

A Survey of Operations Management Practices in Islamic Banks of Bangladesh

by

Rafikul Islam*

*Department of Business Administration
Kulliyah of Economics and Management Sciences
International Islamic University Malaysia*

&

Md. Tareq Bin Hossain

*School of Business Innovation and Technopreneurship
Universiti Malaysia Perlis*

ABSTRACT

The establishment of Islami Bank Bangladesh Ltd. in 1983 was the first step of the Islamic banking system in Bangladesh towards achieving the vision of having an Islamic financial system operating side by side with the conventional interest-based system. Operations Management is a set of activities that creates goods and services through the transformation of inputs into outputs. For Islamic banks, the inputs are the managers, employees, machines, and various facilities, whereas the outputs are the various services such as Letters of Credit (LCs), *Mudharabah* and *Musharakah* contracts, etc. The present research consists of a survey of Operations Management practices in various Islamic banks in Bangladesh. The survey involves 37 branches of five Islamic banks in Bangladesh. In particular, the survey focuses on operations strategy, process, technology, layout, location, supply chain, and quality management. The survey findings are expected to provide the managers of Islamic banks with guidelines in designing an effective Operations Management system.

Key Words: Operations management survey, Islamic banks

1. INTRODUCTION

In the 1950s, Islamic economists initiated the first ever critique of interest from the Islamic economics point of view, and tried to outline *Shariah* compliant alternatives. At this time, Islamic scholars and economists started to develop theoretical models

* *Corresponding author*

of banking and finance as a substitute to interest-based banking. By 1953, Islamic economists offered the first description of an interest-free bank based on two-tier *Mudarabah* (banks would collect funds on a *Mudarabah* basis and extend these funds also on a *Mudarabah* basis). Later, they showed that financial intermediation can also be organized on a *Wakalah* basis. In the 1960s, use of the principles and practices of Islamic finance was initiated in Egypt and Malaysia. Landmark events included the rise and fall of Mitghamr Savings Associations (Egypt) during the 1961-64 period, and the establishment of *Tabung Haji* (Malaysia) in 1967. *Tabung Haji* in Malaysia has flourished as one of the oldest Islamic financial institutions in modern times.

Operational mechanisms for Islamic financial institutions were proposed, and a number of books on Islamic banking based on profit and loss sharing, and leasing were published in order to support the development of those institutions. In the 1970s, the development of Islamic banks emerged with the establishment of the Dubai Islamic Bank in 1975, and the Islamic Development Bank (IDB) also in the same year. Financial *Murabahah* was developed as the core mechanism for the placement of Islamic banks' funds. Academic activities were launched with the First International Conference on Islamic Economics, held in Mecca in 1976. The first specialized research institution, namely, the Centre for Research in Islamic Economics, was established at the King Abdul Aziz University, Jeddah in 1978. In 1975, the Fiqh Academy set out objectives for Islamic insurance (*Takaful*), laying the groundwork for an alternative to conventional insurance.

For the first time, the governors of central banks and monetary authorities of OIC member countries, at their Fourth Meeting held in Khartoum on 7-8 March 1981, jointly called for strengthening the regulation and supervision of Islamic financial institutions. Afterwards, a group of people came up with the Islamic banking concepts in Bangladesh. This group established the first Islamic bank, namely, Islami Bank Bangladesh Ltd. on 13th March 1983. At present, five full-fledged Islamic banks having over 200 branches throughout Bangladesh are operating in the banking sector. The five Islamic banks are Islami Bank Bangladesh Ltd. (IBBL), Al-Arafah Islamic Bank, Export Import Bank of Bangladesh Limited (EXIM), Social Investment Bank Limited, and the Shahjalal Islami Bank Limited. Islami Bank Bangladesh Ltd. is the largest Islamic bank in South Asia, with 169 branches in Bangladesh.

The present authors conducted a survey on Operations Management (OM) practices for selected branches of those five Islamic banks in Bangladesh. To the best of the authors' knowledge, no attempt has so far been made to survey OM practices in the Islamic banking sector in any country; most of the research conducted on Islamic banks has dealt with *Shariah* issues (Khan and Bhatti 2008; Rashid, Hassan, and Ahmad 2009). That is, none of the research has addressed the importance of OM to improving customer satisfaction and competition in the context of global Islamic banking. Alongside religion, it is significant for customers to know the service provider. In the global era, businesses are recognizing the importance of strategic decisions in meeting the challenges of competition; OM plays an important function in meeting global competition (Krajewski and Ritzaman 2010). Thus, the major objective of the present

paper is to report the present OM survey findings based on Islamic banks in Bangladesh. The results have implications not just for Islamic banking in Bangladesh, but for the Islamic banking sector elsewhere, including Malaysia. The following section outlines a brief literature review (LR) of OM practices. The LR is not claimed as exhaustive, rather, only a few, relevant papers are reviewed here.

2. LITERATURE REVIEW OF OPERATIONS MANAGEMENT PRACTICES

The theoretical underpinnings of the OM field are somewhat different from other academic management subjects like strategy, marketing or finance. Whereas these fields of study are more-or-less directly connected to base theoretical disciplines such as economics, sociology, psychology and mathematics, the underpinnings of OM are more fragmented. Indeed, it could be argued that the specific genealogy of “modern” OM is a curious amalgam of very different academic disciplinary inputs (for example, systems theory), and practical fields of application (for example, production engineering). Yet, despite the apparently overwhelming practical focus of academic OM, it also appears to have a history that demonstrates anxieties about how “helpful” Operations Management practices really are (Slack, Lewis, and Bates 2004).

There have been surveys to gauge Operations Management practices in a number of countries. The practice of OM in Spain does not differ from that found in other European countries (Ribera 1998). Large companies have specialized OM or Production Management (PM) departments in their organizational structure, while many small companies do not explicitly recognize it, even though the main OM functions are obviously covered. The state of Operations Management in Spain is notable, but there is room for future improvement, thus creating an important challenge for all Operations Management performance, both in academia and practice.

In the USA, applications of OM principles are widespread (Meredith and Roth 1998). Two of the OM theories, namely, supply chain and quality control, are particularly applied across industries in the country. In this era of globalization, USA manufacturing as well as service organizations are more conscious of Operations Management applications.

In Italy, OM is not only a subject of study in all recognized academic institutions but it is also applied widely at the organizational level. The study of OM was started in 1953 by the Institute for the Study of Company Organization (IPSOA). Presently, the study of OM has become more popular because the recruitment criteria of most organizations includes knowledge of OM. The practice of Operations Management in organizations increases their profitability. The details of the survey are provided by Toni and Filippini (1998).

The opening up of the Indian economy has thrown many challenges to Indian industry. To take up the challenges of liberalization and globalization, the thrust of the industry

is moving towards improving quality, cost and response time. To attain all these, industry is concentrating on improving its manufacturing competence by better management of technology, supply chain and other resources. Academia and industry interaction in India is intended to synergize for the mutual benefit of both. Academia is helping industry by organizing classroom training, short-term courses and by taking consultancy assignments. Industry linkages are being sought by academics, particularly for developing course curricula (Vrat 1998).

Tan and Wisner (2003) describe an exploratory research effort to analyze and classify emerging Operations Management practices in the US manufacturing sector. Using a survey of senior managers and Operations Management professionals in the United States, this study investigates the importance of establishing an appropriate infrastructure and organizational culture to support supplier assessment practices, new product design and development practices, JIT practices, and quality practices. The study also identifies practices that share common variance-covariance characteristics and to what extent observed practices are linked to their underlying factors by means of exploratory factor analysis. Finally, correlation analysis is used to examine the relationships of the factors.

Operations Management's success or failure is frequently attributed to the management control system. Cigolini and Grillo (2003) are of the opinion that sound strategic planning is part and parcel of effective Operations Management in any organization. According to them, linkage between these two expedites the realization of the organization's vision.

Foster and Ogden (2008) investigated whether increased emphasis on supply chain management in the organizations had implications on how quality management is practiced. They found that supply chain managers emphasized more on quality management as compared to the operations managers.

Robinson (2009) edited a textbook on the applications of Operations Management principles in the travel industry. The book comprises ten chapters, each of which provides detailed applications of OM principles in the industry. Further the book consolidates and summarizes the salient management concepts and frameworks related to the management of various kinds of functions in the travel industry. Another book, edited by Karlsson (2009), provides insights of research in various areas of Operations Management. The book covers case studies, action research and quantitative modeling in Operations Management. Overall, the book not only covers methods used in Operations Management but also those related to innovation, supply chain management, and logistics.

According to de Menezes, Wood, and Gelade (2010), OM practices can increase organizational performance. They investigated the integration between OM and HRM practices to measure seven factors among British manufacturing firms: empowerment of the individual or team, integrated computer-based technology, the practice of Just-in-Time (JIT) to increase production, the creation of a learning organizational culture, the development of supply chain partnering for long-term relationships between

customers and suppliers, team-based work to achieve organizational goals, and continuous improvement through Total Quality Management (TQM). Based on their research, they found that teamwork and supply chain partnering have a positive influence on OM, whereas the empowerment factor does not have positive influence on OM.

OM research can be undertaken to solve a particular problem that exists in any organizational process (Forza 2002). Like other fields, survey research on Operations Management can contribute significant knowledge (Babbie 1990). There are different types of surveys: exploratory, confirmatory and descriptive. Exploratory surveys take place at an early stage, when the main intention is to gain preliminary insight into research and provide the basis for further in-depth research. Confirmatory surveys take place after the knowledge of the phenomenon has been articulated using a well-defined model, and data collection has been carried out to test the hypothesis. Finally, descriptive surveys take place to understand the relevance of a certain phenomenon. The main objective is not to develop a theory, rather, it provides hints for both theory reform and for theory development (Wacker 1998). As mentioned earlier, there is no research on Operations Management among the Islamic banks of Bangladesh. Hence, this study is an exploratory survey to gain preliminary insight.

Operations Management research is very different than research in other fields of study, because it addresses both human and physical elements (Drejer, Blackmon, and Voss 2000). Previous studies among the banks of Bangladesh did not cover both the human and physical elements. The present research is intended to fill this gap.

3. RESEARCH INSTRUMENT

No ready-made questionnaire was found in the literature. Therefore the present researchers had to use their own understanding of the subject in order to develop a questionnaire. Due attention has been paid so that no fundamental issue of OM has been left out of the questionnaire. The questionnaire was pilot-tested at three Islamic banks in Bangladesh. Although the language of the questionnaire was English, some respondents in the pilot study suggested adding a Bengali (language of the local people) version side by side. The revised questionnaire was distributed among 50 managers of five Islamic Banks in Bangladesh. In total, 39 completed questionnaires were collected. After collection of the questionnaires, we found that two could not be used, therefore 37 questionnaires were used in the data analysis phase. The Cronbach Alpha for measuring reliability of the items in the questionnaires was found to be 0.81.

The questionnaire had four parts. In part A, the respondents were to furnish their branch details, (e.g., bank name, branch name, the employee size of the branch, and the respondent's position and gender). Part B consisted of a number of statements pertaining to OM practices, and the respondents were asked to state their agreement/disagreement using a 5-point Likert scale. In part C, the respondents were asked to put tick marks in response to some "Yes/No" questions. Finally, in part D, the respondents

were asked to rank seven competitive advantages and fourteen issues in Operations Management. Table 1 summarizes the distribution of the questionnaires among the branches of the five banks, and the number of responses received.

Table 1: Bangladesh Islamic banks surveyed

Name of the Bank	No. of Branches	Contacted	Responses Obtained
Islami Bank Bangladesh Ltd.	169	24	20
Al-Arafah Islami Bank Ltd.	41	10	7
EXIM Bank Ltd.	29	7	6
Social Investment Bank Ltd.	15	4	4
Shahjalal Islami Bank Ltd.	12	5	2
Total	266	50	39

Only the branch managers were eligible to fill out the questionnaires. All the respondents in the survey are male. Though there are a few women working in the banking sector in Bangladesh, most of them are not at the executive level. Actually, this stems from an issue in Bangladesh of women preferring to remain housewives rather than working outside the home, though the culture is changing rapidly. Table 2 presents employee size of the branches contacted.

Table 2: Branch size by number of employees

Frequency	Percent	Valid Percent	Cumulative	Percent
Less than 50	23	62.2	62.2	62.2
50-100	10	27.0	27.0	89.2
100-150	1	2.7	2.7	91.9
More than 150	3	8.1	8.1	100.0
Total	37	100.0	100.0	

As observed in Table 2, most of the branches have less than fifty employees. However, some of the branches contacted have more than 150 employees.

4. DATA ANALYSIS

As mentioned in the previous section, the questionnaire has four parts. In part A, the respondents were asked for personal information. In part B, respondents were asked to state their level of agreement/disagreement with 17 statements pertaining to Operations Management (OM) practices at their banks. A 1 to 5 point Likert scale (1= strongly disagree; 2= disagree; 3= no comment; 4= agree; 5= strongly agree), was used for expressing their opinions. The frequency and percentage of respondent agreement/disagreement for all the statements are shown in Table 3. It was found that none of the respondents strongly disagreed (SD) with any of the statements, hence the column on SD was omitted from Table 3.

About 70 percent of the managers strongly agreed that their branches have clear vision and mission statements, whereas about 30 percent of managers agreed that their

branches have clear vision and mission statements. That is, not a single manager disagreed with the statement “The branch has clear vision and mission statements”. Some of them, however, mentioned that the branches are not efficient in pursuing their vision, and believe that the head office should increase its surveillance in this regard.

Table 3: Summary responses for 17 OM-related statements

No.	Statement	SA		A		N		D		Total
		F	%	F	%	F	%	F	%	
1	The branch has clear vision and mission statements	26	70.3	11	29.7					37
2	The branch has a well-defined operations strategy	30	81.1	7	18.9					37
3	A good operations strategy is vital for success of the bank	34	91.9	3	8.1					37
4	We set the highest priority on customer satisfaction	32	86.5	5	13.5					37
5	We have a formal customer complaint/suggestion system	21	56.8	15	40.5	1	2.7			37
6	The customer complaint/suggestion system has been very effective at our branch	20	54.1	15	40.5	1	2.7	1	2.7	37
7	Customer suggestions are duly acknowledged and implemented as soon as possible	14	37.8	21	56.8	2	5.4			37
8	We have developed strong relationships with customers	30	81.1	7	18.9					37
9	We take all possible action to improve quality of our services	26	70.3	11	29.7					37
10	Employee performance is measured at the end of the year	30	81.1	7	18.9					37
11	Our branch is conveniently located	20	54.1	15	40.5	1	2.7	1	2.7	37
12	At the end of the year, the branch's productivity is measured	27	73.0	10	27.0					37
13	We take all possible action to improve productivity	24	64.9	13	35.1					37
14	Our suppliers are very efficient	9	24.3	20	54.1	7	18.9	1	2.7	37
15	We have developed strong relationships with suppliers	9	24.3	23	62.24	10.8	1	2.7		37
16	I think that my bank should go to the global market, like Bank Islam in Malaysia	13	35.1	19	51.4	2	5.4	13	8.1	37
17	Good Operations Management is the key to attaining service excellence in our company	21	56.8	15	40.5	1	2.7			37

Like the vision and mission statements of the branch, most of the managers strongly agreed that their branch has a well-defined operations strategy. In fact, more than 81 percent strongly agreed that the branch has a well-defined operations strategy, while 19 percent agreed that the branch has a well-defined operations strategy.

A good operations strategy is vital for success in any organization. According to Garvin (1992), strategy is a set of plans and policies by which a company aims to gain advantages over its competitors. Generally, a strategy includes an overall plan for products and the marketing of these products. The marketing plan usually includes

specific approaches and steps to be followed in identifying potential customers, determining why, where, and when they buy, and learning how they can best be reached and convinced to purchase. For the statement, “A good operations strategy is vital for the success of the bank”, about 92 percent strongly agreed, while eight percent agreed and none disagreed.

Eighty-six percent of managers strongly agreed that they were committed to customer satisfaction, and 13 percent agreed on the issue. In personal conversations, some managers said that as far as operations are concerned, their highest priority is compliance with *Shariah* Board regulations. They cited the example of high customer demand for short term loans (e.g., for a couple of hours), and stated that the *Shariah* Board does not allow that type of loan. Though the bank has money, it is not able to satisfy this kind of customer because of *Shariah* regulations. So their priority is not always customer satisfaction but, rather, complying with *Shariah* regulations.

To ensure customer satisfaction, the branches need a suggestion/complaint system. At the time of data collection, one of the authors observed boxes for suggestions or complaints at most of the branches. However, the condition of the boxes proves that the system has been neglected. As we observe in Table 3, about 57 percent of managers strongly agreed that they have a formal suggestion or complaint system, while 40 percent agreed that their branches have this system. Only three percent of managers had no comment on this statement. Furthermore, some of the managers verbally expressed that they encourage direct or verbal suggestions/complaints. It is not essential for the customers to drop suggestions in the suggestion box, rather, they can meet the branch manager directly and provide their suggestions.

Most of the managers said that when they obtain any rational suggestion or complaint, they take immediate action on it. In addition, a majority of them are of the opinion that it is important to have a strong relationship with customers and accept their suggestions or complaints. However, it is not possible for any organization to implement all the suggestions because of limited resources.

As pointed out previously, a customer suggestion/complaint system is an effective tool for improving the quality of services provided by an organization. However, some of the banks have not only the suggestion system, but also take all other necessary action to improve the quality of services they offer. In the survey, we found that more than 70 percent of respondents strongly agreed that they take all necessary action to improve the quality of their services, while the rest agreed on this issue.

Employee performance measurement is widely practiced across organizations. To specifically know the extent of this practice in Islamic banks, we added one statement: “Employee performance is measured at the end of the year”. Eighty percent of the respondent managers strongly agreed that their branches have a specific policy to measure the performance of their employees.

For customer convenience, it is important to locate the branch at a convenient place. In the survey, we found that 54 percent of managers believed that their branches are located at a convenient place. We also observed that only one out of the 37 respondents (managers) disagreed that the branch is located at a convenient place, while the same number of respondents had no comment on the statement.

All the branches of the five Islamic banks are concerned with the improvement of productivity at their branches. Most of the banks have specific ways to measure productivity at the end of a year. Seventy-three percent of managers strongly agreed that their branches have specific policies to measure productivity. On the other hand, 65 percent believe that they take all necessary action to improve productivity at the branch.

In order to improve the productivity of the branch, the managers believe that they need efficient suppliers. When they are asked about their suppliers' efficiency, however, only 24 percent strongly agreed that their suppliers are very efficient, whereas three percent disagreed that their suppliers are efficient. In addition, 24 percent of managers strongly agreed that they have developed a strong relationship with their suppliers, while three percent disagreed that they have developed a strong relationship with their suppliers.

In this era of globalization, most companies are trying to expand their businesses outside their home country. This trend is also observed in the banking industry. We sought managers' views on the statement, "I think my bank should go to the global market". Thirty-five percent of managers strongly agreed that their bank should go to the global market, 51 percent agreed that their bank should go to the global market, whereas five percent had no comment and eight percent disagreed with going to the global market.

Operations Management is crucial to any type of organization because it is only through successful management of people, capital, information, materials, etc. that an organization can attain a competitive advantage (Krajewski and Ritzaman 2010). Thus, effective management of operations is key to attaining service excellence in any company. This has been proved in the present survey, where about 57 percent and 40 percent of managers strongly agree and agree on this issue, respectively.

In the above, we analyzed data for the 17 statements considering all five banks together. We also investigated the similarity/dissimilarity of responses that came from individual banks. In the comparison, we considered only three banks, namely, Islami Bank Bangladesh Ltd., Al-Arafah Islami Bank and EXIM Bank. The remaining two were not considered in the comparison exercise as their sample size was rather small. A one-way ANOVA test was performed to compare the responses from the individual banks, details of which are provided in Tables 4 and 5. From the F and P-values in the last two columns of Table 5, it is clear that there is no significant difference in the opinion of the managers of the three above-mentioned banks.

Table 4: Compilation of the opinions of the managers of three banks for 17 OM-related statements

	Stat.1	Stat.2	Stat.3	Stat.4	Stat.5	Stat.6	Stat.7	Stat.8	Stat.9	Stat.10	Stat.11	Stat.12	Stat.13	Stat.14	Stat.15	Stat.16	Stat.17
IBBL																	
Mean	4.74	4.84	4.89	4.79	4.74	4.68	4.42	4.74	4.68	4.79	4.42	4.21	4.68	4.63	3.95	4.16	4.74
Std. Dev	.452	.375	.315	.419	.452	.478	.607	.452	.478	.419	.838	.918	.478	.496	.848	.602	.452
Total	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
EXIM																	
Mean	4.83	5.00	5.00	5.00	4.67	4.67	4.50	5.00	4.83	5.00	4.83	4.17	4.83	4.67	4.00	3.83	4.67
Std. Dev	.408	.000	.000	.000	.516	.816	.548	.000	.408	.000	.408	1.169	.408	.516	.894	.753	.516
Total	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Al-Arafah																	
Mean	4.83	4.83	4.83	5.00	4.33	4.33	4.33	5.00	4.67	4.83	4.33	4.00	4.83	4.67	4.33	4.33	4.50
Std. Dev	.408	.408	.408	.000	.516	.516	.516	.000	.516	.408	.516	.632	.408	.516	.516	.516	.548
Total	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
All																	
Mean	4.77	4.87	4.90	4.87	4.65	4.61	4.42	4.84	4.71	4.84	4.48	4.16	4.74	4.65	4.03	4.13	4.68
Std. Dev	.425	.341	.301	.341	.486	.558	.564	.374	.461	.374	.724	.898	.445	.486	.795	.619	.475
Total	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31

Table 5: Summary of the one-way ANOVA results

Statement		Sum of Squares	df	Mean Square	F Value	P-value
The branch has clear vision and mission statements	Between Groups	.068	1	.068	.371	.547
	Within Groups	5.351	29	.185		
	Total	5.419	30			
The branch has a well-defined operations strategy	Between Groups	.041	1	.041	.344	.562
	Within Groups	3.443	29	.119		
	Total	3.484	30			
A good operations strategy is vital for success of the bank	Between Groups	.004	1	.004	.038	.847
	Within Groups	2.706	29	.093		
	Total	2.710	30			
We set the highest priority on customer satisfaction	Between Groups	.000	1	.000	.000	.984
	Within Groups	9.548	29	.329		
	Total	9.548	30			
We have a formal customer complaint/ suggestion system	Between Groups	.032	1	.032	.145	.706
	Within Groups	6.355	29	.219		
	Total	6.387	30			
The customer complaint/suggestion system has been very effective for our branch	Between Groups	.014	1	.014	.085	.773
	Within Groups	4.825	29	.166		
	Total	4.839	30			
Customer suggestions are duly acknowledged and implemented as soon as possible	Between Groups	.194	1	.194	.361	.552
	Within Groups	15.548	29	.536		
	Total	15.742	30			
We have developed strong relationships with customers	Between Groups	.041	1	.041	.104	.750
	Within Groups	11.443	29	.395		
	Total	11.484	30			
Our suppliers are very efficient	Between Groups	.009	1	.009	.037	.849
	Within Groups	7.088	29	.244		
	Total	7.097	30			
We take all possible action to improve the quality of our services	Between Groups	.119	1	.119	.143	.708
	Within Groups	24.075	29	.830		
	Total	24.194	30			
Our branch is conveniently located	Between Groups	.250	1	.250	.795	.380
	Within Groups	9.105	29	.314		
	Total	9.355	30			
At the end of the year, the branch's productivity is measured	Between Groups	.509	1	.509	4.009	.05
	Within Groups	3.684	29	.127		
	Total	4.194	30			
We take all possible action to improve productivity	Between Groups	.164	1	.164	.822	.37
	Within Groups	5.772	29	.199		
	Total	5.935	30			
Our suppliers are very efficient	Between Groups	.413	1	.413	1.790	.191
	Within Groups	6.684	29	.230		
	Total	7.097	30			
We have developed a strong relationship with suppliers	Between Groups	.354	1	.354	.551	.464
	Within Groups	18.614	29	.642		
	Total	18.968	30			
I think that my bank should go to the global market	Between Groups	.326	1	.326	2.994	.094
	Within Groups	3.158	29	.109		
	Total	3.484	30			

Good Operations Management is the key to attaining service excellence in our company	Between Group	.075	1	.075	.309	.582
	Within Groups	7.022	29	.242		
	Total	7.097	30			

In part C, respondents were asked to answer a number of Yes/No type of questions. An example of one such a question is, “If your bank wants to enter into the global market, do you think that the bank still needs preparation for that?” Table 6 summarizes answers to all of the questions.

Seventy-three percent of managers believe that their banks need extra preparation to enter into the global market, whereas 27 percent believe that their banks do not need any such preparation. Of those who believe that their banks need extra preparation, we asked them “what preparation do you require before entering the global market?” The compiled list of items for extra preparation includes:

- Increase financial strength
- Strengthen international relationships
- Inter-regional financial collaboration
- One-stop service
- Online banking
- Enhance IT systems
- Develop the necessary human capital
- Further planning
- Develop *Shariah* compliant rules & regulations

Before going into the global market, it is essential for the bank to evaluate its competitive position over other Islamic banks in the local market. In response to another question, 81 percent of managers believe that their bank has a competitive advantage over other Islamic banks in the local market.

To ensure quality of the services provided by the branch, it is important for the manager to maintain quality circles at the branch. About 95 percent of managers (Table 6) are using this instrument to manage quality at their branch. In response to another question, all 37 managers mentioned that they have a job rotation system at their bank.

To maintain close customer ties, many companies create a customer care department. About 78 percent of the respondents said that they have a customer care department which plays an important role to ensure customer satisfaction. However, there are customers who are reluctant to provide any suggestions or lodge complaints even though they receive poor service. For this reason, managers of many of the branches conduct surveys to obtain feedback from their customers. Occasionally, they also provide incentives to customers who fill out survey questionnaires. In the survey, we found that 62 percent of managers conduct customer surveys to obtain customer feedback on various aspects of their services.

Table 6: Operations Management practices in Islamic banks

Questions on OM practices	Responses			
	Yes	Percentage	No	Percentage
If your bank wants to enter the global market, do you think that the bank still needs preparation for that?	27	73%	10	27%
Do you have a department for customer care?	29 29	78.4% 78.4%	8 8	21.6% 21.6%
Do you think that your bank has been enjoying a competitive advantage over other Islamic banks?	30	81.1%	7	18.9%
Do you have any employee development programs?	36	97.3%	1	2.7%
Do you have a formal employee reward and recognition system?	31	83.8%	6	16.2%
Do you have a formal quality circle at your branch?	35	94.6%	2	5.4%
Do you provide training to your employees?	34	91.9%	3	8.1%
Does your branch conduct customer surveys?	23	62.2%	14	37.8%
Do you practice job rotation for your employees?	37	100%	–	–

To motivate employees for better performance, 83 percent of managers said that their branch has a reward and recognition system. Further, managers of the branches conduct employee development programs and training for their employees on the basis of their needs. Ninety-seven percent of managers (Table 6) have mentioned that their branch has employee development programs, whereas 91 percent said that they also have employee training programs.

In order to attain a competitive advantage, a good location for a new branch is an imperative. However, finding a good location is an uphill task. In this regard, managers were asked to articulate the most important factor in a location decision. According to 73 percent of managers, ‘Customer base’ is the most important factor in choosing a place for the branch. Table 7 summarizes the factors and their relative priorities.

Table 7: Choice of location for a new branch

Factor	Frequency	Percent	Cumulative Percent
Customer base	27	73.0	73.0
Cost of land	4	10.8	83.8
Convenient location	4	10.8	94.6
Proximity to suppliers	1	2.7	97.3
Location of competitors	1	2.7	100.0
Total	37	100.0	

Once the bank succeeds in securing a good location for its new branch, it is important for the manager to design an effective layout of the facility. About 65 percent of managers believe that the layout should be based on customer convenience. Table 8 provides the statistics on other relevant factors.

Table 8: Factors important in facility layout

Factor	Frequency	Percent	Cumulative Percent
Customer convenience	24	64.9	64.9
Aesthetics	7	18.9	83.8
Smooth communication among employees	5	13.5	97.3
Others	1	2.7	100.0
Total	37	100.0	

To provide quality service to its customers, every company needs to choose good suppliers. In other words, supplier quality has a significant effect on company offerings. Table 9 provides a prioritization of the factors considered in the selection of suppliers. Clearly, quality is at the forefront when choosing a new supplier at the majority of the branches.

Table 9: Most important factors in choice of suppliers

Factor	Frequency	Percent	Cumulative Percent
Quality	18	48.6	48.6
Track record	8	21.6	70.2
Cost	5	13.5	83.7
Financial stability	4	10.8	94.5
Delivery time	2	5.5	99.9
Total	37	100.0	

The respondent managers were also asked for their opinion on the extent to which Operations Management practices are applied at their branch. A summary of the managers' opinions is provided in Table 10. The table shows that, at more than 50% of the branches, a substantial to maximum application of OM practices is observed.

Table 10: Operations Management practices in Islamic banks in Bangladesh

	Frequency	Percent	Cumulative Percent
Minimum Application	1	2.7	2.7
Moderate Application	12	32.4	35.1
Average Application	2	5.4	40.5
Substantial Application	14	37.8	78.4
Maximum Application	8	21.6	100.0
Total	37	100.0	

Operations Management helps managers attain a competitive advantage in the marketplace. There are several factors within OM that require attention in order to obtain a competitive advantage. The respondents were asked to provide their opinions

on the importance of seven factors in Operations Management. The most important factor was to be ranked 1, with the least important to be ranked 7. We observed that nearly half (48.6%) of the respondents articulated customer satisfaction as the most important factor to achieve the desired competitive advantage. The smallest and largest mean values of rank assigned to the factors are observed to be 2.11 and 6.14, so their respective ranks are 1 and 7. From Table 11, we can observe that the three most important factors that can provide competitive advantages are: (1) Full commitment to customer satisfaction, (2) A viable operations strategy, and (3) Efficient workforce management.

Table 11: Factors that can help attain a competitive advantage

Factors to attain competitive advantage	Mean	Standard Deviation	Rank
Market know how	3.91	1.805	4
Full commitment to customer satisfaction	2.1143	1.47072	1
Good location	4.1143	1.98185	5
Viable operations strategy	3.0286	1.36092	2
Efficient supply chain	6.1429	1.16677	7
Efficient workforce management	3.5429	1.59674	3
High productivity	5.1429	1.66527	6

From Table 12, we observe that out of 37 respondents, 14 indicated ‘Full commitment to customer satisfaction’ as the most important factor, whereas 5 respondents said it is the second most important factor. Other numerical values in the table can be interpreted analogously.

Table 12: Five most important factors and their level of importance

Factor	Level of importance				
	1st	2nd	3rd	4th	5th
Full commitment to customer satisfaction	14	5	6	1	1
Viable operations strategy	3	8	7	4	3
Efficient workforce management	2	5	6	7	3
Market know how	3	4	6	5	5
Good location	6	2	1	10	2

In order to investigate whether or not a difference existed amongst the three major banks (EXIM, IBBL, Al-Arafah) in terms of the ranks assigned to the seven factors, an ANOVA test was performed. Out of the seven factors, the managers of the three banks differed on only one factor, namely, workforce management ($p = 0.021$). A Tukey post hoc test confirmed that EXIM bank managers ($M = 2.5$) assigned a significantly higher rank to this compared to IBBL managers ($M = 3.375$), at a 5% significance level ($p = 0.043$). It should be noted that the lower the mean value, the higher the rank. But when all seven factors were considered simultaneously and the MANOVA test was performed, no significant difference was observed among the managers of the three banks. In other words, the managers agree overall with the ranks assigned to the seven factors. The details of the MANOVA test are furnished in Table 13.

Table 13: MANOVA test results for the seven factors of OM

Effect	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared	Observed Power
Pillai's Trace	0.383	0.683	18.000	84.000	0.818	0.128	0.445
Wilks' Lambda	0.659	0.653	18.000	74.024	0.844	0.130	0.388
Hotelling's Trace	0.456	0.624	18.000	74.000	0.869	0.132	0.396
Roy's Largest Root	0.243	1.133	6.000	28.000	0.369	0.195	0.369

A list of Operations Management issues was compiled and the respondent managers were asked to rank the issues in terms of their perceived importance. Table 14 summarizes the detailed findings.

Table 14: Issues in Operations Management and their corresponding rank

Issues in Operations Management	Mean	Standard Deviation	Rank
Location of the bank	4.1875	3.95489	3
Layout of the facility	7.1875	4.09908	6
Supply chain management	9.1875	3.37388	13
Workforce management	3.5000	2.43628	1
Just in time	4.0938	2.51908	2
Process management	8.7500	3.45478	11
Quality improvement	5.1875	2.60814	4
Productivity improvement	8.5625	3.06844	10
Operations strategy	6.8125	3.16674	5
Capacity planning	8.4688	3.42650	9
Employee scheduling	8.0625	3.02610	8
Resource planning	7.7500	3.66324	7
Technology management	9.0938	3.47674	12
Inventory management	13.0000	1.39122	14

With regards to Bangladesh's Islamic banks, the most important Operations Management issue is 'Workforce management'. The second most important issue is 'Just in time' bank operations. Table 15 provides details of the level of importance of the five most important issues in Operations Management.

Table 15: Five most important issues in OM and their level of importance

Factor	Level of importance				
	1st	2nd	3rd	4th	5th
Workforce management	11	5	6	1	3
Just in time	6	5	3	4	2
Location of bank	2	4	2	1	1
Quality improvement	3	2	2	4	6
Operations strategy	3	3	4	3	1

Likewise, as in the previous case of the seven factors, a one-way ANOVA test was also performed here in order to ascertain whether a difference exists among the various banks in terms of the ranks assigned to the 14 OM factors. Once again, the managers of

EXIM, IBBL, and Al-Arafah banks differed on the rank given to workforce management ($p = 0.021$). A Tukey post hoc test revealed that EXIM bank managers ($M = 1.8$) assigned a significantly higher rank to workforce management compared to IBBL managers ($M = 4.867$) ($p = 0.043$). The managers did not differ on the ranks assigned to the remaining 13 OM issues. Finally, the one-way MANOVA test confirmed that the managers did not differ significantly on the ranks of all 14 Operations Management issues when these were considered at the same time. The MANOVA test results are shown in Table 16.

Table 16: MANOVA test results for the 14 issues of OM

Effect	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared	Observed Power
Pillai's Trace	1.433	1.111	42.000	51.000	0.358	0.478	0.835
Wilks' Lambda	0.111	1.182	42.000	45.263	0.290	0.519	0.836
Hotelling's Trace	3.828	1.246	42.000	41.000	0.242	0.561	0.851
Roy's Largest Root	2.626	3.189	14.000	17.000	0.013	0.724	0.926

Our last question concerned the managers' future plans of action to achieve more efficient operations at their branch. The compiled list, albeit abridged, comprises the following:

- Maximizing shareholder value
- Effective human resource management
- Superior customer service
- Enhancing inter-personnel relations
- One-stop banking
- Complete electronic business
- Ensuring regular marketing activities
- Developing relevant databases for use in running day-to-day operations
- A secure banking system
- Finding efficient investment portfolios
- Proper execution of head office plans
- Establishing more branches in strategic locations

5. SUMMARY AND CONCLUSIONS

Most of the managers at Islamic banks in Bangladesh are concerned with the full satisfaction of customers. A vast majority of them contend that banks should place the highest priority on customer satisfaction. Customer satisfaction is ensured by providing quality products or services at a reasonable cost. However, it may be difficult for managers to know whether most customers are satisfied. In this regard, managers have a suggestion and complaint system at their branch. Managers always try to acknowledge the suggestions and complaints that come from the customers. In this way, managers of the organizations establish a strong relationship with their customers. Furthermore,

some branches have a customer care department, which helps the bank enjoy a competitive advantage over other banks.

It was also found that most of the branches of the Islamic banks have been established at a convenient location. Managers choose a place for establishing a new branch on the basis of the cost of the land, convenient location, customer base, quality of life, proximity to suppliers and the location of competitors. According to the survey, however, 73 percent of managers agree that a solid customer base is very important in establishing a new branch. Furthermore, managers of the branches always try to improve the quality of the bank, and they take all the necessary action to improve it. At the end of the year, the productivity of the branch is measured by the bank. Every employee's performance is also measured at the end of the year. Managers not only measure employee performance but also have employee development programs. Managers deem that a reward and recognition system assists them in motivating their employees. To ensure the proper practice of Operations Management, the most important issue to managers is workforce management. An excellent workforce is essential to ensuring customer satisfaction. Employee training is also widely practiced in Bangladesh's Islamic banks. Job rotation among employees and establishing quality circles are common in most of the branches surveyed.

Generalization of the present study findings is limited due to the small sample size. Future research should proceed in surveying all the Islamic banks in Bangladesh to provide an increased sample size. For comparison purposes, similar research on OM practices can also be carried out for Islamic banks in other countries. Survey research should also be conducted to compare the present findings on Islamic banks with those obtained for conventional banks.

REFERENCES

- Babbie, E.R. 1990. *Survey research methods*. California: Wadsworth Publishing Company.
- Cigolini, R. and Grillo, G. 2003. "Linking strategic Planning to operations management: The competitive histograms approach and an empirical study." *Production Planning & Control*, 14(6):517-532.
- de Menezes, L.M., Wood, S., and Gelade, G. 2010. "The integration of human resource and operation management practices and its link with performance: A longitudinal latent class study." *Journal of Operations Management*, 28(6):455-471.
- Drejer A., Blackmon K., and Voss, C. 2000. "Worlds apart?-a look at the operations management area in the US, UK and Scandinavia." *Scandinavian Journal of Management*, 16:45-66.

- Forza, C. 2002. "Survey research in operations management: a process-based perspective." *International Journal of Operations & Production Management*, 22:152-194.
- Foster, S.T., and Ogden, J. 2008. "On Differences in How Operations and Supply Chain Managers Approach Quality Management." *International Journal of Production Research*, 46(24):6945-6961.
- Garvin, A.D. 1992. *Operations Strategy*. New Jersey: Prentice-Hall.
- Karlsson, C. 2009. *Researching Operations Management*. New York: Routledge.
- Khan, M.M., and Bhatti, M.I. 2008. "Islamic banking and finance: on its way to globalization." *Managerial Finance*, 34:708-725.
- Krajewski, L.J., and Ritzaman, L.P. 2010. *Operations Management: Processes and Value Chains*, 9th Edition. New Jersey: Prentice Hall.
- Meredith, J., and Roth, A. 1998. "Operations Management in the USA." *International Journal of Operations & Production Management*, 18(7):668-674.
- Rashid, M., Hassan, M.K., and Ahmad, A.U.F. 2009. "Quality perception of the customers towards domestic Islamic banks in Bangladesh." *Journal of Islamic Economics, Banking and Finance*, 5:109-31.
- Ribera, J. 1998. "Regional Report on Operations Management in Spain." *International Journal of Operations & Production Management*, 18(7):180-184.
- Robinson, P. 2009. *Operations Management in the Travel Industry*. Oxford: CABI International.
- Slack, N., Lewis, M., and Bates, T. 2004. "The Two Worlds of Operations Management Research and Practice." *International Journal of Operations & Production Management*, 24(4):372-387.
- Tan, K.C., and Wisner, J.D. 2003. "A Study of Operations Management Constructs and Their Relationships." *International Journal of Operations & Production Management*, 23(11):1300-1325.
- Toni, A.D., and Filippini, R. 1998. "Operations Management in Italy." *International Journal of Operations & Production Management*, 18(7):644-648.
- Vrat, P. 1998. "A Report on Operations Management in India." *International Journal of Operations & Production Management*, 18(7):651-653.

Wacker J.G. 1998. "A definition of theory: research guidelines for different theory-building research methods in operations management." *Journal of Operations Management*, 16, pp. 361-385.