

APPLICATION OF QUEUING THEORY IN MODERN BANKING SECTOR

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ABSTRACT

In the Modern economic world, banking has occupied one of the most important positions. It is one of the greatest agencies of commerce as it is necessary for trade and industry. For the industrial progress and the economic activity of the country modern banking is very helpful and plays a key role. It is commonly perceived that technology is important to enhance the standard of customer service and to make it customer friendly. With the use of technology in the form of mobile banking, ATMs, internet banking, telephone banking etc. banking industry is growing rapidly. One of the banking products that cater to the requirements of retail segment is plastic card. It has seen its number grow in geometric progression in recent years. These days the idea of core banking has made 'anytime, anywhere' banking possible. Banking services had made a head way and the remittance of different banking services are transferred through the medium of high technology at a fraction of cost to the consumer. How the technological aid in banking sector captivating the sustainable development.

KEYWORDS: *Economic Activity, Sustainable Development, Brisk Escalation, Technological Innovation.*

Introduction

Banking industry is a proliferating industry. It is engrossed on technological remodeling these days. An important and vital role played by banks in the economic development of the country. Banking systems brings brisk escalation in different sectors of the economy hence it needs to be efficient, effective and disciplined.

All the areas of human ventures and activities are reorganized by technological innovation. E-banking is now circumspectly taking place of traditional branch banking. Now, a customer can choose their banker from the different banks offering various services and giving quality services. Internet Banking is bringing a change in the banking industry gradually and is having an eloquent impact on banking relationship.

The importance, requirement, impacts and utility of current banking services for the defensible expansion of the banking sector is expressed in this paper.

Objectives of the Study

- To apprehend the requirement of modern banking services
- To know the impressions of current banking services.
- To inform the significance corresponding modern banking services
- To perceive the advantage of modern banking services.

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Need for the Study

The future expansion and the speed of evolution of India's banking industry had been immense over the past years and will always remain high. A strong expansion and development will be enjoyed by the India's financial sector in the coming years, directed by the increase in personal incomes and corporate innovation. It was difficult for the banks to keep pace with the international banks with respect to customer service without making the use of computers and information technology. Usage of modern alteration and mechanization of the banking industry of India has increased a number of folds after the economy.

Impact of Modern Banking Sector

Banking sector is expanding with a fast pace with understanding the needs of customer by giving technological services like online banking, mobile banking, ATMs and so on. This development and enhancement has been supported by the development in the area of technology. The customers of banks are becoming extremely clamorous and it is the immeasurable use of the technology that permits banks to satisfy efficiently the needs of customers. Also the banking sector reforms and the commencement of e-banking has made very structural changes in the quality of services, managerial decisions, profitability, operational performance and productivity.

Technology Based Modern Banking Services

Use of advanced technology has led to the shift from traditional banking methods to modern banking methods. The most familiar and functional technology based banking techniques are mobile banking, interne banking, plastic money, ATMs etc.

- **Online Banking:** It accredit the customers to administer financial banking transactions on a safe website which can be regulated by a virtual bank, credit union or building society. It has made banking faster and user friendly.
- **Mobile Banking:** Mobile banking allows the customers of a financial institution to manage to do multiple financial transactions through a gadget or a personal digital assistant.
- **Telephone Banking:** It is a bank service provided by financial institutions allowing its customers to conduct banking transactions over the telephone. Institutions which provide banking services exclusively over telephone are called Phone Banks. They use special technology to modernize the customer by providing bank and account related information over a telephone.
- **ATM (Automated Teller Machine):** ATMs are electronic devices that are operated by the customer himself to withdraw or deposit cash from or in a bank account respectively. A customer has to get an ATM card from the bank to make an transaction using the ATM. The card is made of plastic and is magnetically coded so that it is easily read by the machine.
- **Plastic Money:** Plastic Money is a must need of our busy life. Also it is the best alternative for cash. It is safe to travel with a plastic card than carrying cash all the time. It has made life easy as one need not carry money or gold all the time. Money transactions are also made so customer friendly and easy, all one need to do is carry the card in the pocket.

A Brief Introduction of Banking Queue Management System

The process of moving the customer from a core location to a particular place or service is Queuing. Banking Queuing system is a modern method used to regulate queues. Not only it helps the bank manager to increase the services provided to the customers but also revamp the staff efficiency to reduce further costs that appears generally due to mistakes made by the staff. Waiting in lines is something that everyone does but it also irritates if it takes long hours. There are lines everywhere irrespective of the place. Queue in banks helps the customers and meet their requirements effortlessly.

Types of Queues Model

Following are the models of queues.

- **Shortest Processed First (SPF):** It is a model where the transactions of short expected length are entertained as soon as possible.
- **First in First Out:** as the name suggests, the customer who registered himself first for the service will be entertained first. It is considered the most important model of the queues.
- **Single Queue System:** Here, each customer is served in turn and the format of the queue deters pushing in. Visible guarantee is presented to the customer that they will be served fairly and the queue is progressing.

- **Multiple Queue System:** generally department stores and supermarkets witness such systems. There are multiple individual queues without any filtering of customers. In such system the floor space is used optimally and the customer feels obliged to search for a queue that is shorter.
- **With the Help of Queue Management System:** The job satisfaction among the staff is increased as they get less stressed while dealing the customers. Also the customers served per hour by the staff are increased. Customers waiting in the queue are most likely to pick up the impulse purchases within the queue line. This system of queuing proves better in all the ways as the customers expect that they should be treated fairly and the management of queues gives them the idea that their time is respected.

Findings

This section briefly describes the findings of reviewed methods and techniques used to evaluate and increase the performance of Queuing systems in various fields. Our findings show that improving customer management could significantly improve economic and social benefits. To perceive how to enhance efficiency, minimize the cost of services, it is required to use queuing theory to emerge a queuing model to optimize the services on banks. Throughout this paper, it is clear that customer service is a necessary factor of customer management in banking.

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