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# An Automated Experience-Based Business Process Reengineer: Case Study Bank Call Center

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Abstract: In the wake of the digital era, there has been increased competition among businesses due to technological development, changing customer preferences and globalization. These factors have led to survival challenges in banks. There has been increased demand for efficient and quality customer care services and business agility for speed to enhance profitability and cost reduction. Reengineering is a tool that has been adopted as a major driver of change in major institutions. Business Process Reengineering plays a vital role in enhancing efficiency and productivity. The primary goal of Business Process Reengineering is to improve efficiency, enhance quality services and reduce costs incurred in conducting organizational processes. A major business process in banks is communication and this is done through the operation of a call center. The call center serves to handle customer complaints, requests, and it is a vital tool for the company in enhancing customer services. Most banks however, have still relied on age old call center process models and it has had an impact on their customer relations. For this reason, banks should adopt a shift from the routinely call center process models and reengineer their models to enhance efficiency and cut costs. This research paper examines improvements in the bank call center process model and looks at why it is important for the bank call center and the impacts on the overall institutional performance. The paper concludes that Reengineering the Business processes at the call center increases first call resolution, reduces call abandonment rates, enhances the quality and brand image, helps cut on unnecessary Subscriber Maintenance Tickets and leads to a reduction in repeat calls. All these factors cumulate to increased service delivery and an overally increased performance of banks.

Keywords: Business Process Modeling, Business Process Reengineering, Business Process Improvement, Call Center Process

### 1. Introduction

Business process reengineering (BPR) alludes to the fundamental radical redesign and rethinking of the overall business process to enhance improvements in areas of performance like quality, service, cost and even speed. This is done by incorporating the required information technology methods. According to Hesson [1], organizations have to continuously find better ways of operation by developing new competencies in the ever-changing global economy since old competencies and business advantages gained are quickly eroded.

Typically, organizational performance is gauged by the total economic results from the activities being undertaken in the organization. There has been no defined factor that enhances organizational performance, but it is rather a composite of several aspects [2]. However, the dimensions of performance in a business can be categorized as efficiency, effectiveness and adaptability. To survive in the turbulent business environment, businesses have to adapt. Adapting means embracing changing and adopting more efficient processes. Businesses have therefore adapted to BPR so as to ensure that change is systematic. Changing banking dynamics globally have forced banks to reengineer. This is because adopting better business processes in activities of the bank enables it to acquire new customers, build better relationships and offer world-class service quality that increases customer satisfaction.

Although most institutions have undertaken BPR to improve their business processes, the magnitude of improvements and performance levels benefits to the organization go beyond only reengineering the business process. Improvements also encompass the creation of a set of BPR systems, technologies and complementary skills. The set of technologies and systems are therefore key in

institutionalizing and reinforcing the redesigned process [3].

### 2. Literature Review

The concept of process redesign was popularized by early scholars on the field like Champy and Hammer, 1993, and referred to BPR as business redesign by the use of technology to increase quality, enhance cost reduction and profits all in geometrical progression. Other studies have termed BPR in organizations as complete process transformations and radical changes that turn typical bureaucratic organizational structures specialization [3]. Furthermore, in another study, Cheng, Tsai & Xiano [4] observed that reengineering of business processes is essential in breaking down the business objectives into smaller achievable processes instead of rigid structures and this greatly increased efficiency and organizational performance. Adoption of BPR in a few observed organizations by Herzog, Polajnar & Tonchia [5] (2007) shows that it enabled them to gain benefits that skyrocketed their performance. They conducted investigative study to understand how financial and manufacturing organizations managed to overcome enhance operational performance and minimize process in-efficiency, they found the BPR was a defining factor.

Shin &Jemella [6] further examined the importance of business process reengineering in a case study of Chase Manhattan Bank and defined it as a management tool that is vital in analyzing and redesigning the existent business processes and their components in terms of their efficiency and effectiveness. They posited that conducting BPR is a planned gathering of business requirements to achieve a modernization effort in the defined areas that require leverage. Successful BPR implementation in organization depends on how the project articulates with organizational cultural norms as well as the IT infrastructure in place [7].

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The moderating variable in the implementation of BPR in banking institutions is the IT capability as well as its influence in intangible company resources (Liu, Liu, and Hu, 2008). They held that good IT capabilities and experience enables the smooth implementation of reliable and cost-efficient systems. Eid [8] in a publication 'Towards a successful CRM implementation in banks' talks about how IT capabilities provide a basis of enhancing organizational performance and gaining a competitive advantage. The publication further talks about how redesigning long standing processes in banks helps improve several performance metrics.

## 3. BPR in the context of Bank Call center Process

BPR in the Bank Call center process means restructuring and transforming particular select processes with the view of empowering the call center with temporary technologies innovations and business solutions that will help improve service delivery so that the bank can gain a competitive advantage and increase profitability. Currently, there is a rapidly growing customer base in banks. Additionally, the proliferation of technology in many sectors of the economy has forced banks to adopt an online service system in which customers can transact over their mobile phones or computers remotely. Different from the transactions, this has created the need for a more responsive customer care support and a diligent call center that is standby to handle customer complaints and sort out any emergencies when warranted. Given this business situation, the current call center process model has not been able to comfortably realize accommodating the increasing customer needs. In most banks, post-sales support has been deteriorating as most customer service teams are facing a challenge. The call center is an integral part of customer service and the current customer service management system has not been able to fully support it.

#### 4. The Current Call Center Process Model

The Bizagi call center process model offers a simple and easy to use model for every organization. It presents a disruptive business model with a collaborative design. By adopting a helpdesk design that allows the company to efficiently manage customer requests and complaints in a single process, it offers one-on one real-time solutions where possible. The model aims at offering quick solutions to customers that contact the call center. The call center process helps in streamlining contact activities between key departments of an organization with customers. It enables fast action on customer requests and complaints. An efficient customer interaction system increases productivity as it cultivates a culture of continuous improvement among employees. Apart from the employees a stronger customer relationship is built since it enables faster action to their requests and complaints. The system further enables control of base records where actions can be improved. This makes every case have a positive feedback and reduces the reopening of cases thus standardizing the attention of frequent incidences

The model has a systematic method in which customer issues are solved. The process is initiated when the customer makes a call to the call center to launch a complaint or to make a request. Most of these calls get into the call center through the Automated Call Distributer where it is then routed to the concerned agent [9]. The ACD is an automatic prompt that enables the customer to choose their problem from a list of options from which they are then directed to the relevant agent. If all the agents are busy, the caller is placed in a queue, after which they are then served. The call center agent gathers the details of the client and by accessing the system in real-time; they are then able to assist the client accordingly. If it takes a longer time to fetch the solution or to execute the request of the client, they can be placed on hold as the operator executes the request of the client upon clear verification.

## 5. Disadvantages/ Challenges of the Current Model

However, the system faces challenges due to the highly unstructured process within which it is based. It lacks the capabilities of complex case-control. The nature of customer queries and requests are highly unstructured and diverse. At times they require several other alternatives in the workflow. This often deteriorates the quality of the post-sales support that should be given to the clients as well as direct assistance like credit card issues and diverse account queries raised. Consequently, this has led to customer dissatisfaction with bank call centers due to the poor-quality services offered. Lack of parameters to ensure customer information is always available has led to the loss of vital customer information, making customer services in the call center a difficult task. Additionally, first call resolution has been less than 50 % in most call centers, coupled with a high rate of call drops [10]. The system further lacks any metrics for Key Performance Indicator (KPI) and Service Level Agreement (SLAs) and has poor inter-departmental coordination in handling of customer cases. The current model mainly consists of a main process: The Call Center Process and four subprocesses: Registration Block/Change Credit Card Password, Block/Change Debit Card Password and Register client Phone number Via ATM Password.

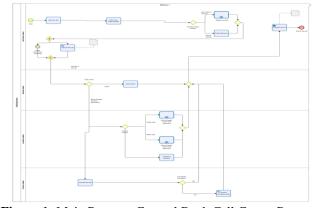


Figure 1: Main Process: General Bank Call Center Process

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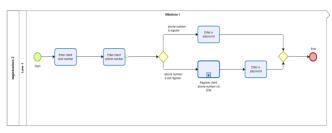


Figure 2: Subprocess: Registration Process

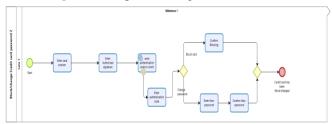


Figure 3: Subprocess: Block/Change Credit Card Password

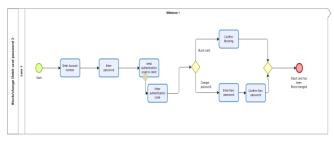


Figure 4: Subprocess: Block/Change Debit Card Password



Figure 5: Subprocess: Register client Phone number Via ATM Password

Finally, by comparing the call center process model with the minimal requirements by the Gartner Business Process IQ Framework, it offers a lower intelligence system as encompassed from this framework [11].

## **6.** Recommendations of Improvements on the Process

The system can therefore be redesigned to sort out these challenges and enable the call center operators to make clear decisions that define the flow of a customer case, especially when it cannot be predicted beforehand. The objectives of the redesign are simply to reduce the transaction process; the time is taken before the request or the complaint of the customer is acted on, without sacrificing security and enhancing quality and providing a real time solution to clients. By redesigning the call center processes, the bank conforms to the prevailing transforming market realities. By analyzing the shortcomings of the system, several improvements can be made.

The common problem of First Call Resolution (FCR) being a common challenge of the system can be addressed by including a mechanism of analyzing the existent incoming call flow data to mark frequent and repeat callers [12]. Additionally, there is a need to group the primary, secondary and tertiary user needs. The system should be enhanced so that there is an analysis of all logged cases by the use of a service request management (SRM) system add-on integrated to the call center model [13]. The system enables the review of all the logs to identify first time callers and repeat callers. Identifying repeat callers then enables the call center agents to query the knowledge base and provide more personalized services to the customer.

By doing this, the first call resolution rate increases as it will enable the call center agents to identify first time callers, repeat callers and therefore reduce repeat calls and also multiple-case entry for same clients with the same issues. In overall, this improvement helps in reducing the turnaround time in solving customer issues. Consequently, this enables the call center agents to manage additional call volume inflows and could increase the First Call Resolution FCR rate from 50% to 80% [12]. Moreover, improvements on the system do not end there. The redesign can further involve the addition of features that enhance mapping of infrastructure, reporting, developing concrete KPIs and adopting a method for optimum skill utilization.

Given the recommendations given above, a redesign on the structure of the process needs to be accomplished for the recommendations to be incorporated into the process. In order to reduce contact reduction, there is a need for automation of the process; if the call center has different specialists depending on the customer requests, say A or B, A mechanism that defines if the request goes to specialist A or B has to be included. This can be done by automation in the ACD menu, this enables the user to choose the nature of the case and the ACD automatically selects the call center agent to deal with the issue. By doing so, contact reduction is realized. Moreover, additional resources have to be added into the system in the form of cross-trained agents. Apart from the division of agents depending on the case to be handled, there should be a provision for customers whose cases are not well-defined to enable it to be grouped through the ACD mechanism; the crops-trained call center agents can be able to handle their cases.



Figure 6: Improved Process for Bank Call Center Model

A simulation of the recommendations given can be depicted as; the customer request enters the call center through telephone call. It then goes through the Automated Call Distributor (ACD) which routes the case to the designated agent depending on the case as Special, General or

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Undefined. The caller then waits in the queue depending on the agent chosen by the ACD. The ACD system is infused with a recording tool to determine the initial customer queries for analysis and future references. The information is stored in the ACD Database for generation of call reports and for performance analysis. The system further adopts flexibility among the call agents for reference or case forwarding. Once the client is served and the call agent closes the case, the data is automatically sent to the ACD repository for comparisons with the input in order to determine performance parameters. Once all the data is collected, an analysis of the number of call and types of complaints is done. Waiting times, service time length, and customer feedback is analyzed. Additionally, abandoned calls are tabulated and compared with agent availability. By analyzing all these aspects, metrics of performance can be accessed to see if the recommendations adopted had impacts on service times, First Call Resolution rates and Call dropping rates. A positive change in all these parameters infers to increased customer-care effectiveness. This enhances customer satisfaction and spurs profit-making in the bank.

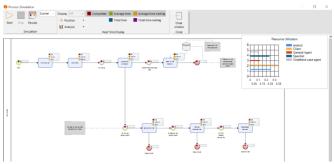


Figure 7: Simulated the Improved Process for Bank Call Center Process



Figure 8: Simulated Result for Improved Process

### 7. Conclusion

With the current global expansion and rapid change, most companies are shifting to a customer centered approach. Banks are vouching to satisfy their customers in order to retain them by delivering the best services and the best customer services. This has forced companies to reengineer their business processes, so they can meet these targets. By identifying what works and what needs to be improved, efficiency and productivity is enhanced. Reengineering the Business processes at the call center increases first call resolution, reduces call abandonment rates, enhances the quality and brand image, helps cut on unnecessary Subscriber Maintenance Tickets and leads to a reduction in

repeat calls. All these factors cumulate to increased service delivery and an overall increased performance of banks.

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