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Abstract

*The purpose of this project is to improve the bank account opening process and save the time of opening a new bank account at Palestine Islamic Bank (PIB) by at least 20%, using Lean Six Sigma (LSS) methodology. To achieve this, the researcher used value tools of the LSS to gather data on the key measures for the account opening process in accordance with the DMAIC Methodology (Define, Measure, Analyze, Improve and Control), and the root causes for the extra-long time required to open a new bank account. The results showed that the implemented test at Al-Bireh branch has reduced the average time of opening a new bank account by **61.4%**, i.e. from 38 minutes to 14.7 minutes, alongside reducing the customer's waiting time at the Bank through eliminating some steps. In parallel, the researcher has developed a new standard for the bank account opening process with control charts to monitor the prospective key performance indicators. It is crucial to state that LSS methodology is a comprehensive framework, which includes specific improvement tools for achieving sustainable results in reducing the time rate in bank account opening process at PIB. In order to do so, it is recommended that the Bank should continue with the improvement actions, particularly by focusing on internal and external communication, practical trainings, periodic feedback and control activities.*

Keywords: Bank account opening process, Lean Six Sigma Methodology, continuous improvement.

Introduction:

The process of improvement is considered as proactive approach of defining, verifying and developing the current procedures and activities of the businesses related to the banking sector to guarantee consistent growth and development at a level of high quality to meet: customers' expectations, the requirements of severe competition and market segmentation. "Within product businesses, for example, product development defers to marketing when it comes to customer experience issues, and both usually focus on features and specifications. Operations concern itself mainly with quality, timeliness, and cost. And customer service personnel tend to concentrate on the unfolding transaction but not its connection to those preceding or following it" (Schwager & Meyer, 2007). In addition, customer loyalty and retention have strong linkage with the offered quality as well as with the increase or decrease in the returned product and services, or in other words, the bad feedback will eventually generate decrease in revenues and profits, which, in turn, result in the decline of market share.

Palestine Islamic Bank (PIB) is one of the largest Banks in Palestine determined to proceed in providing excellent Islamic banking services and carry out progressive improvement activities (Palestine Islamic Bank, 2017). According to "Internal source at the bank", PIB is currently working on achieving the ISO 9001:2015 certification and it is expected to be received in 2019. The bank's management has approved to start the improvement schedule for a new bank account opening process to review, analyze, and comprehend the respective process, and to identify the improvement opportunities of enhancing customer satisfaction, keeping good reputation, and

gaining greater market share, as well as minimizing the total cost of the overall related processes to achieve better performance and get more competitive advantages.

In parallel, Lean Six Sigma methodology and its pool of tools and techniques are professional options for businesses to get more productivity with less cost, whether in production cycle time or enhancing capacity, and minimizing the variation as low as possible to get better quality in services and manufacturing fields. This will absolutely create massive productivity, better reputation and increased profits (Drohomeretski, Costa, Lima , & Garbuio , 2014).

The “Lean Six Sigma” term reflects a management system that includes a combination of Lean and Six Sigma (Sheridan, 2000). Furthermore, Lean Six Sigma is defined as a methodology that focuses on the elimination of waste and variation, following the DMAIC structure, to achieve customer satisfaction with regards to quality, delivery and cost. It focuses on improving processes, satisfying customers and achieving better financial results for the business (Salah, Rahim, & Carretero, 2010).

Statement of the study:

As per instructions from the Palestine Monetary Authority (PMA), the PIB had to fulfill the requirements of bank account opening process, which have been increased gradually, not mentioning the increasing global risks and the rapid changes and complexity in the banks worldwide. As a result, the customer had to provide more supportive documents and more protective procedures should be followed. This has led to the slowness of opening bank accounts, customers’ increasing complaints and resentment, and inflexibility, and less productivity in accepting deposits.

Importance of the Project:

Lack of empirical studies:

There is no sufficient literature, specialized in Lean Six Sigma, to improve the bank account opening process among those internationally published so far. Specifically, there is an observable deficiency in the reservoir of research and studies about the implementation of LSS in the Middle East, in general, and Palestine, in specific, especially in the services sector. In addition, there is a sever lack of Lean Six Sigma research, which focus on one company in somehow services sector, such as in the banking field. That's why this study focuses on one company, which is Palestine Islamic Bank. It can be said that the current theoretical base of LSS methodology to enhance this empirical study is not adequate since the origin of LSS is not familiar enough with this academic approach.

Lack of empirically sound LSS implementation models in Palestine:

Implementing LSS has to be at the top of the management priorities of the Palestinian service sectors to keep up with updates using creative thinking to guarantee the best ranking in the procedural aspects, gain good reputation in customer's service, and meet the most appropriate expectations that would lead to lucrative business in local, regional, and international markets.

The project applies methods and tools in descriptive and experimental ways that can be an invaluable source for improving organizations' business, and a motive for more studies to research deeply LSS methodology with its tools. In other words, the framework of this project can be used in drafting out banking formula in Palestine and elsewhere, even in any other similar services

sectors to get the utmost benefits of implementing Lean Six Sigma methodology, especially when it complies with the applicable regulations, customs, and standards. Palestine Monetary Authority could also use the methodology and its tools to improve the bank account opening process and any other vital processes in the banking industry, and be competitive with central banks regionally and globally.

Project Objectives:

This project is focusing on improving the bank account opening process at the Palestine Islamic Bank using Lean Six Sigma methodology. This entails saving the time in opening a new bank account, which means reducing the customers' waiting time at the Bank before their bank accounts are created, in addition to lessening the requirements and documents needed for opening the account, taking into consideration the protective actions that the bank does to prevent the potential risks to the least extent.

More specifically, this study will address the potential causes of the long time spent by both customers and staff when opening the account to be able to formulate a practical improvement plan, and use the appropriate tools of Lean Six Sigma.

The stated target is to save the time spent when opening a new bank account by at least 20%. It is noteworthy that the project reduced the time by **61.4%**, which means achieving more customers' satisfaction with fewer complaints and higher productivity. This paves the way to make changes in other processes at the bank by adopting LSS to guarantee progressive improvement approach.

Project Scope:

The scope was mostly limited to the Bank's employees; there were no partners or parties involved from outside the Bank except for some interviewed customers and the supplier of the new banking system.

The participants in this project included 37 branches of Palestine Islamic Bank in the West Bank and Gaza Strip with special focus on customer service sections, as well as specific departments in the Head Office including: Product Development Department, Organizing and Procedures Department, Central Operations Department, Anti-Money Laundering Department and Compliance Department. This will not explore any other banking services like feeding automatic teller machine (ATM) or money transfer service, etc.

Although this single process of improvement work is exclusive to one particular Bank, the work tools and concepts can be used by other financing services companies.

Literature Review:

Banks today are working hard to get distinguished in meeting the customer's needs. It is well-known that the customer mostly asks for low prices, discounts, offers, and quick qualitative services. In parallel, the suppliers, whether in service or in manufacturing industry, are frequently asked to work intelligently to achieve the customers' requirements with minimal material costs, provide attractive competitive advantages in short lead time and good enough quality to be able to sustain and satisfy customers (Pepper & Spedding, 2010). The major thought of Lean is to make more benefits for customers with fewer resources and expand what customer's value and stop waste

(Lean Enterprise Institute, 2000). Six Sigma is a customer_ centered approach and statistical method of numbers, which helps achieve process perfection. It helps to meet sustainable outcomes with concentrating on statistical instruments to drive choices on diminishing variation and the quantity of imperfections. In the meanwhile, the categories of improvement can be classified as follows: Disposing of quality shortages by fulfilling customers' desires or needs, removal of errors or reducing holding up times, enhancing frameworks or achieving lean processes by diminishing expenses and accelerating the process while preserving quality. This can be done by lessening non-value-added activities in the process, and giving more value to the customers. This can be improved to get newer products or services (Arnheiter & Maleyeff, 2005).

Additionally, both of the Six Sigma and Lean have distinctly reflected the roots of continuous improvement history (Sunder, 2013). Lean Six Sigma and the application of DMAIC as a phased model for guiding improvement project work became fashionable. The popularity of the LSS methodology for development has increased by raising the implementation advantages, especially in terms of the financial dimension. Antony and Banuelas stated that 75% of the businesses they targeted in their study had obtained benefits of more than US \$1 billion; Motorola (1987-1994), General Electric (1995-1998) and Allied Signal (1992- 1996) are clear examples of this success (Antony & Banuelas, 2002). In 1999, General Electric Company spent more than half a billion dollars on Six Sigma initiatives and gained over \$2 billion (Linderman, Schroeder, Zaheer, & Choo, 2003).

Although Lean Six Sigma is regarded as an improvement methodology for the excellence of the companies and organizations since 1990s, the businesses have not benefited from Lean Six Sigma in terms of transformation as well as financial gains.

The companies implementing only Six Sigma or Lean solely may face gradual losses. Therefore, the implementation the integrated approach of Lean Six Sigma has demonstrated numerous advantages in many organizations from the largest to smallest ones across industries. The most significant advantage is incrementing profits in parallel with lowering the costs (Arnheiter & Maleyeff, 2005). In addition, Lean Six Sigma methodology has proved its advantages in both manufacturing and services sectors (De Koning & De Mast, 2005).

Six Sigma and Lean solutions have helped many financial services and Banks to develop their internal processes. Typical applications of Six Sigma and Lean in most vital banking processes have generally reduced the cycle times for: accounts opening, credit cards issuing, loan processing, profile changes, fund transfers, and reducing errors to outstanding levels in transferring funds , profile updates, names as well as addresses, and amounts (Anexas).

One of the success stories for financial companies around the world that implemented structured Lean Six Sigma methodologies was the Commonwealth Bank of Australia that has published an article titled "recognized process excellent"? in (2016) which stated that the Executive of Enterprise Services has got an award through the Process Excellence Week Conference. The CBA group is used to be motivated ?to meet the customers' needs. In more details, after launching its Process Excellence program in January 2004, with a primary focus on building individual capability through Lean Six Sigma (LSS) projects, CBA has refocused on the productivity effort, strengthening the links between Productivity Excellence, core values and the customer experience. CBA Group Executive of Enterprise Services David Whiteing proudly accepted the CEO of the Year Award on behalf of Ian Narev. He said, "Over the past four years, we have undergone

enormous transformational change. Our people are now thinking about processes end-to-end, looking closely at how they're measured, and making informed decisions that help our customers achieve their goals". In 2012, the Bank has worked on the change management and introduced four productivity habits, which now form part of everyday work practices as follows: linking closely to the Bank's core values of integrity, accountability, collaboration, and excellence service (Anexas).

According to Prosci, change management is "the process, tools and techniques to manage the people side of change to achieve the required business outcome," (Prosci, 2014). In addition, change management is determent as "the process of continually renewing an organization's direction, structure, and capabilities to serve the ever-changing needs of external and internal customers," (Moran & Brightman, 2001). In addition, change is an ever-present feature of organizational life, both at an operational and strategic level (Burnes, 2004). Accordingly, change management combines the companies' tools that could be used to assist people get successful individual transitions that lead to the change realization and adoption. Its implementation means to be either impacting the job roles, systems, or organization structure or even processes.

Lot practitioners? of Lean Six Sigma disregard the crucial role of the effectiveness organizational change management in gaining the prosperity of the related projects. The DMAIC methodology of Lean Six Sigma introduces a considerable utilization of its tools in terms of gathering and analyzing data with defining the root cause of the problems as well as coming up with improvements (Salah, Rahim, & Carretero, 2010). In contrast, the DMAIC presents little pet direct instruments for organizational change management to incorporate the ones who will be influenced by the change

efforts of the Lean Six Sigma. Too often, Six Sigma professionals lack change management competency -- that ability to manage the people side of change (Creasey, 2018).

By the way, it is fundamental to state that the existed culture of concentrating on methodologies of organizational improvement were generated from the philosophy of Total Quality Management (TQM) in the 1970's and 1980's, and improved to be the business excellence models so as the continuous improvement was a basic part all the worldwide. Despite the emergence of a lot of models during 1990's, the Lean Six Sigma methodology was agreed as the most effective improvement methodology among them (Chelliah & Skinner, 2016).

Every framework like: (e.g., Australian (2011), Baldrige (2015 – USA Based), EFQM (2013, European Based)) has enhanced the developing and implementing the improvement capacity within the businesses. This ,in turn, meant the creation and implementation of a model for improvement based on specific works or projects. There was also a lot of organizational improvement approaches emerged as process improvement cases among the organizations that worked on follow ups across the world (Evans & Lindsay, 2014).

Project Propositions:

1. Improving the bank account opening process using Lean Six Sigma will save the time needed.
2. Improving the bank account opening process using LSS will increase the customer satisfaction.
3. The performance of PIB accounts' opening officers will be developed through applying LSS project.

Methodology:

The study methodology is considered as the mixed methods strategy since the documents, interviews and reports are being used for achieving its goals. Basically, the project's plan has been designed according to two major models; DMAIC model & PDSA model, in parallel with its accompanying tools, especially those used in data collection. These aspects are explained as follow:

1. DMAIC model:

As defined by Kwak and Anbari (2004), DMAIC is a closed-loop process that eliminates unproductive steps, often focuses on new measurements, and applies technology for continuous improvement. DMAIC is a logical and structured approach to problem solving and improvement process; it is a progressive improvement process and quality tool focuses on a change of management style (Success Factors in Managing Six Sigma Projects., 2004).

This project substantially used DMAIC model (Define, Measure, Analyze, Improve and Control) as a framework for the improvement process regarding the following explanations:

- The **Define** phase is the first step in the DMAIC model. It aims to determine the problem and the objectives, to recognize the existing resources, scope and duration of the project. Moreover, the potential improvement is defined from business and customer perspectives.
- **Measure** phase has been demonstrated to learn more about the process and the current performance to determine the current problem and use it as a ground for improvement.
- **Analyze** phase aims at determining the key factors or input variables affecting the process outputs as well as defining the root causes of the problem.

- **Improve** phase is covered in the project with special focus on the following activities: testing theories, results of testing, prepare the improvement plan and implementing solutions.
- **Control** phase is the final phase of the DMAIC methodology , which displays the need to maintain the achieved improvements by monitoring them to minimize the defects and standardize any process changes with the most appropriate procedure. Figure 1 shows a brief clarification of the DMAIC model:

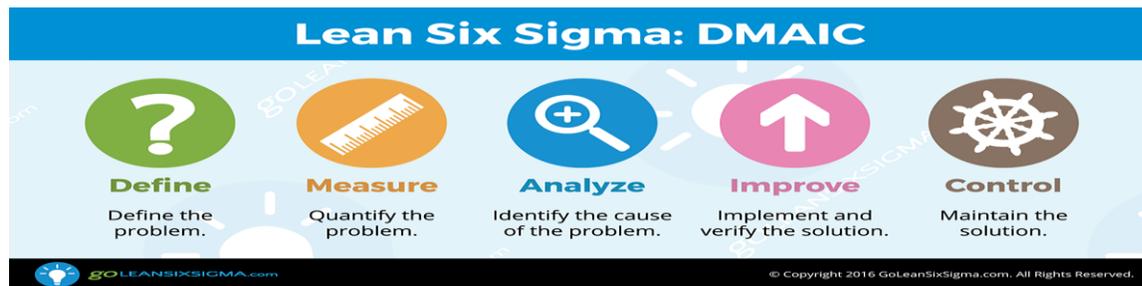


Figure 1: DMAIC model

Goleansixsigma (2016) - (Lean Six Sigma: Step by Step (DMAIC Infographic))

2. PDSA model:

The Deming Cycle, which ended up known as PDSA cycle, is a constant change cycle containing an exact course of stages or steps (Plan, Do, Study and Act). It is a refined model for quality change that can offer structure to the work improvement. The structured cycle of PDSA is recommended to be applied in parallel with the phases of DMAIC structure (Define- Measure- Analyze- Improve- Control), and considered as the key role for the undertaking of all cycle dimensions in order to take stimulating activities for bringing perpetual upgrades and improvements.

It is important to mention that DMAIC and PDSA are linked by iterative cycle to improve the process continually. Fundamentally, DMAIC is generated from the Six Sigma philosophy and contains the same principle as PDSA, but focuses more on gathering the data and analysis regarding the Six Sigma Methodology.

The study utilized PDSA cycle model in an immediate and backhanded way once the majority of the examination parts ,including DMAIC, pass in a complimentary cycle as far as plans for activity, executing, assessing and acting, and reusing the examination procedure are required. The two models utilized tools with exhaustive graph will be clarified also later on.

3. Data Collection Tools:

The process tools of the project utilized for collecting data were carried out by using each of quantitative and qualitative methods, in parallel with using software programs like Minitab and excel analysis of the Project Management Institute (PMI). These, in turn, have resulted in getting a valued baseline and completed the image of the current situation. Moreover, data collection tools have helped in identifying most of the root causes for the long time spent to open a new bank account, and then generating solutions to get the targeted improvement.

Interviews (face to face and through phone calls), intermittent reports assessment in addition to statistical data gathering were considered as major tools to get valid information, in parallel with getting deeper to know more about the nature of the procedures and responsibilities required by the customer and the Bank based on the statistical data about the new accounts performed, various feedback on the bank account opening process and its related processes, keeping in touch with the periodic updates in external and internal instructions that control and organize the process, and

studying and analyzing the value added and wastes in the process with identifying opportunities for improvement. Moreover, that information was considered the key step forward to get other accurate facts through effective interaction and conducting constructive meetings with the related units' managers, as well as customer service officers, who are working directly with the customers. It is noteworthy that the assembled information has formulated the starting point to go ahead to prepare a plan for practical steps for improvements. It is essential to mention that the general frame and the approach of information about the used tools were recommended from the Head of Quality Management Program at Arab American University as a requirement of accomplishing this study.

In addition, a three-month period was chosen before the improvement work starts to act as a standard for past performance. Therefore, the average of three-month utilization rate for opening new bank accounts acted as the main criterion of the improvement work. This time-frame has been chosen for the considerations of adjusting the changes in regular events as well as the monetary effects on economic environment, so the reliability and validity of the project have been determined to achieve its purposes. Figure 2 shows briefly the project framework including the Lean Six Sigma tools used according to DMAIC & PDSA models for this improvement work; it is an inference from PMI approach:

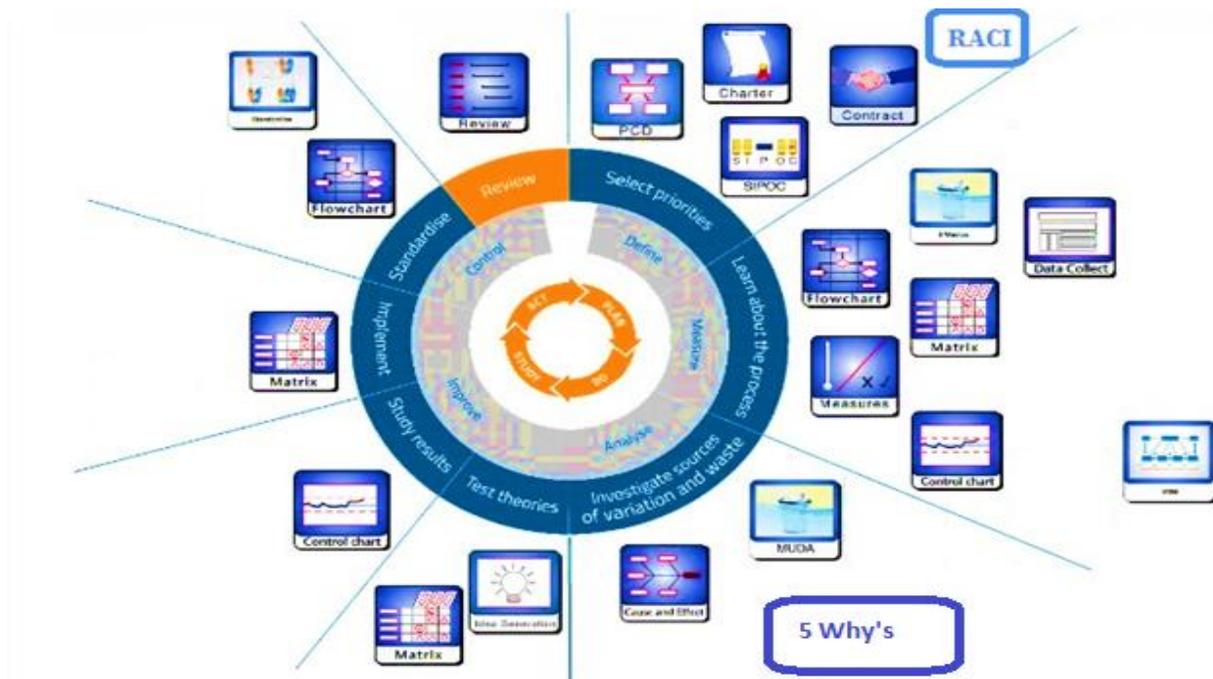


Figure 2: Project Framework

In details, the project used specific tools in each phase of DMAIC and PDSA as follows:

1. The tools of Project Charter, SIPOC, Team Contract, Problem Context Diagram and the RACI Chart have been used in the **Define** phase of the improvement work as it synchronized with the **Plan** phase in PDSA model.
2. Tools including: Flow Chart, Value Stream Map, 8 Wastes, Quick Wins, Voice of Customer (internal & external customers), Voice of Process, Key Measures, Data Collection and Control Charts have been used in the second phase of Six Sigma Methodology that is **Measure** phase,

since it is also linked with **Do** phase, which is the second step of PDSA so that to collect the data from the field.

3. The tools used in the **Analyze** phase are: Cause and Effect Diagram, 5 Whys and Brainstorming. These tools are correlated with the **Study** phase of PDSA to identify Root Causes deeply.
4. The **Improve** phase in DMAIC model is linked with the **Act** phase in PDSA model, which uses tools related to testing theories, finding the results of testing, preparing the improvement plan, also providing tools related to implementing the solutions from within specific tools like: Matrix Tool, Idea Generation, Control Chart and Flowchart.
5. **Control** phase displays the need to maintain the achieved improvements by monitoring them to minimize defects and standardize any process changes with the most appropriate procedure. There are standardized tools and flowchart used in the final phase, noting that this phase is also linked with the **Act** phase in PDSA model.

Conclusion:

The significant objective for the improvement project was to reduce the time needed to open new bank account at Palestine Islamic Bank by at least 20%. Profound perception had been taken into account regarding the related process of the procedures to know how this service was finalized to the customers. It was significant to shed light on Lean Six Sigma methodology and its tools, and the role played in the improvement project.

Appropriate mobilization has been prepared for concerned Bank units to give priority to accounts opening service, which forms the first impression that the customer makes about banking relationship.

As per the collected statistical data, there was a need to classify and select the most important accounts to prioritize with focusing on the retail banking since PIB is a retail Bank and control a process to standardize and eventually improve, and organize staff to one common goal.

Accordingly, a seven- month period was enough to implement the Lean Six Sigma methodology with the most appropriate tools related to the project. The needed requirements were guaranteed through PIB management directing the staff to cooperate and provide the suitable support to complete the improvement process.

It was an opportunity to start the improvement work to provide more developed services for the customers in parallel with looking forward to bringing new banking system. In other words, the steps have been taken to conduct a test to reduce the current waiting time of the customers at the Bank to become 14.7 minutes instead of 35 minutes. That test has shown considerable indicators for improving the bank account opening process by designing high level features of a new banking system and standardizing the continuous improvement.

This study has proved to be a significant experience to practice the simulation during conducting the test to meet the outlined objectives by reducing the time needed.

Figure 3 below illustrates the breakthrough reflected after the process tested, in which the performance before the test is located in cases from 1 to 21:

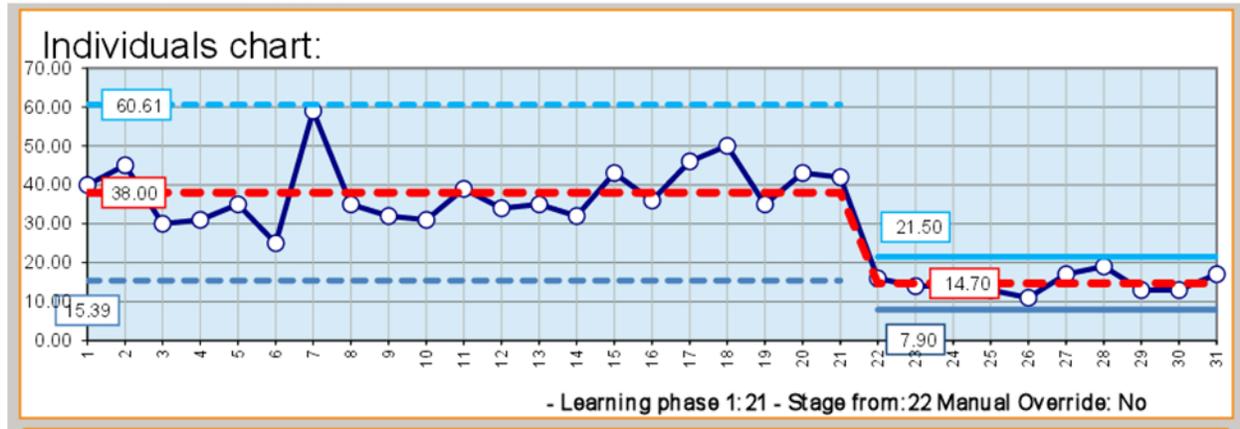


Figure 3: Control Chart before and after tested process

Indeed, the above control chart expresses a brilliant result for the improvement project with steep drop in the time needed beyond the disclosed percentage of 20% to be 61%, especially that all of the 10 cases tested (cases from 22 to 32) are located under the displayed average value line and most of them are located under the lower control limit learning phase.

Finally, the results have confirmed the propositions of the study as follow:

- Improving the bank account opening process using Lean Six Sigma has reduced the time needed through the conducted test.
- Improving the bank account opening process using LSS fulfills the customer satisfaction.
- The performance of PIB accounts opening officers has been improved through the implementation of LSS project test.

The following figures (4, 5 and 6) show the improved procedures in the bank account opening process to be included in the new banking system with its technical banking requirements, through the cooperation between PIB and JMR, the provider of the new banking system:

- Figure 4 below shows the simple current flowchart of the bank account opening process at Palestine Islamic Bank:

Flow Chart for Bank account opening process at PIB

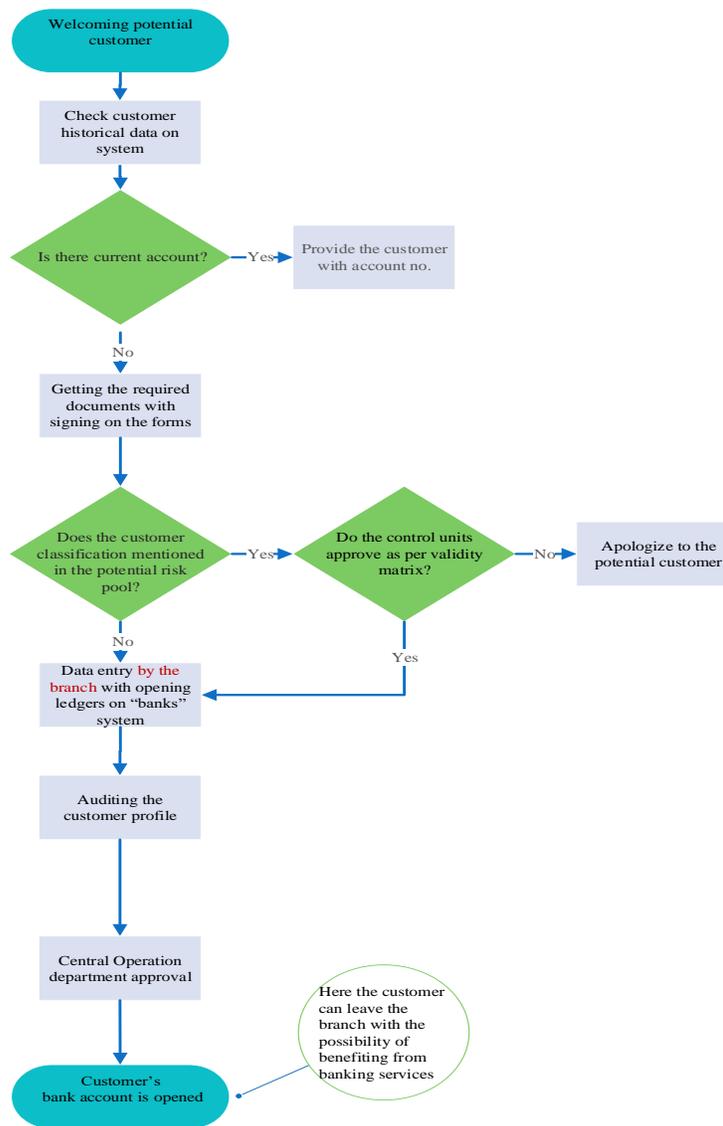


Figure 4: Current Flow Chart

- Figure 5 represents the simple new flow chart, which reflects the improved procedure in bank account opening process to be included in the new banking system:

Flow Chart for Bank account opening process at PIB

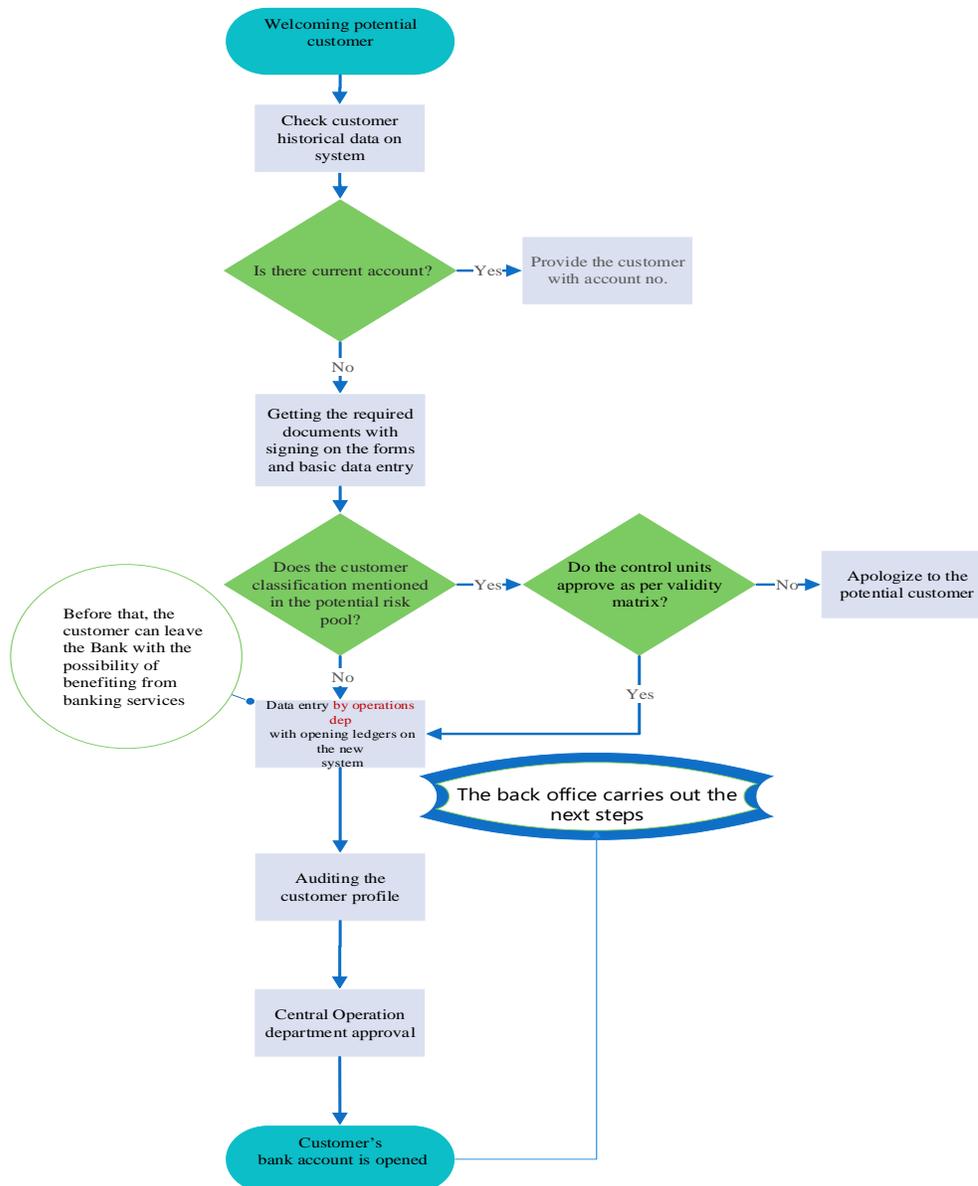
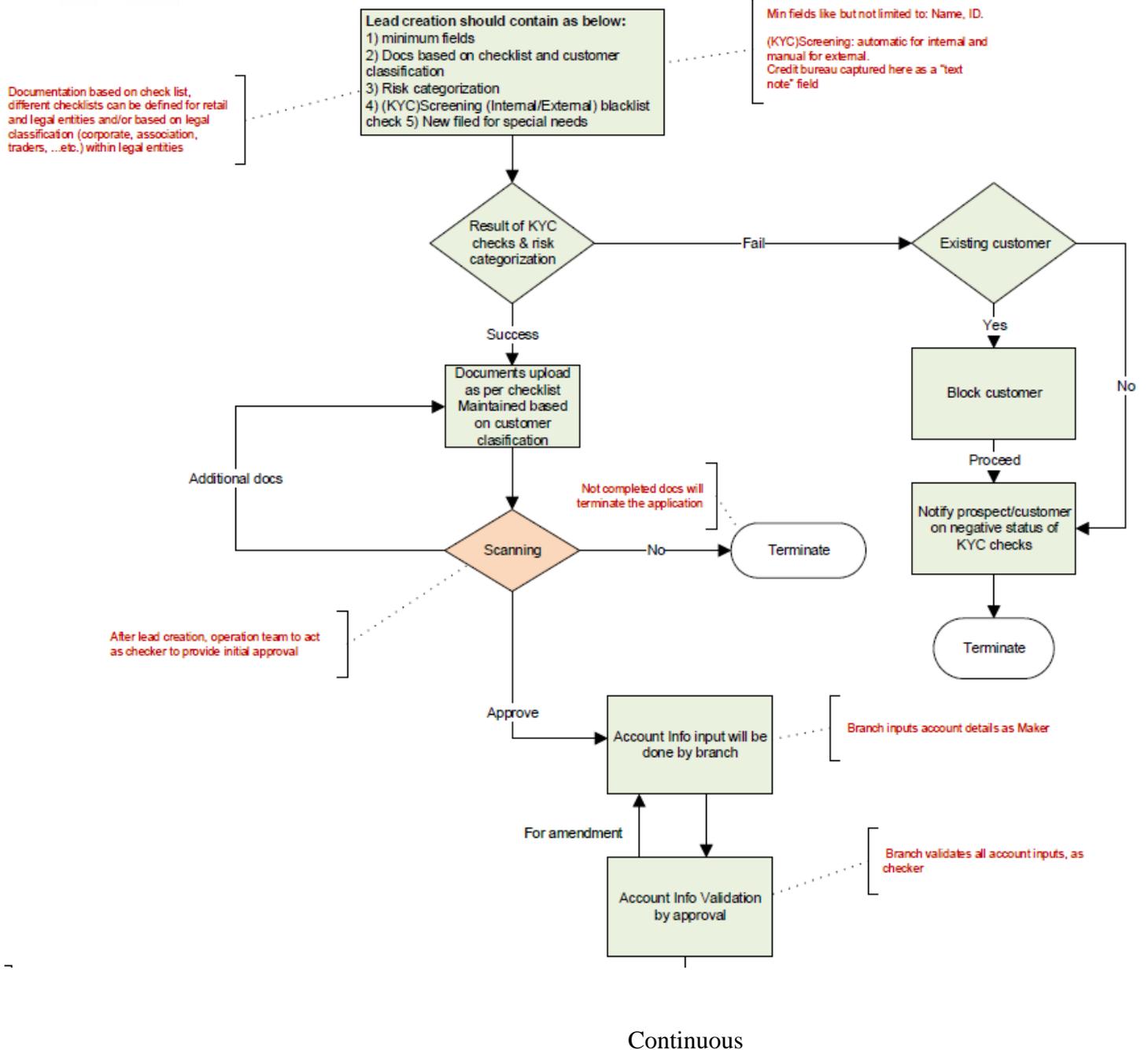


Figure 5: New Flow Chart of the improved process

- Figure 6 shows a clarifying chart for the series of steps of the new flowchart to be designed in the new banking system “Oracle Flex Cube Functional and Technical Responses (FCUBS)”:



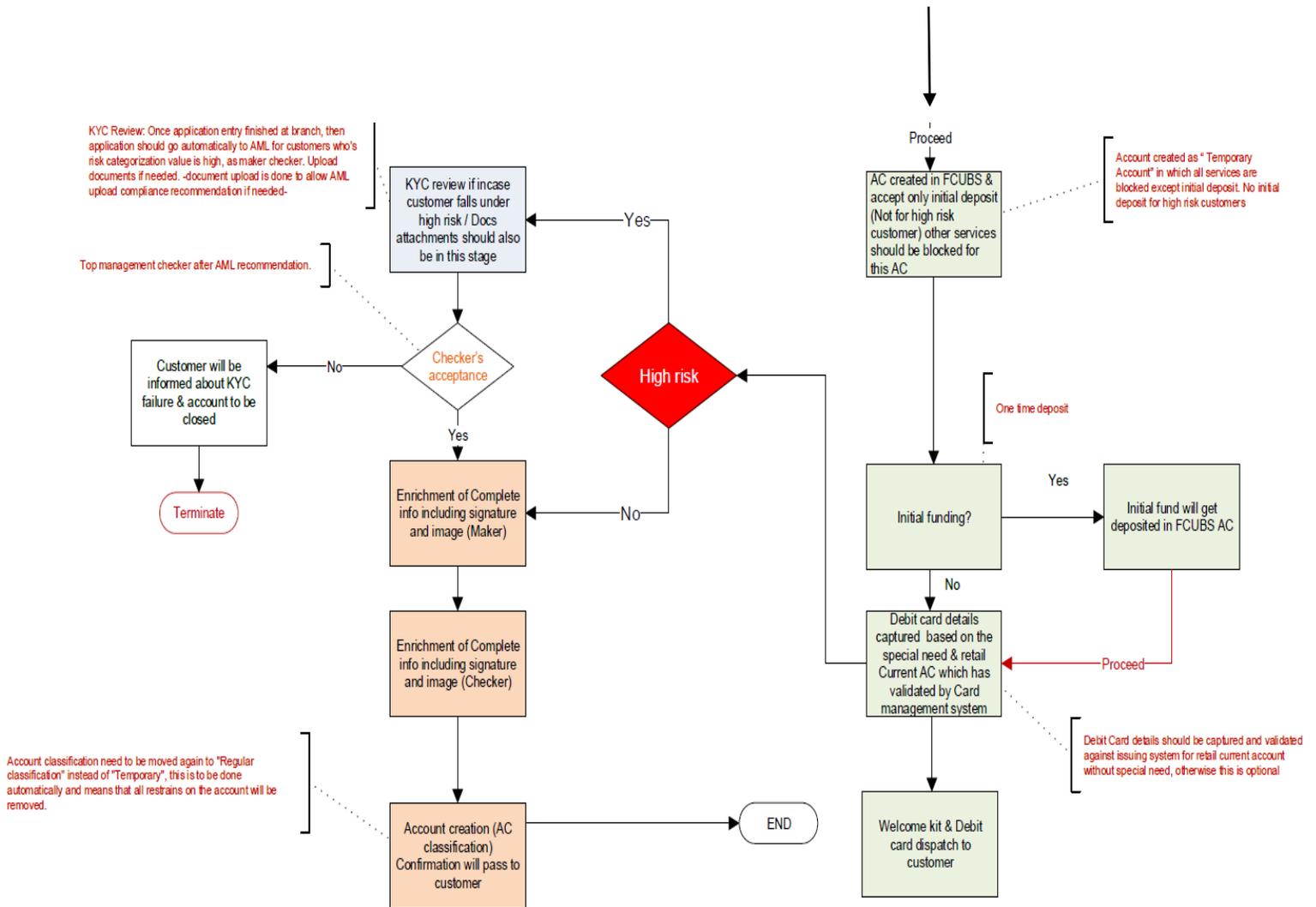


Figure 6: Comprehensive Flow Chart of the improved process

Recommendations:

It can be said that this advancement of work has achieved its targets and is viewed as underlying enhancement towards future changes and improvement practices inside the Bank.

It is noteworthy that PIB environment has many opportunities for improvement to gain capability of assessment and enhancement of the current procedures in the daily work. In addition, there is a need to provide developed software programs giving a quick feedback and analysis for every performed process at the Bank, especially those related to reinforce the customers' satisfaction and get accurate inferences for evaluating the decision making process with high quality and low variation.

The Bank has to conduct extensive training in applying Lean Six Sigma methodical tools, provide special programs to get the professional certificates of Six Sigma Belts, and determine the best Banks' practices globally.

Although the process of opening bank account may differ from one Bank to other, advanced improvement opportunities need more examination according to Lean Six Sigma to define the most pertinent activities for the regular work. To develop the banking services at Palestine Islamic Bank, it is suggested that the administration should proceed through progressing development activities, concentrating on training, communication, control and monitoring mechanisms through customer service units including departments and branches.

It is suggested to conduct brainstorming sessions weekly among PIB management, committee of banking system configuration and the related staff to come up with improving ideas to be included in the new banking system, prepare progressive management plans for extensive training programs,

monitor and control the critical characteristics of the process, develop plans for providing a test for the environment, and prepare various scenarios to accomplish many relative practical simulations addressing the most vital customer's requirements.

Recommendations to other studies:

It is recommended that the future projects should firstly display the vital considerations in implementing LSS methodology, especially in the services industry.

Second, it was obvious that the impact of implementing LSS methodology to keep up with the international banking regulations had many difficulties to be investigated, taking into account the various requirements and details, the performance of employees, customer perspectives, competitors' status, software programs and banking systems as whole.

Third, accrediting LSS methodology and applying its tools and techniques in the banking processes, like opening new bank accounts, are linked with the commitment and contribution of key concerned parties, senior official of the Bank with their strict desire to achieve success, and strategic benefits for the Bank.

Fourth, considering the LSS methodology leads progressive measurement to distinctive competitive feature, productivity, efficiency and effectiveness. Therefore, the recommendations should be implemented and the culture of change should be adopted.

Fifth, it is recommended to examine deeply the "DOWNTIME" elements of the banking environments to overcome difficulties and DMAIC and PDSA models should be applied for developing the processes of improving the quality.

Moreover, it can be concluded that implementing LSS quality is a tremendous methodology in Quality Management, and has been used in other services fields in many countries.

Contribution to the Theoretical Knowledge:

This improvement activity is the first step in the bank account opening process in Palestine and the Middle East. This will be an important reference to many LSS practitioners, especially to the professionals of bank services.

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تحسين عملية فتح الحساب البنكي باستخدام منهجية لين ستة سيجما

في البنك الاسلامي الفلسطيني - دراسة حالة

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ملخص:

إن الهدف من هذا المشروع هو تحسين عملية فتح الحساب البنكي في أكبر شبكة مصرفية إسلامية في فلسطين باستخدام منهجية لين ستة سيجما". المستهدف هو تقليل الوقت المستغرق لفتح حساب مصرفي جديد في البنك الاسلامي الفلسطيني بنسبة لا تقل عن 20٪، وهذا بدوره سيؤدي إلى نتائج مثمرة مثل تحقيق رضا أكبر للعملاء، وإنتاجية أفضل للبنك، وجذب مزيد من العملاء، واستقطاب الودائع. وتم استخدام أدوات قيمة من لين وستة سيجما لجمع البيانات حول التدابير الأساسية لعملية فتح الحساب استناداً إلى منهجية DMAIC (التعريف بالمشكلة، والقياس، والتحليل، والتحسين والضبط)، وتم تحديد الأسباب الجذرية للوقت الطويل المستغرق في فتح حساب مصرفي جديد. وأظهرت النتائج أن الاختبار المنفذ في فرع البيرة قد خفّض متوسط وقت فتح حساب مصرفي جديد من 38 دقيقة إلى 14.7 دقيقة؛ أي بنسبة 61.4٪. وتضمن ذلك تقليل وقت انتظار العميل في البنك عن طريق إلغاء بعض الخطوات التي تمت في المكتب الخلفي بعد مغادرة العميل للبنك، وقد تضمن الاختبار محاكاة استخدام نظام مصرفي جديد. وابتكر الباحث معايير جديدة لعملية فتح الحساب المصرفي، إلى جانب إعداد مخططات التحكم لمراقبة الإجراءات الرئيسية في المستقبل. ولا بد من التأكيد على أن منهجية لين ستة سيجما، تقوم على إنشاء إطار متكامل يتضمن أدوات تحسين محددة لتحقيق نتائج مستدامة تسهم في تقليل معدل الوقت المستغرق في عملية فتح الحساب المصرفي في البنك الإسلامي الفلسطيني. ومن أجل القيام بذلك، يوصي الباحث أن يستمر البنك في إجراءات التحسين، وخاصة التركيز على الاتصالات الداخلية والخارجية، والدورات التدريبية المباشرة، كذلك التركيز على الرقابة الدورية وتحليل التغذية الراجعة باستمرار.

الكلمات الدالة: عملية فتح الحساب البنكي، منهجية لين ستة سيجما، التحسين المستمر.