

Durham E-Theses

EXPLORING PRODUCT DEVELOPMENT PROCESS IN ISLAMIC BANKS WITH SPECIAL REFERENCE TO ISLAMIC TRADE FINANCING

HAQUE, MOHAMMAD, FAZAL

How to cite:

HAQUE, MOHAMMAD, FAZAL (2016) EXPLORING PRODUCT DEVELOPMENT PROCESS IN ISLAMIC BANKS WITH SPECIAL REFERENCE TO ISLAMIC TRADE FINANCING, Durham theses, Durham University. Available at Durham E-Theses Online: http://etheses.dur.ac.uk/11503/

Use policy

The full-text may be used and/or reproduced, and given to third parties in any format or medium, without prior permission or charge, for personal research or study, educational, or not-for-profit purposes provided that:

- ullet a full bibliographic reference is made to the original source
- a link is made to the metadata record in Durham E-Theses
- the full-text is not changed in any way

The full-text must not be sold in any format or medium without the formal permission of the copyright holders.

Please consult the full Durham E-Theses policy for further details.

DURHAM UNIVERSITY BUSINESS SCHOOL UNITED KINGDOM

EXPLORING PRODUCT DEVELOPMENT PROCESS IN ISLAMIC BANKS WITH SPECIAL REFERENCE TO ISLAMIC TRADE FINANCING

by

MOHAMMAD FAZAL HAQUE

Thesis submitted in fulfilment of the requirement for award of Degree of Doctor of Philosophy at Durham University Business School, Durham University

2015

Dedication

Dedicated to the memory of my beloved parents: Late Hajjí Abdul Latif Mohammed &
Late Hajjah Khatija Bibi
Who always persevered to achieve higher than their means and inspired me.

May Allah (swt) grant them Jannah, Ameen.

ACKNOWLEDGEMENTS

Alhamdulillah, all praise to Allah, the beneficent and the merciful, for granting me guidance, blessings and courage in pursuing the quest of this knowledge along with doing my job and completing the research study.

On this journey of mine I have received help, support and well wishes of many people, without which it would not have been possible to finish this doctoral thesis. It is not possible to mention everybody's name except a few here; but I acknowledge and thank to all who have directly or indirectly helped me, even if I missed their names.

First and foremost, I sincerely express my gratitude to my Supervisor Professor Mehmet Asutay, for his continuous help and valuable guidance during my entire research period and his kind understanding of my balancing act between professional work and research work. I really admire his knowledge, organizational skills and helping attitude to everybody. I feel very lucky to have a supervisor like him and worked with him.

I express my sincere thanks to my employer Al Rajhi Bank and all colleagues for being sources of inspiration to pursue research in Islamic Banking and Finance. I am also thankful to the Islamic banking professionals, who have participated in my questionnaire survey. My special thanks to the colleagues in Islamic Bank of Bangladesh Limited (IBBL) who have hosted me in their campus during the survey visit and also facilitated to contact some other banks to participate in the survey.

Above all I appreciate the cooperation of my family for understanding my goals to grow in education for self, family members and society as well. My special thanks to my wife Dr Salma; first, for completing her PhD much before me, so inspiring me and second for helping me in my research work by typing all the variables in SPSS statistical table. My two children, son Yasser and daughter Safa by doing well in their respective academic careers are also inspiration to my study.

I am thankful to all my extended family members back home in India, including brothers, sisters, in-laws, well- wishers like Prof Karamat Ali and others for their continuous good will with me. *Dua* from them all and my parents have helped me to stand where I am today.

I thank to all my close friends in Riyadh specially brothers Shamsher, Shauquat, Rafiq, Waheed, Iqbal and others for their encouragement to me in pursuing this research work. My special thanks to brother Shamsher and his boss Mr. Fahad for arranging my sponsorship transfer. My thanks to members of Shinningstar, OMAR and ROSA group for spending quality time and discussions of knowledge.

In Durham University, my thanks to all whom I know from DUBS, SGAIA, St. Aidan College and other centres for the direct and indirect help during my studentship of this great university. My special thanks for co-researchers and friends like Naif and Bahaa for spending time with me and helping in my research work.

DECLARATION

I hereby declare that this thesis is a result of my original work. The references, citations and quotes which are not my original work have been duly acknowledged. None of the materials in this thesis have previously been submitted for any other degree in this or any other university or institute of learning.

COPYRIGHT

The copyright of this thesis rests with the author. No extract from it should be published in any format, without the author's prior consent, and all information derived from it should be appropriately acknowledged.

Exploring Product Development Process in Islamic Banks with Special Reference to Islamic Trade Financing

by Mohammad Fazal Haque

Abstract:

Islamic banking (IB) is a rapidly growing sector within the global financial system with annual growth of nearly 15%. IB or *Shari'ah* banking as an alternative mode of banking to the conventional banking is not only restricted to Muslim societies. In particular, after the financial crisis during 2008-2009 when *Shari'ah* compliant assets passed the resilience test, the operations of IB has increased and geographically expanded to many countries. Today more than 500 institutions spread over globally are practicing Islamic banking and finance.

Nevertheless, Islamic banking (IB) is still rather a smaller player compared to the conventional banking. One of the limitations is that IB product range is small compared to conventional banking, because IB products are restricted to remain within the tenets of *Shari'ah* and must follow the *magasid al-Shari'ah* or the objectives of *Shari'ah*.

Development of new products in IB hence is essential for the growth and sustenance of the sector. Therefore, conducting an in-depth study on the product development processes (PDP) in Islamic banks is a matter of academic interest with practical and professional implications. This research, hence, is a product of such motivational factors, which aimed at exploring the PDP through the opinions of participants working in relevant departments of full-fledged Islamic banks and Islamic windows in a number of countries through a questionnaire survey.

By aiming that, this research surveyed 22 banks from 8 countries in South East Asia and GCC which are the main hubs of IB today. The survey was conducted through a structured questionnaire, which covered main pillars of PDP including strategy, resources, processes and *Shari'ah* approval processes. A special focus was given to trade financing products to have a product level deeper understanding.

The research findings enabled a deeper understanding of the product development processes among Islamic banks. First, the broad finding indicated that though most of the banks' overall strategy and mission-vision statements talked about innovation at high level, but at the implementation level the focus were diluted. As per the findings 95% of the banks overall strategy agreed for innovation but only 50% banks allocated budget and 63% of banks put target for number of new products to be developed. Hence, as indicated by this study, the Islamic banks were in general slow on giving priority towards the development of new products. Second, the deeper findings of the study revealed that the strategies of product development are not standard among the Islamic banks, as various factors influence the product development. First geographical location is an important factor that influences the PDP. Second the nature of IB business (full-fledged or Islamic window) plays a role. Similarly the age, size and ownership structure of the Islamic bank are also important factors of influence in PDP. As examples, the strategies and product development processes in Malaysia vary with Bangladesh and that in GCC; the Islamic windows of conventional banks show significantly different results in developing new Islamic products compared to fullfledged Islamic banks.

By emphasizing that larger product range is a critical success factor of growth for IB, this research provides a valuable contribution to the deeper understanding of PDP in Islamic banks.

TABLE OF CONTENTS			
Dedi Ackn	is Cover page cation owledgement aration and Copyright	Page i ii iii iv v	
Table	e of contents	vi	
	of Tables	xiii	
List	of Figures	xviii	
	CHAPTER 1		
	INTRODUCTION		
1.1	INTRODUCTION AND BACKGROUND	1	
1.2	PROBLEM STATEMENT	3	
1.3	RESEARCH AIMS, OBJECTIVES AND QUESTIONS	5	
1.4	SIGNIFICANCE OF THE RESEARCH	6	
1.5	RESEARCH METHODOLOGY	7	
1.6	RESEARCH OVERVIEW	8	
	CHAPTER 2		
	AN INTRODUCTION TO ISLAMIC FINANCE		
0.1	INTRODUCTION	10	
2.1 2.1	INTRODUCTION BASIC PRINCIPLES OF ISLAMIC ECONOMICS AND FINANCE	10 10	
2.1	IMPLICATIONS OF THE ABOVE PRINCIPLES ON ISLAMIC	10	
2.5	SOCIAL ECONOMICS	13	
2.4	OPERATIONAL PRINCIPLES OF ISLAMIC ECONOMICS	10	
	AND FINANCE	14	
2.5	UNDERLYING PRINCIPLES OF ISLAMIC FINANCE	16	
2.6	ISLAMIC FINANCE INSTRUMENTS AND CONTRACTS	17	
$2.\epsilon$	2.6.1 Practice of Finance during the Prophetic Period 18		

Need of Regulatory Frameworks for Shari'ah Governance

Shari'ah Compliance in Relation to Product Development Process 34

ROLE OF SHARIAH BOARD IN GOVERNING ISLAMIC BANKS

Shari'ah Governance in Islamic Banking and Finance

AAOIFI Standardization and Harmonization for SSB

Composition of Shari'ah Supervisory Board (SSB)

Duties and Responsibilities of Shari'ah Board

AND FINANCIAL INSTITUTIONS

and Harmonization

Appointment, and Composition

Challenges with Standardisation

Contemporary Methods of Islamic Finance Products and Contracts19

29

29

30

31

31

33

34

2.6.2

2.7.1

2.7.2

2.7.3

2.7.4

2.7.5.

2.7.6.

2.7.7

2.7

2.8	SNAPSTOT OF THE PRESENT ISLAMIC FINANCE INDUSTRY	33
2.9	CONCLUSION	36

CHAPTER 3		
INTRODUCTION TO ISLAMIC TRADE FINANCING		
	PRODUCTS	
3.1	INTRODUCTION	38
3.2	MEANING OF TRADE	38
3.3	TRADE AND ISLAM: A HISTORICAL LINK	39
3.3.1	Makkah was a Trading Center before Islam	39
3.3.2	Spread of Trade with Islam	39
3.4	ISLAMIC FINANCE AND TRADE FINANCING	40
3.5	MURABAHAH: AN ALTERNATIVE TO INTEREST BASED	
	FINANCING OF TRADE	41
3.5.1	Financial Murabahah or Credit Murabahah	43
3.5.2	Murabahah Sale versus Loan of Money	43
3.5.3	Murabahah in Trade Financing	44
	3.5.3.1 Limitation of murabahah - the bill discounting issue	45
	3.5.3.2Alternative Solutions to Refinancing (Discount)	
	Requirement of the Seller	46
3.6	DISCUSSION ON ISLAMIC TRADE FINANCING BANKING	
	PRODUCTS	48
3.6.1	Sale based trade financing products	50
	Equity based Trade Financing Products	53
3.6.3	Trade Products based on Services	54
3.6.4	Opportunities and Challenges on Islamic Trade Finance business	
3.7	CONCLUSION	59
	CHAPTER 4	
	PRODUCT DEVELOPMENT IN ISLAMIC BANKS	
4.1	INTRODUCTION	60
4.2	PRODUCT DEVELOPMENT AND INNOVATION	60
4.2.1	Definitions and Importance of Innovation, Financial Innovation	
	and Product Development	60
4.2.2	2 Introduction to Product Development in Service Sector	
	and Islamic Banking	62
4.3	THE NEED AND RATIONALE FOR PRODUCT DEVELOPMENT	
	IN SERVICE SECTOR	63
4.4	ASPECTS OF FINANCIAL PRODUCT DEVELOPMENT	66
4.5	CORNERSTONES FOR EFFECTIVE NEW PRODUCT	67

1 5	DEVELOPMENT	70
4.5	.1 Product Development Cycle in an Islamic Bank WHY PRODUCT DEVELOPMENT IN ISLAMIC FINANCE	70 75
4.7	DISCUSSIONS ON SOME SPECIAL FEATURES OF ISLAMIC BANKING	81
4.7	7.1 Objective to Achieve <i>Magasid Shari'ah</i>	81
4.7	7.2 Legal Regime, Corporate Governance and Regulatory Framework	0.2
47	of Islamic Banking 7.3 Islamic Product Features: Levels of Product Structure	82 85
	7.4 Risk in Islamic Banking Products	87
4.8	FACTORS/ASPECTS OF PRODUCT DEVELOPMENT	
4.0	IN ISLAMIC FINANCE	90
4.9.	EXISTING PRACTICE OF PRODUCT DEVELOPMENT IN ISLAMIC BANKING	92
4.10	CONCLUSION	93
	CHAPTER 5	
	RESEARCH METHODOLOGY	
5.1 5.2	INTRODUCTION RESEARCH METHODOLOGY	94 94
5.3	RESEARCH DESIGN	95
5.4	RESEARCH DESIGN	97
5.5	RESEARCH METHODS	98
5.5	.1 . Research Methods: Data Collection Methods – Questionnaire Method	100
	5.5.1.1 Questionnaire design5.5.1.2 Description of each part of the questionnaire	100 101
	5.5.1.3 Study of population and Sample	104
	5.5.1.4 Administration of the questionnaire	108
	5.5.1.5. Validity and Reliability of the Questionnaire	110
	.2 Research Method: Data Analysis Methods	111
5.6	DIFFICULTIES AND LIMITATIONS	116
	CHAPTER- 6	
COL	THE ISLAMIC BANKING ENVIRONMENT IN THE	NOI
	UNTRIES OF SAMPLED BANKS AND THE PERCEPTIO PRODUCT DEVELOPMENT PROCESSES AMONG BANI	
1	UNDER STUDY	X O
6.1	INTRODUCTION	118
6.2	ISLAMIC BANKING ENVIRONMENT IN THE COUNTRIES	110
0.2	UNDER STUDY AND PRODUCT DEVELOPMENT PROCESSES	120
	.1 Islamic Banking Environment in Bangladesh	121
	.2 Islamic Banking Environment in Indonesia	122
	.3 Islamic Banking Environment in Malaysia	124
6.2	.4 Islamic Banking Environment in the GCC (Saudi Arabia, UAE, Kuwait, Qatar, and Bahrain)	127
6.8	CONCLUSION	130

CHAPTER 7

EXPLORING PRODUCT DEVELOPMENT IN ISLAMIC BANKS WITH SPECIAL REFERENCE TO TRADE FINANCING: DESCRIPTIVE FINDINGS FROM THE QUESTIONNAIRE SURVEY

7.1 INTRODUCTION	132
7.2 GENERAL INFORMATION ABOUT THE BANKS UNDER STUDY	133
7.2.1 The Country-wise Location of the Sampled Islamic Banks	133
7.2.2 Year of Establishment of the Sampled Islamic Banks	134
7.2.3 Ownership Structures of the Sampled Islamic Banks	134
7.2.4 Number of Branches of the Sampled Islamic Banks	135
7.2.5 Number of Employees at the Sampled Islamic Banks	136
7.2.6 Licensing Authority for the Sampled Islamic Banks	136
7.2.7 Nature of Banking Activities of the Sampled Islamic Banks	137
7.2.8 Nature of Islamic banking business	137
7.2.9 Bank-wise Financial Data	137
7.3 STRATEGY AND PLANNING PROCESS ON INNOVATION AND	
PRODUCT DEVELOPMENT	139
7.3.1 Banks; Strategy and Planning on Innovation and Product	
Development- Innovation as a Planning Process	139
7.3.2 Banks' Strategy and Planning on Innovation and Product	
Development: Strategic Approach on Product Development	142
7.3.3 Banks' Strategy and Planning on Innovation and Product	
Development: Views on Competitive Advantage of New Products	144
7.4 PRODUCT DEVELOPMENT PROCESSES: GENERAL ASPECTS 1	146
7.4.1 Resources Availability: People	146
7.4.2 The Key Initiatives/Factors Required for Developing New Islamic Product 1	149
7.4.3 Searching for Departments in Giving Formal Approval for	
Developing New Products	154
7.4.4 Steps Involved in Developing a New Product in the Sampled Banks	158
7.4.5 Availability of Resources in the Sampled Banks for Product Development 1	160
7.4.6: Bank's General in-house Product Development Principle	163
7.4.7 Formation of Cross-Functional Teams to Carry out	
Implementation of New Product	165
7.4.8 Responsibility for the Product after the Implementation of the Product	166
7.5 PRODUCT DEVELOPMENT PROCESS: SHARI'AH	
APPROVAL PROCESS	167
7.5.1 Availability of <i>Shari'ah</i> Advisory Board	168
7.5.2 Number of <i>Shari'ah</i> Scholars in the Shari'ah Board	168
7.5.3 Questioning <i>Shari'ah</i> Board Members' Relationship with the Bank	169
7.5.4 The Kind of <i>Shari'ah</i> Units (or Sections) Existing in the Bank	169
7.5.5 The Number of Staff in <i>Shari'ah</i> Department	171
7.5.6 Existence of coordinator between business and <i>Shari'ah</i> department	171
7. 5.7 Preparations of Paperwork	172
7.5.8 The Steps Followed in Presenting the New Products to <i>Shari'ah</i> Board	172
7.5.9 The Frequency of <i>Shari'ah</i> Board Meetings	174

7.5.10 The Length of <i>Shari'ah</i> Approval Process	174
7.5.11 The Nature of the Decision Rule for	
Shari'ah Scholars: Unanimous or Majority	175
7.5.12 The Frequency of Shari'ah Audit for the Implemented Product	176
7.6 TRADE FINANCING ACTIVITIES IN THE SAMPLED BANKS	176
7.6.1 Number of Staff in the Trade Finance Department	177
7.6.2 Centralisation of Trade Finance Activities	177
7.6.3 Trade Financing Facilitation:	
Conventional/Shari'ah Compliant/ Mixed products	178
7.6.4: List of main Trade Financing Products Indicating	
Nature of Trade Product (Sale/Service/Equity)	179
7.6.5 Challenges in Front of Islamic Trade Financing	
to be Alternative to Conventional Trade Financing	180
7.6.6 Opportunities of Islamic Trade Financing in	
Becoming the Alternative to Conventional Trade Financing	181
7.6.7 Exploring the Need for Product Development in Islamic Trade Financing	182
7.7 SUMMARY AND CONCLUSION	182

CHAPTER 8

STUDY OF PRODUCT DEVELOPMENT IN ISLAMIC BANKS WITH SPECIAL REFERENCE TO TRADE FINANCING: INFERENTIAL STATISTICAL ANALYSIS FROM THE QUESTIONNAIRE SURVEY

8.1	INTRODUCTION	186
8.2	INFERENTIAL ANALYSIS OF PERCEPTION OF PARTICIPANTS	
	ON: BANKS' STRATEGY AND PLANNING ON INNOVATION	
	AND PRODUCT DEVELOPMENT	187
8.2.1	Analysing the Significance of Independent Variables on Innovation of New	W
	Products is being Part of Planning Process	188
8.2.2	2 The Impact of Independent Variable of Nature of Business Activity	188
8.2.3	3 Analysing the Impact of Independent Variables on the Overall Strategy	
	of the Bank including Product Development	191
0.2		
8.2.4	Analysing the Impact of Independent Variables on Product Development	102
	Being Built into Annual Operating Plan of Relevant Business Units	192
8.2.4	The Impact of Independent Variables on the Strategic Approach	
0.2.0	related to Being Leader in Providing New Product to the Market	193
	related to Being Beader in 110 ylung 110 W 110 duet to the Hanker	1,0
8.2.6	Searching for Impact of Independent Variables on Providing	
	Shari'ah Compliant Product to the Market that Substitutes	
	Conventional Banking Products Available in the Market	193
8.2.7	Analysing the Impact of Independent Variables on Providing New	
	Products when Existing Products Becomes Obsolete	194
8.2.8	3 Locating the Significant Independent Variables on the Competitive	

	8.2.9	Advantage of an Islamic Bank in Developing New Products The Impact Of Independent Variables On Developing New Products	196
	5.2.0	Attracts Some New Customers to Use Islamic Banking	196
		The Impact of Independent Variable on Corporate customers' Borrowing of funds from Islamic Banks Enhances the Demand of their Shares in the Market Locating the Significant Independent Variables on Developing New Products Helping with the Islamic Banks to Become	197
		Pioneer Compared to other Islamic Banks	198
8.	.3 8.3.1	INFERENTIAL ANALYSIS OF PERCEPTION OF PARTICIPANTS ON: PRODUCT DEVELOPMENT PROCESSES The Impact of Independent Variables on the Level at which Product	199
		Development Conducted	200
		Inferential Results on Product Development Team Determining Variables of Reporting Body of the Product	201
	0.3.3	Development Team	202
	8.3.4	Determining Variables for the Available Human Resources in the Respective Banks for Product Development	203
	8.3.5	The Determining Variables of the Cross-functional Team Work after the Product Launched	203
		Troduct Launence	204
8.	.4	INFERENTIAL ANALYSIS OF PERCEPTION OF PARTICIPANTS ON PRODUCT DEVELOPMENT PROCESSES IN RELATION TO S HARI'AH APPROVAL	205
	8.4.1	Determining Variable of Existence of a <i>Shari'ah</i> Research Unit in the Sampled Banks	206
		Determinants of Shari'ah Advisory Unit in the Sampled Banks	207
		Determining Factors of Existence of Shari'ah Coordinator	208
		Determining Factors of Period Necessary for <i>Shari'ah</i> Approval Inferential Analysis on The Process through which the Opinion of	208
	0.4.5	Shari'ah Scholars Taken into Consideration	210
	8.4.6	Determining Factors of the Frequency of Shari'ah Audit of the	
		New Products	211
8.	.5	INFERENTIAL ANALYSIS OF PERCEPTION OF PARTICIPANTS ON: ISLAMIC TRADE FINANCING ACTIVITIES IN THE	
	~ ~ .	SAMPLED BANK	213
		Determining Variables of the Number of Staff in the Trade Finance Department	213
		Factors Determining the Responses in Relation to the Number of Staff Working in Trade Finance Department	214
		Analysing the Responses in Relation to the Rationale for Product Development in Islamic Trade Financing Analysing the Reponses on New Trade Financing Product Under	215
	0.3.4	Development	216
Q	6	CONCLUSION	217

CO	CHAPTER 9 CONTEXTUALIZATION, DISCUSSIONS AND CONCLUSION		
	,		
	SUMMARISING THE RESEARCH PROCESS AND FINDINGS	219	
9.2.	REFLECTING ON THE FINDINGS	221	
	Reflecting on the Findings Relating to Bank Strategy and		
	Planning on Innovation and Product Development	223	
9.2.2	Comparing Perceptions Conceived from the Questions/Statements		
	on Strategy	229	
9.2.3.	Reflecting on the Findings Related to Product Development 'Process'	230	
9.2.4	Reflecting on the Findings related to Product Development Process-		
	Shari'ah approval	234	
	Reflecting on the Results on Findings – Trade Activities	236	
9.3	CONCLUSION	240	
9.3 9.4	LIMITATIONS OF THE STUDY AND FUTURE RESEARCH	240	
9. 4 9.5	EPILOGUE	243	
7.5	LIEGGE	273	
	APPENDICES		
1. Rese	arch Survey Questionnaire	245	
_	lest Letter from Researcher to banks to participate in the survey	252	
	duction Letter from Durham University for participation in the survey	253	
4. The 1	Banker Report- Top 20 World banks in terms of assets	254	
DIDI		25.	
RIRL	IOGRAPHY	256	

256

LIST OF TABLES

Common Islamic Banking Products and Relation to Nearest Conventional Banking Products	27
Top-10 Countries having Shari'ah complied Assets	35
Top 10 banks in terms of Shari'ah complied Assets as of Nov 2013	36
Top-ten Muslim Populated Countries	77
Top-10 Countries with Shari'ah complied Assets	78
Scales and Their Application in the Questionnaire	101
Required Sample Size Table	107
Cronbach's Alpla Test Results	111
Nature of Islamic Business Activity Among the Sampled Banks	119
Age and Size (Branch, Staff, Equity, Assets) of the Sampled Islamic Banks	119
List of Bangladeshi Islamic Banks in terms of Sharia- compliant Assets	122
List of Indonesian Islamic Banks	123
List of Malaysian Islamic Banks in terms of <i>Shari'ah</i> compliant assets	125
Top 25 Islamic Banks in the GCC (in terms of assets)	128
Islamic Banking Assets in GCC (2013)	129
The Location Countries of the Sample Islamic Banks	133
Years of Establishments of the Sampled Islamic Banks	134
Ownership Structures of the Sampled Islamic Banks	134
Number of Branches of Islamic Banks under study	135
Number of Employees of Islamic Banks under study	136
Licensing Authorities for the Sampled Islamic Banks	136
Nature of Banking Activities of the Sampled Islamic Banks	137
Nature of Islamic banking business of the banks under study	137
Financial parameters (Assets, Equity, Net-income) of the banks under study (minimum, maximum, mean values)	136
Bank-wise Financial Data	138
Innovation as a Planning Process (Consolidated Table)	140
Strategy Approach Relating to Product Development	142
	Nearest Conventional Banking Products Top-10 Countries having Shari'ah complied Assets Top 10 banks in terms of Shari'ah complied Assets as of Nov 2013 Top-ten Muslim Populated Countries Top-10 Countries with Shari'ah complied Assets Scales and Their Application in the Questionnaire Required Sample Size Table Cronbach's Alpla Test Results Nature of Islamic Business Activity Among the Sampled Banks Age and Size (Branch, Staff, Equity, Assets) of the Sampled Islamic Banks List of Bangladeshi Islamic Banks in terms of Sharia- compliant Assets List of Indonesian Islamic Banks List of Malaysian Islamic Banks in terms of Shari'ah compliant assets Top 25 Islamic Banks in the GCC (in terms of assets) Islamic Banking Assets in GCC (2013) The Location Countries of the Sampled Islamic Banks Years of Establishments of the Sampled Islamic Banks Number of Branches of Islamic Banks under study Number of Employees of Islamic Banks under study Licensing Authorities for the Sampled Islamic Banks Nature of Banking Activities of the Sampled Islamic Banks Nature of Islamic banking business of the banks under study Financial parameters (Assets, Equity, Net-income) of the banks under study (minimum, maximum, mean values) Bank-wise Financial Data Innovation as a Planning Process (Consolidated Table)

	LIST OF TABLES- cont	
Table 7.13	Competitive Advantages for an Islamic Bank in	144
	Developing New Products	
Table 7.14a	Existence of a Product Development Team	147
Table 7.14b	Product development as Part of Division/Department	147
	level	
Table 7.14c	Product Development being Conducted Centrally	148
Table 7.14d	Number of People Working in the Product Development	148
	Team	
Table 7.14e	Reporting Line of Product Development	149
Table 7.15	Mean Ranks of Key Factors Required for Developing	149
	New Islamic Banking Products	
Table 7.15a	Key Initiative/Factor: Product of a Conventional bank	150
Table 7.15b	Key Initiative/Factor: Product of Another Islamic Bank	151
Table 7.15c	Key Initiative/Factor: Initiative of Own R & D Team	151
Table 7.15d	Key Initiative/Factor: Initiatives by Outside Agencies	152
	(Consultants)	
Table 7.15e	Key Initiative/Factor: Outcome of a Market Research	152
Table 7.15f	Key Initiative/Factor: Initiative of a Star Employees of	153
14010 7.131	the Bank	133
Table 7.15g	Key Initiative/Factor: Demand from other Internal	153
14010 7.135	Departments	133
Table 7.15h	Key Initiative/Factor: Meeting the Regulatory	154
10010 / 11011	Requirements	10.
Table 7.16	Departments Providing Formal Approval for Developing	155
	New Products	
Table 7.17	Steps Involved for New Product Development in the	158
	Sampled Banks	
Table 7.18	Mean Ranking for Available Resources in the Sampled	160
	for Product Development,	
Table 7.18a	Resources Available in the Bank for Product	161
	Development-Shari'ah Capability	
Table 7.18b	Resources Available in the Sampled Banks for Product	161
	Development-People	
Table 7.18c	Resources Available in the Sampled Banks for Product	162
T 11 7 101	Development -Finance	1.60
Table 7.18d	Resources Available in the Sampled Banks for Product	163
T-1-1- 7 10	Development -IT	1.64
Table 7.19	Bank's in-house Product Development Principles	164
Table 7.20	The Working of Cross-functional Teams in Carrying out	166
Table 7.21	Their Function in Launching New Products Personalible Sections for the Product after its	167
1 able 7.21	Responsible Sections for the Product after its implementation	107
Table 7.22a	Existence of Shari'ah Advisory Board	168
Table 7.22b	Nature of <i>Shari'ah</i> Board being Dedicated in-house or	168
14010 7.220	Shared	100
Table 7.23	The Numbers of <i>Shari'ah</i> Scholars in the <i>Shari'ah</i> Board	169

LIST OF TABLES – cont			
Table 7.24	Are the <i>Shari'ah</i> board members your bank employees	179	
Table 7.24 Table 7.25	The Nature of <i>Shari'ah</i> Units (or Sections) in the	179	
14010 7.25	Sampled Banks	170	
Table 7.26	The Number of staff working in the Shari'ah	171	
	Department of the Sampled Banks		
Table 7.27	Existence of Coordinator between Business and <i>Shari'ah</i> Department	172	
Table 7.28	Authority to Prepare Paperwork	172	
Table 7.29	The Steps Followed in Presenting the New Product to the <i>Shari'ah</i> Board	173	
Table 7.30	The Frequency of Shari'ah Board Meetings	174	
Table 7.31	The Length of Shari'ah Approval Process	175	
Table 7.32	The Nature of the Decision Rule for <i>Shari'ah</i> Scholars: Unanimous or Majority	175	
Table 7.33	The Frequency of <i>Shari'ah</i> Audit for the Implemented Product	176	
Table 7.34	Number of Staff in the Trade Finance Department	177	
Table 7.35	Is your trade financing activities centralized?	177	
Table 7.36	The Number of Trade Finance Centres	178	
Table 7.37	Type of Trade Finance Products Provided by the Bank	178	
Table 7.38	Nature of Trade Financing Products	179	
Table 7.39	Challenges for Islamic Trade Financing to be	180	
	Alternative to Conventional Trade Financing		
Table 7.40	Opportunities for Islamic Trade Financing (ITF) to be	181	
T 11 7 41	Alternative to Conventional Trade Financing	102	
Table 7.41	The Need for Product Development in Islamic Trade Financing	182	
Table 8.1	Significance of Control Variables (CVs) on the	188	
	Statement/ question- Is innovation of new products is a		
	part of planning process?	100	
Table 8.2	Significance of Control Variables on the statement/	189	
	question: Does the bank's mission or vision statement include innovation?		
Table 8.2a	Does the banks mission or vision statement include	190	
1 4010 0.24	innovation? Nature of Islamic Business Activity- cross-	170	
	tabulation		
Table 8.2b	Does the bank have a formal approach /process for	190	
	innovation? Vs Nature of Islamic Business Activity-		
	cross-tabulation		
Table 8.2c	Is there an annual plan for the number of new products	191	
	to be developed? Vs Nature of Islamic Business Activity		

LIST OF TABLES -cont..

Table 8.3	Significance of Control Variables on the Statement: Does the overall strategy of the bank include product	191
Table 8.4	development? Significance of Control Variables on the Statement: Is the product development built into annual operating	192
	plan of relevant business units?	
Table 8.5	Significance of Control Variables on the Statement: The strategic approach related to product development- <i>Be a leader in providing new product to the market</i> .	193
Table 8.6	Significance of Control Variables on the Statement: The strategic approach related to product development - Provide Shari'ah compliant product to the market that substitutes conventional banking products available in the market.	194
Table 8.7	Significance of Control Variables on the Statement: <i>The strategic approach related to product development- Provide new products when existing products become obsolete.</i>	195
Table 8.8	Significance of Control Variables on the statement: The competitive advantage of an Islamic bank in developing new products- It motivates some customers to switch over from Conventional bank to the Islamic bank because they look for Shari'ah compliant business solutions.	196
Table 8.9	Significance of Control Variables on the Statement: The competitive advantage of an Islamic bank in developing new products- It attracts some new customers to use Islamic banking who avoid conventional banking	197
Table 8.10	Significance of Control Variables on the Statement: The competitive advantage of an Islamic bank in developing new products- Some Corporate customers borrow funds from Islamic bank as it enhances the demand of their shares in the market.	198
Table 8.11	Significance of Control Variables on the Statement: The competitive advantage for an Islamic bank in developing a new product- it helps the Islamic bank to become pioneer compared to other Islamic banks.	199
Table 8.12a	Cross-tabulation: Is the Product Development done at Division/ Department level? vs Location of Country	200
Table 8.13	Significance of Control Variables on the Statement: <i>If</i> there is a Product development team, how many people work in the Product development team?	201
Table 8.14	Significance of Control Variables on the Statement: <i>To whom the product development team reports?</i>	202
Table 8.15	Significance of Control Variables on the Statement: Resources available in your bank for product development-People	203

	LIST OF TABLES – cont	
Table 8.16	Significance of Control Variables on the question: When	204
	a product is launched how the cross-functional teams	
	work to carry out their part of the function?	
Table 8.16a	Cross-tabulation: When a Product is Launched How the	205
	Cross-Functional Teams Work to Carry Out Their Part	
Table 0 17	of the Function? vs Nature of Islamic Business Activity	206
Table 8.17	Significance of Control Variables on the Statement: <i>Shari'ah research unit exist in your bank?</i>	206
Table 8.17a	Cross-tabulation: Shari'ah Research Unit Exist in Your	206
1 4010 0.174	Bank? vs Nature of Islamic Business Activity	200
Table 8.18	Significance of Control Variables on the Statement:	207
	Shari'ah advisory unit exist in your bank?	
Table 8.18a	Cross-tabulation: Shari'ah Advisory Unit Exists in Your	207
	Bank? vs Nature of Islamic Business Activity	
Table 8.19	Significance of Control Variables on the Question: <i>Does</i>	208
	your bank have a Shari'ah coordinator?	
Table 8.20	Significance of Control Variables on the Question: <i>How</i>	209
	many days it usually takes to get Shari'ah approval?	•00
Table 8.20a	Cross-tabulation: How Many Days it Usually Takes to	209
T-1-1- 0 21	get Shari'ah Approval? vs Year of Establishment	210
Table 8.21	Significance of Control Variables on the Question: <i>How</i>	210
	the opinion of Shari'ah scholars taken into consideration?	
Table 8.21a	Cross-tabulation: How the Opinion of Shari'ah Scholars	211
14010 0.214	Taken Into Consideration vs Ownership Structure	211
Table 8.22	Significance of Control Variables on the Question: <i>How</i>	212
	frequently Shari'ah audit takes place to audit the	
	product?	
Table 8.22a	Cross-tabulation: How Frequently Shari'ah Audit Takes	212
	Place to Audit the Product? vs Year of Establishment	
Table 8.23	Significance of Control Variables on the Statement:	214
	How many staff works in your Trade finance dept.	
Table 8.23a	Cross-tabulation: How Many Staff in Your Trade	214
T-1-1- 0 24	Finance Department? vs Number of Employees	215
Table 8.24	Significance of Control Variables on the Question: <i>How</i>	215
Table 8.24a	many staff works in your Trade finance department? Cross-tabulation: How Many Staff in Your Trade	215
1 aute 6.24a	Finance Department? vs Year of Establishment	213
Table 8.25	Significance of Control Variables on the Statement: Why	216
1 4010 0.23	there is a need for product development in Islamic trade	210
	financing?	
Table 8.25a	Cross-tabulation: Nature of Islamic Business Activity vs	216
	Why There is a Need for Product Development in	
	Islamic Trade Financing?	
Table 8.26	Significance of Control Variables on the Question: Any	217
	new trade financing product under development?	

LIST OF TABLES – cont				
Table 9.1	Cross Tabulation: Does the Banks Mission or Vision Statement Include Innovation? vs Nature of Islamic Business Activity Cross-tabulation	224		
Table 9.2	Comparison of Findings	230		
Table 9.3	Summary of Reflections of the Findings on Shari'ah Approval Process	236		
Table 9.4	Summary of Reflections of the Findings on Trade Activities	240		

LIST OF FIGURES Figure 2.1: Simple Mudarabah Structure 20 Figure 2.2: Murabahah Structure 22 Figure 2.3: 23 Tawarruq Structure Figure 3.1: Murabahah LC Diagram 51 Figure 3.2: Istisna'a Structure 52 Figure 3.3: Musharaka Structure 53 Figure 3.4: Musharaka LC Structure 54 Figure 4.1: Stage-GateTM Model – from Discovery to Launch 65 Figure 4.2: Cornerstones of Performance 68 Figure 4.3: Product Development Cycle 70 Figure 4.4: Global Assets of Islamic Finance 78 Market Share of Idslamic Banks in their Domestic Figure 4.5: 79 Market Figure 6.1: Global Islamic Banking Assets by Jurisdiction (2013) 120 Figure 9.1: Pillars of Product Development (PD) in an Islamic Bank 222

CHAPTER 1

INTRODUCTION

1.1. INTRODUCTION AND BACKGROUND

Islamic banking is one of the most rapidly growing sectors of banking industry in the world with double digit growth rates. By making a humble beginning in the 1970s at few centres, Islamic banking has grown phenomenally well during the last forty years having global reach and acceptability. Today more than 500 financial institutions are involved in interest-free banking and the asset size has increased above USD 2tn at the end of 2014 (The Banker, 2014). Therefore Islamic banking is an emerging banking sector to recon with.

The practice of Islamic banking having other synonyms like interest-free banking, participatory banking, *Shari'ah* banking is not only confined to Muslim countries but have spread the wings to many non-Muslim countries and societies (The Banker 2013) ranging from Far West to Far East. Moreover, the perception that interest-free banking is limited to certain community is changing; its acceptability as an alternative way of doing banking is growing. Especially after the financial crisis in 2008-2009 when the *Shari'ah* compliant assets passed the resilience test without serious defaults, the practitioners are looking into Islamic banking with keen interest.

While the growth of Islamic banking sector is encouraging, it is still a small player compared to the vast conventional banking and financial sector, as Grewal (2011:6) stated Islamic finance assets were miniscule 1% of global banking assets in 2010, which according to Kammer *et al.* (2015:11) increased to 1.25%. In addition, The Banker Report (2014) depicts that top 12 global banks have individual assets more than the total size of global *Shari'ah* compliant asset which is about USD 2 tr. Hence, it could be interpreted that Islamic finance assets are very small compared to global banking assets, which implies that Islamic Finance has to go a long way to become a viable alternative to the conventional banking. One of the challenges faced by Islamic banking is that its product range is small compared to conventional banking to meet

customers' needs. The major factor is that the Islamic banks have to remain within the tenets of Shari'ah (or Islamic law) compliance. The Islamic banking and finance products have to pass through the 'Shari'ah filter' (Khan, 2007:3) before they are offered to customers; hence the products supply is restricted (discussed further in They must follow the guidelines of magasid al-Shari'ah namely section 1.4). 'objective of Shari'ah' (which is interpreted as 'human well-being'), and the products need to be free from prohibitory business principles of riba (interest), gharar (uncertainty) and maysir (gambling); and the business areas should be within the remits of halalness (or lawfulness as established by Shari'ah) (Asutay, 2007). Thus, the Islamic banking products are complex in nature mainly due to Shari'ah requirements, as they represent emergent practices in terms of being new metaphors for the 'old question of moving capital'. Development of new products is, therefore, an essential requirement for the growth and sustenance of Islamic banking sector (Al-Salem, 2009: 187). Therefore, conducting an in-depth study on the product development process in Islamic banks is a matter of academic interest with practical and professional implications. This research study is hence is a product of such motivational factors.

Importance to product development in the service sectors such as banks has been given by many social scientists. Cooper and Edgett (1999:1) mention that in the present competitive environment, a service organization has two choices: "Succeed at developing new service products, or fail as a company".

Talking about importance of innovation in products, Ahmed (2011:99) mentioned that "firms that recognize the changing nature of markets understand the need to adjust to be relevant in the future. These firms will have innovation as an integral component of their mission and strategic goals". Iqbal and Mirakhor (2002:57) said that 'financial engineering and financial innovation are the forces driving the global financial system toward the goal of greater economic efficiency'. For banks to remain at the competitive edge means product development. According to Cooper and Edgette (1999:26-28), the three pillars of product development in a service sector are 'strategy' and planning, 'resources' and product development 'process'. However as mentioned in this section, the additional pillar for an Islamic bank is the *Shari'ah* approval process. The study aimed to collect data through a well-structured

questionnaire covering in detail the above aspects of product development processes in Islamic banks. The attempt is to explore and analyze the findings through empirical tools and derive the themes, which are perceived to have academic as well as business interest.

Additionally, by aiming to get product level deeper information, this research attempts to pay a special attention to 'trade financing products', which is one of the main products that Islamic banks usually offer to their customers.

A study conducted by Ahmed (2011) on the product development in Islamic banks provides an insight into this subject. Apart from Ahmed (2011), there is hardly any systematic study or literature available on this important activity of the Islamic banking business. As a motivational factor, this research attempts to conduct a deeper analytical study on the product development processes with different samples covering some of the top Islamic banks in the world. The study further aims to explore the factors that influence the product development processes in the target banks. Significantly the study focuses on the geographical regions of South East Asia and GCC which are the global hubs of Islamic banking; therefore the study aims that the analytical findings would reflect the practices of some of the main players of the industry.

1.2. PROBLEM STATEMENT

As indicated in the previous section, the Islamic banking product range is lesser than in numbers compared to conventional banks, therefore development of new Islamic product is an essential requirement for the growth of Islamic banking.

The problem is that the Islamic banking product development has to pursue a particular process and has to make references to norms and principles. It must follow the guidelines of *maqasid al-Shari'ah* and the product need to be free from prohibitory business principles of *riba* (interest), *gharar* (uncertainty) and *maysir* (gambling).

Since they are not 'ordinary financial products', 'Islamicity' requires product development be embedded in the *Shari'ah* and moral requirements of Islam and has the expected larger consequences. Such consequences are mainly defined by *Maqasid al-Shari'ah* or the objective of *Shari'ah*, which, in a general sense, is defined as

'human well-being' implying that whatever financial and economic activity is, it has to serve the social interest as well. Following words of Imam Ghazali provides a broad idea about *maqasid al-Shari'ah* in the following form (Chapra 2008: 4):

The very objective of *Shari'ah* is to promote the well-being of the people, which lies in safeguarding their faith (*din*), their self (*nafs*), their intellect (*aql*), their posterity (*nasl*) and their wealth (*mal*). Whatever ensures the safeguard of these five serves public interest and is desirable, and whatever hurts them is against public interest and its removal is desirable." Imam Aby Hamid Ghazali (d. 505/1111)

Therefore business practices that are considered not for well-being of people or not ethical are prohibited, such as business involving liquor, pornography industry, prohibited forms of food consumption, and arms and armament (Ayub, 2007). In addition, the following prohibitions shape the construct and nature of Islamic financial products:

Riba: In common sense it is 'interest', which is prohibited in Islamic products (*Qur'an*, 2:275-281, 3:130, 4:161, 30:39),

Gharar: It "refers to uncertainty or hazard caused by lack of clarity regarding the subject matter or the price in contract or exchange. A sale or any other business contract which entails an element of *Gharar* is prohibited" (Ayub, 2007:57). The source of prohibition of *Gharar* "comes from the Prophetic traditions" Ahmed (2011:33).

Maysir: It is gambling, and therefore any transaction if *Shari'ah* scholars consider involving gambling uncertainty is not approved, such as lottery, raffle, *etc.* (*Qur'an*, 2:219, 5:90-91; see also: Ayub, 2007; Iqbal and Khan, 2005).

By acknowledging that Islamic products development has special features due to *Shari'ah* norms, several research questions are raised to explore whether the product development processes in Islamic banks are standard. This study argues that the product development processes in the Islamic banks are not standard. They are influenced by various environmental factors, which among others include geographical jurisdiction, nature of Islamic banking operation (full-fledged or window), age, size, ownership *etc*. In determining such factors, it is essential that an emergent study to be conducted to reveal the factors. This constitutes the main

argument of this research: to explore the product development processes in Islamic banks, analyze them to reflect the theme of findings.

1.3. RESEARCH AIMS, OBJECTIVES AND QUESTIONS

This research, hence, aims to explore the product development process in Islamic banks by making references to the nature of the process and the determining factors of product development process. In doing so, special attention is allocated for trade financing related product development and the relating dynamics.

In fulfilling the research aim, the following objectives are developed:

- (i) to develop an understanding of the product development in general and in particular in the case of Islamic banking;
- (ii) to identify the underlying principles of Islamic finance in determining the product development process;
- (iii) to develop and understand Islamic trade financing and to identify underlying principles of Islamic finance in development of Islamic trade financing products;
- (iv) to investigate the perceptions of participants of Islamic banks/Islamic windows on the product development processes in their respective institutions;
- (v) to provide, in light of empirical results, reflections of findings on the strategy of product development process in Islamic banks and the significance of environmental factors in the product development process of Islamic banks.

In relation to the research aims and objectives, the following research questions are developed:

- (i) What are the aspects of bank strategy and planning on innovation and product development in Islamic banking?
- (ii) What are the resources available for product development in the banks?
- (iii) What are the processing factors involved in developing new products, especially the initiatives factors, approval process, steps involved, cross-functional guidelines *etc.*?

- (iv) What a re the *Shari'ah* approval processes involved in the product development?
- (v) What are the *trade financing* activities in the banks including the performance, challenges and opportunities for the Islamic trade financing?

The questions are raised through a structured questionnaire sent to the target participants /staff in the Islamic banks and responses obtained for the analysis.

1.4. SIGNIFICANCE OF THE RESEARCH

Islamic banking has witnessed rapid growth over the years and has made its presence felt in the international banking system. It has created an impact as an alternative channel of banking not only in the Muslim world but also in the West and Far East. However compared to the conventional banking system which is deep rooted in every country including the Muslim countries, as discussed in the introduction section, the Islamic banking or interest-free banking is still a small player. One of the limitations is that Islamic banking products are very less in supply compared to conventional banking. The reason of short supply or slow growth in Islamic products is that Islamic banking products have to mandatorily comply with Shari'ah (or Islamic law), which creates barriers in innovation as the process is difficult and also creates transaction costs. Al-Salem (2009:187) states that "the major challenge is developing products in compliance with Sharia". This is because "developing products according to Sharia is burdensome and more difficult than the traditional ones. Development is not an easy task because Sharia committees need time to do their work" (Al-Salem, 2009:193). In general sense, "Islamic banking is by its character more complicated (because it has to meet the requirements of the secular and Islamic legal system)" (Nienhaus, 2007:139). While Shari'ah compliance remains the main challenge impacting supply of Islamic finance products, Iqbal and Mirakhor (2002:57) and Grewal (2011:11) identified some other factors that are impacting supply such as, requirement of human capital by the Islamic institutions to make innovation, formation of large institutions to afford research on product innovation and regulatory support for growth of Islamic finance.

As discussed, Islamic banking products have to mandatorily comply with *Shari'ah*. They must follow the guidelines of *maqasid al-Shari'ah* and the products need to be

free from prohibitory business principles of *riba* (interest), *gharar* (uncertainty) and *maysir* (gambling).

The Islamic banking products, therefore, characteristically are required to undergo stricter development processes. To understand those processes including the factors influencing the Islamic products development is of academic importance; hence constitute the motivation of this research.

It should be noted that a very limited amount of research has been conducted in the area of product development process in Islamic banks. The prominent one is by Ahmed (2011); this research takes the analysis step further to study the factors or control variables that influence the product development in the banks under study. The scope of the study is to cover the practical aspects of 'what exists' within the banks. This study provides the framework that could be used for further study and help in developing models that can be used by Islamic banks while developing their new products, which may help to speed the Islamic product development process whereby transaction cost can be reduced.

1.5. RESEARCH METHODOLOGY

In responding to the aims, objectives and research questions, this research applies quantitative method. Data collection is targeted to make through a structured questionnaire covering detail statements/ questions on product development processes in Islamic banks.

The target sample locations are South East Asia countries covering Indonesia, Bangladesh and Malaysia and the GCC covering Saudi Arabia, UAE, Kuwait, Qatar and Bahrain. These countries constitute eight among the top ten countries in the world in terms of Islamic assets (The Banker, 2014). The target banks are 22 banks in these countries, with mixed of full-fledged and Islamic window banks. The sample aimed to cover some of the top Islamic banks, like Al Rajhi Bank, KFH, DIB, IBBL and QIB.

The questionnaire contained 6 sections (A to F) covering different areas of the subject matter. The primary data is analyzed in two ways; descriptive and inferential statistical analysis. SPSS tools like descriptive, cross-tabulation and non-parametric

tests (Mann Whitney and Kruskal Wallis) are used. The findings are interpreted and discussed to conclude themes of this research.

Details of the methodology used in this research are present in Chapter 5, research methodology chapter.

1.6. RESEARCH OVERVIEW

This research is divided into nine chapters. Overview of the chapters of the thesis is as follows:

Chapter 1 being the Introduction chapter introduces the research by providing the research background, problem statement, research aims, significance of the research. It is small a chapter but important in setting out the direction of this research.

Chapter 2 (Islamic Finance: An Introduction) reviews the literature on the basic principles of Islamic economic and finance. The chapter also narrates the mechanism of Islamic economics, which covers prohibition of *riba* (interest); legitimacy of trade; distribution of wealth through *zakah*, *sadaqa*, *waqf* and Profit and Loss Sharing (PLS) concept. The chapter also explains the sources of *Shari'ah* law. Finally this chapter describes the Islamic banking products and a brief report on the Islamic banks.

Chapter 3 (Islamic Trade Financing: Applications in Banking - A Review) explains that trading is one of the main professions of early Muslims including the Prophet (*pbuh*) and Islam has spread toward many countries through trading. Trade financing carries the very essence of Islamic finance because there is actual movement (sale) of goods and services. Therefore this study provides a special focus on trade financing products and their development processes.

Chapter 4 (Product Development in Islamic Banking) makes a literature review in product development in general specially the service sector and product development in Islamic banks in particular. This identifies the pillars of product development that include 'strategy', 'resources' and 'processes'. Further for an Islamic bank another pillar is the *Shari'ah* approval process. The chapter also discussed about the critical success factors in product development and introduced the 'stage-gate processing'. Finally it discussed the product development processes in Islamic banks. The statistics

on global *Shari'ah* compliant assets was discussed and necessity of product development is emphasized.

Chapter 5 (Research Methodology) mainly explains the research methodology used in this research. This covers the some of the theoretical aspect of research methodology as well the methods of data collection used in this research. It explains the questionnaire design and each section of the survey questionnaire. Finally the SPSS data analysis tools like descriptive, cross-tab and non-parametric tests are discussed.

Chapter 6 (Preview of Primary Data -Islamic Banking Environment in the Countries of Survey) covers the preliminary analysis of primary data by providing qualitative analysis of the findings. The Islamic banking environment of the countries under survey is discussed and any special feature of product development process in the country is highlighted.

Chapter 7 (Empirical Results -Descriptive Findings) presents the empirical analysis of data through SPSS descriptive analysis tools. The frequency tables generated are described and the mean values discussed.

Chapter 8 is the second empirical chapter on the inferential analysis. In this chapter, the findings from inferential statistical tools are presented. Importantly, this chapter uses the non-parametric tests like Mann-Whitney U and Kruskal-Wallis tests and the significance of the control variable against the questions/statements in the questionnaire are analyzed to make the inferences.

Chapter 9 is the final chapter for discussion, contextualization and conclusion of the research. This brings together all the findings from both descriptive and empirical analysis to combine, interpret and find the patterns of product development processes that influenced by the independent variables. The patterns are interpreted to finally get the themes of this research.

CHAPTER 2

AN INTRODUCTION TO ISLAMIC FINANCE

2.1. INTRODUCTION

Islamic finance is now a familiar term in the present global financial markets. Though it is quite young compared to the well-established western style conventional finance, Islamic finance is currently practiced by nearly 500 financial institutions in the world (The Banker, 2013). It has established itself as a viable alternative method of financing and is steadily growing. During the last financial crisis of 2008-2009, Islamic finance industry has shown resilience and therefore proved to be a dependable solution, which, among others, is endorsed by Hasan and Dridi (2010:7) who stated that "Islamic banks showed stronger resilience, on average, during the global financial crisis".

Islamic finance is an ethical financing based on the guiding principles of Islam. But the present renaissance and the institutional development of Islamic finance can be date back to 1960s. It made a small beginning in 1960 through a community financial institution, namely Mit Ghamr in Egypt established 1963 and Tabung Hajj of Malaysia established in 1967.

The Islamic Finance has grown substantially during the last fifty years. Today more than 500 financial institutions including some large international banks are offering Islamic financial services globally with the total assets of Islamic finance are more than \$2,000 billion now and growing at the rate of 15% per annum (The Banker, 2013). Though the tipping point and capital base of the Islamic finance is located within the oil rich Middle Eastern countries as well as Malaysia, its presence is felt throughout the globe at the moment. It can be mentioned that the *Shari'ah* based financial models have passed the tests of sustenance during the last financial crisis in 2008-09 and therefore enhanced the confidence for future growth.

2.2 BASIC PRINCIPLES OF ISLAMIC ECONOMICS AND FINANCE

The holy Qur'an is the main source of guidance of Islam. The focus of Qur'an is the human being (nas) and human welfare (Iqbal and Mirakhor, 2011: 348). As stated in the Our'an (95:4; 17:70; 2: 177), human being is the best creation of Allah and service to fellow mankind is the character of a pious person. Therefore, Chapra (2008: 2) states that magasid al-Shari'ah or the 'objectives of Shari'ah' refers to human well-being as Islam stands for "all individuals be dealt with as equals and treated with dignity and respect, irrespective of their race, colour, age, sex or nationality, and that the fruits of development be also be shared equitably by all". Therefore Islamic economics and finance aims at human centered economic and finance paradigm (Asutay, 2007). The main message of *Qur'an* is the peaceful living of human being, both in this world (duniya) and the here-after (akhirah) (Our'an, 2:201); and therefore with an ethical based Islamic finance, this harmony is aimed at to be established for worldly and hereafter related salvation (Iqbal and Mirakhor, 2011). The moral and Shari'ah guidelines offered by Islam are expected to shape one's economic and financial choices and individual attitude. The prescribed guidelines cover integrally all activities of human life including individual, spiritual, social, political as well as economic activities. Therefore, economic activities are inseparable part of integrated Islamic life (Asutay, 2007).

As regards to the definition of Islamic economics, according to Asutay (2007:6), the Islamic economics can be defined as "part of the *din* (religion). It deals with production, consumption and distribution activities of human being according to Islamic guidelines". According to Hasanuzzaman (1984:50), "Islamic economics in the knowledge and application of injunction and rules of the *Shari'ah* that prevent injustice in the acquisition and disposal of material resources in order to provide satisfaction to human beings and enable them to perform their obligations to Allah and the society". Islamic economics, therefore, constitutes a set of rules and guidelines based on *Shari'ah* that governs the behaviour of the individual and society in economic and financial matters (Asutay, 2007). Within the larger scope of Islamic economics paradigm "Islamic finance is the institutional aspect for financing the economic activity in an Islamic framework" (Asutay, 2007:6).

The contenders in Islamic economics have developed particular foundational principles to locate the economic and financing activity within the objective of moral economy understanding. These are as follows (Asutay, 2007):

- (i) *Tawhid* (God's unity and sovereignty): It provides the vertical ethical dimensions establishing equality in the sight of Allah, while *akhirah* or the hereafter provides accountability and therefore harmony between economic and financial choices between this world and hereafter in this particular context. *Risalah*, on the other hand, provides exemplary economic and financial attitudes from the lives of the prophets including Prophet Muhammad.
- (ii) *Rububiyyah* (Divine arrangements for nourishment, sustenance and directing things towards their perfection), which implies sustainability of everything around us by acknowledging that everything has a developmentalist path to follow.
- (iii) *Al-adl wal-ihsan* (socio-economic justice), which provides for the horizontal dimension of equity establishing equality between individuals in their socio-economic lives. Thus, it identifies the importance of social justice and importance of social good that Muslims have to work for.
- (iv) *Ikhtiyar* (Free-will), which implies that individuals are free to choose their actions and destiny, which is the case with economic and financial matters as well.
- (v) Fard (Responsibility) implies that Islamic ethics does not leave social good and responsibility to voluntary action, but certain actions, such as payment of zakah, are made mandatory so that social good can be delivered.
- (vi) *Tazkiyah* (Purification plus growth), as continuation of *rububiyah*, it implies that while growth is essential for the development of societies, this has to be in harmony and it has to be a purified and morally filtered growth for all the stakeholders in the society.
- (vii) *Khilafah* –Trusteeship and human accountability before God (Individual's role as God's vicegerent on earth), which defines human being's status and role in ensuring above mentioned responsibilities are fulfilled in line with universal solidarity and social concern.

- (viii) *Maqasid-al Shari'ah* (Objectives of the *Shari'ah*), which is interpreted as human well-being; and hence whatever the action taken by individuals, economic or otherwise, has to make sure that human well-being is aimed at and achieved. For this Ghazalian interpretation is often consulted, which informs about the following five categories of *maqasid*: "faith (*din*), their self (*nafs*), their intellect (*aql*), their posterity (*nasl*) and their wealth (*mal*). Whatever ensures the safeguard of these five serves public interest and is desirable, and whatever hurts them is against public interest and it's removal is desirable" (Chapra, 2000: 118).
- (ix) *Ibadah* (obedience to Allah) (*Haququllah* and *Haququl Ibadah*), which emphasizes that worldly duties are equally important to spiritual duties. Thus, pious Muslim (*muttaqun*), as a result of *tawhid* and *adalah* axioms, is expected to fulfil the spiritual duties as well as worldly duties assigned by Allah. In terms of Islamic moral economy, this could be considered as *homoIslamicus*, an individual who observes both *haququllah* and *haququl Ibadah* dimensions as mentioned above (Asutay, 2007).

2.3 IMPLICATIONS OF THE ABOVE PRINCIPLES ON ISLAMIC SOCIAL ECONOMICS

The above assumptions imply that the sovereignty of God is universal. The owner of any property is the God himself and human being is a Trustee only (*Qur'an*, 57:7). Therefore, human being can only claim a partial credit for what he/she produces, as the needy in the society has a right too and must be cared and shared in the form of *zakah*, *sadaqah etc*. This implies that according to Islam, one must treat 'wealth as means and not an end'. Beyond the satisfaction of basic needs, the ultimate objectives of earning and spending money should have moral, spiritual and social values (Asutay, 2007).

Islamic economics suggests that individuals are free to make private economic decisions individually but decision concerning the public welfare must be based on mutual consultation. All people should have equal opportunities without discrimination to benefit from environmental and public resources.

Islamic economics ethics and Islamic law within the above mentioned axioms suggests that the economic activities are not independent of the spiritual or religious activities but a part of the complete code and conduct of Islamic life. The rightful

productive economic activities are very much encouraged whereas economic activities which are immoral are prohibited. On the other hand, it discourages unethical business and excess materialism. Islam believes in a welfare economy.

2.4 OPERATIONAL PRINCIPLES OF ISLAMIC ECONOMICS AND FINANCE

Based on the above discussion, Islamic operational principles in relation economics and finance are listed below (Asutay, 2009; Ayub, 2007):

- (i) Prohibition of *riba* (usury/interest)
- (ii) Legitimacy of trade (bai' or sale)
- (iii)Distribution of wealth by mandatory measures- Zakah
- (iv)Distribution of wealth by voluntary measures- sadaqah, waqf

The principles are explained below:

The literary meaning of *riba* is increment or increase implying increment in capital or loan, which is commonly referred as interest. Islam forbids interest in all its forms in very clear and strong language and considers transactions involving *riba* as a serious sin. Prohibition of *riba* (interest) is the founding stone of Islamic finance. There are many verses of *Qur'an* refers to such instructions. (Ayub, 2007; Thomas *et al.*, 2005)

Regarding to the Quranic sources of prohibition of *riba*, the *ayat al-ahkam* verses (2:278, 279, 282) provide the answer (Thomas *et al.*, 2005): According to these verses in Qur'an, there are three clear rules on the economic or commercial aspects of life (Thomas *et al.*, 2005:15);

- (i) Riba (interest) is forbidden
- (ii) Consuming others wealth inappropriately is avoided.
- (iii)Engaging in commerce/ trade through written contracts

Riba means lending at a predetermined rate of return, as *riba* lending was commonly practiced as a financing mode where money lenders obtained predetermined interest

incomes from borrowers on top of the secured principal loans. *Riba* also a means of re-scheduling existing debt obligations, as when borrower requested an extension of repayment date from his lender against an added premium. In both cases, *riba* involved the stipulation of a time price of lent money or real resource, which is banned by the *Qur'an*. Then, the Prophet's tradition offered a more general definition of *riba* in economic exchange involving both monetary and non-monetary transactions.

As for legitimacy of trade, the *Qur'an* and the *Hadith* provides definition for 'legitimate' and 'illegitimate' trade practices. The Prophet himself practiced trade during the pre-Islamic period both as agent (*mudarib*) and partner (*musharik*). It should be noted that trade (*tijarah*) in the Islamic perspective has a broader scope than the mere exchange of goods. All legitimate income-earning activities and professions in the form of exchange are proper trade practices such as production of goods or services, warehousing of goods, legal advice, insurance, banking, transport distribution *etc*. Thus, whatever income not acquired through legitimate trade is, therefore, illegitimate, which includes all the prohibitions – usury, *gharar*, and gambling. The Qur'anic phrase 'mutual satisfaction' (*tradhi*) gives legitimate trade the essence of generating greater satisfaction (or utility) to the parties involved. The objective of both parties is to maximize utility of consumption, which epitomizes the real life fact that all economic activity, in the final analysis, is about raising people's living standards (Ayub, 2007).

Islamic economics, thus, considers trade as an important means of earning for livelihood. Emphasizing the lawful earning for livelihood and trade being one of the important ways of lawful earning, Imam Ghazzali (*Ihya Ulum-id-din*, 1992: Vol 2-Ch.3:) mentioned:

Livelihood: "Earning is not the aim of human life but it is a means to end" (i.e. hereafter) (p. 49). Lawful earning for livelihood is highly encouraged and is considered as part of worship. Prophet said "Fear God and seek your livelihood in lawful manner." (p. 50)

Trading "Some wise saying is: A truthful merchant is dearer than a worshipper. Hazrat Omar said- No place is dearer to me than that where I search livelihood for my family members and where I buy and sell". (p. 51)

Therefore, in Islamic moral economy, every productive economic and assets based financing is perceived as trade; and therefore Islamic financial contracts are designed to reflect this.

With regards to distribution of wealth by compulsory measures, the Islamic economic tool for this purpose is *zakah*. Literary meaning of *zakah* is 'blessing', 'purification', 'increase' or 'cultivation of goods' (Chapra, 1993). In *Shari'ah*, it is an obligation in respect of compulsory alms-giving for a specified type of purpose and for specified categories. It is a specified amount prescribed by Allah the Almighty for those who are entitled to *zakah* as specified in *Qur'an*. The word *zakah* is also used to indicate the amount paid from the funds that are subject to *zakah* (Thomas *et al.*, 2005: 234).

As for distribution of wealth by voluntary measures, among others *sadaqah* and *waqf* can be mentioned.

2.5. UNDERLYING PRINCIPLES OF ISLAMIC FINANCE

As part of the Islamic economics, Islamic finance is shaped by the sources of Islam in essentialising the above mentioned principles. In terms of structuring and conducting the transactions, the following further salient Islamic finance principles should be mentioned (Asutay, 2009; Ayub, 2007):

- (i) Prohibition of *riba* or interest;
- (ii) Prohibition of gharar or uncertainty;
- (iii) Prohibition of maysir or gambling;
- (iv) Prohibition of excessive speculation;
- (v) Discouragement of debt-based financing and essentialisation of asset based transactions;
- (vi) Essentialisation of profit and loss-sharing principle;
- (vii) Essentialisation of risk-sharing;
- (viii) Money is considered not having an intrinsic value.

Some of these concepts are explained above; however, it is important to reflect upon profit-loss-sharing (PLS) concept in Islamic finance. One of the important features of Islamic finance compared to interest based conventional finance is the *participatory* financing involving profit and loss sharing (PLS) or risk-sharing. Islamic finance instruments are in essence asset-based, involving real economic activity and shares risk (Farooq, 2007; Kahf and Khan, 1992). The modes that form the basis of Islamic finance belong to participatory or profit-loss sharing or risk-sharing techniques and are the most desirable modes. This does not imply that non-participatory modes do not involve business risk, rather taking risk and responsibility is pre-condition for the legality of profit in any business. However, the participatory modes of Islamic finance involve direct participation in profit and loss by the parties (Ayub, 2007; Kettell, 2011).

The participatory (*shirkah*) or partnership system involving PLS concept work in the equity based contracts like *mudarabah* and *musharakah* (partnership). These modes are the means of providing risk-based capital and are jointly termed as participatory modes of finance.

There are mainly two kinds of *shirkah* (Usmani, 2002): *Shirkatul milk* is a partnership with right of ownership or mixing of ownership where a profit may not necessarily exist. In *shirkatul aqd* (contractual partnership), the partners enter into a contract to conduct a joint business with objective of earning profit and agree to share profit on the agreed ratio and bear losses proportionate to the capital invested (Ayub, 2007).

In the PLS under *mudarabah* structure, the profit is shared as per agreed proportion to the profit; but the loss is borne by the owner of the capital (*rabb al maal*), while the PLS under *musharakah* structure requires profits to be distributed according to contractually agreed shares, but the loss is proportionate to the capital contribution.

2. 6. ISLAMIC FINANCE INSTRUMENTS AND CONTRACTS

According to various sources the methods of Islamic finance used at different time frames are discussed below.

2.6.1 Practice of Finance during the Prophetic Period

During pre-Prophetic period *riba*-based financing was very common. According to researchers, trade was the main economic activity that time and a good part of trade was financed on the basis of *riba*. As stated by Kahf and Khan (1992):

As trade was the main economic activity of the tribe of Quraish, good deals of its caravans were financed by persons who did not accompany the caravans. Homoud (1982, p. 135) quotes Al Razi (circa 606H) as saying that in financing the battle of 'Uhud, the Quraish used funds accumulated by means of riba. Furthermore, in commenting on verses 275-280 of Surah II of the Qur'an, almost all writers make reference to the deep-rooted practice of riba in pre-Islamic Arabia, especially among members of the tribes of Quraish and Thaqif and by the Jewish communities.

The Quranic prohibition of *riba* (verse 2/278 and other verses) helped to encourage alternative modes involving PLS and sale-based financing during Prophet's period. This gave the foundation and legitimacy to many of the Islamic finance products that are used now. Kahf and Khan (1992) mentioned that:

Riba-ridden lending is forbidden and was generally eliminated from the Muslim society of the Prophet's (pbuh) era. Other forms of financing (*e.g.* mudarabah, benevolent lending, sale on credit, muzara'ah, musaqah and bai' al salam) dominated the financing practices of that period.

The types of non-riba based financing used during Prophet's time are:

(i) *Mudarabah* financing was a common practice by the Makkan society during Prophet time. The *mudarabah* arrangement between Prophet and his lady employer Khadija (later became wife) is well known. Therefore, the Islamic scholars accept the legitimacy of *mudarabah* as a non-riba financing which is on the basis of PLS. Kahf and Khan (1992) mentioned that:

While discussing the legitimacy of mudarabah, the fuqaha' usually call attention to the mudarabah enterprise the Prophet (pbuh) had with Khadijah which started more than fifteen years before the beginning of the revelation. They also mention the common practice of mudarabah in the Makkan society.

(ii) *Muzaraah and Musaqa*: The agricultural society in Madina used to practice crop sharing called *muzaraah* (for crops) and *musaqah* (for orchads, especially palm trees). In this the land (for *muzaraah*) and land plus trees (for *musaqah*) are given to the working partner on the basis of sharing the gross output of the crop.

- (iii) *Credit sales for consumptions*: There are many saying that sales on credit were existed during Prophet's time. Prophet used to buy on credits the goods and services from Muslims as well as non-Muslims. Sometimes he also gave personal belongings as security for such financing.
- (iv) *Credit sales for production (Salam)*: Credit was also used to finance production where finance is done in advance for future delivery. It is mostly used for financing crops for future delivery and called as Salam (Ayub, 2007).

2.6.2 Contemporary Methods of Islamic Finance Products and Contracts

Islamic finance instruments and the underlying contracts can be classified in following broad categories (Obaidullah, 2005; Ayub, 2007; Kettell, 2011; Kahf and Khan, 1992; Kammer *et al.*, 2015; Hussain, *et al.* 2015):

- (i) Equity based contracts: These contracts are based on PLS concept; therefore, they are also termed as PLS based contracts (Kettell, 2011: 59). The PLS based products are *mudarabah* and *musharakah*. Though PLS is an ideal way of Islamic financing, the present Islamic banking industry offers very less percentage of PLS financing than Non-PLS based financing.
- (ii) Debt based contracts (also termed as Non-PLS contracts): Debt contracts are mainly sale based contracts, with an exception of *Qard*, which is a debt without sale and it is a benevolent provision for the needy to be repaid free of charge (Hussain *et al.*, 2015: 6). These contracts are based on mark-up on sale of goods. The major percentage of Islamic financing at present is sale-based (*e.g. murabahah, bai muajjal, ijara, salam, istisna etc.*). One of the main reasons being the Islamic banking industry is new and it is competing in the same market with conventional banks, therefore in order to remain profitable and safe, Islamic banks tend to offer equivalent products that exist in the conventional banking.

(iii) Fee or Service based contracts:

Islamic banks also offer wide range of fee based services such as *wakalah* (used for Letter of Credit in trade transaction), *kafalah* (used for bank guarantee), *wadi'ah* (safe keeping), and *hawalah* (bank transfer). These are usually auxiliary to the main products such as *murabahah*, *mudarabah* (Hussain *et al.*, 2015: 10).

By comparing the 'equity versus debt based financing', many Islamic finance authors considered that the equity-based financing is the only real Islamic mode of financing that could be alternative to interest-based financing (Ayub, 2007). However as discussed (under item (ii)), in the present Islamic banking environment the debt-based financing is much bigger than the equity-based financing. In order to clarify the dilemma on 'equity versus debt', Ayub (2007: 86) states that:

Many authors, both economists and financial experts, have been saying that Shirkah or equity-based modes are the only modes which can serve as an alternative to interest in the Islamic framework. But this is not the case. Debt has existed forever, and will remain an important part of individuals' and nations' economics... Therefore, debt creating modes like Murabahah, Salam and Ijarah will remain as operating tools in the hands of Islamic financial institutions... the aim is to create a healthy balance between debt-based and equity-based financing for the prosperity of the economy and society.

The followings are the commonly used Islamic finance instruments in the contemporary Islamic financial industry:

(i) Mudarabah (equity based contract):

This is a contract between an investor (rab al mal) and an entrepreneur (mudarib) to invest in commercial activity, in which investor puts the 100% of money (Ayub, 2007). The profit is shared at an agreed upon proportion and loss if any is borne by the investor. This works like investment deposits in conventional finance (Wilson, 2009; Ayub, 2007; Mirakhor and Zaidi, 2007). Figure 2.1 depicts a simple mudarabah structure:

Mudarib Rab Al Mal (Bank/ (investor) Entrepreneur) Partnership business Source: Wilson (2009)

Figure 2.1: Simple Mudarabah Structure

Ayub (2007: 321) noted that "the term *Mudarabah* is derived from the expression 'making a journey' and it is called this because the agent (*Mudarib*) is entitled to the profit by virtue of his effort and work. And he is the investor's partner in the profit and in the capital used on the journey and in its dispositions".

Islamic banks make use of *mudârabah* financing to raise investment funds, savings accounts and for management of mutual funds (Hussain *et al.*, 2015).

(ii) Musharakah (equity based contract):

Musharakah comes from the word sharika or partnership and works like a joint venture where partners contribute their assets to the business enterprise in return for a pre-agreed profit sharing percentage (Kettell, 2011). For example, the contract allows bank customers to import certain goods and equipment at a certain profit sharing ratio between the bank and customers. The profit sharing in musharakah is agreed in advance, which is usually relating to the capital invested. If there is a loss, it will be shared in proportion to the amount invested. In management, all partners may be involved or agree in advance that one party is sleeping partner. (Wilson, 2009; Iqbal and Molyneux, 2005)

Diminishing *musharakah* (*musharakah mutanaqisa*) is commonly used in home financing. Under diminishing *musharakah* the financier and the customer participate in joint ownership of property or commercial enterprise. The customer promises to buy the share of the financier gradually until the ownership of the property transferred to the customer (Hussain *et al.*, 2015).

(iii) Murabahah (sale based contract):

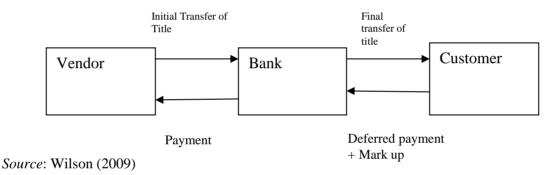
Murabahah is a particular kind of sale on a 'cost plus profit' basis where the seller discloses the cost to the buyer and adds a certain profit (or mark-up) to it to arrive at the final selling price (Ayub, 2007). Murabahah thus allows customers to purchase raw materials, capital goods and other consumables from local and international markets. Payment can be made at spot, on a deferred basis, or in lump sum after a certain time period. (Wilson, 2009)

Kettell (2011:44) mentioned that *murabahah* is a trust sale (*bayu' al-amanah*) in which the buyer puts his trust on the seller to disclose the seller's real cost of buying the goods. In strict definition, *murabahah* is a cash sale with payment being made on spot. However, when the payment is made on deferred payment basis it is called *bai' muajjal* or *bai' bithaman ajil* (literally meaning a sale with a deferred payment).

It should be noted that in the contemporary modes of Islamic finance, *murabahah* has emerged as the most distinct non-PLS principle of Islamic financing. "It has also become the backbone of contemporary Islamic banking" (Kahf and Khan, 1992:28).

While further discussion about *murabahah* is made in the next chapter (section 3.5) related to Islamic trade financing, Figure 2.2 depicts a *murabahah* structure

Figure 2.2: Murabahah Structure



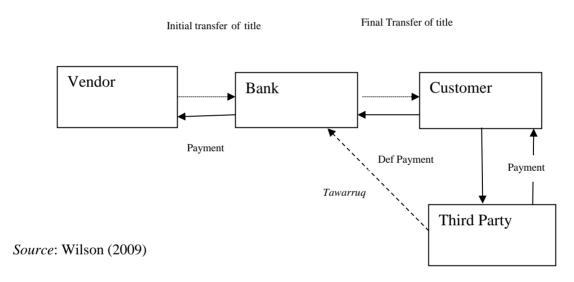
While *murabahah* financing is suitable for situations where the customer requires funds for the purchase of a particular asset; however, businesses often need 'cash financing' to fund expenditure not attributable to identifiable assets *e.g.* to pay wages and salaries, overheads, maintenance expenses and other working capital related cost (Abozaid, 2010). This is done through *tawarruq*, the structure of which is presented in Figure 2.3.

Tawarruq means "buy on credit and sell at spot value with objective of getting cash" (Ayub, 2007:349). As for its operational mechanism, "tawarruq works like reverse Murabahah, buying an item on credit on deferred payment basis and then immediately reselling it for cash at discount /prize to a third party". (Iqbal and Mirakhor, 2011: xiii). Majority of Shari'ah scholars accept Tawarruq on exceptional basis as long as the customer sells the commodity to a third party to get cash. However, Tawarruq is considered a grey area and "is considered a hiyal, (legal

stratagem) since the individual concerned has no real intention of buying or selling the commodity. He engages in these purchase and sale transactions for realization of cash" Obaidullah (2005:109). Therefore, "Islamic bankers need to understand that *Tawarruq* arrangements should be used only in extreme cases where no other option is available to avoid interest" (Ayub, 2007:351).

Tawarruq is used by many Islamic banks for liquidity management and as mode of financing purposes such as personal loans and credit cards. Some Islamic banks in the Middle East and West use *tawarruq* for treasury liquidity management to place and obtain funds. This is done through commodity *murabahah* where international markets *e.g.* London Metal Exchange (LME) are used for purchase and sale of commodities (Ayub, 2007).

Figure 2.3: Tawarruq Structure



Some banks also use *bay' al-'inah* for 'cash financing' purpose, while most of the banks reject *bay' al-'inah*, therefore they have resorted to *murabahah* financing with *Tawarruq* as explained beforehand. *Bay' al inah*, commonly known as 'buy-back' is a "double sale by which the borrower and the lender sell and then resell an object between them, once for cash and then for a higher price on credit; the net result replaces a loan with interest (prohibited)" Ayub (2007: 486).

Banking authorities in Malaysia consider *bay' al inah* is acceptable; however *Shari'ah* experts from the Middle East and the rest of the world consider it non-permissible (Ayub, 2007: 230).

(iv) Bai' Bithaman Ajil or Bai Muajjal (sale based contract-credit sale):

As mentioned under item (iii), a *murabahah* sale when the payment is made on deferred payment basis is termed as *bai' muajjal* or *bai' bithaman ajil* ('literally meaning a sale with a deferred payment') Kettell, (2011:44). This is a financing facility, which provides cash by selling goods or commodities to the customers. Subsequently, the customers appoint the bank as agent to sell the same in the market and the sale proceeds are transferred to the customer. Payment for the finance can be made on a deferred basis in instalments or in a lump sum. (Usmani, 2002; Ayub, 2007)

The bank possesses the commodities and has them ready for inspection in stores or showrooms. Storage and display can be made in space owned by the bank or through standing arrangements with suppliers.

(v) Salam (sale based contract):

Bai-salam involves advance payment for deferred delivery of goods. It is same like *istisna* but exception is that even without existence of the goods, the contract is made by defining the goods and date of delivery in future. It is more suitable for agriculture finance.

As stated by Hussain *et al.* (2015:9), "Salam is a form of forward agreement where delivery occurs at a future date in exchange for spot payment. Such transactions were originally allowed to meet the financing needs of small farmers. A vital condition for the validity of a salam is payment of the price in full at the time of initiating the contract, or else the outcome is a debt-against-debt sale, which is strictly prohibited under Shari'ah".

Special natures of *salam* and *istisna* are, they are sales without commodity or exceptional sales. The Prophet allowed *salam* sale without possession of commodity on the basis of need of people. Therefore *salam* as an exception to the general principle which is also based on Hadith of the Prophet: "Do not sell what you do not possess and which does not exist" (Tirmidhi Hadith No 1232; Abu Dawud Hadith No 3503). However, two exceptions are made to this general *Shari'ah* principle, which are *salam* and *istisna*.

(vi) Istisna'a (sale based contract):

Istisna'a means 'order to manufacture (for purchase)' (Ayub, 2007:490). It is a contract to manufacture goods, assemble or process them, or to build a house or other structure according to exact specifications and a fixed timeline. This product is suitable for financing large projects. Under Istisna'a, the bank will typically arrange to build an asset or plant in accordance with the specifications requested by the customer (Ayub, 2007; Usmani, 2002; Wilson 2009).

As explained by Hussain *et al.* (2015:9), "*Istisna*' is a contract in which a commodity can be transacted before it comes into existence. The unique feature of *istisna*' (or manufacturing) is that nothing is exchanged on the spot or at the time of contracting. It is perhaps the only forward contract where the obligations of both parties are in the future".

(vii) *Ijarah* (sale based contract):

As explained by Ayub (2007), *ijarah* is a rental contract in which a financial institution (lessor) purchases equipment or property and leases it to a customer (lessee). All costs related to the ownership of the asset (usufruct) are borne by the lessor. In this case, the bank would acquire ownership of equipment or property and then lease it to the customer for payment of rentals (fixed or floating) on a periodic basis. Ownership of the asset is transferred to the customer after payment of all dues through a separate sale agreement at the end of the period. Such lease contract in which the asset is transferred to the lessee at the end is called as *ijarah muntahia bit tamleek*.

(viii) Takaful (Islamic Insurance):

Takaful is the cooperative insurance based on Islamic principle of ta'awon or mutual assistance. As a solidarity oriented process, during pre-Islamic time people used to pool funds and this fund is used for recovery of loss in case of eventualities. Modern takaful has two distinct directions of branches, each involving same *ijtihad*. One direction treats the premium as contribution to a managed pool and the other treats the managed pool as a mode of *mudarabah*.

As Ayub (2007: 422) explains:

A Takaful company serves as a trustee or a manager on the basis of Wakalah or Mudarabah to operate the business. The operator and the partners who take any policy contribute to the Takaful fund. Claims are paid from the Takaful fund and the underwriting surplus or deficit is shared by the participants. In life policies, a part of the contribution is also kept as an investment fund. The operator uses the funds in the business on the basis of Wakalah or Mudarabah. The underwriting surplus or deficit belongs to the policyholders/partners, while distribution of profit arising from the business depends upon the basis of Wakalah or Mudarabah.

(ix) Qard Hasan (QH) (a voluntary loan)

As the name itself indicates it is the; beautiful loan; that encouraged in Qur'an at many places mentioning that Allah multiplies in reward to those who give *qard hasan*. It is basically meant for a benevolent loan to weaker section of the society, therefore it is suitable for micro-financing.

Qard hasan (QH) is a voluntary loan entered into by the lender without expectation of any return on the principal. Additionally, while the debtor is obliged to return the principal, the lender is urged, according to a number of the sayings of the prophet not to press the debtor if he or she is unable to repay by the specified deadline (Mirakhor and Iqbal, 2007).

(x) Sukuk

Sukuk (the plural of the word Sak) in ordinary sense is Islamic equivalent of a tradable bond. Sukuk were used by the Muslim societies of the Middle Ages as "papers" representing financial obligations originating from trade and other commercial activities. However, the Sukuk structures presently found in Islamic finance are akin to the conventional concept of securitization, a process in which ownership of the underlying assets is transferred to a large number of investors through papers commonly known as certificates, Sukuk or other instruments representing proportionate value of the relevant assets (Ayub, 2007:204).

In sum, this section presented the Islamic financial instruments used in Islamic finance industry. Table 2.1 shows the common Islamic banking products and the nearest equivalent conventional banking products.

Table 2.1: Common Islamic Banking Products and Relation to Nearest Conventional Banking Products

Islamic Product	Basic features of the product	Nearest Conventional Finance Product
Murabahah	Buying and selling of commodities; Islamic FI purchases the goods at spot (P) and sells on deferred payment basis to the client at cost plus agreed profit (P+X).	Trade Finance (LC Finance), working Capital, Cash management
Reverse Murabahah	It is also called as Direct Investment (DI). It works Opposite of <i>Murabahah</i> . The customer buys goods from vendor on spot and sells to bank at deferred payment basis.	Deposits
Mudarabah	Contract between Investor and the Islamic FI as Entrepreneur (Mudarib) to invest in commercial activity. Investor puts the 100% of money. The profit is shared at an agreed upon proportion. Loss if any is borne by the investor.	Investment Deposits
Musharakah	Partnership financing. Both Investor and entrepreneur provide the capital. Profit is shared on pre-agreed ratio but loss is shared on the basis of equity participation. Under diminishing Musharakah the entrepreneur buys out the shares of investor gradually.	Joint venture financing, margin financing. Musharakah LC
Ijarah	Lease purchase contract. The FI purchase the Equipment or property and lease it to the enterprise. The FI gets the rent or a share of profit earned from the use of the equipment.	Leasing
Istisna'a	Manufacturing loan or pre-shipment export finance. It is also used for construction finance. These are used for medium term financing.	Project Finance, pre- shipment finance
Salam	(<i>Bai-salam</i>). Advance payment for deferred delivery of goods. It is same like <i>Istisna</i> but exception is that even without existence of the goods, the contract is made by defining the goods and date of delivery in future. More suitable for agriculture finance.	Deferred sale, Crop / Agriculture loan etc.

Chapter 2 An Introduction to Islamic Finance

Sukuk	Islamic bond. These are asset backed commercial	Bonds, Commercial	
	papers which gives ownership or part ownership of the	paper	
	asset to the subscriber. Done through a SPV		
Takaful	Cooperative insurance based on Islamic principle of	Insurance	
	ta'awon or mutual assistance.		
Qard Hasan	Voluntary Loan	Micro Finance/	
		Community	
		development	

Sources: Wilson (2009); Ayub (2007), Obaidullah (2005)

2.7. ROLE OF SHARIAH BOARD IN GOVERNING ISLAMIC BANKS AND FINANCIAL INSTITUTIONS

Shari'ah board plays an important role for every Islamic bank and financial institutions, whose role is to ensure that all the products offered by the bank are compliant with Shari'ah. They also help to develop new product that are complied with Shari'ah.

It has been discussed before that *Shari'ah* approval is an important part of the product development process in Islamic banks. In this research, some questions related to *Shari'ah* approval process are included in the survey questionnaire for getting feedback from the target banks and in the empirical part of the thesis *Shari'ah* approval is included in the analysis. In this section the relevant literature on the framework of *Shari'ah* governance is reviewed and discussed.

2.7.1 Shari'ah Governance in Islamic Banking and Finance

According to IFSB (2009) *Shari'ah* governance is defined as "a set of institutional and organizational arrangements through which IFIs ensure that there is effective independent oversight of *Shari'ah* compliance over the issuance of relevant *Shari'ah* pronouncements, dissemination of information and an internal *Shari'ah* compliance review" (Mizushima, 2014:62).

As discussed in the Chapter 1 (Section 1.1), the distinguished feature of Islamic finance is to comply with *Shari'ah* (Islamic law) and Islamic financial institutions must follow *maqasid* al-*Shari'ah*. By comparing conventional and Islamic financial institutions, Mizushima (2014:62) mention that "since *Shari'ah* is the backbone and foundation of Islamic banking and finance industry ... *Shari'ah* governance should be considered as the single most important distinction between conventional and Islamic financial institution".

IFSB (2008) proposes four aspects of *Shari'ah* governance system for Islamic financial institutions (Ahmed, 2011: 63): "issuance of *Shari'ah* pronouncement, ensuring day today compliance with *Shari'ah* pronouncements, internal *Shari'ah* compliance review and audit and an annual *Shari'ah* compliance audit to ensure that

the internal *Shari'ah* compliance review has been properly carried out". IFSB also identified the following units in the *Shari'ah* governance regime in order to undertake the above functions (Ahmed, 2011:63):

- (i) In-house Shari'ah compliant unit/department,
- (ii) Internal Shari'ah review/ audit unit,
- (iii) Shari'ah Supervisory Board (SSB)

Bakar (2002:88) mentioned that, "the *Shari'ah* Supervisory board has been perceived as the most essential organ of governance in the structure of Islamic banking and finance". Thus, the corporate governance structure of an Islamic bank differs from that of a conventional bank with inclusion of an additional governing body called *Shari'ah* board for the former. As Neinhaus (2007:128) mentioned, "in most Islamic financial institutions, an additional body is part of the governance structure which has no counterpart in conventional banks, namely the *Shari'ah* Supervisory Board (SSB)".

2.7.2 Duties and Responsibilities of Shari'ah Board

As discussed earlier *Shari'ah* board plays the key role in the conduct of business of Islamic financial institutions and "the *Shari'ah* advisors have both supervisory and consultancy functions" (Kettell, 2011:24). In a supervisory role, *Shari'ah* advisors review the operations of the institutions, ensuring that they comply with the requirement of *Shari'ah*. Secondly, in a consultancy role, as the modern Islamic finance transactions are becoming more complex and dynamic, *Shari'ah* advisers endeavour to answer any issue for a particular transaction or product to comply with *Shari'ah*. It should be noted that "where deemed necessary, they offer constructive, creative and/or alternative recommendations" (Kettell, 2011:24).

The engagements of *Shari'ah* advisors in relation to Islamic business are expected to be active and continuous to deliberate the *Shari'ah* issues; however, some prevalent duties and responsibilities of *Shari'ah* advisors are listed below (Kettell, 2011:24):

- (i) Review product and services to ensure conformity with Shari'ah requirements;
- (ii) Review and endorse relevant documents;
- (iii) Supervise investments made by the institutions in the Islamic financial markets;
- (iv) Deliberate on *Shari'ah* issues pertaining to day-to-day operations and provide advice:

- (v) Conduct research and development of new products;
- (vi) Provide training and education on Muamalat, based on Shari'ah contracts;
- (vii) Assist related parties (legal counsels, auditors, consultants *etc.*) on *Shari'ah* matters.

2.7.3 Composition of Shari'ah Supervisory Board (SSB)

According to Thomas (2005), there are two approaches for formation of SSB: First, the effort of the bank is to secure the membership of a panel of prominent Islamic scholars in the SSB. In case of Islamic banks, the panel of scholars is appointed by the general assembly (GA) or the board of directors (BOD). The panel is independent of the management of the bank and reports directly to the owners or their representatives (Thomas, 2005). However, "the universe of well-known scholars across the borders who are multi-lingual is small; perhaps only a dozen scholars are thus recognized" (Thomas, 2005:33), which imposed an important constraint in the operations of Islamic banks. Second approach is consisted of panel to include one or more well-known scholars and one or more that are less well-known scholars who are respected in the local market (Thomas, 2005).

With regard to minimum number of members/advisors of any *Shari'ah* supervisory board, the AAIOFI standard has required a minimum of three numbers (Bakar, 2002). But this is not followed strictly, as "many IFIs have appointed only one or two advisors to their respective institution" (Bakar, 2002:79).

Ideally the *Shari'ah* advisor is expected to serve on a full-time basis to examine and check all of *Shari'ah* matters effectively and thoroughly. It is for this reason that an IFI is need an internal *Shari'ah* advisor for continuous supervision. But in practice though most of them have established internal supervision but a few of them do not have specific *Shari'ah* advisors (Bakar, 2002), which is also evidenced in this study (see Table 7.25).

2.7.4 AAOIFI Standardization and Harmonization for SSB Appointment, and Composition

One of the issues faced by Islamic financial industry is lack of standardization of *Shari'ah* rulings within the same jurisdictions and among various regions (Akhtar,

2006). As Bakar (2002:88) stated "though *Shari'ah* boards share the common *raison d'etre*, that is to ensure Sharia compliance, they differ in issues of methods of appointment, composition of numbers, legal status of ruling, internal supervision and so on". Therefore, standardization and harmonization of *Shari'ah* rulings across the globe is desired; and if achieved can become a great strength for Islamic financial service industry. In this regard, AAOIFI has taken lead role in preparing standards for different *Shari'ah* issues (Akhtar, 2006).

AAOIFI has prepared standards for composition of *Shari'ah* Supervisory Board (SSB). According to this standard, "a *Shari'ah* board should be an independent body of specialized jurists in Islamic commercial jurisprudence. It may also include other experts in areas of Islamic financial institutions with knowledge of Islamic jurisprudence relating to commercial transactions" (Ayub, 2007:387). According to AAOIFI Governance Standard No.1 on the '*Shari'a* Supervisory Board Appointment, Composition and Report', every Islamic financial institution will have an SSB which (Nienhaus, 2007:136):

- a. is an independent body of specialized jurists in *fiqh almua'malat* (Islamic commercial jurisprudence,
- b. is entrusted with the duty of directing, reviewing and supervising the activities of the Islamic financial institution in order to ensure that they are in compliance with Islamic *Shari'a* rules and principles,
- c. can issue *fatwas* and rulings which 'shall be binding on the Islamic financial institution,
- d. shall consist of at least three members who are appointed by the shareholders ... upon the recommendation of the board of directors (not including 'directors or significant shareholders of the Islamic financial institution,
- e. shall prepare a report on the compliance of all contracts, transactions and dealings with the *shari'a* rules and principles,
- f. shall state that 'the allocation of profit and charging of losses related to investment accounts conform to the basis that has been approved' by the SSB; finally,
- g. shareholders may authorize the board of directors to fix the remuneration of the *Shari'a* Supervisory Board.

2.7.5. Challenges with Standardisation

There are many challenges in bringing standardisation and harmonisation of among the SSBs, some of them are discussed here.

Though AAIOFI is a universal standard-setting body, AAOIFI standards are not universally applied. They have been made mandatory only in Bahrain, Sudan and Jordan and taken as guidelines by the Saudi Arabian Monetary Agency (Visser, 2009:96). The AAIOFI accounting standards are taken as benchmark in countries like Indonesia, Malaysia and Qatar (Sundararajan and Errico, 2002:16). Thus, AAOIFI was set up by the industry itself but it has no power of enforcement (Visser, 2009:96). Therefore, Islamic banks in many countries rely on their own SSBs for *Shari'ah* compliance matters.

The practices of SSBs differ from one bank to another. This is due to various reasons such as legal status, authority of appointing its members, composition of members, scope of its role and responsibilities *etc*. (Bakar, 2002). Moreover, SSBs may interpret the Islamic laws differently, as "disagreement is a natural phenomenon in the history if Islamic law" (Bakar, 2002:88). Therefore, one product might be *Shari'ah* compliant in one country/ bank and might not be others.

Neinhaus (2007) mentioned, "standardisation curtails the importance of individual SSBs on daily business of Islamic banks". This could be a hindrance in the process of standardization. However, in the highly completive environment, the prosperity of a bank will depend crucially on its innovative potential; SSBs must recognize that they play crucial role in the product innovation process. "If an SSB wants to maintain its importance, its members must adopt an attitude towards financial engineering and product innovation which is less retrospective and restrictive but more prospective and permissive" (Neinhaus, 2007:136).

Another challenge is, Islamic banks try to maintain secrecy of their innovations with fear of imitation by other Islamic banks. Therefore, neither the management nor the SSB has an interest in too much disclosure of the Islamic qualities of financial innovations. Neinhaus, (2007:136) has appropriately commented that, "Islamic banking is by its character more complicated (because it has to meet the requirements

of the secular and Islamic legal system) and less transparent than conventional banking".

2.7.6. Need of Regulatory Frameworks for Shari'ah Governance and Harmonization

IFSB (2008), as another standard setting body, leaves the responsibility of *Shari'ah* governance at the organization level; therefore, there is a need of regulatory framework at national level to give the *Shari'ah* governance guidelines that will help to reduce the *Shari'ah* compliance risks of the Islamic banks (Ahmed, 2011). In this respect, "two broad criteria can be used to classify *Shari'ah* governance regimes", Ahmed (2011: 64): Existence of a National *Shari'ah* Authority (NSA): NSA will address the *Shari'ah*/ *fiqh* related issues, harmonise the *Shari'ah* interpretations and ensure compliance with *Shari'ah* principles, which exists in countries like Indonesia, Malaysia and Pakistan. Secondly, regulations to strengthen *Shari'ah* governance structures and processes, as there is requirement of national level regulatory framework to cover various aspects of *Shari'ah* governance of the Islamic banks, including mandatory requirement of *Shari'ah* unit by all Islamic banks, defining roles/duties of SSBs, approving appointments of members of SSBs, specifying qualifications and minimum numbers in SSBs *etc*.

2.7.7 Shari'ah Compliance in Relation to Product Development Process

It is important to note that SSB also plays important role in the product development process of an Islamic bank. As remarked by Ahmed (2014:26), they ensure "Islamic' nature of Islamic banks by fulfilling the *Shari'ah* requirements in the products. In particular, SSB has direct responsibility to ascertain that the products comply with principles and goals of *Shari'ah* before they are launched in the market". This is done by looking at the product development process and identifying the role of *Shari'ah* related bodies (*Shari'ah* department and SSB) in different stages of developing products (Ahmed, 2014); and each stage SSB is expected to conduct the necessary evaluation of the product design as well as post-design and launch processes. In this, their main references are *Shari'ah* rules and also *maqasid al-shari'ah* and *maslahah*.

It is important to note that SSB's approval of products provides legitimacy for the Islamic banks; as by providing *Shari'ah* compliant products, the Islamic banks attract

many clients for religious reasons. On the other hand, *Shari'ah* non-compliance can be a reason for reputational risk to the Islamic banks (Ahmed, 2014).

2.8. SNAPSHOT OF THE PRESENT ISLAMIC FINANCE INDUSTRY

Islamic finance industry has shown an unprecedented growth since the establishment of first Islamic commercial bank in 1975, and it is now a global industry being present in many parts of the world (Hasan and Dridi, 2010:33). "As one of the fastest growing segments in global financial services, Islamic finance has become systemically important in many markets and too big to ignore in others" (. As mentioned, nearly 500 Financial Institutions are practicing Islamic finance in 40 countries around the world including non-Muslim countries (The Banker, 2013). The total *Shari'ah* complied assets are about US\$2 trillion (The Banker, 2013). It should also be noted that the Islamic finance has showed resilience in the financial crisis during 2008-09 and proved to be stable (Hasan and Dridi, 2010).

Table 2.2 and Table 2.3 show the top ten countries and banks having *Shari'ah* complied assets.

Table 2.2: Top-10 Countries having Shari'ah complied Assets

Shari'ah Compliant Assets -2013			
Country	USD MM		
Iran	475,890		
Saudi Arabia	227,173		
Malaysia	196,820		
UAE	87,321		
Kuwait	72,464		
Bahrain	56,471		
Qatar	53,125		
Indonesia	18,988		
Bangladesh	16,478		
Turkey	12,106		
Total	1,216,836		

Source: The Banker (2013)

Table: 2.3: Top 10 banks in terms of Shari'ah complied Assets as of Nov 2013

Ranking	Country	Result Date	Institution	Assets	% Shari'ah	Profit
				US\$ MM	complied assets	US\$ MM
1	Iran	19/03/12	Bank Melli	76,613.0	100	366.0
2	Iran	19/03/12	Bank Mellat	72,556.5	100	729.3
3	Saudi Arabia	31/12/12	Al Rajhi Bank	71,302.0	100	2102.0
4	Iran	19/03/12	Bank Maskan	54,528.0	100	215.0
5	Kuwait	31/12/12	KFH	52,324.0	100	442.0
6	Iran	19/03/12	Bank Sedarat	50,706.0	100	503.0
7	Iran	19/03/12	Bank Tejarat	41,871	100	610.0
8	Malaysia	31/12/12	Maybank	30,380.8	18.77	2581.0
9	Saudi Arabia	31/12/12	National	27,794.4	30.18	1763.0
			Commercial Bank			
10	UAE	31/12/12	Dubai Islamic	25,967.0	100	328.0

Source: The Banker (2013)

Table 2.2 shows that Iran as a country has highest *Shari'ah* complied assets, which is evidenced in Table 2.3 which shows that 5 Iranian banks in the top ten list. It should be noted that due to lack of information and close environment, Iran is not included in this study. Other than Iran and Iranian banks, 8 countries from table 2.2 and 4 banks from table 2.3 are included in the sample of this study. Further statistical data and comparison on the countries and banks having *Shari'ah* complied assets are discussed in Chapter 6

2.9. CONCLUSION

As the material presented so far indicates, in Islamic finance 'interest' is prohibited, but creating profit from asset backed financing is allowed, [i.e. Money + Asset (or factor of production) = More money], whereas in conventional finance, money can make money in term of 'interest' [Money + Interest = More money]. Therefore, as a main distinction from conventional finance, "making money out of money is not Islamically acceptable" (Kettell B, 2011:34). However, getting reward from capital through investments in real assets or factors of production is encouraged, as "Islam is well cognisant that capital, when used productively, is entitled to an appropriate reward" Asutay (2009:17). In addition, in Islamic finance, there is PLS concept of business and sharing of risk between financier and entrepreneur, while in conventional finance, profit is the main aim, sharing of risk may or may not exist.

In sum, while "conventional intermediation is largely debt-based and allows for risk transfer, Islamic intermediation, in contrast, is asset-based, and centers on risk

sharing. In addition to providing IBs with additional buffers, these features make their activities more closely related to the real economy and tend to reduce their contribution to excesses and bubbles" (Hasan and Dridi, 2010:33).

To further contextualise, it is appropriate to quote an excerpt from the speech by Ahmad Mohamed Ali, President of Islamic Development Bank (IDB), in his G20 Pittsburgh Summit 2009 address about Islamic Finance:

The intrinsic feature of Islamic finance is the participatory finance model in which both the financiers and business partners share in the ex-post outcome of risk and reward. Mainstreaming this feature of Islamic finance carries the potential of contributing to the promotion of market-based discipline and stability in the global financial system. Participatory financial intermediation will help in controlling leverage and the resulting excessive credit expansion. It will also, in turn, help bring about realistic pricing of assets and liabilities. Islamic contracts are generally asset based and activities transacted must comply with Islamic law.¹

Lastly, the recognition of Islamic finance as a growing segment of global financial services which is more close to the real economy and a viable alternative to the conventional finance is clearly reflected in the increasing global assets size and operations of Islamic banks, Islamic financial, money and capital markets.

_

¹ Available: <URL: http://www.g8.utoronto.ca/newsdesk/g8g20/g8g20-ali.html>.

CHAPTER 3

INTRODUCTION TO ISLAMIC TRADE FINANCING PRODUCTS

3.1 INTRODUCTION

The legitimacy of trade in the Islamic moral economy is already discussed in Chapter 2. As trade financing is a focus area of this research, further details about trade financing *vis-à-vis* Islamic finance is discussed in this chapter. With that aim a historical relevance of 'trade' with Islam is briefly described in the beginning. Further, the chapter highlights the fact that trade or 'sale' is one of the main techniques on which the Islamic banking products are devolved. Subsequently some of the main trade financing products that are suitably adapted into Islamic banking are discussed in this chapter. It should be noted that in addition to benefiting from the existing literature in writing up this chapter, researcher's his own experience has also been referred.

3.2. MEANING OF TRADE

As per Oxford Advanced Learner's Dictionary (2010), the meaning of word 'trade' is "the activity of buying and selling or exchanging goods or services between people or countries". Buying or manufacturing goods at one place and selling at another place is commonly known as trade or trading. The place of sale can be local, domestic or foreign; and accordingly the trade is called local trade, domestic trade or foreign trade. The person or establishment who is involved in the business of trading is a trader.

Trading, hence, is an economic activity done with a purpose to make profit, though it may cause loss sometimes. Trade helps in supply of essential commodities, industrial manufacturing, creating jobs, developing transportation, promoting tourism and even making festivities (like trade festivals). In addition to commercial activities, trade has also helped in social activities like spreading religions, bringing cultures together and establishing ethnic colonies at different parts of the world.

3.3 TRADE AND ISLAM: A HISTORICAL LINK

According to many references, trading as an economic activity has been association with the religion of Islam from the beginning. The biography (*sirat*) of Prophet Mohammad (*pbuh*) written by many authors indicates that he worked as a trader during his youth. His woman employer and later became wife, Khadijah was a rich merchant (Lings, 1991). Prophet's father and grandfather were also traders.

3.3.1 Makkah Being Trading Center before Islam

Watt (1953) mentioned that during the birth of Muhammed (*pbuh*) in 570AD, Mecca was already a center of international trade. In support of this, Crone (1987) narrates about trading activities of Meccans before the birth of Prophet, who mentioned that Meccans traders were playing the middlemen role to buy goods from South and take to the North and vice versa.

During pre-prophetic period Meccan traders were regularly travelling by camel caravans to Syria, Palestine and beyond via the city of Medina. During summer they had travelled north towards Syria because it was cooler and during winter they used to travel to South towards to Yemen because it was warmer. Such trade activities are endorsed in the Qur'anic verse: 106: 2.

Crone (1987) has mentioned that the word 'ilaf' (or treaty) that appears in Qur'an (106:2) is related to the trade treaties which were made by Hashim, the Prophet's great-grandfather, as he was a great trader between Mecca and Syria. He had made treaties (ilafs) with the tribes on the trade routes that granted the *Quraysh* the safe passage through the territories of the hostile tribes.

Above references confirm that trading as an economic activity had contextual link with Islam as a religion.

3.3.2 Spread of Trade with Islam

In the post-prophetic period and medieval period as Islam spread many countries (Stelios *et al.*, 2012), the Muslims expanded their trade to those countries as well. As the Muslim traders traveled to new countries for trade, they facilitated the spread of Islam to those lands. Discussing details on this subject with references is

not the scope of this study. However as an example it is worth to mention that the famous Silk route (Liu, 2011) between Istanbul (Turkey) to China with distance of nearly 7,000 miles was used by the Muslim traders to transport their merchandise. The presence of Muslim population today on the hinterland of the silk route is an evidence of contribution of trade in spreading Islam.

The point relevant to this study is that the international trade played a role in spreading Islam to some of the countries especially in Asia including Indonesia and Malaysia, which are the hubs of Islamic finance now. Therefore international trade has an indirect contribution to the growth of Islamic finance in those countries.

3.4 ISLAMIC FINANCE AND TRADE FINANCING

The legitimacy of trade in Islam is already mentioned in Chapter 2. Many Quranic verses as well as Prophet's *Hadith* endorsed to give the seal of *Shari'ah* (Islamic law) on trade (sale) as an approved mode of transaction. However, following citations from the *Qur'an* and *Hadith* sources are significant here to discuss:

Qur'an (2:275): "Allâh has permitted trading (*i.e.* sale) and forbidden ribâ (usury)". This Qur'anic verse is clear on permission of trading (sale) and prohibition of *riba*.

Hadith 282 [Bukhari- English translation byMuhammad Muhsin Khan Vol. 3, Book 34, p167): "The Prophet purchased food grains from a Jew on credit and mortgaged his iron armor to him", which indicates the trade activities of the Prophet. This *Hadith* (traditions and sayings of Prophet) clarifies the following three things:

- (i) Doing business with non-Muslim is allowed;
- (ii) Credit (deferred payment) sale is allowed;
- (iii) Keeping mortgage of items against credit sale is allowed.

Above citations confirm the legitimacy of trade as well as confirm finer points like permissibility of deferred payment sale, mortgage sale and doing business with non-Muslims. These are some of the basic components of Islamic finance in general and Islamic trade finance in particular. Based on those guidelines, there were many Islamic modes of financing used during the early Islamic period (such as *mudarabah*, *musharakah*, *murabahah*, *musawama*, *salam*, *kafalah*, *etc.*), which are continuing to be important and relevant for business today even after centuries. Thus,

Quran's position as well as the practices of the Prophet Mohammad vis-à-vis trade and business are rather encouraging. Some of the Islamic financial instruments ... have been used historically over the centuries to finance trade, and are still used to provide financing and facilitation of trade between countries. In addition, new financial instruments have been developed in recent years to respond to the sophistication and diversity of the needs of contemporary trade financing. Asutay (2015:15)

Based on this general introduction showing the legitimacy of trade in Islam and based on the principles of Islamic finance discussed in Chapter 2, the following sections provides a detailed understanding of various trade financing instruments within Islamic finance.

3.5 MURABAHAH: AN ALTERNATIVE TO INTEREST BASED FINANCING OF TRADE

Due to the nature of the trade business, many Islamic trade financing products are developed on the basis of 'sale'. The most prominent sale-based product is the *murabahah*. It should be noted that *murabahah* sale structure is already discussed briefly and illustrated in Chapter 2 (Figure: 2.2). In this section *murabahah* is discussed in more details, especially the use of *murahabah* as a mode of financing by the Islamic financial institutions and the application of *murabahah* in Islamic trade financing banking.

The meaning of *murabahah* is mark-up sale (*i.e. Murabahah* = Cost + Markup). *Murabahah* is a sale contract between the seller and buyer with trust (*bayu' al-amanah*) (Kettell 2011). "The seller and buyer do not negotiate the price, rather agree on a certain profit margin added to the cost, as faithfully declared by the seller" (Saadallah, 1999:19). "The basic ingredient of *murabahah* is that the seller discloses the actual cost he has incurred in acquiring the commodity, and then adds some profit thereon. The profit may be lump sum form or may be based on percentage" Usmani (2002:65). If a person sells the commodity for a lump sum

price without any reference to cost, even with some mark-up profit, then it is not *murabahah*. In this case the sale is called *musawamah* (Kettell, 2011), which is "a general kind of sale in which the price of the commodity to be traded is bargained between the seller and the purchaser without any reference to the price paid or cost incurred by the former" (Ayub, 2005:492; Kettell, 2011:154).

Murabahah, in original concept was meant for cash sale i.e. 'murabahah sale for cash was the rule rather than exception' Saadallah (1999:19). The shift to murabahah on deferred payment is the first requisite for its transformation into a mode of financing (Kettell, 2011).

The other names used for *murabahah* deferred sale are *bai' muajjal* or *bai' bithaman ajil* which are already discussed in an earlier section. It should be noted that though sale on deferred payment term typically stimulates financing, but it is not an essential condition; even *murabahah* financing can be arranged for spot sale, but in this case the profit for the FI will be reduced for the spot period only.

Secondly, the *murabhah* sale contract to be preceded by customer's promise to purchase the desired goods from the institution. This is also called as "*murabahah* to the purchase order or MPO" (Kettell, 2011). Ayub (2005:222) mentions about MPO that, "this variant is being widely used by almost all Islamic banks operating in various parts of the world and by the Islamic Development Bank for its foreign trade-financing operations".

The rationale behind promise to purchase condition is that, in case of *murabahah* sale the banks/FIs would need to assume the 'commercial intermediaries' function in addition to their original 'financial intermediaries' function. However, as banks/FIs are not specialized in commerce or not allowed by their regulators to take trading positions, they would like avoid the holding of the commodities for prolonged period of time. Moreover, the customer might be in need of a special quality of goods, which the banks/FIs might not even know the source of availability. Hence the requirement is that the sale contract to be preceded by customer's promise to purchase the desired goods once they are acquired by the financier (Saadallah, 1999; Ayub, 2005). As Saadallah (1999: 20) states that

"credit is an indispensable feature, and not just a mere possibility. The existence of a prior promise to buy is a prerequisite for the extension of credit".

3.5.1 Financial Murabahah or Credit Murabahah

The concept of *murabahah*, which is adapted as a financing tool by the Islamic banks and financial instuitutions is termed as *financial murabahah* or *credit murabahah*. This is discussed henceforth.

"Murabahah is a term of Islamic Fiqh (jurisprudence). It refers to a particular kind of sale, having nothing to do with financing in its original sense" (Kettell, 2011:43). "However, this kind of sale is being used by the Islamic banks and financial institutions by adding some other concepts to it as a mode of financing. That is why this term has been taken in the economic circles today as a method of banking operations" (Usmani, 2002:65).

Saadallah (1999: 19) mentioned that "in their quest of a viable Islamic system of finance that would replace the illicit practice of interest financing, Muslim bankers turned towards operationally, closest alternative: *Murabahah*". Therefore, *murabahah* turned out to be the first and most common tool for financing in Islamic banks. Thomas and Kraty (2005:60) remarked that, "the simple elegance of *Murabahah* contract has allowed easy adaptation to a regulated banking context".

Financial murabahah or credit murabahah is achieved by adding following two concepts or conditions to the original concept of murabahah:

3.5.2 Murabahah Sale Versus Loan of Money

It is a very common view in the financial circles including banks and their regulators that *murabahah* is a synthesized loan or form of debt. However, there are some distinctive features of *murabahah* compared to loan (Usmani, 2002; Thomas and Kraty, 2005; Kettell, 2011)

(i) *Murabahah* is a sale transaction therefore the conditions of sale must be fulfilled; such as: the subject (item) of sale must exist, the subject of sale must be owned by the seller at the time of sale and the seller (bank) must have either

physical or constructive possession of the item during the sale. Constructive possession means the possessor has not taken physical delivery of the commodity, but the commodity has come under his control.

- (ii) *Murabahah* transaction may be extended, but unlike a loan where extension or rollover causes further payment of money in terms of higher interest, the *murabahah* extension may not cause an increase in price.
- (iii) If the payment is late, no penalty may be charged for the profit of the creditor.
- (iv) Most of the Islamic scholars do not like sales discount or early payment discount but they don't mind if the financier (bank) elects to give discount.
- (v) Benchmarking murabahah mark-up against LIBOR: While comparing murabahah versus the loan of money, a key issue arises about benchmarking the murabahah mark-up with LIBOR (London Interbank Offer Rate). This resembles murabahah akin to an interest based financing. However, Islamic scholars accept benchmarking of murabahah mark-up with LIBOR with reasons that, "as long as all other Sharia'a parameters are fulfilled the murabahah agreement may use any benchmark for merely determining the amount of periodical mark-up. Mere use of conventional benchmark does not render the contract invalid from Sharia'a prospective" (Kettell, 2011:54). Secondly, in the absence of an internationally acceptable Islamic profit benchmark as compared to LIBOR, it is acceptable at the moment as long as other conditions of murabahah are fulfilled. (Kettell, 2011; Usmani, 2002)

3.5.3 Murabahah in Trade Financing

It should be noted that adaptability of *murabahah* in Islamic trade finance banking has been easier compared to other products. As discussed earlier buying and selling of goods is the activity in trade financing banking (both conventional and Islamic) which involves actual movement of goods for meaningful use.

"Although much of the *murabahah* trade supports the money market such as cash management of the Islamic banks through purchase and sale of metals on global

exchanges, *e.g.* London Metal Exchange (LME), there is growing support of trade in favour of commercial parties using *murabahah*" (Thomas and Kraty, 2005:66).

Applications of *murabahah* in Islamic trade finance products such as Letter of Credit, Import finance and Export pre-shipment finance are exhibited in this chapter.

3.5.3.1 Limitation of *murabahah* - the bill discounting issue

While *murabahah* is an essential instrument, there are certain limitations of *murabahah* in financing trade, such as the issue of 'refinancing' the seller. Saadallah (1999:20) mentions that the 'financial *murabahah* may partly fulfill the functions of conventional techniques in financing the trade but they cannot replace them fully'.

The financial *murabahah* as an Islamic solution is suitable for financing the buyer (or importer) only. But for the seller (or exporter), who wants refinancing or discounting of his credit sells, financial *murabahah* is not a suitable solution.

Exporters mostly need post-shipment finance in the form of bill discounting', (Ayub, 2005:371). 'Discounting bills of exchange is quite commonplace in conventional banking' (Obaidullah, 2005:107). But Islamic banks cannot buy the credit-sale of the seller, because it is considered as debt and a debt cannot be bought at discount due to *Shari'ah* restrictions by majority of scholars, though "some scholars of Malaysia have allowed this kind of sale" (Usmani, 2002:150). Obaidullah (2005:107) mentioned,

When the bank buys the instrument, it effectively engages in lending at interest. Mainstream Islamic scholars have put a plug on the possibility of earning interest by insisting that any sale of debt (*bai-al-dayn*) or transfer of debt (*hawalat-al-dayn*) must be at par. This means in the above case, when the bank buys the instrument of debt (*shahada-al-dayn*) from the original buyer, it is not entitled to any discount.

"The basic rationale of prohibition of *bai-al-dayn* was over uncertainty in its repayment. *Bai-al-dayn* could proceed over a bad debt or one in which the debtor simply wanted a further delay due to his inability to pay on time" (Kamali, 2005:33).

Therefore, there is a limitation of using financial *murabahah* in trade financing especially in terms of refinancing the seller. Therefore mix of other Islamic financing techniques is needed to meet the customers' needs in trade financing.

3.5.3.2 Alternative Solutions to Refinancing (Bill Discounting) issue

"Trade credit is indeed intimately linked to trade itself and traders view credit as an indispensable device to promote and expand sales" (Saadallah, 2005:22). In that respect, bill discounting is an easy and popular device in conventional banking for extending credit to the seller (exporter). However, in Islamic banking, 'the practice of bill discounting, being *riba*-based will have to be changed' (Ayub, 2005:371).

The Islamic economists and bankers have been trying to develop alternative Islamic products to match the refinancing and bill discounting products of conventional banks. Some of the suggested solutions are discussed below. However, as discussed at the end of this section there is no standard solution so far in practice among the Islamic banks to match bill discounting.

Ayub (2005: 371) has suggested some Islamic solutions as alternative to bill discounting as follows:

- (i) "Banks may provide interest- free loan (*qard hassan*) against the bills and take over the bills for collection from the drawee (buyer). As collecting agents of the bills banks receive agreed service charges. Negotiation of the bills will be at face value and as well as export bills".
- (ii) Islamic banks can partially help the customer (exporter) for purchase of raw material for the next consignment of export. Product *musawamah* can be used for this purpose. Then the bank buys the raw materials on spot basis with help of customer as agent and sells to the customer on *musawamah*. The maturity and amount of the *musawamah* sale can be matched with the maturity and amount of the export bill proceed from the foreign bank so that *musawamah* is self-liquidated. The foreign currency rate of the export bill can also be used as a tool with mutual consent, where bank disburses amount to the customer in local currency for purchase of raw material by applying lower rate than the spot rate of

foreign currency and receives foreign currency at the maturity. (see: Ayub, 2009:371 for a detail example provided).

Apart from this, the Islamic banks may use any other *Shari'ah* compliant modes like *musharakah*, *mudarabah*, *murabahah*, *istisna etc*. or combination of modes to finance the exporter for preparation of next consignment through.

(iii) Islamic bank can act as a trader to buy the commodities from the seller (exporter) on cash basis and sale to the buyer (importer) on deferred payment basis. The exporter can act as an agent of the bank to undertake the formalities of shipping. The LC received in favour of the exporter would be assigned in to the exporter's bank to collect funds from the importer through importer's bank (Ayub, 2009: 271).

Saadallah (1999) explained three alternative solutions to the issue of refinancing the seller, which are briefly summarized below:

(i) Islamic bank as a trader

This is similar to solution item (iii) suggested by Ayub as above. The Islamic bank as a trader should play the role of trader and establish merchant subsidiaries for trading activities. This is an effective solution, but the limitation of a bank to be a trader in regulatory angle is discussed in section 3.5.1. Therefore, Saadallah (1999: 26) noted 'the bank-trader method is seriously objectionable on macroeconomic and social angle'.

Secondly, formation of merchant subsidiary will have financial limitations as they have to work under their own funds, therefore ultimately require refinance like the original sellers require.

(ii) Islamic banks as partner to the seller/ trader

Partnership between seller and the Islamic bank is another good solution to overcome the refinancing issue. The partnership could be on *mudarabah* basis or *musharakah* basis. In both cases the profit sharing should be on PLS (profit loss sharing) basis according to *mudarabah* and *musharakah* guidelines. The solution appears to be a very good alternative solution to refinancing the seller, though it

has certain limitations. But in case of PLS system, the partnership contract is signed before the purchase of goods, while the credit to customer is extended at the time of sale. Hence, the seller is locked with the liquidity position with the partnership, which may be unfavorable sometimes.

(iii) To issue PLS securities

PLS security is a concept in which the seller can raise interest-free funding from savers; both individuals and institutional investors by issue of PLS certificates. The types PLS securities can be *mudarabah* certificates or *musharakah* certificates. However, the application of PLS securities concept to trade financing is theoretical in nature because trade financing funding requirements are short-term in nature; whereas PLS certificates are suitable for medium and long-term investments. Therefore, in the present conditions, it would be put into practice for leasing operation only. Secondly negotiability of Islamic securities is a challenge at present due to absence of organized stock markets.

From the above solutions (i, iii, iii) as discussed, the second one, namely banker-trader partnership, would be the best solution. As Saadallah (1999:37) recommended 'bankers-traders partnership would rather dominate as an Islamic alternative to conventional refinancing'. However, in practice refinancing or discounting is still a challenge in Islamic banks, due to the fact that conventional refinancing is very standard and quick, that attracts the sellers to avail the refinancing from conventional banks easily. Though good solutions have been suggested by Islamic economists as discussed above, but in practice the product for refinancing is offered by few Islamic banks only, on their own *Shari'ah* approved structures. Those products are offered on bank specific and un-standard basis. Examples of such products are discussed in the next sections.

3.6 ISLAMIC TRADE FINANCING PRODUCTS

Trade finance operations of banks deal with imports, exports and domestic trades, therefore play important role in the overall economic development of any country. Trade finance involves physical assets; therefore, conversion of the trade finance operation to Islamic modes is relatively easier (Ayub, 2005). "According to World

Trade Organization (WTO), trade finance supports nearly 90% of global trade, making it vital to economic prosperity" (MIFC, 2013).

While Islamic trade finance instruments share similarities with those available via conventional finance, they of course must adhere to Islamic principles. This means that areas such as interest payments and debt trading are off the agenda. Instead, trade is more focused on financing, rather than borrowing and lending (Poole in GTR Report, 2013).

A list of trade financing products and the corresponding Islamic modes/instruments is shown in the Table 3.1, which are discussed below.

Table 3.1: Islamic Banking Products and Modes (Trade Financing)

Nature of Product/ Services	Modes / Contracts			
Import Finance	Musharakah, Murabahah			
Export Finance – Pre-shipment	Salam/Istisnaʻa plus Murabahah and			
	Wakalah			
Export Finance – Post Shipment (bill	Bai al dayn (not allowed in most of the			
discounting)	countries except Malaysia.			
	Alternative modes instead of bill discounting:			
	Qard al Hasan –in local currency (spot rate)			
	and promise to sell foreign exchange in future			
	market - exchange rate difference is banks			
	income.			
	Musawamah/ Murabahah if funds needed for			
	next consignment.			
Letter of Credit	Murabahah/ Musharakah/ wakalah/ etc.			
Letter of Guarantee	Kafalah, service charge (Ujr)			
Documentary Collection	Wakalah, service charge (Ayub, 2005:349)			

Source: Ayub (2005:194) and Obaidullah (2005:16)

Kahf (1999:15) mentioned that "Islamic financing modes are known to be based on three principles: sharing, sale and leasing. These modes and their different variants serve international trade in financing exporters, importers, importers and producers". As discussed in Chapter 2, 'sharing' refers to PLS concept which is applied in 'equity' based products (*mudarabah* and *musharakah*) and 'sale' based products (*murabahah*, *istisna*, *ijarah*, *salam*, *etc.*) which also include leasing (*ijarah*). In addition to 'equity' and 'sale' based products, trade finance banking has also some 'service' or fee-based based products such as bank guarantee, documentary collection *etc.* (Obaidullah, 2005).

Therefore, the Islamic trade financing banking products could broadly fall under 'sale', 'equity' and 'service' based products. Accordingly, they are directly fit into or structured to fit into appropriate Islamic finance modes/ techniques. Some of the main Islamic trades financing products are explained below.

3.6.1 Sale based trade financing products

The products, which are directly fit into or can be structured to fit into sale-based Islamic products, are as follows:

(i) Murabahah Letter of Credit (LC) financing-for Buyer's Credit (or Import Finance)

Murabahah sale contract is already discussed in detail earlier. In international trade, the *murabahah* is clubbed with Letter of Credit (LC) instrument and used as buyer's credit for import financing. Figure 3.1 explains the working of *murabahah* sale contract. By explaining the features of Letter of Credit, Thomas and Kraty (2005:73) mentioned:

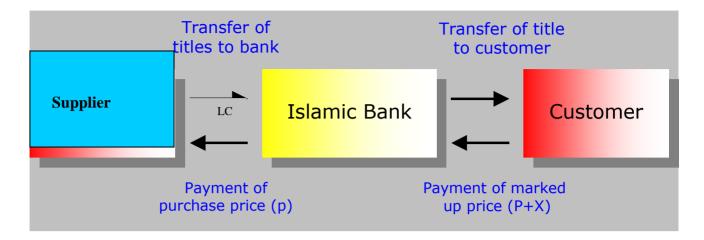
A Letter of Credit is customary instrument of international trade allowing two parties to conduct a sale with a trusted intermediary standing between them to ensure that the terms of the documents are complied with in order to allow payment. On this basis, Muslim scholars permit Letter of Credit and other documentary assurances between distant and unfamiliar parties in a trading transaction.

Detailed features of Islamic Letter of Credit, is explained by Lahsasna (2013) and Ayub (2005:385) also explained the general features of Islamic Letter of Credit which can be referred.

Under the *murabahah*, LC the Islamic Bank as a partner in the trade transaction opens LC in favour of the seller at price 'P' and imports the good in its name. Then it sells the goods to the customer on deferred payment basis at P + X (mark up). The *murabahah* structure is shown in Figure 3.1. In *murabahah* LC financing the mark-up in the sale price is the profit to the bank which is *Shari'ah* compliant.

It is noted that *murabahah* is the one of the three concepts usually used by Islamic banks for LC operations (Hashim and AbdulAziz, 2009); other two concepts (modes) are *musharakah* and *wakalah*, which are discussed further in this chapter.

Figure 3.1: Murabahah LC Diagram



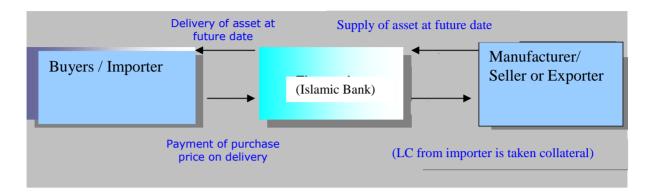
Source: Wilson (2009)

(ii) Istisna'a (Pre-shipment export trade financing or manufacturing loan)

In order to finance the seller, at *pre-shipment* or manufacturing stage, *istisna'a* finance is used for preparation/manufacturing of goods for future sale. For that purpose an LC issued by buyer's bank is taken as collateral. Ayub (2005:372) said about *Istisna'a* financing for export that, 'exporters need financing for the processing of raw material to prepare exportable goods. *Istisna'a* is an exception where forward sale is allowed without making full pre-payment. It is, however, necessary for an *Istisna'a* transaction that the price is fixed and necessary specifications of the product are clearly defined' (Ayub, 2005:372). Figure 3.2 explains the working mechanism of *istisna'a*.

It is noted that *salam* mode can also be used for financing the seller at manufacturing stage. *Salam* mode is usually used for agriculture/ crop financing. Working of *salam* concept is already explained in Chapter-2, therefore not explained again here. However, Chong *et al.* (2009) have provided more explanations with illustrations about *istisn'a* and *salam* financing for trade, which can be referred through the given link.

Figure 3.2: Istisna'a



Source of Istisn'a structure: Wilson (2009)

(iii) Refinancing the seller – Post-shipment trade-financing (alternative or bill discounting)

Refinancing the seller has been discussed before. Direct discounting of the creditsale, which is considered as a debt is not *Shari'ah* compliant; therefore, different alternative solutions are suggested and explained in a later section. Some banks as one off basis use different structures, examples are given below. However, there is no standard.

(a) Post-shipment finance through bai-dayn ('sale of debt')

Some banks use the concept of *bai-dayn* ('sale of debt') to purchase the debt arising from export document and finance the seller. The *bai-dayn* concept is in practice in banks Malaysia (*e.g.* Bank Islam, Malaysia²); however, many other banks, especially in GCC don't use *bai-dayn* concept, due to non-approval of their respective *Shari'ah* boards as discussed in section 3.5.3.1.

(b) Export finance- (through bai ajil / Bai' Bithaman Ajil)

Some banks (*e.g.* Al Rajhi Bank, KSA³) provide post shipment finance (based on *bai ajil* or *murabahah* deferred sale) to the exporter after shipment is over and the documents under the LC are accepted by the buyer's bank. The payment of finance

http://www.bankislam.com.my/en/Pages/ShariahContractsConceptsforTradeServices.aspx?tabs=1

² See: Bank Islam, Malaysia:

³ *See*: AlRajhi Bank, KSA website: http://www.alrajhibank.com.sa/en/business/documents/global-trade-finance-booklet.pdf>.

is linked to the payment under the LC, so the export finance is self-liquidated from the payment received under the LC.

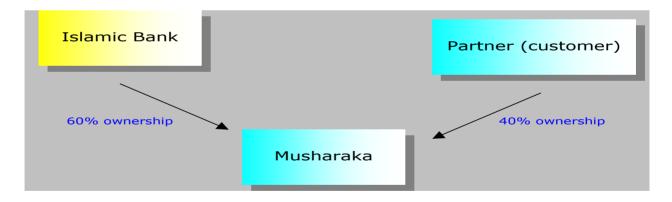
3.6.2 Equity based Trade Financing Products

The products, which are directly fit into or can be structured to fit into equity-based Islamic products, are as follows:

(i) Musharakah LC financing

Musharakah LC financing is equity based products, where the buyer and the bank enter into partnership (musharakah) to import goods. The customer places a deposit with the bank on al-wadiah basis towards his share of the goods. This is usually considered as margin deposit for the LC. After sale of the product, the profit-sharing is done on the basis of musharakah agreement (see Figure 3.3). In the conventional banking this kind of trade financing is done through import loan, which is interest bearing (Obaidullah, 2005:65; Hashim and Abdulaziz, 2009; Ayub, 2005:385).

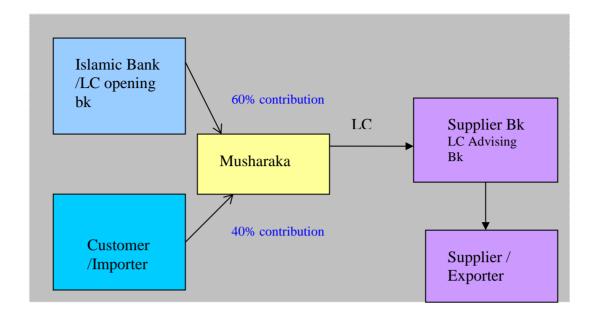
Figure 3.3: Musharaka



Source: Wilson (2009)

In the case of *musharakah* LC financing, the importer and the Islamic bank join together under *musharakah* contract to open an LC favouring a supplier. The margin for the LC is paid by the buyer and that is treated as his portion. The *musharakah* LC diagram is shown in Figure 3.4.

Figure 3.4: Musharaka LC



Source: Wilson (2009) modified version.

3.6.3 Trade Products based on Services or Fees

Many trade financing products are service or Fee-based. The Islamic bank as a financial intermediary facilitates the service of trade to take place. Islamic bank collects fees for the services offered, which is very much *Shari'ah* compliant. "Fee-based products also involve a lesser degree of divergence between Islamic and conventional practices" Obaidullah (2005:113). Though there are minor differences in *Shari'ah* opinions about quantum of fees to be collected, otherwise in general these products are very standard and there is not much difference between conventional banks and Islamic banks.

Some of the service-based trade-financing products, which involve no financing, are explained below:

(a) Issue of Letter of Credit (LC)-on wakalah basis

"A letter of credit is a major tool of trade finance and clients look forward to their banker to extend this facility" (Obaidullah, 2005:113). It is discussed earlier about *murabahah* and *musharakah* LCs. These modes are used when the buyer

(importer) requires financing. However Islamic banks also issue standard LCs on behalf of customers without financing; they are issued on *wakalah* (agency) basis. In this arrangement the bank acts as *wakil* on behalf of the customer. The Islamic bank charges fees or commission as agency fees or *ujr* for its services (Obaidullah, 2005).

The bank would request the customer to deposit full amount of the LC which the bank accepts as *al-wadiah*. The bank places a lien over the deposit on the principle of *al-wadiah yad dhamanah* (i.e. a guarantee custody where bank has the authority to use the deposit and gives a guarantee to return it to customer when he needs it) (Hashim and AbdulAziz, 2009: 2).

The operation of this standard LC is similar to conventional banks, where buyer specifies a set of documents for the supplier to submit through the bank after the shipment is made. The Islamic bank makes the payment on behalf of the buyer as per the LC terms only if the documents are complied with the LC.

(b) Export LC advising and Confirmation:

Export LC advising: This service is offered by Islamic banks to the export (selling) customers to receive inward LCs in their favour, from overseas or domestic buyers. So the service is also known as Inward LC advising. This facilitates the exporter (sellers) to receive the amount of goods from their buyers through banking channels through LCs. This is a service based product like LC issue (wakalah based) which is already discussed. The Islamic bank receives agency fees or *ujr* for LC advising. LC advising operation is explained in the websites of some large Islamic banks like Bank Islam Malaysia and Al Rajhi Bank, KSA.⁴

LC confirmation: In addition to the inward LC advising, the exporter (seller) may request the Islamic bank to add its 'confirmation'. (Usually the process starts with the LC issuing bank by putting a condition in the LC to be confirmed by the advising bank). LC 'confirmation' is a technical term in trade banking, but in common sense the Islamic bank by adding 'confirmation' guarantees (as *kafalah*) for payment to the exporter on the due date of the export bill.

⁴ See: footnotes 2 and 3

Though operation in Islamic banks is almost same like conventional banking, there are certain differences. The content of LC (or other instrument) should not have any interest clause in it. Goods/services under the LC (or other instrument) should not have prohibited items. The fees structure is also different. Ayub (2005: 385) mentiones about confirmation fees that "time will not be an element in the variation of fees". To clarify further, a sample *Shari'ah* ruling on LC confirmation with conditions of fees and goods is provided as reference.

(c) Documentary Collection: (works on wakalah basis)

Documentary Collection is another service based trade product, which is an integral part of trade finance banking, both conventional and Islamic. It is also called as Bill for Collection. The Bill for Collection is a collection service, which is offered by Islamic banks under *wakala* basis (Ayub, 2005; Obaidullah, 2005). The Islamic bank charges collects as agency fees or commission for its services as *ujr*. The websites of some large Islamic banks also explain about this product (*e.g.* Bank Islam, Malaysia; Al Rajhi Bank, KSA).

Under the operation of this product, the bank sends shipping documents (known as 'bill' in trade banking) on behalf of the seller (exporter) to the buyer (usually through buyer's bank) to collect the amount of goods as per the instructions on the bill. On the reverse way the buyer's bank receives the Bill for collection from the seller's bank (either international or domestic) for collection. All the parties (buyer, seller and the banks) follow some standard rules stipulated by the International Chamber of Commerce (ICC), which the trade finance bankers are familiar.

(d) Bank Guarantee: Bank guarantee is a common product in trade financing, which is used for bidding, advance payment, financing, performance purpose *etc*. "Islamic banks are using the *Shari'ah* nominate mechanism of *kafalah* to provide such a facility" (Obaidullah, 2005:114). But there have been variations among Islamic banks about guarantee fees. The views on guarantee fees are that "guarantee or *kafala* is a well-known contract in *fiqh* and classical texts of *fiqh* report the same. At best, the guarantor may recover or claim back the actual expenses incurred in offering the service" (Obaidullah, 2005:114). However, taking fees vary from bank to bank depending on the decision of respective

Shari'ah board. It should be noted that there should be common ground to find way for collecting fees on bank guarantees.

3.6.4 Opportunities and Challenges on Islamic Trade Finance Business

Trade finance is a core business segment of any bank, both conventional as well as Islamic. As discussed in Chapter 2, Islamic banking is a growing industry. That has also opened opportunity for growth in Islamic trade finance.

MIFC (2013) reported about "Islamic trade finance has benefitted from the shifting preferences towards *Shari'ah*-compliant banking and could serve as one of the key growth drivers to help the USD1.6tln Islamic finance industry double in size". In support of this, Poole (2013) reported in the Global Trade Review (GTR, 2013) that "With trade growing in countries with large Muslim populations, and innovation happening on the product side, Islamic trade finance is looking set to expand". Further, according to EY's Global Islamic Banking Center report (2013),

Islamic trade finance could provide new opportunities and become the preferred choice for emerging rapid growth markets (RGMs) such as Turkey, Indonesia Malaysia, Qatar, Saudi Arabia and the UAE. RGMs are emerging as hot spots for global business and they promise to permanently alter the global trade scene over the next 10 years. Many of these markets already have strong trade links with other "core" Islamic finance markets, which offer new opportunities for growth for Islamic trade finance.

While opportunities of ITF are immense, there are also many challenges ahead for ITF to grow. Nazim (2013) in the EY Press release (4 June 2013) commented that "the road to Islamic trade finance is not one without obstacles".

Some of the challenges to Islamic finance products in general are referred in Chapter 1; however more such challenges in front of ITF are discussed here:

- (i) As discussed in the introductory Chapter 1, innovation and product development is the key challenge for Islamic banking. Chapter 3 (Section 3.5.3) of this chapter also referred about unviability certain trade products like bill discounting. Therefore, innovation is the key for development of ITF. The referred EY report mentioned about this challenge, "innovation and differentiation essential for the industry to facilitate the switch from conventional to Islamic Trade Finance".
- (ii) Enhancement Islamic banking knowledge and to build up talent of the IB human capital is another challenge. The referred GTR (2013) Report,

appropriately reported on this challenge as: "Talent management is a key concern for Islamic banks, both in terms of keeping the current practitioners within the sphere of finance, and also in terms of identifying and promoting new talent as demand for Islamic trade finance services grows".

- (iii) Issues related to standardization of interpretation of Islamic banking law, uniformity of Islamic contracts and harmonization *Shari'ah* rulings are discussed in Chapter 2. Islamic trade finance being part of the Islamic banking and finance have the same challenges. As discussed before, apart from institutions like AAIOFI, IFSB *etc.*, the *Shari'ah* scholars play important role in standardization of interpretation of Islamic banking laws. In that respect short supply of *Shari'ah* scholars is a limitation. The GTR identified "Another key challenge is [that] the relatively small pool of Islamic scholars and experts that can oversee and confirm that the trade instruments being used are indeed *Shari'ah*-compliant".
- (iv) As referred in Chapter 1, to meet customers' business needs by suitable solutions is a challenge in order to attract them from the conventional banking environment.

The trade finance offerings from Islamic banks have to align with global common practices in order for corporates to consider them as a viable alternative. These banks will need to demonstrate how the products that they offer are not just *Shari'ah*-compliant, but are also capable of adding value to their clients.... Islamic institutions need to present a compelling proposition to persuade corporates to move over from conventional finance. (GTR Report 2013)

- (v) As Islamic banks are usual small and localized, the formation of large institutions having access to global trade finance network is another challenge. "As many Islamic banks are quite local in terms of their scale, there is a challenge for them to offer trade finance tools that can link deals across different countries or regions" (GTR Report 2013)
- (vi) Some other challenges which are inherent with Islamic banking business are also applicable to Islamic trade finance. For example, workflows in Islamic trade finance are usually lengthy due to involvement of additional contracts; pricing of Islamic trade finance products could be higher due to additional fees for lawyers/ *Shari'ah* scholars; ITF has to comply with national regulations, international regulations as well as *Shari'ah* regulations, therefore undergo higher risk management than the conventional trade financing.

3.7. CONCLUSION

Trade financing banking is a core business segment in any bank, both conventional as well as Islamic. In Islamic banking, trade financing has a special significance with following three main reasons and this chapter aimed to highlight them. First, the 'promotion of trade (or sale) and prohibition of *riba* (interest)' is one of the founding principles of Islamic finance. Second, one of the main techniques of Islamic finance products is the involvement of 'sale' through *murabahah* instrument, which is the most important and brightest example of 'sale'. Third, adaptability of Islamic finance principles to trade financing banking products is easy, sometimes fitting directly and sometimes with easy structuring; though refinancing or discounting is an exception where more structuring is needed. This chapter fulfills the aim by elucidating above points.

As a special focus to this research, the study of trade financing products is an illustration in general, on how Islamic finance principles are adapted to banking products in order to meet customers' needs as well as complying with *Shari'ah* principles. Significantly the trade financing products discussed in this chapter are sale, service and equity based products, which broadly represent the main categories of Islamic banking products.

CHAPTER 4

PRODUCT DEVELOPMENT IN ISLAMIC BANKS

4.1 INTRODUCTION

This chapter aims at discussing the critical requirement of product development (PD) in Islamic banking industry. The chapter renders a discussion also on product development in the service sector in general and Islamic banking in particular. In addition, it explores through the literature reviews with aim to find that product development process is a critical success factor for growth of Islamic banking industry.

4.2 INNOVATION AND PRODUCT DEVELOPMENT

Innovation has been a subject of debate for many years by many economists. Starting from Karl Marx who argued innovation is the "flywheel of capitalism" many other economists notably Schumpeter has helped to understand the powerful link between innovation and the pursuit of profit. Schumpeter wrote extensively on the subject and he is considered as the 'godfather' of this area of economics (Bessant and Tidd, 2007:301). In this section, hence, some of the definitions as well as importance of innovation, financial innovation and product development are discussed.

4.2.1 Definitions and Importance of Innovation, Financial Innovation and Product Development

Levit stated that "innovation is the vital spark of all human change, improvement and progress". Innovation, hence, is considered crucial for a firm's survival. Firms need to invest in new products and services before their competitors do; those firms that refrain from taking innovative actions will not remain viable in the long run (Vermeulen and Raab, 2007:12). According to Suwailem (2007), innovation is a change which creates instability. Instability is not desirable but only when innovation

60

⁵ Quoted in: World Economic Forum (2012) Report- *Rethinking Financial Innovation* (p11) http://www3.weforum.org/docs/WEF_FS_RethinkingFinancialInnovation_Report_2012.pdf

creates value which offsets the instability, it becomes desirable. "Innovation therefore is a tool and a means for generating value" (Suwailem, 2007).

Financial innovation:

According to Frame and White (2009:3), financial innovation is something new that reduces costs, reduces risks, or provides an improved product, service, instrument that better meets the satisfaction of financial system participants. Financial innovation can consist of new products, new services, new production processes and new organizational forms. "Financial innovation is [, hence,] the act of creating and then popularizing new financial instruments, as well as new financial technologies, institutions and markets" (Lerner and Tufano, 2011, as reported in WEF Report 2012:16).

There were institutional and functional factors triggering the resurgent of financial innovations in the 1970s. As discussed by Ahmed (2011), Miller (1992) identified the institutional factors that initiated rapid growth in financial innovations. Some of the institutional factors are: after the Great Depression that continued till 1950s there was a long period of stagnation till the stream of growth picked up in 1970s hence innovations triggered; the revolution of information and computer technology helped innovation; stringent regulatory environment encouraged financial institutions to create innovations to circumvent prohibitions, costly regulations and tax-regime. Some other institutional factors as identified by Bank of International Settlements (BIS 1986) include competition in the international markets and rapid growth in supply of new instruments. Regarding the functional factors of financial innovations, Merton and Bode (1995, as reported in WEF Report, 2012:16) defined six factors, which include: to provide ways of clearing and settling payments to facilitate trade, mechanism for pooling resources, transferring economic resources, ways of managing risk, providing price information, and ways of dealing with the incentive problems. Tufano (2003, as reported in WEF Report, 2012:16) also identified six functional factors which include: to complete inherently incomplete market, to address agency concerns and information, to minimize (transaction, search and marketing) costs, response to taxes and regulation, increasing globalization and risk motivate innovation, and response to technological shocks.

Product development:

One of the important constituents of financial innovation is the product development. According to Unger and Eppinger (2011:689), competition, technological advancement, market change and product life cycles all force companies to develop new products frequently. "Product development means creating business; suggesting means to it, keeping in mind the realities and business prospects for future" (Ayub, 2007:358). Therefore, according to Mital *et al.* (2008:18), "the overall process of conceptualizing a product and designing, producing, and selling it is known by a generalized and comprehensive process called product development".

4.2.2 Introduction to Product Development in Service Sector and Islamic Banking

The banking industry is part of service sector and Islamic banking is part of the banking industry. According to Cooper and Edgett (1999), the corner stones of performance for a service sectors are 'strategy', 'resources' and 'process'. Among these three cornerstones the critical driver of success is the high-quality product innovation/development process. Especially for service industry the innovation or product development process is the important factor for performance and success. As per Cooper and Edgett, 1999:25), "of the three, it is process - its nature and quality that has the strongest impact on the business' new service performance".

Islamic banking is a young industry and it is at growing stage. Unlike conventional banks which are bigger players with established products, Islamic banking is at growing stage and has restriction of moral boundaries requires product development and structuring has to follow additional layers of constraints.

As discussed in Chapter 2, Islamic banking products are required to be complied with Shari'ah which is the Islamic law. They must follow the guidelines of *maqasid al-Shari'ah* and the products need to be free from prohibitory business principles of *riba* (interest), *gharar* (uncertainty) and *maysir* (gambling). Hence the additional requirement of Islamic banking products is that they must be *Shari'ah* compliant. Therefore Islamic banking products have unique requirement of *Shari'ah* approval.

4.3 THE NEED AND RATIONALE FOR PRODUCT DEVELOPMENT IN SERVICE SECTOR

Definitions and importance of innovation and product development according to many economists are discussed in the previous section. In this section some practical approaches to product development especially in the service sector (such as financial institutions) are discussed. Among the contemporary management experts in the field of product development, Cooper and Edgett are the prominent ones who worked extensively in this field including introduction of Cooper's Stage-Gate model.

Cooper and Edgett (1999:1) state that in the present competitive environment, a service organization has two choices: "Succeed at developing new service products, or fail as a company". "Increasing competition domestically and globally, a changing regulatory environment, the quickening pace of technological advances, and constantly shifting customer needs are all fueling the drive to design new service products and stay ahead of the competition. The stakes have never been higher" (Cooper and Edgett, 1999:1). They also find that product development process in service sector is slower compared to manufacturing sector. However according to them each year more companies in service sector are looking products development as a weapon in the increasingly competitive environment in which they operate. Therefore 'new service development is fundamental to achieving corporate growth goals'. Hence 'development of new services designed to increase market share or to attract new markets are major contributors' to aggressive growth targets (Cooper and Edgett, 1999:7). In support of this, Mital et al. (2008: 18) state that "successful companies in the business world constantly operate in a state of innovation in terms of products they manufacture, frequently introducing new products or modifying and improving existing products as needed and desired by the customers".

As to the meaning of 'service', Cooper and Edgett (1999) explain that under service sector goods are intangible, whereas under manufacturing sector produces physical goods. Therefore, developing new product/offering in a service industry is more challenging than developing a new physical product like a new soap or new pen. The main nature of service industry is intangibility.

In addition to *intangibility*, the nature of the products provided by financial institutions (or service sector) also includes *simultaneity*, *heterogeneity* and *perishability*. The nature of service products are discussed below in more detail mainly based on Ahmed (2011: 78 -79), Cooper and Edgett (1999: 16-19) and de Brentani (1991).

As discussed, service products are intangible; this is because customers cannot observe, touch or feel a service before buying it. "Because services are intangible, they are perceived as easier to develop than physical products. Yet, precisely because they are conceptual in nature and, in reality, highly complex processes, definitions of new services are often extremely vague" (de Brentani 1993:16). There are various difficulties and risks due to the intangibility. Difficulties include conducting research, having a prototype for market research, determining the actual cost of service and measuring success. Risks with intangibility include disorganized development, easy to duplicate by competitors, confusing customers with information overload etc. (Ahmed, 2011).

Simultaneity (or inseparability) includes production (or supply) and consumption of a product simultaneously. Simultaneous production and consumption has implication regarding development of the product. The organizational structure of the service firm affect more seriously than the firm that produce tangible goods because the new service development involves all most all departments in the service company.

Heterogeneity means services are having human interaction. Products sold by financial institutions depend upon the individuals serving the clients which may change individual to individual. Whereas in a physical product, once produced it remains homogeneous from market to market.

Perishability means services are produces at the time they are consumed, so they cannot be inventoried. This leads to demand/ supply difficulty and problems with production efficiency (Cooper and Edgett 1999:17; Ahmed, 2011:79).

In rationalizing the importance of product or service development, Cooper and Edgett (1999:20) emphasize that 'new service development is critical to the future viability of service organization'. The processes used in many service companies may not be systematic but there is ample evidence that specific steps can bring discipline to the

development process and increase the chance of market success in today's increasingly tough business environment.

For financial institutions like banks and more specifically Islamic banks, the system of product development is an important factor of success, which has been emphasized by many authors including Mital *et al.* (2008), Al-Salem (2009), Ahmed (2011) and Iqbal and Mirakhor (2002). Product development in Islamic banks as a success factor has been discussed before in Chapter 1 (Section 1.4) and Chapter 3 (Section 3.6.4).

"To succeed, a business must develop and market new products. However, not all new products that are developed succeed in the marketplace" (Mital *et al.*, 2008:19). The success of product development project is dependent on various factors by which the new product can move successfully from idea generation stage to launching and beyond. Cooper (2001:83) stated that there are 15 Critical Success Factors (CSF) for product development, which includes his famous multistage new product process known as Stage-GateTM Model. Mital *et al.* (2008) have also explained fourteen success factors in similar line with Cooper. It is beyond the scope of this research to explain all but only two as follows: The number one success factor is a 'unique superior product'. Product superiority implies "delivering unique benefits and product value to users- separates winners from losers more often than any other single factor" (Cooper, 2001:83). In addition, the prominent critical success factor is that, the companies that follow the multistage, disciplined new product process a Stage-GateTM process- fare better.

An illustration of multistage Stage-Gate™ Model of new product process is shown in Figure 4.1:

DRIVING NEW PRODUCT TO Discovery Testing and Validation Build Development Stage Scoping Launch Idea Screen Second Goto Goto Goto Post Launch Development Review

Figure 4.1: Stage-GateTM Model – from Discovery to Launch

Source: Cooper (2001:130)

As can be seen in Figure 4.1, "The Stage-Gate process breaks the product development project into discrete and identifiable stages, typically four, five or six in number. Each stage is designed to gather information needed to progress the project to the next gate or decision point" (Cooper, 2001:130).

4.4 ASPECTS OF FINANCIAL PRODUCT DEVELOPMENT

The literature indicates that there are many factors affecting the financial product development. According to Ahmed (2011), two broad categories of such factors affect product development: (i) Institutional environment, which is mainly external environment in which the financial institution operates. This includes globalization, technological changes, legal and regulatory regimes *etc.*; (ii) Organizational environment, which is related to internal environment of the institution. Under the internal environment, the process of organizational adaption is a topic of major managerial concern, which needs to be given importance and it must be treated appropriately in order to solve internal problems.

According to Miles and Snow (1978:21), the complex and dynamic process that organizations face can be broken apart into three major problems which the management must continually solve. The three adaptive problems are:

- (i) Entrepreneurial Problem, which involves identifying the product *vis-à-vis* market, where the organization would participate. The top management performs the entrepreneurial function by identifying the preferred market the institution will operate in and product it will offer. This is related to the overall strategy and goals of the institution.
- (ii) Engineering Problem, which involves the creation of a system and provide resources which puts into actual operation management's solution to the entrepreneurial problem. The creation of such system requires management to select an appropriate technology for producing and distributing the chosen products or services and to form new information, communication, and control linkage to ensure proper operation of the technology.
- (iii) Administrative Problem, which involves creation of processes and procedures to ensure efficient delivery of the product. The major objective of administrative

problem is to reduce risk and uncertainty. "It also entails processes allowing firms to adapt and evolve to meet challenges arising from changing environment" (Ahmed, 2011: 98).

According to Ahmed (2011:98), "the above three problems can be used to define the building blocks of Product Development system within an organization".

4.5 CORNERSTONES FOR EFFECTIVE NEW PRODUCT DEVELOPMENT

Three cornerstones for effective new service development are: (Cooper and Edgett, 1999:26-28):

(i) Strategy: A clear strategy is essential for the new product product/ service development of a business unit in the bank. Strategy is not only limited to setting up business targets, according to Cooper and Edgett (1999:26), "strategy means setting out a master plan for how a business unit will achieve its targets, and how those targets will contribute to the overall goals of the company". In other words, "Firms that recognize the changing nature of markets understand the need to adjust to be relevant in the future. These firms will have innovation as an integral component of their mission and strategic goals" (Ahmed 2011:4).

The new product/ service strategy should consist of the following (Cooper and Edgett, 1999:26):

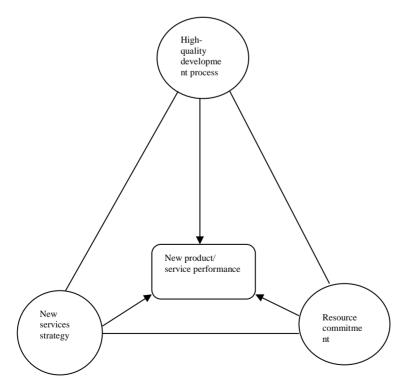
- (a) Clear goals and objectives of the business unit's total new service efforts that should include targets for revenues and profits for new products;
- (b) Clear communicated information on the role that new product/ service will play in achieving the overall business goals of the bank;
- (c) Clearly defined areas of strategic focus that gives direction to the total new service efforts: *e.g.* market and technology;
- (d) A long terms thrust that builds in long-term and short-term projects.
- (ii) Resources: Availability and allocation of people, time and money to conduct the research and development of the new product/service. This should include the following:
- (i) Senior management support for resources;
- (ii) Budget allocation;
- (iii) Adequate number of right people assigned to the project with adequate time frame.

- (iii) Product Development (PD) Processes: A high quality new product development process that not only include list of steps but also execution of those steps ensures timely completion of the project from idea to launch. It needs to be managed by an efficient project coordinator. The process to include the following:
- (i) Pre-development activities;
- (ii) Sharp product definition before the development begins;
- (iii) Critical project review and tough decision if necessary to terminate;
- (iv) Strong focus on quality of the execution of all steps;
- (v) Flexibility so that stages and decision points can be collapsed or skipped depending upon the nature of project.

The above three cornerstones of performance are explained in Figure 4.2.

However, for product development in an Islamic bank, one essential requirement is *Shari'ah* approval. This is explained in Chapter 9 and above cornerstone diagram is suitably modified for Figure 9.1 to accommodate *Shari'ah* approval process.

Figure 4.2: Cornerstones of Performance



Source: Cooper and Edgett (1999:27)

Ahmed (2011:106) stated that "PD process is the structured flow of activities and information required to accomplish the creation of new products (taken from Ulrich and Eppinger 2008:22)". Ahmed (2011:106) added that "an important aspect of this process is to have a well-planned scheme that details the various phases and steps of each phase. This scheme acts as a roadmap to develop new products".

It should be noted that there is no unique process that applies to all banks (Ahmed, 2011). Many authors have suggested different elements of the process. For example, Cooper (1994) identified four stages: 'preliminary investigation', 'building business case', 'development stage' and 'test and validation stage'. However, Cooper and Edgett (1999:30) suggested thirteen process activities steps. One of the popularized product processes is the Stage-Gate process by Cooper (1994) which is mentioned in earlier (see: section 4.3 and Figure 4.1). On the other hand, Murthy *et al.* (2008) propose a new model having combination of three Stages (pre-development stage, development stage and post-development stage) and three Levels (business level, product level and component level) that involve in a product life cycle. By putting a grid of Stages and Levels, they have proposed eight phases of product development which are more appropriate for making decisions relating to performance and specification in new product development.

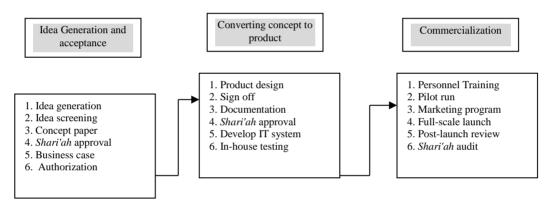
The focus of this research is on the product development processes in Islamic banks. Therefore, in addition to general product development processes the *Shari'ah* approval process also is part of the study. Deeper study was done through the questionnaire survey among the Islamic banks. In the survey questionnaire, sections C and D in the questionnaire are devoted to explore different aspects of product development process in detail with large number of questions and sub-questions (statements), which covers various elements of product development process in general and *Shari'ah* approval process. Due to the special nature of Islamic financial products, the phases of product development cycle discussed by Ahmed (2011:108) have more relevance to the empirical work done on the product development process under this research. Therefore, it is appropriate to discuss the steps of the cycle in detail here.

4.5.1 Product Development Cycle in an Islamic Bank

The important element of product development process is the 'product development cycle'. Ahmed (2011:107) mentioned that "The PD [product development] cycle of Islamic banks has three broad phases; idea generation and acceptance, converting concept into product and commercialization. Each phase has six steps".

The broad idea of product development cycle of Islamic bank is shown in the figure 4.3. As can be marked, as special feature of Islamic product development, there are special features of *Shari'ah* approval at first two stages of idea generation and implementation and *Shari'ah* audit at the post launch stage.

Figure 4.3: Product Development Cycle



Source: Ahmed (2011:108)

(i) Idea generation and acceptance

Idea generation is the first phase of PD. As per Kelly and Storey (2000), the idea generation is not as an isolated activity in the new product development process, but it is an integrated feature, therefore requires close management attention. They identified that source of new ideas can be internal or external. Internal new ideas can come from marketing, sales, operations, customer service, information technology and research and development departments The external new ideas may come from regulatory changes, outside agencies (consultants), customers, competitors, suppliers and overseas markets (Ahmed, 2011, 2014; Kelly and Storey, 2000).

It is important to note that identifying customer need is an ignitor for idea generation. For this, conducting market research is important to find out needs of customers, to ascertain potential market size and estimate possible competition (Ahmed, 2011). Therefore, Ulrich and Eppinger (2012) consider that identifying customer need is the first step in product development process.

Idea screening

Cooper and Edgett (1999) have put the idea screening as the first activity in product development process. According to them this is the activity to take the initial 'go' or 'no go' decision for allocating funds to the new service idea. Kelly and Storey (2000) also viewed the same way and stated that the objective of screening is to allocate resources between those projects which have most likelihood of helping the firm to achieve its objectives. They mentioned that the process of idea screening can be a single activity or a multi-stage procedure and it can utilize quantitative or qualitative screening criteria. Some of the criteria of screening are the ability of the product fitting into the overall strategy of the firm, financial potential, corporate and technological synergy, product life *etc*.

For Islamic products the idea screening should identify the type of *Shari'ah* compatible contract that can be used. Therefore, it is required to evaluate the pros/cons and risk/returns implications of using different contractual formats while developing a product (Ahmed, 2011).

Development of concept paper

After the idea and the concept of the product are conceived the next step is to prepare a concept paper. "The goal of concept generation is to thoroughly explore the space of product concepts that may address the customer needs" (Ulrich and Eppinger, 2012:17). According to stage-gate model this is the second gate and "the gate-keepers are the representatives from various involved functions, with more senior people attending" (Cooper and Edgett, 1999:82).

The above process is also applicable to the product development in Islamic banks, but with important additional involvement of the *Shari'ah* board. Therefore, as Ahmed (2011:110) explained, "the objective of the concept paper is to enable the initial

screening of the product concept by senior management and the *Shari'ah* board... In the pre-product launch stage SSB can contribute to the development of new products by advising on the different *Shari'ah*-compliant structures for the product... The *Shari'ah* organ of the bank will have important role to play in developing the concept paper".

Shari'ah approval of the concept

As explained by Ahmed (2011), after the concept paper is ready, it has to be presented to the *Shari'ah* board for approval. It should be presented by the PD manager with help of the representative of the *Shari'ah* department of the bank. The SSB formally approves the product before the full-scale development of the product takes place. The advantage of prior approval is to minimize the risk of *Shari'ah* incompatibility before the product goes for full-scale development.

Business case

After approval of the concept paper by SSB a detailed business case for the product to be prepared. Business case is a comprehensive document that guides the product development in future. Feedbacks from relevant departments such as finance, IT, treasury, risk, compliance and legal are important (Ahmed, 2011).

According to Cooper and Edgett (1999), business case is the vital input to take major spending decision. Therefore, according to them business case is the Gate-3 in the stage-gate model. They also consider it as important money gate and the last point before the project can be halted before inciting heavy costs.

The format and contents of the business case are not discussed here. However, it should be noted that Ahmed (2011) explains the format as well as contents, that include requirement of financial analysis, SWOT analysis, resource requirements *etc*. for the product development.

Authorization

Senior management must study the business case and approve it before committing funds and resources in the new product development Therefore as referred to Cooper and Edgett (1999) in the previous section this is the important money gate.

(ii) Converting concept into product

The steps under this phase are discussed below in brief:

Product design and process flow

Before the product is developed, a product blueprint to be prepared which will have detailed steps and processes of the product. Each step should have input from related units of the bank. Second, the bank should develop detailed process to ensure the high quality of the products; should identify the fall-points and develop sub-process to correct them. Third, while designing the product it is desirable to look into clients prospective, therefore interaction with the clients and their feedbacks are important (Ahmed, 2011).

Sign off from various departments (Finance, Treasury, Risk Management, Compliance and Operations)

A banking product is a service which is offered by front end staffs to the customers. However, the dealings of the products have implication to many departments of the bank. Therefore, it is required to get sign off from various related department. The role of departments related to the banking products are briefly explained as follows (Ahmed, 2011:115)

- (i) Finance department: to account for cost and revenue for the new product. To create new codes for balance sheet and general ledger *etc*.
- (ii) Treasury department: to manage asset and liability position to be created by the new product. An asset based product will require funding resources and a liability product will generate funds which need to be placed properly.
- (iii) Risk department: Risk management will study the various risks associated with the product and intimate the product team to come up how to mitigate the risk.
- (iv) Compliance: The compliance team will ensure that the new product should comply with various regulatory, country and international rules applicable.
- (v) The operation department will responsible for the setting the process flow and execution of the product.

Documentation

Product documentation is an important aspect of new product development. This includes making the product and policy manual for the internal staff and preparing form, brochure, terms and conditions *etc*. for the customer. Also another document is prepared for IT specifications.

Shari'ah approval

After all the documents are ready they are required to be presented to the *Shari'ah* board for review and approval. Discussion about *Shari'ah* approval process has been done before under *Shari'ah* approval of the concept.

IT system development

Most of the products in modern banking run on IT. Therefore, IT system development is as important requirement.

In-house Testing

After all the systems and procedures are ready the product to be tested in-house. IT testing of the product is important. According to Ahmed (2011:118) before IT department can clear the product it has to undertake Software Quality Assurance (SQA) by inviting nominees from relevant department to perform the user acceptance test (UAT). After the results from SQA are cleared by all business units then the IT department signs off the product as readiness of the IT system.

(iii) Commercialization

This is the crucial phase of product development where the preparation and full scale launch of the product takes place. According to Cooper and Edgett (1999:87) in terms of stage-gate process, this is the final gate (Gate 5, see Fig 4.1) and it is a vital one. The gatekeepers or the decision makers are the executive group (senior management) like the previous phases of development process.

Ahmed (2011) mentiones that before launching the product, the senior management should be informed and all the relevant stakeholders in the bank should be informed about the product launch. Various steps in launching the product are given below with reference to Ahmed (2011).

Personnel training: Training is required for both front-end and back office staff for quality delivery of the product.

Pilot run- process and system: Pilot run of the product is conducted to test the product with few selected customers and selected branches with real-life transactions. The aim of pilot run is to see that the product runs as expected.

Marketing programme: The marketing strategy is to be prepared for successful sell of the product. Depending upon the budget allocated for marketing, the marketing strategy to include publishing promotional materials, advertisements through internal channels (brochures, banners, ATM screens *etc.*) and external channels (print, electronic media, billboards *etc.*).

Full-scale launch: After the marketing campaign by taking senior management approval the product can be launched in full-scale. Though the launch of the new product can be done quietly but launching with fanfare is a better way of launching.

Post –launch review: According to Cooper and Edgett (1999) this is the final check point in the product development process and serves to end the project. This phase takes place once the launch implementation is completed successfully and the product is running smoothly.

According to Ahmed (2011), the review of the success of the product can be done by getting feedback from staff, IT system and customers. If any issue arises during the post-launch review, then the product features may be changed or fine-tuned to make it suitable for the customers. Thereafter, annual review of the product should be done in order to evaluate the performance of the product.

Shari'ah audit: After the product is launched in the market, a Shari'ah audit has to take place in order to ensure that the product runs in compliance with approved procedure, process and contract. Shari'ah audit is usually undertaken by internal Shari'ah auditor, but "ideally there should be an external Shari'ah auditor who would evaluate the in-house audit reports and make public the findings" (Ahmed, 2011:121).

4.6. WHY PRODUCT DEVELOPMENT IN ISLAMIC FINANCE

Islamic banking is a young industry and it is at growing stage. Since Islamic banking is at developing stage, product development and structuring is required essentially in Islamic banking in order to compete with the bigger pears.

Secondly, the Islamic banking products are less in numbers to meet customers' needs. Developing new products through innovative process is an essential requirement for the growth of Islamic banks. Unlike the conventional banking products, which are mostly standardized due to established practices, the Islamic banking products are complex in nature mainly due to *Shari'ah* requirements, and hence they represent emergent practices.

As discussed in Chapter 2, Islamic banking products must follow the guidelines of *Shari'ah* for prohibition and must essentialise the implications of *maqasid al-Shari'ah*. Hence, the additional requirement for Islamic banking product is that they must undergo through the special process called *Shari'ah* approval.

For the growth, development, sustainability, accessibility, market penetration and sophistication, new product development is a necessity in Islamic banking. The old saying is 'necessity is the mother of invention' is an important source for product development in Islamic banking. In other words, new product development is a basic necessity for Islamic banking industry at this juncture for its survival and growth (Al-Salem, 2009: 187).

Islamic banking has managed some market penetration to the day-today banking life of customers in the GCC and Malaysia. But the countries like Indonesia, India, Pakistan, and Bangladesh which are the top four countries in terms of Muslim population (see: Table 4.1) by hosting about 43% of world Muslim population, who, as can be seen in Table 4.2, are not in the top of the list of Shari'ah compliant assets Leaving aside India, though having large Muslim population it is not a Muslim country and Islamic banking is yet to make an inroad to Indian banking industry; as can be seen in Figure 4.5, three large Muslim countries such as Indonesia, Pakistan and Bangladesh at present place themselves at the lower levels of market penetration of Islamic banking in their respective domestic banking markets. As per EY Islamic Banking Competitiveness Report (2014-15), at end of 2013 Indonesia had only 5.5%, Pakistan 9.5%, and Bangladesh 17% market penetration of Islamic banking in their respective markets. This indicates that bigger countries in terms of Muslim population have still smaller adaptability to Islamic banking. It is also important to note that economic performance and growth of a country, as well as financial inclusion and importantly financial accessibility in a country can determine Islamic banking adaptability as well. Indonesia is now the largest Muslim economy followed by Turkey; however, in both the countries Islamic banking role in the financial system has not reached 6% despite the fact that they have over thirty years' experience in Islamic finance. In addition, general financial inclusion is rather limited due to the lower financialisation of economy and in particular relative low per capita income in most of the Muslim countries.

Realizing the fact that banking service is an essential requirement in the modern life, Islamic banking sector has to go a long way to become an easy alternative service provider to larger customer base, otherwise the customers will continue to depend on the conventional banking service providers. In this regard new product development is an important requirement to increase the basket of Shari'ah compliant products for easy choice of consumers.

A crude analogy between conventional banking and Islamic banking products could be the Android and i-Phone mobile operating systems. Irrespective of different operating systems and different security aspects, the customer wants his required applications are available otherwise he may not use that particular mobile set.

Table: 4.1: Top Muslim Populated Countries

Rank	Country	Capital	Estimated 2010 Muslim Population	% of World Muslim Population
1	Indonesia	Jakarta	209,120,000	13.1
2	India	New Delhi	176,190,000	11
3	Pakistan	Islamabad	167,410,000	10.5
4	Bangladesh	Dhaka	133,540,000	8.4
5	Nigeria	Abuja	77,300,000	4.8
6	Egypt	Cairo	76,990,000	4.8
7	Iran	Teheran	73,570,000	4.6
8	Turkey	Ankara	71,330,000	4.5
9	Algeria	Algiers	34,730,000	2.2
10	Morocco	Rabat	31,940,000	2

Source: Pew Research Center's Forum on Religion & Public Life; Global Religious Landscape (December 2012)⁶

77

⁶ See: http://www.mapsofworld.com/world-top-ten/world-top-ten-countries-with-largest-muslim-populations-map.html.

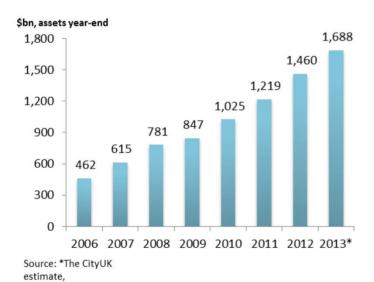
Table: 4.2: Top-10 Countries with Shari'ah Compliant Assets

Shari'ah Com	pliant Assets -2010	Shari'ah Compliant Assets -2013	
Country	USD MM	Country	USD MM
Iran	314,897	Iran	475,890
Saudi Arabia	138,238	Saudi Arabia	227,173
Malaysia	102,639	Malaysia	196,820
UAE	85,622	UAE	87,321
Kuwait	69,088	Kuwait	72,464
Bahrain	44,858	Bahrain	56,471
Qatar	34,676	Qatar	53,125
Turkey	22,561	Indonesia	18,988
United Kingdom	18,949	Bangladesh	16,478
Pakistan	9,365	Turkey	12,106
Total	840,893		1,216,836

Source: The Banker (November 2010, 2013)

As can be seen in Table 4.2 and Figure 4.4, the *Shari'ah* compliant assets are growing nearly at 15% rate in last few years. The main contributors to *Shari'ah* compliant assets are the Islamic banks.

Figure 4.4: Global Assets of Islamic Finance



Source: TheCityUK (Islamic-finance-2013-CityUK.pdf, October 2013

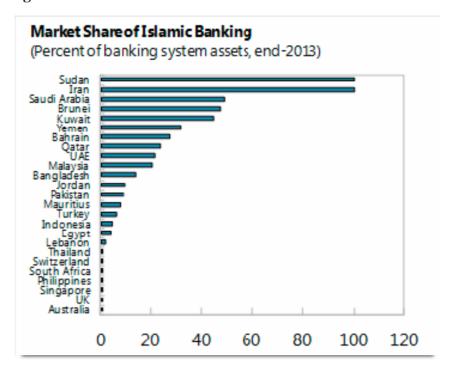


Figure 4.5: Market Share of Islamic Banks in their Domestic Markets

Source: Kammer et al. (2015:13)

Since the Islamic banking has grown in the shadow of conventional banking, Islamic banks exhibit tendency for replication of conventional banking products. As Ahmed (2011:200) mentioned "the problem of using Islamic replications of conventional financial products has its origins in the genesis of Islamic banking under the shadow of conventional finance. Islamic finance was affected by its conventional counterparts when it adopted their debt-based corporate banking model. Not only did Islamic banks assume the for-profit banking model, they also employed professionals from conventional institutions to manage the operations". This, therefore, indicates that Islamic finance industry has to develop proactivity in product development so that authenticity should be achieved beyond mimicry.

It should be added that, the researcher with his long experience in the industry has the following observations:

(i) Islamic banks being commercial organizations, profit is the most important target to protect the shareholders' values. Islamic banks need to 'have profit or perish' slowly;

(ii) Both Islamic and conventional banks work in the same market place under same central bank regulations and need to fulfil the similar customer demands; therefore the tendency of providing identical products (but *Shari'ah* compliant) may termed as replication of products but unavoidable at the moment until the product ranges of Islamic banking are large and diversified;

By suggesting the diversity of Islamic Financial Institutions, Ahmed (2011:200) mentioned "as many Non-bank financial institutions (NBFIs) have less stringent regulations, these can be used to circumvent the legal and regulatory constraints limiting to the use of *Shari'ah* – compliant products and serving social needs".

As part of NBFIs, other financing institutions such as microfinancing institutions, NGOs and Credit societies could fill the gap of Islamic commercial banks to provide *Shari'ah* compliant finance to fulfil social needs and they should all contribute as larger stakeholders for product development.

Furthermore, product development is essential for Islamic banks to move from class banking to mass banking. Creation of large Islamic financial institutions is needed for making economy of scale for investment in innovation of new products (Iqbal and Mirakhor, 2002; Grewal, 2011). This implies that the customer base of Islamic commercial banks must enlarge. Some of the pioneers and large Islamic banks like Al Rajhi Bank (nearly 4.5MM customer base), Dubai Islamic Bank (about 1.5MM customers), and Islami Bank of Bangladesh Limited (about 6.5 MM customers)⁷ are successful retail banks with broad customer bases. But most of the other Islamic banks are focussed on investment and corporate banking products and have less number of branch networks. However, in order to expand the customer base, the Islamic banks should engage product development to address the need of the Muslim mass.

⁷ Customer bases of banks taken from Internet sources for respective banks:

⁽i) Al Rajhi Bank Annual Report 2012 (page 25). Internet source:

http://www.alrajhibank.com.sa/en/investor-relations/documents/annual-report-2012-en.pdf

⁽ii) Dubai Islamic Bank press release 28 October 2015 (page 6). Internet source http://feeds.dfm.ae/documents/efsah/2015/Oct/28/346f579d-dd86-4665-9c7a-401f1a9818f5/DIB PR E 28 10 2015 1030AM.pdf.pdf

⁽iii) Islami Bank Bangladesh website- page MD Corner (Item- 20-Sep-2012). Internet Source http://www.islamibankbd.com/mdCorner/article.php>

4.7 DISCUSSIONS ON SOME SPECIAL FEATURES OF ISLAMIC BANKING: OBJECTIVE, REGULARORY ENVIRONMENT, PRODUCT FEATURE AND RISK MANAGEMENT

Basic features of product development in service sector including financial intuitions are discussed in the previous sections. As a part of service sector, the IBF products possess those characteristics. However, they have additional features such as *Shari'ah* compliance with a goal to achieve *maqasid Shari'ah* (objectives of *Shari'ah*), which must also be observed in the product development. The special features of IBF products require special regulatory framework, product levelling and risk management for nourishing, controlling and sustaining the products. It is prudent to discuss some of special features of IBF products, which are essential to consider in product development process.

4.7.1 Objective to Achieve Magasid Shari'ah

Definition of *maqasid Shari'ah* is already discussed in Chapter 1. One of the objectives of *maqasid Shari'ah* is that IBF products must comply with *Shari'ah* requirements; which is the main distinguished feature of Islamic finance compared to conventional finance. Second objective of *maqasid Shari'ah* is to promote social benevolence in the sense that the economic activities while promoting financial benefits must promote social benevolence, as "the primary purpose of development is to promote human well-being" (Chapra, 2008:1). Thus, product development in Islamic banking has to refer to human well-being in terms of *maslaha* and *maqasid*.

Relating the financial product innovation with social benevolence, El-Gamal (2006:191) mentioned, "true success for active participants in the industry can be measured by the extent to which they can integrate those social goals with the mechanics of financial innovation".

In a similar manner, Ahmed (201:53) by relating to Grais and Pellegrini (2006:13) mentioned three aspects of *Shari'ah* requirements for IBF. First, financial transactions should comply with *Shari'ah* by avoiding mainly *riba* (interest) and *gharar*; second, economic activities should have social objectives in order to promote social benevolence; and third, to develop an integrated Islamic financial system based on the principles of *maqasid Shari'ah*.

As discussed in Chapter 2, *Shari'ah* compliance is a mandatory requirement for operation of any Islamic banking product. Also it is discussed that the *Shari'ah* compliance is governed by *Shari'ah* Supervisory Boards (SSB) at bank level.

4.7.2 Legal Regime, Corporate Governance and Regulatory Framework of Islamic Banking

In order to have a good understanding of the product development in Islamic banks, it is required to have a broad idea about the legal regime, corporate governance, regulatory framework, business models and risks associated with Islamic banking business. These are covered in this section.

Ahmed (2011, 2014) in his study on product development also stressed the importance of institutional environment, organizational design and product features of Islamic banking which covered above functions and more. In addition, Hasan (2010) examined the legal framework and *Shari'ah* governance systems existing in the jurisdictions of Malaysia, GCC and UK by identifying the differences and the respective impact of these systems. In further supporting, Mejia *et al.* (2014) covered the legal, corporate and regulatory framework of the Islamic banking business. Therefore, such matters are discussed in the following sections in identifying the essential nature of these issues on product development.

Legal regime

Ahmed (2011, 2014) explained that the legal regime under which the Islamic banks operate can be broadly divided into three groups. The first group-of countries are having Islamic legal system under practice with them. The countries are Iran, Saudi Arabia and Sudan. Iran enacted Usury-free Banking Act in 1983 (Akhtar, 2007; Ahmed, 2014). Although Saudi Arabia has traditional Islamic system, in Saudi Arabia, "though contemporary laws in the form of royal edicts exist, the country does not have any specific Islamic banking law" (Ahmed, 2011:56). The *Shari'ah* governance of Islamic banks in Saudi Arabia is based on self-regulated approach by the Islamic financial institutions (Hasan, 2010). In Sudan, the banking sector is transformed to Islamic since 1980s and the Islamic Transaction Law is enacted in 1984.

The second group of countries *as per* Ahmed (2014) has Western legal system but introduced Islamic banking laws to support Islamic financial practices. The countries are Pakistan, Malaysia and Indonesia. Pakistan and Malaysia have common law system with Islamic banking laws introduced to that. Malaysia enacted Islamic Banking Act in 2014 (Akhtar, 2006; Ahmed, 2014). Pakistan amended laws to accommodate Islamic finance (*e.g.* Banking and Financial Service Ordinance 1984). Bangladesh is also a common law country in which Islamic banking is covered under a section of the existing banking law. Indonesia is civil law country, which introduced Islamic Banking act in 1992 and introduced Central Banking Act 1999 to support Islamic liquidity management (Ahmed, 2014; Akhtar, 2007).

The third groups of countries in which Islamic financial institutions operate are countries with Western legal system (Ahmed, 2014). These are "purely secular jurisdictions" (Mejia et al., 2014). In these countries the Islamic finance products would have to adjust to the existing banking laws. However, some of the jurisdictions have aimed to enact legislation to ensure a level playing field for Islamic banking products, but not necessarily incorporating Shari'ah element in the law of the land. Few such examples as cited in Mejia et al. (2014:13) are, "Singapore (e.g., amending banking and tax laws in the early 2000s), United Kingdom (e.g., allowing the establishment of Islamic banks under the 2000 Financial Services and Markets Act), France (e.g., tax changes in 2008 and amendments to the French Civil 14 Code in 2009), Japan (e.g., amending the Asset Securitization Law in 2012), and Hong Kong (amending the tax law in 2013)". For example is, in UK, the tax law was amended in 2003 to eliminate double real estate transfer tax (stamp duty) for Islamic mortgage (Hasan, 2010). Further, in some countries like the US and Canada, the regulatory authorities don't support Islamic banking, but Islamic finance products can be provided through other appropriate organizational format such NBFIs (non-bank financial institutions).

As can be seen, IBF industry faces different regulative environment and legal frames in each country, showing an array of different practices. Therefore, Islamic finance related product engineering process has to consider such factors in detail in producing efficient and effective Islamic products.

Corporate Governance and Shari'ah Governance Regimes

The nature of Islamic banking business requires unique governance challenges including safeguarding the interest of investment account holders and defining the role of *Shari'ah* compliance governance (Mejia *et al.*, 2014). Earlier in this chapter, it is discussed in detail about the *Shari'ah* governance regime of Islamic banks. It is discussed that in order reduce the *Shari'ah* compliance risk, an Islamic bank requires regulatory bodies to provide *Shari'ah* governance framework. There are two criteria used to classify *Shari'ah* governance regimes (Ahmed, 2011): the existence of National *Shari'ah* Authority (NSA) and to set up *Shari'ah* regulatory framework at organizations level by strengthening role of *Shari'ah* Supervisory Board (SSB).

The *Shari'ah* regulatory regimes in different countries can be identified in following four types (Ahmed, 2011; also see Hussain *et al.*, 2015; Hasan, 2010; Mejia *et al.*, 2014; Akhtar, 2007).

Legally constructed *Shari'ah* regime: In this system the financial system is fully *Shari'ah* compliant (Hussain *et al.*, 2015) by banking law, for example in Iran the products offered by banks are governed by Usury Free Banking Act 1983 (Akhtar, 2007; Ahmed 2011). The central bank is responsible for implementing the law; there is neither NSA at national level nor SSB at organizational level.

The second type of regime has active governance system at NSA and SSB level. Examples of are Malaysia, Indonesia and Pakistan where robust *Shari'ah* governance regime is there at NSA and SSB level (Ahmed, 2011).

Third group of countries have passive *Shari'ah* governance at national and SSB level. The examples of countries are UAE and Kuwait. In both jurisdictions, there is no specific stipulation for national *Shari'ah* body to clear products approved by SSB or issue directive to SSBs (Ahmed, 2011)

The fourth types of regimes are market- driven regime. *Shari'ah* compliance is left to the banks, among others, this type of countries include Saudi Arabia and the UK.

Considering the various types of Shari'ah and corporate governance systems and frames available in the Muslim world and in the countries where Islamic finance is

prevailing, the product development process has to face some of these challenges. In other words, such differences have particular consequences and implications for product development in Islamic finance and banking.

Regulatory Framework

Banking industry is one of the most regulated sectors, because it does business with others' money. Moreover, the banking industry is linked to many other sectors of the economy, therefore susceptible to potential systematic risks (Ahmed, 2011:59). Islamic banks (IBs) as part of the banking industry are subject to the regulatory framework similar to their bigger counterparts, *i.e.* conventional banks (CBs). Additionally, IBs have to manage additional issues owing to *Shari'ah* non-compliance risk.

Therefore, "ensuring an adequate alignment of the regulatory framework with the guidelines of standard setters is a key to address the main risks inherent in IBs operations. The authorities should also ensure that the regulatory framework for IBs puts them in a level playing field with CBs" (Mejia *et al.*, 2014:15).

According to Mejia *et al.* (2014), the conceptual regulatory framework of the Basel is the default framework of most of the countries where IBs are present. Additionally, many countries complement BCBS with the standard setting Islamic institutions like IFSB and AAOIFI to give effect to *Shari'ah* compliance. For example, "IFSB standards provide some guidelines for regulators regarding prudent capital adequacy and risk management standards for Islamic financial institutions" (Ahmed, 2011:61).

Therefore, the regulatory requirements have impact on the product development in Islamic banks and financial institutions. In other words, effective and efficient product development process requires that regulative concerns should also be considered in product development.

4.7.3 Islamic Product Features: Levels of Product Structure

General features of the products in service sector i.e. having intangibility, simultaneity, heterogeneity and perishability are already discussed in earlier section. Here, the levels of product structure in Islamic banks are covered and it is useful to

discuss how the *Shari'ah* requirements fit at product levels such as balance sheet level, customer segment level, business segment level *etc*. Ahmed (2011) has analyzed them and classified into seven levels.

The levels are briefly discussed here which are based Ahmed (2011:80-84).

(i) Balance sheet level

This is the first level, in which the products are identified as assets, liabilities and off balance sheet items. Liabilities are source of funds (*e.g.* current accounts, deposits *etc.*); assets are use of funds (*e.g.* loans to customers, treasury investments *etc.*) and off-balance-sheet items are fee based products (e.g. Letter of Credit, Bank Guarantees *etc.*).

(ii) Product functions level

Functions of the banking products are many. Few examples are in the asset side, allocating capital for financing real estate, working capital, project finance, credit cards *etc.*; in the liability side, mobilizing deposits such as savings deposits and term deposits *etc.*

(iii) Customer market segment level

This is third level, where the market segment has two aspects relevant to Islamic banks. The first sector is to screen out that Islamic banking products are not extended to sectors prohibited under *Shari'ah* such as alcohol, gambling, pornography and business involving interest, and so on. The second segment is customer segment such as affluent, middle-class, weaker section *etc*.

(iv) Purpose/Need of the Product

Fourth level relates to the purpose of the product/need to solve. There can be many ways of classification. One way of classifying the purpose is essential products (saving deposit, demand deposit, real estate financing, working capital financing *etc.*); complementary products (cash reserve and risk management needs) and embellishment products (risk and tax protection *etc.*). In Islamic perspective the products serving essential needs has higher level than complementary requirement and then beautification or embellishment products.

(v) Islamic Legal Modes

After product functions and purposes are established next will be to identify the appropriate Islamic mode or contract to be used. The modes of financing for different purposes are provided in Chapter 2. However, more than one mode can be used for a single transaction as shown in Chapter 3 (for example, import finance can be done through *murabahah* and *musharakah* modes).

(vi) Brand of the Product

After the above levels, then the appropriate brand name of the product to be assigned *amana* mutual fund, *musafir* credit card *etc*.

(vii) Business Segment/ Department Level

This is the most common of classifying according to business segment or department level such as retail, corporate, treasury, trade and so on.

Thus, the product development process has to consider all these stages in the product life cycle from its inception in order for developing a successful product.

4.7.4 Risk in Islamic Banking Products

"There can be no progress, including economic progress, without risk because risk is an essential element in all innovations" (Delorenzo, 2002:23). While risk management applies equally to Islamic and conventional financial institutions, in theory IBs are less susceptible to instability than conventional banks; however, in practice they are as exposed to risk as CBs. In theory, IBs have comparative advantage due to risk sharing (PLS) feature of the business, while in practice IBs end up paying PSIA (profit sharing investment account) account holders competitive 'market' return regardless of their performance. Secondly as discussed before, IBs shift away from PLS model to more debt-based short term, low income trade assets (Mejia *et al.*, 2014).

Risks faced by CBs as well as IBs are credit risk, liquidity risk, operational risk, market risk and legal risk (Ahmed, 2011; Ahmed and Khan, 2007; Song and Oosthuizen, 2014; Mejia *et al.*, 2014). However, additionally there are some risks

unique to IBs, such as *Shari'ah* compliance risk, equity investment risk, rate of return risk, displacement commercial risk (Mejia *et al*, 2014; Ahmed, 2011; Song and Oosthuizen 2014).

The main concern in the conventional bank's interest-based loans is the credit risk. However, IB products are more complex. Since IB products are equity-based or sale-based, they involve market risk along with credit risk.

As Islamic modes of financing are based on commercial contracts, 'added attention must be paid to the contractual role of the bank concerned, when analyzing the risks inherent in the bank's assets and liabilities' (Greuning and Iqbal, 2008:69).

By referring to Ayub (2007) and Ahmed (2011), brief discussions on the risks associated with Islamic modes of financing are given here.

Murabahah: Murabahah is a sale-based contract where the IB first owns the goods and then sale it to the customer at mark up. Therefore, there is risk involved in the transaction. Ayub (2007:234) mentioned about the risks associated with murabahah include customer refusal to buy goods, customer wants finance for goods already purchased, late payment risk, overdue risk, default in payment risk etc. Ahmed (2011:88) discussed the risk associated with murabahah at following stages of transaction:

Beginning of transaction: Bank buys the goods on the basis of promise from the customer. If the promise is not binding the IB may get stuck with the goods exposed to market risk. IB is also exposed to loss, due to damage of the goods. To mitigate this risk, IBs usually make the promise to buy by the customer as binding.

Transaction period: IB is faced credit risk once the goods are delivered to the client. To mitigate credit risk the IB asks for collateral and guarantees.

Conclusion of transaction: There is no risk once payment is made.

Istisna: As Ayub (2007:268) discussed, risks associated with *Istisna* are settlement risk, price risk, delivery risk, possession risk, market risk *etc*. Ahmed (2011:88) discussed the risk associated with *Istisna* at following stages of transaction:

At the beginning of transaction: Once the IB commits with the customer, it has to select subcontractor to manufacture the asset/goods.

At transaction period: *Istisna* involves construction/ manufacturing and payments made in installments. So the IB is exposed to market risk, counter-party and credit risk.

At conclusion of transaction: No risk once goods delivered and payment received.

Ijarah: As Ayub (2007:268) discussed, risks associated with *Ijarah* are such as customer refusal to take the goods, default in payment, maintenance/ repair risk, early termination risk, *etc*.

Ahmed (2011:91) discussed the risk associated with *ijarah* at following stages of transaction:

At the beginning of transaction: If the asset is not leased then IB faces market risk in disposing the asset.

At transaction period: There is a credit risk in terms of non-payment of rental installments by the counter party.

At conclusion of transaction: In case of *Ijarah* the IB has to deal with market risk of the residual value of the asset. But in case of *ijarah wa iqtinah*, no market risk as the asset is transferred to the lessee.

Mudarabah: Ahmed (2011:92) discussed the risk associated with *mudarabah* at following stages of transaction:

At the beginning of transaction: IBs have limited competencies in project evaluation and related techniques.

At transaction period: There is a counter-party risk arising from an information asymmetry problem. The counter-party risk includes misreporting of profit by the manager.

At conclusion of transaction: The counterparty risk of untruthful reporting of the profit exists.

Musharakah: *Musharakah* is same like *mudarabah* but in former case all the partners contribute to capital and labour (management). Profit sharing for different partners may be different depending upon their involvement in the project and capital invested.

Similar to *mudarabah*, the risks involved in *musharakah* are at following stages Ahmed (2011:93):

At the beginning of transaction: IBs have limited competencies in project evaluation and related techniques, so there can be adverse selection.

At transaction period: The counter-party risk arising from moral hazard and information asymmetry problem are high. The counter-party risk includes misreporting of profit by the manager.

At conclusion of transaction: The counterparty and market risk may exist depending upon asset type. In case of physical assets (*musharakah* with *ijarah* sub-contract or *musharakah* with *murabahah* sub-contract) then IB will face asset-price risk and/or counter-party risks.

As identified, in Islamic finance mode has its particular risk possibilities depending on the stage where the product is in its life cycle; therefore, it is essential for speicliasts concerned with product development to consider risk implications and consequences of the new products and instruments.

4.8 FACTORS/ASPECTS OF PRODUCT DEVELOPMENT IN ISLAMIC FINANCE

This section aims to discuss as to what should be taken into consideration in developing financial products in Islamic banking.

It should be noted that a deeper study of product development processes in Islamic banks is the objective of this research. Various factors are considered for the product development in Islamic banking in collecting data. These factors and initiatives are reflected in the survey questionnaire for this study. Some of the factors/aspects of product development in Islamic finance are briefed here though details will be covered in subsequent chapters.

(i) The Demographic location and general information of the banks:

Following static parameters influence the product development process, which play the roles of Control Variables (CVs) in the statistical analysis: location or country of origin; year of establishment or the age; ownership structure; number of branches; number of employees; nature of Islamic business activity.

(ii) Bank strategy and planning on innovation and product development:

This contains various initiatives in the product development process, such as 'Bank's mission or vision on innovation', 'mew product development as part of planning process', 'strategic approach on product development'.

(iii) Product development resources and processes:

Resources available to the product development team is one of the important factors for product development. The requirement of human capital is very important. Apart from human resources, financial resources as well as information technology resources are also important.

Among the key initiatives for product development are the product of conventional bank, product of another Islamic bank, own R&D, market research *etc*. It is discussed in the beginning of the Chapter 1 that conventional banks are the main providers of banking services to the customers. Therefore, to understand and match to products of conventional banks with *Shari'ah* compliant Islamic products is a key initiative. Similarly matching to products of another Islamic bank in the area is also an initiative. The factors related to product development process are to streamline the internal approval process; steps involved in product development cycle and steps for post launch carry out of the product (which is already discussed in Section 4.5.1 related to product development cycle).

(iv) Shari'ah approval process:

Shari'ah approval process is the most important factor for product development in Islamic banks. The importance of *Shari'ah* compliance and role of SSB are already discussed in detail in Chapter 2. Through the survey, the aim is to find out whether the *Shari'ah* board exclusively works for the target Bank or the same board is shared with

other banks or group members. To know of the number of employees and various units in *Shari'ah* department will be good information too. Other information aimed to access through the survey are to know who prepares the product agreement (in-house or outsourced); how many days requires for *Shari'ah* approval; whether the *Shari'ah* approval is done on unanimous basis or on majority basis and how frequently *Shari'ah* audit takes place in the Bank *etc*.

4.9. EXISTING PRACTICE OF PRODUCT DEVELOPMENT IN ISLAMIC BANKING

The experience with Islamic banking practice so far indicates that product development process follows mimickry and mirroring of the conventional banking and finance. This implies that product and instruments from the conventional sphere are Islamised with quick fix process to claim their *Shari'ah* compliancy. As discussed in an earlier section, the main objective of *Shari'ah* is 'human well-being'; however, the objective of present product development process in Islamic banking is mainly profit making rather than fulfilling social goals. "Hence there remains a source of debate centred on forms vs substance in the sense that the legality of Islamic finance has been achieved yet substance requirement has not been fulfilled" (Asutay, 2015:23), which also remains a strategic challenge for the Islamic financial product development.

In this context, Ahmed (2011a) by categorizing present Islamic banking products into three types mentioned that some Islamic banking products at present are pseudo-Islamic products (e.g. tawarruq) which conform only to legal form but fulfil neither the substance of Shari'ah nor the social goals. Accordingly, other category of products are: Shari'ah -compliant products, which satisfy the legal as well as the substance of Shari'ah but fail to pay attention to the social goals (e.g. investment banking products mainly target for the affluent customers but not the middle class or weaker section). The third category is consisted of the ideal ones termed as Shari'ah-based products which fulfil the legal, Shari'ah substance and the social goals (e.g. home financing product covers legal, Shari'ah compliance and also having social goal of helping all sections of the society).

By taking a balancing position, one should realize the situation that prompt the Islamic banks for using some inferior modes of financing at present. The dilutions of the Islamic principles in some banking products may be partly due to external factors (such as regulations of the country) that are beyond the control of Islamic banks (Ahmed, 2014: 26). Competition from conventional banks, and economic viability may be other reasons. However, as the industry grows and gets strengths, it is expected that Islamic banks will move to use better modes of products with objectives of achieving *maqasid Shari'ah*. For this, cooperations of regulators and SSBs are required; however Islamic banks must invest in product innovation as a priority to provide customer solutions with better quality of *Shari'ah* compliant products than the quick-fix ones. As product development in the form of authentic products remains an essential challenge for the sustainability of the industry in its authentic and aspirational sense.

4.10 CONCLUSION

Islamic banking like any other service sector such as banks requires new products for its survival and growth. Pressure is more on Islamic banking sector, because it is new in the banking sector and products are complicated due to requirement of *Shari'ah* compliance.

The necessity of developing new Islamic banking products rapidly to meet the market demand requires innovative strategy, good planning along with high quality process flow. In that respect this research analyses the factors or aspects of product development *visa-a-vis* the control variables like country, age, size, nature of Islamic business *etc.* of the banks under study. Subsequent chapters cover more detail on factors with empirical analysis of data collected through questionnaire survey.

CHAPTER 5

RESEARCH METHODOLOGY

5.1 INTRODUCTION

In the previous chapters we have reviewed the literature with the objective of providing a background on Islamic finance and Islamic trade finance, and products in Islamic finance with special study on products in Islamic trade financing which are being practiced in the Islamic banking industry. This chapter discusses the research methods utilized in this research and the appropriate way of analysis with the objective of achieving the objectives of the research study. Various tools of research are discussed and the most appropriate one needed for is adapted to conduct the research.

5.2 RESEARCH METHODOLOGY

Methodology is defined as the framework associated with a particular set of paradigmatic assumptions that will be used to conduct the research (O'Leary, 2004). Grix (2004:169) defines methodology as "the science and study of methods". It is the "branch of science concerned with methods and techniques of scientific enquiry; in particular, with investigating the potential and limitations of particular techniques or procedures". Methodology and method are very often confused as same but they are distinct, former is the science (or study) and later is the tool (Grix 2004). The scope of research methodology is wider than that of research methods; in fact the later constitute a part of the former (Kothari, 2004). By clarifying the difference between research methodology and methods Kothari (2004:8) mentioned:

When we talk of research methodology we not only talk of the research methods but also consider the logic behind the methods we use in the context of our research study and explain why we are using a particular method or technique and why we are not using others so that research results are capable of being evaluated either by the researcher himself or by others.

Research methodology appears in two types: qualitative and quantitative methods. While the quantitative method aims to identify and examine relations between the variables included in the study, the qualitative method aims to explore ideas and perceptions through some form of communication. Statistical understanding suits to quantitative research methodology, while discursive and primary data through social constructivist manner are mostly utilized in qualitative research. Thus, motivation for qualitative research is exploration, while quantitative research methodology by explanation (Bryman, 2001).

As for this study, since this study aims to evaluate the financial product development through the perceptions of the participants, it is framed as qualitative study, as it explores the opinions and perceptions.

5.3 RESEARCH DESIGN

Research design is defined as "The research design is the conceptual structure within which research is conducted; it constitutes the blueprint for the collection, measurement and analysis of data" (Kothari, 2004:31).

A research design is a procedural plan that is adopted by the researcher to answer questions validly, objectively, accurately and economically (Kumar, 2011). Selltiz *et al.* (1962:50) as related by Kumar (2011) mentioned that "a research design is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure".

The research design by employing the adequate methods and tools aims to answer certain basic questions of who, where, when, how, what about the research study (Kothari, 2004; O' Leary, 2009). Some of basic the questions are briefly discussed here (O'Leary, 2009:94-95):

First question is 'who' you want to be able to speak about in the research study; that means what is the 'population' of the study? Also who do you plan to speak or observe? That means to those you will actually speak to is your 'sample'. Second question is 'what' the physical domain of the sample is; are things relevant to the credibility of the methods? Third question is the time frame 'when'; that means how do your methods fit into your time frame? Is the timing relevant to the credibility of your methods? Fourth question is 'how' you are going to collect data; since there are number of ways to collect data such as observation, interview, survey, document

analysis *etc*. which one is yours? Fifth is 'what' will you look for i.e. what will you ask during the data collection?

While making the research methodological design three key prerequisites need to be addressed in order to keep the research design on target. First, the research design must address the research question; second, it must be within the capacity and interest of the researcher; and the third and the focal one is that the design must be practical and doable. O'Leary (2004:89) explained these three prerequisites through a diagram of a target circle by putting the first one (as explained above) in the outer ring, second in the middle ring and third in the center.

According to Saunders *et al.* (2007) and Kothari (2004) there are three types of research studies such as 'exploratory', descriptive' and 'explanatory' (or 'hypothesis testing'). Any particular research should fall into any one of these categories. The three types of studies are explained here.

Exploratory research is conducted with an objective to either to explore an area where little is known or to investigate the possibility of undertaking a particular research study (Kumar, 2011). The exploratory research aims to gather preliminary information that will help to define problems and suggest hypotheses (Kotler *et al.*, 2006:112). The primary point of exploratory research is to give researchers relevant information and help them to form initial hypotheses about the subject (Habib *et al*, 2014).

Descriptive research includes surveys and fact-finding enquiries of different kinds. The major purpose of descriptive research is description of the state of affairs, as it exists at present (Kothari, 2004). "A research study classified as a descriptive study attempts to describe systematically a situation, problem, phenomenon, service or program, or provides information about, say, the living conditions of a community, or describes attitudes towards an issue" (Kumar, 2011:10).

The third type of study is the *explanatory* research as stated by Saunders *et al.* (2007) or 'hypothesis testing' as stated by Kothari (2004). In this type of research, the researcher tests the hypotheses of causal relationships between variables (Kothari, 2004; Saunders *et al.*, 2007).

Kumar (2011) mentioned about the fourth category of research study as 'correlational' study; which is intended to discover or establish the existence of relationships between two or more aspects of a situation. However, some authors consider this type to resemble the descriptive study as mentioned above.

Choosing an appropriate research design for a particular purpose is a key skill for researchers, as using the appropriate design will help the researcher to avoid problems, will improve the reliability and validity of findings and will usually enable the researcher to do better research in less time and with less effort.

As regards to this research, considering the above aspects, this research is designed as an explorative survey study, as it aims to explore as to how product development process work in Islamic banks through a questionnaire survey administered with bankers and financiers in charge of such departments. It is an analytical study at the same time, as it provides a critical approach to product development.

5.4 RESEARCH STRATEGY

Research strategy is an important aspect of social research. There are two major approaches of research strategies: deductive and inductive approaches.

Grix (2004:174) mentioned that "a research strategy is the manner in which you approach your research topic, for example, deductively or inductively. This choice will impact on how you formulate your research questions or hypotheses, the level and units of analysis you choose and the type of study and the sources of data to be collected".

Explaining deductive strategy, Bryman (2001:8) states that "Deductive theory represents the commonest view of the nature of the relationship between theory and social research. The researcher, on the basis of what is known about in particular domain and of theoretical considerations in relation to that domain, deductive a hypothesis that must then be subject to empirical scrutiny". Thus, deductive is a type of strategy in which theory prompts the research and hypotheses dictates what evidence the researcher looks for. Data are then collected to confirm or falsify the hypotheses. 'Deductive theories in contrast to inductive theories arrive at their conclusions by applying reason to a given set of premises.' (Grix, 2004).

Inductive research on the other hand, "can be understood as research which draws conclusion from specific empirical data (the particular) and attempts to generalize from them (the general), leading to more abstract ideas, including theories." (Grix, 2004: 168). In inductive approach, the researcher starts collecting data and then explores them to see which themes or issues to follow up and concentrate on them (Saunders *et al.*, 2007).

In inductive approach the researcher moves from specific observations or finding to broader generalization and theory. The researcher begins with specific observations or arguments; formulate tentative hypotheses to be explored and finally develops a general theory (Blaikie, 2007).

It should be noted that deductive reasoning (hypothesis verification/ theory testing) is associated with positivist/quantitative research and inductive reasoning (to derive theory from specific instances) is seen central to post-positivist/ qualitative research (O'Leary 2004:12).

Accordingly, by considering the aspects of deductive and inductive research, the strategy pursued in this researcher is based on inductive reasoning. The population consists of Islamic banks in target countries and the study start from specific observation to identify the general behaviour and patterns governing the sample. The researcher can infer the general characteristic of the population from the study of the sample analyzed. This research moves from specific to general, therefore fits into inductive strategy. In addition, considering that the aim of this study is to explore and analyze, in line with explorative survey nature of this study, inductive research design becomes the essential design through to shape the research in this study.

5.5 RESEARCH METHODS

Research methods are the 'techniques or procedures used to collate and analyze data' (Blaikie 2000:8), which are inextricably linked to the research questions posed and the source of data collected (Grix, 2004: 30).

Research methods may be understood as all those techniques that are used for conduction of research. Research methods or techniques, thus, refer to the methods the researchers use in performing research operations (Kothari, 2004).

Research methods have two principal functions, first they offer the researcher a way of gathering information or gaining insight into a particular issue; second they enable another researcher to re-enact the first's endeavours by emulating the methods employed (Grix, 2004: 32).

According to literature there are two types of research methods: quantitative and qualitative research which has been referred in section 5.1. Differences between quantitative and qualitative research methods are explained by authors such as Grix (2004:122), Kothari (2004), Habib (2014:9), Kumar (2011), as follows:

Quantitative research is based on the measurement of quantity or amount (Kothari, 2004). It usually involves collecting and converting data into numerical form so that statistical calculations can be made to draw conclusions (Habib, 2014). According to Grix (2004:117), "researcher develops variables or concepts which can be measured and converted into specific data-collection techniques. These techniques produce precise numerical information which can be understood as empirical representation of the abstract concepts (relating to Neuman 2000: 157-8). It includes identifying general pattern and relationship among variables, testing hypothesis and theories making predictions on these results".

Most common types of method associated with quantitative research are social surveys, analysis of previously collected data or official statistics and 'structured' observation. The data collection methods associated with quantitative research are, 'questionnaire or survey technique, structured observation and content analysis ' (Grix, 2004:123).

On the other hand, the main focus in qualitative research is to understand, explain, explore, discover and clarify situations, feelings, perceptions, attitudes, values, beliefs and experiences of a group of people (Kumar, 2011). As for qualitative research method, it is concerned with interpreting the subjective experience, such as perspective of the individual studied. It employs data collection methods such as interviews, observations, documentary analysis *etc*. The language of qualitative research revolves around case studies and social contexts instead of 'variables' and 'hypotheses' (Grix, 2004:120).

5.5.1. Research Methods: Data Collection Methods – Questionnaire Method

As part of the quantitative research method, this study considered questionnaire as the best method to collect data in responding to the research aims and questions. This section describes the research process relating to the administration of questionnaire research. Thus, primary data collection method of survey in this research was a well-structured questionnaire.

Questionnaire is the most common way of survey technique in social research, as it is an easy instrument for the respondent to complete. A questionnaire schedule consists of a list of questions sent to specific individuals to respond in an attempt to collect primary data.

A sample of the questionnaire schedule used in this study can be found in the appendix section.

5.5.1.1 Questionnaire design

The Questionnaire for survey in this research is designed with six parts, each part consists of several semi-structured questions. The framework of the questionnaire is taken from an earlier survey conducted by Ahmed (2011).

The aims of each part of the questionnaire is to explore the process of product development stages for developing/ structuring an Islamic banking product. The questions are mostly closed questions with multiple choices relevant to the activities undertaken by the Islamic banker in product development so that it becomes easy for the interviewee to answer without much confusion. However, a few questions are open question which are kept open ended to get independent opinion of the interviewee.

In the questionnaire, different forms (scales) of questions were used such as:

- (i) Fill in the blanks: these questions require respondent to fills up the answers. No choice is given for this;
- (ii) Choosing from a list: there are various options relevant to a particular solutions or practice, one has to choose from them. There can be more than one choices depending upon organizational practices;

- (iii) Yes/No and Agree/Disagree (Dichotomous): these are straight answers about practice in the organization;
- (iv) Ordering Options: when answers to a particular activity is more than one, then the respondent one has to give the choices in order of preference;
- (v) Likert type Scaling: This is used for ranking from 1 to 5 on the basis of lowest to highest ranking.

Table 5.1 summarizes the scales and their applications with particular sections and questions in the questionnaire administrated for this study.

Table 5.1: Scales and Their Application in the Questionnaire

Scale	Definition	Question Numbers
Fill in the blanks	Filling blanks with response from participant	A1-8,11;D9,10,12;
		E1-2, 7-9; F 1-4
Choosing from a	Uses multiple items, to choose from a list.	A9-10,
list		
Dichotomous	It is used to obtain a 'yes' or 'no' answer	B1-3, C6-8;D1,4,8
Ordering option	5 to 10 point scale with anchors, as	C2, 4
(Itemized rating)	needed, is provided for each item and the	
	respondent states the appropriate order	
	number on the side of each item, or circles/	
	tick the relevant number against each item.	
Likert scaling	Uses to examine how strongly subjects agree	C5
	or	
	disagree with statements give ranking (1-5)	

5.5.1.2 Description of each part of the questionnaire

The questionnaire has six parts, each of which aim to respond to a particular set of information related to product development in an Islamic bank. The description of each part is as follows:

Part A: This part contains general information about bank such as physical location, nature of banking *e.g.* commercial/ investment/ central bank *etc*. The information constitutes the independent variables or control variables (CVs) used for statistical analysis. The section also aims to collect data on the financial highlights of the bank (assets, equity and income). Most importantly this part covers information about the nature of Islamic banking the bank in question is practicing. It confirms to the fact that in general, Islamic banking is practiced through three kinds of banks:

- (i) Full (100%) Islamic banks (*e.g.* Al Rajhi Bank, Dubai Islamic Bank, Islamic bank of Bangladesh). The balance sheet of the bank is 100% Shari'ah compliant.
- (ii) Islamic window of a conventional bank (*e.g.* Islamic windows of National Commercial Bank, Deutsche Bank, Dhaka Bank *etc.*). In this case the balance sheet is in general mixed.
- (iii) Islamic subsidiary of a conventional bank (*e.g.* Bank Syariah Madiri, Indonesia). In this case the balance sheet of the subsidiary is separately prepared which is fully *Shari'ah* compliant but ultimately it is consolidated with the Group balance sheet, which is not *Shari'ah* compliant.

Part B: This part investigates the sampled banks' strategy and planning on innovation and product development. This part contains questions of Yes/No types, choosing from a list and selecting from the choices with true/ sometimes true/ not true.

This part aims to explore the following:

- (i) How important is the product development and innovation at the sampled banks? This part of the questionnaire explores whether the mission or vision of the bank includes innovation and product development and how the annual business plan of the institution gives priority to innovation.
- (ii) How the strategic approach is correlated to product development of the sampled banks? This helps to explore in details how the product development gives strategic advantage to the institution. The results of feedbacks can be interestingly diverse than the theoretical assumptions.
- (iii) What are the main benefit/advantage of developing products in an Islamic bank? This question relates to the various benefits a bank can get on developing new products. The answers are true/ not true/ sometimes true in nature.

Part C: Product development process.

This part of the questionnaire is the main part of survey, which explores various stages of processes that take place in the Islamic bank for product development. It contains eight questions with total more than fifty variables covering most of the

parameter of product development. Therefore, with a sample size of 22 Islamic banks it would give various combinations of data to be analysed by using graphs and statistical tools.

The study assumes that the main reason of product development or product structuring in Islamic banks is to meet customer needs by providing products that are available in conventional banking. The second assumption is that most of the Islamic banks in one market, copy each other's products, which results in homogeneous product range across the industry.

The third assumption is that the Islamic banks are being commercial organizations their main aim is to achieve commercial benefit (*i.e.* make higher profit) than to achieve social benefit of helping the needy customers. Though Islamic moral economics is obeyed to get *Shari'ah* approval, the academic notion that Islamic banks are more social oriented than the conventional banks and they are champions of Islamic moral economics is mere a theoretical myth. This study assume that that the survey result will reveal outcome of the actual business practices in Islamic banks which may be contrast to theoretical notions.

Part D: Shari'ah approval process

Shari'ah approval is one of the main pillars of new product development in Islamic banks. In fact, no product could be implemented in the Islamic bank without approval of Shari'ah board. Therefore, this part of the questionnaire covers the parameters involving Shari'ah approval, which explores as to what kind of Shari'ah advisory board the bank has. It can be a dedicated Shari'ah board or a shared Shari'ah board in terms of a consultancy. Additionally, it also explores other Shari'ah related activities such as:

- (i) Whether the Bank is having a permanent *Shari'ah* coordination unit/ *Shari'ah* department. If yes, the various sections with the unit (audit unit, research unit, coordination unit with board, coordination unit with the business *etc*);
- (ii) Preparation of product agreement;
- (iii) Steps followed to get the new products approved.

Part E: Trade financing activities of banks

The focus of this study is on the trade financing products of Islamic banks. Therefore, the last part of the questionnaire focuses on trade financing activities. Trade financing is an important business segment under both in conventional and Islamic banking. Moreover trade financing has similarity in both types of banking. However, more products are available in conventional banking than Islamic banks for trade financing. In responding to the trade financing needs of customers, additional products (for example 'discounting') are needed by the trade customers to complete their trade cycles. In spite of *Shari'ah* limitations on such products, Islamic banks endeavour to develop parallel products to fill the gaps. This study explores that.

Part F: New trade finance products recently launched

This part of the questionnaires explores the recently developed new trade financing products. Some Islamic banks have developed good trade financing products. This study aims to highlight them so that the product can be referred by other Islamic banks.

5.5.1.3 Study of population and Sample

The target markets in this study are Islamic banks in Bangladesh, Indonesia, Malaysia and GCC. It should be noted that the socio-economic backgrounds of these markets vary. In terms of Islamic banking these are the main countries where Islamic banking has good presence. These markets are prominent Islamic countries in Asia and they are at the proximity of the researcher due to his job location and professional contacts. The intention of selecting these four main markets is to provide variety of samples from markets that having different stages of development of Islamic banking, as:

- (i) GCC is a well-developed market in Islamic finance with affluent economic and social life;
- (ii) In Bangladesh, the Islamic banking has taken good inroad into the market but still conventional banking is the dominant mode of banking. The religious-socio-economic background of the population is attracted towards Islamic banking but at the moment providers are limited. Bangladesh being at the higher end of

Islamic population but at the lower end economic conditions, Islamic banking has good demand to meet the basics financial needs such as micro-finance, tradefinance, SMEs (small and medium enterprises). Therefore, the demand for Islamic banking is quite different than other geographies.

- (iii)Indonesia is the new market in Islamic banking. The population of Indonesia is the highest among Muslim countries in the world but providers of Islamic banking are one of the lowest. The socio-economic condition is mixed where affluent and poverty exist in large numbers. The Islamic banking has taken inroad recently mostly influenced by the success of Islamic banking in Malaysia. Therefore, the product development is at beginning stage and it is interesting to study at this stage.
- (iv)Malaysia is a very developed and leading market of Islamic banking/ finance. The main reason of development of Islamic banking in Malaysia is the government strategy to encourage Islamic banking, create the necessary institutions for the development of the industry and finance Islamic finance research in the country. However the Malaysian Islamic banking models have certain differences with GCC models, the former is considered to be liberal in respect of *Shari'ah* restrictions.

In sum, for this research, the population is the Islamic banks. In this research, the researcher selected Islamic banks mostly from Asian countries: Bangladesh, Indonesia, Malaysia and GCC. As mentioned, these countries are selected for proximity of the researcher to the banks. The researcher being a senior banker in international environment has professional contacts with many of the banks in the region. Bangladesh is chosen as the first country of survey due to proximity, good number of banks having full Islamic banking/Islamic windows. Indonesia is another country where Islamic banking is at developing stage, so the product development is an essential element of success in the new market like Indonesia. On the other hand GCC and Malaysia are developed markets; survey of product development process in these countries will provide a good sample- mix.

According to O'Leary (2004:102), population is the total membership of a defined class of people, objects or events. The best way to research on any population is to

gather data from every element within the population. However such in-depth research is feasible when the population is small, defined and accessible. In large scale population, the research is carried by conducting a 'census' which is basically a survey of every element of a defined population. However, most studies involve populations for which it is impossible to name and access all elements.

For generalizing the finding of research the sample has to be representative of the population under study. According to O'Leary (2004:103), to make generalization, both appropriate and representative sampling is required. According to Kothari (2004:56), the size of sample should neither be excessively large, nor too small. It should be optimum. An optimum sample is one which fulfills the requirements of efficiency, representativeness, reliability and flexibility.

Sampling is a process that is always strategic and sometimes mathematical in nature. In studies where aim is generalizability (also referred as external validity), sampling study to involve the most practical procedures for gathering a sample possible that represents a larger population. If the goal is transferability (*i.e.* the sample size does not ensure of findings to larger population, but is still a goal because the lessons learned are likely to be applicable in alternative settings or across populations), then also each researcher will strategically select his sample which will serve his research goals. In sample study, always a larger population is recommended for better result (O'Leary, 2004).

For a researcher looking for qualitative data to understand the population is not looking for large sample size, rather looking for deep understanding which may come from few. However, a minimum sample size is required if the researcher aims to use them for statistical analysis.

On the other hand, when the researcher is working with quantitative data, the basic rule of thumb is to attempt to get as large a sample as possible within constraint of time and money, as the larger is the sample, the more likely it can be representative and therefore generalizable.

According to O'Leary (2004), it is important to check that the selection of sample size should be 'feasible'. 'Large samples are likely to mean less error, but they also mean more money and more time'. However it does not mean that one can simply cut

sample size and forget about generalizability. 'The credibility of the research needs to be paramount in all methodological considerations. What is doable does highlight; however, is the need for credible research to be designed with practicalities firmly in mind.' (O'Leary, 2004:106)

According to Roscoe (1975), a sample size more than 30 and smaller than 500 is suitable for most studies. However, advanced statistical analysis formulae can be used to calculate the sample size for a known population. However, 'sample size calculator' is available to calculate sample size (O'Leary 2004:105):

The Table 5.2 provides an idea about the required sample size for more commonly used confidence levels (O'Leary 2004:106).

Table 5.2: Required Sample Size Table

Confidence	95% C.L	99% C.L	99% C.L
level	+/- 5% C.I.	+/- 5% C.I.	+/- 1% C.I.
Population	_		
30	28	29	insufficient
100	80	87	99
500	217	286	485
1000	278	400	943
5000	357	588	3,845
10,000	370	624	6,247
50,000	381	657	12,486
100,000	383	661	14,267
1,000,000	384	665	16,369

Source: O'Leary (2004: 105)

It can be observed from Table 5.2 that:

- (i) As the population increases the corresponding sample size does not increase dramatically;
- (ii) As the level of confidence increases the required sample size increases significantly.

In this research, the researcher wanted to collect the data from the Islamic bankers who are directly involved in product development processes or officials who are very much aware on the processes being practised in the respective banks. Therefore, for one bank one questionnaire survey was conducted which reflected the practices in that

particular bank. There was a target of 30 Islamic banks but due to limitations of number of Islamic banks in the target countries and non-response of some respondents, a sample size of 22 Islamic banks/Islamic windows from four markets (Bangladesh, Indonesia, Malaysia and GCC) were surveyed. It is notable that among the 22 Islamic banks and windows survey was very diversified to represent some of the biggest and pioneer Islamic banks (*e.g.* Al-Rajhi, KFH, IBBL) to small and young Islamic banks (*e.g.* Barwa, BNI-*Shari'ah*).

The distributions of banks selected in the survey are:

Bangladesh:

- (i) Islami Bank Bangladesh
- (ii) EXIM Bank Limited
- (iii) Al-Arafah Islamic Bank Limited
- (iv) Dhaka Bank Limited
- (v) ICB Islamic Bank
- (vi) Southeast Bank
- (vii) Prime Bank

Indonesia:

- (viii) Bank Muamalat
- (ix)Bank Syariah Mandiri
- (x) BNI Syariah

Malaysia:

(xi) Al Rajhi Bank, Malaysia

The GCC:

- (xii) Al Rajhi Bank
- (xiii) Alinma Bank
- (xiv) Al Jazirah Bank
- (xv) National Commercial Bank
- (xvi) Abudhabi Islamic Bank
- (xvii) Al Hilal Bank
- (xviii) Dubai Islamic Bank
- (xix) Qatar Islamic Bank
- (xx) Bahrain Islamic Bank
- (xxi) Kuwait Finance House
- (xxii) Barwa Bank

5.5.1.4 Administration of the questionnaire

The pilot survey for this research was conducted by the researcher in Bangladesh with Islami Bank Bangladesh Limited (IBBL). The selection of IBBL was done on the

basis that IBBL is first and biggest Islamic bank in Bangladesh and one of the leading Islamic banks in the world. It is a pioneer in many aspects and consider as training ground of Islamic bankers in that country. IBBL is also accessible to the researcher due to professional relationship of the researcher as well as proximity of travel from researcher's home country, India.

IBBL has a Research Division with highly qualifies team members including PhDs in Economics/ Islamic Finance. The researcher met the following officials:

- (i) Head of research division;
- (ii) Product development manager;
- (iii) Economist.

The feedback and suggestion of respondent were very helpful to this research, which provided the following observations:

- (i) The questionnaire is structured well and touched most of the areas of product development in an Islamic bank;
- (ii) The multi-choice answers are appropriate to get the feedback;
- (iii) Views of officials met (such as head of research division, product development manager and economist) on above observations are mostly in conformity in the sense that they were happy with the structure and the choices provided.

The questionnaire survey was done by travelling to Bangladesh during August 2012 for one week and making face to face questionnaire discussions with four banks (the first 4 in the list). IBBL was very helpful in this survey in Bangladesh. They helped in handing over the questionnaire to other three banks (ICB, Southeast and Prime Bank) in Bangladesh. The researcher had to personally follow up by telephone with the respondents to complete the questionnaire and finally completed questionnaires were collected and couriered back with help of IBBL team. The process took nearly four months for completing study of seven Bangladesh banks in.

In Indonesia the researcher during one of his visits in July 2012 for other purpose could meet the key persons in three banks (Bank Muamalat, Bank Syariah Mandiri and BNI Syariah) and made the groundwork for the survey. Subsequently the

questionnaires were sent by e-mail, follow up by telephone calls and e-mail; finally feedbacks were collected by e-mail. This process took nearly three months.

Saudi Arabia is the home ground for the researcher. Survey was made through handing over questionnaire personally to the concerned officials, following up by telephone calls and collecting the feedbacks by email. Due to the large size of the questionnaire it took more than two months to complete the survey in Saudi Arabia.

Other eight banks survey was conducted by sending questionnaire through email then following up through regular telephone calls and emails.

It is important to note, the personal contacts of the researcher who is a banker himself with good international contacts could help in conducting the survey.

It is also important to note that as the survey questionnaire was exhaustive with many sub-questions and about 150 variables, the completion of study with all targeted banks were slow therefore took more than one year.

For entering the data in SPSS system, making the tabulations and analysing the data took another one year. Moreover, as the researcher undertook the research study on part-time basis, it took about 2 years to complete the survey, data entry and tabulation process.

5.5.1.5. Validity and Reliability of the Questionnaire

The questionnaire is the tool to get the answers of the research questions. Hence, the validity of the questionnaire is important to the research survey. The questionnaire used in this research was tested in the detailed survey in Bangladesh and they were acceptable to the Islamic bankers except suggestions on few questions. The questions were adjusted by taking into the consideration of the suggestions.

As for reliability, frequently used indicators are test-retest reliability and internal consistency. In the test-retest reliability indicator the same sample is tested in two different occasions and correlation between two scores is obtained; high test-retest correlation indicates a more reliable scale. In addition, the internal consistency is the degree to which the items that make up the scale are all measuring the same underlying attribute i.e. the extent to which the items 'hang together' (Pallant, 2005).

The most commonly used statistical tool to find internal consistency is the 'Cronbach's coefficient alpha', which as a measure ranges from 0 to 1, with higher values indicating greater reliability. It should be noted that an alpha of minimum level of 0.7 is recommended indicating an effective reliability (Pallant, 2005; Vaus, 2002; Nunnally, 1978). In case of explanatory research, a lenient cut-off value of Cronbach's alpha above 0.6 is generally acceptable.

In this survey, the Cronbach's coefficient alpha is used to find the reliability of the data. As the questionnaire is having large numbers of statements (questions), the Cronbach's alpla is tested with statements in different sections. The results are depicted in Table 5.3:

Table 5.3: Cronbach's Alpha Test Results

Sections	No of Variable	Cronbach's Alpha	Average
			Cronbach's Alpha
Section-B Strategy	17	.690	0.690
Section-C Process	14	.761+0.2+.969+.764=2.694	0.6735
	+11+15+11=51		
Section-D Shari'ah	11+13=24	.764+.886=1.65	0.825
Section –E & F Trade*			
Total Average			0.729

Note: *not included-due to less response and many questions are open- ended

As can be seen from table 5.3; the average Cronbach's alpha for section B is 0.69, section C is 0.67. They should be considered reliable as they are very close the benchmark value above 0.7. Cronbach's alpha for section D is 0.82, which ensured reliability for that section. In overall, average is 0.729 which indicates that the questionnaire has overall internal consistency.

5.5.2 Research Method: Data Analysis Methods

This research aimed to explore the product development process in Islamic banks by making reference to nature of processes and factors running the particular process of product development. Primary data was collected through questionnaire survey with 22 banks in South-East Asia and GCC. Different statistical methods were used for analysis of the data and make the findings. They are explained in this section. There are two major areas of statistics used in data analysis: descriptive statistics and inferential statistics. *Descriptive statistics* concern the development of certain indices

Chapter 5
Research Methodology

from the raw data, whereas *inferential statistics* concern with the process of generalization (Kothari, 2004).

Descriptive analysis:

Descriptive statistics are used to describe and summarize the basic feature of the data in a study, and are used to present quantitative descriptions in a manageable and intelligible form (O'Leary, 2004).

By applying SPSS statistical tools, the data collected through the questionnaire were coded and studied by using descriptive analysis to find out frequency, valid percentage, mean and standard deviation to represent the preliminary results. The results were analysed and themes were reflected in Chapter 7.

'Section B' (Q1 to Q3) of the questionnaire contained statements relating to strategy and planning on innovation on product development. The answers are simple at nominal scales such as:

Nominal scale:

Yes-1 or No-2

True-1 or Not True-2 or True to some extent -3

The descriptive analysis was very appropriate to analyse the frequencies, valid percentage and mean values of the variables and derive preliminary results.

'Section C' of the questionnaire contained statements related to 'processes'. The answers were in following scales:

Questions C1, 2, 3, 6 -Nominal scales – Yes (1) or No (2)

Questions 7, 8 - Nominal scale – simple choices 1, 2, 3

Questions 4, 5, - Ordinal scale – with ranking 1 to 5 or 1 to 10

The descriptive analysis was also very appropriate to analyse the frequencies, valid percentage and mean values of the variables and derive preliminary results.

Chapter 5 Research Methodology

'Section D' of the questionnaire contained statements related to *Shari'ah* approvals with the following scale groups:

Questions D1-8 have *Nominal scale* answers Yes (1) or No (2).

Questions D8-12 have also *Nominal scale* answers with numbers (1,2, 3 etc)

For this section also descriptive analysis showed frequency, valid percentage and mean values to compare and derive preliminary results.

'Section E and F' of the questionnaire contained statements related to trade financing. Some of Questions (E1, 2, 3) have answers in *Nominal scale* (Yes/ No). Some Questions (E4) answers as Sale-1/ Service-2/ Equity-3 in *Nominal scale*. Therefore, by descriptive analysis the mean ranks were compared to segregate the nature of trade products that give interesting meanings. However, many other questions in Section E and F s are not standardized so descriptive analysis was weak.

Inferential Statistics

As defined by Kothari (2004:131),

Inferential analysis is concerned with the various tests of significance for testing hypotheses in order to determine with what validity data can be said to indicate some conclusion or conclusions. It is also concerned with the estimation of population values. It is mainly on the basis of inferential analysis that the task of interpretation (i.e., the task of drawing inferences and conclusions) is performed.

The parametric and non-parametric techniques are part of inferential analysis. which is discussed below.

In the empirical analysis chapters of this thesis, various SPSS tools are used starting from cross-tabulation to more advance tests for making the inferential analysis of data that contribute to the themes of the research. For using the appropriate inferential technique, the researcher must decide whether the data is suitable for parametric technique or non-parametric technique.

Parametric techniques: The word parametric comes from parameter, or characteristic of a population. The parametric tests (e.g. t-tests, analysis of variance, ANOVA, Pearson correlation) make assumptions about the population that the sample has been drawn from. This often includes assumptions about the shape of the population

distribution (*e.g.* normally distributed). Other assumptions include sample size is large, population parameters like mean, variance, *etc.*, must hold well. Parametric statistics are more powerful, but they do have more 'strings attached': that is, they make assumptions about the data that are more stringent (Pallant, 2005; Kothari, 2004; Saunders *et al.*, 2007). But there are situations when the researcher cannot or does not want to make such assumptions. In such situations the other statistical methods used for testing hypotheses, which are called non-parametric tests because such tests do not depend on any assumption about the parameters of the parent population (Kothari, 2004).

Non-parametric techniques: Non-parametric techniques, on the other hand, do not have such stringent requirements and do not make assumptions about the underlying population distribution (which is why they are sometimes referred to as distribution-free tests). Non-parametric statistics are designed to be used when the data are not normally distributed. Therefore, non-parametric techniques are ideal for use for data that are measured on nominal (categorical) and ordinal (ranked) scales. They are also useful when data samples are small and when the data do not meet the stringent assumptions of the parametric techniques. (Pallant, 2005; Saunders *et al.*, 2007; Kothari, 2004; Sekaran, 2003).

In this research non-parametric tests Mann Whitney-U (MW) and Kruskal Walis (KW) tests are used which are explained below, as the data is not 'normal' due to being small and also collected through convenience sampling rather than randomly; as the latter producer 'normal distribution'.

It should be noted that Chapter 8 deals with inferential statistical analysis of data from the survey. Following techniques are used to make the inferential analysis.

Cross-tabulations

SPSS tool cross-tabulation is used to find the relationships between dependent variables and independent variable. In this research cross-tabulations were drawn between control variables (demographic profile) with questions (statements). The results are analysed. Some of the examples of cross tabulation analysis made in this research are as follows:

(i) Does the banks mission or vision statement include innovation? vs Nature of Islamic Banking activities (CV)

(ii) Is there an annual plan for the number of new products to be developed? vs Nature of Islamic Banking activities (CV)

Non-parametric test Mann Whitney-U (MW) test

Mann Whitney or U-test

Mann Whitney-U (MW) test technique is used to test for differences between two independent samples from the same population (Pallant, 2005; Saunders *et al*, 2007; Sekaran, 2003). For example, test for nature of Islamic business, either full-fledged Islamic bank or Islamic windows. This test is equivalent to the independent t-test for the parametric statistics. Instead of comparing means of the two groups, as in the case of the t-test, the Mann-Whitney U Test actually compares medians. The probability value (*p*) less than or equal to .05 (*i.e.* 5%) is considered significant results.

Though 5% significant level is considered as standard, in this research survey, in order to capture the results which are at the edge of 5%, the statistical significance level is expanded to 10% level as explained in Chapter 8.

Non-parametric test Kruskal Wallis (KW) test

Kruskal Wallis (KW) test is similar to MW test as explained above, but it allows to compare the scores on some continuous variable for three or more groups (Pallant, 2005; Sekaran, 2003). In this research, the survey includes many Control Variables (CVs) such as year of establishment; number of employees is compared with the statements of the questionnaire through KW test as depicted in Chapter 8.

As explained in MW case, though 5% significant level is considered as standard, in this research survey, in order to capture the results which are at the edge of 5%, the statistical significance level is expanded to 10% level as explained in Chapter 8.

5. 6 DIFFICULTIES AND LIMITATIONS

Similar to any other research, this study has experienced some of difficulties and constraints. The main difficulty was to get number of survey responders. Though the researcher aimed to get at least 30 samples from the target countries, the response came from 22 banks only, which might perhaps be considered not large enough to make generalisation for the industry.

Some of the limitations are explained below:

- (i) The research was focussed and limited to Muslim countries such as Bangladesh, Indonesia and Malaysia in South East Asia and Saudi Arabia, UAE, Kuwait, Qatar and Bahrain in GCC. These countries are the main contributors to Islamic banking in the world and rank among top nine in terms of Islamic assets (The Banker, Nov 2013) by keeping aside Iran.
- (ii) Iran was not included in the study due to difficulty to access and the model of Islamic banking in Iran is less known to outside. India, the home country of the researcher, though has second highest Islamic population but so far no bank has been allowed by the regulators to start Islamic banking. Pakistan has some good Islamic banks but could not be included in the survey due to limited of accessibility by the researcher.
- (iii) Numbers of Islamic banks in the countries of survey are much less compared to total banks in the country. 22 banks surveyed in the target countries though cover more than 50% of the total numbers of Islamic banks together respectively in each of the sampled countries. However, the sample size could been larger to enrich the findings, especially from countries where representation was less such as Bahrain, Kuwait and Malaysia. Unfortunately, it was not possible due to limitation of response, time and cost.
- (iv) The questionnaire itself being very large with nearly 150 variables, it took long time to get the responses. Moreover, the response to the sections (E and F) on trade financing was poor because they are more technical in nature. Therefore, the analyses of these sections are not be enriched.

(v) The data collection method was limited to questionnaire survey only. Survey through interview could have enriched the study. However the questionnaire was tested intensely with Islami Bank Bangladesh Limited (IBBL) through face to face administration of the questionnaire and considered to be the suitable way of survey for this research. Therefore, there was a limitation of number of sample being small due to difficulty in getting responses, but overall the data collected through the survey gave good representative finding and themes could be derived to meet the aim of the research.

CHAPTER 6

THE ISLAMIC BANKING ENVIRONMENT IN THE COUNTRIES OF SAMPLED BANKS AND THE PERCEPTION OF PRODUCT DEVELOPMENT PROCESSES AMONG BANKS UNDER STUDY

6.1 INTRODUCTION

As discussed in the previous two chapters, namely product development (PD) in Islamic Banks as well as in Research Methodology (RM) chapter, a research survey was conducted among 22 banks with Islamic banking business. The countries covered in this research are among two regions such as South East Asia with Indonesia, Malaysia and Bangladesh and the GCC countries covering Saudi Arabia, Kuwait, UAE, Qatar and Bahrain. It is noted that the sample size of 22 is relatively small to provide robust results but the sample covers a good representation of Islamic banks in the two regions. Therefore, the sample provides a reliable indication of practices and processes in product development in Islamic banks.

It should be mentioned that the sample covers a range of age, size (branches, staff), equity and assets. For example the sample consists of leading old banks such as National Commercial Bank, Dubai Islamic Bank, Al-Rajhi Bank, Islami Bank Bangladesh Limited, as well as the new generation Islamic banks such as Barwa Bank, Alinma Bank, BNI Syariah. It should also be noted that the sample also covers large size Islamic banks such as Al Rajhi, KFH and DIB as well as small size Islamic banks such as ICB Bangladesh, Al-Arafah Islamic Bank, and Bahrain Islamic Bank.

Before entering into the empirical analysis of the data in the next chapters, it is appropriate to discuss in this chapter some of the basic features of the Islamic banks under study by previewing the secondary and primary data and the Islamic banking environment in the countries where the banks are located. For that purpose, the help of some of the descriptive statistical analysis in the form of tables is used which were created through SPSS tools from the sample data. Consequently, Islamic banking

environment and perceptions of Islamic product development processes in those countries and banks are discussed in this chapter.

It should be noted that all the banks under survey are commercial banks covering variety of commercial banking activities such as retail, corporate and treasury banking. Some of them have investment banking activities as well. As can be seen in Table 6.1, among the banks surveyed 18 banks are full-fledged Islamic banks and 4 banks have Islamic windows

Table 6.1: Nature of Islamic Business Activity Among the Sampled Banks

Nature of Islamic Business Activity	Frequency	Valid Percent	Cumulative Percent
Full Fledge Islamic Bank	18	81.8	81.8
Islamic Window	4	18.2	100.0
Total	22	100.0	

As reflected in Table 6.2, the age group of the banks ranges from 4 years to 60 years and average age is about to 20 years (2013 is taken as base year). While the oldest Islamic bank in the world is Dubai Islamic Bank which is 41 years old; however, since this study also includes Islamic windows, such as NCB which is 60 years old. In terms of branch size the smallest bank is having 8 branches whereas the biggest one is having 650 branches and the average is about 150 branches. In terms of number of staff, the minimum staff strength is 150 and maximum is 11,243 with average staff size of 3,057. In terms of equity, the lowest one is USD (-) 108 m and biggest one is USD11, 243 m and the average equity size is USD2, 240 m. In terms of asset size the smallest bank is having USD140m assets and the biggest one is USD100, 608m and average asset size is USD17, 291m.

Table 6.2: Age and Size (Branch, Staff, Equity, Assets) of the Sampled Banks

Descriptive statistics	Age of banks (Years)	No of branches	No of Staff	Equity (USDMM)	Total Assets (USDMM)
Minimum	4	8	150	-108.50	140.50
Maximum	60	650	11381	11343.00	100608.10
Mean	20.36	149.91	3057.50	2240.30	17291.30
St. Deviation	14.23	183.84	3125.086	3200.63	25868.79

It can, therefore, be stated that the sample size represents a good mix of big and small banks in terms of many parameters as discussed above.

6.2 ISLAMIC BANKING ENVIRONMENT IN THE COUNTRIES UNDER STUDY AND PRODUCT DEVELOPMENT PROCESSES

According to The Banker Report of November 2013, the top 10 countries with *Shari'ah* compliant assets are provided in Chapter 2 (Table 2.2). Figure 6.1 shows the jurisdictions of global Islamic finance assets.

Indonesia Bangladesh Sudan
1% 1% Egypt
1% Others
2%
Turkey
3%
Qatar
4%
Kuwait
6%
Malaysia
9%
Saudi Arabia
18%

Figure 6.1: Global Islamic Banking Assets by Jurisdiction (2013)

Source: KFH Research Ltd. (30 June 2014)

Out of the top nine countries in terms of *Shari'ah* compliant assets (Table 2.2), eight countries and also banks were included in the survey of this research. Iran is not included in this study due to its unique characteristics and non-accessibility of data. Among the eight countries sampled for this study, the five GCC countries (Saudi Arabia, UAE, Kuwait, Bahrain and Qatar) have uniformity in the environment of Islamic banking so they are discussed together, whereas the banking and financial environments in other three countries Bangladesh, Indonesia and Malaysia have separate environments. The countries are discussed in brief under this section.

6.2.1 Islamic Banking Environment in Bangladesh

Bangladesh is a Muslim country, which is the third highest populated country in the Muslim world after Indonesia and Pakistan. Islamic banking started in Bangladesh in 1983 with the establishment of Islami Bank Bangladesh Limited (IBBL), and since then it has shown a steady growth.

It should be noted that in August 1974, Bangladesh signed a charter with Islamic Development Bank and committed itself to reorganize its economic and financial system in accordance with *Shari'ah*. In January 1981, late Ziaur Rahman, the then President of Bangladesh while addressing the 3rd Islamic Summit Conference held at Makkah and Taif suggested, "The Islamic countries should develop a separate banking system of their own in order to facilitate their trade and commerce" (IBBL Booklet, 2009). This statement of the President indicated favourable attitude of the government towards establishing Islamic banks and financial institutions in the country.

As regards to the socio-economic reason for success of Islamic banking in Bangladesh, Bangladesh is one of the most populated Muslim countries but at the same time one of poorest countries in the world. The religious affinity of the public as well as the perception of social inclination of the Islamic banking paved the way of success of Islamic banking in Bangladesh. IBBL became the leading institution to show the path success which is not only the first Islamic bank in Bangladesh but also in the entire South East Asia.

Moreover, Bangladesh also adapted Islamic microfinance to benefit the weaker section of the society. "The highlight of Islamic Finance of Bangladesh is that it is the first country to adopt Islamic micro-finance (MF) in the world. At present Islamic MF in Bangladesh though constitutes only 1 percent of MF industry of the country, however, in terms of clients it is still the largest among global Islamic MF" (SBP Bulletin, Oct-Dec 2012).

Currently, there are 8 full-fledged Islamic banks in Bangladesh and many banks have Islamic windows as well as Islamic insurance companies and financial institutions have been operating in the country. Today the Islamic banking has nearly 20% of market share of the overall banking industry in Bangladesh. (EY-World Islamic

Banking Competitiveness Report, 2013-14). Table 6.3 shows Sharia-compliant assets and the corresponding Islamic banks in Bangladesh.

Table 6.3: List of Bangladeshi Islamic Banks in terms of Sharia-compliant Assets

No.	Bank Name	Date of result	Shari'ah Compliant assets \$MM	Total Assets \$MM	% of Shari'ah compliant assets to total
			10.10	10.15	assets
1	Islami bank	31/12/2012	6063	6063	100
2	EXIM	31/12/2012	2099	2099	100
3	Al-Arafah Islamic	31/12/2012	1876	1876	100
4	Shahjalal Islamic	31/12/2012	1682	1682	100
5	First security	31/12/2012	1630	1630	100
6	Social Islami	31/12/2012	1442	1442	100
7	Southeast Bk	31/12/2012	209	2386	8.78
8	Prime Bank	31/12/2012	204	2992	6.84
9	ICB Islami	31/12/2012	190	190	100
10	Premier Bank	31/12/2012	119	1028	11.59
11	Arab Bang. Bk	31/12/2012	105	2205	4.76
12	Dhaka Bank	31/12/2012	78	1679	4.68

Source: The Banker (November 2013)

As for the product development processes in Bangladeshi Islamic banks is concerned based on the survey questionnaire conducted for this study, survey was conducted among 7 Bangladeshi Islamic banks to study the product development processes in those banks, which are:

- (i) Islami Bank Bangladesh;
- (ii) EXIM Bank Limited;
- (iii) Al-Arafah Islamic Bank Limited;
- (iv) ICB Islamic Bank;
- (v) Southeast Bank;
- (vi) Prime Bank;
- (vii) Dhaka Bank Limited.

It should be noted that first 4 banks are full-fledged Islamic banks and the last 3 banks have Islamic windows. The findings of the survey are included in the empirical chapters.

6.2.2 Islamic Banking Environment in Indonesia

Indonesia is the largest Muslim country in the world with 250 million population (mostly Muslims) and with sound per capita income of about USD3000 (EY: World Islamic Banking Competitiveness Report 2013-14). "Islamic banks have about

USD20BN assets and it is growing at the rate of 4.6%; it is expected to grow to USD100BN by 2018. Many foreign Islamic banks have been keen to invest in Indonesia, though the progress has been slow due to regulatory and legal considerations" (EY- World Islamic Banking Competitiveness Report 2013-14, figures at end of 2012).

The Islamic banking in Indonesia started late compared to other peer group Muslim countries. The history of Islamic banking in Indonesia began with establishment of first Islamic bank, Bank Muamalat Indonesia established in 1992. This is almost ten years after Malaysia and Turkey and almost 20 years behind Dubai. (Abduh and Omar, 2010)

At present there are more than 10 full-fledged Islamic banks majority of which are the Islamic subsidiaries of large commercial banks. Apart from that many commercial banks have Islamic banking windows. Table 6.4 depicts top 13 Indonesian banks in order of Sharia-compliant assets.

Table 6.4: List of Indonesian Islamic Banks

Sl	Bank Name	Date of	Shari'ah	Total	% of Shari'ah
No		result	Compliant	Assets	compliant
			assets	\$MM	assets to total
			\$MM		assets
1	PT Bank Syariah	31/12/2012	5608	5608	100
	Mandiri				
2	PT Bank Muamalat	31/12/2012	4638	4638	100
3	PT Bank BRI Syariah	31/12/2012	1457	1457	100
4	PT Bank Permata	31/12/2012	1101	13629	8.08
5	PT Bank Syariah BNI	31/12/2012	1100	1100	100
6	PT Bank Syariah	31/12/2012	844	844	100
	Mega				
7	PT Bank BTN	31/12/2012	790	11556	6.84
8	PT Bank Niaga	31/12/2012	756	20414	3.71
	(CIMB Niaga)				
9	PT Bank BJB	31/12/2012	442	7325	6.04
10	PT Bank Syariah	31/12/2012	374	374	100
	Bukopin				
11	PT Bank Panin	31/12/2012	221	221	100
	Syariah				
12	PT Bank Int'l Id	31/12/2012	216	11972	1.81
	(BII) Syariah				
13	PT Bank Maybank	31/12/2012	213	213	100
	Indonesia Syariah				

Source: The Banker (November 2013)

As far as product development processes in Indonesian Islamic banks is concerned, survey questionnaire for this study was conducted among 3 Indonesian Islamic banks to study the product development processes in those banks, which are:

- (i) Bank Muamalat
- (ii) Bank Syariah Mandiri
- (iii) BNI Syariah

Bank Muamalat is the full-fledged Islamic bank with shareholding of foreign financial institutions (IDB 32.74%, Boubyan Bank 19.03%, Atwill Holding 17.91%, NBK 6.0%; see the relevant Annual Reports). Other two banks, Bank Syariah Mandiri and BNI Syariah are the 100% Islamic subsidiaries of their respective parent banks.

It should be noted that the findings of the survey are included in the empirical chapters.

6.2.3 Islamic Banking Environment in Malaysia

Malaysia has demonstrated an exemplary expansion in the development of Islamic finance industry by developing policies, legal, regulative and education environment. Ernst and Young (WIBC Report, 2013-2014) reported that in Malaysia the Islamic banking market share in 2012 was 20% of the total banking sector. According to EY the Islamic banks had USD120BN in assets in 2012, and expected to grow more than USD390BN by 2018 at six-year CAGR of 21%. As per further update in EY's WIBC Report 2016, global market share (excluding Iran) of Islamic Banking business up to 2014 for Malaysia was 15.5 % (which was second to Saudi Arabia) and at national level Malaysia Islamic banking asset was 21.3% of total banking assets. This indicates the special status of Malaysia in the global Islamic banking environment.

The evolution of overall socio-economic-religious resurgence in Malaysia started in early 1980s during the Prime minister-ship of Dr. Mahathir Mohamad. "With the policy of Mahathir administration the value of Islam was integrated within the state policy to give a positive impact for the development of the nation. In support of this policy in 1981, Islamic Consultative Body (ICB) was announced emphasizing that every attempt for the development of the country and the nation must have conformity with the values of Islam" (Kayadibi, 2011: 432). This witnessed not only the emergence of Islamic banking and finance as an alternative channel of financing in Malaysia but also opened the opportunities of education and research in the field by Malaysia establishing the necessary infrastructure.

Thus, the ongoing favourable environment paved the way of growth of Islamic banking in Malaysia, which has become a global centre for Islamic banking industry and education. The government has allowed some of the foreign Islamic banks from the Middle East (*e.g.* Al Rajhi Bank, Kuwait Finance House) to open branches for bringing the international Islamic banking expertise to Malaysia.

As mentioned in the EY WIBC Report (2013-14) "The ongoing liberalization of financial sector will create opportunities for partnership between domestic and Middle Eastern banks, which may become a key driver for East-to-East linkages promoting trade and increasing the size of the global Islamic finance industry".

In the case of Malaysia only Al Rajhi Bank Malaysia is included in the sample, which was established in 2007 as a Malaysian bank but a full subsidiary of Al Rajhi Bank Saudi Arabia. It should be noted that the sample size for Malaysia is small compared to other South East Asian countries like Indonesia and Bangladesh, which is due to limitation of contacts and access with other Islamic banks in spite of efforts, the sample size remained single.

A list of Islamic banks in Malaysia in terms of Shari'ah compliant assets is depicted in Table 6.5.

Table 6.5: List of Malaysian Islamic Banks in terms of Shari'ah compliant assets

				0 = 10 : : : : : : : : : : : : : : : : : :	
S1	Bank Name	Date of	Shari'ah	Total	% of Shari'ah
No		result	Compliant	Assets	compliant assets
			assets \$MM	\$MM	to total assets
1	Malayan Banking	31/12/2012	30380	161826	18.77
	Berhad (Maybank)				
2	Bank Rakayat, Malay	31/12/2012	25902	25902	100
3	CIMB Group Holding	31/12/2012	19263	110221	17.48
4	BIMB Holding	31/12/2012	14358	14358	100
5	AMMB Holding	31/12/2013	10637	41528	25.61
6	Public Islami Berhad	31/12/2012	9581	9581	100
7	Dev Bank of Malysia	31/12/2012	8985	8985	100
8	Hong Leong Islamic	31/12/2012	7162	7162	100
9	Bank Muamalat Mal	31/12/2012	6671	6671	100
10	HSBC Amanah Mal	31/12/2012	3971	3971	100
11	Affin Islamic Bk Bhd	31/12/2012	3833	3833	100
12	RHB Bank Berhad	31/12/2012	3401	55479	6.13
13	KFH (Malaysia) Bhd	31/12/2012	2974	2974	100

Source: The Banker (November 2013)

In overall, it should be noted that it has been a general perception that the Islamic banking model in Malaysia differs to other regions and it has more liberal approach in *Shari'ah* position taking than the GCC model (Ashraf and Giashi, 2011:34).

Therefore, more products of the conventional banking could be easily structured and converted to Islamic in Malaysia to meet the customer demands. But that is not the case in the GCC model where *Shari'ah* approval is perceived as stricter. As examples the following can be mentioned:

(i) The profit sharing deposit account (*mudarabah* investments deposits) is a popular product in Malaysia among the retail customers of Islamic banks. In the Malaysia model, the customers having saving deposits get returns, which they would otherwise expect from a conventional bank. Mohd Karim (2010:2) in his research on the related product mentioned about the customer behaviour: "In fact, most of the Islamic banks' practitioners have argued that the behaviour of Islamic banking customers is not much different from that of the customers of conventional banks when it comes to demand for any of the financial products".

On the other hand, the expectation of customers in the GCC Islamic banks is different on such product. In the GCC model, the demand deposit accounts irrespective of retail or corporate customers are current accounts, which are non-profit bearing in nature. The Islamic banks in the GCC do not share profits on the current accounts and customers accept that. Therefore, Islamic banks benefits from such accounts in terms of expanding their liquidity from such accounts as free funds.

(ii) Malaysia is the biggest market for *sukuk* (EY Report 2013-2014), which is commonly referred as the Islamic equivalent of bond. However, the conventional bonds, which confer ownership of a debt, *sukuk* grant the investor a share of an asset, along with the commensurate cash flows and risk. The emergence of *sukuk* has been one of the most significant developments in Islamic capital markets in recent years. Malaysia is the most active *sukuk* market in the world, which comprises of two-third of global *sukuk* value in 2014 (Hussain *et al.*, 2015:15). However, in the GCC the growth of *sukuk* is a slow mover compared to Malaysia due to stringent *Shari'ah* approval issues.

Above examples show the different approaches to the same products in Malaysia *vis-à-vis* other regions.

In this survey though the sample from Malaysia is limited only for one bank, but it still show the Islamic product development processes in that bank. In addition, some

of the answers to the statements in the questionnaire reflect the perception of the Malaysia model Islamic banking being different to other countries has been observed in the findings.

6.7.4 Islamic Banking Environment in the GCC

The GCC countries like Saudi Arabia, UAE, Kuwait, Bahrain and Qatar (except Oman who accepted Islamic finance only recently) are the home grounds of Islamic banking and they contribute to 39.21% of the global *Shari'ah* compliant assets (The Banker, November 2013). The models of Islamic banking practices in all the GCC countries are almost uniform due same culture, language, *Shari'ah* laws and economic conditions.

Some of the earliest and large institutes of Islamic banking such as Dubai Islamic Bank (1975), Kuwait Finance House (1977), Al-Rajhi Bank (1988) are present in the GCC and there are dozens of full-fledged Islamic banks in the GCC. Apart from that many GCC conventional banks have Islamic windows and have large Islamic assets.

Out of the top 30 banks in the world in terms of Islamic assets (including Iran), 15 banks are located in the GCC countries (The Banker, November 2013). A large number global banks such HSBC, Citi, UBS, Barclays, Deutsche, BNP opened their Islamic subsidiaries or windows in the GCC to spread their investment banking skills and attract funds from the oil rich GCC countries.

Islamic Development Bank (IDB) was established in Jeddah in Saudi Arabia in1975 on the patronage of Organization of Islamic Countries (OIC), which has recently been named as Organization of Islamic Cooperation played important role as multinational development institute and benefited the member countries but mainly outside GCC. AAOIFI (Accounting and Audit Organization of Islamic Financial Institutions) was established in 1990 in Bahrain, which aims, as stated in the official website is, at "standardization and harmonization of international Islamic finance practices and financial reporting in accordance to *Shari'ah*". AAOIFI has played an important role in setting accounting standards though still it is long way to go for bringing standardization among the Islamic banks.

A list of top 25 Islamic banks in GCC is listed in Table 6.6:

Table 6.6: Top 25 Islamic Banks in the GCC (in terms of assets)

Rank	Institution	Asset size (\$mn)	Reporting Date	Country
1	Al Rajhi Bank	71,302	12/31/2012	Saudi Arabia
2	Kuwait Finance House	52,288	12/31/2012	Kuwait
3	Dubai Islamic Bank	25,964	12/31/2012	UAE
4	Abu Dhabi Islamic Bank	23,326	12/31/2012	UAE
5	Qatar Islamic Bank	20,105	12/31/2012	Qatar
6	Masraf Al Rayan	16,929	12/31/2012	Qatar
7	Alinma Bank	14,421	12/31/2012	Saudi Arabia
8	Bank Aljazira	13,605	12/31/2012	Saudi Arabia
9	Al Hilal Bank	8,746	12/31/2012	UAE
10	Bank Albilad	7,950	12/31/2012	Saudi Arabia
11	Qatar International Islamic Bank	7,845	12/31/2012	Qatar
12	Ithmaar Bank	7,226	12/31/2012	Bahrain
13	Barwa Bank	6,939	12/31/2012	Qatar
14	Boubyan Bank	6,695	12/31/2012	Kuwait
15	Sharjah Islamic Bank	4,987	12/31/2012	UAE
16	Noor Islamic Bank	4,888	12/31/2012	UAE
17	Kuwait International Bank	4,439	12/31/2012	Kuwait
18	Al Salam Bank	2,499	12/31/2012	Bahrain
19	Bahrain Islamic Bank	2,209	12/31/2012	Bahrain
20	Ajman Bank	1,495	12/31/2012	UAE
21	Al Baraka Islamic Bank	1,418	12/31/2012	Bahrain
22	Khaleeji Commercial Bank	1,255	12/31/2012	Bahrain
23	Warba Bank	794	12/31/2012	Kuwait
24	Bank Nizwa	386	12/31/2012	Oman
25	Alizz Islamic Bank	264	6/30/2013	Oman

Source: The Banker (2014)

Country-wise Islamic banking assets in the GCC are shown in Table 6.7. The percentage of contribution of GCC countries to the global *Shari'ah* compliant assets is very substantial. However looking into the home markets (last column in the table), the market share of *Shari'ah* assets compared to total banking assets indicates scope

to grow. Though GCC is the favourite home ground for Islamic banking, still majority banking assets are with conventional banks. This implies that majority of the customers in the GCC still bank through the conventional banking channels.

Table 6.7: Islamic Banking Assets in GCC (2013)

Country	No. of full Islamic Banks	No. of Institutions offering Shari'ah services	Total Shari'ah Assets (includes all institutions) USD Bn	% of Total global Shari'ah assets (this excludes Iran)	Market share in home market compared to total banking assets
Saudi Arabia	5	41	227	31.7	48.9
UAE	6	19	87	14.6	21.4
Kuwait	4	26	72	10.5	44.6
Bahrain	18	37	56	1.7	27.7
Qatar	4	10	53	7.7	23.6

Source: The Banker (2013) and EY Report 2014-15.

As mention earlier by quoting Mohd Karim (2010), demand for financial products of Islamic banking customers is not much different from that of the customers of conventional banks. The customer seeks to get full range of banking facilities from one place. The reality is that, Islamic banks many a times do not have full range of products to offer to customers. This is irrespective of regions and GCC is not exception. Therefore, shortage of products is an identified problem and need to be given priority to be addressed.

Some suggestions in view of the researcher are:

- (i) First, Islamic financial institutions must give priority to innovate new products to meet the customer needs.
- (ii) Second, instead of choosing easy path of booking *Shari'ah* compliant assets through Islamic investment banking products by having invisible branch network and minuscule staff, Islamic banks should penetrate the market to increase the customer base in corporate and retail banking business, with large branch network, visibility, efficient staff and state of art technology to compete with conventional banks. Al

Rajhi Bank, Dubai Islamic Bank, Qatar Islamic Bank and Abu Dhabi Islamic Bank are the good models to follow.

In sum, the GCC is the most fertile ground to prove in future that Islamic banking is the main banking channel of business in the GCC, not the second alternative channel to conventional banking.

As regards to product development processes in Islamic banks in the GCC surveyed through questionnaire in this study, survey included 11 banks in the GCC region to study the product development processes in those banks. The following banks are sampled:

- (i) Al Rajhi Bank
- (ii) Alinma Bank
- (iii) Al Jazirah Bank
- (iv) National Commercial Bank
- (v) Abudhabi Islamic Bank
- (vi) Al Hilal Bank
- (vii) Dubai Islamic Bank
- (viii) Qatar Islamic Bank
- (ix) Bahrain Islamic Bank
- (x) Kuwait Finance House
- (xi) Barwa Bank

Out of the sampled banks, 10 banks are full-fledged Islamic banks and only National Commercial Bank (NCB) is a conventional bank but having more than 30% assets as *Shari'ah* compliant assets. It should be noted that all the sampled 11 banks constitute a good mixer of old banks (NCB, DIB and Al-Rajhi) to new generation banks (Barwa and Alinma), as well as large size Islamic banks (Al Rajhi, KFH, and DIB) to relatively smaller Islamic banks (BIB and Barwa).

6.3 CONCLUSION

In this chapter, some descriptive analysis of primary data is made, which included the analysis of primary data on some of the variables like location, nature of Islamic business, size, ownership of the banks *etc*. Also some of the parameters of product development strategy, process and *Shari'ah* approval process are discussed, which

includes banks' strategy and planning on innovation of new products, key initiatives for developing new Islamic banking products, resources available, function of crossfunctional teams and steps involved in presenting the new product to the *Shari'ah* board.

In the second part of the chapter, the Islamic banking environment of the target countries with prospects to product development is discussed. The reviews in this chapter will be helpful to support the findings in empirical analysis for making the final inference of the results.

CHAPTER 7

EXPLORING PRODUCT DEVELOPMENT IN ISLAMIC BANKS WITH SPECIAL REFERENCE TO TRADE FINANCING: DESCRIPTIVE FINDINGS FROM THE QUESTIONNAIRE SURVEY

7.1 INTRODUCTION

The aim of this chapter is to present the findings from the questionnaire survey conducted for this study. The demographic profile of the participants of the survey was discussed in the previous chapter. The survey was aimed at Islamic banks to determine their Islamic product development processes in South-East Asia (Bangladesh, Indonesia and Malaysia) and the GCC countries; these countries are the major Islamic banking centres of the world. The survey was directed to. A total of 22 Islamic banks and Islamic windows in eight Muslim countries were sampled. The survey was conducted through managers of the banks who were involved in or aware of the product development processes in their banks. Special reference was given to trade financing which is an important segment of banking that supports the trading (buying/ selling) of goods, which represents one of the essences of Islamic finance.

As discussed in the Research Methodology chapter, the survey questionnaire for this study was structured with six sections (A, B, C, D, E, and F). Each section contained a set of questions and sub-questions related to the information needed for the study. Apart from Section-A, which contains static data about the banks, the other sections are aimed at gathering information and analysing the perceptions of the participants on various factors in the product development processes of Islamic banks. The data collected from the banks through the survey was entered in the SPSS system for the empirical analysis. By applying statistical tools, the data collected through the questionnaire was studied by using descriptive analysis methods to locate frequency, mean and standard deviation in order to present the preliminary results. More sophisticated models of calculation are applied in the next chapter for an interpretation of the results.

In this chapter, the structure follows the questionnaire. The findings of the SPSS tools on the frequencies, means and standard deviations are set out in tables for various questions. Each table is described to explain the findings. At the end of the chapter, the findings are summarized to give concluding remarks in order to depict the descriptive findings. In this chapter, the findings of the descriptive analysis are depicted in the sections following.

7.2 GENERAL INFORMATION ABOUT THE BANKS UNDER STUDY

Section-A of the questionnaire survey outlined the demographic locations of the banks under study and the general information about the banks. This information was collected from the banks under study through the survey. The findings on the various questions are shown in tabular forms as listed below.

7.2.1 The Country-wise Location of the Sampled Islamic Banks

Locations of the Islamic banks under study constitute an important parameter for the survey. The location constitutes one of the control or independent variables (CV) for future analysis. The geographic locations of the banks are depicted in Table 7.1:.

Table 7.1: The Location Countries of the Sample Islamic Banks

Location – Country	Frequency (Valid)	% (Valid)
Bangladesh	7	31.8
Indonesia	3	13.6
Malaysia	1	4.5
UAE	3	13.6
Kuwait	1	4.5
Qatar	2	9.1
Saudi Arabia	4	18.2
Bahrain	1	4.5
Total	22	100.0

This data was previewed in the previous chapter (Table 6.1) in relation to the country review, and here a descriptive analysis is provided. Table 7.1 shows that a total of 22 Islamic banks in eight countries were under study: 31.8% of the banks were from Bangladesh; 18.2% were from Saudi Arabia; 13.6% were from Indonesia as well as the UAE; and only 4.5% each were from Malaysia, Kuwait and Bahrain. The mean value was 3.68, which does not have any significance in this case. However, if we take the arithmetic average (22 divided 8), there are an average of 2.75 banks per country covered.

7.2.2 Year of Establishment of the Sampled Islamic Banks

The year of establishment is another independent variable, which is also an important parameter for further analysis in this study. The years of establishments of the banks under study are depicted here.

Table 7.2: Years of Establishments of the Sampled Islamic Banks

Year of Establishment	Value	Frequency (Valid)	% (Valid)
Before 1970 - 1979	1	4	18.2
1980 - 1989	2	5	22.7
1990 - 1999	3	8	36.4
2000 - 2009	4	4	18.2
2010 - 2014	5	1	4.5
Total		22	100.0

Table 7.2 shows that the years of establishment for banks under the study were divided into 5 blocks of chronological periods: 1970–1979, 1980–1989, 1990–1999, 2000–2009, and 2010–2014. Among the banks surveyed, 18.2% were established during the period 1970–1979, 22.7% were established during the period 1980–1989, 36.4% were established during the period 1990–1999, 18.2% were established during the period 2000–2014, and only 4.5% were new banks that were established during the period 2010–2014.

7.2.3 Ownership Structures of the Sampled Islamic Banks

Ownership structure is another control variable and is a parameter that plays a role in the product development process. The descriptive analysis is depicted in Table 7.3:

Table 7.3: Ownership Structures of the Sampled Islamic Banks

Ownership Structure	Value	Frequency	%
Ownership Structure	assigned	(Valid)	(Valid)
Public	1	4	18.2
Private	2	7	31.8
Public- Private Mixed	3	5	22.7
Government	4	5	22.7
Multinational Joint	5	1	4.5
venture	3	1	4.3
Total		22	100.0

Table 7.3 shows the ownership structure of the banks under study. Among the banks, 18.2% were public ownership banks (that means the bank has public shareholding through the Stock market), 31.8% were privately-owned banks, 22.7% were public and private mixed-owned banks, 22.7% were government-owned banks, and only 4.5% were multinational Joint venture banks. The mean value calculated for the banks under study is 2.64.

7.2.4 Number of Branches of the Sampled Islamic Banks

The size of the bank in terms of the number of branches is another Control Variable. The sample contains a good mix of banks with small branch networks to bigger branch networks. The descriptive analysis of the number of branches in Table 7.4

Table 7.4: Number of Branches of Islamic Banks under study

Number of Branches	Value assigned	Frequency (Valid)	% (Valid)
1-10	1	1	4.5
11-20	2	1	4.5
21- 50	3	4	18.2
51 - 100	4	10	45.5
101 - 300	5	2	9.1
301 - 500	6	2	9.1
501 above	7	2	9.1
Total		22	100.0

As can be seen in Table 7.4, the size of the branch network is divided into 7 blocks. These are 1–10, 11–20, 21–50, 51–100, 101–300, 301–500, and 501 above. Among the banks, both branch number blocks of 1–10 and 11–20 comprise 4.5% each. 18.2% have branch numbers between 21–50, and 45.5% of banks have a branch number between 51–100. Furthermore, 9.1% of banks have branch numbers between 101–300, and 9.1% of banks have a branch number between 301–500, which is a similar percentage to the branch numbers for banks located in the above 501 blocks. The mean value calculated for all banks in the study is 4.14, which indicates that the average size of the banks is mid-sized.

7.2.5 Number of Employees at the Sampled Islamic Banks

Table 7.5, shows the number of employees of the banks under study. The size of the employee count is divided into 5 blocks: 101–500, 501–1000, 1001–2000, 2001–5000, and above 5000. As can be seen, 36.4% of the banks under study have an employee count between 1001 to 2,000; 22.7% and 27.3% of the banks have employee counts in the range 501–1,000 and 2,001–5,000 respectively; 9.1% and 4.5% of banks have employee counts in the range of 101–500 and above 5,000 respectively. The mean value calculated for all banks in the study is 5.14 which indicates that the average employee size of the banks is mid-sized.

Table 7.5: Number of Employees of Islamic Banks under study

Number of Employees	Value assigned	Frequency (Valid)	% (Valid)
1- 50	1	0	0
51- 100	2	0	0
101 - 500	3	1	4.5
501 - 1000	4	5	22.7
1001-2000	5	8	36.4
2001 - 5000	6	6	27.3
above 5000	7	2	9.1
Total		22	100.0

7.2.6 Licensing Authority for the Sampled Islamic Banks

Licensing authority is uniform for all the banks in the survey as depicted in Table 7.6 and therefore does not have much influence on future analysis.

Table 7.6: Licensing Authorities for the Sampled Islamic Banks

Licensing Authority	Frequency (Valid)	% (Valid)	
Central Bank	22	100.0	
Total	22	100.0	

The findings in Table 7.6 indicate that all the banks surveyed are licensed by the respective Central Banks of their countries. This is common in Asian countries though in some Western countries the licensing authorities are different than the Central Bank.

7.2.7 Nature of Banking Activities of the Sampled Islamic Banks

Table 7.7: Nature of Banking Activities of the Sampled Islamic Banks

Nature of banking activities	Frequency (Valid)	% (Valid)
Commercial Banking	22	100.0
Total	22	100.0

The findings in Table 7.7 depict that all the banks surveyed are involved in commercial banking activities. In general, commercial banking also includes other banking activities like investment banking, industrial banking, foreign exchange activities, *etc*. However, none of them are special category banks (as per their licenses) such as industrial banks, investment banks, stockbrokers, *etc*.

7.2.8 Nature of Islamic banking business

The nature of the Islamic banking business, that is whether the bank is a fully-fledged Islamic bank or an Islamic window of a conventional bank, is an important Control Variable (CV). This CV plays an important role in future analysis. The descriptive analysis of this CV is depicted below.

Table 7.8: Nature of Islamic banking business of the banks under study

Nature of Islamic	Frequency	%
banking business	(Valid)	(Valid)
Full Fledge Islamic Banking	18	81.8
Islamic Windows of		
conventional banks	4	18.2
Total	22	100.0

The findings as per Table 7.8 indicate that 81.8% of the banks surveyed are fully-fledged, licensed Islamic banks whereas 18.2% are Islamic windows of conventional banks.

7.2.9 Bank-wise Financial Data

The data for the financial highlights of the banks is not used as an independent or control variable in this study, but it is useful information for the future use of this study. Therefore, they were manually collected from the Annual Reports of the sampled Islamic banks.

Table 7.9: Financial parameters (Assets, Equity, Net-income) of the banks under study (for all banks together)

Financial Parameters (Millions shown as MM)	N	Minimum	Maximum
Financial Parameter Asset- USDMM	22	140.50	100,608.10
Financial Parameter Equity -USDMM	22	-108.50	11,343.00
Financial Parameter Net Income-USDMM	22	-96.30	2,130.00

Table 7.10 Bank-wise Financial Data

Tab	le 7.10 Bank-wise	Filialiciai Da	ta <u> </u>			
Sl. No	Banks	Country	Date of Financial data	Assets USD MM	Equity USD MM	Income USD MM
1	Islamic Bank Bangladesh Ltd	Bangladesh	31/12/2012	5,905.60	496.70	70.30
2	Dhaka Bank	Bangladesh	31/12/2012	1,630.80	122.60	9.90
3	Export Import Bk	Bangladesh	31/12/2012	2,091.40	207.30	26.10
4	Al-Arafah Islamic Bank	Bangladesh	31/12/2012	1,848.30	176.00	24.40
5	ICB Islamic Bank Ltd	Bangladesh	31/12/2012	140.50	-108.50	-13.50
6	Prime Bank,	Bangladesh	31/12/2013	3,093.50	300.40	26.20
7	Southeast Bank	Bangladesh	31/12/2013	2,791.70	282.20	124.60
8	Bank Muamalat	Indonesia	31/12/2012	4,638.50	254.20	40.30
9	Pt Bank Syariah Mandiri	Indonesia	31/03/2013	5,709.00	457.00	306.00
10	Pt. Bank Negara Indonesia Syariah	Indonesia	30/09/2013	1,098.00	122.30	10.50
11	Al Rajhi Bank	Malaysia	31/12/2012	2,287.00	233.00	4.50
12	Kuwait Finance House	Kuwait	31/12/2012	52,287.70	5,607.00	438.50
13	Abu Dhabi Islamic Bank,	UAE	31/12/2012	23,326.00	3,445.00	327.10
14	Dubai Islamic Bank	UAE	31/12/2013	30,847.80	4,449.90	467.80
15	Barwa Bank	Qatar	31/12/2012	6,939.50	1,434.50	94.80
16	Al Rajhi Bank	KSA	31/12/2013	74,632.20	10,241.00	1983.50
17	Alinma Bank,	KSA	31/12/2013	16,800.30	4,488.50	267.90
18	National Commercial Bank	KSA	31/12/2013	100,608.10	11,343.00	2130.00
19	Bahrain Islamic Bank B.S.C.	Bahrain	31/12/2012	2,214.90	185.60	-96.30
20	Al Hilal Bank, Abu Dhabi UAE	UAE	31/12/2012	8,746.60	951.80	72.30
21	Qatar Islamic Bank, SAQ	Qatar	31/12/2012	20,107.70	3,585.40	309.30
22	Bank Al-Jazira,	KSA	31/12/2012	15,993.70	1,527.60	173.50

Table 7.9 depicts the financial parameters (Assets, Equity, Net-income) of all banks together showing minimum, maximum and mean values. Table 7.10 depicts the financial parameters such as the assets, equities and income of individual banks under study. The table shows that the GCC banks have comparatively bigger asset size than the banks from other countries. The common reason given for this is that it is due to the sound, oil-based economy of the GCC compared to the Asian countries. The National Commercial Bank in Saudi Arabia is the biggest in the list, with USD100, 000 MM assets whereas ICB Islamic Bank Limited, Bangladesh is the smallest with only USD140MM assets. Al Rajhi Bank of Saudi Arabia is the biggest among the fully-fledged Islamic banks with USD 74,632.20MM assets.

The financial data depicted above indicates that the sample of the survey consists of financially large, medium and small banks. Therefore the data represents a good mix of banks in terms of financial parameters.

7.3 STRATEGY AND PLANNING PROCESS ON INNOVATION AND PRODUCT DEVELOPMENT

This section presents that analysis of the questions of the Section-B of the questionnaire. This section outlines the strategy and planning for innovation and product development for the banks under study. Gathering information from the Islamic banks about their innovation strategy is an important objective of this study. Thus, Section-B has three main questions (1, 2, and 3) which have multiple subquestions. The answers were either 'Yes / No' or 'True / False' with the following values assigned:

Yes = 1, No = 2; Sometimes Yes (if any) = 3

True = 1, False = 2; Sometimes True (if any) = 3

The findings related to this section are presented in the following sections.

7.3.1. Banks; Strategy and Planning on Innovation and Product Development-Innovation as a Planning Process

The questions under this sub-section (section-B1 of the questionnaire) were aimed at studying the perceptions of banks about the innovation of new products as part of the planning process of the individual banks.

The answers were collected through the questionnaire survey and were analysed through the SPSS descriptive analysis tool as depicted in the following consolidated table:

7.11 Innovation as a Planning Process (Consolidated Table)

Questions	Responses	Frequency (Valid)	% (Valid)	Mean	Standard Deviation
a. Is innovation	Answer- Yes	21	95.5		
of new product is	Answer - No	1	4.5	1.05	.213
part of Planning process?	Total	22	100.0		
b. Does the banks	Answer- Yes	19	86.4		
mission or vision statement include	Answer - No	3	13.6	1.14	.351
innovation?	Total	22	100.0		
c. Does the	Answer- Yes	21	95.5		
overall strategy	Answer - No	1	4.5	1.05	.213
of the bank include product development?	Total	22	100.0		
d. Does the bank	Answer- Yes	17	77.3		
have a formal	Answer - No	5	22.7	1.23	.429
approach /process for innovation?	Total	22	100.0		
e. Is the product	Answer- Yes	14	63.6		
development	Answer - No	4	18.2	1.48	.750
built into annual	Sometimes Yes	3	13.6		
operating plan of	Missing	1	4.5		
relevant business units?	Total	22	100.0		
f . Is there an	Answer- Yes	11	50.0		
annual budget set	Answer - No	11	50.0	1.50	.512
aside for developing new products?	Total	22	100.0		
g. Is there an	Answer- Yes	14	63.6		
annual plan for	Answer - No	7	31.8	1.41	.590
the number of	Sometimes Yes	1	4.5		
new products to be developed?	Total	22	100.0		

The descriptive analysis as depicted in the Table 7.11 can be summarised as follow:

As for 'a', the results shows that 95.5% of banks under study had positive answers, agreeing that innovation of new products is a part of their planning process; only a small percentage of 4.5% had a negative answer. The mean value calculated was 1.05 for the banks studied.

As regards to Item 'b', the results show that 86.4% of representative from the sampled banks under study had a positive answer agreeing that the bank's mission and vision statement included innovation; only a small percentage of 13.6% had a negative answer. The mean value calculated was 1.4 for the banks studied.

Regarding the item 'c', the results show that 95.5% of participants from the sampled banks under study agreed that the overall strategy of the bank included product development; only 4.5% had a negative answer. The mean value calculated was 1.05 for banks studied.

As for item 'd', the results show that 77.3% of banks under study had a formal approach/process towards innovation, and 22.7% had a negative answer. The mean value calculated was 1.23 for the banks studied.

Regarding the item 'e', the results in Table 7.11 show that 63.6% of banks under study had product development, which was built into the annual operating plan of the business units, whereas 18.2% banks did not, 13.3% partially agreed, and 4.5% did not answer. The mean value calculated was 1.48 for the banks studied.

As regards to item 'f', the results show that only 50.0% of banks under study had an annual budget set aside for developing new products, while the other 50.0% did not have it. The mean value calculated was 1.50 for the banks studied. The above study depicted that the budget allocation was not given a priority by 50% of the banks for developing new products.

As for item 'g', the results in Table 7.11 show that 63.6 % of banks under study had an annual plan for a certain number of new products to be developed, while 31.8% banks under study did not set aside a number of new products to be developed. Only 4.5% partially agreed. The mean value calculated was 1.41 for the banks studied.

As revealed from the descriptive analysis above, most (nearly 90%) of the Islamic banks under study included innovation in their mission-vision statements and strategies. However, as discovered, the focus gradually reduced when breaking down the strategies into actual action parameters. For example, the target for the number of products to be developed was reduced to 63% of responses, and the allocation of the budget for product development was reduced to 50% of responses. Therefore, it is

analysed that, though the bank's mission-vision statement talked about innovation at a high level, the implementation level saw that the focus was diluted. Hence, as indicated by this study, the Islamic banks were slow on giving priority towards the development of new products.

7.3.2 Banks' Strategy and Planning on Innovation and Product Development: Strategic Approach on Product Development

This section aims to analyse the strategic approaches of banks on product development. Questions about the strategic approach, as mentioned in the table below, were asked to the participants. The question had several choices with 'Yes/ No' type answers.

Table 7.12: Strategy Approach Relating to Product Development

Answers	Responses	Frequency (Valid)	% (Valid)	Mean
a . Be a leader in	Answer- Yes	18	81.8	
providing new product to the	Answer - No	2	9.1	1.10
market	Missing	2	9.1	
	Total	22	100.0	
b . To Provide	Answer- Yes	20	90.9	
Shari'ah compliant product to the	Answer - No	1	4.5	
market that	Missing	1	4.5	
substitute conventional banking products available in the market	Total	22	100.0	1.05
c. Keep the core	Answer- Yes	18	81.8	
business intact and introduce new	Answer - No	1	4.5	1.05
product that exist	Missing	3	13.6	
in the market	Total	22	100.0	
d. Sell product in	Answer- Yes	6	27.3	
the existing market, without	Answer - No	10	45.5	1.63
venturing into new	Missing	6	27.7	
markets	Total	22	100.0	
e. Provide new	Answer- Yes	11	50	
products when existing products	Answer - No	2	9.1	1.15
become obsolete	Missing	9	40.9	
	Total	22	100.0	

The descriptive analysis as depicted in the Table 7.12 can be summarised as follows: As can be seen, the results for item 'a' of Table 7.12 shows that 81.8% of banks under study had a strategic approach towards being a leader in providing new products to the market. 9.1% did not have such a strategic approach whereas 9.1% of the banks did not answer. The mean value calculated was 1.10 for the banks studied.

The results in Table 7.12 for item 'b' show that 90.9% of banks under study had a strategic approach to providing *Shari'ah*-compliant products, which substituted conventional banking products available in the market. Only 4.5% did not have such a strategic approach whereas 4.5% of the banks did not answer. The mean value calculated was 1.05 for the banks studied.

In addition, Table 7.12 for item 'c' shows that 81.8% of banks under the study had a strategic approach to keep their core business intact and introduce new products that exist in the market. Only 4.5% of the banks did not have such a strategic approach whereas 13.6% did not respond to the question. The mean value calculated was 1.05 for banks studied.

As regards to item 'd', the results show that only 27.3% of the banks under study had a strategic approach to selling products in their existing market without venturing into new markets. 45.5% did not agree on this whereas a large 27.7% of the banks did not answer. The mean value calculated was 1.63 for banks studied.

Lastly, as the findings in Table 7.12 for item 'e' show only 50% of banks under study had a strategic approach to provide new products when existing products become obsolete. 9.1% did not have that strategy whereas a large 40.9% of the banks did not answer. The mean value calculated was 1.15 for banks studied.

As revealed from the descriptive analysis in this section, the substitution of products available in the market carried the highest strategic approach with nearly 91% of the banks agreeing with this strategy. The perception of 'becoming a leader in providing new innovative products' as well as 'introducing new products that exist in the market', occupies the second position in the strategic approaches. As depicted in Table 7.12 for items 'a' and 'c', nearly 82% banks agree on these approaches. In the researcher's view, the perceptions of the respondent as revealed in the study are reflections of actual market practices.

7.3.3 Banks' Strategy and Planning on Innovation and Product Development: Views on Competitive Advantage of New Products

The participants from the banks under the study were questioned on the competitive advantages of developing new products. The question had several choices with 'True/Not true' type answers. The responses received are analysed as depicted in Tables 7.13.

Table 7.13: Competitive Advantages for an Islamic Bank in Developing New Products

Answers	Responses	Frequency (Valid)	% (Valid)	Mean
a. It motivates some customers to switch over from Conventional bank	Answer- True	13	59.1	
	Answer – Not True	0	0.0	1.82
to the Islamic bank	True to some extent	9	40.9	
because they look for Shari'ah compliant business solutions	Total	22	100.0	
b . It attracts some new	Answer- True	10	45.5	
customers to use Islamic banking which otherwise	Answer – Not True	1	4.5	2.05
avoid to use the	True to some extent	11	50	2.05
conventional banking	Total	22	100.0	
c. Some customers get	Answer- True	5	22.7	
attracted to Islamic bank knowing that it is lenient	Answer – Not True	8	36.4	
in charging penalty	True to some extent	4	18.2	
compared to conventional banks	Missing	5	22.7	2.09
	Total	22	100.0	
d. Some Corporate	Answer- True	9	40.9	1.91
customers prefer to borrow funds under	Answer – Not True	6	27.3	
Islamic structure because	True to some extent	7	31.8	
it enhances the demand of their shares in certain market	Total	22	100.0	
e. It helps the Islamic	Answer- True	12	54.5	
bank to become pioneer compared to other	Answer – Not True	3	13.6	1.77
Islamic banks	True to some extent	7	31.8	
	Total	22	100.0	

The results of the descriptive analysis as depicted in the Table 7.12 can be summarised as follows:

Table 7.13 for item 'a' shows that 59.1% of banks under study had considered there were competitive advantages for Islamic banks in developing new products, because it motivates some customers to switch over from Conventional banks to Islamic banks because they could look for *Shari'ah*-compliant business solutions. 40.9% of banks considered that as not true. The mean value calculated was 1.82 for banks studied.

For item 'b', table 7.13 shows only 45.5% of banks under study had considered the competitive advantage consequences for Islamic banks in developing new products, because it attracts new customers to use Islamic banking which otherwise would avoid using conventional banking. Only 4.5% of banks considered that was not true, and 50.0% banks considered that was true to some extent. The mean value calculated was 2.05 for the banks studied.

Table 7.13 for item 'c' shows that 22.7% of banks under study had considered there were competitive advantages for Islamic banks in developing new products because of the fact that some customers were attracted to Islamic banks knowing that they were lenient in charging penalties compared to conventional banks. 45.5% of banks considered that was not true, and 31.8% banks considered that was true to some extent. The mean value calculated was 2.09 for the banks studied.

As for item 'd', the results show that 40.9% of banks under study had considered there were competitive advantages for Islamic banks in developing new products because of the fact that some corporate banking customers prefer to borrow funds under the Islamic structure because it enhances the demand of their shares in certain markets. 27.3% of banks considered that was not true, and 31.8% banks considered that was true to some extent. Therefore the mean value calculated was 1.91 for the banks studied.

Table 7.13 for item 'e' shows that 54.5% of banks under study had considered there were competitive advantages for Islamic banks in developing new products because it helps the Islamic bank to become pioneers compared to other Islamic banks. 13.6% of banks considered that was not true, and 31.8% banks considered that was true to some extent. The mean value calculated was 1.77 for banks studied.

The perceptions of the participants on 'competitive advantage in developing new products' revealed mixed results, as nearly 50% on the choices of initiatives given in the question. However, results for item 'a' depicted comparatively higher responses with 59.1%, which indicated that there is competitive advantage in developing new products because it motivates customers to switch over from conventional banks to Islamic banks. Similarly, results for 'e' also shows higher responses with 54.5%, which indicate that there is competitive advantage because it helps the bank to become a pioneer among the Islamic banks. The study revealed that banks moderately agree on factors related to competitive advantages to develop new products.

7.4: PRODUCT DEVELOPMENT PROCESSES: GENERAL ASPECTS

This section outlines the study of product development processes in the banks. This constituted the main part of the research study that was conducted by the researcher. There were eight main questions under Section C of the questionnaire with a number of sub questions and choices that were asked to the participants in the target banks. The results of the analysis are presented in the following sections.

7.4.1 Resources Availability: People

As discussed in Chapter 4 (see: section 4.5), 'resource' is one of the cornerstones of performance. The importance of various resources for Islamic banks such as *Shari'ah* capabilities, people, finance, and IT, for product development is discussed in later sections, while this section focuses on human resources.

Human resources are one of the main ingredients for product development in particular and performance in general. Therefore, a few questions were asked in the survey questionnaire to get feedback on the resources support from the sampled banks on product development. The perceptions of the participants on the resource parameters related to people are depicted here.

(i) Availability of product development team in the bank

The initial question relates as to whether the bank had a product development team, for which the results are provided in Table 7.14a:

Table 7.14a: Existence of a Product Development Team

Answers	Frequency (Valid)	% (Valid)
Answer- Yes	21	95.5
Answer - No	1	4.5
Total	22	100.0

As shown in Table 7.14a, 95.5% of the participating bank representative responded with 'yes' for having product development teams in their respective banks; only 1 bank which constituted 4.5% of the total did not have a product development team.

(ii) Product development being as part of the business division

This question asked whether product development was being done at the business division or not. The responses are depicted in Table 7.14b:

Table 7.14b: Product development as Part of Division/Department level

Answers	Frequency (Valid)	% (Valid)
Answer- Yes	15	68.2
Answer – No	6	27.3
Missing	1	4.5
Total	22	100.0

The results in table 7.14b shows that 68.2% of banks under study had the product development task being done at the business division/department level. However, 27.3% of banks did not agree to that whereas 4.5% of the banks did not answer. The mean value calculated was 1.29 for the banks studied. The study revealed that most of the banks product development tasks were done at the department level.

(iii) Product development being conducted centrally

This question was asked to find as to whether product development was done centrally at the bank level. The responses are depicted in Table 7.14c:

Table 7.14c: Product Development being Conducted Centrally

Answers	Frequency (Valid)	% (Valid)
Answer- Yes	7	31.8
Answer – No	7	31.8
Missing	8	36.4
Total	22	100.0

Table 7.14c depicts that only 31.8% of the sampled bank representatives under study had the product development task being done centrally at the bank level. 31.8% of banks did not agree to that whereas a large 36.4% of the banks did not respond to the question because they had already responded to the contrary that product development was being done at the business department level.

(iv) Number of people working in the product development team

Data were collected from the banks about the number of people working in the respective banks and the feedback is depicted in table 7.14d.

Table 7.14d: Number of People Working in the Product Development Team

Transcr of respic vi orining in the resource bevelopment				
Number of people	Frequency (Valid)	% (Valid)		
	(vana)	,		
1	1	4.5		
2	3	13.6		
3	2	9.1		
4	3	13.6		
5	2	9.1		
6	1	4.5		
7	2	9.1		
10	1	4.5		
Not responsive participants	7	31.8		
Total	22	100		

As can be seen in Table 7.14d, the number of people working in the product development team ranges from 1 to 10 persons. The mean value calculated was 4.33 for this activity. That indicated that an average of nearly 4 people worked for product development teams. 31.8% of the banks did not respond to the question.

(v) Reporting line of product development team

The responses to the question related to the reporting line are depicted in table 7.14e.

Table 7.14e: Reporting Line of Product Development

Answers	Frequency (Valid)	% (Valid)
Head of the business division	12	54.5
Head of Central Product development division	1	4.5
Managing Director/ Board	4	18.2
Missing system	5	22.7
Total	22	100.0

As can be seen in Table 7.14e, 54.5% of the banks had the product development team report to the Head of the relevant business division, while 18.2% of the banks had the product development team report to the Managing Director/Board, and only 4.5% reported to the Head of the Central Product team while 22.7% of the banks under the study did not respond.

7.4.2 The Key Initiatives/Factors Required for Developing New Islamic Product

This section studies the perception of the participants and analyses the findings on the key initiatives/factors that are required for the development of Islamic banking products. Getting feedback on the initiatives/factors for developing new Islamic products was one of the main objectives of the research. There were several factors of product development put forward to the banks; therefore, the participants were asked to give a ranking to each initiative/factor on a scale of 1 to 10 in order of importance with 1 being the most important factor.

As per the questionnaire, there were 8 initiatives/factors and feedback was collected for the importance of each one. Each initiative/factor is discussed in the individual tables (7.15 a, b,...h). However, a consolidated table 7.15, depicting the mean values of individual factors is given below and analysed.

Table 7.15: Mean Ranks of Key Factors Required for Developing New Islamic Banking Products

Key initiatives/ factors for product development		Mean
Product of another Islamic bank	21	2.95
Initiative of own R & D team	21	3.38
Demand from other internal departments	21	3.76
Outcome of a market research	22	3.82
Product of a conventional bank	21	4.29
Initiative of a star employees of the bank	21	5.10
To meet regulatory requirements	21	5.57
Initiatives by outside agencies (like consultants)	19	7.21

Note: Due to Likert Scale, the lower the mean value, the higher the ranking

Table 7.15 shows the mean ranking of the key initiatives in ascending order. This shows that the 'product of another Islamic bank' has the highest importance (2.95). The next factor is the 'initiative of the bank's own R & D team' (3.38), which is followed by 'product of a conventional bank with 4.29. 'To meet the regulatory requirements' as an initiative has a lower importance (5.57); and finally, the 'initiatives of outside agencies (consultants)' has the lowest importance (7.21).

The perception of the participants depicts that matching the products offered by another Islamic bank in the same location is a very important initiative for an Islamic bank (or window) in their product development initiative. In fact, *as per* the outcome of the study, that is the most important initiative/factor for the development of new products. So the perception is proven to be true. The outcome of 'research and development' and 'market demands', which include demand from internal departments, market research and demand from customers, are the next most important initiatives. The product of a conventional bank has a mid-level importance. Similarly, the initiative to meet regulatory requirements has a comparatively lower importance. The results on above key factors have been briefly discussed in the previous chapter under Section 6.4. Additionally it should be noted that a study conducted by Ahmed (2011:147) with another sample of banks showed nearly similar results.

In furthering the study, Table 7.15a to 7.15h, details the individual descriptive analyses of initiatives:

Table 7.15a: Key Initiative/Factor: Product of a Conventional bank

Valid Answers: Importance levels (1 being highest)	Frequency (Valid)	(Valid)	Mean
1	5	22.7	
2	3	13.6	
3	1	4.5	
5	7	31.8	
7	1	4.5	4.29
8	3	13.6	4.29
10	1	4.5	
Not responded by participants	1	4.5	
Total	22	100	

Table 7.15a shows how important the products of 'conventional banks' are, as a key initiative factor, for product development in the Islamic bank. As can be seen, 22.7% of the banks had this initiative as the most important factor, and 31.8% gave it an importance level of 5. Totalling the percentages for rankings of 1 to 5 reveals that 72.6% banks in the study ranked this factor as an important factor within the top 5 for product development. The mean value calculated for this finding was 4.29 for the banks studied.

Table 7.15b: Key Initiative/Factor: Product of Another Islamic Bank

Valid Answers: Importance levels (1 being highest)	Frequency (Valid)	% (Valid)	Mean
1	8	36.4	
2	2	9.1	
3	2	9.1	
4	4	18.2	2.95
5	2	9.1	2.93
6	3	13.6	
Missing System	1	4.5	
Total	22	100	

Table 7.15b shows how important the products of other Islamic banks are with regards to being the key initiative factor for product development in the bank under study. As the results show, 36.4% of the banks had this initiative as the most important factor, while 18.2% gave it an importance level of 5. Totalling the percentages for rankings of 1 to 5 reveals that 81.9% banks under study ranked this factor as an important factor within the top 5 ranking for product development. The mean value calculated for this finding was 2.95 for the banks studied.

Table 7.15c: Key Initiative/Factor: Initiative of Own R & D Team

Valid Answers: Importance levels (1 being highest)	Frequency (Valid)	% (Valid)	Mean
1	6	27.3	
2	1	4.5	
3	3	13.6	
4	6	27.3	3.38
5	4	18.2	3.36
10	1	4.5	
Not responded	1	4.5	
Total	22	100	

Table 7.15c shows the importance attached to the initiative of the bank's own R & D Team are as a key factor for product development in the bank under study. As the results show, 27.3% of the banks had this initiative as the most important factor, and 27.3% gave it an importance level of 4. Totalling the percentages for rankings of 1 to 5 reveals that 90.9% banks in the study gave this as an important factor within the top 5 ranking for product development. The mean value calculated for this finding was 3.38 for the banks studied.

Table 7.15d: Key Initiative/Factor: Initiatives by Outside Agencies (Consultants)

Valid Answers: Importance levels (1 being highest)	Frequency (Valid)	% (Valid)	Mean
1	1	4.5	
2	1	4.5	
3	1	4.5	
5	1	4.5	
6	1	4.5	
7	5	22.7	7.21
8	1	4.5	7.21
9	3	13.6	
10	5	22.7	
Not responded by participants	3	13.6	
Total	22	100	

Table 7.15d shows results in relation to the important factor of 'Initiatives by outside agencies (consultants)' for product development in the bank. As the results show, 22.7% of the banks had this initiative as the seventh most important factor. The mean value calculated for this finding was 7.21 for the banks studied. Therefore, the importance of this factor was much lower in the ranking.

Table 7.15e: Key Initiative/Factor: Outcome of a Market Research

Valid Answers: Importance	Frequency	%	Mean
levels (1 being highest)	(Valid)	(Valid)	Mean
1	4	18.2	
2	4	18.2	
3	1	4.5	
4	7	31.8	
5	2	9.1	3.82
6	2	9.1	
9	1	4.5	
10	1	4.5	
Total	22	100	

Table 7.15e shows the findings relating to the factor that 'Outcome of a market research' is as a key factor for product development in the bank under study. 31.8% of the banks had this initiative as the fourth most important factor. Totalling the percentages for rankings between 1 to 5 reveals that 81.8% of the banks under study gave this as an important factor within the top 5 ranking for product development. The mean value calculated for this finding was 3.38 for the banks studied. The findings reveal that this factor had a high importance.

Table 7.15f: Key Initiative/Factor: Initiative of a Star Employees of the Bank

Valid Answers: Importance	Frequency	%	Mean
levels (1 being highest)	(Valid)	(Valid)	Wicali
1	1	4.5	
2	2	9.1	
3	3	13.6	
4	2	9.1	
5	4	18.2	5.10
6	2	9.1	3.10
7	3	13.6	
8	4	18.2	
Missing System	1	4.5	
Total	22	100	

Table 7.15f shows how important the factor of 'initiatives of a star employee of the bank' is as a factor for product development in the bank. The importance was evenly poised with the mean value as 5.11. Therefore, this factor was at a medium level of importance.

Table 7.15g: Key Initiative/Factor: Demand from other Internal Departments

Valid Answers: Importance	Frequency	%	Mean
levels (1 being highest)	(Valid)	(Valid)	Mean
1	5	22.7	
2	3	13.6	
3	4	18.2	
4	1	4.5	
5	3	13.6	3.76
6	1	4.5	3.70
7	1	4.5	
8	3	13.6	
Missing System	1	4.5	
Total	22	100	

Table 7.15g shows how important 'demand from other internal departments' is as a key factor for product development in the bank under study. As can be seen, 22.7% of the banks had this initiative as the most important factor. Totalling the percentages for

rankings between 1 to 5 revealing that 72.6% of banks under the study ranked this as an important factor within the top 5 ranking for product development. The mean value calculated for this finding was 3.75 for banks studied. The findings revealed that this factor had a high importance.

Table 7.15h: Key Initiative/Factor: Meeting the Regulatory Requirements

			
Valid Answers: Importance	Frequency	%	Mean
levels (1 being highest)	(Valid)	(Valid)	Mean
1	4	19.0	
2	2	9.5	
3	2	9.5	
5	1	4.8	
6	1	4.8	
7	3	14.3	5.57
8	4	19.0	
9	1	4.8	
10	3	14.3	
Missing System	1	4.5	
Total	22	100	

As regards to the 'meeting the regulatory requirements' as a factor leading to product development, table 7.15h shows that the importance was evenly poised with the mean value as 5.57. Therefore, the importance of this factor had a medium importance.

7.4.3 Searching for Departments in Giving Formal Approval for Developing New Products

The perception of participants on the approval process of product development is analysed in this section. The development of a new product in a bank undergoes the approval process for various departments. On the basis of feedback received through the survey, a descriptive analysis of the frequencies of approvals by various departments is explored in this section.

Table 7.16: Departments Providing Formal Approval for Developing New Products

Answers	Responses	Frequency (Valid)	%(Valid)
a. Head of Business Group for new product	Answer- Yes	22	100.0
b . Head of centralized	Answer - No	10	45.5
product development department	Missing	4	18.2
•	Total	8	36.3
	Answer- Yes	22	100.0
c. Budget and planning	Answer- Yes	8	36.4
department	Answer - No	4	18.2
	Missing	10	45.5
	Total	22	100.0
d. Finance department	Answer- Yes	13	59.1
	Answer - No	2	9.1
	Missing	7	31.8
	Total	22	100.0
e. Accounting department	Answer- Yes	10	45.5
	Answer - No	2	9.1
	Missing	10	45.5
	Total	22	100.0
f. IT department	Answer- Yes	17	77.3
	Missing	5	22.7
	Total	22	100.0
g. Risk management	Answer- Yes	19	86.4
department	Answer - No	1	4.5
	Missing	2	9.1
	Total	22	100.0
h. Shari'ah department	Answer- Yes	21	95.5
	Missing	1	4.5
	Total	22	100.0
i. Internal Audit	Answer- Yes	5	22.7
department	Answer - No	4	18.2
	Missing	13	59.1
	Total	22	100.0
j. Top management (CEO/	Answer- Yes	17	77.3
Deputy CEO)	Missing	5	22.7
	Total	22	100.0
k. Board of Directors	Answer- Yes	12	54.5
	Answer - No	1	4.5
	Missing	9	40.9
	Total	22	100.0

As per the findings for item 'a' indicated in Table 7.16, 100% of the banks under study agreed that the approval of the Head of the Business Group while developing a new product for the relevant business is required. The mean value calculated for this finding was 1.0 for the banks studied.

For item, 'b', the findings in Table 7.16 shows that, 45.5% of the banks under study wanted the approval of the Head of the Centralized product development department, while developing a new product. 18.2% answered negatively while 36.3% of banks did not respond. The mean value calculated for this finding was 1.29 for the banks studied.

Regarding the item 'c' the findings in 7.16 shows that 36.4% banks under study wanted the approval of the budget and planning department, while developing a new product. 18.2% answered negatively while 45.5% of banks did not respond. The mean value calculated for this finding was 1.33 for the banks studied.

As per the findings for item 'd' indicated in Table 7.16, 59.1% banks under study wanted the approval of the finance department while developing a new product. 9.1% answered negatively, while 31.8% of banks did not respond. The mean value calculated for this finding was 1.13 for banks studied.

As regards to the item 'e', as the results in Table 7.16 shows 45.5% banks under study wanted the approval of the accounting department while developing a new product; and 9.1% answered negatively, while 45.5% of banks did not respond. The mean value calculated for this finding was 1.17 for the banks studied.

Table 7.16 shows that in responding to item 'f', 77.3% of banks under the study wanted the approval of the IT department while developing a new product, while 22.7% of banks did not respond. According to the results, hence,, the IT department's approval was very important, because most of the new products in the market are IT-dependent. The mean value calculated for this finding was 1.0 for the banks studied.

As for item 'g', the findings in Table 7.16 shows that 86.4% of banks under study wanted approval of the risk management department while developing a new product, while only 4.5% answered negatively and 9.1% of banks did not respond. According

to this study, the risk management department's approval was very important. The mean value calculated for this finding was 1.05 for the banks studied.

As regards to item 'h', Table 7.16 shows that 95.5% of banks under study wanted the approval of the *Shari'ah* department while developing a new product, while only 4.5% of banks did not respond. This study reveals that for any product development in Islamic banking, *Shari'ah* approval was an essential requirement. The mean value calculated for this finding was 1.0 for the banks studied.

As per the findings for item 'i' in Table 7.16, only 22.7% banks under study wanted the approval of the audit department while developing a new product, while 18.2% answered negatively while 59.1% of banks did not respond. This indicated that the audit department's approval was not important. The mean value calculated for this finding was 1.14 for the banks studied.

As regards to item 'j', Table 7.16 shows that 77.3% banks under study wanted approval of the top management while developing a new product. 22.7% of banks did not respond. According to this study the top management's approval was very important for launching new products in a bank. The mean value calculated for this finding was 1.0 for the banks studied.

The findings in table 7.16 for item 'k' shows that 54.5% of the banks under study wanted the approval of the Board of Directors while developing a new product. However, only 4.5% had a negative answer while 40.9% of banks did not respond. It indicated that the Board of Directors approval was not very important while developing new products. The mean value calculated for this finding was 1.08 for the banks studied.

As the analysis of the perception of the participants as depicted in Table 7.16 show, four main departments such as the relevant business unit, IT, *Shari'ah* and the top management, which have mean values of 1 are the most important departments for the approval of the products.

In view of the research, it should be noted that the perception is true in reflecting the present business environment. The relevant business unit's and management's approval are always needed for any bank and that *Shari'ah* approval is essential for

Islamic banking products. As indicated by this study, what is especially reflected in the study is that the IT (Information Technology) department's approval is also essential to roll out new products because in modern banking IT plays an important role as product operations run on IT systems.

7.4.4 Steps Involved in Developing a New Product in the Sampled Banks

There are many steps involved while developing a new product in a bank. The perceptions of the participants in terms of the steps involved and their importance are captured through the questionnaire used for this study. The study analysed feedback on the steps and their importance (1 as the highest importance and 10 as the lowest importance). The mean ranking established through the SPSS descriptive analysis are arranged in ascending order and reported in table 7.17.

Table 7.17: Steps Involved for New Product Development in the Sampled Banks

Steps involved for new product	No of	Minimum	Maximum	Mean
in your bank	responses	value	value	ranking
III your builk	responses	varae	varae	runking
Product idea generation	21	1	3	1.19
Product concept paper	22	1	4	1.95
Shari'ah approval process	21	1	7	2.10
Product flow chart	19	1	7	3.00
Top management approval	20	1	10	3.20
Approval from internal dept. (other than <i>Shari'ah</i>)	20	1	7	3.35
IT development In- house/Vendor	21	1	9	3.48
Product documentation	21	1	10	3.52
Making a product implementation team	19	1	8	3.79
Shari'ah Audit	19	1	10	3.95
IT user acceptance test	19	1	10	4.26
Marketing the product	22	1	10	4.32
Training the operating staff	22	1	10	4.45
Steps involved for new product in your bank-Product budgeting	20	1	10	4.75
Post implementation review	18	1	10	5.17
Full scale product Roll out	21	1	10	5.29
Post implementation support	19	1	10	5.42
Pilot implementation	18	1	10	5.72

Note: Importance attached for each step with ranks (1-highest, 2,3, 4,....10-lowest)

The mean ranking in the table signifies the importance given by respondents on the particular step involved in product development, which combines the findings in this section. As explained in above note lower is the value higher is the importance. The steps listed above as asked in questionnaire are almost similar to the steps in the product development cycle (Figure 4.3) explained in the literature review chapter 4 section 4.5.1. The significances are explained in the next paragraphs, however it is important to note two observations: first, the response levels are good (out of 22 banks, 18 and above banks respondent to the steps); second, according to the respondents all the steps are important (as mean values are between 1.19 to 5.72; in the scale of 1 to 10 with 1 as highest and 10 as lowest importance). According to respondents' feedbacks the first three ranks are product idea generation, product concept paper and *Shari'ah* approval, which mean they have more importance. This is a proof what discussed in the literature before.

Table 7.17 shows the various steps involved and the rankings of importance in ascending orders are shown above. Some of the main steps appearing on top of the table in terms of importance are highlighted. The perceptions of the participants reflect the actual steps involved in product development, especially those which are on the top of the list. The highlighted ones are required at the idea generation and acceptance stage to start the product development. The most important of them are briefly explained here:

- (i) Idea generation and Concept paper These are starting steps of any new banking product including Islamic banking products (explained in Chapter 4 section 4.5.1).
- (ii) Approval of Top management, *Shari'ah* department, IT and Internal business department are also required as important starting steps. Importance of approval of these departments are already reflected and explained in previous section 7.4.3 (also explained in Chapter 4 section 4.5.1).

It should be noted that a similar study by Ahmed (2011:143) with another sample of banks showed almost same steps under 'Status of idea generation and acceptance' table. His focus was on the number of banks that always undertaken the steps and the responses depicted were medium. However under this study the focus was on

importance of each step (1, ...10) and responses were comparatively higher. However both studies recognized similar steps and considered they are important in product development.

7.4.5 Availability of Resources in the Sampled Banks for Product Development

As discussed in Chapter 4, and mentioned earlier in section, 7.4.1 'resource' is one of the cornerstones of performance. Feedback was taken through the questionnaire on the four main resources for product development such as *Shari'ah* capabilities, people, finance and IT. The importance of the resources was asked to be ranked on a scale of 5 to 1 (5 being highest). The perceptions of the participants on the importance of those resources are analysed in this section. A summary table of the mean values of resources in descending order is shown in Table 7.18. The descriptive analyses of individual resources are discussed subsequently.

Table 7.18: Mean Ranking for Available Resources in the Sampled for Product Development

Resources available in your bank for product development	N	Mean Ranking
Shari'ah capability	22	4.41
IT	22	3.77
Finance	22	3.73
People	22	3.68

Note: Summary of mean ranks in descending orders: 5 as highest 1 as lowest:

The results in Table 7.18 show a mean value of 4.41 for *Shari'ah* capability as the highest mean and 3.68 as the lowest for People. The results reflect that the banks have adequate resources between the ranges of the medium to high level. But the mean ranking for 'people' is lowest at 3.68, which indicate that supply of trained manpower requires improvement in Islamic banks. This validates the point which is discussed in Chapter 1 (under section 1.4) that requirement of human capital is one of the factors of affecting supply of new Islamic banking products (Iqbal and Mirakhor, 2002; Grewal, 2011).

The responses received from the participants for individual resources are depicted in the tables below.

(i) Resources available –Shari'ah capability

As discussed earlier, Islamic banking products are required to go through *Shari'ah* approval process; and therefore, the *Shari'ah* capability of the Islamic bank is a main requirement for product development. The feedback of the participant on the resource is depicted in Table 7.18a.

Table 7.18a Resources Available in the Bank for Product Development-

Shari'ah Capability

210010	Shurt un Capabiney				
Ranking		Frequency	Percent	Mean	
	3	2	9.1		
Valid	4	5	22.7	4.41	
vand	5	15	68.2		
	Total	22	100.0		

The findings depicted in 7.18a show that most of the banks had resources available in terms of *Shari'ah* capability for developing new products: 68.2% of the banks ranked the *Shari'ah* capability of the bank as 5 which was the highest ranking, while 22.7% of the banks under study ranked this resource with 4 and 9.1% with 3. The mean value calculated for this finding was 4.41, which confirmed the high amount of *Shari'ah* resources available for product development among all banks.

(ii) Resources available -People

The importance of human resources is discussed in section 7.4.1, while here, the perceptions of the participants in terms of ranking are displayed in Table 7.18b:

Table 7.18b Resources Available in the Sampled Banks for Product Development-People

Ranking		Frequency	Percent	Mean
	1	1	4.5	
	2	2	9.1	3.68
V-1: 4	3	5	22.7	
Valid	4	6	27.3	
	5	8	36.4	
	Total	22	100.0	

The findings in Table 7.18 depict that the resources available in terms of people, *i.e.* human resources, were fairly good. However, the mean value calculated for this finding was 3.68 which is lowest compared to other resources. This confirmed that the human resources available for product development require improvement as explained above.

(iii) Resources available – Finance

Product development involves various expenses; therefore finance is another resource required for product development. The responses of the participants are depicted in Table 7.18c.

Table 7.18c Resources Available in the Sampled Banks for Product Development -Finance

Ranking		Frequency	Percent	Mean
	1	1	4.5	
2 Valid 4 5	2	2	9.1	
	3	5	22.7	3.73
	4	6	27.3	
	5	8	36.4	
	Total	22	100.0	

The findings in Table 7:18 depict that the resources available in terms of finance were fairly good in the sampled banks according to the opinions of the participants. The mean value calculated for this finding was 3.73 out of highest point of 5, which confirmed the financial resources available for product development among all banks was sound.

(iv) Resources available – IT (information technology)

As briefed earlier in section, 7.4.3 in the modern banking environment, IT plays a very important role, as banking is now technology-based and product operations run on IT systems. Therefore IT resources are essential for new product development. The perceptions of the participants in terms of IT resources available in their respective banks are depicted in Table 7.18d.

Table 7.18d: Resources Available in the Sampled Banks for Product Development -IT

Ranking	Frequency	Percent	Mean
1	1	4.5	
2	1	4.5	
3	6	27.3	3.77
4	4	18.2	5.77
5	10	45.5	
Total	22	100.0	

As the findings in Table 7.18 shows, in the case of the sampled banks, according to the respondents' opinion, the resources available in terms of IT capability were good. 45.5% of banks gave the score for the resources available in terms of IT as 5, 18.2% gave 4, 27.3% gave 3, only 4.5% each gave 1 and 2. The mean value calculated for this finding was 3.77 out of the highest point of 5.

In overall, the importance of all four resources for product development showed a high ranking from 3.68 to 4.41 with the highest rank being 5. The study revealed that the sampled banks have adequate resources for product development. Furthermore, the study revealed that *Shari'ah* capability has a high ranking of 4.41 implying that banks are well equipped in the *Shari'ah* angle for product development. The study depicted that the resource capability in terms of people was a comparatively lower 3.68. This result evidenced that the availability of trained human resources is in short supply and needs to be addressed.

7.4.6: Bank's General in-house Product Development Principle

A query was raised in the questionnaire to know whether the product development principles of the banks were written guidelines, broad guidelines, *adhoc* guidelines, *etc*. The perceptions of the participants in this respect were captured and analysed in this section with a summary table 7. 19 and itemized analyses are given thereafter.

Table 7.19 Bank's in-house Product Development Principles

Responses	Responses	Frequency (Valid)	% (Valid)	Mean	
a . Follow the	Answer- Yes	15	68.2		
formal written	Answer - No	2	9.1	1.12	
process or guidelines	Missing	5	22.7	1.12	
guidennes	Total	22	100.0		
b . Follow some	Answer- Yes	12	54.5		
broad guidelines	Answer - No	3	13.6	1.20	
	Missing	7	31.8	1.20	
	Total	22	100.0		
c. Informal	Answer- Yes	1	4.5		
guidelines	Answer - No	9	40.9	1.90	
	Missing	12	54.5	1.90	
	Total	22	100.0		
d . Adhoc	Answer- Yes				
guidelines	Answer - No	10	45.5	2.00	
	Missing	12	54.5	2.00	
	Total	22	100.0		
e. No guidelines	Answer- Yes				
	Answer - No	11	50.0	2.00	
	Missing	11	50.0	2.00	
	Total	22	100.0		

The summary Table 7.19 indicates that the banks have either written or broad guidelines for in-house product development principles. Though there are some overlaps between written and broad principles, as a number of banks appear to have responded in both places, the outcome showed mean scores of 1.21 and 1.28 which are nearer to 1, showing the responses are skewed towards 'Yes' (in the scale of Yes = 1 and No = 2).

The responses are analysed item-wise as follows:

As the results in Table 7.19 for item 'a' depicts, according to the opinions of the participants, 68.2% of the sampled banks under study followed written guidelines, while following product development. 9.1% answered negatively and 22.7% did not answer. The mean value calculated for this finding was 1.12.

As regards to the item 'b', the results in Table 7.19 show that 54.5% of the sampled banks, according to the opinions of the participants, followed some broad guidelines, while following the product development. 13.6% answered negatively and 31.8% did not answer. The mean value calculated for this finding was 1.20.

As for item 'c' related results in Table 7.19 show the mean value is 1.90, which shows that most of the banks did not agree that they had informal guidelines for product development.

Table 7.19 depicts also results for item 'd' for which the mean value calculated is 2.0 indicating that the banks did not agree to have *adhoc* guidelines for product development.

As per Table 7.19, the results for item 'e' show that the mean value calculated for this item is 2.0, which indicates that according to the participants, their relative banks did not agree to the principle of having no guidance.

As depicted by the above discussion, the perceptions of the participants indicated that most of the banks follow written guidelines in product development process.

7.4.7 Formation of Cross-Functional Teams to Carry out Implementation of New Product

When a product is launched, it is important to carry out an evaluation of the implementation process of the new product. The best way is to have Service Level Agreements (SLAs) between the cross-functional teams, such as sales, operation, accounts *etc.*, carry out their parts of the functions. This study collected the feedback of the participants from the sampled Islamic banks in this respect, and the findings are presented in table 7.20.

Table 7.20 The Working of Cross-functional Teams in Carrying out Their Function in Launching New Products

Responses (values in brackets)	Frequency	Percent	Mean
Permanent SLA between the functional teams to carry out the business (1) Different SLA for different products (2) Informal /adhoc request from product owners to other functional teams (3)	7 10 5	31.8 45.5 22.7	1.91
Total	22	100.0	

As can be seen in Table 7.20, according to the participants' opinion, 31.8% of banks had permanent Service Level Agreements (SLAs) between the cross-functional teams to carry out their function after the new product was launched, while 45.5% had different SLAs for different products. Together, 77.3% of banks had some kind of SLA to carry out the function/operation of the new product. 22.7% of banks had some *adhoc* arrangements to carry out the function. As the results show, no bank showed having 'no guidelines' or having no SLA.

A survey by Ahmed (2011:139) with different samples showed that *adhoc* arrangements had higher percentage though in this study it only showed third position. However in his study, the response for the different SLAs with the department for each product had the second highest response, and this study showed the highest response for that. Overall, the theme revealed that some kind of SLA exists between the cross functional teams in order to carry out their respective functions when the product is launched.

7.4.8 Responsibility for the Product After the Implementation of the Product

It is good to know who the custodian of the product is after the product is implemented. As per good business practice, it should be the business unit who worked on that product. These issues are discussed in this section through the

responses of the participants from the sampled banks and the results are depicted in Table 7.21.

Table 7.21: Responsible Sections for the Product after its Implementation

Responses (values in brackets)	Frequency	Percent	Mean
Product development team (1)	5	22.7	
Business Unit (2)	17	77.3	1.77
Total	22	100.0	

Table 7.21 depicts that in 77.3% of the banks, the business unit for the product was responsible for the new product after its implementation, while only in 22.7% of the banks were the product development team responsible after the product implementation. The mean value calculated for this finding was 1.77 for the banks studied.

It should be mentioned that the study supported the business perception that the responsibility of the product after the implementation is with the concerned business unit, not the other department.

7.5 PRODUCT DEVELOPMENT PROCESS: SHARI'AH APPROVAL PROCESS

As discussed in Chapter 4, *Shari'ah* approval is a special requirement for the development of Islamic banking products, which defines the distinction between Islamic banking and conventional banking products. As explained under Section 7.4.3 and depicted in Table 7.16, all the banks agree that approval of the *Shari'ah* department was essential for the development of new Islamic products.

Through section D of the survey questionnaire, queries on various aspects of the *Shari'ah* approval processes were raised with the participants. On the basis of the feedback received, the perceptions of participants on the *Shari'ah* approval processes are analysed. The findings are presented in the following sections.

7.5.1 Availability of Shari'ah Advisory Board

As discussed above, the *Shari'ah* advisory board is an essential feature of Islamic banks, which is confirmed by the findings in Table 7.22a.

Table 7.22a: Existence of Shari'ah Advisory Board

Answers	Frequency	Percent	Valid	Cumulative	Mean
			Percent	Percent	
Yes	22	100.0	100.0	100.0	1.0

Table 7.22 depicted that all the banks under study had a *Shari'ah* advisory board with 100% of the banks answering 'yes'. This finding confirms that the *Shari'ah* advisory board is essential and is a distinctive feature of an Islamic bank.

The issue is further explored by questioning the respondents as to whether the *Shari'ah* board was a dedicated in-house *Shari'ah* board or was it shared with another organization. The responses are given in the table below.

7.22b: Nature of Shari'ah Board being Dedicated in-house or Shared

Answers	Frequency	Percent	Mean
Dedicated in -house Shari'ah board	18	81.8	
Shari'ah board shared with other organization	4	18.2	1.18
Total	22	100.0	

As evidenced in Table 7.22b, 81.8% of the banks under study had in-house *Shari'ah* advisory boards, while only 18.2% had *Shari'ah* boards shared with other organizations.

7.5.2: Number of Shari'ah Scholars in the Shari'ah Board

This question was raised to know the number of *Shari'ah* scholars in the board, and the feedback received is depicted in Table 7.23.

Table 7.23: The Numbers of Shari'ah Scholars in the Shari'ah Board

Answers		Frequency	Percent	Mean
	1	1	4.5	
	2	1	4.5	
	3	7	31.8	
	4	2	9.1	
	5	6	27.3	4.71
	6	2	9.1	
	12	1	4.5	
	13	1	4.5	
Miss	sing	1	4.5	
То	tal	22	100.0	

As can be seen in Table 7.23. the mean value calculated for this finding is 4.71 for the banks studied, which implies that the *Shari'ah* boards of the sampled banks had an average of less than 5 members in the board. The perception of the participants reflected the standard *Shari'ah* board strength.

7.5.3 Questioning Shari'ah Board Members' Relationship with the Bank

Table 7.24 provides the results for the question as to whether the Shari'ah board members are the employees of the respective banks.

Table 7.24: Shari'ah Board Members being Bank Employees

Answer	Frequency	Percent	Mean
No	22	100.0	2.0

As can be seen from the findings, the *Shari'ah* board members were not employees of the banks. In the view of the researcher, this is a true reflection of a *Shari'ah* board in which the members are independent scholars and not bank employees. Only the member-secretary who represents the bank's *Shar'iah* department is a bank employee.

7.5.4 The Kind of Shari'ah Units (or Sections) Existing in the Bank

The *Shari'ah* department in a bank usually constitutes small units in order to undertake different activities. Through the survey questionnaire, feedback was taken from the participants about the existence of such units. The main units of the *Shari'ah*

department as per the feedback received from the participants are depicted in Table 7.25 (items 'a', to 'd') and analysed thereafter.

7.25: The Nature of Shari'ah Units (or Sections) in the Sampled Banks

Choices	Responses	Frequency (Valid)	% (Valid)	Mean
a. Do you have a	Answer- Yes	20	90.9	
Shari'ah	Answer - No	1	4.5	1.05
department/ unit to coordinate with	Missing	1	4.5	1.05
Shari'ah board	Total	22	100.0	
b . Shari'ah audit	Answer- Yes	18	81.8	1.05
unit exist in your bank?	Answer - No	1	4.5	
	Missing	3	13.6	
	Total	22	100.0	
c. Shari'ah	Answer- Yes	14	63.6	1.13
research unit exist	Answer - No	2	9.1	
in your bank?	Missing	6	27.3	
	Total	22	100.0	
d. Shari'ah	Answer- Yes	18	81.8	1.05
advisory unit exist	Answer - No	1	4.5	
in your bank?	Missing	3	13.6	
	Total	22	100.0	

The responses are analysed item-wise as follows:

Table 7.25 for item 'a' showed that 90.9% of the banks under study had a *Shari'ah* department (or *Shari'ah* secretariat), while only 4.5% did not have one and 4.5% did not answer. The mean value calculated for this finding was 1.05 for the banks studied.

As can be seen from Table 7.25 for item 'b', the results show that 81.8% of the banks under study had a *Shari'ah* audit unit in the bank, but 4.5% did not have a *Shari'ah* audit unit, while 13.6% did not respond. The mean value calculated for this finding was 1.05 for the banks studied.

As regards to responses given for item 'c', as can be seen from Table 7.25, the results show that 63.6% of the banks under study had a *Shari'ah* research unit in the bank. However, 9.1% did not have a *Shari'ah* audit unit and 27.3% did not respond. The mean value calculated for this finding was 1.13 for banks studied.

Table 7.25 showed that 81.8% of the banks under study had a *Shari'ah* advisory unit in the bank, while only 4.5% did not have one and 13.6% did not respond. The mean value calculated for this finding was 1.05 for the banks studied. *Shari'ah* advisory

unit, as part of the *Shari'ah* Department refers to in-house *Shari'ah* compliance unit as explained in Chapter 2 (Section 2.7.1 under item-i). This is one of the required organs (units) identified by IFSB for *Shari'ah* governance regime (Ahmed, 2011:63). It can be clarified that the internal *Shari'ah* advisory unit is not the SSB (*Shari'ah* Supervisory Board) but the internal advisor could be a member of SSB. As discussed in the 2.7.1 and at the end of Section 2.7.2, the internal *Shari'ah* advisor is needed for continuous supervision and advisory work in relation to the *Shari'ah* compliancy of the instruments and operations. As evidenced in Table 7.25, 81.8% of the sampled banks have in-house *Shari'ah* advisory unit.

7.5.5 The Number of Staff in Shari'ah Department

Responses from the participants were received about the number of staff working in the *Shari'ah* department, as depicted in Table 7.26.

Table 7.26: The Number of staff working in the *Shari'ah* Department of the Sampled Banks

Answers	Frequency	Percent	Mean
1	2	9.1	
2	2	9.1	
3	2	9.1	
5	4	18.2	8.76
10	2	9.1	
13	1	4.5	
18	2	9.1	
20	1	4.5	
28	1	4.5	
Missing	5	22.7	
Total	22	100.0	

As can be seen from Table 7.26, the highest number of employees was 28 and the lowest was 1. Considering the lower ends of the scale, 45.5% of the banks had *Shari'ah* departments' staff strength between 1 to 5.

7.5.6 Existence of coordinator between business and Shari'ah department

The question was raised on whether the bank had a *Shari'ah* coordinator between the business unit and the *Shari'ah* department. The responses are listed below.

Table 7.27: Existence of Coordinator between Business and Shari'ah Department

Answers	Frequency	Percent	Valid	Cumulative	Mean
			Percent	Percent	
Yes	15	68.2	68.2	68.2	
No	7	31.8	31.8	100.0	1.32
Total	22	100.0	100.0		

Table 7.27 showed that 68.2% of the banks under study had a coordinator between the business unit and *Shari'ah* department, while 31.8% did not have such position. The mean value calculated for this finding was 1.32 for the banks studied.

7. 5.7 Preparations of Paperwork

Question was raised to know, in case the product involved agreement who prepared the agreement. The responses are depicted in Table 7.28.

Table 7.28: Authority to Prepare Paperwork

Responses (values in bracket)	Frequenc	Percent	Mean
	у		
1-In-house lawyer (1)	15	68.2	
2-Out-sources lawyer (2)	2	9.1	
3-Prepred by business units referring similar agreements (3)	2	9.1	1.95
1,2,3, together (4)	3	13.6	
Total	22	100.0	

Table 7.28 shows that for 68.2% of the banks under study, the agreement required for the product is prepared by the in-house lawyer, while for 9.1% of banks it is prepared by an outsourced lawyer, and another 9.1% banks by the business units, and 13.6% responded stating all the options were being followed. Therefore the majority viewed that the agreement was prepared by the in-house lawyer.

7.5.8 The Steps Followed in Presenting the New Products to the Shari'ah Board

The steps involved in presenting the new products to the *Shari'ah* board were studied and it provided some useful results as shown in the consolidated table 7.29:

Table 7.29: The Steps Followed in Presenting the New Product to the *Shari'ah* Board

Steps	Responses	Frequency (Valid)	% (Valid)	Mean
a. Prepare a product	Answer- Yes	21	95.5	
paper for the Shari'ah with	Answer - No			1.00
explanation	Missing	1	4.5	
r r	Total	22	100.0	
b . Get the draft agreement ready	Answer- Yes	17	77.3	
agreement ready	Answer - No	1	4.5	1.06
	Missing	4	18.2	1.00
	Total	22	100.0	
c. Make translation	Answer- Yes	10	45.5	
into Arabic if	Answer - No	5	22.7	1.33
necessary	Missing	7	31.8	1.33
	Total	22	100.0	
d. Make meeting	Answer- Yes	18	81.8	
with Shari'ah	Answer - No	2	9.1	1.10
coordinator to	Missing	2	9.1	1.10
explain the product	Total	22	100.0	
e. Prepare a	Answer- Yes	18	81.8	
presentation to	Answer - No	1	4.5	1.05
Shari'ah board	Missing	3	13.6	1.03
members if required	Total	22	100.0	

The responses are analysed item-wise as follows:

Table 7.29 for item 'a' showed that 95.5% of banks prepare a product paper for the *Shari'ah* board with explanations. The mean value calculated for this finding was 1.0, which was a positive response for the banks studied.

As for item 'b', Table 7.29 showed that 77.3% of banks prepared the draft agreement for sending to the *Shari'ah* board, while 4.5% disagree and 18.2% did not respond. The mean value calculated for this finding was 1.06 which was a positive response for the banks studied.

As regards to item 'c', Table 7.29 show that only 45.5% of banks made the translation into Arabic for sending to the *Shari'ah* board, while 22.7% disagree and 31.8% did not respond. The mean value calculated for this finding was 1.33. In practice, mostly in the GCC *Shari'ah* boards do not require Arabic translations as most of the scholars are comfortable with Arabic. This is not the case in South Asian countries.

With regards to item 'd', Table 7. 29 show that 81.8% of banks agreed to schedule meetings with the *Shari'ah* coordinator to explain the product; however, 9.1 % did not agree and 9.1% did not respond. The mean value calculated for this finding was 1.10 which was a positive response for the banks studied.

As for the item 'e', Table 7. 29 show that 81.8% of banks agreed to prepare a presentation to *Shari'ah* board members if required while 4.5 % disagreed and 13.6% did not respond. The mean value calculated for this finding was 1.50 for the banks studied.

7.5.9 The Frequency of Shari'ah Board Meetings

This question was raised to know how frequently the *Shari'ah* board meets. The responses are depicted here.

Table 7.30: The Frequency of Shari'ah Board Meetings

Answers	Frequency	Percent	Mean
Once in a week	2	9.1	
Once in 2 weeks	2	9.1	
Once in a month	8	36.4	
Once in 2 months	2	9.1	3.52
Once in 3 months	6	27.3	
Once in 6 months	1	4.5	
Missing	1	4.5	
Total	22	100.0	

As per the findings shown in table 7.30, according to the opinions of the participants, 36.4% of the banks' *Shari'ah* board meet once a month. Adding in the frequencies at the lower ends (once in a week to once in a month), 54.6% of bank fall under this category. The findings show that the *Shari'ah* boards for 27.3% of the banks meet once in 3 months. The mean value calculated for this finding was 3.52 (which corresponds to more than a month and less than 2 months).

7.5.10 The Length of Shari'ah Approval Process

The participants were asked to identify the length of *Shari'ah* approval process in their respective Islamic banks with the objective of getting to know as to how many

days it usually takes to get the *Shari'ah* board's approval. The responses are depicted in Table 7.31.

Table 7.31: The Length of Shari'ah Approval Process

Answers (values in bracket)	Frequency	Percent	Mean
Within 7 days (1)	6	27.3	
30 days (2)	6	27.3	
60 days (3)	2	9.1	2.73
90 days (4)	4	18.2	
More than 90 days (5)	4	18.2	
Total	22	100.0	

The findings depicted in Table 7.31 show that the number of days taken for *Shari'ah* board approval ranges from 1 week to 90 days. The reported data shows that 27.3% of the banks received approval within 1 week and the same percentage of banks received it within 30 days. The mean value calculated for this finding was 2.73 which corresponded to more than 30 days but less than 60 days.

7.5.11 The Nature of the Decision Rule for *Shari'ah* Scholars: Unanimous or Majority

This section presents the results for the question aimed at determining the perception of the participants on whether the opinions of the *Shari'ah* scholars were taken on a unanimous or majority basis during the approval of a product. The responses are depicted in the table 7.32.

Table 7.32: The Nature of the Decision Rule for *Shari'ah* Scholars: Unanimous or Majority_____

Answers (values in bracket)	Frequency	Percent	Mean
Unanimous agreement (1) Majority agreement (2) Missing Total	8 13 1 22	36.4 59.1 4.5 100.0	1.62

As the results shown in Table 7.32, in the case of 59.1% of banks, the scholars' decisions were taken with majority agreement, while 36.4% of the banks had it by unanimous agreement. However, 4.5% did not comment. It should be noted that the results reflect the practice in the banks. In some countries (for example, the GCC), the

Shari'ah scholars' opinions were taken on a majority basis. In some countries (for example Malaysia) the *Shari'ah* scholars' opinions were taken on a unanimous basis.

7.5.12 The Frequency of Shari'ah Audit for the Implemented Product

The respondents from the sampled banks were asked to express the frequency of the *Shari'ah* audit takes place to audit the product; the results are depicted in Table 7.33

Table 7.33: The Frequency of Shari'ah Audit for the Implemented Product

Answers (values in bracket)	Frequency	Percent	Mean
1 time in a year (1)	12	54.5	
2 times in a year (2)	1	4.5	
3-4 times in a year (3)	3	13.6	
Monthly-12 time p.a.(4)	1	4.5	
Not Applicable (5)	2	9.1	2.35
Whenever required (6)	1	4.5	
Missing	2	9.1	
Total	22	100.0	

As the results in Table 7.33 depicts, for 54.5% of the sampled banks, the *Shari'ah* audit took place once a year and other frequencies are distributed between 2 times to 12 times (monthly) a year. The mean value calculated for this finding was 1.62 for the banks studied. Thus, this study revealed that, in a majority of the banks the *Shari'ah* audit takes place once a year.

7.6 TRADE FINANCING ACTIVITIES IN THE SAMPLED BANKS

Section E and F of the questionnaire were aimed at gathering the perceptions of the participants on trade financing products of the respective sampled banks under study. While trade financing is a technical area with which this research is concerned with, the participations of the responses were not strong compared to other sections. However, the responses received through the survey provided a reasonable insight into trade financing banking practices in banks. The combination of information received through the literature review on the trade financing products in Chapter 3 and the data from the empirical findings in Chapter 7 and 8 are together contextualized and discussed in Chapter 9 to derive conclusions related to Islamic trade financing products in particular and Islamic banking products in general.

However, some reflections on the findings are provided in this section, as this research explored the product development processes in trade financing among the Islamic banks under study. Through the questionnaire survey, the Islamic trade financing activities and Islamic trade financing product development were studied. The data were analysed and are presented in this section.

It should be noted that in the questionnaire, questions E1, E2, and E3 were aimed to get the general information about the trade financing business of the banks.

7.6.1 Number of Staff in the Trade Finance Department

Initially, in order to make sense of the commitment and business of the trade department, the respondents were expected to reveal the number of staff worked in the trade finance department.

Table 7.34: Number of Staff in the Trade Finance Department

Answers	Frequency	Percent	Mean
Range 1: 1 to 10	5	22.7	
Range 2: 11 to 20	1	4.5	
Range 3: 21 to 50	6	27.3	2.83
Range 4: 51 to 100	4	18.2	
Range 5: :Above 100	2	9.1	
Missing	4	18.2	
Total	22	100.0	

As depicted in Table 7.34, 27.3% of the banks had staff in Range 3 (21 to 50) in the Trade Finance department; 22.7% had staff in Range 1, 18.2% in Range 4, 9.1% in Range 5 and only 4.5% in Range 2. The mean value calculated for this finding was 2.83 which correspond closely with Range 3.

7.6.2 Centralisation of Trade Finance Activities

Table 7.35: Is your trade financing activities centralized?

Answers	Frequency	Percent	Mean
Yes	14	63.6	
No	3	13.6	1.18
Missing	5	22.7	
Total	22	100.0	

As depicted in Table 7.35, 63.6% of the banks had Trade Financing activities which were centralized at specialized trade financing centres rather than available at branches. However, 13.6% did not agree, whereas 22.7% did not respond. As regards to the numbers of centres, the findings from the respondents answers are depicted in table 7.36.

Table 7.36: The Number of Trade Finance Centres

Answers	Frequency	Percent	Mean
1 center	7	31.8	
2 centers	2	9.1	
3 centers	3	13.6	1.67
Missing	10	45.5	
Total	22	100.0	

As the results in Table 7:36 shows the mean value calculated for this is 1.67, which, on average, indicates less than 2 centres.

7.6.3 Trade Financing Facilitation: Conventional/Shari'ah Compliant/Mixed products

Table 7.37: Type of Trade Finance Products Provided by the Bank

Answers	Frequency	Percent	Valid Percent	Mean
1: Conventional banking product	1	4.5	5.6	
2: Shari'ah compliant product	14	63.6	77.8	
3: Mixed conventional and <i>Shari'ah</i> compliant	3	13.6	16.7	2.11
Missing	4	18.2		
Total	22	100.0		

As can be seen in Table 7:37, the mean value calculated for this is 2.11 which indicates that the products are *Shari'ah* compliant and some are mixed with *Shari'ah* compliant and conventional products (which is the case with banks with Islamic windows).

7.6.4: List of main Trade Financing Products Indicating Nature of Trade Product (Sale/Service/Equity)

As discussed in Chapter 3 (Section 3.5), Islamic trade financing products are broadly sale, service and equity-based products. The study aimed to discover that concept in practice through the questionnaire survey. Participants were asked to indicate the nature of some main trade financing products on whether they were sale/service/equity-based products by assigning values 1 = sale, 2 = service and 3 = equity. The findings were analysed through the descriptive tools by listing the products and their mean values in the consolidated table 7.38.

Table 7.38: Nature of Trade Financing Products

Trade financing product	Response Frequency (Valid)		%(Valid)	Mean
	Valid	15	68.2	
Murabahah LC	Missing	7	31.8	1.00
	Total	22	100	
	Valid	6	27.3	
Post-shipment finance	Missing	16	72.7	1.00
	Total	22	100	
	Valid	6	27.3	
Pre-shipment finance	Missing	16	72.7	1.00
	Total	22	100	
Bill discounting	Valid	6	27.3	
	Missing	16	72.7	1.00
	Total	22	100	
	Valid	19	86.4	
Issue of Letter of Credit	Missing	3	13.6	2.00
	Total	22	100	
Advising/confirmation of	Valid	19	86.4	
Advising/confirmation of LC	Missing	3	13.6	2.00
LC	Total	22	100	
	Valid	19	86.4	
Bank Guarantees	Missing	3	13.6	2.00
	Total	22	100	
	Valid	18	81.8	
Documentary Collection	Missing	4	18.2	2.00
	Total	22	100	
	Valid	14	63.6	
Musharakah LC	Missing	8	36.4	3.00
	Total	22	100	

Note: Mean values are; 1 = sale, 2 = service, 3 = equity based.

As depicted in table 7.38, the study analysed the perception of participants about the nature of certain trade financing products as being sale-based, service-based or equity-based.

This confirms the categorization as discussed in Chapter 3. As demonstrated in the above table, the numbers of responses to some of the products were few (6 numbers). However, overall the responses confirm the nature of the products.

7.6.5 Challenges in Front of Islamic Trade Financing to be Alternative to Conventional Trade Financing

The perceptions of the participants on the perceived challenges for Islamic trade financing to be alternative to conventional trade financing were captured through the questionnaire survey. They are depicted in Table 7.39

Table 7.39: Challenges for Islamic Trade Financing to be Alternative to Conventional Trade Financing

Answers	Frequency	Percent	Mean	Standard Deviation
To Make Islamic Contracts	1	4.5		
Many TF products are not				
available in ITF <i>e.g.</i> Bill	1	4.5		
Discounting				
Higher risk in ITF	1	4.5	7.27	1.751
All of above	11	50.0		
Any other	1	4.5		
Missing	7	31.8		
Total	22	100.0		

The findings produced the following list of challenges:

- (i) Islamic Banking Law
- (ii) Islamic banking Knowledge
- (iii) To Make Islamic Contracts
- (iv) Many TF products are not available ITF e.g. Bill Discounting
- (v) Higher risk in Islamic TF
- (vi) Sometimes higher pricing in ITF
- (vii) Complex work flow
- (viii) All of above
- (ix) Any other

As can be seen, the majority responses were in favour of item-8 which indicated 'All of above'. The feedbacks of participants received through the survey provided valuable inputs to this study, not only in the prospects of trade financing products but also Islamic banking products in general. Above outcomes helped to further analyse, contextualize and derive conclusions, which are discussed in last Chapter 9 of this study.

7.6.6 Opportunities of Islamic Trade Financing in Becoming the Alternative to Conventional Trade Financing

This question was raised to get the feedback on the opportunities of Islamic trade financing in becoming the alternative to conventional trade financing. The perceptions of the participants were captured through the questionnaire survey. They are depicted in the table 7.40.

Table 7.40: Opportunities for Islamic Trade Financing (ITF) to be Alternative to Conventional Trade Financing

Answers	Frequency	Percent
All of above*	16	72.7
Missing	6	27.3
Total	22	100.0

List of opportunities are listed as follows:

- (i) Favourable demography of Islamic world
- (ii) Rising income level of Islamic communities
- (iii) Wrong notion about Islamic finance are clearing now
- (iv) Market is Big
- (v) Many products that available in CTF yet to be developed
- (vi) All of above *
- (vii) Any more.

Thus, the lists of opportunities are shown above. The majority responses were in favour of item-6 which indicated 'All of above'. The feedbacks of participants received through the survey provided valuable input for this study, not only in the prospects of trade financing products but also Islamic banking products in general. The above outcomes helped to derive conclusions which are discussed in Chapter 9 of this study.

7.6.7 Exploring the Need for Product Development in Islamic Trade Financing

This section aimed at exploring the participants' perceptions and opinions on the need for product development in Islamic trade financing. Though the question is very general in nature, the feedbacks received were useful information. They are discussed in the table below.

Table 7.41: The Need for Product Development in Islamic Trade Financing

Answers	Frequency	Percent	Mean
1. Customers need ITF	1	4.5	
2.Some Conventional Trade products still not available in ITF	1	4.5	2.00
Both: 1 and 2	13	59.1	2.88
Any other	1	4.5	
Missing	6	27.3	
Total	22	100.0	

Notes: Choices:

- 1. Customers need Islamic Trade Financing
- 2. Some Conventional Trade products still not available in Islamic TF
- 3. Both: 1& 2
- 4. Any other

As can be seen in Table 7.41, the majority of responses (59.1%) were in favour of item-3, which indicated 'both 1 and 2'. The perception of the participants reflected the positive feedback that customers are interested in Islamic trade financing products. However, as reflected from the output, some conventional trade financing products are not available in Islamic trade financing. It is also discussed in Chapter 3 that there is no good substitute to conventional bill discounting products to finance the exporter/seller. Therefore new product development is essential in Islamic banking. The above feedback from this research study helped to further analyse, contextualize and derive conclusions, which are discussed in the last chapter of this study.

7.7 SUMMARY AND CONCLUSION

This chapter determines the preliminary results through a descriptive analysis of the data collected through the survey questionnaire by using SPSS tools. As mentioned, a total of 22 banks were surveyed in 8 countries, where Islamic banking practices are active. Out of 22 banks, 18 banks were fully-fledged Islamic banks and 4 banks were Islamic windows. Among the banks surveyed,, a high percentage of them fall under

the middle range groups, *e.g.* 45.5% banks have a middle-sized branch network (51-100), 36.4% banks were established in the middle age period (1990-1999), and 36.4% have a mid-level employee strength (1001-2000) (see: Tables 7.2 to 7.5).

The main points of preliminary results derived from the descriptive analysis are as follows:

- (i) The study revealed that as high as 86.4% of banks' overall strategies include innovation and new product development. However the percentage of responses decreases while cascading down the overall strategy into various tools of implementation. For example, only 68% of banks possess any formal approach towards the innovation of new products, 59% have product development built into the annual operating plan of relevant business units, 59% of banks have an annual plan for the number of new products to be developed, and only 40% of banks allocate a budget for developing new products (reference Table 7.11). This revealed that although the overall strategies of banks on product development are ambitious, actual steps towards the implementation of strategies are diluted and not very focused.
- (ii) On the question of how would the bank think the strategic approach is related to product development, the following conclusions are drawn from the analysis (see: Table 7.12):
 - (a) 81.8% of banks considered that new product development is required to become leader in the market;
 - (b) 90.9% of banks considered that new product development is required to provide *Shari'ah*-compliant products that substitute conventional banking products available in the market.
- (iii) Some of the key initiative factors for product development in order of importance are (see: Table: 7.15)
 - (a) Product of another Islamic bank
 - (b) Initiative of own R & D team
 - (c) Demand from other internal departments
 - (d) Outcome of a market research
 - (e) Product of a conventional bank

- (iv) The study of the *Shari'ah* approval process depicts some important findings. As per the study, 100% of the participants from the sampled banks had *Shari'ah* advisory boards, 81.8% of the banks had in-house *Shari'ah* advisory boards, and 18.2% had *Shari'ah* boards shared with other organizations. The average numbers of *Shari'ah* scholars on the boards were less than 5. *Shari'ah* board members (especially the scholars) were not employees of the banks (see: Tables 7.22- 7.25). In 59.1% of the banks, the *Shari'ah* scholars' decisions were taken with majority agreement whereas 36.4% of the banks had it by unanimous agreement (see: Table 7.32).
- (v) Trade products were studied with special focus in this study. The initial findings from descriptive analysis showed some important results, which shows that trade products were based on sale/service and equity, which fully complied with *Shari'ah* guidelines. As depicted in Table 7.38, products like *murabahah* LC, pre-shipment finance, post-shipment finance, *etc.* are sales-based products. Products like issue of Letter of Credit, Guarantee, and documentary collections are service-based products. In addition, products like *musharakah* LC are equity-based product.

The study of trade financing products demonstrates a list of challenges and opportunities, which could be applicable to all other Islamic banking products as well. They are listed below

As Table 7.39 shows, the perceived challenges for Islamic trade financing banking. The findings support the points about challenges that discussed in the literature review section 3.6.4 of chapter 3. The findings are briefly discussed here.

First point is better understanding of Islamic banking law i.e. understanding of *Shari'ah* law will be helpful. As discussed in chapter 1, innovation and product development by understanding *Shari'ah* laws is a key challenge for Islamic banking. Secondly enhancement Islamic banking knowledge and to build up talent of the IB human capital is another challenge to deal with. Third, the Islamic banking products require special contracts which can be made easy by standardization of Islamic contracts and harmonization *Shari'ah* rulings are discussed in section 2.7 of chapter 2. Fourth there are some trade products such as bill discounting which is ether not available or having no standard solution. Therefore innovation and product development is a key to be addressed for ITF growth. Other challenges like higher

pricing and complex work flows can be addressed through solutions of innovation and standardization.

Opportunities are depicted in Table 7.40, which are as follows:

The findings support the points about opportunities that discussed in the literature review Chapter 3 (see: section 3.6.4).

First, the demography of Islamic world is helpful to the growth of Islamic trade finance banking. As discussed in the above section as trade is growing in countries with large Muslim populations, and innovation happening, Islamic trade finance is looking set to expand. Secondly, it is evidenced from the findings that the rising income level of Islamic communities will help the Islamic banking to grow. It has been discussed that countries like Indonesia, Bangladesh have shown good growth in Islamic banking during last decade. Rising income level is a factor of growth. Third point is wrong notion about Islamic finance is clearing now; which mean that as the innovation happening on the product side, Islamic trade finance is looking set to expand. Other points are also more or less covered in the literature in Chapter 3 (Section 3.6.4)

The descriptive statistical analysis presented in this chapter is substantiated with further inferential empirical analysis in Chapter 8 and discussion is presented in the subsequent Chapters 9.

CHAPTER 8

ASPECTS OF PRODUCT DEVELOPMENT IN ISLAMIC BANKS: INFERENTIAL STATISTICAL ANALYSIS

8.1: INTRODUCTION

This chapter is a continuation of the previous empirical chapter. In the previous chapter a descriptive analysis of the data is presented, while in this chapter the inferential analysis of the data is provided with focus given to the statistical significance of the independent or the control variables (IV or CV). The independent variables are drawn from the demographic information section of the survey utilised for this study, which constitute Section A of the survey questionnaire. The independent variables include the followings:

- (i) Location of Country
- (ii) Year of Establishment
- (iii) Ownership Structure
- (iv) Number of Branches
- (v) Number of Employees
- (vi) Nature of Islamic Business Activity
- (vii) Country Ranking
- (viii) World Ranking

In developing the empirical analysis in this chapter, inferential statistical tools in the form of non-parametric tests such as the Mann-Whitney U-Test and the Kruskal-Wallis test were used to find out the significance and mean values of the control variables of the survey questionnaire. The number of sub-group variables determines the nature of the test. If there are two variables in the selected group categories then the Mann-Whitney U-Test (MW-Test) is applied. However, if there are more than two variables in the selected group categories then the Kruskal-Wallis test (KW-Test) is

applied. It should be noted as evidenced in the normality test presented in the Research Methodology Chapter, since the data is not normal, non-parametric tests are utilised to analyse the data. Thus, the statistical analysis aims to measure the significance of the identified independent variables in determining the differences 9if any) given to each statement/questions by the participants.

Given that the questions (statements) of the survey are large in number for each control variable, this chapter presents results, which are statically significant at the 5% and 10% significance levels. Although the 5% significance level is considered standard in such questionnaire surveys, in order to capture results which are slightly more than 5%, the statistical significance level is expanded to 10%. However, statistical significance levels above 10% are not included in the tables. This implies that those results having significance levels above 10% are not considered significant for this study.

The results of the significance levels of 5% and 10% found through the Mann-Whitney U-Test (M-W) and Kruskal-Wallis (K-W) test are depicted under the tables hereafter.

8.2 INFERENTIAL ANALYSIS OF PERCEPTION OF PARTICIPANTS ON BANK STRATEGY AND PLANNING ON INNOVATION AND PRODUCT DEVELOPMENT

In the previous chapter, a detailed descriptive analysis was performed on the factors covered relating to the strategy and planning on the innovation and product development of the banks. Furthermore, through inferential statistical tools, the significance of some control variables on the statements of the questionnaire were analysed. While analysing the data, it was observed that the mean values of some independent variables showed significant differences that could fall within the reporting levels of 5% and 10%. Those significances are reported in the tables hereafter and analysed.

8.2.1 Analysing the Significance of Independent Variables on Innovation of New Products is being Part of Planning Process

By analysing statements related to product development being part of the planning process, as can be seen in Table 8.1, the mean ranks showed significant differences for the independent variable 'location of the country'.

Table 8.1: Significance of Control Variables (CVs) on the Statement/Question: *Is*

innovation of new products is a part of planning process?

Statement	Group (Control Variables)	Group Categories	N	Mean Rank	Asymp. Sig. (p)	Test
		Bangladesh	7	11.00		
Is innovation of		Indonesia	3	11.00		
new products is		Malaysia	1	22.00		
a part of	Location of	UAE	3	11.00	.004*	K-W Test
planning	Country	Kuwait	1	11.00	.004**	K-W Test
process?		Qatar	2	11.00		
		Saudi Arabia	4	11.00		
		Bahrain	1	11.00		

Note: (*) Statistically significant at 5% level; (**) statistically significant at 10%

As the findings in Table 8.1 shows, the significance level of the location as the independent variable determining the responses given on innovation of new products being part of the planning process is significant at 5% confidence level with a p value of 0.004. Table 8.1 depicted that the mean rank value generated by the responses of the individuals representing Malaysian banks had a wide gap compared to other countries under study, as the mean value for Malaysia is 22 whereas all other countries under the survey had 11. Thus, the results showed a significantly different result for only Malaysia compared to other countries like the GCC, Bangladesh and Indonesia. There has been a general perception in the Islamic banking market that the Malaysian model is different to other models; as the government provides a great deal of incentives to develop the industry. The finding of this survey supports the above general perception.

8.2.2 The Impact of Independent Variable of Nature of Business Activity

As can be seen in Table 8.2, data analysis through the non-parametric test (M-W) show significant difference for the independent variable 'nature of Islamic business activity' in relation to bank's mission or vision statement include innovation.

 Table 8.2: Significance of Control Variables on the Statement/ Question: Does

the bank's mission or vision statement include innovation?

Statement	Group (Control Variables)	Group Categories	N	Mean Rank	Asymp. Sig. (p)	Test
Does the banks mission or vision statement include innovation?	Nature of Islamic Business Activity	Full Fledged - Islamic Bank Islamic Window	18 4	10.61 15.50	.022*	M-W Test

Note: (*) Statistically significant at 5% level

As the findings in table 8.2 shows, the 'nature of Islamic business activity' is an important independent variable in this study, which is expressed as fully-fledged Islamic banks and banks with Islamic windows. Having two variables, the M-W Test was used to determine the significance. As per the findings, for the question on 'whether the bank's mission or vision statement includes innovation?', the significance level for this independent variable is achieved with a *p* value of 0.022. The findings show that mean rank value for fully-fledged Islamic banks was 18 while the value for banks having Islamic windows was only 4. This result is of significance in that in the strategy and planning process, the fully-fledged Islamic banks give more importance towards developing Islamic banking products compared to conventional banks having Islamic windows. This is because in order to compete in the market with Islamic as well as conventional banks, they need to meet customer requirements by developing new products. However, for banks having only Islamic windows, Islamic banking products are not the core business; rather they are a cross-sale or value addition business.

The cross tabulations between related statements and this particular independent variable (nature of Islamic business activity) are provided in tables 8.2a, 8.2b, and 8.2c to provide further evidence the differences.

Table 8.2a: Cross-tabulation: Does the Banks Mission or Vision Statement Include Innovation? vs Nature of Islamic Business Activity

Question/ Statement	Yes/ No	Nature of Isla Acti	Total	
		Full Fledge Islamic Bank	Islamic Window	
Does the banks mission or vision statement include innovation? Total	Yes No	17 94.4% 1 5.6% 18 100.0%	2 50.0% 2 50.0% 4 100.0%	19 86.4% 3 13.6% 22 100.0%

As the results in Table 8.2a depicts, the full-fledged bank representatives provides full support for having product invocation in their respective bank's mission and vision statement.

Table 8.2b: Cross-tabulation: Does the Bank Have a Formal Approach /Process for Innovation? vs Nature of Islamic Business Activity

Question/ Statement		Nature of Isla Acti	Total	
		Full Fledge Islamic Bank	Islamic Window	
Does the bank have a	Yes	15	2	17
formal approach		83.3%	50.0%	77.3%
/process for innovation?	No	16.7%	50.0%	22.7%
Total		18	4	22
		100.0%	100.0%	100.0%

As can be seen in Table 8.2b, 83.3% of the respondents from full-fledged Islamic banks stated that their respective banks have a formal approach to product development as opposed to 50% from the Islamic windows. This again demonstrates the pro-activity of full-fledge Islamic banks for product development.

Table 8.2c: Cross-tabulation: Is There an Annual Plan for the Number of New Products to be Developed? vs Nature of Islamic Business Activity

Question/ Statement	Yes / No/ Partially Yes	Nature of Islamic Business Activity		Total
		Full Fledge Islamic Bank	Islamic Window	
	Yes	12	2	14
Is there on annual plan	1 68	66.7%	50.0%	63.6%
Is there an annual plan for the number of new	M-	5	2	7
products to be	No	27.8%	50.0%	31.8%
developed?	Partially	1	0	1
-	Yes	5.6%	0.0%	4.5%
T-4-1		18	4	22
Total		100.0%	100.0%	100.0%

The cross-tabulation results in Table 8.2c shows that the percentages of positive responses from fully-fledged Islamic banks for the statement that they have an annual plan to develop new products are higher compared to Islamic windows.

Therefore, this finding reflects the perception that Islamic windows of conventional banks are not at the level of full Islamic banks in developing Islamic banking products.

8.2.3 Analysing the Impact of Independent Variables on the Overall Strategy of the Bank including Product Development

In examining as to whether the overall strategy of the sampled banks include product development, the non-parametric test (K-W) showed significant differences of mean ranks for the independent variable 'location of country', as depicted in Table 8.3, as the independent variable is significant at *p* value of 0.004.

Table 8.3: Significance of Control Variables on the Statement: Does the overall

strategy of the bank include product development?

Question/ Statement	Group (Control Variables)	Group Categories	N	Mean Rank	Asymp. Sig. (p)	Test
Does the overall		Bangladesh Indonesia	7 3	11.00 11.00		
strategy of the		Malaysia	1	22.00		
bank include	Location of	UAE	3	11.00	.004*	K-W Test
product	Country	Kuwait	1	11.00	.004	K-W Test
development?		Qatar	2	11.00		
		Saudi Arabia	4	11.00		
		Bahrain	1	11.00		

Note: (*) Statistically significant at 5% level;

Table 8.3 depicts that the mean rank value for country Malaysia had a wide gap compared to other countries under study, as the mean value for Malaysia is 22, compared to 11 produced by all other countries under survey, which implies proactivity of Malaysia. This again supports the perception that Malaysia is significantly different to other countries in terms of its approach to the development of Islamic finance industry.

8.2.4 Analysing the Impact of Independent Variables on Product Development Being Built into Annual Operating Plan of Relevant Business Units

In examining the impact of independent variables on as to whether the product development is being built into annual operating plan of the relevant business unit, the non-parametric test (K-W) showed significant differences of mean ranks for the control variable 'year of establishment', as is depicted in Table 8.4. As the findings show in Table 8.4, the independent variable 'year of establishment' was statistically significant at the 5% level with a p value of 0.041.

Table 8.4: Significance of Control Variables on the Statement: *Is the product development built into annual operating plan of relevant business units?*

Question/ Statement	Group (Control Variables)	Group Categories	N	Mean Rank	Asymp. Sig. (p)	Test
Is the product development built into annual operating plan of relevant business units?	Year of Establishment	Before 1970 - 1979 1980- 1989 1990 - 1999 2000 - 2009 2010 - 2014	3 5 8 4 1	7.50 16.80 8.63 12.00 7.50	.041*	K-W Test

Note: (*) Statistically significant at 5% level.

Table 8.4 depicts that the mean rank value of banks established between 1980-89 are at 16.8% (the highest), between 2000-2009 at 12%, and between 1990-99 at 8.63%. The mean value for other years was low with 7.5%. It is inferred from the findings that 'year of establishment' is a significant factor in product development; however, it is difficult to make a conclusion on the positive correlation between longevity and the answers provided for this particular statement.

8.2.5 The Impact of Independent Variables on the Strategic Approach related to Being Leader in Providing New Product to the Market

Be a leader in providing new product to the market.

In this section the main significant independent variable is 'number of employees' in relation to being leader in providing new product to the market. The non-parametric test (K-W) results in Table 8.5 showed significant differences of mean ranks for the control variable 'number of employees' for the above statement, which is significant at the p value of 0.045. As can be seen from the mean ranking, the banks with the smallest number of employees performed the highest mean ranking, while large banks in terms of number of employees showed similar performance in their mean ranking. However, it is not possible to draw a conclusive answer or establish a positive correlation between the number of employees and the answers given to the statement.

Table 8.5: Significance of Control Variables on the Statement: The strategic approach related to product development- Be a leader in providing new product to the market.

Question/ Statement	Group (Control Variables)	Group Categories	N	Mean Rank	Asymp. Sig. (p)	Test
Be a leader in providing new product to the market	Number of Employees	101 - 500 501 - 1000 1001- 2000 2001 - 5000 above 5000	1 4 8 5 2	19.50 9.50 10.75 9.50 9.50	.045*	K-W Test

Note: (*) Statistically significant at 5% level

It can be inferred from the findings that the size of banks in terms of the number of employees is a factor in the product development; however, a generalisation cannot be made. However, the results show that the perception is that banks having a mid-sized employee strength, i.e. between the ranges 1001 to 2000, are more active in developing new Islamic products than bigger ones.

8.2.6 Searching for Impact of Independent Variables on Providing *Shari'ah* Compliant Product to the Market that Substitutes Conventional Banking Products Available in the Market

As the results in Table 8.6 shows, the non-parametric test (M-W) showed significant differences of mean ranks for the control variable 'nature of Islamic business activity'

for the statement that the sampled banks provide *Shari'ah* compliant product to the market that substitutes conventional banking products available in the market; for which the results are depicted in table 8.6.

Table 8.6: Significance of Control Variables on the Statement: The strategic approach related to product development - Provide Shari'ah compliant product to the market that substitutes conventional banking products available in the market.

Statement	Group (CVs)	Group Categories	N	Mean Rank	Asymp. Sig. (p)	Test
Provide Shari'ah compliant product to the market that substitute conventional banking products available in the market.	Nature of Islamic Business Activity	Full Fledge Islamic Bank Islamic Window	17	10.50 13.13	.039*	M-W Test

Note: (*) Statistically significant at 5% level

As the results indicate in table 8.6, the differences in the opinions for the statement in relation to the nature of Islamic business activity is significant with p value of 0.039. As can be seen, Islamic window seems to be more related to this statement in terms of providing Islamic products to substitute conventional banking products; as the mean ranking value for Islamic windows is 13.13 as compared to 10.50 for full fledged Islamic banks.

8.2.7 Analysing the Impact of Independent Variables on Providing New Products when Existing Products Becomes Obsolete

In analysing the responses provided by the representative of the sampled banks on the statement that providing new products when existing products become obsolete non-parametric tests (K-W), the results in Table 8.7 show that significant differences of mean ranks are established for the independent variables 'year of establishment' and 'ownership structure'.

Table 8.7: Significance of Control Variables on the Statement: The strategic approach related to product development- Provide new products when existing products become obsolete.

Statement	Group (Control Variables)	Group Categories	N	Mean Rank	Asymp. Sig. (p)	Test
Provide new products when existing	Year of Establishment	1980- 1989 1990 - 1999 2000 - 2009 2010 - 2014	3 5 3 1	9.50 5.50 5.50 5.50	.086**	K-W Test
products become obsolete	Ownership Structure	Public Private Public-Private Mixed Government	2 5 3 2	5.50 5.50 9.50 5.50	.086**	K-W Test

Note: ** Statistically significant at 10% level

As the findings in Table 8.7 show, the control variable 'year of establishment' is significant at 10% level of significance with a p value of 0.086. As the results show the mean rank value of banks established during 1980 to 1989 is the highest with 9.5%. For banks established during subsequent periods, the mean rank value is at 5.5%.

This finding reveals that as a part of their strategic approaches, the banks established between 1980–1989, which are comparatively older generation banks (banks established between 1970–1979 did not respond to the question), make better planning to develop new products when the existing products become obsolete. This supports the assumption that the older generation of banks do realize the need to replace the obsolete products more than the new generation banks due to their experience and practical realization.

As for the 'ownership structure' as the significant independent variable, table 8.7 shows that it is significant also at 10% level of significance with a *p* value of 0.086. The results depict that the mean rank value of banks with public and private mixed ownership structures is highest with 9.5%, while banks with ownership structures of public, private and government have a mean rank value at 5.5% each. This finding reveals that banks with public and private joint ownership act differently on new products as part of their strategy compared to banks with different ownership. The perception is that due to their dual nature, they have the support of the government providing liquidity and the efficiency of the private sector.

8.2.8 Locating the Significant Independent Variables on the Competitive Advantage of an Islamic Bank in Developing New Products

In this section, the impact of significant independent variables are sought in relation to developing new products providing competitive advantage for the sampled banks, as it motivates some customers to switch over from conventional bank to the Islamic bank because they look for *Shari'ah* compliant business solutions. As the results in Table 8.8 show the non-parametric test (K-W) results show significant differences of mean ranks for the control variable 'year of establishment' with 6% level of significance and p value of 0.057.

Table 8.8: Significance of Control Variables on the Statement: The competitive advantage of an Islamic bank in developing new products- It motivates some customers to switch over from Conventional bank to the Islamic bank because they look for Shari'ah compliant business solutions.

Statement	Group (Control Variables)	Group Categories	N	Mean Rank	Asymp. Sig. (p)	Test
It motivates some customers to switch over from Conventional bank to the Islamic bank because they look for <i>Shari'ah</i> compliant business solutions	Year of Establishment	Before 1970 - 1979 1980- 1989 1990 - 1999 2000 - 2009 2010 - 2014	4 5 8 4 1	17.50 13.10 7.88 12.00 6.50	.057**	K-W Test

Note: (**) Statistically significant at 10% level

Table 8.8 depicts that the mean rank value of banks established during 1970 to 1979 is the highest with 17.5%. The banks established between the year 1980 to 1989 have the second highest mean rank value, while banks established during the subsequent periods have their mean rank reduced, except for the period 2000 to 2009 where the mean rank is 12.00%. This finding depicts that older banks place more emphasis on new products as part of their strategy compared to newer generation banks. However, it should be noted that making a direct correlation is rather difficult.

8.2.9 The Impact Of Independent Variables On Developing New Products Attracts Some New Customers to Use Islamic Banking

The non-parametric test (K-W) results in table 8.9 show significant differences of mean ranks for the control variable 'year of establishment' on developing new

products attracting some new customers to use Islamic banking by shifting from conventional banks, which provides competitive advantage.

Table 8.9: Significance of Control Variables on the Statement: The competitive advantage of an Islamic bank in developing new products- It attracts some new customers to use Islamic banking who avoid conventional banking

Statement	Group (Control Variables)	Group Categories	N	Mean Rank	Asymp. Sig. (p)	Test
It attracts some new customers to use Islamic banking who avoid conventional banking	Year of Establishment	Before 1970 - 1979 1980- 1989 1990 - 1999 2000 - 2009 2010 - 2014	4 5 8 4 1	15.50 14.70 8.38 8.38 17.00	.093**	K-W Test

Note: (**) Statistically significant at 10% level

The finding in Table 8.9 shows that the control variable 'year of establishment' is statistically significant with a *p* value of 0.093 at 10% level of significance. Table 8.9 depicts that the mean rank value of banks established during 1970 to 1979 is the highest with 15.5%, and banks established during 1980 to 1989 are at 14.70%. For banks established during subsequent periods, their mean rank values are in reducing order except for the period 2010 to 2014 where the mean rank was 17.00%. The finding supports the outcome similar to section 8.2.8 which depicted that older banks give more emphasis towards new products as part of their strategy compared to newer generation banks. It should again be noted that it is difficult to establish a fully significant trend as the differences of mean ranking for each category is shown.

8.2.10 The Impact of Independent Variable on Corporate customers' Borrowing of funds from Islamic Banks Enhances the Demand of their Shares in the Market

Table 8.10 analyses the significance of the control variable on the statement that 'the competitive advantage of an Islamic bank in developing new products because some corporate customers borrow funds from Islamic bank as it enhances the demand of their shares in the market'. The findings of the control variable 'ownership structure' are found to be significant with a p value of 0.016 at 5% level of significance.

Table 8.10: Significance of Control Variables on the Statement: The competitive advantage of an Islamic bank in developing new products- Some Corporate customers borrow funds from Islamic bank as it enhances the demand of their shares in the market.

Statement	Group (Control Variables)	Group Categories	N	Mean Rank	Asymp. Sig. (p)	Test
Some Corporate customers borrow funds from Islamic bank as it enhances the demand of their shares in the market	Ownership Structure	Public Private Public- Private Mixed Government Multinational Joint venture	4 7 5 5 1	5.00 13.29 17.70 7.80 12.50	.016*	K-W Test

Note: (*) Statistically significant at 5% level

Table 8.10 depicts that the mean rank value of banks with public and private mixed ownership structures is the highest with 17.70%. The mean rank values of other ownership structures are, respectively, for public banks is 5.0%, for private banks 13.29%, for government owned banks 7.8% and for multinational joint ventures is 12.5%. Thus, the banks with public and private joint ownership show significantly different strategies compared to banks with different ownership. The perception is that due to their dual nature, they have support of the government providing liquidity and the efficiency of the private sector.

8.2.11 Locating the Significant Independent Variables on Developing New Products Helping with the Islamic Banks to Become Pioneer Compared to other Islamic Banks

As the findings in Table 8.11 shows the 'year of establishment' is a significant independent variable on the statement 'the competitive advantage of an Islamic bank in developing new products- it helps the Islamic bank to become pioneer compared to other Islamic banks' which is significant at 5% level of significance with p value of 0.047.

Table 8.11: Significance of Control Variables on the Statement: The competitive advantage for an Islamic bank in developing a new product- it helps the Islamic bank to become pioneer compared to other Islamic banks

Statement	Group (Control Variables)	Group Categories	N	Mean Rank	Asymp. Sig. (p)	Test
It helps the Islamic bank to become pioneer compared to other Islamic banks	Year of Establishment	Before 1970 - 1979 1980- 1989 1990 - 1999 2000 - 2009 2010 - 2014	4 5 8 4 1	7.00 9.50 12.13 18.38 7.00	.047*	K-W Test

Note: (*) Statistically significant at 5% level

Table 8.11 depicts that the mean rank value of banks established during 2000 to 2009 is the highest with 18.38%, while the mean rank values of banks established during other periods increase in order of older to newer (except for 2010 to 2014). The values are, respectively, 7.0% for 1970 to 1979, 9.5% for 1980 to 1989 and 12.13% for 1990 to 1999. For 2010 to 2014, the mean rank value of 7.0% is a drop of an exceptional basis as they are very new competitors. It is clear that, the older generation banks' mean values are less than the new generation banks. It is depicted from the findings that the emphasis on developing new products increases with older to newer generation (with the exception of the very latest banks which probably are not in the competition). As the results show, while it is possible to draw some conclusions, it is rather difficult to reach conclusive results. However, the trend of newer banks giving more emphasis on developing new products indicates that they want to compete for survival and growth with new products.

8.3: INFERENTIAL ANALYSIS OF PERCEPTION OF PARTICIPANTS ON: PRODUCT DEVELOPMENT PROCESSES

In Chapter 7, a detailed descriptive analysis is presented on the factors relating to the product development processes being practiced by the banks under study. As mentioned earlier, section C of the questionnaire constitutes the main part of the research survey which covers resource position, initiatives/factors necessitating development of new products, approval processes, product development steps, inhouse product development guidelines, working of the cross-functional teams and others. In this section, the perceptions of the participants related to the product development processes are further analysed by using inferential statistical tools (M-W and K-W) to extract the significance of independent variables on the statements of the

questionnaire's C section. The significance of independent or control variables that could fall within the significance level of 5% and 10% are reported in the tables and analysed.

8.3.1 The Impact of Independent Variables on the Level at which Product Development Conducted

This section examines the responses given to the questions as to whether the product development is conducted at the divisional or departmental level in the participating banks. For this, cross-tabulation of the statement in relation to location of the country is conducted, and the results are displayed in Table 8.12.

8.12a: Cross-tabulation: Is the Product Development done at Division/ Department level? vs Location of Country

Statement/	Respons		Location of Country							
Question	е	Banglade sh	Indonesi a	Malays ia	UAE	Kuwait	Qatar	Saudi Arabia	Bahrain	
Is the product	V	2	3	1	2	1	2	3	1	15
development done at Division/	Yes	28.6%	100.0%	100.0%	100.0%	100.0%	100.0%	75.0%	100.0%	71.4%
department	N-	5	0	0	0	0	0	1	0	6
level?	No	71.4%	0.0%	0.0%	0.0%	0.0%	0.0%	25.0%	0.0%	28.6%
	Total	7	3	1	2	1	2	4	1	21
	Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

The cross-tabulation analysis results in 8.12a confirm that 71.4% of banks in Bangladesh expressed 'No' for the question. This confirms the fact that, for Bangladesh, product development is done centrally. Bangladesh has a central *Shari'ah* board named the 'Central *Shari'ah* Board for Islamic Banks of Bangladesh' under the patronage of the Central Bank, which plays an important role in the development and standardization of products centrally.

The study depicts the exceptional nature of the Islamic banks in Bangladesh with product development, as for Islamic banks in Bangladesh, product development is done centrally and not at the division level as opposed to other sampled Islamic banks from various countries.

8.3.2 Inferential Results on Product Development Team

The non-parametric test (K-W) showed significant differences of mean ranks for the control variables 'year of establishment' and 'number of employees' for the number of product development team, as depicted in Table 8.13.

Table 8.13: Significance of Control Variables on the Statement: *If there is a Product development team, how many people work in the Product development team?*

Statement/ Question	Group (Control Variables)	Group Categories	N	Mean Rank	Asymp. Sig. (p)	Test
How many people work in the Product	Year of Establishment	Before 1970 - 1979 1980- 1989 1990 - 1999 2000 - 2009 2010 - 2014	1 2 6 4 1	8.00 5.50 10.00 3.13 13.50	.055**	K-W Test
development team	Number of Employees	101 - 500 501 - 1000 1001- 2000 2001 - 5000 above 5000	1 2 5 4 2	1.00 3.00 8.30 11.38 5.50	.061**	K-W Test

Note: (*) Statistically significant at 5% level; (**) Statistically significant at 10%

As the results show in Table 8.13, there are two control variables with significant outcomes. As can be seen, the independent variable 'year of establishment' is significant with a p value of 0.055. Table 8.13 depicts that the banks established during the period 1990-1999 have a higher mean rank value at 10.0% compared to banks established during other periods, except one during the period 2010-2014.

In addition, the findings of the control variable 'number of employees' is significant with a p value of 0.061. Table 8.13 depicts the trend of increasing mean values with the number of employees except for the largest bank. The mean value is the highest with 11.38% for the number of employees in the range 2001-5000 and second highest for the range 1001 to 2000. However it decreases for employee strength above 5000.

The study showed that middle-aged Islamic banks established during the period 1990-1999 have a greater number of employees engaged in the new product development process. In addition, the results show that the number of employees employed in the product development team increased with staff strength (with the exception of very large banks having employees above 5,000).

8.3.3 Determining Variables of Reporting Body of the Product Development Team

Table 8.14 reports the results of the analysis of the significance of the control variable on the questionnaire in the survey: 'to whom the product development team reports?'. As the results show, three control variables, namely variables 'nature of Islamic business activity', 'location of the country' and 'year of establishment' found to be significant below the 10% significance level.

Table 8.14: Significance of Control Variables on the Statement: To whom the

product development team reports?

Statement/ Question	Group (Control Variables)	Group Categories	N	Mean Rank	Asymp. Sig. (p)	Test
	Nature of Islamic Business Activity	Full Fledge Islamic Bank Islamic Window	14 3	8.25 12.50	.097**	M-W Test
To whom the product development team reports?	Location of Country	Bangladesh Indonesia Malaysia UAE Kuwait Qatar Saudi Arabia	5 2 1 2 1 2 4	13.70 6.50 6.50 9.75 6.50 6.50	.098**	K-W Test
	Year of Establishment	Before 1970 - 1979 1980- 1989 1990 - 1999 2000 - 2009 2010 - 2014	3 3 6 4 1	6.50 6.50 13.58 6.50 6.50	.017*	K-W Test

Note: (*) Statistically significant at 5% level; (**) Statistically significant at 10%

As the findings in Table 8.14 show, the independent variable 'nature of Islamic business activity' is significant with a p value of 0.097. Table 8.14 depicts a clear difference between Islamic banks and banks with Islamic windows. The mean rank value as determined by the Mann Whitney test is 8.25% for fully-fledged Islamic banks and 12.5% for Islamic windows. It is obvious that banks with Islamic windows focus less on developing Islamic products. Similarly, the reporting lines of the product development teams in Islamic banks are different to Islamic windows.

The finding of the independent variable 'location of the country' is significant with a p value of 0.098. As shown in Table 8.14 for the country Bangladesh, the mean rank value is highest with 13.70%. Analysing the responses of the survey questionnaire, it

is found that for Bangladesh the product developments are done centrally as discussed earlier.

The finding of the control variable 'year of establishment' is significant as well with a p value of 0.017. Table 8.14 depicts that the banks established during the period 1990-1999 have the highest mean rank value with 13.58% compared to banks established during other periods.

This study, hence, depicts that the constituents of product development teams including the number of people and the reporting line is different in Islamic banks compared to banks with Islamic windows. Secondly, the constituents of the product development teams of Bangladesh banks are different than that of other countries under study. Similarly, the banks established during the period 1990-1999 have comparatively stronger product development teams compared to banks established during other periods.

8.3.4 Determining Variables for the Available Human Resources in the Respective Banks for Product Development

Table 8.15 analyses the significance of the independent variables on the statement that people related resources availability in the sampled banks, which shows that 'number of employees' is significant at about 10% level of significance. Table 8.15 depicts that the mean rank value is the highest with 15.19% for the number of employees in the range 1001-2000.

Table 8.15: Significance of Control Variables on the Statement: Resources available in your bank for product development-People

Statement	Group (Control Variables)	Group Categories	N	Mean Rank	Asymp. Sig. (p)	Test
Resources available in your bank for product development- People	Number of Employees	101 - 500 501 - 1000 1001- 2000 2001 - 5000 above 5000 Total	1 5 8 6 2 22	6.00 12.90 15.19 8.75 4.25	.103*	K-W Test

Note: (*) Statistically significant at 5% level; (**) Statistically significant at 10%

8.3.5 The Determining Variables of the Cross-functional Team Work after the Product Launched

Table 8.16 depicts the significance of the control variable on the question: when a product is launched how the cross-functional teams work to carry out their part of the function? The choices given for this question are: 'a permanent SLA between the functional teams', 'different SLA for different products', 'an informal or *adhoc* arrangement between the functional teams'. The results in Table 8.16 show that the mean rank value of the full Islamic banks and Islamic windows are different with values of 10.3% and 18.13% respectively.

Table 8.16: Significance of Control Variables on the question: *When a product is launched how the cross-functional teams work to carry out their part of the function?*

Statement	Group (Control Variables)	Group Categories	N	Mean Rank	Asymp. Sig. (p)	Test
When a product is launched how the cross-functional teams work to carry out their part of the function?	Nature of Islamic Business Activity	Full Fledge Islamic Bank Islamic Window Total	18 4 22	10.03 18.13	.015	M-W Test

Note: (*) Statistically significant at 5% level

However, the Mann Whitney test results do not show the values inside the statement, and therefore the SPSS cross-tabulation tool is used to further analyse the case. As depicted in table 8.16a, for fully-fledged Islamic banks, 39.9% have permanent SLA, 50% have different SLA for different products and 11.1% have *adhoc* arrangements. However, for Islamic windows, the responses were 0%, 25% and 75% respectively for the same categories. Therefore, it is clear that the cross-functional teams (departments) work more closely with formal SLAs between each other when a new Islamic product is launched. That is not the case for Islamic windows of conventional banks. This is obviously due to the fact that full Islamic banks place more emphasis on new product development for their own survival and to attract customers. However for banks having Islamic windows, the development of new Islamic products is not so essential.

Table 8.16a: Cross-tabulation: When a Product is Launched How the Cross-Functional Teams Work to Carry Out Their Part of the Function? vs Nature of Islamic Business Activity

Statement	Responses	Nature of Is Business A	Total	
		Full Fledge Islamic Bank	Islamic Window	
When a product is launched how the cross-functional teams work to carry out their part of the function	Permanent SLA between the functional teams to carry out the business	7 38.9%	0.0%	7 31.8%
	Different SLA for different products	9 50.0%	1 25.0%	10 45.5%
	Informal /adhoc request from product owners to other functional teams	11.1%	3 75.0%	22.7%
Total		18 100.0%	4 100.0%	22 100.0%

8.4: INFERENTIAL ANALYSIS OF PERCEPTION OF PARTICIPANTS ON PRODUCT DEVELOPMENT PROCESSES IN RELATION TO *SHARI'AH* APPROVAL

Previously in Chapter 7, a detailed descriptive analysis is provided on the factors covered under this section relating to the Shari'ah approval processes for new product development. This section aims to examine the perceptions of the participants are by using inferential statistical tools (M-W and K-W) to extract the significance of certain independent variables on the statements of the questionnaire. Significant independent vari8ables that could fall within the reporting levels of 5% and 10% are reported in the tables and analysed.

8.4.1 Determining Variables of Existence of a *Shari'ah* Research Unit in the Sampled Banks

As the findings in Table 8.17 show, the independent variable 'nature of Islamic business activity' is significant at 10% level of significance Table 8.17 depicts a clear difference between Islamic banks and banks with Islamic windows. The mean rank value as determined by the Mann Whitney test is 8.07% for fully-fledged Islamic banks and 11.5% for Islamic windows.

Table 8.17: Significance of Control Variables on the Statement: *Shari'ah research unit exist in your bank?*

Statement	Group (Control Variables)	Group Categories	N	Mean Rank	Asymp. Sig. (p)	Test
Shari'ah research unit exist in your bank	Nature of Islamic Business Activity	Full Fledge Islamic Bank Islamic Window Total	14 2 16	8.07 11.50	.097**	M-W Test

Note: (**) Statistically significant at 10% level

The analysis is further through cross-tabulation analysis and the findings are reported in Table 8.17a.

Table 8.17a: Cross-tabulation: *Shari'ah* Research Unit Exist in Your Bank? vs Nature of Islamic Business Activity

Statement	Response	Nature of Islamic Bu	Total	
		Full Fledge Islamic Bank	Islamic Window	
Shari'ah research	Yes	13 92.9%	1 50.0%	14 87.5%
unit exist in your bank	No	1 7.1%	1 50.0%	2 12.5%
	Total	14 100.0%	2 100.0%	16 100.0%

The cross-tabulation analysis in Table 8.17a shows that 92.9% of Islamic banks agree that they have *Shari'ah* research units but only 50% of the banks with Islamic windows agree on having *Shari'ah* research units. The study confirms the perception that most fully-fledged Islamic banks have *Shari'ah* research units but banks with Islamic windows may or may not have *Shari'ah* research units.

8.4.2 Determinants of Shari'ah Advisory Unit in the Sampled Banks

The non-parametric test (M-W) results in Table 8.18 showed significant differences of mean ranks for the control variable 'nature of Islamic business activity' for the questions as to whether the sampled banks have in house *Shari'ah* advisory unit.

Table 8.18: Significance of Control Variables on the Statement: Shari'ah advisory

unit exist in your bank

Statement	Group (Control Variables)	Group Categories	N	Mean Rank	Asymp. Sig. (p)	Test
Shari'ah		Full Fledge Islamic Bank	16	9.50		
advisory unit exist in your	Nature of Islamic Business Activity	Islamic Window	3	12.67	.021*	M-W Test
bank		Total	19			

Note: (*) Statistically significant at 5% level; (**) Statistically significant at 10%

As the results in Table 8.18 show, the control variable 'nature of Islamic business activity' is significant with a p value of 0.021. Table 8.18 depicts a clear difference between Islamic banks and banks with Islamic windows. The mean rank value as determined by the Mann Whitney test is 9.5 for fully-fledged Islamic banks and 12.67% for banks with Islamic windows.

In further examining the results, the cross-tabulation in Table 8.18a depicts that 100% of fully-fledged Islamic banks have *Shari'ah* advisory units but only 66.7% of banks with Islamic windows have *Shari'ah* advisory units.

Table 8.18a: Cross-tabulation: *Shari'ah* Advisory Unit Exists in Your Bank? vs Nature of Islamic Business Activity

Statement	Response	Nature of Islamic Bu	Total	
		Full Fledge Islamic	Islamic	
		Bank	Window	
		16	2	18
Shari'ah advisory unit exist in your	Yes	100.0%	66.7%	94.7%
bank	No	0	1	1
ounk	110	0.0%	33.3%	5.3%
	Total	16	3	19
	1 Otal	100.0%	100.0%	100.0%

The study finds a diversified position between fully-fledged Islamic banks and banks having Islamic windows. The result supports the assumption that most fully-fledged Islamic banks have *Shari'ah* advisory units, and all the banks with Islamic windows may not have *Shari'ah* advisory units.

8.4.3 Determining Factors of Existence of Shari'ah Coordinator

Table 8.19 analyses the significance of the control variable on the question: 'does your bank have a *Shari'ah* coordinator?'. The finding of the control variable 'ownership structure' is significant at 10% confidence level with a p value of 0.085. As the results in Table 8.19 depicts, the mean rank value of 'multinational joint venture' banks is the highest with 19.00%, for private it is 14.29%, for public-private mix it is 12.4% and for others it is 8% each.

Table 8.19: Significance of Control Variables on the Question: *Does your bank have a Shari'ah coordinator?*

Statement/ questions	Group (Control Variables)	Group Categories	N	Mean Rank	Asymp. Sig. (p)	Test
Does your bank have a <i>Shari'ah</i> coordinator?	Ownership Structure	Public Private Public- Private Mixed Government Multin'l Joint venture Total	4 7 5 5 1 22	8.00 14.29 12.40 8.00 19.00	.085**	K-W Test

Note: (**) Statistically significant at 10% level

8.4.4. Determining Factors of Period Necessary for Shari'ah Approval

Table 8.20 analyses the significance of the control variable on the question: 'How many days it usually takes to get *Shari'ah* approval?'. The findings of the control variable 'Year of Establishment' is significant at the 5% confidence level with a p value of .030.

Table 8.20 depicts that the mean rank value of banks established during 1990 to 1999 is the highest with 16.75%. The second highest is 11.30% for banks established

during 1980 to 1989. The mean rank values for banks established during other periods are 6.5% for 1970-1979, 8.25% for 2000-2009 and 3.50% for 2010-2014.

It is revealed from the finding that the second generation banks that were established during the period 1990 to 1999 are significantly different compared to banks established in other periods for the control variable of *Shari'ah* approval days.

Table 8.20: Significance of Control Variables on the Question: How many days it

usually takes to get Shari'ah approval?

Statement/ question	Group (Control Variables)	Group Categories	N	Mean Rank	Asymp. Sig. (p)	Test
How many days it usually takes to get <i>Shari'ah</i> approval	Year of Establishment	Before 1970 - 1979 1980- 1989 1990 - 1999 2000 - 2009 2010 - 2014 Total	4 5 8 4 1 22	6.50 11.30 16.75 8.25 3.50	.030*	K-W Test

Note: (*) Statistically significant at 5% level; (**) Statistically significant at 10%

The analysis is further expanded by cross-tabulation analysis and the results are reported in Table 8.20a.

Table 8.20a: Cross-tabulation: How Many Days it Usually Takes to get *Shari'ah* Approval? vs Year of Establishment

Statement	Response		Year	of Establishr	nent		Total
		Before 1970 - 1979	1980- 1989	1990 - 1999	2000 - 2009	2010 - 2014	
	1: Within7	2	1	0	2	1	6
	days	50.0%	20.0%	0.0%	50.0%	100.0%	27.3%
	2. 20 days	2	2	1	1	0	6
TT 1 2	2: 30 days	50.0%	40.0%	12.5%	25.0%	0.0%	27.3%
How many days it usually takes to get	3: 60 days	0	1	1	0	0	2
Shari'ah approval		0.0%	20.0%	12.5%	0.0%	0.0%	9.1%
	4: 90 days	0	0	3	1	0	4
	4. 90 days	0.0%	0.0%	37.5%	25.0%	0.0%	18.2%
	5: more than	0	1	3	0	0	4
	90 days	0.0%	20.0%	37.5%	0.0%	0.0%	18.2%
		4	5	8	4	1	22
	Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

The cross-tab Table 8.20a shows that a good percentage of banks established during 1990-1999 indicated that they took a longer time for *Shari'ah* approval compared to other periods. Therefore, it is significantly different. This is true as comparing all banks together, 54.6% (27.3 +27.3) of banks reported that they have *Shari'ah* approvals within 7 days to 1 month.

8.4.5 Inferential Analysis on The Process through which the Opinion of *Shari'ah* Scholars Taken into Consideration

This is another important statement for getting information about the *Shari'ah* approval process. Table 8.21 analyses the significance of the control variable on the question: 'How the opinion of *Shari'ah* scholars taken into consideration? 'The findings of the control variable 'ownership structure' is significant with a p value of .093 at the 10% confidence level. Table 8.21 depicts that the mean rank value of banks with public ownership structures is the highest with 15.0%. For public-private mixed banks and government banks the mean rank values are 12.9% and 12.38% respectively. For other ownership banks, the mean rank values are less.

Table 8.21: Significance of Control Variables on the Question: *How the opinion of Shari'ah scholars taken into consideration?*

Statement/ questions	Group (Control Variables)	Group Categories	N	Mean Rank	Asymp. Sig. (p)	Test
How the opinion of <i>Shari'ah</i> scholars taken into consideration	Ownership Structure	Public Private Public- Private Mixed Government Multinational Joint venture Total	4 7 5 5 1 22	15.00 7.50 12.90 12.38 4.50	.093**	K-W Test

Note: (**) Statistically significant at 10% level

In further expanding this particular issue, cross-tabulation analysis is conducted; and the results are reported in Table 8.21.

Table 8.21.a: Cross-tabulation: How the Opinion of *Shari'ah* Scholars Taken Into Consideration vs Ownership Structure

Statement	Responses		(Ownership Stru	icture		Total
		Public	Private	Public- Private Mixed	Govern ment	Multination al Joint venture	
	Unanimous agreement	0	5	1	1	1	8
How the opinion of		0.0%	71.4%	20.0%	25.0%	100.0%	38.1%
Shari'ah scholars taken into consideration?	Majority agreement	4	2	4	3	0	13
		100.0%	28.6%	80.0%	75.0%	0.0%	61.9%
	Total	4	7	5	4	1	21
		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

As per cross-tabulation analysis in Table 8.21a, under public sector all the 4 bank types (100%) show that the opinions of *Shari'ah* scholars are taken on a majority agreement basis although others are different. Therefore, the independent variable of 'public ownership structure' is significantly different compared to other ownership types of the sampled banks. By taking all banks together, it is depicted that 61.9% of banks reported that the opinions of *Shari'ah* scholars are taken on a majority basis.

8.4.6 Determining Factors of the Frequency of *Shari'ah* Audit of the New Products

Table 8.22 depicts the significance of the independent variable on the question: 'how frequently *Shari'ah* audit takes place to audit the product?'. The results show that only the 'year of establishment' is significant with a p value of 0.032. Table 8.22 depicts that the mean rank value increases in order of older to newer banks: the mean rank value of older years of establishment in the range 1970–1979 is 8.13% and is

20% for younger ones in the range 2010-2014, and this shows statistically high difference levels.

Table 8.22: Significance of Control Variables on the Question: *How frequently*

Shari'ah audit takes place to audit the product?

Statement/ question	Group (Control Variables)	Group Categories	N	Mean Rank	Asymp. Sig. (p)	Test
How frequently Shari'ah audit takes place to audit the product	Year of Establishment	Before 1970 - 1979 1980- 1989 1990 - 1999 2000 - 2009 2010 - 2014 Total	4 5 7 3 1 20	8.13 6.00 11.43 15.83 20.00	.032	K-W Test

Note: (*) Statistically significant at 5% level

The analysis is further developed through cross-tabulation and the results are reported in Table 8.22a.

Table 8.22a: Cross-tabulation: How Frequently Shari'ah Audit Takes Place to Audit the Product? vs Year of Establishment

Statement	Response		Ye	ear of Establisl	nment		Total
		Before 1970 - 1979	1980- 1989	1990 - 1999	2000 - 2009	2010 - 2014	
	1 time in a	3	5	3	0	0	11
	year	75.0%	100.0%	42.9%	0.0%	0.0%	52.4%
	2 times in a	0	0	1	0	0	1
	year	0.0%	0.0%	14.3%	0.0%	0.0%	4.8%
How frequently	3-4 times in	1	0	1	2	0	4
Shari'ah audit takes place to	a year	25.0%	0.0%	14.3%	50.0%	0.0%	19.0%
audit the	Once in a	0	0	1	0	0	1
product	month	0.0%	0.0%	14.3%	0.0%	0.0%	4.8%
	Not	0	0	1	1	0	2
	Applicable	0.0%	0.0%	14.3%	25.0%	0.0%	9.5%
	Whenever	0	0	0	1	1	2
	required	0.0%	0.0%	0.0%	25.0%	100.0%	9.5%
	Total	4	5	7	4	1	21
	Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

The cross-tabulation analysis in Table.27a shows that older generation banks, namely 1970-1999 have *Shari'ah* audits once a year and newer banks have it more times in a year.

The perception from the finding is that for older banks the products are stabilized and so the frequency of *Shari'ah* audits is less, that is once a year. However, newer banks

have a greater frequency of *Shari'ah* audit to make sure that the products are running in a *Shari'ah* compliant manner.

By taking all banks together, it is depicted that 52.4% of banks reported that the frequency of *Shari'ah* audit is once a year. Therefore any frequency different than this is statistically different.

8.5: INFERENTIAL ANALYSIS OF PERCEPTION OF PARTICIPANTS ON: ISLAMIC TRADE FINANCING ACTIVITIES IN THE SAMPLED BANKS

Chapter 7 provides descriptive analysis for the data related to trade financing activities in the banks under study. In the current section, the data is further analysed by using inferential statistical tools (M-W and K-W) to identify the determining factors on the statements of the questionnaire. However, only the significant results are reported.

As mentioned in chapter 7, trade financing is a technical area and thus the level of participation of the respondents was comparatively little. However, the responses received through the survey provided reasonable insight that helped in contextualising the findings and making an interpretive discussion in the last chapter.

8.5.1 Determining Variables of the Number of Staff in the Trade Finance Department

Table 8.23 reports the significant control variable on the question as to 'how many staff works in your trade finance department?'. The findings of the independent variable 'number of employees' is significant with a p value of 0.038. Table 8.23 depicts that the mean rank value is the highest with 16.00% for the number of employees in the range above 5000. The next mean rank is 11.33% for the number of employees in the range 1001–2000, and with this employee range a maximum number of 9 banks responded to the question. Thus, the study depicts that banks with employee strengths of 1001-2000 have a greater number of staff strength in their trade finance department. However, a general trend cannot be established nor is there a case for positive correlation.

Table 8.23: Significance of Control Variables on the Statement: How many staff

works in your Trade finance dept.

Statement	Group (Control Variables)	Group Categories	N	Mean Rank	Asymp. Sig. (p)	Test
How many staff work in your Trade finance dept.	Number of Employees	101 - 500 501 - 1000 1001- 2000 2001 - 5000 above 5000 Total	1 2 9 4 2 18	4.00 1.50 11.33 7.50 16.00	.038*	K-W Test

Note: (*) Statistically significant at 5% level

As for the results in cross-tabulation analysis, the results in Table 8.23a shows that, with the employee strength of 1000-2000, more numbers of banks have a staff strength between the 21-50 range in the trade finance department. Therefore, the study supports the perception that mid-sized (in terms of staff) banks are better staffed in their trade finance department compared to other sized banks.

Table 8.23a: Cross-tabulation: How Many Staff in Your Trade Finance Department? vs Number of Employees

Statement	Range		Nu	mber of Empl	loyees		Total
		101 - 500	501 - 1000	1001-2000	2001 - 5000	above 5000	
	1 to10	1	2	0	2	0	5
	11 to 20	0	0	1	0	0	1
How many staff in your	21 to 50	0	0	5	2	0	7
Trade finance dept.	51 to 100	0	0	2	1	1	4
	Above 100	0	0	1	0	1	2
Total		1	2	9	5	2	19

8.5.2 Factors Determining the Responses in Relation to the Number of Staff Working in Trade Finance Department

Table 8.24 reports the analysis on the question as to 'How many staff works in your trade finance department'. As the results show, the independent variable 'year of establishment' is found significant with a p value of 0.038. Table 8.24 depicts that the mean rank value of banks established during the period 1980-1989 is the highest with 16.50%.

It is, thus, revealed from the finding that the year of establishment is a significant factor for the staff strength in the trade finance business. The second generation of

Islamic banks established during 1980-1989 put more staff (51-100 range) in the trade finance department. Therefore, the study supports the perception that mid-aged or second-generation banks are better staffed in their trade finance departments compared to other sized banks. This is evidenced in cross-tabulation analysis in Table 8.24a.

Table 8.24: Significance of Control Variables on the Question: How many staff

works in your Trade finance department?

Statement/ question	Group (Control Variables)	Group Categories	N	Mean Rank	Asymp. Sig. (p)	Test
How many staff work in your Trade finance dept.	Year of Establishment	Before 1970 - 1979 1980- 1989 1990 - 1999 2000 - 2009 2010 - 2014 Total	3 8 4 1 19	11.83 16.50 10.38 4.75 3.00	.038*	K-W Test

Note: (*) Statistically significant at 5% level

Table 8.24a: Cross-tabulation: How Many Staff in Your Trade Finance Department? vs Year of Establishment

Statement	Range		Year	of Establishm	nent		Total
		Before 1970 - 1979	1980- 1989	1990 - 1999	2000 - 2009	2010 - 2014	
How many staff in	1 to10	0	0	1	3	1	5
	11 to 20	0	0	1	0	0	1
How many staff in your Trade finance	21 to 50	2	0	4	1	0	7
dept.	51 to 100	1	2	1	0	0	4
	Above 100	0	1	1	0	0	2
Total		3	3	8	4	1	19

8.5.3 Analysing the Responses in Relation to the Rationale for Product Development in Islamic Trade Financing

The non-parametric test (M-W) showed significant differences of mean ranks for the control variable 'nature of Islamic business activity' in relation to as to why there is a need for product development in Islamic trade financing. The results are depicted in Table 8.25. As the findings show the control variable 'nature of Islamic business activity' is significant with a p value at 0.093%. The mean rank value as determined

by the Mann Whitney test is 7.85 for fully-fledged Islamic banks and 11.33% for banks with Islamic windows.

Table 8.25: Significance of Control Variables on the Statement: Why there is a need for product development in Islamic trade financing?

Statement	Group (Control Variables)	Group Categories	N	Mean Rank	Asymp. Sig. (p)	Test
Why there is a need for product development in Islamic trade financing?	Nature of Islamic Business Activity	Full Fledge Islamic Bank Islamic Window Total	13 3 16	7.85 11.33	.093**	M-W Test

Note: (**) Statistically significant at 10% level

The cross-tabulation result in Table 8.25a shows that 84.4% of fully-fledged Islamic banks chose option 3, *i.e.* agree on both choices 1 & 2, while only 66.7% Islamic windows chose option 3. The findings reflect that both types of banks agree customers need ITF (Islamic trade finance) and some products are not available in CTF (conventional trade finance); therefore there is a need for the development of ITF products. However, fully-fledged Islamic banks comparatively give more importance towards this.

Table 8.25a: Cross-tabulation: Nature of Islamic Business Activity vs Why There is a Need for Product Development in Islamic Trade Financing?

Question/ Statement	Responses	Nature of Islamic Business Activity		Total
		Full Fledge Islamic Bank	Islamic Window	
	1.Customers need ITF	1	0	1
Why there is a need for product development in Islamic trade financing?	(Islamic Trade Finance)	7.7%	0.0%	6.2%
	2.Some CTF products still not available in ITF	1	0	1
		7.7%	0.0%	6.2%
	3.Both: 1 & 2	11	2	13
		84.6%	66.7%	81.2%
	Any other	0	1	1
		0.0%	33.3%	6.2%
	Total	13	3	16
		100.0%	100.0%	100.0%

8.5.4 Analysing the Reponses on New Trade Financing Product Under Development

Table 8.26 analyses the significance of the control variable on the question: 'Any new trade financing product under development?'. The results show that the independent variable 'ownership structure' is found to be significant at the 5% confidence level with a p value at 0.049. Table 8.26 depicts that the mean rank value value of banks with private ownership and multinational joint venture are the highest with 10.00%. So the difference levels are high for them. For government banks, the mean rank values are 7.83%.

Table 8.26: Significance of Control Variables on the Question: Any new trade

financing product under development?

Statement/ questions	Group (Control Variables)	Group Categories	N	Mean Rank	Asymp. Sig. (p)	Test
Any new trade financing product under development?	Ownership Structure	Public Private Public- Private Mixed Government Multinational Joint venture Total	2 4 3 3 1 13	3.50 10.00 3.50 7.83 10.00	.049*	K-W Test

Note: (*) Statistically significant at 5% level

8.6 CONCLUSION

This chapter provides the statistical significance of the independent variables in relation to the various statements raised through the survey questionnaire with an attempt to understand the product development process in the sampled Islamic banks. For this, as mentioned, the data generated from a questionnaire survey utilised by focusing on the major pillars of product development in Islamic banks such as strategy, product development processes, and the *Shari'ah* approval process as well as exploring Islamic trade financing products related issues. A number of independent variables were tested in relation to the questions and statements in the questionnaire to locate the significance of the control variables.

Statistical tools like the Mann-Whitney U-test (MW) and the Kruskal-Wallis (KW) test were used to find the significance and mean values of the control variable of the survey questionnaire. Also, wherever required, the cross-tabulation tool was used to breakdown the group variables against the statements and explain the significance.

The most significant independent variable in the study found to be the 'nature of Islamic business activity'. The behaviour of fully-fledged Islamic banks showed significant variance with the banks having Islamic windows. The pattern of outcome was produced against many statements/questions.

The second prominent control variable is the 'location of country' of the sampled banks. The findings indicated that the strategies and product development process in Malaysia vary with Bangladesh and that in the GCC.

The third control variable the 'age of the Islamic bank' influences its strategy and the practice of product development and showed some significant results.

Fourth, the size of the Islamic bank in terms of the 'number of employees' is also found to be an important determining factor.

Fifth, the 'ownership structure' is another factor of influence that showed some significance in relation to a number of statements and questions.

Other control variables such as 'country ranking' and 'world ranking' did not show any significance through the MW and KW tests, and therefore are not discussed in the chapter.

In should be noted that the findings established in this chapter are further explored and discussed in a contextualized manner in Chapter 9 with the objective of providing further reflection and meaning making.

CHAPTER 9

CONTEXTUALIZATION, DISCUSSIONS AND CONCLUSION

9.1. SUMMARISING THE RESEARCH PROCESS AND FINDINGS

This research aimed at exploring the product development process in Islamic banks by making reference to nature of processes and factors affecting the particular process of product development. The literature review in Chapter 2 highlighted that the Islamic banking industry is much younger compared to the conventional banking industry; and as a result, the Islamic banking products are less in numbers to meet customers' needs. Developing new products through innovative process is, therefore, an essential requirement for the sustenance and growth of Islamic banks. Unlike the conventional banking products, which are mostly standardized due to established practices, the Islamic banking products are complex in nature mainly due to *Shari'ah* compliancy process and its legal and moral requirements, as they represent emergent practices. Therefore, conducting an in-depth study on the product development process in Islamic banks is a matter of academic interest with practical and professional implications. This research study is hence is a product of such motivational factors.

To this effect the research study was conducted through a questionnaire survey with the participants sampled from 22 banks who, as banking staff, are actively involved in Islamic banking products and their developments or aware about the product development process in their respective banks. The banks are located in the South East Asia and GCC countries, which are the main corridors for Islamic banking practices.

The finding contributed to a deeper understanding of the product development processes among Islamic banks.

As a broad indication, the finding from the descriptive analysis in Table 7.11 revealed that though the banks' overall strategy and mission-vision statements talked about

innovation at high level, but at the implementation level such as allocation of budget and target for number of new products to be developed, the focus was diluted. As per the findings 95% of the banks overall strategy agreed for innovation but only 50% banks allocated budget and 63% of banks put target for number of new products to be developed. Hence, as indicated through this study, the Islamic banks were in general slow on giving priority towards the development of new products.

The deeper findings of the study revealed that the strategies of product development are not standard among the Islamic banks, as various factors influence the product development in each respective Islamic bank. First, the findings demonstrate that geographical location is an important significant factor indicating that geographical positioning has impact on product development process. For example, as the findings indicate, the strategies and product development process in Malaysia vary with Bangladesh and that in GCC.

Second, the findings in this study also demonstrate that within the same market, 'the nature of Islamic banking business' in the sense as of being a full-fledged Islamic bank or as an Islamic window of a conventional bank plays important role in developing the products. As findings indicate, the findings display that banks with Islamic windows show significantly different results with many 'No' answers for development of Islamic products compared to full-fledged Islamic banks.

Third, it is found that the 'age of the Islamic bank' influences its strategy and practice of product development. As found out in the study, the middle-aged Islamic banks put more emphasis on new product development compared to the older and the youngest Islamic banks.

Fourth, the 'size of the Islamic bank' in terms of number of employees is also an important factor. As findings indicate, the middle-sized Islamic banks in terms of number of employees put more emphasis on new product development compared to the smaller and bigger Islamic banks.

Fifth, the results show that 'ownership structure' is another factor of influence. As findings indicate public-private mixed banks show more interest to have a coordinator

between business units and *Shari'ah* department for product development compared to banks having other ownership structures.

Further as per the findings, apart from 'strategy on product development', many environmental factors also influence the product development plus deployment of resources, steps of product development process as well as the *Shari'ah* approval processes in the Islamic banks.

In this research, above factors, due to being significant factors affecting process, are used as control variable (CVs) for making further meaning through inferential statistical analysis to find the results as depicted in Chapter 8. The results are contextualized with meaningful correlation of literature, descriptive and inferential analysis to extract the themes of the research and discussed in the forthcoming section.

In summing, as identified in Chapter 1, this study is an attempt to explore the product development processes that currently exist in the banks under the study. The scope of the study covered the practical aspect of 'what exist' within the banks, and therefore the scope is neither to cover the theoretical aspects of 'what should exist' nor to recommend any theoretical model.

9.2. REFLECTING ON THE FINDINGS

As reported in Chapter 4, the three cornerstones of product development in a service sector like a bank consist of 'Strategy, Resource and Process' (Cooper and Edgett, 1999; Ahmed, 2011). However, for product development in an Islamic bank, the *Shari'ah* approval process is an essential requirement. Therefore, in a modified concept, by merging the constituents of 'Resources and Process' into one and calling it as 'Process', the three new pillars of product development process in Islamic banks are construed as 'Strategy, Process and *Shari'ah* process', which as a modified concept is depicted in Figure 9.1. The flow of discussions in this chapter is structured along the lines of this particular concept.

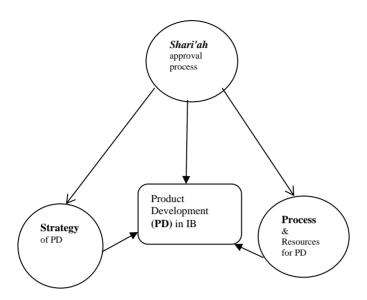


Figure 9.1: Pillars of Product Development (PD) in an Islamic Bank

Source: Modified and Shari'ah Augmented version of Cooper & Edgett (1999)

The survey questionnaire of this research covered the three pillars under the sections; section B (Strategy) focused on 'Strategy', section C aimed at developing data for 'Resource and Process (combined)' and section D aimed at generating data relating to 'Shari'ah approval process'. The initial section of the survey questionnaire covered the 'Demography' information for profiling the participating banks under Section A and special focus on the 'Trade Financing Products' in sections E and F aimed at developing data in relation to product development issues in particular in these areas.

In developing a discussion, this section aims to develop an interpretative discussion on the findings established by this study in Chapter 7 and Chapter 8 by connecting it with the earlier foundational chapters. In doing so, the discussion is developed according to the sections B, C and D of the questionnaire used for this study in a respective manner. In doing so, this study provides a critical understanding and the meaning of the analysis and the findings established, which will be framed around particular themes emerge from the findings. However, the demographic section (section A), and Section E and Section F are not included in the interpretative discussion due to the nature of the analysis; but in developing the discussion related to other sections, the general findings from these sections are also referred to. Overall, this chapter is an attempt in meaning-making with the objective of responding to the 'so what' question in any research.

9.2.1. Reflecting on the Findings Relating to Bank Strategy and Planning on Innovation and Product Development

As identified so far, 'strategy' is the first pillar of product development. "Firms that recognize the changing nature of markets understand the need to adjust to be relevant in the future. These firms will have innovation as an integral component of their mission and strategic goals" (Ahmed, 2011:99). Thus, the 'strategy section' of the questionnaire covered 3 sub-sections with several questions to generate data on the opinions and perceptions of strategy practices, which are as follows:

- (i) Whether innovation of new product is a part of banks planning process;
- (ii) Banks strategic approach related to product development;
- (iii) Banks view on competitive advantages of an Islamic bank in developing new products.

In recalling, Chapter 7 depicted the descriptive findings and Chapter 8 depicted the inferential findings through Mann-Whitney (MW) and Kruskal-Wallis (KW) tests on the questions pertaining to above mentioned sub-sections. This study finds out that some of the control variables produce patterns of outcome that are constructed to reflect themes of this study. The control variables are:

- (i) Nature of Islamic business activity;
- (ii) Location of country;
- (iii) Year of establishment;
- (iv) Number of branches;
- (v) Number of employees, and
- (vi) Ownership structure.

To reflect the pattern (or theme) of significance of the control variables, the statements/ questions which are identified as significant in MW or KW test in Chapter 8 are briefly discussed here.

Implications of and Reflecting on the Results Relating to 'Nature of Islamic Business'

In critically analysing whether 'nature of Islamic bank' has an impact on whether mission and vision statement include innovation, the frequency analysis result as shown in Table 7.11 (item 'b') in Chapter 7 depicted that 86.4% of the respondents

agreed on innovation of new product constitute in the mission and vision of their planning process. Only 13.6% of the respondents did not consider their banks put innovation as part of their mission and vision statement. It should be noted that this finding is consistent with the finding of the similar survey conducted by Ahmed (2011). Ahmed's (2011: 135) findings show that out of 20 banks responded, 18 banks (90%) consider that bank's mission and vision statement include innovation. As can be seen, both findings are consistent.

Further comparison between the results of this study and Ahmed's (2011) study is depicted in Table 9.2.

Table: 9.1: Cross Tabulation: Does the Banks Mission or Vision Statement Include Innovation? vs Nature of Islamic Business Activity (ref Table 8.2a)

Question/ Statement	Yes/No	Nature of Islamic Business Activity		Total
		Full Fledge	Islamic	
		Islamic Bank	Window	
Does the banks mission or vision statement include innovation?	Yes	17	2	19
		94.4	50.0%	86.4%
	No	1	2	3
		5.6%	50.0%	13.6%
	Total	18	4	22
		100%	100%	100%

This research has made further analysis through inferential statistical method and found that the mean rank values of full-fledged Islamic banks and banks having Islamic windows have significant differences. Table 8.2 depicted the gap between the mean rank values of two categories of banks. By making further breakdown, the cross-tabulation of values (Table 9.1 referred above) revealed that 94.4% of full-fledged Islamic banks considered that innovation constitutes as part of mission and vision statement, whereas only 50% of the respondents from the sampled banks have Islamic windows considered in support of that.

As can be seen in Table 9.1, the full-fledged Islamic banks reflected higher percentages in terms of putting emphasis on product development as part of their strategy compared to banks having Islamic windows. Same finding is also confirmed

through cross-tabulation tables 8.2b, 8.2c of Chapter 8 by using other statements/questions.

The above implies that product development in Islamic banks become more important for their growth and sustainability, whereas, it seems that, for Islamic windows Islamic products are not their core business, therefore comparatively they give less emphasis as part of their strategy.

As for the impact of 'institutional nature' on 'providing *Shari'ah* compliant product to the market that substitute conventional banking product available in the market', cross-tabulation analysis results with 'providing *Shari'ah* compliant product to the market that substitute conventional banking product available in the market' is depicted in Table 8.6 in Chapter 8. This also resulted in significant difference of mean rank values between full-fledged Islamic banks and banks with Islamic windows.

As this findings, and the findings presented in Chapter 7 and 8 indicate, it can be concluded that the 'nature of Islamic banking' as an independent variable plays a deterministic role in product development process in the sampled banks. It should be noted that the Islamic windows are not at par with full-fledged Islamic banks in terms of development of Islamic banking products.

Implications of and Reflecting on the Results Relating to the 'Location of the Country'

As regards to whether 'innovation of a new product is a part of planning process', the frequency analysis result as shown in Table 7.11 (item 'a') in Chapter 7 depicted that 95.5% of the respondents agreed on innovation of new product is being a part of their planning process. Only 4.5% of the respondents answered negatively on this. In relation to this result, Table 8.1 reported significance of 'Location of Country' as an independent variable in explaining the difference of opinions in relation to the statement that 'innovation of a new product being part of the planning process'. The findings showed that Malaysia as a country showed significantly different mean rank value compared to other countries implying the significance of the 'jurisdictional differences' over opinions relating to innovation and product development.

The results regarding the statement as to whether 'the overall strategy of the bank include product development', show that in Table 7.11 (item 'c') in Chapter 7 depicted that 95.5% of the respondents agreed that overall strategy of the bank include product development. Only 4.5% of the respondents answered negatively on this. Further this finding exactly matches with the finding of the similar survey conducted by Ahmed (2011:135) whose findings show that out of 20 banks responded, 19 banks (95%) considered that the overall strategy of the banks include product development as one of the objectives. Both findings are consistent.

In relation to the 'country location' or 'jurisdiction' with regards to 'the overall strategy of the bank includes product development', findings in Table 8.3 reported significance of control variable 'Location of Country' as an independent variable. The findings showed that Malaysia as a country showed significantly different mean rank value compared to other countries.

By reflecting the results from perception approach it is conceived that Malaysian Islamic banking approach is different than the GCC approach. Therefore, the theme of the finding is construed as:

Theme 2 - (i) Location of the country plays a role in product development process;

(ii) The country Malaysia stands separate to other countries in terms of the strategy on product development process.

Going forward as discussed in later stage (section 9.2.3) for another statement related to product development 'Process', findings in Table 8.12 reported significance of control variable 'location of country' for country Bangladesh.

Implications of and Reflecting on the Results Relating to the 'Year of Establishment'

In relation to the impact of 'age of a bank' as an independent variable, the results with regards to the 'product development built into annual operating plan of relevant units?' depicted in Table 7.11 (item 'e') shows that 63.6% of the respondents agreed on the statement, 13.6% respondents partially agreed and 18.2% of the respondents did not agree and 4.5% did not answer. Therefore, combining those agreed and those partially agreed, nearly 77.2% respondents of the banks under study considered the

practice is available in respective banks. Comparing with Ahmed (2011:135) study, which revealed that 100% out of 20 banks surveyed agreed with the statement, the present study had less percentage of agreement probably due to difference of audience; however the overall trend remained congruent.

Further, Table 8.4 reported significance of control variable 'year of establishment' on the above question related to strategy, as the mean rank values of second older aged banks are higher than the older and newer banks in relation to this particular practice. The results show that especially the second phase banks which were established in 80s, between the period1980-1989 have better approach to product development.

Additionally, the mean rank values in tables 8.7, 8.8, and 8.9 depicted higher mean values for Second older banks (especially those established between 1980- 1989) for the same control variable 'Year of establishment' against following statements/ questions:

- (i) The strategic approach related to product development- Provide new products when existing products become obsolete (Table 8.7);
- (ii) The competitive advantage of an Islamic bank in developing new products- It motivates some customers to switch over from Conventional bank to the Islamic bank because they look for *Shari'ah* compliant business solutions (Table 8.8);
- (iii) The competitive advantage of an Islamic bank in developing new products- It attracts some new customers to use Islamic banking who avoid conventional banking (Table 8.9);

It is true that 1980-1989 is the phase when the resurgence happened with establishment of banks like Al Rajhi Bank, Islamic Bank of Bangladesh Limited, Bank Islam Malaysia Berhad (BIMB). Those phase banks are very well established and active to compete for growth hence have better product development practices.

Therefore the theme of the finding is construed as:

Theme-3

(i) Age of the Islamic bank plays role in the product development of Islamic bank;

(ii) Middle aged banks (especially those established during 1980-1989) are more active in Islamic product development.

Implications of and Reflecting on the Results Relating to the 'Number of Employees'

With regards to the statement that 'Strategic approach related to product development – be leader in providing new product to the market', the descriptive analysis result as shown in Table 7.12 (item 'a') in Chapter 7 depicted that 81.8% of the respondents agreed on the statement and 9.1% of the respondents did not agree, and 9.1% did not respond. Therefore maximum number of the banks under study considered the practice is available in respective banks. In addition, Table 8.5 reported that the independent variable 'Number of employees' is significant on this particular statement; as the findings reflected from the Kruskal-Wallis (KW) test that the mean rank values of middle size banks (in terms of number of employees) are higher than the smaller and larger banks.

The results, hence, implies that though the bigger are established in the product lines and newer banks are yet to compete with older banks, the mid-sized banks are active to compete for growth hence have better product development practices.

Therefore the theme of the finding is construed:

Theme -4:

- (i) Size of the Islamic bank in terms of number of employees plays a determining role in the product development of Islamic bank;
- (ii) The middle sized banks are comparatively more active in Islamic product development.

Implications of and Reflecting on the Results Relating to the 'Ownership Structure'

Table 8.10 reported significance of control variable 'Ownership Structure' on the competitive advantage for developing new product oriented statement. Same significance also depicted in table 8.7. The findings from the Kruskal-Walliss (KW) test shows that the mean rank values of public–private mixed are higher than other ownership structures. This implies that the public- private mixed ownership banks have more emphasis on product development. Due to dual nature they have support of the government providing liquidity and efficiency of the private sector. Due to such nature, the perception is that such banks are usually strong and aggressive so they are keen on new product development, which is the case with such Islamic banks.

The theme of the finding, hence, is construed as:

Theme 5

- (i) Ownership structures of the Islamic bank plays role in the product development of Islamic bank;
- (ii) There is a trend that public-private mixed banks act differently than other ownership banks in Islamic product development.

9.2.2. Comparing Perceptions Conceived from the Questions/Statements on Strategy.

Apart from the patterns derived and developed through the performance of the control variables by using MW and KW test in Chapter 8, some general perceptions are conceived from the following frequency analysis tables. In order to develop a better and comparative understanding the results, Table 9.2 summarises the results from this study in comparison with Ahmed (2011:135) which are depicted in *italics*.

As can be seen in Table 9.2, the results produced by this study and Ahmed (2011) are very much similar, which verifies the results of this study. The perceptions related results can be summarised as follows:

(i) The mission and vision statements of most of Islamic banks include innovation as a planning process. However deeper analysis under this research as discussed

- under 9.2.1 depicted that percentage of response of full-fledged Islamic banks are higher than banks with Islamic windows;
- (ii) The overall strategies of banks include the product development;
- (iii) Most of the participants as the representative of banks agree that the product development built into annual operating plan of relevant units;
- (iv) Allotment of annual budget for product development is not a regular practice of the majority the sampled banks, they are evenly placed between having and not having annual budget for product development;
- (v) Majority of the banks though make annual plan for the number of new products to be developed but a good percentage (about 30%) of banks do not do that.

Table: 9.2: Comparison of Findings

Question	Frequency numbers – Yes	Frequency numbers – No
	(% in bracket)	(% in bracket)
Table 7.11 (item 'b'): Does the	19	3
banks mission and vision	(86.4)	(13.6)
statement include innovation?		
	Ahmed's survey (2011): 90%	Ahmed's survey (2011): 10%
Table 7.11(item 'c'): Does the	21	1
overall strategy of the bank	(95.5)	(4.5)
include product development?		
	Ahmed's survey (2011): 95%	Ahmed's survey (2011): 5%
Table 7.11(item 'e'): Is the	14 + (3 sometimes yes)	4
product development built into	77.2	(18.2)
annual operating plan of		
relevant units?	Ahmed's survey (2011): 100%	Ahmed's survey (2011): 0%
Table 7.11(item 'f'): Is there an	11	11
annual budget set aside for	(50%)	(50)
developing new products?		
	Ahmed's survey (2011): 45%	Ahmed's survey (2011): 55%
Table 7.11(item 'g'): Is there an	14 + (1 sometimes yes)	7
annual plan for the number of	(69.2%)	(31.8%)
new products to be developed?		
	Ahmed's survey (2011): 70%	Ahmed's survey (2011): 30%

9.2.3. Reflecting on the Findings Related to Product Development 'Process'

As discussed in Section 9.2 above, 'process' is the second pillar of product development in Islamic banks. In fact, 'process' itself is the most important stage of

product development in a service sector. According to Cooper and Edgett (1999:2) "of the three (Strategy, Resource, Process) it is process- its nature and quality that has the strongest impact on the business's new service performance". To successfully develop new services and products an organization must have an effective development process in place. Chapter 4 discussed about some of the management tools that are being used by service sector for effective product development process that included the famous *Stage-gate* process popularized by Cooper (1990).

This research, through the questionnaire studied the actual practices of product development processes with the targeted banks. The questionnaire under Section C covered questions to collect the relevant feedbacks in relation to 'process'. As reported earlier the 'process' sections also covered some relevant questions about 'resources' being deployed by the banks on carrying out the process activities.

'Product development process' section constituted bigger part of the questionnaire with following sub-sections containing multiple statements / questions.

- (i) Product development team
- (ii) Key initiatives that necessitate in developing a new product
- (iii) Which department involved
- (iv) Steps involved in developing a new product
- (v) Resources available for product development
- (vi) Product development principles
- (vii) Post product launch cross functional teams to carry out

In providing empirical evidence, Chapter 7 depicted the descriptive findings and Chapter 8 depicted the inferential statistical findings on the questions pertaining to above sub-sections. As reported in the previous section some of the control variables produced patterns of outcome that are constructed to reflect themes of this study. The findings on this section are the supplement and support to the earlier findings.

Independent or control variables, which provided to have significant mean values through MW and KW test, and hence being determinants of 'process' stage are:

- (i) Nature of Islamic business activity
- (ii) Location of country
- (iii) Year of establishment

- (iv) Number of branches
- (v) Number of employees
- (vi)Ownership structure

Reflecting on the significance of control variable - 'Location of country' findings

As regards to the question as to whether the product development is done at division/ department level, according to the frequency analysis result as shown in Table 7.14b of Chapter 7, 68.2% of the banks agree that product development is done at the 'division or department level'; 27.3% of banks did not agree on that and 4.5% banks did not respond. It is therefore concluded that the perception construct in favour of the product development being done at the 'division or department' where it is used. Further, Table 8.12 reported significance of control variable 'Location of Country' on the above question related to the process. The findings showed that Bangladesh as a country showed significantly different mean value compared to other countries in relation to the responses provided for this particular question. Drawing the crosstabulation (Table 8.12a) the findings revealed that most (71.4%) of the banks in Bangladesh reported that with 'No' on the above question. The finding implies that product development in Bangladesh is not done at Division or Department level. As per the Islamic banking practice in Bangladesh they have a Central Shari'ah Board sponsored by the Central Bank of the country. Therefore most of the product development is done centrally instead of at business (Division / Department) level.

This finding supports the *Theme-2* as constructed earlier that: 'Location of the country plays a role in product development processes. It is also perceived that product development process in Bangladesh is conducted centrally not at business department level.

Reflecting on the significance of control variable: 'Number of Employees' findings:

As regard to the product development 'process' for knowing the resources available for the product development team a question was raised to the banks asking 'how many people work in the team' and as reflected in the frequency analysis Table 7.14d in Chapter 7, the mean value of resources available shown as 4.33.

Further Table 8.13 shows the control variable 'Number of employees' has significance on the same question 'how many people work in the team'. It depicted that that the mean value is higher for number of employees range 1001-2000, and 2001-5000 compared to other ranges.

In another related question on their 'banks resources available for product development in terms' of 'people', Table 7.18b shows the mean value of 3.82.

This finding as validated from above analysis supports the *Theme-4* as constructed earlier that: 'Number of employees' or size of the Islamic bank plays a role in product development process'. It is also perceived that the middle sized banks are more active in Islamic product development.

Reflecting on the findings relating to the significance of control variable: 'Year of establishment'

With regard to the question under 'process' to the banks to state 'how many people work in the product development team', the responses as analysed in the frequency Table 7.14d of Chapter 7 depicted the mean value of resources in the form of people available in the team as 4.33.

Further Table 8.13 shows the control variable 'Year of Establishment' is significant in relation to the question as to 'how many people work in the team'. It depicted that that the mean value is higher for the banks originated from the year 1990-1999.

This finding supports the *Theme 3* as constructed earlier that: 'Year of establishment' or age of the Islamic bank plays a role in product development process'. It is also perceived that the middle aged banks are more active in Islamic product development.

Reflecting on the findings related to the independent variable: 'Nature of Islamic Business Activity'

According to the frequency analysis result as shown in Table 7.20, 31.8% of banks indicated in their response to 'how the cross-functional teams (example; sales, operation, accounts *etc.*), carry out their part of the function' that they had permanent Service Level Agreements (SLAs) between the cross-functional teams to carry out their function, 45.5% had different SLAs for different products and 22.7% of banks had some *ad-hoc* arrangement to carry out the function. It is therefore reflected that 77.3% (31.8 + 45.5) of banks had some kind of SLAs to carry out the function/operation of the new product.

Further Table 8.16 shows the significance of control variable 'Nature of Islamic Business Activity' for the same question 'how the cross-functional teams work to carry out their part of the function'. The cross-tabulation results in Table 8.16a depicts that in full-phased 38.9% of Islamic banks have permanent SLAs and 50% have different SLAs; but in Islamic windows 0% have permanent and only 25% have different SLAs. This is obvious due to the fact that the full Islamic banks give more emphasis on new product development for their own survival and to attract customers. However for banks having Islamic windows, the development of new Islamic products is not so essential. This result is an indication that *Theme 1* as established above is supported again.

9.2.4. Reflecting on the Findings related to Product Development Process-Shari'ah approval

As discussed in the earlier section *Shari'ah* approval process is the third pillar of product development in Islamic banks. More importantly *Shari'ah* approval (or *Shari'ah* filtration) is the distinct feature of an Islamic banking product compared with a conventional banking product. Therefore, as essential requirement, Islamic banking products undergo the *Shari'ah* approval process before they are launched.

This study explored the *Shari'ah* approval process among the target banks through the questionnaire. The significant findings reflected through the study are discussed in this section.

As per findings in Chapter 8 through MWU and KW tests, the control variables having significant mean values, and therefore being the important deterministic variables, are:

- (i) Nature of Islamic business activity
- (ii) Location of country
- (iii)Year of establishment
- (iv)Number of branches
- (v) Number of employees
- (vi)Ownership structure

Reflecting on the findings of control variables -'Nature of Islamic business Activity'

Table 8.17 shows the significance of control variable 'Nature of Islamic Business Activity' on the question that 'Shari'ah approval Process: Shari'ah research unit exist in your bank'. The crosstab Table 8.17a depicted that higher percentage of full-fledged Islamic banks has Shari'ah research units compared to banks having Islamic windows. The study confirms the perception that most of full-fledged Islamic banks have Shari'ah research unit but banks with Islamic windows may not have a Shari'ah research unit. Therefore the Theme-1 is supported...

Furthermore, Table 8.18 shows the significance of control variable 'Nature of Islamic Business Activity' on the question that 'Shari'ah approval Process: Shari'ah advisory unit exist in your bank'. The cross-tab Table 8.18a confirms the perception that most of full-fledged Islamic banks have Shari'ah advisory unit but banks with Islamic windows may not have a Shari'ah advisory unit. Hence, Theme-1 is verified again.

Reflecting the significance on the findings of control variables – 'Year of Establishment' on *Shari'ah* approval process

Table 8.20 shows the significance of control variable 'Year of Establishment' on the question that 'Shari'ah approval Process: 'how many days usually it takes for Shari'ah approval'. It is revealed from finding that the banks that established during the period 1990 to 1999 have the highest significance and the second significant period is 1981 to 1989. Thus, it can be concluded that the second generation banks compared to banks established in other period are more active in terms of Shari'ah

approval process. The cross-tabulation results in Table 8.20a shows that banks take longer time for *Shari'ah* approval compared to other period. So it is perceived that the middle aged banks that are established during the decades 1981- 1989 and 1991 to 1999 are more aggressive. As a result *Theme 3* is supported.

Table 9.3: Summarises the findings on *Shari'ah* approval process.

Table 9.3: Summary of Reflections of the Findings on Shari'ah Approval Process

Control Variable	Statement/ question	Table reference (Mean score/ Cross Tab)	Finding	Reflection	Discussion
Nature of Islamic business Activity	Shari'ah research unit exist in your bank	8.17 / 8.17a	1. 93% of Full-fledged Islamic banks have Shari'ah research units. 2. Only 50% of Banks with Islamic windows have Shari'ah research unit.	Study confirms the perception that full Islamic banks have Shari'ah research unit. But Islamic windows may or may not have	Confirms Theme-1
	Shari'ah advisory unit exist in your bank	8.18/ 8.18a	100%- Full Islamic banks yes 67% - Islamic windows yes	same	same
Year of Establishment	How many days usually takes to get Shari'ah approval	8.20/ 8.20a	The second generation banks that established during the period 1981 to 1989 and 1990 to 1999 have significant.	Second generation banks show different behaviour compared other banks	Confirms Theme-3
	How frequently Shari'ah Audit takes place to audit the products.	8.22	Older banks 1970- 1999 have <i>Shari'ah</i> audit once in a year. Newer banks have more.	Older banks have less frequency of Shari'ah audit than new generation banks.	Confirms Theme-3

9.2.5 Reflecting on the Results on Findings – Trade Activities

After discussing on the 3 pillars of product development in an Islamic bank, namely Strategy, Process and *Shari'ah* this section discusses on the product development in a specific area, namely 'trade financing'. Trade finance was a focus area of study under this research. Therefore a deeper study was made in the 'trade finance banking'. Some of the findings reflected interesting results, which add value to the overall findings of

this research. In this section there is a comparative study on how the conventional banking trade finance products are adapted into Islamic banking.

As discussed earlier and mentioned by Mohd Karim (2010) 'the behaviour of Islamic banking customers is not much different from that of the customers of conventional banks when it comes to demand for any of the financial products'. In order to meet customer requirement as well as *Shari'ah* requirement, some product structuring is required either small or big way while adapting the product into practice. In case of trade financing, due to involvement of actual 'sale' the adaptability is easy.

Therefore, this study on the trade finance products is an example on how other conventional banking products are being adapted into Islamic banking either directly if acceptable in *Shari'ah* angle or with necessary structuring to be acceptable in *Shari'ah* angle.

Trade financing is an important product area for both conventional and Islamic banks. As discussed in Chapter 3, trade finance has some further significance to Islamic finance because it involves physical movement of goods and suggests embeddedness in real economy. As discussed in Chapter 3 trade products are categorised as 'sale, service and equity based products'. They are adaptable into Islamic banking and generate profit in terms of mark-up for sale, fees for service and profit-sharing for equity invested.

As depicted in Table 7.39 and 7.40, this study reflected some of the challenges and opportunities for Islamic trade financing products, which are listed below. With assumption that these points are generic in nature, these points reflect some common challenges and opportunities for any other Islamic banking product.

As for the challenges faced by Islamic banks in developing products, the following can be mentioned:

(i) Islamic banking law: the bankers' perception is that Islamic banking laws and practices are not standardized; therefore, they constitute a major challenge. This study evidenced the diversity of product development processes in the Islamic banks. The scope of this study is not to discuss standardization; however the challenge faced by bankers is reflected here.

As a practicing banker, the researcher over the years observed that the conventional banking has a global standard of banking law and practice. For example when we talk about a trade product 'bill discounting', in conventional banking it is understood and conducted same way globally. However in Islamic banking as evidenced in Chapter 3, different Islamic banks do it differently. So it is recognized as a challenge.

- (ii) Islamic banking knowledge: The perception is and as discussed in Chapter 4 most of the Islamic banks 'employed professionals from conventional institutions to manage the operations' (Ahmed, 2011:200), therefore there is a tendency of replication of conventional products. Therefore, enhancement of Islamic banking product knowledge is a challenge and need to be done through training and attending refresher courses.
- (iii) Islamic banks requires a great deal of documentation as part of Islamic contracts as compared to product delivery of conventional banks;
- (iv) Many CTF (Conventional Trade Finance) products are not available as ITF (Islamic Trade Finance) in many Islamic banks, such as bill discounting;
- (v) Higher risk in ITF;
- (vi) Sometimes higher pricing in ITF;
- (vii) Complex work flow;
- (viii) All of above

It should be noted that as depicted in Table 7.39, most of the banks (73%) responded 'All of above' as challenges for Islamic banking products indicating that this is an ongoingly growing industry and therefore has not settled down into established practices.

Some of the points related to opportunities for Islamic banking as gathered by this study from the feedback of the bankers are relevant and discussed briefly as follows:

(i) Favorable demography of Muslim world: Growth of Islamic banking has been discussed in the introductory Chapter 2, which states that Islamic banking is still a very small player in many countries and there are opportunities to grow. Referring to

Chapter 4, Table 4.1 and 4.2 top four countries in terms of Muslim population (Indonesia, India, Pakistan and Bangladesh) are not the top four countries in terms of market penetration of *Shari'ah* compliant assets. Even for the GCC countries, the penetration of total *Shari'ah* compliant asset is less than 50% of banking assets (computed from Earnest Young Report 2013). Therefore, in the present trend of Islamic banking the perception is true that favourable demography of Islamic world is an opportunity for Islamic finance to grow. As per Kammer *et al.* (2015:13) the compound annual growth during 2009-2013 of Islamic banking assets is Indonesia is highest at 43% which indicates the good opportunity of growth of Islamic banking in respective domestic markets.

- (ii) Rising income level in Muslim countries and communities: This is another relevant and valid perception reflected through the samples. A comparative study is shown in Chapter 4, Table 4.2 on the top ten countries with *Shari'ah* compliant assets during 2010 and 2013. It is remarkable to see that Indonesia and Bangladesh which were not in top-ten during 2010 were present in 2013 list. Economic growths in Indonesia and Bangladesh and rising of income level of these Muslim communities are assumed to contribute to *Shari'ah* compliant assets in those countries.
- (iii) Wrong notion about Islamic finance are clearing now: As discussed in the introductory Chapter 2, Islamic banking as alternative model banking is being recognized globally, even in non-Muslim countries. Thus, the perception has changed for positive over the years.
- (iv) Market is big and hence provides opportunity spaces for further expansion and development (see: Chapter-2).
- (v) Many products that available in CTF yet to be developed in ITF (covered through discussion in Chapter3).
- (vi) All of above

In relation to the perceptions of the participants for these points, as per Table 7.40, all the banks (100%) responded 'All of above' as opportunities for Islamic banking products.

Another important outcome reflected in Table 7.41 on the question as to 'why there is a need for product development in Islamic trade financing'; the choices were:

- (i) Customers need Islamic Trade Financing
- (ii) Some Conventional Trade products still not available in Islamic TF
- (iii) Both: 1& 2;

Most of the respondents opted for the choice for both implying the validity of both reasons. As discussed above, dealing with 'opportunities' and opportunities of Islamic trade finance (discussed in section 3.6.4) there is good scope for growth of Islamic trade finance.

Overall, as discussed above, the study reflected that there is opportunity of growth for Islamic banking in general and Islamic trade financing in particular.

Table 9.4 summarises the findings about trade finance products:

Table 9.4: Summary of Reflections of the Findings on Trade Activities

Control Variable	Statement/ question	Table reference (Mean score/ Cross Tab)	Finding	Reflection	Discussion
Nature of Islamic Business Activity	Why there is a need for product development in Islamic trade financing?	8.25/ 8.25a	1. Customers need ITF 2.Some CTF products still not available in ITF 3. Both 1 & 2	More % (84.6%) Full-fledged Islamic banks give more emphasis on product development than Islamic windows (66.7%)	Confirms Theme-1
Number of Employees	How many staff work in your Trade finance dept.	8.23 / 8.23a	Employee strength 1001 to 2000 have higher mean rank (11.3%) and more number of banks fall under the category	Mid-sized banks comparatively employ more staff in their trade finance department.	Confirms to Theme-4
Year of Establishment	How many staff work in your Trade finance dept.	8.24 / 8.24a	Mean rank value of banks established during the period 1980- 1989 is highest.	Middle aged banks are comparatively more active	Confirms to Theme-3

9.3. CONCLUSION

Similar to any other financial institution, product development is an essential ingredient of success and growth for Islamic banking industry. There is hardly systematic study available on the product development in Islamic banks except the

study by Ahmed (2011). To complement Ahmed (2011), this research should be considered as emergent research that made deeper analytical study on the product development processes that exist in some of the top Islamic banks in the world. The study further explored the determinants of variables that influence the product development in the banks under study. Therefore this study provides the framework that could be used for further study, which also provides valuable findings that can be useful in developing models that can be used by Islamic banks while developing their new products.

Significantly, the study focussed on the geographic regions of South-East Asia and GCC which are the global hubs of Islamic banking. The banks that covered in the survey are located in the countries that rank among the top ten countries in terms of *Shari'ah*-compliant assets, such as Saudi Arabia, Malaysia, UAE, Kuwait, Bahrain, Qatar, Indonesia and Bangladesh rank from 2nd to 9th respectively (*The Banker*-November, 2013). Only Iran, which is occupying rank-1, in terms of *Shari'ah* compliant assets is not included in the study because of limited accessibility and closed environment. Therefore, the data and findings presented in this this research is considered of reflecting the major part of Islamic banking industry.

9.4. LIMITATIONS OF THE STUDY AND FUTURE RESEARCH

Similar to any other research in social sciences, this research has its own limitations, which are mainly external. One of the main limitations of the study was assembling data through the questionnaire; as despite huge efforts only twenty-three respondents could respond to the questionnaire through reasonable follow ups. Most of the control variable information and the financial data are taken from the publicly available resources such as Annual Reports, *Banker, Bankscope and Bankers Almanac*. However information on sections on Strategy, Process, *Shari'ah*, Trade Financing, which contain the main sources of primary data is collected through the survey questionnaire. The questionnaire itself being very large with nearly 150 variables, it took long time to get the responses, which discouraged the potential respondents to response. Moreover, the responses to the sections E and F of the questionnaire on trade financing were particularly poor, because they are more technical in nature, which comparatively did not allow developing more sophisticated analysis. Therefore,

future research should consider particular areas of specialisation in product development and focus in such areas with a very specific questionnaire survey.

As discussed in Section 9.1, new product development is a critical factor for Islamic banks for survival and growth of the industry. Deeper study and research recommendations are needed in this field. This research is a step in that direction, as it is delimitated with exploring on and reflecting the existing practices in the product development process in the Islamic banks. This study, hence, is not constructed to develop or recommend or developing models which can be used as standard product development processes. More research is required to take the study further that will add value in the development of new products process and contribute to the growth of Islamic banking industry.

To bring standardization at a product level among Islamic banks would be a challenge due various factors that influence the processes as revealed and discussed in this study. However synergy between industry and academics is required to take up the standardization project forward. More literature is required to be available for providing wider information on the product development process related practices in the Islamic banking industry. By joint efforts of practising Islamic bankers and academics, standard product development models could be formulated. Application of management tools like Stage-Gate process as discussed in Chapter 4 could be incorporated into Islamic banking product development processes. These models shall be used as prototypes and check-lists by Islamic banks and Islamic windows to launch new products expeditiously that will save time and money. The findings in this study will be useful and be a stepping stone in that direction; and therefore future research can be undertaken to develop such processes.

This study mainly explored the views of the practitioners, while *Shari'ah* scholars and Shari'ah Board members of Islamic banks could not be included due to logistical issues. However, an essential stakeholder of product development process is Shar'ah scholars; and therefore, future research should consider integrating views and the perceptions of the *Shari'ah* scholars if necessary through interviews.

9.5. EPILOGUE

This research aimed at exploring the product development process in Islamic banks by making references to the nature of the process and determining factors of running a particular process of product development. In attempting to achieve that, this research surveyed through questionnaire the product development processes among 22 Islamic banks and Islamic windows which are located in the main geographic regions where Islamic banking has made in roads successfully, namely GCC and South-East Asia. As evidenced with the foundational and empirical chapters, this research has fulfilled its aims as stated in Chapter 1. The empirical findings provided valuable insight to the strategy and actual processes carried out by the Islamic banks and windows. More significantly, the research also analysed the significance of environmental factors that influence product development of Islamic banks and windows.

Secondly, product development being an important success factor for growth of Islamic banks, this research opens scope of further study in developing standardized models that can be implemented to expedite the Islamic banking product development process in future through a proactive innovation method and with Islamic authenticity, which are the important features explored in this study as well.

APPENDICES

Appendix-1

(Research Survey Questionnaire) STUDY ON PRODUCT DEVELOPMENT IN ISLAMIC BANKS WITH SPECIAL REFERENCE TO TRADE FINNACING

(Research Methodology- Questionnaire)

Name	of the Respondent					
	Position					
	NERAL INFORMATION Name of the Bank -	N ABOUT T	HE BANK			
				Dlaga of t	ha II O	
	Location – Country				пепО	
	Year of Establishment					
	Ownership structure					
5.	Number Branches					
6.	No of Employees (approx	٤.)				
7.	Licensing Authority					
8.	Ranking of the Bank: Co	untry	World	(
	Source	Year)			
9.	Nature of Banking activit	ies:	,			
	out a cross (X)					
	Commercial Banking		Foreign Exc	change deale	er	
	Investment Banking		Central Ban	k		
	Offshore Banking		Credit Unio			
	Insurance activities		Stock Broke	ers		
	Industrial Banking		Other (spec	ify)		
10	a. A full (100%) Islamic b. Islamic window of a c c. An Islamic subsidiary	bank conventional		bank		
11	. Latest Financial highlight	s of the Banl	c. as			
	of(so)		
	Financial Item		ency		urrency	
	Assets	Local Carr	ency	1 oroign Co	arrency	
	Equity					
	Income					
DEVE 1.	NK STRATEGY AND PLEADPMENT i. Is innovation of new pro-	oducts is a pa				
ii. If Y	es, then please answer the			1 1	X 7	N.T.
	a Does the banks mis	ssion or visio	n statement in	cludes	Yes	No
	'innovation'?	1040 CY C 6 41	hanle in almid -	nu du ct	1	
	b Does the overall stranderelopment?	alegy of the	valik iliciude į	vi oaucī		

Does the bank have a formal approach/ process for

	innovation?	
d	Is the product development built into annual operating	
	plan of relevant business units?	
e	Is there an annual budget set aside for developing new	
	products?	
f	Is there an annual plan for the number of new products to	
	be developed?	

2. How would you think the strategic approach related to product development for your organization?

a.	Be a leader in providing new product to the market	
b.	To provide Shariah compliant products that substitute	
	conventional banking products available in the market	
c.	Keep the core business intact and introduce new products that	
	already exist in the market.	
d.	Sell product in the existing market, without venturing into new	
	markets	
e.	Provide new products when existing products become obsolete.	

3. What do you think about the following competitive advantages for an Islamic bank in developing new products?

a	It motivates some customers to switch over from	True	Not	True
	Conventional bank to the Islamic bank because		true	to
	they look for Shariah compliant business			some
	solutions.			extend
b	It attracts some new customers to start banking			
	with the Islamic bank, which otherwise avoid to			
	use the conventional banking channels.			
c	Some customers are attracted to Islamic bank			
	knowing that it is lenient in charging penalty			
	compared to conventional bank.			
d	Some Corporate customers prefer to borrow funds			
	from banks under Islamic structures because it			
	enhances the demand of their shares in certain			
	market.			
e	It helps the Islamic bank to become pioneer			
	compared to other Islamic banks.			

C. PRODUCT DEVELOPMENT PROCESSES (General)

1.	Do you have a product development team in your bank? Yes/ No)
If 'Yes'	please answer the following:	

- a. Product development is done at Division (department) level
- b. Product development is done centrally at bank level
- c. How many people work in the team.....
- d. To whom they report.....

2. What are the key initiatives/ factors that necessitate in developing a new Islamic product?

Give ranking in terms of importance (use 1,2, 3,10) (1 being the highest importance)

	Initiatives/ factors	Importance
a.	Product of a conventional bank	
b.	Product of another Islamic bank	
c.	Initiative of own R & D team	
d.	Initiatives by outside agencies (like consultants)	
e.	Outcome of a market research	
f.	Initiative of a star employees of the bank	
g.	Demand from other internal departments	
h.	To meet regulatory requirements	
i.	Any other (specify)	

3. Which are the departments required to give formal approval for developing a new product. (please put a X)

a.	Head of the business group
b.	Head of centralized product development department
c.	Budget and planning department
d.	Finance department
e.	Accounting department
f.	IT Department
g.	Risk management department
h.	Shariah department
i.	Internal Audit Department
j.	Top Management (CEO/ Deputy CEO)
k.	Board of Directors
1.	Any other department (specify)

4. What are the steps involved in developing a new product in your Bank? (mark a X)

And give the importance of each step with ranks: (1- highest, 2,3,4,5,......10)

	Steps	Yes	Importance
a	Product idea generation		
b	Product concept paper		
c	Product budgeting		
d	Approval from internal departments (other than Shariah)		
e	Top management approval		
f.	Shariah approval process		
g	Making a Product implementation team		
h	Product Flow chart		
i.	IT development- In-house /Vendor		
j.	IT User Acceptance Test		
k	Pilot implementation		
1.	Training the operating staff		

n	Full scale Product Roll out	
n	Product documentation	
О	Marketing the product	
p	Post implementation review	
q	Post implementation support	
r.	Shariah Audit	
S	Any other (specify)	

5. What are the resources available in your Bank for product development? Give ranking on the basis of resource availability (1 as lowest and 5 as the highest)

Resource // rank	1	2	3	4	5
Shariah capability					
People					
Finance					
IT					

6. What is bank's general in-house product development principle?

a.	Follow the formal written process or guidelines	
b.	Follow some broad guidelines	
c.	Informal guidelines	
d.	Adhoc guidelines .	
e.	No guidelines	

- 7. When a product is launched how the cross-functional teams (example: sales, operation, accounts etc) work to carry out their part of the function:
 - a. A permanent SLA between the functional teams to carry out the business.
 - b. Different SLA for different products.
 - c. On informal / *adhoc* request from product owners to other functional teams.
 - d. Any other (please specify).....
- 8. Who is responsible for the product after the product is implemented
 - a. Product development team
 - b. Business unit

D. PRODUCT DEVELOPMENT PROCESS- Shariah approval

1. Does your bank have a Shariah advisory board? Yes / No

If 'Yes'

- a. Is it a dedicated in-house Shariah board......
- b. Or a Shariah board shared with other organization.....
- 2. How many Shariah scholars are there in your Shariah board?
- 3. Are the Shariah board members your Bank employees?.....
- 4. Please tell what kinds of Shariah units exist in your bank? (put X, can have multiple answers)

a.	Shariah Department/ unit to coordinate with Shariah board for getting	
	product approval	

b.	Shariah Audit Unit	
c.	Shariah Research Unit	
d.	Shariah Advisory unit	
e.	Any other (specify)	

5	How many	y staff is there	in vour	Shariah de	nartment?	
J.	110 w man	y starr is there	III your	Sharian uc	partificit:	

6.	Do you have a Shariah coordinator between the business unit and the Shar	riah
	department?	

If above is 'Yes', what is his main role.....

- 7. If the product involves an Agreement, who prepares the agreement
 - a. In-house lawyer
 - b. Out-sources lawyer
 - c. Prepare by business units by referring similar agreements
 - d. Out sourced from other Islamic banks
 - e. Any other source? Specify.....
- 8. What are the steps followed in presenting the new product to the Shariah board

a.	Prepare a product paper for the Shariah with explanation	
b.	Get the draft agreement ready	
c.	Make the Translation into Arabic if necessary	
d.	Make the meeting with Shariah coordinator to explain the	
	product	
e.	Prepare a presentation to Shariah board members if required	
f.	Any other, please specify	

9.	How fi	requently	your	Shariah	board	d meets	
----	--------	-----------	------	---------	-------	---------	--

- 10. How many days it usually takes to get Shariah approval-----
- 11. How the views/ opinions of Shariah scholars are considered during approval of a product?
 - a. It has to be unanimous agreement to approve a product
 - b. It has to be a majority agreement to approve a product
- 12. How frequently Shariah Audit takes place to audit the product..........

E. TRADE FICANCING ACTIVITIES IN YOUR BANK

- 1. How many staff work in your Trade Financing department?......
- 2. Is your Trade Financing activities centralized?

If Yes, then at how many centres?.....

- 3. Whether your bank provide Trade Financing products:
 - a. As Conventional banking products
 - b. As Shariah compliant products

c.	As mixed	conventional	and Shariah	compliant	products
• •		• • • • • • • • • • • • • • • • • • • •	***************************************	• • • • • • • • • • • • • • • • • • • •	P - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 -

4.	List out th	e Main	Trade	Financing	products

Sl	Name of the existing product	Nature of the product (Sale/ Service/ Equity based)

5. In your view, what are the similarities and differences between Conventional and Islamic Trade Financing

Trade Product	Islamic Trade Financing	Conventional Trade Financing
		Ü

6.	What are the challenges for Islamic Trade Financing vis-à-vis Conventional
	Trade Financing

- a. Give choice
- b. Give choice
- c. Give choice

7.	What are the opportunities for Islamic Trade Financing vis-à-vis Conventional
	Trade Financing?

a.	 	 	
L			

8.	Why there is a	need for Product	Development in	Trade Financing?
	<i>3</i>		1	\mathcal{C}

• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	 	

9.	Is the process of	product dev	elopment is	different th	an another	business?
	Yes/No					

If 'Yes' in what aspect it is different.....

F. RECENTLY DEVELOPED NEW TRADE FINANCINFG PRODUCTS

1. Please indicate the number of new Trade Financing

Total number of new products	2010	2005- 2010
No of products performed better than		
expected		
No of products performed as expected		
No of products performed less than		
expected		

2. Any Trade financing product that bank has pioneered among the pear groups?

a. b.

3. Any new Trade Financing Product under development? Yes/ No

If 'Ye	s', please							
specif	y	 .	 	 	 	 		
-	-						1	

4. Make a SWOT analysis of Islamic Trade Financing (please select from the choices and add if needed)

Strength	Weakness	Opportunity	Threat
choices	choices	choices	choices

Appendix-2

(Request Letter from Researcher to banks for Questionnaire Survey)

Date: .../July/ 2012

To

..... Bank

Research Survey on: Product Development Process in Islamic banks- with special reference to Islamic Trade Financing

Dear Brother Islamic Banker.

Assalam alekum wo-rahamtullahi wo-barakatuhu,

Hope this letter will find you in good health and happiness.

As a part of my PhD research program in Islamic Finance under Durham University, UK, I am doing a survey on the 'product development process' in Islamic banks. I know that the practice of Islamic banking and finance is growing in Bangladesh and your esteemed institution is a part to that.

I shall appreciate and be grateful to you if you kindly participate in my survey by answering the Questionnaire attached and help in the research.

An introduction letter from my research guide Dr. Mehmet Asutay of Durham University is attached.

I am a practicing Islamic banker and presently working with Al Rajhi Bank, Kingdom of Saudi Arabia, which is one of the pioneers and largest Islamic bank in the world.

As per my professional relationship we must beknowing each other, however it is personal request for kind cooperation.

After finishing the questionnaire you may kindly send to my e-mail or contact me so that I shall arrange to collect.

With warm regards,

Fazal

Present address:

Mohammad Fazal Haque Head of Financial Institutions (Asia & Far East) Al Rajhi Bank

P.O. Box 28, Riyadh, Kingdom of Saudi Arabia

T: 00966 (1) 2798306, Fax: 00966-1-2798327

M: 00966-0508916489 Personal E-mail: mfazalhaque@yahoo.com

Appendix-3

(Introduction Letter from University for PhD Survey)



Shaped by the past, creating the future

 30^{th} June 2012

To Whom It May Concern:

Dear Sir or Madam:

Re: Mohammad Fazal Hague, Reg No: 000043719/ST

This is to conform that Mr M. Fazal Haque is a Ph.D student (on part-time basis) at the Durham Islamic Finance Programme, School of Government and International Affairs, Durham University, researching the topic of Product Development Process in Islamic Banks - with Special Reference to Islamic Trade Financing under my supervision.

His research requires conducting fieldwork to collect primary data through questionnaire schedule from the Islamic finance in Muslim countries, including Bangladesh among others. During his fieldwork, he will visit the product development departments of Islamic banks to gain an understanding of the process of Islamic financial product development and financial engineering through the questionnaire survey.

I should be grateful if you could kindly facilitate his visit to Bangladesh and other Muslim countries as well as his field work in Islamic banks of these countries.

Please note that your co-operation is essential for the successful completion of the Ph.D research in question.

Please do not hesitate to contact me if you have further questions.

elwet p Dr Mehmet Asutay

Reader in Middle Eastern and Islamic Economics & Finance

Director, Durham Islamic Finance Programme E-mail: mehmet.asutay@durham.ac.uk

The Al-Qasimi Building Elvet Hill Road Durham DH1 3TU UK

Telephone +44 (0)191 334 5656 Fax +44 (0)191 334 5661

www.durham.ac.uk/sgia Durham University is the trading name of the University of Durham

<u>Appendix-4</u>
The Banker's- Top 20 World Banks of 2014 by Total Assets

Unit: USD1 million

Ranking 2014 2013				Total A		t: USD1 millio
		Bank	Country	Amount	Change (%)	NPL Ratio (%)
1	1	Industrial and Commercial Bank of China	of China 3,100,254		11.16%	0.94%
2	3	HSBC Holdings	UK	2,671,318	-0.79%	3.22%
3	9	China Construction Bank	China	2,517,734	13.34%	0.99%
4	6	BNP Paribas	France	2,482,950	-1.32%	4.70%
5	2	Mitsubishi UFJ Financial Group	Japan	2,451,396	-1.58%	NA
6	7	JPMorgan Chase	USA	2,415,689	2.40%	3.15%
7	11	Agricultural Bank of China	China	2,386,447	13.34%	1.22%
8	5	Credit Agricole	France	2,353,553	-11.16%	3.40%
9	14	Bank of China	China	2,273,730	12.78%	0.96%
10	4	Deutsche Bank	Germany	2,222,621	-16.28%	1.76%
11	8	Barclays	UK	2,161,890	-8.03%	2.80%
12	10	Bank of America	USA	2,104,995	-4.84%	4.66%
13	15	Citigroup	USA	1,880,617	0.86%	2.39%
14	18	Societe Generale	France	1,703,810	3.26%	6.00%
15	12	Royal Bank of Scotland	UK	1,693,374	-18.19%	8.61%
16	13	Mizuho Financial Group	Japan	1,669,733	-11.39%	NA
17	19	Groupe BPCE	France	1,549,683	2.36%	3.90%
18	17	Banco Santander	Spain	1,538,811	-8.13%	5.64%
19	16	Sumitomo Mitsui Financial Group	Japan	1,534,040	-2.87%	NA
20	21	Wells Fargo	USA	1,527,015	7.31%	5.19%

Data source: The Banker magazine (25/7/2014)

BIBLIOGRAPHY

BIBLIOGRAPHY

Abduh, Muhamad and Omar, Azmi (2010). "Who Patronizes Islamic Banks in Indonesia?". *Australian Journal of Islamic Law, Management and Finance (AJILMF)*, 1 (1): 40-53.

Abozaid, Abdulazeem (2010). "Contemporary Islamic financing modes between contract technicalities and *Shari'ah* objectives". *Islamic Economic Studies*, 17(2), pp.55-75

Abozaid, Abdulazeem (2009). *Basics of Islamic Finance*. Training Note, training arranged for Al Rajhi Bank, Riyadh on 02-04 November 2009. Riyadh, Saudi Arabia, Conducted by Saudi Human Resources Development,.

Abozaid, Abdulazeem (2012). "The Methodology of Product Development Needed for Islamic Banks Upholding Social Responsibility". Paper presented at the International Conference on *Business Ethics and Corporate Social Responsibility: Ideals and Realities.* 12th-14th April 2012, Istanbul University Main Campus, Istanbul, Turkey.

Abu Dawud (Imam Hafiz Abu Dawud Sulaiman bin Ash'ath) (2008). English Translation of Sunan Abu Dawud, Volume 4, Riyadh, Darussalam

Ahmad, Ausaf. (1993). *Contemporary Practices of Islamic Financing Techniques*. Jeddah: Islamic Research and Training Institute, Islamic Development Bank Group.

Ahmad, Ausaf. (2000). "Economic Development in Islamic Perspective Revisited". *Review of Islamic Economics*, No.9, 2000, pp. 83-102. Leicestershire: International Association for Islamic Economics & The Islamic Foundation.

Ahmed, H., Asutay, M. & Wilson, R. (2013). *Islamic Banking and Financial Crisis: Reputation, Stability and Risks*. Edinburgh: Edinburgh University Press.

Ahmed, Habib (2011). *Product Development in Islamic Banks*. Edinburgh, United Kingdom: Edinburg University Press.

Ahmed, Habib (2011a). "Maqasid al-Shari'ah and Islamic Financial Products: A Framework for Assessment". *ISRA International Journal of Islamic Finance*, 3(1): 149-160.

Ahmed, Habib (2014). Islamic Banking and Shari'ah Compliance: A Product Development Perspective. *IIUM, Journal of Islamic Finance*, 3(2): 15-29.

Ahmed, Habib & Khan, Tariqullah (2001). *Risk Management: An Analysis of Issues in Islamic Financial Industry*. Jeddah: Islamic Research and Training Institute, Islamic Development Bank Group.

Ahmed, Habib and Khan Tariqullah (2007). "Risk Management in Islamic Banking". In K. Hassan and M. Lewis (eds.), *Handbook of Islamic Banking*. Chethnam: Edward Elgar Publishing.

Akhtar, Shamshad (2006). *Shariah Compliant Corporate Governance*. Keynote address delivered at Annual Corporate Governance Conference, Dubai on November 7, 2006. Available at: < http://www.bis.org/review/r070118b.pdf>

Ali, Ahmad Mohamed (2009). *Islamic Finance: An Alternative Financial Model* (Speech at G20 Pittsburgh Summit 24th -25th September 2009). [Newsdesk Publication- The G20 Pittsburgh Summit- G20 Research Group and G8 Research Group at University of Toronto]. Available at: <URL: http://www.g8.utoronto.ca/newsdesk/g8g20/g8g20-ali.html>Access date: 11/12/2009.

Al-Salem, Fouad H. (2009). "Islamic financial product innovation". *International Journal of Islamic and Middle Eastern Finance and Management*, 2: 187-200.

Ashraf and Giashi (2011). "Islamic Banking in Iran - Progress and challenges"; *Kuwait Chapter of Arabian Journal of Business and Management Review*, 1(2), Available: http://www.omicsonline.com/open-access/islamic-banking-in-iran-progress-and-challenges-2224-8358-1-116.pdf

Asutay, M. (2007). "A Political Economy Approach to Islamic Economics: Systemic Understanding for an Alternative Economic System", *Kyoto Bulletin of Islamic Area Studies (Special Issue: Islamic Economics- Theoretical and Practical Perspectives in a Global Context)*, 1(2): 3-18.

Asutay, M. (2008). "Islamic Banking and Finance - Social Failure", *NewHorizon*, *Oct-Dec*.

Asutay, M. (2009). "An Introduction to Islamic Moral Economy", Lecture Note at *Durham Islamic Finance Summer School on* $6^{th} - 10^{th}$ *July* 2009 (pp 1-45). School of Government and International Affairs (SGIA), Durham University, Durham, UK.

Asutay, M. (2012). "The socio-ethical failure in Islamic banking and finance". *New Horizon* (182): 33-35.

Asutay, M. (2015). "Islamic finance: Principles, Institutions and Development", *Trade and Finance (PwC)*, Winter: 4-26.

Ayub, Mohammad (2007). *Understanding Islamic Finance*. Singapore: John Wiley and Sons Limited.

Bakar, Mohd Daud (2002). The Shari'a supervisory board and issues of Shari'a rulings and their harmonization in Islamic banking and finance. In Simon Archer and Rifaat Ahmed Abdel Karim (eds.), Islamic Finance: Innovation and Growth (pp. 29-41). London: Euromoney Books.

Blaikie, N. (2000). Designing Social Research. Cambridge: Polity Press.

Bessant, John and Tidd, Joe (2007:301). *Innovation and Entrepreneurship*. Chichester: John Wiley & Sons Ltd.

Bryman, A. (2001). Social Research Methods. Oxford: Oxford University Press.

Bukhari (1997). *Hadith Sahih* Bukhari (English transalation by Muhammad Muhsin Khan), Volume 3, Book 34. Riyadh, Darussalam.

Chapra, M.U. (2008). *The Islamic Vision of Development- in the Light of Maqasid al-Shariah*. London: The International Institute of Islamic Thoughts.

Chapra, Mohammad Umar, and Ahmed, Habib. (2002). *Corporate Governance in Islamic Financial Institution*. Jeddah: Islamic Research and Training Institute, Islamic Development Bank Group.

Chapra, Mohammad Umer (2000). *The future of Economics: An Islamic Prospective*, Leicestershire: The Islamic Foundation.

Cooper, Robert G. (1990). "Stage-gate systems: a new tool for managing new products". *Business Horizon*, May-June: 44-53.

Cooper, Robert G. (1994). "Perspective: third generation new product development process". *Journal of Product Innovation Management*, 11, 3-14.

Cooper, Robert G. (2001). Winning at New Product-accelerating the process from idea to launch. Cambridge, MA: Basic Books.

Cooper, Robert G. and Edgett, Scott J. (1999). *Product Development for the Service Sector*. Cambridge, MA: Basic Books.

Crone, Patricia (1987). *Meccan Trade and the Rise of Islam*. Oxford: Basil Blackwell Ltd.

de Brentani, Ulrike (1991). "Success Factors in Developing New Business Services", *European Journal of Marketing*, 25(2): 33 – 59

de Brentani, Ulrike (1993). "The New Product Process in Financial Services: Strategy for Success", *International Journal of Bank Marketing*, 11(3): 15 - 22

Delorenzo, Yusuf Talal (2002). "The Religious Foundation of Islamic Finance". In S. Archer and R. A. Abdel Karim (eds), *Islamic Finance: Innovation and Growth* (pp. 9-28). London: Euromoney Books.

Di Vanna, Joseph and Sreih, Antoine (2009). A New Financial Dawn: The Rise of Islamic Finance. Cambridge, UK: Leonardo and Francis Press.

Dosi, Giovanni (2007). "Tecnhological innovation, institutions and human purposefulness in socioeconomic evolution: A freface to Christopher Freeman 'Systems of innovation. Selected essays in evolutionary economics' ". Laboratory of Economics and Management (LEM), PISA (Italy).

El-Gamal, Mahmoud A. (2006). *Islamic Finance: Law, Economics, and Practice*. Cambridge, New York: Cambridge University Press.

Farooq, Mohammad Omar (2007). "Partnership, Equity-Financing and Islamic Finance: Whither Profit-Loss Sharing?", *Review of Islamic Economics*, 11(3): 67-88.

Frame, W.S. and White, L.J. (2009). *Technological Change, Financial Innovation and Diffusion in Banking*. Fedaral Reserve of Atlanta, Working Paper Series 2009-10. Access

https://books.google.com.sa/books?id=rzndO__IMnMC&printsec=frontcover#v=onepage&q&f=false

Grais, Wakif and Pellegrini, Matteo (2006). *Corporate governance in institutions offering Islamic financial services: issues and options*. World Bank Policy Research Working Paper 4052, available at:< http://ssrn.com/abstract=940709>

Greuning and Iqbal (2008). Risk Analysis for Islamic Banks. Washington, DC: The World Bank Publication.

Grewal, Baljeet Kaur (2011). *Constraints on Growth in Islamic Finance*. Islamic Finance Service Board (IFSB)- 4th Public Lecture on Financial Policy and Stability, at Amman, Jordan

Grix, Jonathan (2004). The Foundation of Research. New York: Palgrave Macmillan.

Habib, Mamun; Pathik, B. B and Maryam, Hafsa (2014). "Research Methodology-contemporary practices: Guidelines for Acedemic Research". Newcastle: Cambridge Scholars Publishing.

Hasan, M. and Dridi, J. (2010). *The Effects of the Global Crisis on Islamic and Conventional Banks: A Comparative Study*. IMF Working Paper No. WP/10/201. Washington: International Monetary Fund.

Hasan, Zulkifli (2010). "Regulatory Framework of *Shari'ah* Governance System in Malaysia, GCC Countries and the UK". *Kyoto Bulletin of Islamic Area Studies*, 3(2): 82–115.

Hasanuzzaman, S. M. (1984). "Definition of Islamic Economics". *Journal for Research in Islamic Economics*, 1 (2): 49-50.

Hashim, Rosmawani B. C. and AbdulAziz, Akhtar Z. B. (2009). *Islamic Letter of Credit (LC)- An Overview on Legal and Shari'ah Issues*. University of Malay, Malaysia.

Available: http://eprints.um.edu.my/9456/1/Islamic_letter_of_credit_(LC)_An_overview_on_legal_and_shari'ah_issues.pdf

Hassan, M. Kabir and Lewis, Mervyn K. (2007). *Handbook of Islamic banking*. Cheltenham, UK: Edward Elgar Publishing Limited.

Heertje, Arnold (2006). *Schumpeter on Innovation and Profits: The Classical Heritage*. University of Amsterdam, Netherlands. Available: < http://www.lib.hit-u.ac.jp/service/tenji/amjas/Kurz.pdf >

Hidayah, Nunung Nurul (2014). *Religious Compliance in Islamic Financial institutions*. Aston University, UK. Available: http://eprints.aston.ac.uk/24762/1/Hidayah_Nunung_N_2014.pdf>.

Hussain, Jamila (2003). Islam It's Law and Society. Sydney: Federation Press

Hussain, Mumtaz; Shahmoradi, Asghar and Turk, Rima (2015). *An Overview of Islamic Finance*. IMF Working Paper WP/15/120.

Institute of Islamic Banking and Insurance-IIBI London (2000). "Developing an Interest Free Economy (Module 1, Lesson 3)"- Course material for- *PG Diploma Course in Islamic Banking and Insurance 2000*. London, UK: IIBI

IFSB (2009). (IFSB-10), Guiding principles on Shari'ah governance systems for institutions offering Islamic financial services. Kuala Lumpur

Imam Ghazali (Maulana Fazlul Karim) (1992). *Imam Ghazali's Ihya Ulum-Id-Din*. Darya Ganj, New Delhi: Islamic Book Service.

Iqbal, Munawar and Khan, Tariqullah (2005). Financial Engineering and Islamic Contracts. New York: Palgrave Macmillan.

Iqbal, Munawar and Molyneux, Philip (2005). *Thirty Years of Islamic Banking: History, Performance and Prospects.* New York: Palgrave Macmillan.

Iqbal, Zamir and Mirakhor, Abbas (2002). "The development of Islamic financial institutions and future challenges". In S. Archer and R. A. Abdel Karim (ed.), *Islamic Finance: Innovation and Growth* (pp. 42-62). London: Euromoney Books.

Iqbal, Zamir and Mirakhor, Abbas (2011). *An Introduction to Islamic Finance: Theory and Practice*. Singapore: John Wiley and Sons (Asia).

Iqbal, Zubair and Mirakhor, Abbas (1987). *Islamic Banking*: Washington, D.C., International Monetary Fund, Occasional Paper No. 49.

Islami Bank Bangladesh Limited-IBBL (2009). *Islami Bank 26 Years of Progress*-Published Booklet. Dhaka, Bangladesh: IBBL.

Kahf, M. (1999). *Financing International Trade: An Islamic Alternative*. Seminar on International Trade from Islamic Perspective, April 1999. IKIM, Malaysia.

Kahf, Monzer (2003). "Islamic Economics: Notes on the Definition and Methodology". *Review of Islamic Economics*, No.13, 2003, pp. 23-47. Leicestershire: International Association for Islamic Economics & The Islamic Foundation.

Kahf, Monzer and Khan, Tariqullah (1992). *Principles of Islamic Finance (A Survey)* –*Research Paper No. 16.* Jeddah, KSA: Islamic Research and Training Institute, IDB.

Kamali, M.H (2005). "Fiqhi Issues in Commodity Futures". In Munawar Iqbal and Tariqullah Khan (ed), *Financial Engineering and Islamic Contracts* (pp 21-57). New York: Palgrave Macmillan

Kammer, Alfred; Norat, Mohamed; Pinon, Marco; Prasad, Ananthakrishnan; Towe, Christopher; Zeidan, Zeine and an IMF Staff Team (2015). *Islamic Finance: Opportunities, Challenges, and Policy Options*. IMF, SDN/15/05, International Monetary Fund.

Kayadibi, Saim (2011). *Islamic Finance: Growth of Islamic Banking and Finance in Malaysia*. Kuala Lumpur, Malaysia: International Islamic University, Available at: <URL:http://www.academia.edu/2920846/The_growth of Islamic banking and finance_in_Malaysia> Access date: 1st February 2015.

Kelly, David and Story, Chris (2000). "New service development: initiation strategies". *International Journal of Service Industry Management*, 11(1): 45-62.

Kettell, B (2011). *Introduction to Islamic banking and finance*. West Sussex, UK: John Wiley and Sons Ltd.

Khan, Iqbal (2007). *Islamic Finance: Relevance and Growth in the Modern Financial Age*. Presented at: London School of Economics on 1st February 2007. www.lse.ac.uk/publicEvents/ppt/iqbalKhanPresentation20070201.ppt

Khan, Iqbal. (2009). The evolving Paradigm of Islamic Finance: Shift from Shari'ah Compliant to Shari'ah-Based. Paper presented at the Durham Islamic Finance Summer School 2009, organized by Durham University on 6-10July 2007, UK.

Kothari, C.R. (2004). *Research Methodology. Method & Techniques* (Second edition). New Delhi: New Age International (P) Limited.

Kotler, P.; Adam, S.; Brown, L. and Armstrong, G. (2006). *Marketing*. Sydney: Prentice and Hall.

Kumar, Ranjit (2011). Research Methodology: A Step by Step Guides for Beginners (Third ed.). London: Sage Publication.

Lahsasna, Ahcene (2013). *Implementation of the Islamic Letter of Credit in International Trade*. USIM, Malaysia (posted on internet 7-3-2013). Available at: http://www.maybank2u.com.my/iwov-resources/islamic-my/document/my/en/islamic/scoe/knowledge-centre/research-paper/Islamic_Letter_of_Credit.pdf>.

Lerner, J. & Tufano, P. (2011). "The Consequences of Financial Innovation: A Counterfactual Research Agenda". *Annual Review of Financial Economics*, 3: 41-85.

Lings, Martin (1991). *Muhammad: His Life Based on the Earliest Sources*. Cambridge: The Islamic Texts Society.

Liu, Xinru (2011). "A Silk Road Legacy: The Spread of Buddhism and Islam". *Journal of World History*, 22(1): 55-81.

Mannan, Mohammad Abdul (2014). *Islamic Banking in Bangladesh: Progress and Potentials*. Islami Bank Limited, Bangladesh website (Refer Section: VI. Shariah Compliance). Available at: http://www.islamibankbd.com/mdCorner/article.php.

Martin, Jeremy (2000). Enhancing the Competitiveness of Islamic Banks. In Asma Siddiqi (ed.), *Anthology of Islamic Banking*, London: Islamic Institute of Banking and Insurance.

Mejia, Alijando Lopez; Aljabrin, Suliman; Awad Rachid; Norat, Mohamed and Song, Inwon (2014). *Regulation and Supervision of Islamic Banks*. IMF WP/14/219. International Monetary Fund.

Mendenhall, William; Beaver, Robert J; Beaver, Barbara M. (14th Ed) (2013). *Introduction to Probability and Statistics*. International Edition: BOOKS/ COLE, Cengage Learning.

Merton, R. & Bode, Z. (1995). *The Global Financial System: A Functional Perspective*. Boston: Harvard Business School Press.

Miles, Raymond E. and Snow, Charles C. (1978). *Organizational Strategy, Structure, and Process*. New York: McGraw-Hill Book Company.

Mirakhor, Abbas and Iqbal, Zamir (2007). 'Qard Hasan Microfinance (QHMF)", *New Horizon*, (April-June 2007), pp18-20. Available at: <URL: http://www.islamic-banking.com/resources/7/newhorizon%20previouse%20issues/newhorizon_aprjun07.pdf Access date: 1st February 2015.

Mirakhor, Abbas and Zaidi, Iqbal (2007). "Profit-and-loss sharing contracts in Islamic finance". In M. K. Hassan and M. K. Lewis (eds). *Handbook of Islamic Banking*. Cheltenham: Edward Elgar Publishing Limited.

Mital, Anil; Desai, Anoop; Subramanian, Anand and Mital, Ashi (2008). *Product Development: Astructured Approach to Consumer Product Development, Design and Manufacture*. Burlington: Elsevier Inc.

Mizushima, Tadashi (2014). "Corporate Governance and Shariah Governance at Islamic Financial Institutions: Assessing from Current Practice in Malaysia". *Reitaku Journal of Interdisciplinary Studies*, 22(1): 60-62.

Mohd Karim, Muhammad Syahmi (2010). *Profit-Sharing Deposit Accounts in Islamic Banking: Analysing the Perceptions and Attitudes of the Malaysian Depositors*. Unpublished Ph.D Thesis, Durham University, UK.

Murray, Rowena (2002). How to Write a Thesis. Maidenhead: Open University Press.

Murthy, D.N.P; Rausand, M.; Osteras, T (2008). *Product Reliability- Specification and Performance*. New York: Springer.

Nazim, Ashar (2013). Reported in EY Press release (2013) *Islamic Trade Finance to become the preferred choice in emerging markets.* (London, 4 June 2013)

Available at: < http://www.ey.com/GL/en/Newsroom/News-releases/News_Islamic-Trade-Finance-to-become-the-preferred-choice-in-emerging-markets>.

Nienhaus, Volker (2007). "Governance of Islamic banks". In M. K. Hassan and Mervyn K. Lewis (eds.), *Handbook of Islamic Banking* (pp128-143). Cheltenham,: Edward Elgar Publishing Limited.

Neuman W.L. (2000). Social Research Methods, Qualitative and Quantitative Approaches. Boston, MA: Allyn and Bacon.

Nunnally, J. C. (1978). Psychometric theory (2nd ed.). New York, NY: McGraw-Hill.

Obaidullah, Mohammed (2005). *Islamic Finance Services*. Jeddah: Scientific Publishing Center, King Abdul Aziz University.

O'Leary, Zina (2004). The essential guide to doing research. London: SAGE Publications Ltd.

Oxford Advanced Learner's Dictionary (2010), Oxford, UK.

Pallant, Julie (2005). SPSS Survival Manual. Crows Nest: Allen & Unwin

Peter Drucker (1985/2015). *Innovation and Entrepreneurship: Practice and Principles*. Abingdon, Oxon: Routledge

Poole, Ben (2013). "Islamic Trade Finance Report- Changing Patterns". *Reported in Global Trade Review (GTR) Magazine*, SIBOS Special dated 16-9-2013. Available at: http://www.gtreview.com/supplements/gtr-sibos-supplement-2013/islamic-trade-finance-report-changing-patterns/

Roscoe, J.T. (1975). Fundamental Research Statistics for Behavioural Science. New York: Holt Rinehart & Winston.

Saadallah, Ridha (1999). Financing Trade in an Islamic Economy (Research Paper No.51). Jeddah, Kingdom of Saudi Arabia: IRTI, IDB.

Saunders, Mark, Lewis, Philip, and Thornhill, Adrian. (2007). Research Methods for

Business Students (Fourth edition). Harlow: Pearson Education Limited

Sekaran, Uma (2003). Research Methods for Business. New York: John Wiley & Sons.

Selltiz, Jahoda; Deutsch, Morton and Cook, Stuart (1962). "Research Methods in Social Relations". New York: Holt, Rinehart and Winston.

Shifa, Mohd Nor (2010). Exploring CSR and Sustainable Development Practices of Islamic Banking in Malaysia. Unpublished Ph.D Thesis, Durham University, UK.

Siddiqi, Muhammad Nejatullah. (1983). *Banking without Interest*. Leicestershire: The Islamic Foundation.

Song, Inwon and Oosthuizen, Carel (2014). *Islamic Banking Regulation and Supervision: Survey Results and Challenges*. IMF Working Paper WP/14/220. International Monetary Fund.

Stelios, Michalopoulos; Alireza, Naghavi and Giovanni, Prarolo (2012). *Trade and Geography in the Origins and Spread of Islam*. Brown University, Department of Economics,

USA. Available at:

http://www.brown.edu/academics/economics/sites/brown.edu.academics.economics/files/uploads/2012-12_paper.pdf

Sundararajan V. and Errico Luca (2002). *Islamic Financial Institutions and Products in the Global Financial Systems: Key issues in Risk Management and Challenges Ahead.* IMF Working Paper WP/02/192, International Monetary Fund.

Suwailem, Sami Al (2007). "Financial Engineering: An Islamic Perspective". *SINERGI*, 9(1): 87-10. Jakarta, Indonesia.

Thomas, Abdulkader (2005). "Understanding Shari'ah Process". In Thomas, Abdulkader; Cox, Stella; Kraty, Bryan (Ed.), *Structuring Islamic Finance Transactions* (pp.32-44). London: Euromoney Books.

Thomas, Abdulkader; Cox, Stella; Kraty, Bryan (2005). *Structuring Islamic Finance Transactions*. London: Euromoney Books.

Thomas, Abdulkader and Kraty, Bryan (2005)."The Murabaha and Simple Sale Transactions". In Thomas, Abdulkader; Cox, Stella; Kraty, Bryan (eds.), *Structuring Islamic Finance Transactions* (pp.60-76). London: Euromoney Books.

Tirmidi (Imam Hafiz Abu Eisa Mohammad Ibn Eisa At-Tirmidi) (2007). English Translation of Sunan Jami At-Tirmidi, Volume 3, Riyadh, Darussalam

Tufano, P. (2003). "Financial Innovation". In: Constantinides, G. M. Harris, and R. M. Stulz (eds.), *The Handbook of the Economics of Finance*. North Holland: Elsevier.

Ulrich, Karl T (2012). *Product Design and Development*. New York, NY: McGraw Hill.

Unger and Eppinger (2011:689). "Improving Product Development Design: A Method for Managing Information Flows, Risks and Iterations", *Journal of Engineering Design*, 22(10): 689-699.

Usmani, Muhammad Taqi (2002). *An Introduction to Islamic Finance*. The Hague:Kluwer Law International.

Vaus, DA De (2002). "Research Design in Social Research". London: Sage Publication London.

Vermeulen and Raab (2007). Innovations and Institutions, an Institutional Perspective on the Innovative Efforts of Banks and Insurance Companies. Abingdon: Routledge.

Visser, Hans (2009). *Islamic Finance: Principles and Practice*. Cheltenham, UK: Edward Elgar Publishing Limited.

Watt, W. Montgomery (1953). *Muhammad at Mecca*. London: Oxford University Press.

Wilson, Rodney (1984). *Islamic Business Theory and Practice*. London: The Economist Intelligence Unit.

Wilson, Rodney (2009). "Islamic Financing instruments", Lecture Note at *Durham Islamic Finance Summer School on* $6^{th} - 10^{th}$ *July* 2009 (pp 1-10). Durham University, Durham, UK.

Wilson, Rodney. (2002). "The Evolution of Islamic financial system". In Simon Archer and Rifaat Ahmed Abdel Karim (Ed.), *Islamic Finance: Innovation and Growth* (pp. 29-41). London: Euromoney Books.

Yahia, Abdul Rahman (2010). *The Art of Islamic Banking and Finance*. Hoboken, New Hersey: John Wiley and Sons. Inc.

Zikmund, William G. (2003). Essentials of Marketing Research (Second edition). Australia: Thomson South-Western.

PUBLISHED REPORTS AND WEBSITE MATERIALS

Published Reports:

Earnst and Young (2013). World Islamic Banking Competitiveness Report 2013-14 (2013): Dubai, UAE: Earnest and Young

Earnst and Young (2014). World Islamic Banking Competitiveness Report 2014-15 (2014): Dubai, UAE: Earnest and Young.

Earnst and Young (2015). World Islamic Banking Competitiveness Report 2016 (2015): Dubai, UAE: Earnest and Young.

EY Press release (London, 4 June 2013) on: *Islamic Trade Finance to become the preferred choice in emerging markets*. Available at: http://www.ey.com/GL/en/Newsroom/News-releases/News_Islamic-Trade-Finance-to-become-the-preferred-choice-in-emerging-markets>.

GTR (Global Trade Review) Report (2013). *Islamic Trade Finance Report- Changing Patterns*. SIBOS Special issue dated 16-9-2013. Available at:<http://www.gtreview.com/supplements/gtr-sibos-supplement-2013/islamic-trade-finance-report-changing-patterns/>.

IFSB-15 (2014). Revised Capital Adequacy Standard for Institutions Offering Islamic Financial Services. Kuala Lumpur: Islamic Finance Service Board.

MIFC (Malaysia International Islamic Finance Centre) (2013): *Report: Inside Islamic Trade Finance*. Bank Negara Malaysia. Available at: http://www.mifc.com/newsletter/epicentre_august/BNML0070%20MIFC%20Insights%20Report-Islamic%20Trade%20Finance.pdf.

SBP (State Bank of Pakistan). Islamic Banking Bulletin October – December 2012. Available at: http://www.sbp.org.pk/ibd/bulletin/2012/IBB-Dec-2012.pdf.

The Banker (2010). Special Report: Top Islamic Financial Institutions, November 2010. London, UK: The Banker.

The Banker (2013). Special Report: Top Islamic Financial Institutions, November 2013. London, UK: The Banker.

The Banker (2014). Special Report: Top Islamic Financial Institutions, November 20143. London, UK: The Banker.

World Economic Forum (WEF) Report (2012). *Rethinking Financial Innovation*. Available at: http://www3.weforum.org/docs/WEF_FS RethinkingFinancialInnovation Report 2 012.pdf>.

TheCityUK (2013). *Islamic Finance Report October 2013*. Available at: http://www.thecityuk.com/research/our-work/reports-list/islamic-finance-2013/>.

Website materials without authors:

Bankers Almanac (information about individual banks for 2012/ 2013- available by subscription). London, UK: Accuity (RELX Group). Available at: http://www.bankersalmanac.com/formslogin.aspx > Access dated June-July 2014 (access through Employer subscription).

Bankscope (financial reports for 2012/ 2013 on individual banks- available by subscription). London, UK: Bureau Van Dijk. Available at: < https://bankscope.bvdinfo.com/version-2015420/home.serv?product=scope2006 > Access dated: during June-July 2014 (access through Employer subscription).

Customer base of Al Rajhi Bank: Al Rajhi Bank Annual Report 2012 (page 25). Available at: http://www.alrajhibank.com.sa/en/investor-relations/documents/annual-report-2012-en.pdf>.

Customer base of Dubai Islamic Bank: Dubai Islamic Bank press release 28 October 2015 (page 6). Available at: http://feeds.dfm.ae/documents/efsah/2015/Oct/28/346f579d-dd86-4665-9c7a-401f1a9818f5/DIB_PR_E_28_10_2015_1030AM.pdf.pdf.

Customer base of Islami Bank Bangladesh: Islami Bank Bangladesh website- page MD Corner (20-Sep-2012). Available at: http://www.islamibankbd.com/mdCorner/article.php.

Global Islamic Banking Assets by Jurisdiction (2013). [KFH Research Ltd (30 June 2014)].Available at: <URL: http://www.kfh.com/pdf/Islamic%20Fin%201Q14%20Perform%20Review%2 <a href="http://www.kfh.com/pdf/Islamic%20Fin%201Q14%20Perform%20IQ14%20Perform%20IQ14%20Perform%20IQ14%20Perform%20IQ14%20Perform%20IQ14%20Perform%20IQ14%20Perform%20IQ14%20Perform%20IQ14%20Perform%20IQ14%20Perform%20IQ14%20Perform%20IQ14%20IQ14%20Perform%20IQ14%20Perform%20IQ14%20Perform%20IQ14%20Perform%20IQ14%20IQ14%20Perform%20IQ14%20IQ1

Top Ten Countries with Largest Muslim Population, (2012). [Pew Research Center's Forum on Religion & Public Life. Global Religious Landscape, December 2012]. Available at; http://www.mapsofworld.com/world-top-ten/world-top-ten-countries-with-largest-muslim-populations-map.html > Access date: 1st February 2015.

Global Assets of Islamic Finance by Year (2013). [TheCityUK (Islamic-finance-2013-CityUK.pdf, October 2013]. Available at: <URL:

http://www.thecityuk.com/research/our-work/reports-list/islamic-finance-2013/> Access date: 1st February 2015.

Islamic Banking Bulletin (October- December 2012). [State Bank of Pakistan -SBP, Bulletin 2012]. Available at: http://www.sbp.org.pk/ibd/bulletin/2012/IBB-Dec-2012.pdf > Access date: 1st February 2015.

Islamic banks in GCC- ranked by Assets (Dec 2012). [Global Finance (Feb 2014)]. Available at:< https://www.gfmag.com/magazine/february-2014/ranking-gccs-safest-islamic-banks > Access date: 1st February 2015.

Trade financing products. [Bank Islami Malaysia]. Available at: http://www.bankislam.com.my/en/Pages/ShariahContractsConceptsforTradeServices _aspx?tabs=1> Access date: 1st February 2015.

Trade financing products. [Al Rajhi Bank, Saudi Arabia]. Available at: http://www.alrajhibank.com.sa/en/business/documents/global-trade-finance-booklet.pdf Access date: 1st February 2015.

Trade financing products. [SABB- Saudi British Bank, Saudi Arabia]. Available at: http://www.sabb.com/1/2/sabb-en/commercial/ifs/trade-solutions/islamic-export-solutions> Access date: 1st February 2015.

Trade financing products. [Standard Charted Bank Islamic- *Saadiq*, Malaysia]. Available at: https://www.sc.com/my/saadiq/wholesale-trade-finance.html Access date: 1st February 2015.