

IMPACT OF INFORMATION TECHNOLOGY ON PERFORMANCE OF EMPLOYEES: A REFERENCE OF PRIVATE COMMERCIAL BANKS IN BANGLADESH

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ABSTRACT

Modern industries cannot function effectively without the assistance of technology. Technology has largely taken over the world of financial institutions. Throughout the years, banks have invested a significant amount of money into technological advancement in order to gain a competitive advantage over their rivals. It is the goal of this research to examine the impact of information technology on the performance of Bangladeshi bank employees. According to the findings of this study, implementing technology into the workplace has increased employee productivity. Additionally, technological advancement has contributed to a reduction in errors and frauds and saving time. However, in order to get the best results from new technologies, proper training and workshops must be provided first. Before beginning the implementation process, all of the preconditions must be met in order to ensure a high level of customer satisfaction as well as good performance.

Key Words: Information technology, commercial banks, technological advancement, quality service.

1. INTRODUCTION

Every industry can benefit from technology. The way we live has been fundamentally altered by technological advancement. Increasing numbers of people have increased demand for goods and services. Customers are more aware than ever before of the market and the product. Organizations must keep up with the times if they want to keep their customers happy. They have adapted their business practices in order to better serve their customers. They must adopt new technology in order to remain competitive. In doing so, they've taken advantage of the advantages that come with living in a Global Village. Any country's economic competitiveness can be enhanced by utilizing IT. Rapid decision-making, lower costs, more precise data, more rapid reaction times, and so on are all the products of technological progress.

One of the most important stakeholders in technology is the financial sector. Increasingly, financial institutions such as commercial banks rely on technology. They've put a lot of money into technological advancement in order to better serve their customers and gain an advantage over their competitors.

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These days, banks put their customers first. As a result, they are attempting to expand their customer base and their market share. An increase in the value of information systems has allowed businesses to make better decisions. Various software, such as DSS, ESS, and others, are used by management to develop strategies. They're not just collecting data; they're processing it and putting it to good use in the decision-making process. It's well-known that information is a strategic and tactical resource in organizations, as well as a major source of added value. Rezaei, Rezaei, Zare, Akbarzadeh, & Zare, (Sep. 2014) Information is viewed as a resource that can be used to an organization's advantage in the marketplace. The strategic business goals of the organization can be met if the organization is able to make effective use of these vital resources by implementing new technology.

Khajeh, (2011) stated that the absence of information technology (IT) can lead to ignorance, poor decisions, and ultimately failure for a business. As a result, to succeed in business and remain competitive, one will need to keep up with the times. According to Agboola, (2003), banks initially used technology to transfer data from branch servers to the central server; however, as time progressed, they began to focus on automating business processes. Customers today are more demanding, requiring faster response times, more convenient service, and the ability to access their accounts from any location at any time. Organizations must meet the needs of their customers in order to gain their trust, and this can be done by implementing modern technology at every level. A better understanding of how and why IT affects an organization's performance is no longer a significant factor in the development of an organization's performance. IT-based banking activities include mobile banking, internet banking, ATMs, e-transfers via SMS, and a host of other banking services, such as check deposit machines and electronic transfer machines. To offer these services, banks make their products more appealing for their customers while also lowering administrative expenses. Banks cut down on paper use and provide a paperless work environment. In addition, they hope that IT will boost employee productivity. The new era expects instant gratification at all times and in any location. Because IT has several built-in checks, workers are more productive and make fewer mistakes. As a result, workers are able to carry out a wide range of additional duties in addition to their primary duties. Because branches are the most important and central point of contact for banking services, a customer of one branch is now a customer of the entire bank. For today's business and banking sectors, the availability of an online network is critical and mandatory. To support both employees and customers, banks with a large number of branches need a smooth information system network and a high-performance server. Because of technology and the internet, a wide variety of delivery methods have emerged.

2. LITERATURE REVIEW

The importance of Information Technology (IT) is immeasurable to every aspect of human life and business. IT has an enormous quintessence in banking system. In today's banking system, IT and its applications are considered as the valuable assets which help to face the challenges of new economy.

Dangolani, (2011) and Samsudeen & Yamin, (2018) revealed that Information Technology has been the keystone of recent financial sector developments aimed at enhancing the speed and reliability of financial processes and of initiatives to strengthen the banking sector. In today's global society, IT is a prime force. Ahmadi-rezaei, (2011) in his study pointed that investment in technology result in better facilitation of the customers and time saving of both customers and employees. Gupta & Sharma, (2001) concluded that quality service is their main concern for any organization. To deliver quality service by the employees, efficiency and speed of network should be consistent. Accurate and timely information help to take better decision. Instant access to timely and accurate information has vital importance in banks. Khajeh, (2011) stated that banking industry influences by technology in three different ways which are level of competition, economy of scale and creation of different delivery channel.

Ugwu, Oyeibisi, Ilori, & Adagunodo, (2000) investigated that IT has significant influence on efficiency and productivity of organization in local and global perspectives. In local perspective, it results in saving of time, control over errors, helps in decision making, reduction in paper work and quick access to information. Besides in global perspective, it helps in development of business and increase market share.

Mironicacorici showed that the enhancement of the management systems centered into the growing level of professional training. The relationship of firm and Information System is interdependent. The technology should support the firm's policies, procedures and people. Wilson, Iravo, Tirimba, & Ombui, (2015) stated that Information Technology has a substantial effect on the movement of people and product. Today's banking services are more than the expectations of customers. They focus on the customer oriented services. They are providing more services to achieve customer satisfaction and capture maximum market. Jawad, Muzaffar, & Mahmood, (2014) and Samsudeen, Thelijagoda, & Pulasinghe, (2015) found in their research that today's customer are more demanding, they want quick response, convenient service, access to their account anytime, anywhere. Aliyu & Tasmin, (2012) said that the growth in technology, change in knowledge and attitude of customer has made the banking industry to restructure. Ghasemi, Shafeiepoor, Aslani, & Barvayeh,

(2011) also mentioned that growth in technology explore more opportunity for any organization. Use of technology in banking results in paperless banking which reduce the manual working burden on employees. It also results in increased functionality and improved accuracy.

Ombati, Magutu, Nyamwange, & Nyaoga, (2010) concluded that there is a direct relationship between technology and service quality in banking industry. If financial institution use technology in a better way, it will result in quality service as well as enhancing employee's productivity. Dauda & Akingbade, (2011) mentioned that if organization invest in technology, it increases employee's motivation and morale. It also helps to decrease employee's turnover level and will motivate employees towards motivation. Kim & Davidson, (2004) concluded that the investment in IT results in reduction in payroll expenses; however, there is no any impact of it on total expense. It also results in the employee's productivity as well as the market share of the organization. It also helps to increase the revenue and profitability.

Samsudeen & Thowfeek, (2014) in his study revealed that adoption of the cloud computing services has been rapidly growing during past years. Zhygalova, (2013) said that the use of cloud computing in the organizations will have the noticeable improvements in their business process

2.1 Objective of the Study

The broad objective of the study is to find out the effects of information technology on performance of the employees of private commercial banks in Bangladesh. The specific objectives of the study are as follow:

- I. To find out IT adoption reduces employee's workload
- II. To identify that employees are motivating through the usage of IT
- III. To measure the employee's error rate after the adoption of IT
- IV. To visualize that IT increases the efficiency of the employees
- V. To find out IT increases employees satisfaction
- VI. To measure IT that reduce the absenteeism of the employees.

3. METHODOLOGY

3.1 Research Design

Primary and secondary data were used in the study to examine the effect of information technology on the performance of employees at private commercial banks. Questionnaires are ideal for exploratory, observational, and survey research because they yield the most primary data Bakar, (2001). The primary data source for this study is a self-created questionnaire, and the secondary data source is a variety

of online articles. As a result, the research is structured to be both qualitative and quantitative.

Many researchers has applied simple and cost-effective sampling methods like convenience sampling process and found that has a higher response rate Eze, Manyeki, Yaw, & Har, (2011). The study used an online survey to gather primary data from 98 participants. Employees of Bangladesh's private banks were the intended respondent. These respondents given data through a set of questions. In the section A of the questionnaire, the respondents were asked about a set of demographic data, while Section B focuses on the research's specific objectives. Likert-scale questions were placed and the answers were collected in five point such as: 1 indicating "strongly disagree," 2 "disagree," 3 "neutral," 4 "agree," and 5 indicating "strongly agree" on the five-point scale.

Data gathered through the questionnaire was thoroughly checked. In this process, out of 120 total employees, responses of 98 employees found valid.

3.2 Hypothesis

H0: There is no significant relationship between the usage of Information Technology in the banking sector and excellent performance of the employees.

H1: There is a significant relationship between the usage of Information Technology in the banking sector and excellent performance of the employees.

3.3 Data Analysis

The data was edited to ensure the integrity and logical consistency of the responses. After the data had been edited, quantitative analysis was performed using SPSS 25.0. The results of the analysis were presented in the form of tables and graphs for ease of comprehension. The causal relationship between the dependent and independent variables was discovered using the Pearson Correlation and Linear Regression models.

4. RESULTS AND ANALYSIS

The data was solicited to 120 employees, but only 98 turned up to provide the data. Table-1 summarized the demographics of those who took part in the survey. Males comprised (56.1%) of the participants, while females comprised (43.9%). A little higher than half of the respondents were (64.3%) married, followed by (35.7%) were single. In addition, this Table-1 reveals the respondents' educational backgrounds. The majority of those polled (46.9%) had earned a bachelor's degree, while (36.7%) had earned a master's or professional degree (16.3%). 61% of those who took the survey worked in middle management, with the remaining 2% in the

highest echelons of the corporate ladder (38.8%).

Table-1: Demographic information of the respondents

| Sl. No | Characteristics | Component | Frequency | Percentage |
|--------|------------------------------|-----------------------|-----------|------------|
| (1) | Gender | Male | 55 | 56.1 |
| | | Female | 43 | 43.9 |
| (2) | Educational Background | Diploma | - | - |
| | | Bachelor's Degree | 46 | 46.9 |
| | | Master's Degree | 36 | 36.7 |
| | | Professional Degree | 16 | 16.3 |
| | | PhD/DBA | - | - |
| (3) | Marital Status | Single | 35 | 35.7 |
| | | Married | 63 | 64.3 |
| | | Divorced | - | - |
| | | Widowed | - | - |
| (4) | Position in the Organization | Top Management | 38 | 38.8 |
| | | Middle Management | 60 | 61.2 |
| | | First Line Management | - | - |

One of the main objective of introduction of technology in Banking system is to reduce the work load of employees. Because the work load of employees increased as the banking transactions has extended across the world. The Table-2 represents the percentage of employees agree IT reduces their work load. Nowa-days customers are transferring money through online via ATM, E-banking which helps to reduce the long ques in the banks. With the help of technology (like Internet Banking, ATM, Mobile Banking), long ques in banks have reduced significantly. For example, Bankers no longer has to manually calculate their profit at the year closing. Technology does it for them automatically. As a result it is found that out of 98 respondents 35.70% of employees records agree, and 31.60% of employees records strongly agree with the statement.

Table-2: Work Load of Respondents Participated in this Survey

| | | Frequency | Percent | Cumulative Percent |
|-------|-------------------|-----------|---------|--------------------|
| Valid | Strongly disagree | 9 | 9.2 | 9.2 |
| | Disagree | 13 | 13.3 | 22.4 |
| | Neutral | 10 | 10.2 | 32.7 |
| | Agree | 35 | 35.7 | 68.4 |
| | Strongly Agree | 31 | 31.6 | 100.0 |
| | Total | 98 | 100.0 | |

When respondents were asked about the employees’ motivation, 38.80% of the respondents strongly agreed that IT increases their motivation in work place. From Table-3, above 8.20% of the respondents neither agree nor disagree with this statement. Improved technology does motivate employees at work palace. As IT helps to better the work performance than the previous systems, it motivates the employees to search and gather knowledge for new technology as well as train themselves accordingly.

Table-3: Improvement of Level of Respondents Motivation

| | | Frequency | Percent | Cumulative Percent |
|-------|-------------------|-----------|---------|--------------------|
| Valid | Strongly disagree | 5 | 5.1 | 5.1 |
| | Disagree | 10 | 10.2 | 15.3 |
| | Neutral | 8 | 8.2 | 23.5 |
| | Agree | 37 | 37.8 | 61.2 |
| | Strongly Agree | 38 | 38.8 | 100.0 |
| | Total | 98 | 100.0 | |

The Table-4 that 34.70% of the respondents strongly accepted that with proper adoption of IT in working sector, the error rates have reduced significantly. Also 33.70% of the respondents agree with that. Nowadays banks are using different software to do their transactions which can automatically detect the error as a result on adoption of IT.

Table-4: Employees Expectation on Reduction of Error Rate

| | | Frequency | Percent | Cumulative Percent |
|-------|-------------------|-----------|---------|--------------------|
| Valid | Strongly disagree | 7 | 7.1 | 7.1 |
| | Disagree | 9 | 9.2 | 16.3 |
| | Neutral | 15 | 15.3 | 31.6 |
| | Agree | 33 | 33.7 | 65.3 |
| | Strongly Agree | 34 | 34.7 | 100.0 |
| | Total | | 100.0 | |

The Table-5 shows that 45.90% of the respondents agree with the statement that IT increases the efficiency of the employees. Also 33.70% of the respondents support this statement. There are so many applications like- HourStack, Toggl, Evernote etc which is significantly contributing to employee’s involvement and efficiency.

Table-5: Level of Employees' Efficiency

| | | Frequency | Percent | Cumulative Percent |
|-------|-------------------|-----------|---------|--------------------|
| Valid | Strongly disagree | 3 | 3.1 | 3.1 |
| | Disagree | 8 | 8.2 | 11.2 |
| | Neutral | 9 | 9.2 | 20.4 |
| | Agree | 45 | 45.9 | 66.3 |
| | Strongly Agree | 33 | 33.7 | 100.0 |
| | Total | 98 | 100.0 | |

The Table-6 represents the satisfaction level of the employees after using Information Technology. There is no doubt that the applications of Technology in Banking process make their working easier than working manual. And this definitely increases the satisfaction level of employees. Table-6 is showing that we see majority of the respondents agreed with this statement as it facilitate the activities of bankers in different ways, for example- real time balance updates, automatic report generation, and access to information anytime and anywhere through the network.

Table-6: Level of Employees' Satisfaction

| | | Frequency | Percent | Cumulative Percent |
|-------|-------------------|-----------|---------|--------------------|
| Valid | Strongly disagree | 3 | 3.1 | 3.1 |
| | Disagree | 4 | 4.1 | 7.1 |
| | Neutral | 14 | 14.3 | 21.4 |
| | Agree | 36 | 36.7 | 58.2 |
| | Strongly Agree | 41 | 41.8 | 100.0 |
| | Total | 98 | 100.0 | |

Table-7 is showing that 32 respondents (32.7%) strongly supporting that the usage of IT has reduced the absenteeism of the employees. On the other hand 30.6% also agreed on in this point. There is no doubt that the applications of IT make their working environment easier than working manually. Thus it helps the employees to work more efficiently than the previous system.

Table-7: Absenteeism of Employees

| | | Frequency | Percent | Cumulative Percent |
|-------|-------------------|-----------|---------|--------------------|
| Valid | Strongly disagree | 10 | 10.2 | 10.5 |
| | Disagree | 14 | 14.3 | 24.5 |
| | Neutral | 12 | 12.2 | 36.7 |
| | Agree | 30 | 30.6 | 67.3 |
| | Strongly Agree | 32 | 32.7 | 100.0 |
| | Total | 98 | 100.0 | |

Respondents were asked to provide their opinion on selected thematic area using a tool developed based on ordinal Likert Scale with the least 1 and the highest 5 score (Likert, 1932).

A specific objective of this research is to examine the impact of information technology on the work output of Bangladeshi bank employees. The correlation coefficient between the use of technology and employee performance was found to be 0.821, which is very significant.

The estimated parameter of regression model are shown in Table-8. The independent variable (usage of Information Technology) that was examined with performance level of the employees.

Table 8: Results of Liner Regression

| | Coefficients | Standard Error | t-value | P-value |
|---------------------|--------------|----------------|---------|---------|
| Intercept | 2.498 | .102 | 24.518 | .000 |
| Usage of Technology | .414 | .029 | 14.098 | .000 |

For every one percent increase in the banking sector's use of Information Technology, employees will see a performance boost of 0.414 (41%). The research also shows that the estimated value of t-value has a positive and highly significant correlation. Thus it proves that employees who use more Information Technology in their workplaces are more likely to perform at a higher level than those who don't. As a result, it can be concluded that bank employees perform better when information technology is used in their work processes.

5. CONCLUSION

Employee performance in Bangladesh's private commercial banks was examined in this research. A company's ability to compete and operate at a higher level of efficiency can be greatly enhanced by making significant investments in technology. Because of the importance of employees to any organization, it is imperative that every possible measure can be taken to help them to do their jobs more effectively and efficiently. For private commercial banks and other organizations, this gives them a competitive advantage in terms of better customer service and lower operational costs. Research have shown that IT has a significant impact on employees' productivity. Employee productivity, job satisfaction, and absenteeism have been found to rise as a result of reduced workload, increased motivation, decreased error rates, and increased efficiency. The hypothesis was put to the test that if the banking industry has a positive strong connection between employee performance and their use of IT. The result found that Information technology has a

positive effect on bank performance, according to those who responded in the banking industry. According to the findings of the study, banks are using technology to gain an advantage over their competitors by ensuring that their employees perform consistently well.

6. RECOMMENDATION

This study recommends that banks should utilize information Technology more than ever in every operational process of the bank to get the maximum benefit out of it. At the same time, it has to ensure that proper security systems are duly installed to protect the interest of the Bank & its stakeholders. Banks should conduct proper training & workshops for its employees so that they can easily cope with technological change & provide better service to the customers.

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