UNIVERSIDAD PARA LA COOPERACION INTERNACIONAL
(UCI)

PROJECT MANAGEMENT PLAN FOR A CORE BANKING SYSTEM IN BELIZE, CENTRAL AMERICA

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DEDICATION

This research project is dedicated to my children Naisha, Jezrel, and Andrea Vidal for giving me the motivation and strength of achieving a higher level of education and serve as an inspiration to them in order to achieve higher goals. To my best friend and beautiful wife Dilcia Vidal who has always been supportive to me.

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ABBREVIATIONS AND ACRONYMS

AC – Actual Cost
ACH – Automated Clearing House
AML – Anti Money Laundering
ASO – Administrative Service Officers
ATM – Automatic Teller Machine
BAC – Budget at Completion
BAT – Build Acceptance Test
BBL – The Belize Bank Limited
BBIL – The Belize Bank International Limited
BC – Business Crew
BCB – British Caribbean Bank
BF – BankFusion
BFUB – BankFusion Universal Banking
BPA – Business Process Alignment
BSI – Belize Sugar Industry
CA – Central America
CBB – Central Bank of Belize
CBS – Core Banking System
CBSI – Core Banking System Implementation
CCP – Change Control Process
CDPS – Check Deposit Payment System
CEO – Chief Executive Officer
CFO – Chief Financial Officer
COA – Chart of Accounts
CPI – Cost Performance Index
CSV – Comma Separated Values
CV – Cost Variance
DB – Database
DBA – Database Administrator
DSX – Data Synchronization Extensions
EAC – Estimate at Completion
EEF – Enterprise Environmental Factors
EMIS – Enterprise Management Information System
EMV – Electromagnetic Vulnerability
EOD – End of Day
ETL – Extract Transform Loading
EV – Earned Value
FBE – Fusion Banking Essence

FGP – Final Graduation Project
FX – Foreign Exchange
GB - Gigabyte
GHz – Giga Hertz
GL – General Ledger
GOB – Government of Belize
HMC – Hardware Management Console
IBIS – Inter-Banking Information System
IBM – International Business Machines
ISD – Information Systems Department
IT – Information Technology
KYC – Know Your Customer
L1 – Level 1
L2 – Level 2
MAPS – Misys Application Project System
MIS – Management Information System
MMM – Misys Message Manager
MS - Microsoft
NBS – Nu Banking System
NCC – Normally Closed Contract
NCR – Ncompass
OPA – Organizational Process Assets
PDF – Portable Document Format
PHP – Personal Home Page
PID – Project Initiation Document
PM – Project Manager
PMBOK® Guide – Project Management Body of Knowledge Guide
PMI – Project Management Institute
PSA – Project Systems Analyst
PV – Planned Value
R & D – Research and Development
RAM – Random Access Memory
RBC – Royal Bank of Canada
RBS – Risk Breakdown Structure
RFP – Request for Proposal
RLF – Recurring License Fee
RMIS – Risk Management Information System
RTBTRANS – Real Time BTRANS
RTGS – Real Time Gross Settlement System
SAN – Storage Area Network
SAP – Systems, Applications, and Products

SIT – System Integration Testing
SO – Standing Order
SOW – Statement of Work
SPI – Schedule Performance Index
SQL – Structured Query Language
SV – Schedule Variance
SW - Software
SWIFT – Society for Worldwide Interbank Financial Telecommunication
TC – Technical Crew
UAT – User Acceptance Testing
UB – Universal Banking
UCI – Universidad para la Cooperación Internacional
UPS – Uninterruptible Power Supply
UK – United Kingdom
UXP – User Extension Protocol
VPN – Virtual Private Network
WBS – Work Breakdown Structure
XML – Extensible Mark-up Language

EXECUTIVE SUMMARY (ABSTRACT)

The Belize Bank Limited (BBL), one of the largest banks in the country of Belize located in Central America, is considered to be the leading and most dominant bank in the country. The Belize Bank Limited is well known to carry a tradition of excellence in services and is considered the oldest and continuous banking operation in the country of Belize. In 1912, the Royal Bank of Canada (RBC) purchased the financial institution's operations, and in 1987, the bank was then named the Belize Bank Limited as it is now known in Belize.

The BBL is considered the leading and competitive banking industry in Belize due to its cutting edge and advance technology. It aims to always have the most updated and advanced technology to keep up with excellent operations and services. It has in practice to consistently upgrade its Core Banking System (CBS) at least every ten (10) years. Its current system, the Nu Banking System (NBS) has been in service for more than fifteen (years) and is now time for an upgrade. A newly advance system which will bring more value to the bank through its effective and efficient technology is the right proposed solution to keep the company dominant and competitive at this point in time. As a result, a properly and well defined project management plan is of utmost importance for this project.

The general objective was to develop a project management plan for a Core Banking System in accordance to standards and principles of the Project Management Institute (PMI) ® in order to create an effective and comprehensive management plan. The specific objectives were: To develop an Integration Management Plan in order to define the basis of all project work; To create a Scope Management Plan in order to ensure that all the work and only the work required is included to successfully complete the project; To develop a Time Management Plan in order to manage time efficiently for the completion of the project; To create a Cost Management Plan in order to complete the project within the approved budget; To develop a Quality Management Plan in order to satisfy the needs of the project; To develop a Human Resource Management Plan in order to establish roles, responsibilities, organizational charts, and staff management; To develop a Communication Management Plan in order to identify and document the most appropriate approach to communicate with stakeholders effectively and efficiently; To develop a Risk Management Plan in order to increase the likelihood and impacts of positive events, and decrease the likelihood and impact of negative events; To develop a Procurement Management Plan in order to determine whether to acquire outside support, what to acquire, how to acquire it, how much is needed, and when to acquire it; and To develop a Stakeholder Management Plan in order to provide a clear, actionable plan to interact with stakeholders in order to support the interest of the project.

The methodology used for the research was analytical or explanatory. Furthermore, the main sources used to gather information included A Guide to the

Project Management Body of Knowledge (*PMBOK® Guide*) Fifth Edition and interviews that were held with members from the client and performing organization. The data was analysed to create each subcomponent of the subsidiary plans used to develop the Project Management Plan for a Core Banking System (CBS).

In conclusion, we have a Project Management Plan for the Core Banking System in Belize, Central America. This plan has served as a guide in the project to make better management decision based on the strategic objectives of the organization. The use of this plan has executed all knowledge areas found in the *PMBOK® Guide* 5th Edition, thereby mitigating any risk and establishing a successful Project Management Plan.

The Project Management Plan, developed using the *PMBOK® Guide* 5th Edition, provided a new methodology for the project team to build a more thorough project management plan for a project as important as this CBS, thus, to improve the way the company would manage the project. It is recommended that the project team at BBL make use of the planning process and documents developed during the development of the Project Management Plan for the CBS as a basis for implementing a methodology for similar projects in the future. Furthermore, the team should also seek to use and execute document management and storage systems, in order to store and create a central location for project planning documents and future Organizational Process Assets.

1. INTRODUCTION

1.1 Background

The Belize Bank Limited (BBL) was incorporated in December 1902 and was opened for business the subsequent year. Its main branch is located in the city of Belize, a small Caribbean country in Central America. It is well known to carry a tradition of excellence in services and is considered the oldest and continuous banking operation in the country of Belize. In 1912, the Royal Bank of Canada (RBC), which endured until 1987, purchased the financial institution's operations. Thereafter, its operations were purchased by the BBL, which consisted of a group of local investors, and is now in operation for over 100 years. Its assets are worth more than BZ$880 million dollars and has BZ$147 million in capital reserves. Its historical record reflects consistent growth, strength, stability and integrity in the Belizean economy (The Belize Bank Limited, 2012).

The BBL remains as one of the most dominant player in the banking industry of Belize and is the only branch network that covers the entire country with twelve (12) branches. The bank offers a variety of products and services including credit cards, debit cards, loan facilities, savings, checking, currency exchange and more. The bank continues to be the leader in an increasingly sophisticated and competitive environment having more than 41% market shares of loans and 37% shares of deposits (The Belize Bank Limited, 2012).

One major aspect that maintains the bank as the leading institution in the competitive banking industry is its cutting edge and advance technology. The bank has in practice to consistently upgrade its Core Banking System (CBS) atleast every ten (10) years. Its current system, the Nu Banking System (NBS) has been in service for more than fifteen (years) and is now time for an upgrade. A newly advanced system which will bring more value to the bank through its effective and efficient technology is the right proposed solution to keep the company dominant and competitive at this point in time.

1.2 Statement of the problem

Due to the increasingly sophisticated and competitive banking environment, the BBL needs to maintain an advanced technological system. A new CBS is required and due to the vast amount of applications, integrated, and peripheral systems, it will not be an easy task to implement a new system. As a result, a proper Project Management Plan is required to gather the entire requirement in order to create an effective and comprehensive management plan for the CBS. Since the banking institution remains competitive and plans to keep its position as being the dominant and leading banking institution in Belize, it now has to purchase and implement a new CBS. The new CBS should bring with it all the international standards and policies concerning banking principles.

1.3 Purpose

Considering that the company's current system is now more than fifteen (15) years in use, and the competitive environment is increasingly sophisticated, it is now time for a new and advanced Core Banking System. Part of the mission of the company is to become the pre-eminent banking institution, not only in Belize, but also in the entire Caribbean. The NBS definitely will not lead the BBL to that mission since the NBS is an in-house core banking system that is managed and maintained by the bank itself. BBL hence requires a new CBS that will cope with all the internationally banking principles and could be a representative of the model bank.

To support and properly define and anlayze the requirements for the new CBS a Project Management Plan is required. The project management plan, as a result, will not only bring the company to a competitive advantage through its cutting edge technology, it will also create a smoother work flow, efficient and reliable system, new and wider ranges of products, good return on investments, as well as bring the company one step closer to its mission.

1.4 General objective

To develop a project management plan for a Core Banking System in accordance to standards and principles of the Project Management Institute (PMI) ® in order to create an effective and comprehensive management plan.

1.5 Specific objectives

1. To develop an Integration Management Plan in order to define the basis of all project work (*PMBOK® Guide* 5th Edition, 2013, pg. 72).
2. To create a Scope Management Plan in order to ensure that all the work and only the work required is included in the plan to successfully complete the project (*PMBOK® Guide* 5th Edition, 2013, pg. 105).
3. To develop a Time Management Plan in order to manage time efficiently for the completion of the project (*PMBOK® Guide* 5th Edition, 2013, pg. 141).
4. To create a Cost Management Plan in order to complete the project within the approved budget (*PMBOK® Guide* 5th Edition, 2013, pg. 193).
5. To develop a Quality Management Plan in order to satisfy the needs of the project (*PMBOK® Guide* 5th Edition, 2013, pg. 227).
6. To develop a Human Resource Management Plan in order to establish roles, responsibilities, organizational charts, and staff management (*PMBOK® Guide* 5th Edition, 2013, pg. 258).
7. To develop a Communication Management Plan in order to identify and document the most appropriate approach to communicate with stakeholders effectively and efficiently (*PMBOK® Guide* 5th Edition, 2013, pg. 289).
8. To develop a Risk Management Plan in order to increase the likelihood and impacts of positive events, and decrease the likelihood and impact of negative events (*PMBOK® Guide* 5th Edition, 2013, pg. 309).
9. To develop a Procurement Management Plan in order to determine whether to acquire outside support, what to acquire, how to acquire it, how much is needed, and when to acquire it (*PMBOK® Guide* 5th Edition, 2013, pg. 358).

10. To develop a Stakeholder Management Plan in order to provide a clear, actionable plan to interact with stakeholders in order to support the interest of the project (*PMBOK® Guide* 5th Edition, 2013, pg. 399).

2. THEORETICAL FRAMEWORK

2.1 Company/Enterprise framework

2.1.1 Company/Enterprise background

The Belize Bank Limited (BBL), as previously mentioned, is one of the largest and most dominant banking institutions in the country of Belize. Despite in partaking in one of the most sophisticated competitive environments the BBL has proved to be a leading institution towards its competitors and has full potential for further development and growth.

Belize is a Central American (CA) country positioned in a strategic part of the world. As a result, the Belize Bank Limited as a member of the Central American countries and the Caribbean, grants the institution an opportunity to further develop itself with immense growth and potential by responding to vast needs to both commercial and private clients. In fact, one of the main objectives of the organization is expand its business and operations all over the Caribbean (R. R. Cuello, Personal Communication, July 12, 2017).

2.1.2 Mission and vision statements

Mission

“To maximize value for individuals and businesses locally and internationally by providing quality and innovative financial services, nurturing long-lasting relationships and delivering superior customer service.” (The Belize Bank Limited, 2012).

Vision

“To be the pre-eminent financial service provider in Central America and the Caribbean.” (The Belize Bank Limited, 2012).

2.1.3 Organizational structure

Currently the Belize Bank Limited has twelve (12) branches covering the entire country of Belize. Each branch has its own managers and Administrative Service Officers (ASO) who are in charge of all the daily operations, profitability, and portfolio management of that specific branch. The Belize Bank Limited consists of approximately a little over three hundred (300) employees across the entire country of Belize.

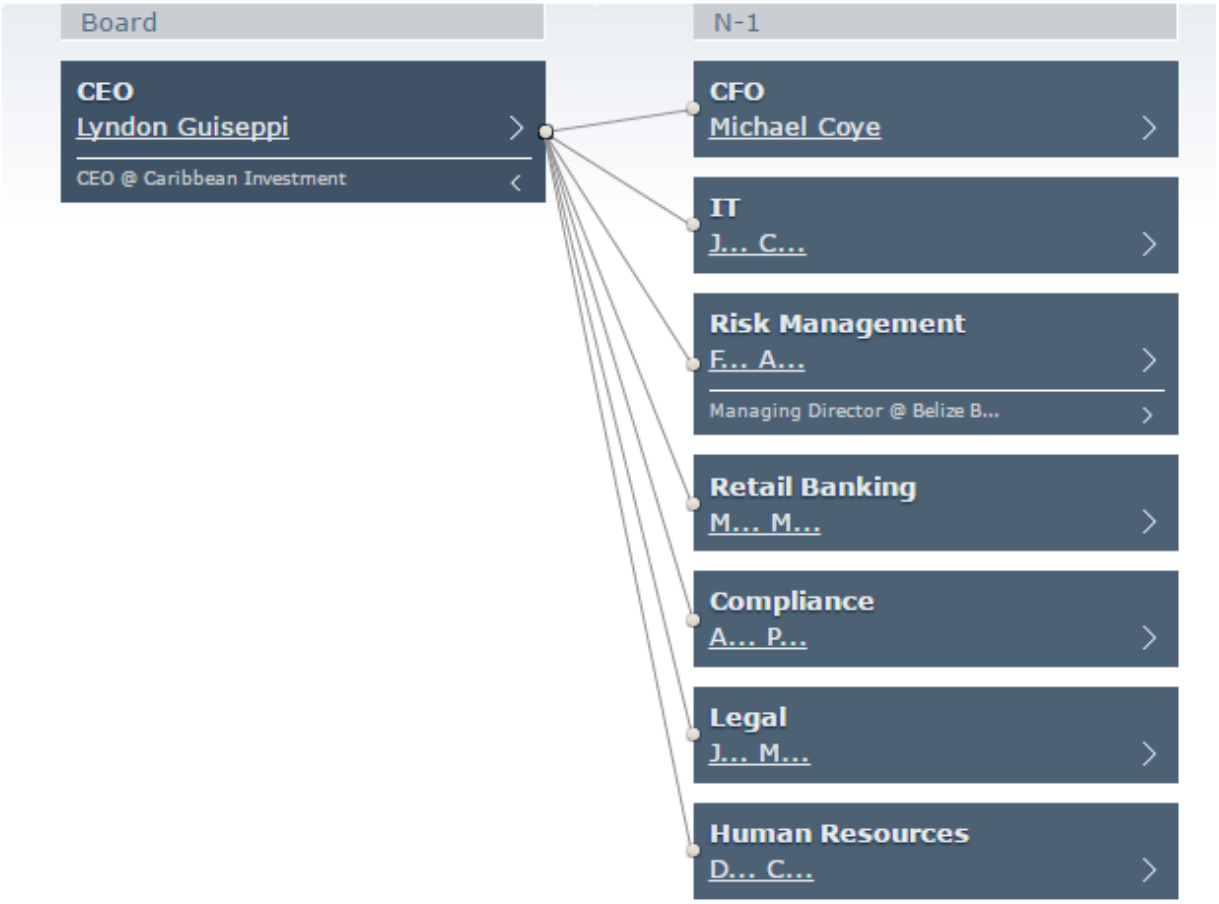


Figure 1 Organizational structure (Source: https://www.theofficialboard.com/org-chart/belize-bank)

In Figure 1 the company's organizational chart is depicted on a high-level scale showing the main players of the organization. The C.E.O Lyndon Guiseppi, who manages seven (7) main channels, currently heads the organization: the Chief Financial Officer (CFO), IT, Risk Management, Compliance, Legal, and Human Resources. Due to the organization's confidentiality, it is not recommended to review the breakdown of each department. (R. R. Cuello, Personal communication, July 12, 2017).

2.1.4 Products offered

The Belize Bank Limited offers the following products and services: checking accounts, savings accounts, fixed deposits, consumer loans, residential loans, debit cards, credit cards, online banking, mobile banking, night and day deposits, foreign exchange purchases and sales, wire transfers, letters of credits, cash advance, point of sale services, salary payroll processing services, and Automated Clearing House (ACH) services. (R. R. Cuello, Personal Communication, July 12, 2017).

2.2 Project Management concepts

2.2.1 Project

In every institution, even in our daily lives, we are surrounded by projects. Many individuals might not notice, but a basic purchase of a new brand laptop could be considered a project. Let us define a project. A project is defined as "a temporary endeavor undertaken to create a unique product, service, or result" (Project Management Institute, 2016, p. 8). Just like purchasing a laptop, creating a project management plan for a new Core Banking System is a project.

According to banktech.com (Bank Systems & Technology, 2017), bankers refer to core banking migrations as "open heart surgery" and that the vast platforms that supports all financial transactions are critical to the daily operations and activities within any bank. As a result, the related costs and risks involved for such "core banking projects" are high. We can therefore say that the creation of a project management plan for a Core Banking System (CBS) is extremely critical as it

pertains to the life and profitability of the banking institution. Bankers share twelve (12) best practices for a Core Banking upgrade or replacement according banktech.com (Bank Systems & Technology, 2017):

1. Cleanse data before the migration.
2. Set a schedule and stick to that schedule.
3. A high-level decision body must be created to arbitrate between different points of view.
4. “Use a guinea pig”. This is a concept used in order to learn from other smaller organizations with similar implementations.
5. “Create a reusable blueprint”.
6. Avoid doing to many things or everything at once.
7. Under each project, create smaller sub-projects that can be specific and deliver value.
8. Do expect time and cost overruns.
9. Enable and retain existing IT employees.
10. Before the implementation to your LIVE production, make sure to have end user practice/training of the new system.
11. “Manage the migration strictly”.
12. Upon implementation, be prepared to quickly manage, control and resolve bugs and glitches.

At Belize Bank Limited, the project for a new Core Banking System needs to focus on three (3) main areas: Integration, Migration, and Reporting. Each area should be managed as a sub-project and further sub-project within each sub-project. This is to consider the importance of a core banking system and its impact it may have if not properly planned. (R. R. Cuello, Personal Communication, July 12, 2017).

2.2.2 Project Management

According to managementhelp.org (Free Management Library, n.d.), “Project management is the planning, organizing and managing the effort to accomplish a successful Project”, which “includes developing a project plan, which

involves defining and confirming the project goals and objectives, how they will be achieved, identifying tasks and quantifying the resources needed, and determining budgets and timelines for completion. It also includes managing the implementation of the project plan, along with operating regular 'controls' to ensure that there is accurate and objective information on 'performance' relative to the plan, and the mechanisms to implement recovery actions where necessary." According to villanovau.com (Villanova University, 2017), project management has emerged as a "vital component of any serious business operation. It has also become a key to success in a global business environment where companies constantly seek an edge over the competition."

There are different methodologies in project management. Some methods include, but are not limited to, Agile, Waterfall, SCRUM, and more. These methods "contain guiding processes for those who are doing project management" (Successful Projects, 2016). Although, each methodology has its advantages, they all agree that "every project management life cycle contains five phases: initiating, planning, execution, monitoring, and controlling & closure" (Picariello, 2015). Planning is perceived as "the all-important second step of any successful project management life cycle" after initiating the project (Picariello, 2015).

According to the *PMBOK® Guide* (*PMBOK® Guide* 5th Edition, 2013, pg. 5), "Project Management is the application of knowledge, skills, tools, and techniques to project activities to meet the project requirements. Project management is accomplished through the appropriate application and integration of the 47 logically grouped project management processes, which are categorized into five Process Groups." During the development of the project management plan for the FGP, the initiating, planning, and execution processes would be used. Due to strict deadlines, the final two processes (monitoring and controling, and closing) will not be conducted in this plan.

2.2.3 Project life cycle

“The project manager and project team have one shared goal: to carry out the work of the project for the purpose of meeting the project’s objectives. Every project has a beginning, a middle period during which activities move the project toward completion, and an ending (either successful or unsuccessful). A standard project typically has the following four major phases (each with its own agenda of tasks and issues): initiation, planning, implementation, and closure. Taken together, these phases represent the path a project takes from the beginning to its end and are generally referred to as the project “life cycle.”” (Watt, A., 2017).

According to the *PMBOK® Guide* (*PMBOK® Guide* 5th Edition, 2013, pg. 38),

> “A project life cycle is the series of phases that a project passes through from its initiation to its closure. The phases are generally sequential, and their names and numbers are determined by the management and control needs of the organization or organizations involved in the project, the nature of the project itself, and its area of application. The phases can be broken down by functional or partial objectives, intermediate results or deliverables, specific milestones within the overall scope of work, or financial availability. Phases are generally time bounded, with a start and ending or control point. A life cycle can be documented within a methodology. The project life cycle can be determined or shaped by the unique aspects of the organization, industry, or technology employed. While every project has a defined start and a definite end, the specific deliverables and activities that take place in between will vary widely with the project. The life cycle provides the basic framework for managing the project, regardless of the specific work involved.”

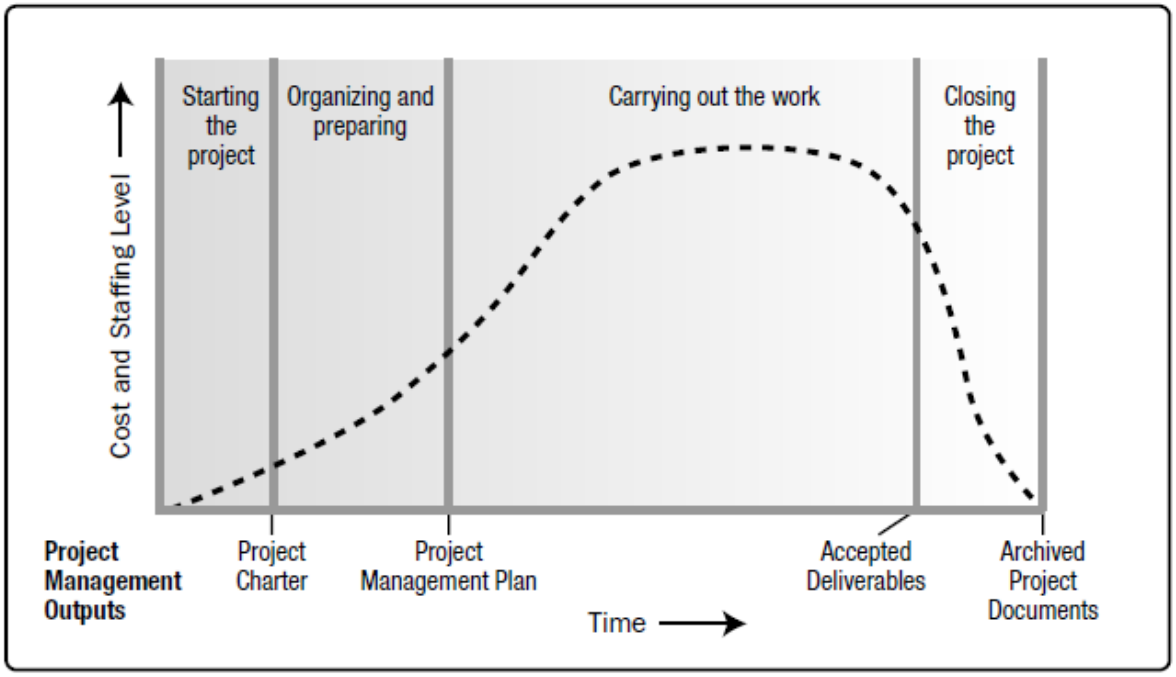


Figure 2 Typical Cost and Staffing Levels across a Generic Project Live Cycle Structure (Source: *PMBOK® Guide* 5th Edition, 2013, pg. 39)

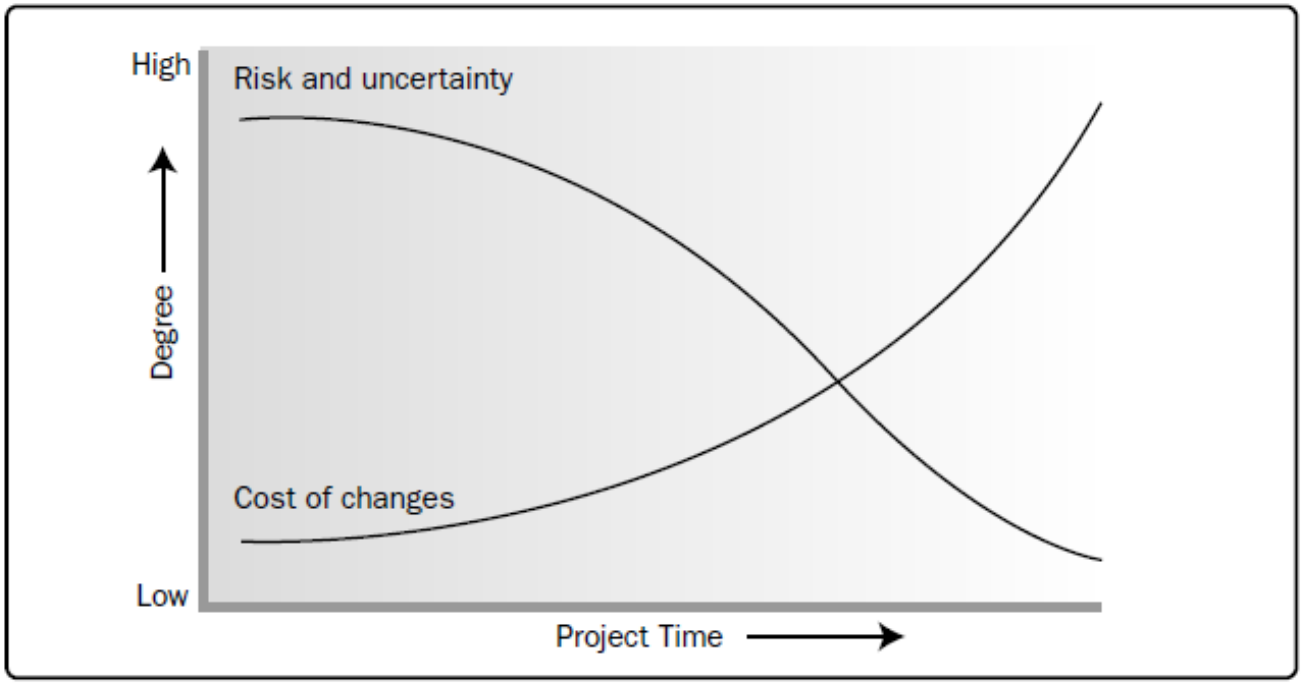


Figure 3 Impact of Variable Based on Project Time (Source: *PMBOK® Guide* 5th Edition, 2013, pg. 40)

2.2.4 Project management processes

Let us first define a process. According to the *PMBOK® Guide* (*PMBOK® Guide* 5th Edition, 2013, pg. 47), "A process is a set of interrelated actions and activities performed to create a pre-specified product, service, or result. Each process is characterized by its inputs, the tools and techiniques that can be applied, and the resulting outputs." In addtion, the project management processes "ensure the effective flow of the project throughout its life cycle. These processes encompass the tools and techniques involved in applying the skills and capabilities described in the Knowledge Areas". The *PMBOK® Guide*s further describes that the processes are grouped in five (5) major categories knows as the project management process groups (*PMBOK® Guide* 5th Edition, 2013, pg. 49):

1. Initiating Process Group – refers to the processes which are performed in order to define a new project or a new phase of a project that already exists.

This is done by acquiring the necessary authorization required for the project or phase to start.

2. Planning Process Group – are those processes which are required to establish the project scope. It also includes the processes that are required to refine the objectives and define the course of action required to achieve the objectives of the project.
3. Executing Process Group – are those processes performed to execute and complete the tasks and work defined in the project management plan in order to satisfy the project specifications.
4. Monitoring and Controlling Process Group – refers to those processes "required to track, review, and regulate the progress and performance of the project". It also identifies areas where changes are required to the plan and henceforth commence such required changes.
5. Closing Process Group – are those processes done to "finalize all activities across all Process Groups to formally close the project or phase."

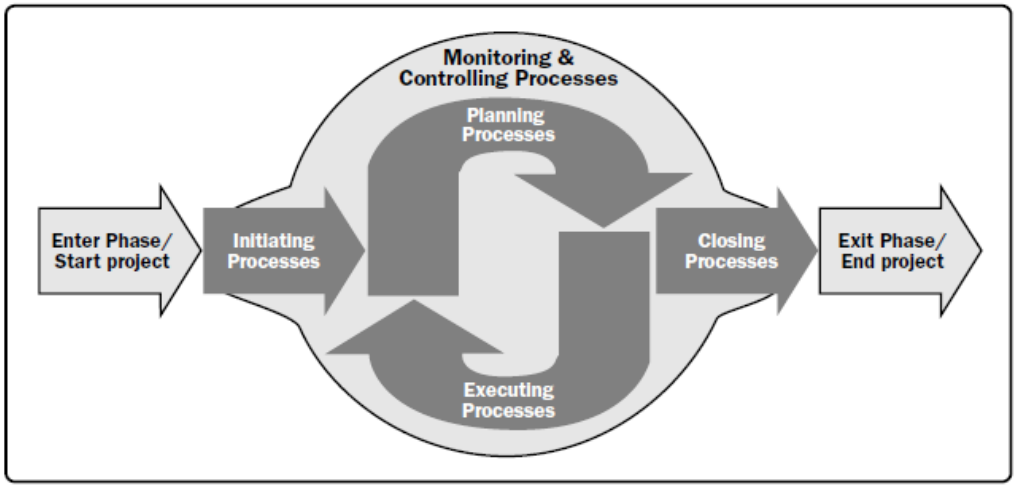


Figure 4 Project Management Process Groups (Source: *PMBOK® Guide* 5th Edition, 2013, pg. 50)

It is important to note that each defined process groups have clear dependencies that are typically performed in each project and highly interact with each other. Each process groups and individual processes are regularly iterated prior to completing the project and can interact within the Process Group and among the Process Groups.

In Figure 5, a brief and summarized process flow is displayed with all the interactions amongst each Process Groups and specific stakeholders.

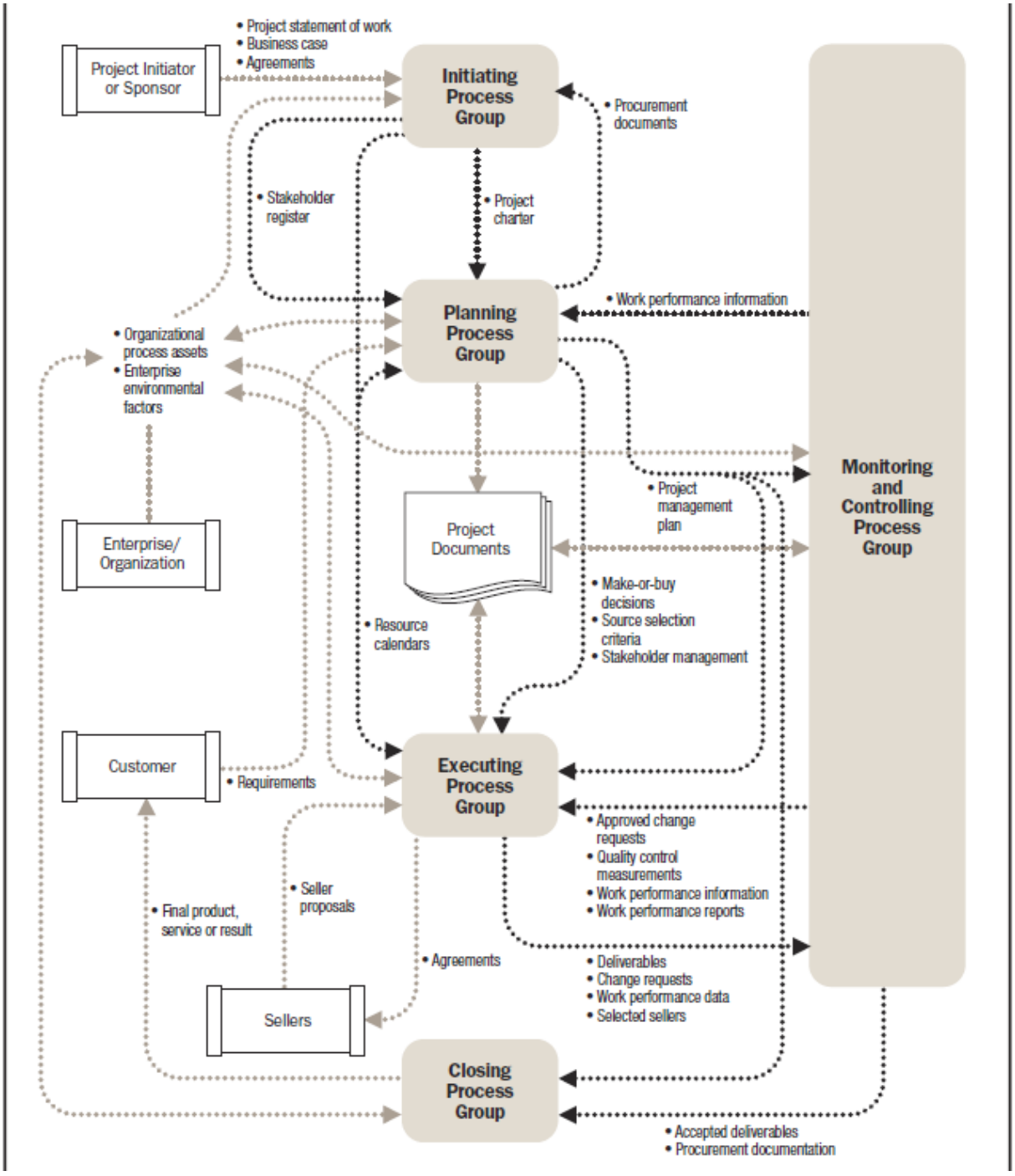


Figure 5 Project Management Process Interactions (Source: *PMBOK® Guide* 5th Edition, 2013, pg. 53)

2.2.5 Project management knowledge areas

There are “47 project management processes identified in the *PMBOK® Guide*. These are grouped into ten separate knowledge areas (*PMBOK® Guide* 5th Edition, 2016, p. 422). These will all be used during the lifecycle of the FGP.

The ten knowledge areas of project management (Project Management Institute, 2016) are:

1. Integration management
2. Scope management
3. Time management
4. Cost management
5. Quality management
6. Human Resources management
7. Communication management
8. Risk management
9. Procurement management
10. Stakeholder management

Project Integration Management

“Project Integration Management includes the processes and activities to identify, define, combine, unify, and coordinate the various processes and project management activities within the Project Management Process Groups” *PMBOK® Guide* 5th Edition, 2013, pg. 63). The processes involved in Project Integration Management are:

1. Develop Project Charter
2. Develop Project Management Plan
3. Direct and Manage Project Work
4. Monitor and Control Project Work
5. Perform Integrated Change Control
6. Close Project or Phase

Project Scope Management

Project Scope Management is defined as the knowledge area that "includes the processes required to ensure that the project includes all the work required, and only the work required, to complete the project successfully" (*PMBOK® Guide* 5th Edition, 2013, pg. 105). However, according to Moustafaev "project scope management seems to be one of the most neglected domains in project management" (Moustafaev, 2015, pg. 3). The processes involved in the Project Scope Management are:

1. Plan Scope Management
2. Collect Requirements
3. Define Scope
4. Create WBS
5. Validate Scope
6. Control Scope

Project Time Management

"Project Time Management includes the processes required to manage the timely completion of the project (*PMBOK® Guide* 5th Edition, 2013, pg. 141).

There are seven (7) processes identified in the strategic management of the Project Time Management, which will guide the development of the project's required activities, and the sequence in which they are to occur. The processes involved in the Project Time Management are:

1. Plan Schedule Management
2. Define Activities
3. Sequence Activities
4. Estimate Activity Resources

5. Develop Schedule
6. Control Schedule

Project Cost Management

"Project Cost Management includes the processes involved in planning, estimating, budgeting, financing, funding, managing, and controlling costs so that the project can be completed within the approved budget" (*PMBOK® Guide* 5th Edition, 2013, p. 193). The processes involved in the Project Cost Management are:

1. Plan Cost Management
2. Estimate Costs
3. Determine Budget
4. Control Costs

Project Quality Management

"Project Quality Management includes the processes and activities of the performing organization that determine quality policies, objectives, and responsibilities so that the project will satisfy the needs for which it was undertaken" (*PMBOK® Guide* 5th Edition, 2013, pg. 227). The processes involved in the Project Quality Management are:

1. Plan Quality Management
2. Perform Quality Assurance
3. Control Quality

Project Human Resource Management

"Project Human Resource Management includes the processes that organize, manage, and lead the project team" (*PMBOK® Guide* 5th Edition, 2013, pg. 255).

1. Plan Human Resource Management
2. Acquire Project Team

3. Develop Project Team
4. Manage Project Team

Project Communications Management

"Project Communications Management includes the processes that are required to ensure a timely and appropriate planning, collection, creation, distribution, storage, retrieval, management, control, monitoring, and the ultimate disposition of project information" (*PMBOK® Guide* 5th Edition, 2013, pg. 287). The processes involved in the Project Communications Management are:

1. Plan Communications Management
2. Manage Communications
3. Control Communications

Project Risk Management

According to PMI, "Project Risk Management includes the processes of conducting Project Risk Management, identification, analysis, response planning, and controlling risk on a project" (*PMBOK® Guide* 5th Edition, 2013, pg. 309). The processes involved in the Project Risk Management are:

1. Plan Risk Management
2. Identify Risks
3. Perform Quality Risk Analysis
4. Perform Quantitative Risk Analysis
5. Plan Risk Responses
6. Control Risks

Project Procurement Management

"Project Procurement Management includes the processes necessary to purchase or acquire products, services, or results needed from outside the project team"

(*PMBOK® Guide* 5th Edition, 2013, pg. 355). The processes involved in the Project Procurement Management are:

1. Plan Procurement Management
2. Conduct Procurements
3. Control Procurements
4. Close Procurements

Project Stakeholder Management

The Project Management Institute defines a stakeholder as "an individual, group, or organization that may affect, be affected by, or perceive itself to be affected by a decision, activity, or outcome of a project, program, or portfolio" (*PMBOK® Guide* 5th Edition, 2016, pg. 391). The processes involved in the Project Stakeholder Management are:

1. Identify Stakeholders
2. Plan Stakeholder Management
3. Manage Stakeholder Engagement
4. Control Stakeholder Engagement

3. METHODOLOGICAL FRAMEWORK

According to the Regents of the University of Minnesota, Twin Cities (2017), it is important to develop a methodological framework since it will affect the “niche you carve for yourself within your department, your discipline, and the wider academic community.” At this point, research questions should be refined and practical consideration needs to be involved. The methodology of your decision will move “from what you want to ask to how you are going to ask it.” In this section, however, we are going to include five (5) major topics: information sources, research methods, tools, assumptions and constraints, and deliverables.

3.1 Information sources

Information source can be defined as “A system which produces message by making successive selections from a group of symbols.” (McGraw-Hill dictionary of Scientific and Technical Terms, 2003). Textual, graphics, and audio-visual are forms of representation in which information sources can be distinguished. In addition, it is important to note that information science made a division of information sources; that is primary and secondary divisions.

Due to the implication of wide dissemination and official registration of public documents which resulted from ideas and facts acknowledged, the most important division of information sources was considered to be that of “published and unpublished” (The Great Soviet Encyclopedia, 3rd Edition, 2017). Furthermore, the analysis of interrelationships between scholarly publications establishes a large amount information sources accumulated by humankind. As a result, information sources are considered “truly valuable scholarly works”

3.1.1 Primary sources

The primary information sources are original materials that have not been “interpreted, condensed, or evaluated by a second party”. The source provides

fresh or firsthand information about an event, person, activity, object, or an object (Mangrum-Strichart Learning Resources, 2017).

The primary information sources that will be used for the development of the Final Graduation Project (FGP) are: interviews with Belize Bank's employees and suppliers, minutes of meetings (BBL, Consolidated Minutes of Meetings, 2015), and any first hand document which will be acquired from the interviewed company for the benefit of this project.

3.1.2 Secondary sources

"A secondary information source analyses, interprets, or discusses information about a primary information source. Secondary sources are subsequent to what they describe, as they are produced at some point after a primary information source appears. Papers written by students typically contain mostly secondary sources." (Mangrum-Strichart Learning Resources, 2017).

The secondary information sources that will be utilized for the development of the Final Graduation Project (FGP) are web databases, library databases, PMI database, and the *PMBOK® Guide* 5th Edition.

Chart 1 Information sources (Source: D. Davis, BBL Project Manager Assistant, July 2017)

Objectives	**Information sources**	
	Primary	**Secondary**
1. To develop an Integration Management Plan in order to define the basis of all project work (*PMBOK® Guide* 5th Edition, 2013, pg. 72).	Interviews with BBL employees and suppliers, and first hand documents.	Web databases, PMI databases, and the *PMBOK® Guide* 5th Edition.

2. To create a Scope Management Plan in order to ensure that all the work and only the work required is included to successfully complete the project (*PMBOK® Guide* 5th Edition, 2013, pg. 105).	Interviews with BBL employees and suppliers, minutes of meetings, and first hand documents.	Web databases, library databases, PMI databases, and the *PMBOK® Guide* 5th Edition.
3. To develop a Time Management Plan in order to manage time efficiently for the completion of the project (*PMBOK® Guide* 5th Edition, 2013, pg. 141).	Interviews with BBL employees and suppliers, minutes of meetings, and first hand documents.	Web databases and the *PMBOK® Guide* 5th Edition.
4. To create a Cost Management Plan in order to complete the project within the approved budget (*PMBOK® Guide* 5th Edition, 2013, pg. 193).	Interviews with BBL employees and suppliers, and first hand documents.	Web databases, library databases, PMI databases, and the *PMBOK® Guide* 5th Edition.
5. To develop a Quality Management Plan in order to satisfy the needs of the project (*PMBOK® Guide* 5th Edition, 2013, pg. 227).	Interviews with BBL employees and suppliers.	Web databases, library databases, PMI databases, and the *PMBOK® Guide* 5th Edition.
6. To develop a Human Resource Management Plan in order to establish roles, responsibilities, organizational charts, and staff management (*PMBOK® Guide* 5th Edition, 2013, pg. 258).	Interviews with BBL employees and suppliers, and first hand documents.	Web databases and the *PMBOK® Guide* 5th Edition.

7. To develop a Communication Management Plan in order to identify and document the most appropriate approach to communicate with stakeholders effectively and efficiently (*PMBOK® Guide* 5th Edition, 2013, pg. 289).	Interviews with BBL employees and suppliers, minutes of meetings, and first hand documents.	Web databases and the *PMBOK® Guide* 5th Edition.
8. To develop a Risk Management Plan in order to increase the likelihood and impacts of positive events, and decrease the likelihood and impact of negative events (*PMBOK® Guide* 5th Edition, 2013, pg. 309).	Interviews with BBL employees and suppliers, and first hand documents.	Web databases, library databases, PMI databases, and the *PMBOK® Guide* 5th Edition.
9. To develop a Procurement Management Plan in order to determine whether to acquire outside support, what to acquire, how to acquire it, how much is needed, and when to acquire it (*PMBOK® Guide* 5th Edition, 2013, pg. 358).	Interviews with BBL employees and suppliers, and first hand documents.	Web databases and the *PMBOK® Guide* 5th Edition.
10. To develop a Stakeholder Management Plan in order to provide a clear, actionable plan to interact with stakeholders in order to support the interest of the project (*PMBOK® Guide* 5th Edition, 2013, pg. 399).	Interviews with BBL employees and suppliers, minutes of meetings, and first hand documents.	Web databases, library databases, PMI databases, and the *PMBOK® Guide* 5th Edition.

3.2 Research Methods

According to Research Methodology, (Research Methodology, 2017), data collection and data analysis represents the center of research methods. Due to research methods being a "broad term", it is necessary to address, in additional to the aforementioned data, additional elements within the scope of a research. Research Methodology points out six (6) important elements necessary in research methods. They are: research philosophy, research approach, research design, data collection method, sampling, and ethical considerations.

Analytical method

The analytical research method, sometimes referred to as the explanatory method, "uses facts or information already available and analyses to make a critical evaluation" (Sridhar, 2008, slide 20). With this research method, information from multiple sources will be examined and used to develop the deliverables demonstrated in the **Chart 2**.

The research and analytical method that will be applied to the Final Graduation Project are the facts and/or data acquired from the sources identified in **Chart 1** for each individual objective.

Chart 2 Research methods (Source: D. Davis, BBL Project Manager Assistant, July 2017)

Objectives	Analytical Research Method
1. To develop an Integration Management Plan in order to define the basis of all project work	The analytical research methods that will be applied are facts and/or data acquired from the sources identified in

(*PMBOK® Guide* 5th Edition, 2013, pg. 72).	Chart 1 to its respective objectives.
2. To create a Scope Management Plan in order to ensure that all the work and only the work required is included to successfully complete the project (*PMBOK® Guide* 5th Edition, 2013, pg. 105).	The analytical research methods that will be applied are facts and/or data acquired from the sources identified in Chart 1 to its respective objectives.
3. To develop a Time Management Plan in order to manage time efficiently for the completion of the project (*PMBOK® Guide* 5th Edition, 2013, pg. 141).	The analytical research methods that will be applied are facts and/or data acquired from the sources identified in Chart 1 to its respective objectives.
4. To create a Cost Management Plan in order to complete the project within the approved budget (*PMBOK® Guide* 5th Edition, 2013, pg. 193).	The analytical research methods that will be applied are facts and/or data acquired from the sources identified in Chart 1 to its respective objectives.
5. To develop a Quality Management Plan in order to satisfy the needs of the project (*PMBOK® Guide* 5th Edition, 2013, pg. 227).	The analytical research methods that will be applied are facts and/or data acquired from the sources identified in Chart 1 to its respective objectives.
6. To develop a Human Resource Management Plan in order to establish roles, responsibilities, organizational charts, and staff management (*PMBOK® Guide* 5th Edition, 2013, pg. 258).	The analytical research methods that will be applied are facts and/or data acquired from the sources identified in Chart 1 to its respective objectives.

7. To develop a Communication Management Plan in order to identify and document the most appropriate approach to communicate with stakeholders effectively and efficiently (*PMBOK® Guide* 5th Edition, 2013, pg. 289).	The analytical research methods that will be applied are facts and/or data acquired from the sources identified in Chart 1 to its respective objectives.
8. To develop a Risk Management Plan in order to increase the likelihood and impacts of positive events, and decrease the likelihood and impact of negative events (*PMBOK® Guide* 5th Edition, 2013, pg. 309).	The analytical research methods that will be applied are facts and/or data acquired from the sources identified in Chart 1 to its respective objectives.
9. To develop a Procurement Management Plan in order to determine whether to acquire outside support, what to acquire, how to acquire it, how much is needed, and when to acquire it (*PMBOK® Guide* 5th Edition, 2013, pg. 358).	The analytical research methods that will be applied are facts and/or data acquired from the sources identified in Chart 1 to its respective objectives.
10. To develop a Stakeholder Management Plan in order to provide a clear, actionable plan to interact with stakeholders in order to support the interest of the project (*PMBOK® Guide* 5th Edition, 2013, pg. 399).	The analytical research methods that will be applied are facts and/or data acquired from the sources identified in Chart 1 to its respective objectives.

3.3 Tools

According to the *PMBOK® Guide 5th edition,* a tool is defined as "something tangible, such as a template or software program, used in performing an activity to produce a product or result" (*PMBOK® Guide* 5th Edition, 2013, pg. 565).

The tools that will be used in the Final Graduation Project (FGP) are listed and defined below.

a. Project charter template - guides the development of the project charter.
b. Requirements traceability matrix template - ensures that project requirements are necessary and will be met.
c. Work Breakdown Structure (WBS) online generator - breaks down the project into smaller components so it can be more easily managed.
d. Requirements Management Plan template – describes how the requirements will be analysed, documented and managed.
e. Requirements documentation template - captures the requirements documentation.
f. Project Scope Management template - guides the development of the Project Scope Management and all of its subcomponents.
g. Project Management Plan template - guides the development and organization of the project management plan and all its subcomponents.
h. Schedule Management Plan template - guides the development of the project management plan and all its subcomponents.
i. Scheduling tool – developed in Microsoft Project 2016 to create the Project Schedule using Schedule network analysis.
j. Activity List template – captures the list of activities for the project.
k. Project Cost Management template – develops the Project Cost Management that will guide the project team during the project's lifecycle.
l. Project Budgeting template – created in Microsoft Excel 2016, develops the project budget and track financial transactions throughout the project's lifecycle.

m. Cost Baseline template – outlines the development of the cost baseline.

n. Project Quality Management template – outlines the development of the Project Quality Management.

o. Quality Management tools – examples include cause-and-effect diagrams, flowcharts, check sheets and control charts to be used throughout the project. The use of these tools will be outlined in the Project Quality Management.

p. Project Human Resource Management template – guides the planning of human resource management.

q. Responsibility Assignment Matrix – identifies team members and assigns them responsibilities.

r. Communications Management Plan template – guides the development of the communications management plan.

s. Communication Matrix – created in Microsoft Excel 2016, plans communications between project team and stakeholder management.

t. Project Risk Management and Risk Register template – developed in Microsoft Excel 2016, identifies and classifies risks, and plans risk responses.

u. Project Procurement Management template – aids in identification of contracts and purchasing decisions.

v. Project Stakeholder Management template – aids in identification and classification of stakeholders, and plans stakeholder management.

w. Stakeholder Analysis Chart – aids in analysis and classification of project stakeholders.

x. Stakeholder Register template – aids in identification of project stakeholders.

y. Stakeholder Engagement Assessment Matrix – details how each project stakeholder should be engaged based on their level of involvement in the project.

Chart 3 Tools (Source: D. Davis, BBL Project Manager Assistant, July 2017)

Objectives	Tools
1. To develop an Integration Management Plan in order to define the basis of all project work (*PMBOK® Guide* 5th Edition, 2013, pg. 72).	Project Charter and Project Management Plan
2. To create a Scope Management Plan in order to ensure that all the work and only the work required is included to successfully complete the project (*PMBOK® Guide* 5th Edition, 2013, pg. 105).	Requirements traceability matrix template, Microsoft Vision Professional 2016, Requirements Documentation template, Requirements Management Plan template, Work Breakdown Structure generator, and Project Scope Management template
3. To develop a Time Management Plan in order to manage time efficiently for the completion of the project (*PMBOK® Guide* 5th Edition, 2013, pg. 141).	Schedule Management Plan, Microsoft Project 2016, Microsoft Visio Professional 2016, and Activity List template
4. To create a Cost Management Plan in order to complete the project within the approved budget (*PMBOK® Guide* 5th Edition, 2013, pg. 193).	Cost Management Plan, Microsoft Excel 2016 Project Budgeting template, and Cost Baseline template

5. To develop a Quality Management Plan in order to satisfy the needs of the project (*PMBOK® Guide* 5th Edition, 2013, pg. 227).	Quality Management Plan and Quality Management tools (Checksheets)
6. To develop a Human Resource Management Plan in order to establish roles, responsibilities, organizational charts, and staff management (*PMBOK® Guide* 5th Edition, 2013, pg. 258).	Human Resource Management Plan and Responsibility Assignment Matrix
7. To develop a Communication Management Plan in order to identify and document the most appropriate approach to communicate with stakeholders effectively and efficiently (*PMBOK® Guide* 5th Edition, 2013, pg. 289).	Communications Management Plan and Communications Matrix
8. To develop a Risk Management Plan in order to increase the likelihood and impacts of positive events, and decrease the likelihood and impact of negative events (*PMBOK® Guide* 5th Edition, 2013, pg. 309).	Risk Management Plan, and Risk Register template
9. To develop a Procurement Management Plan in order to determine whether to acquire outside support, what to acquire, how to acquire it, how much is	Procurement Management Plan

needed, and when to acquire it (*PMBOK® Guide* 5th Edition, 2013, pg. 358).	
10. To develop a Stakeholder Management Plan in order to provide a clear, actionable plan to interact with stakeholders in order to support the interest of the project (*PMBOK® Guide* 5th Edition, 2013, pg. 399).	Project Stakeholder Management template, Stakeholder Analysis Chart, Microsoft Excel 2016, Stakeholder Register template, Stakeholder Engagement Assessment Matrix, Mindtools Online Stakeholder Power/Interest Grid Creator

3.4 Assumptions and constraints

According to the PMBOK ® Guide 5th Edition, assumption is described as "a factor in the planning process considered to be true, real, or uncertain, without proof or demonstration" (*PMBOK® Guide* 5th Edition, 2016, p. 124). A constraint on the other hand, is defined as "a limiting factor that affects the execution of a project, program, portfolio, or process". The assumptions and constraints considered for the Final Graduation Project for each specific objective are detailed in **Chart 4**.

Chart 4 Assumptions and constraints (Source: D. Davis, BBL Project Manager Assistant, July 2017)

Objectives	Assumptions	Constraints
1. To develop an Integration Management Plan in order to define the basis of all project work (*PMBOK® Guide* 5th Edition, 2013, pg. 72).	Before any subsidiary documents, the charter will be created.	Due to time limitation (5 days), insufficient data may be gathered especially in reference to directing and managing project

Objectives	Assumptions	Constraints
		work.
2. To create a Scope Management Plan in order to ensure that all the work and only the work required is included to successfully complete the project (*PMBOK® Guide* 5th Edition, 2013, pg. 105).	The company have disclosed all of the relevant information required to develop the Project Scope Management.	Due to confidential data, insufficient information may be gathered from the company to define the Project Scope Management.
3. To develop a Time Management Plan in order to manage time efficiently for the completion of the project (*PMBOK® Guide* 5th Edition, 2013, pg. 141).	The time allocated for the development of the Project Management Plan for the new Core Banking System (CBS) will suffice.	A two (2) years strict schedule has been defined for this project and should not surpass this timeline.
4. To create a Cost Management Plan in order to complete the project within the approved budget (*PMBOK® Guide* 5th Edition, 2013, pg. 193).	The budget created during planning suffices for all the resources and requirement for the Project Management Plan of the new CBS.	Due to confidential data, insufficient information, especial from the budget, may be gathered from the company to define the Project Cost Management.
5. To develop a Quality Management Plan in order to satisfy the needs of the project (*PMBOK® Guide* 5th Edition, 2013, pg. 227).	The Project Quality Management will identify all of the technical and managerial quality requirements for the	Peripheral systems were not properly analysed and test cases were not adequately

Objectives	Assumptions	Constraints
	project.	designed.
6. To develop a Human Resource Management Plan in order to establish roles, responsibilities, organizational charts, and staff management (*PMBOK® Guide* 5th Edition, 2013, pg. 258).	The organization has sufficient human resources to complete the project.	Resources from the suppliers are also required and the bank will need to cope with the resources provided from the supplier's side applying other HR risks such as culture.
7. To develop a Communication Management Plan in order to identify and document the most appropriate approach to communicate with stakeholders effectively and efficiently (*PMBOK® Guide* 5th Edition, 2013, pg. 289).	The organization has the adequate tools and methods required to implement the required communication needs of all stakeholders.	Since the supplier's resources are from abroad, communication may be a complicated depending on the resource's culture and accent.
8. To develop a Risk Management Plan in order to increase the likelihood and impacts of positive events, and decrease the likelihood and impact of negative events (*PMBOK® Guide* 5th Edition, 2013, pg. 309).	There is sufficient information required to adequately identify most, if not all, project risks.	Overlooking interfaces and integrated systems, improper test cases, and unidentified reporting indicators may cause a budget overrun and even project delay.
9. To develop a Procurement Management Plan in order to	The main list of suppliers for the new CBS has	International suppliers should not

Objectives	Assumptions	Constraints
determine whether to acquire outside support, what to acquire, how to acquire it, how much is needed, and when to acquire it (*PMBOK® Guide* 5th Edition, 2013, pg. 358).	been identified.	result in schedule delays.
10. To develop a Stakeholder Management Plan in order to provide a clear, actionable plan to interact with stakeholders in order to support the interest of the project (*PMBOK® Guide* 5th Edition, 2013, pg. 399).	The Stakeholder Management plan will include a complete list of all stakeholders involved and a plan as to how to properly manage each one.	The data acquired for the stakeholder management must be accurate and none must be left out.

3.5 Deliverables

According to *PMBOK® Guide* 5th Edition, a deliverable is defined as "any unique and verifiable product, result, or capability to perform a service that is required to be produced to complete a process, phase, or project" (*PMBOK® Guide* 5th Edition, 2013, p. 537).

Chart 5 Deliverables (Source: D. Davis, BBL Project Manager Assistant, July 2017)

Objectives	Deliverables
1. To develop an Integration Management Plan in order to define the basis of all project work	Project Charter

(*PMBOK® Guide* 5th Edition, 2013, pg. 72).	
2. To create a Scope Management Plan in order to ensure that all the work and only the work required is included to successfully complete the project (*PMBOK® Guide* 5th Edition, 2013, pg. 105).	Scope Management Plan (WBS and WBS Dictionary), Requirements Management Plan, and Requirements Traceability Matrix
3. To develop a Time Management Plan in order to manage time efficiently for the completion of the project (*PMBOK® Guide* 5th Edition, 2013, pg. 141).	Schedule Management Plan, Activity List, Schedule Network Diagram, Resource assignments and activity durations, and Schedule in Gantt chart
4. To create a Cost Management Plan in order to complete the project within the approved budget (*PMBOK® Guide* 5th Edition, 2013, pg. 193).	Cost Management Plan, Project Budget and Cost Flow
5. To develop a Quality Management Plan in order to satisfy the needs of the project (*PMBOK® Guide* 5th Edition, 2013, pg. 227).	Quality Management Plan
6. To develop a Human Resource Management Plan in order to establish roles, responsibilities, organizational charts, and staff management (*PMBOK® Guide* 5th Edition, 2013, pg. 258).	Human Resource Management Plan

7. To develop a Communication Management Plan in order to identify and document the most appropriate approach to communicate with stakeholders effectively and efficiently (*PMBOK® Guide* 5th Edition, 2013, pg. 289).	Communication Management Plan and Communications Matrix
8. To develop a Risk Management Plan in order to increase the likelihood and impacts of positive events, and decrease the likelihood and impact of negative events (*PMBOK® Guide* 5th Edition, 2013, pg. 309).	Risk Management Plan and Risk Register
9. To develop a Procurement Management Plan in order to determine whether to acquire outside support, what to acquire, how to acquire it, how much is needed, and when to acquire it (*PMBOK® Guide* 5th Edition, 2013, pg. 358).	Procurement Management Plan
10. To develop a Stakeholder Management Plan in order to provide a clear, actionable plan to interact with stakeholders in order to support the interest of the project (*PMBOK® Guide* 5th Edition, 2013, pg. 399).	Stakeholder Management Plan, Stakeholder Register, Stakeholder Power / Interest Grid, and Stakeholder Engagement Assessment Matrix.

4. RESULTS

4.1 Integration Management Plan

The first process in the Project Integration Management is the Project Charter (PC). During the development of the PC: interviews, minutes of meeting (BBL, Consolidated Minutes of Meetings, 2015), and the *PMBOK® Guide were used* as sources and decision-making drivers. A template from the PMI database was used as a tool to develop the Project Charter, which formally authorized the project and provided authority to the Project Manager in order to apply organizational resources to the project for the development of the Project Management Plan. Furthermore, during the development of the FGP, a template was created and utilized as a guide in order to compile the Project Management Plan; the second process in the Project Integration Management comprised of subsidiary plans. The PC is the only process that we'll develop in the Project Integration Management, however will serve as input to develop a Project Management Plan.

The inputs, tools and techniques for a project charter are listed below:

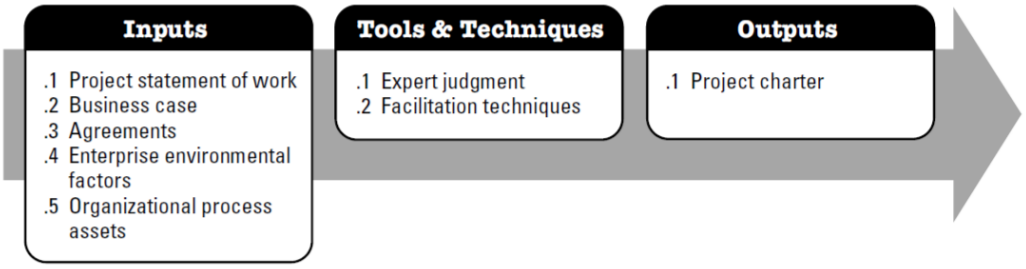


Figure 6 Project Charter: Inputs, Tools & Techniques, and Outputs. (Source: *PMBOK® Guide* 5th Edition, 2013, pg. 66)

Note that the Belize Bank Limited has never had a Project Manager nor has it adopt Project Management principles until the implementation of the new Core Banking System. As a result, several inputs, tools or techniques may not be applicable, as they were never utilized by the researched organization. However, such input, tool or technique may indirectly be applied. Two main inputs that are not directly utilized by the organization are the Organizational Process Assets (OPA) and the Enterprise Environmental Factors (EEF). Below is the Project

Charter established and guided from minutes of meetings documentation (BBL, Consolidated Minutes of Meetings, 2015) held at the organization and (BBL's Project Charter (BBL, Project Charter, 2014).

4.1.1 Project Charter

Purpose

The purpose of the Project Charter is to provide a high-level description of the expected outcomes and approach to the Core Banking System Implementation project. The Charter is used to confirm expectations of the project's objectives with BCB Holdings, and to formally approve, initiate and kick-off the project.

This Charter identifies the project objectives, scope, and participants. It establishes participant roles, relationships, and responsibilities for decision-making, approvals, and issue resolution and escalation. The Project Charter also contains vital information about the project and its leadership.

4.1.1.1 Background

Business Problem

The current NBS core banking software being used by the Belize Bank and the Belize Bank International has been in operation for over ten years. It has been customized and modified in-house by the Information Systems department, with input from the business as well as in the area of regulatory compliance from the Central Bank of Belize. Although it has adequately served the bank's needs over the years, the existing core banking system relies heavily on in-house technical support for its day to day operation, and has no external support from its vendor. Additionally, the technical platform under which the Nu Banking System is being run is inadequate for the changing needs of the bank and its vision of becoming the "preeminent banking services provider in Central America and the Caribbean".

Project Background

A RFP describing the functional requirements and business needs of the Bank was created and sent to a group of twelve vendors of core banking system software. After careful assessment, the Core Banking Selection team ultimately made the decision to select Misys' Fusion Banking Essence software as the Bank's new banking system. Along with the new Core Banking System, third party modules are being purchased to handle document management, SWIFT messages, hardware peripherals, and anti-money laundering. On May 22nd, 2017 formal agreements between Misys and the Bank were made to license and implement Essence. These third party modules are certified by Misys to integrate tightly with Essence. The implementation of the new system is expected to take twenty-one months and includes deployment for the BBIL and BBL environments.

4.1.1.2 System Concepts

Project Goal Statement

The fundamental goal is the implementation of a new core banking system to provide the technological platform on which to build a premier regional banking institution. The platform must be highly secure, reliable, comprehensive and flexible in the services it supports and provide all the tools required to effectively manage the operations in order to allow the bank to provide the highest quality services to its customers and the greatest value to its shareholders.

Project General Objectives

To implement a new Core Banking System in order to increase the bank's productivity and competence.

Specific Objectives (Business):

1. To develop a comprehensive suite of preconfigured products and in order to adopt the best practices configured in the Misys Model Bank.
2. To create an easy configuration of new products in order to meet the bank's changing needs demand.

3. To develop a Customer Relationship Management functionality in order to improve customer service and public relationship.
4. To implement a support for a Multi-Company, Multi-Jurisdiction, Multi-Currency Banking Group Operation in order to have a regional expansion strategy.
5. To develop a highly configurable General Ledger module to support the required bank's operations.
6. To develop a strong and agile general and regulatory reporting tools to support internal controls and operations.
7. To develop a strong Anti-money laundering functionality in order to comply with local and international policies.
8. To develop a strong audit and compliance features in order to improve internal operations.

Specific Objectives (Technical):

9. To develop a web-based technological platform in order to allow easy deployment, operation, and maintenance.
10. To create a highly reliable, available, and redundant systems in order to promote productivity.
11. To develop a robust security framework in order to protect the bank's data.
12. To develop a Sound Business Continuity and Disaster Recovery features in order for business going concerns.
13. To develop an easy to interface and integrate with other software systems to improve efficiency of peripheral systems.
14. To develop a comprehensive and detailed documentation in order to maintain backup data and enhance future training development.
15. To create a flexible and easy to use reporting functionality in order to develop a user-friendly system.

Project Scope

- The Project Scope is comprised as follows:

- Software Modules to be installed, configured and tested.
- Project initiation and planning involving the Bank and Misys.
- Business Process Alignment and Analysis workshops.
- Configuration and localization of Essence modules.
- Training to empower the Client to participate in delivery, installation, configuration, testing and implementation of the Model Solution. This will include functional, technical and BankFusion Workbench training.
- Work with the Bank in developing interfaces between Essence and a set of identified external & internal applications.
- Work with the Bank to provide Management, Regulatory and Client specific reporting along with the build and deployment within the Bank's reporting architecture.
- Support for System Integration Testing and User Acceptance Testing.
- Work with the Client on the migration of data from the Client's existing Core Banking Application.
- Go-Live preparation.
- Cut over support to Production.
- Post Production handover to Customer Support and on-site support (2 weeks).

The scope of the project covers both BBIL and BBL for each project stage. The system configuration and testing will be performed simultaneously for both banks. BBIL will be implemented initially, and will be used as a production test phase to prove the functionality of the platform and to identify any potential inadequacies prior to the main BBL launch. The migration of BBL is scheduled a number of months after BBIL and only branch user and data preparation is assumed to be required.

The details of the Project Scope can be found in the SOW document.

Project Cost and Budget

The main Project Budget categories are listed below (note: due to confidentiality, a detailed budget was not provided).

A) Initial License Fee

The Initial License Fee for the Software that is described as at the Schedule Effective Date shall be invoiced by Misys as follows:

(i) 50% on the Schedule Effective Date

(ii) 30% on August 29th; and

(iii) 20% on November 28th, 2017.

B) Recurring License Fee ("RLF")

(i) The Recurring License Fee for the Software shall commence on upon the date which is one (1) year from the Schedule Effective Date (the date the agreement was signed). This fee is payable for a period of 11 years.

(ii) A pro-rated amount shall be payable on the RLF Commencement Date for the period from the RLF Commencement Date up to and including 31 December of that year.

C) Professional Services

The Professional Services cost for the implementation of Essence in the BBIL and BBL environments are fixed.

D) Travel and Accommodation

Misys' travel and accommodation expenses for the duration of the project are estimated.

The Bank’s travel and accommodation expenses for the duration of the project are estimated.
There is a 25% contingency on travel and accommodations, which brings the total estimated budget for travel and accommodation.

E) Hardware and Installation

The total estimated hardware and installation cost.

F) Training

The total cost of Training for the project.

G) Human Resources

The total cost of additional Human resources assigned to the project from the Bank. This consists of two programmers to be employed on a contract basis for the duration of the project.

H) Taxes

The applicability of taxes in the various jurisdictions in which the project and related services are executed have not been determined.

The total budgeted amount of the implementation project is X $USD.

Critical Success Factors

A committed and supportive management from both the Bank and Misys - Management’s role in leading the effective participation of the entire Bank is indispensable for successful implementation.

A committed and fully dedicated Project Manager for both parties – The undivided attention and commitment of the Project Manager on both the Bank's side and Misys will be important.

A dedicated and fully involved Project Team – Due to the importance of this point, the Bank has assigned a dedicated team of technical resources to focus fully on this project. Other resources including those on a contract basis will be responsible for supporting the legacy system during implementation.

A clearly developed Project Plan – A carefully drafted project plan was substantially completed prior to the signing of the contract between Misys and the Bank.

Periodic and consistent review of the progress of the project – It is important to constantly monitor and receive updates on the project status to ensure that planned deadlines are met.

Education and Training – We will have to train our technical resources to adopt and manage the new technological platform of the solution. Also, sufficient end-user training should be timely to ensure full acceptance by the general staff.

Communication and Change Management support – It is essential that a well-defined change management program be communicated and implemented by Bank management and the project team.

4.1.1.3 Project Approach

Chart 6 Project Approach (Source: BBL, Project Charter, 2014).

Project Milestones	Description
Infrastructure	Delivery and Installation of IBM Hardware and Misys Software
Project Training	Technical - IBM / Java / Crystal / FusionBanking Essence Business Training – FusionBanking Essence Overview
Solution Design	Business Process Maps Alignment Workshops. Implementation Strategies – Migration / Integration / Reporting.
Off Shore System Configuration	Fusion Banking Essence Configuration and Test

On Shore Development	Interfaces, Migration, Reporting Development
Test Phase	System Integration and Functional Test User Acceptance Test
BBIL Go Live	Dress Rehearsal and Go Live
BBL Go Live	BBL Branches Go Live Preparation and Dress Rehearsal Go Live – All BBL Branches Simultaneously

Assumptions and Constraints

Assumptions:

1. Misys' Model Bank incorporates the business processes which address the needs of a standard Bank. The Model Bank incorporates banking best practice procedures derived from Misys' experience in the Core Banking sector over thirty years. The Model Bank is a template for the implementation of FBE which incorporates Misys' experience, however it doesn't restrict to it.
2. The Bank also makes the assumption that Misys' experience in a project of this scope is adequate in determining cost, time, and organization.
3. Misys' development tool (Workbench) will provide the necessary framework to accomplish the interface development and customization necessary for integration of FBE and the Bank's peripheral applications.
4. The Bank will assign the highest priority and importance to the execution of its project responsibilities. Misys will have the required resources, including personnel available during the duration of the project. No external factors such as natural disasters, force majeure, etc. will affect the project. The assumption is made that FBE will perform substantially as described in the documentation.

Constraints:

1. Financial resources
2. The availability of dedicated human resources assigned to the project by the Bank.
3. The shortage of qualified personnel in the local labour force.

4. Competing resources for the project vs. running the business.

Project Impacts

1. There is a moratorium on any new information technology projects except for those of a critical or regulatory nature.
2. ISD support for new initiatives proposed by the Bank will be limited during implementation.

Success Criteria

The project will be considered successful if signed off and completed within 6 months of the projected go-live dates for BBIL and BBL.

4.1.1.4 Organization

Project Organization

Figure 7 Project Organization (Source: BBL, Project Charter, 2014).

Project Authority and Oversight

Project Sponsor: The Project Sponsor is the overall owner of the Project.

Project Manager: The Project Manager has full responsibility and authority to ensure that the Project is completed successfully.

Some specific responsibilities include:

- Support the Misys Project Manager in developing and updating the Project Plan.
- Managing the project stakeholders.
- Managing Communication.
- Managing and constantly evaluating Project Risk.
- Managing the Project Schedule along with the Misys Project Manager.
- Managing the Project Budget.
- Managing and escalating to the Project Steering Committee if necessary when there are project conflicts.

Project Steering Committee: The Project Steering Committee is the highest decision level of the project. Members of the project steering committee are the Members of the Executive Committee along with the Bank's Project Manager, the Misys Project Sponsor and the Misys Project Manager.
The Steering Committee will typically meet once in a month but this is dependent upon the status of the project and a joint decision can be taken regarding the frequency of the meetings.
The Steering Committee responsibilities are the following:

- To set overall direction and budget for the project.
- Approve all major plans and authorize major deviation from agreed plans.
- Ensure that project direction and the Client Business/IT Strategies are adhered to at all times during the project.
- Provide management focus and guidance to ensure success of the project.
- Solving "strategic" issues and also directing the project.
- Coordinate and resolve fundamental decisions and disputes.
- Verify that all project deliverables and directives have been met.

The Steering Committee does not get involved in day-to-day activities. The Project Managers from both sides take guidance from this Committee.

Change Control Board: The Change Control Board (CCB) consists of the same members of the Project Steering Committee. The CCB are responsible for making decisions having to do with deviations / deltas from the Model Bank business escalated from the Design Authority Group, which have an impact on cost and duration of the Project.

Design Authority Group: The Design Authority Group is responsible for decision escalation resolution arising from the output of the BPA Workshops. Although the MAPS (Misys Application Project System) approach involves the adoption of the Misys Model Bank, there may still be deltas between the Model Bank and the Bank's business processes. The responsibility of the Design Authority Group is to resolve these potential deltas and escalate to the Change Control Board when required.

Roles and Responsibilities

Chart 7 Roles and Responsibilities (Source: BBL, Project Charter, 2014).

Member	Description
Misys Project Director	• Is responsible for management of a collection of projects within the region, each with a project manager reporting to them. • Responsible for the provision of the highest quality of service delivery in all implementation and engagements to customers in the region.
Misys Project Manager	• Performs project management duties on behalf of the Company.
Misys Functional Consultant	• Performs Company specific system functional consultancy implementation assignment.
Misys Technical Consultant	

	• Performs Company specific system IT consultancy implementation assignments and development of interfaces and customizations.
Misys Delivery Manager	• Responsible for the Deliverables from the (Customization, Build, Interface Development, Data migration activities).
Misys Project Manager	• Performs Project Planning, management and execution of Customization, Build, Interface development, Data migration activities.
Misys Team	Responsible for: • Offshore Build activities • Interface Development • Customization • Data migration testing • Automated Test.
Misys Academy	• Provides the Training to the bank's Core Team
Bank's Senior Management	• Overall responsibility for the implementation • Take key decisions for Project • Change Management Approval • Internal Stakeholder Management • Steering Committee participants
Bank's Project Manager	• Project Management from the Bank's perspective • Participate in Project Planning along with Misys Project Manager
	• Risk management • Status review • Issue management • Availability of the required logistics like environment etc.

	• Availability of the Subject Matter Experts (Technical / Functional) • Escalation Management
Bank's Functional Resources	• Provide the required Business requirements • Review the requirements defined • Provide knowledge / clarification on the domain and the Business process flow in the bank • Review the Product test plans • Review the Customization Test plans
Bank's Technical Resources	• Provide an overview on the current architecture and deployment of various applications in the Banks environment • Provide the details regarding the interfaces to these applications • Provide clarification on the Interface requirements • Review the interface requirements • Review the System Integration Test plan
Role	**Skills**
Project Manager	Ensure that client responsibilities for the project, as agreed, are discharged. Provide and deliver the necessary Bank resources for the project.
Business User Team Leader	This individual is the leader of the business analysis effort performed by the business analysts. The person in this role is responsible for leading the overall business representation.
Technical Team Leader	The Technical Team Leader is responsible for the high-level design of the technical solution. This person proposes, via an assigned team, the use of appropriate technology to meet the needs of the Bank.
Build Team Leader	The Build Team Leader is responsible for ensuring that Bank assigned resources, partaking in the configuration and build of the Solution complete their assigned build tasks, as well as making best use of the knowledge transfer process as possible.
Team Leader Test	The Test Manager assures that the project testing approach is complete for all areas of

	the project, functional, technical, and process change.
Member	**Description**
Database Administrator	Reporting into the Technical Team Leader, this individual designs and maintains the various database environments required for the new system.
Systems Administrator	Reporting into the Technical Team Leader, the Systems Administrator is responsible for assessing the computer-related needs of user community.
Training Team Leader	The procedures and training team would have a large responsibility for ensuring that the new Misys solution is welcomed and respected by low-level users within the Bank.
Conversion Team	The conversion team, headed by the Data Conversion Team Leader would be able to assist in the extraction of the data from the Bank's existing system and preparing it for migration into the new Misys solution.
Business Users	The employees, managers and executives who will be using the Misys application software once it is deployed.

4.1.1.5 Project Risk

Risk Analysis

Project Requirements Definition – One of the major risks the project may face is inadequate identification and definition of the functional requirements, in order to close the scope. The scheduling of the Business Process Alignment workshops at the inception of the project is deliberate. The careful definition of our requirements within the context of the Model Bank approach will help avoid changing requirements in the middle of the project, which may lead to scope drift, one of the biggest risks faced in projects of this size. The Model Bank approach is intended to mitigate the specific risk, and is based on the adoption of industry best practices rather than replicating our current business processes.

Project Planning – The Project Plan must be comprehensive and detailed with proper allocation of resources and achievable timelines.

Budget – The Budget should account for all possible sources of expenditure for the duration of the project. It should provide a comprehensive and accurate picture of the financial investment undertaken by the organization.

Acceptance of Deliverables – The Bank must ensure that criteria are clearly defined, and deliverables are met before formal acceptance. For example, business users are required to perform user acceptance testing and to sign off on formal Acceptance. The risk is the acceptance of deliverables that are incomplete or inaccurate.

Resources – The Bank must have sufficient technically skilled resources both from the business and ISD for successful implementation. The input of the Business Leads is critical during the BPA Workshops and User Acceptance Testing. It is also essential that the bank's resources be given adequate time to devote to the execution of their project responsibilities. The Information Systems Department has the responsibility to develop all the ancillary interfaces to Essence, and all the reports while supporting the existing legacy system. There is a risk of resource bottlenecks in this area.

Project Ownership responsibility – Projects of this scope or magnitude often experience a risk of perception that the owner is the Information Systems department, although in reality it should be driven by the Business. There is the risk of inadequate participation of the business units of the Bank. As a result critical decisions often fail to be taken in a timely manner, and the Information Systems department is left to make sub-optimal decisions.

Mandatory Industry Developments – There are a number of projects that are envisioned in the industry under the aegis of the Central Bank, which include National Payment Systems Reform components such Automated Clearing House (ACH) electronic funds transfer system, the Real Time Gross Settlement System

(RTGS), as well as the National Credit Reporting System (Credit Bureau). In addition to this, the Bank must implement EMV chip card issuing and acquiring by October 2015. These projects may compete for technical resources with the CBSI.

Project Team Continuity – Losing key personnel from the Project Team may cause a disruption in implementation.
There is a risk of natural disasters such as a hurricane, or other force majeure event affecting the project timelines.

Change Management Risk – Projects of this scope which can have a profound transformational impact on the business processes of an institution carry a significant that stakeholders, both internal and external, may resist the change exhibiting various levels of resistance or even rejection. This risk is managed by executing in parallel a Change Management program which seeks to pre-empt resistance by engaging stakeholders at inception keeping them continuously informed and involved. The Change Management stream will involve both staff and clients.

4.1.1.6 Charter Acceptance

The charger should be signed and dated by each member of the Steering Committee. An agreement in the charter acceptance should state “I understand the Project Charter and my responsibilities with respect to the Core Banking System Implementation project, and I pledge my support to the successful completion of the project.”

4.2 Scope Management Plan

The Project Scope Management is the process that includes all and only the work required in order to have a successful project completion (PMBOK 5th Edition, 2013, pg. 105). As a result, a Scope Management Plan was developed to define, validate and control the project scope.

The development of the plan was produced using inputs from the Project Charter, information gathered from the minutes of meetings (BBL, Consolidated Minutes of Meetings, 2015) and first hand documents. The plan includes a high-level scope, In Scope, Test Stage, Responsibilities and Assumptions, scope verification, scope control measures, the Work Breakdown Structure (WBS) and WBS Dictionary. The WBS processes and Scope Definition outputs would result to the approved Scope Baseline.

Introduction

In this process, the Project Scope Management will be developed to document how the project will be defined, validated, and controlled in order to provide guidance throughout the development and management of the scope of this project. In this process, a high-level scope, in scope, test stage, and out of scope will be described.

High Level Scope of Misys Services

In summary Misys will provide services to:

- Software Modules to be installed, configures and tested
- Project initiation and planning involving the Client and Misys
- Business Process Alignment and Analysis workshops
- Configuration and localization of BankFusion Universal Banking modules

- Training to empower the Client to participate in delivery, installation, configuration, testing and implementation of the Model Solution. This will include functional, technical and BankFusion Workbench training.
- Work with the Client in developing interfaces between core banking application and set of identified external & internal applications
- Work with the Client to provide Management, Regulatory and Client specific reporting along with the build and deployment within the Client's reporting architecture
- Support for System Integration Testing and User Acceptance Testing
- Work with the Client on the migration of data from the Client's existing Core Banking Application
- Go Live preparation
- Cut over support to Production
- Post Production handover to Customer Support and on-site support (2 weeks)

It should be noted that the scope of the project covers both BBIL and BBL for each project stage. The migration of BBL is scheduled a number of months after BBIL and only branch user and data preparation is assumed to be required as the end to end solution will have been accepted by both BBIL and BBL during the main project; that is, no new functionality is expected to be introduced for BBL after the define stage of the project.

Project Scope Statement

The project scope statement contains a detailed description and definition of the project's in-scope, test stage, out of scope, and stages and deliverables. Work/task that falls outside the scope of this project should not be performed.

In Scope

Project Initiation and Planning

The Project Planning stage begins after the Bid Stage following legal agreement sign-off and Project Managers from Client and Misys can then perform detailed planning. The key deliverable from the Initiate Stage is the Project Scope Management document (this document) which is based on the agreed SOW and Plan from the Bid stage. This document will detail the project team resources, schedule for the design phase and project processes.

In parallel with the detail planning the hardware design and ordering (hardware and software) is completed so the project has the pre-requisite hardware environments.

Once the hardware is delivered and deployed, a technical consultant from Misys will arrive on site to complete the initial installation and technical training to facilitate the commencement of the Design Phase activities.

There is an assumption that the resources from Misys and Client have been identified and Project is ready to start within 4 months of contract signing.

Project Functional Scope

The functional scope of the Belize Bank project is defined according to:

- the MAPS Process model
- the Misys licenced modules as defined in the licence agreement
- the existing Belize Bank Products are to be mapped to FBE Model Bank products / processes

At the start of the project, Misys will setup the standard FBE system along with the standard MAPS configured processes and products. The Business Process Alignment (BPA) workshops are run by Misys to review the MAPS model (Processes and Application) to determine any changes to the model in order for the Client to adopt the MAPS Model. All changes to the model or ‘deltas’ will be

categorised according to type of change and processed with the bank via the Project Change Control Process (CCP).

Following the BPA workshop Misys will deliver a built system from its Global Solution Centre in Bangalore, based on the Model Bank and configured following the Business Process Alignment workshops for all of the relevant MAPS Processes.

This delivered system will be installed on the Client's hardware at the Client's location by Misys Technical Resources and will be used for System Integration Testing (SIT). On completion of SIT a User Acceptance Test (UAT) environment will be created by the Client with Misys support. Misys will demonstrate the building of the FBE environment to the Client IT team along with installation guides that will be customised for the local environment and built in a way that enables the easy replication of the building of future environments. Any subsequent builds, including upgrade versions and custom development releases will be performed by the Client and supported by Misys.

Design Phase - Business Process Alignment and Analysis

The objective of the Design Phase is to complete the definition of the end to end Solution Design using the Misys Reference Model (Model Bank) to define all of the required deliverables from this phase via Business Process Alignment and Strategy workshops to deliver:

- Process Model Definition
- Solution Design Document
- Migration Strategy and Design (mapping)
- Integration Strategy and Design
- User Field Database design
- Infrastructure / Application Architecture Design

The Business Process Alignment and Analysis workshops are conducted following the acceptance of the project initiation / Project kick off. The Misys led workshops are intended to review and outline the FBE Model Bank business processes and how best these business processes can be adopted by the client.

The workshops will be conducted by Misys Professional Services resources with the participation from Client's business and technical team. A detailed schedule of workshops will be drawn up during the planning, indicating the required participants from Misys and the Client. The main BPA workshops in scope for Belize Bank are listed below:

- Customer and Party Management – Retail and Corporate
- Retail and Corporate Accounts and Deposits (including Term Deposits)
- Retail Lending Products
- Retail Lending Operations
- Retail Loan Origination
- Corporate Lending Products
- Corporate Lending Operations
- Corporate Loan Origination
- Retail and Corporate Lending Collateral
- Retail and Corporate Lending Past Due/Settlements/Write-Offs
- Teller Operations
- Transactional Banking – Collections/Clearing/Payments/Remittances
- Foundation Treasury
- Channels
- Finance
- Audit

The output of the workshops is the set of agreed Best Practice Business Processes, the qualified deltas which will be reviewed by the Change Control Board, and the final delta log determined. The output will be classified according to type of change and will be subject to change control management. A Business Solution Design Document will be created and shared based on the agreed Process Alignment and Deltas.

Design Phase – Deliverables

The following are the deliverables from the Design Phase for Belize Bank.

Chart 8 Design Phase Deliverables (Source: BBL, PROJECT INITIATION DOCUMENT, 2014)

Deliverables	Workshop
Product Familiarization training and supporting material	Familiarization Training
Business Process Alignment Workshop Overview	Pre-Business Process Alignment Implementation Workshop – Accelerators review
Non-functional Definition (COA / Interest / System wide parameters)	Accounting and non-Functional design Workshop
Process Design (Standard plus identified changes) Core Application Design (Standard plus identified changes)	Business Process Alignment (BPA) Workshop
Datamart Design Document	Feedback from all workshops where datamart elements are changed and / or user defined data elements need to be defined.
Data Migration strategy Document	Data Migration / Conversion Workshop
Testing Strategy Document Test Plan and Scripts for SIT Test Plan and scripts for UAT	Test Planning Workshop
Approvals Matrix User Profiles / Job Functions definition document	Security Workshop
Diagram of all in scope Interfaces Interface Design Documents	Incoming and Outgoing Interfaces Workshop
Infrastructure Design Document / Technical Installation Document	Infrastructure Review Workshop
Reporting Requirements Document	Reporting Workshop

Deliverables	Workshop
Final Delta Log Solutions / Open Items	Change Control Board Meetings
Business Solution Design Package	

Build Stage

The Build stage for Belize bank is comprised of two elements:

- The Offshore Build – build of the FusionBanking Essence Solution based on the Solution design documentation at the Misys Solution Centre in Bangalore
- The Onshore build – build of Migration processes, interfaces and reporting.

FusionBanking Essence - Scope of Configuration - Off Shore Build

The Business Process Alignment and Analysis workshops will identify details of the necessary Model Bank system settings based on the defined Business Processes and the Business Solution Design Document along with any delta approved. The build stage will use the design outputs to build the target solution remotely at the Misys Solution Centre in Bangalore.

Within the scope of the project the following Belize Bank Products will be mapped to the Model Bank products:

- Party Management
    - Personal Customers
    - Corporate Customers
    - Internal GL/Operating Customers

- Liability Products

  - Retail and Corporate Checking Accounts
  - Regular Savings Accounts
  - Bonus Savings Accounts
  - Staff Savings Accounts
  - Term Deposits – 1, 3, 6, and 12 Month

- Asset Products
  - Overdrafts
  - Flexi Loans
  - Demand Loans
  - Mortgage Loans
  - Commercial Loans
  - Loan Accounts (including Rule of 78)
  - Credit Card Accounts

- General Ledger Accounts
  - Income and Expense Accounts
  - Asset and Liability Accounts

The Project Build process will build a Belize Bank FBE solution from the Solution Design document by applying the agreed deltas to the Model Bank base configuration. On completion of the build Misys will conduct a Build Acceptance test using its own test cases to validate the system build before delivery back to the client.

The Project Build and Configuration will cover all Business Processes, Products, Reporting and Interfaces for both BBL and BBIL. The SIT and UAT testing will test and accept all of the processes and functionality for both BBIL and BBL, which will enable the client to implement their roll-out approach as the entire system will have been built upfront without the need for significant additional cost in following a fully phased approach. The client's approach is to roll out the system to BBIL initially and then rollout to BBL following a defined period of operation at BBIL, which is to reduce impact on IT resources, allow a period of system stabilisation, iron out any issues they have before rolling out to BBL and leveraging BBIL as the training bank for BBL.

A Bangalore visit by the Bank's management is also being considered to review the testing outputs when compete and to see a demo of the solution before shipment back to the project team.

FusionBanking Essence Offshore Build Deliverables

- Abstract Products
  - Artefacts
  - DB Patch tool
- Build Specification document
- Build Data (templates)
- BAT results
- SQL scripts
- BF Teller Configuration Extract
- Customization (subject to Change Control Approval)

- Business Definition document
- Technical Specification document
- DB Patch tool

On Shore Build - Interfaces / Integration

This phase involves developing interface between core banking application and set of identified external and internal applications as per “Integration Points” provided by the client. The data specifications and requirements for these interfaces will be entirely supplied by the client. In case of any external validation required for the interface development, such validations will be managed by the client.

Misys will provide (FBE toolkit / FBE database layout) training and assistance to the client for mapping the data required to build the interfaces listed below. During the training a client offline interface can be used as a case study. In advance of the Misys training it is recommended that the client IT team complete all relevant external technical training (db/2, Java etc.). Once Misys training is complete, Misys will work with the client to complete a strategy and plan. The coding and testing of the interfaces will be the primary responsibility of the Client with Misys providing no more than 80 man-days assistance inclusive of training. Any additional Interface effort required from Misys can be handled via the change control process.

The interfaces (suppliers) identified are:

- Merchant Administration System (In House)
- BTRANS (Evertec)
- Mobile Banking System (In House)
- BSI Payroll Application (In House)
- Payroll (In House)
- Insurance (In House)

- Stationery (In House)
- Integrated Transaction Management ISO8583 (Euronet)
- Remote Data Interface (In House)
- Checkplus Financial (Printech)
- Internet Banking System (In House)
- RMIS Diary Application (In House)
- NCompass (NCR)
- RTBTrans (Evertec)
- CDPS (In House)
- Financial Compass (Plansmith)
- Credit Card Acquiring (Credomatic)
- Credit Card Issuing (Evertec)
- Alchemy Swift Processing (IBIS)
- NBS Dashboard (In House)
- Zyng (World Compliance)
- Banktel Accounts Payable/Fixed Assets

The following Misys FBE standard interfaces in scope are as follows:

- Datastore

Scope is to implement Datastore for document capture and standard FBE reports. Misys will install up to 2 instances of Datastore and provide training to the client on Data Definition, Scanning / importing indexing and project user training. The client will be responsible for the design and implementation of the required FBE reports as Datastore templates. Currently signatures are captured by the branches by the

banks NCR solution, which is planned to remain as is and retrieved outside of FBE. There is no plan to move the signatures to FBE at this time.

As part of the model bank the following PDF report templates will be made available:

- Account or Customer Statement Report
- Status List Report
- Daily Transaction List Report
- Audit Trail Report
- Today's Maturities – Money Market

- Misys Message Manager

This is a Black Box software delivery of message manager to handle the production of standard Swift Messages. Misys will configure the Swift messages as defined during the Business Process Alignment workshops. This may also include interfacing with Misys Swiftnet instead of SwissRoute, which will be determined during the project define stage.

- Dynasty

Black box printer driver support for the printing of Receipts/Cheques

- IS08583

To support ATM processing, standard IS08583 supported messages are in scope.

- Fircosoft

Standard Fircosoft – FBE interface to perform Watchlist Checking against payment messages and against the client’s customer database.

A detailed work plan for the build of the interfaces will be defined during the design phase.

On Shore Build - Data Migration

The Data Migration phase defines ETL phase of the project which involves build of data extraction files from the client's existing core banking applications and transform the data for loading into FBE. A migration strategy (analysis) for the data to be migrated will be formulated by both Misys and the client during the Design Phase. Misys will deliver a standard Migration Strategy document that pertains to the FBE MAPS model and this will be customised with the client during a Migration workshop to reflect the data that they are migrating to the target FBE Products.

The following activities will be included in the Data Migration:

- Data Cleansing/Consistency - Client Responsibility with Misys support
- Data Migration Analysis - Joint Client and Misys Responsibility
- Data Extracts Build - Client Responsibility with Misys support
- Data Transformation - Client Responsibility with Misys support
- Data Loading - Client Responsibility with Misys support
- Data Reconciliation and Validation - Client Responsibility with Misys Support

The client's team with support from Misys will perform the extraction activity phase. The client team will undertake the transformation of the extracted data and presentation to Misys ETL tools in an agreed format. Once the extracted data is presented in the correct format, Misys will produce scripts to load the data to the FBE database. The client will perform the execution of the data loading scripts with Misys training and support. The scripts will highlight data that has been incorrectly formatted against the database definitions. Errors encountered in the loading process will need to be corrected in the source data by the client. The running of various standards reports (GL Status List, Audit Trail) performs

validation of the loading of this data. In addition to this migration script, logs are produced that validate the number of records successfully migrated that can be validated against the source data. Reconciliation of the migrated data will be the responsibility of the client's team.

Misys will provide relevant training on the migration procedures plus work with the client to generate a migration strategy and plan during the define stage. On-going support to the banks migration team will be provided up to a limit of 40 man-days. Additional support can be requested via the change control process.

The following data elements will be included in the Data Migration:

- Customer Data
- Account Data mapped to the configured Products in FBE
- Brought forward balances as of conversion date. Loans and Contracts (Fixed Deposits) will be taken on as of last event for that contract, including arrears as of the last event.
- Non-Performing loan data (days in arrears, interest arrears etc.)
- Future value dated items – un-cleared items etc.

Internal GL Balances as of the migration date. It is expected that the bank will need to migrate the prior fiscal year's month end average balance to output in their monthly reports. The strategy for migrating historic GL transactions can be analysed during the define stage to determine the most efficient method to migrate this data to FBE.

It is possible to extract historical data from the legacy application and load it into the database for querying. Misys can create a 'database view' for this purpose and provide a basic inquiry screen through the BankFusion user interface for the client's staff to inquire on these transactions on a separate screen from the BankFusion's normal transaction inquiry. The client will take responsibility for

populating this database and building query logic for clients to inquire these historical transactions through channels such as Internet Banking.

Off Shore Build - Reporting

The structure of the installation will enable the client to report at individual BBL and BBIL and also at a consolidated level.

The standard suite of Core FBE reports will be provided to the client, who will be responsible for analysing these reports and identifying any client specific Management Information or Regulatory reporting requirements during the reporting workshop in the Design Phase.

Client resources with support will lead the build and deployment client reporting in the client's reporting architecture from Misys. The client team will integrate the Management reports / data into their reporting architecture. Training on Crystal reporting writing tools will be arranged by the client for their report writing team as part of the external training indicated in the project plan. At the time of writing it is expected (before consolidation mapping of reporting requirements to standard FBE reports) that there could be in the region of around 150 reports that require to be written by the client reporting team.

The Misys team will act as a FBE Database layout advisor to this effort and limited to 15 man-days and will only act under the guidance of the Bank's project management team. Any additional effort required can be handled via the change control process. The existing Core reports are detailed in each of the functional manuals.

Training

The objective of the Project Team Training is to empower the client to participate in delivery, installation, configuration, testing and implementation of the Model Solution based on the licensed Misys products and make decisions based on the

facts. The client's project team will attend formal product training at the client's location. All Misys training will be delivered on site for the duration of the project.

It is essential that the client business and IT users be thoroughly trained around the FBE Model system being delivered. This significantly de-risks the success of delivering accurate solution and verification, performing full testing and ensuring confidence in acceptance of the solution.

The tables below describe the suggested project team-training program. It is assumed that the training sessions described in the tables below will be conducted only once. In addition, a Training Needs Assessment will be conducted to determine additional training needs of the organization. Belize Bank may choose to work independently of Misys to deliver additional training. Misys, through its Training Academy can provide additional training as required however; this additional training is outside the scope of this proposal and would be contracted separately following the completion of the Training Needs Analysis.

Chart 9 Project Team Training Program (Source: BBL, PROJECT INITIATION DOCUMENT, 2014)

Technical Training – Delivered during the Initiate Phase

Attendees – Technical Team (IT Infrastructure, Integration)

- FBE Installation, Configuration, Administration
- FBE Operations
- Data Model Training
- BankFusion Workbench, Platform and Security Architecture
- MMM Installation, Configuration and Administration
- MMM Operations
- Dynasty
- Migration
- Fircosoft Installation, Configuration and Administration
- Fircosoft Operations
- Datastore DSX Installation, Configuration and Administration (Separate)

- Datastore Operations (Separate)

Model Bank Training System Overview – Given Before the BPA Workshop

Attendees – all business and operational participants of the BPA workshop

- Business Process Alignment Training
- Application Overview Training
- Business Process Alignment Input and Output Training
- Customers – Acquisition and Configuration
- Accounts (and General Ledger)– Configuration
- Products – Configuration
- Interest
- Withholding Tax Configuration
- Interest Accrual and Delinquency
- Charges
- Loan Configuration
- Lending for Users
- Collateral
- Limits
- Back Office
- Money Markets
- FX Configuration
- Payments
- Batch Posting
- MMM – Inward/Outward Swift Message processing.
- Datastore DSX – Document Management
- Fircosoft – AML/KYC Watchlist checking

Pre-SIT Training – Delivered before SIT Training

User Training on generic model bank system so users are able to test and prepare end user training notes on own system.

Attendees – Project Team, ‘train the trainers’ responsible for end user training preparation and delivery on bank system, super users.

Duration – 5-10 days depending on scope.
Bank Support Training – Training on Operational support and how to make enhancements to the system. – Delivered before Go Live. ***Attendees*** **-** The team of support people within the bank, which will be providing L1 / L2 support on the LIVE system. Will include EOD operations and fault diagnosis. Duration 5-10 days depending on scope.

Test Stage

Three levels of testing are proposed:

- Build Acceptance Test,
- System Integration Test
- User Acceptance Test

The purpose of the Build Acceptance Test (BAT) is to validate that the FBE system is working correctly after the system build. This test is a Misys executed test and is completed offshore using Misys test cases (scenarios and expected results). Once the test is completed, the system is packaged and delivered to the bank where a demo of the built system can be performed on site. The completion of the demo is considered the completion of the BAT.

After the demo, the bank can append its interfaces, reports and migrated data to start System Integration Testing.

The System Integration Testing (SIT) occurs after the end to end system environment has been constructed on site. The purpose of the System Integration Testing is to test the integration of FBE and the identified interfaces and available reports against the newly built UB application in the client's IT environment. The end result is that the end to end solution should be operationally stable and system is functionally verified before UAT. This is intended to allow for a smooth UAT and a single cycle of UAT. The SIT therefore involves 3 cycles of end to end testing of inward and outward data flow from identified applications in the bank. Cycle 1 is an

integration test of the interfaces on the environment. Cycle 2 is testing the interfaces within a functional test cycle (using the client's UAT test cases) and Cycle 3 is a regression test using the same UAT test cases after all fixes have been applied. The client with Misys will be providing FBE issue resolution and FBE system validation support will execute the SIT. The client's business team will provide financial reconciliation.

The UAT (User Acceptance Test) is a single cycle to validate the solution delivered to the client considering that the end user is ready for the production usage. The UAT process will be executed by client business and supported by Misys and the client operations team. The same test scripts and scope used for SIT will be adapted for UAT but the testing will be executed by the business. The UAT testing will act as final end user acceptance of the functional and business processes solutions before Go Live. Misys will provide two consultants for 30 man-days each to support all system issues raised during the UAT Cycle. Given that there are three SIT cycles, two of which are a re-run of the same test scripts, only one UAT cycle is anticipated. If an additional UAT cycle or additional Misys support is required, they can be requested via the change control process.

As preparation for SIT/UAT testing, the client will be responsible for preparing the Test Cases (Test Plan, Scripts, and expected results). Misys will provide the BAT test templates so the bank can use these to populate its own test script database. After the BPA workshop, the client business team will define the test scenarios that they want to test. The client's operations team, who will take these scenarios and convert them into test cases with expected results, will support this process. The same test cases will be applied during the SIT and UAT.

The client IT team from the Initial test environment setup by Misys and the client IT team will replicate the SIT and UAT Test Environments. The client operations team will own the maintenance of the test and support environments (maintaining them in sync.)

Misys and the client will work together to devise the following:

- SIT/UAT Test Strategy
- SIT/UAT Test Plan
- SIT/UAT Test Cases and Documented Results using Misys templates as sample.
- SIT/UAT Defect Reporting using the Client ticketing system and Misys portal to report software issues.
- SIT/UAT Application of Defect Fixes to the Test environment will be executed by the Client supported by Misys following Misys delivery of the Fixes.
- SIT/UAT Sign Off based on agreed exit criteria.

SIT / UAT Exit Criteria

The project will employ exit criteria to both SIT and UAT where, based on the number of acceptable issues, the test phase can be closed out to proceed to either UAT or Go live. The criterion is for guidance and the open issues will need to be reviewed at each exit stage to assess the severity versus fix and project impact. As part of the exit criteria, a delivery plan will also need to be agreed for the final agreed number of high / medium issues.

The following criteria are proposed:

SIT Exit Criteria

Critical Priority issues – 0

High Priority Issues – up to 15 issues

Medium Priority Issues – up to 30 issues

UAT Exit Criteria

Critical Priority issues – 0

High Priority Issues – up to 10 issues

Medium Priority Issues – up to 20 issues

Where:

Critical priority is where the system or major business function is not available (down) or no testing can proceed and no workaround exists. (Normally applies to production issues only)

High Priority – where there is significant loss of functionality, major operational inconvenience but an acceptable workaround does exist allowing the testing to proceed.

Medium – No Significant loss in functionality. Some operational inconvenience. Workaround exists.

Low – Minimal inconvenience or Cosmetic issue

Go Live Preparation

The activities during the Go-Live preparation stage are as follows:

- Create Go-Live check list
- Data Migration and Cutover Rehearsal including reconciliation and validation of migrated data by the client audit team
- Finalize production environment for Go-Live
- Identify and prepare required data for the loading into FBE production system

Cutover to Production

The client will have two phases of go live BBIL then BBL. A detailed plan for each of these will be confirmed during the testing phase. For each phase the same deliverables apply:

- Build of the live FBE and MMM Production System
- Go-Live Dress Rehearsal
- Misys will assist the Client by providing post Go-Live consultancy support and assistance FBE, MMM, Dynasty, Fircosoft and Datastore DSX
- Project Closing Report after each phase
- Post Go-Live Support

Out of Scope

Any task or item not specified in the preceding paragraph is excluded from the Scope of the Services. In particular, the following items are not included in the Scope of the Services and will required Change Control approval to be considered as part of scope:

- All activities and deliverables not explicitly listed in the In Scope are out of scope. Specifically, all custom developments, funded extension developments, additional interfaces, are considered to be out of scope.
- The following anticipated changes are deemed as out of scope as they are still going through the legislative process. If any of these items become a requirement a full impact assessment and Change Control approval process will need to be processed before they are included as part of the project scope.
    - ACH – Interbank funds transfer
    - Real-Time Gross Settlement System
    - Electronic Cheque clearing house

- National Credit reporting system (Credit Bureau)
- Chip card issuing / acquiring.
- Swipe Cards / Check scanning – to review as part of FBE roadmap

Responsibilities and Assumptions

Misys Responsibilities

- Install the licensed modules of FBE, MMM, Dynasty, Fircosoft and Datastore DSX
- Lead Business Process Alignment Workshops based on Misys Model Bank with a focus on “adopt rather than adapt”
- Manage deltas identified during the workshops through the Change Control Board
- Provide a Business Solutions design Document based on the workshops and deltas
- Provide technical and functional training to the Client’s project team
- Work with the client to produce a Migration, Integration and Reporting strategy
- Execute the system build offshore and delivery of a built FBE system back to the Client
- Build and configure the initial environment to be replicated along with installation documentation
- Support the Bank IT during the replication and maintenance of the environments.
- Plan and Perform BAT testing
- Report and fix defects identified during BAT

- Provide FBE defect resolution and system validation support during the SIT and UAT
- Plan and Support UAT with the Client
- Deliver Migration scripts to the Client following data cleansing and extraction to the required format.
- Train the Client Migration team on the use of Migration scripts.
- Support analysis and build of specified interfaces up to 80 man-days
- Support analysis and build of specific Management and Regulatory Reports up to 15 man-days.
- Support analysis, extract and transformation of data for migration up to 40 man days
- Prepare go live environment with the Client.
- Support go live preparation
- Support cut over to Production for the 2 entities
- Provide post go live support for 2 weeks for each entity and handover to Customer support.

Client Responsibilities

- The client needs to make sure that all hardware and software are available and in place by the time system build commences
- Participate fully in Business Process Alignment workshops
- Pro-actively qualify deltas identified in the BPA workshops for presentation to the CCB, based on an “adopt not adapt” approach
- Lead the Change Control Board for qualified deltas
- Review and Sign Off Business Processes

- Review and Sign Off Business Solution Design Document
- Participate in the Functional and Technical Training workshops
- Support and participate in the build of the initial environment with Misys.
- Replicate and maintain environments thereafter during the project
- Create User Test Cases that can be deployed in both SIT and UAT
- Plan and execute SIT
- Support and participate in the build of the UAT environment
- Plan and perform UAT testing
- Report defects found during SIT/UAT
- Sign off UAT testing
- Lead and execute the development of the Interfaces to internal and external systems as identified
- Lead and execute the build of the specific MIS and Regulatory reports
- Analyse, extract and transform data for migration and present to Misys templates for loading
- Execute Misys scripts to load data into FBE
- Reconcile migrated data against legacy system.
- Participate in preparation of Go Live environment
- Lead and execute Go Live preparation
- Lead and execute cut over to Production for the 2 entities
- Provide post go live support to users

General Assumptions

- The language of the services, the delivery of the services, and the project implementation are English language.
- Creation of client specific user documentation and translation of these documents in local languages is an added service and will involve additional costs that will be mutually agreed and signed off, between Client and Misys
- The Client will provide the business knowledge and requirements based on the scope of services
- Availability of business and static data on time as per the mutually agreed project plan during project
- The Client's resources will be deployed for appropriate tasks as mutually agreed and in line with the signed off project plan. A full time core team from Client is mandatory with other users being deployed as required
- The project plan will be mutually discussed and agreed between the Misys project manager and the Client project manager, at the start of the project. Once agreed, the project timeline will be driven by the respective project managers for each of their activities.
- Client's senior management will be involved in the decision making process, especially on issue resolution and change management. In the case of FBE system issues Misys' interpretation of the functionality will prevail
- Client's technical staff will be knowledgeable on the databases, hardware and system software
- Client's team/s will provide test scenarios, term sheets and test plans
- Misys will retain intellectual property rights for any custom work (if any) undertaken as part of this project, in far as it relates to Misys products and processes.

Client Deliverables (to support Misys on site).

The Client will deliver the following items to support the project (if applicable):

- A Project Manager who will be the first point of contact for the Client regarding the activities carried out under the Statement of Work (SOW) and who will coordinate and manage the client resources.
- A team of project resources (Business and Technical) with good working knowledge of the business and of client's requirements
- Office space for the onsite Misys consultants including PCs, access to VPN via the Internet, a printer, phone and other facilities to ensure a conducive working environment
- User Acceptance Test plan (scenarios and test cases) for Misys to review and use for internal testing prior to User Acceptance Testing.
- Appropriate meeting room with facilities (including internet access and overhead projector) for delivering any workshops and training sessions that are part of this project.
- Access to relevant client software applications, hardware and computer systems as well as IT staff as required.
- Involvement of client's senior management in the decision making process, especially on issue resolution and change management.
- Timely commencement and completion of User Acceptance Test (UAT) in the defined timeframes.
- Preparation of the plan and Scope of the conversion strategy and drive the rehearsals and data reconciliation processes. This will be jointly reviewed and mutually agreed between the client and Misys.

- Provide necessary hardware to meet performance requirements. Hardware requirements will be defined by Misys based on: target time to compute and number of scenarios

Other Assumptions

- The Misys Project Manager will provide a single point of contact between client and Misys with regard to Scope, schedule, and resources assigned to accomplish the services provided by Misys.
- The project plan will be mutually discussed and agreed between the Misys Project manager and the client project manager, at the start of the project. Once agreed, the project timeline will be driven by the Misys project manager.
- Misys delivery of the services is dependent on (i) client's timely and effective completion of the client responsibilities, (ii) the accuracy and completeness of the assumptions, (iii) timely decisions and approvals by client's management and (iv) availability of a full time project team with other users being deployed as required. Additional fees and charges may be applicable for deficiencies or delays in client deliverables.
- The implementation will follow the guidelines and milestones in the statement of work and will be further defined in the detailed specification documents that will be agreed and signed off in the 'Define' stage.
- Misys is not responsible for procuring or deploying any required non-embedded third party products and services unless otherwise stated.
- The services relating to the stage project deliverables will be deemed to be complete and closed when all contractually agreed deliverables or tasks have been signed off. Client would sign off deliverables in a timely manner (within 15 days after submission) and not unreasonably withhold sign off.
- Misys will provide a regular status report which will detail the work performed in the previous period in addition to future activities, issues and perceived risks. The client will use this status report as input to the overall

status to be presented to the Steering Committee. Timesheets can be produced to monitor time utilised against Integration, Migration and Report support.

- A project closure presentation would be held with client to agree and close out the project.

Project Stages and Deliverables

Each Stage of the project is structured in a sequence of activities and progresses with the completion of the associated Project Deliverables. The Stages are sequentially dependent on each other and each phase dependent on the acceptance of the deliverables within the Stage. Delays in Project Deliverables in a stage will result in a delay of its successor stage.

Project Responsibility Matrix

The following table details the Project Deliverables during the project stages along with the role and responsibility of each party.

Chart 10 Project Responsibility Matrix (Source: BBL, PROJECT INITIATION DOCUMENT, 2014)

Stage: Initiate Deliverables		Responsibility	
ID	**Name**	**Company**	**Client**
D1	Project Definition Documentation	Execute	Execute
	SOW signed off from Bid Stage.	Execute	
	Project Plan Review & sign-off	Execute	
	Project Initiation Document	Execute	
D2	Software Ordered	Execute	Execute

Stage: Initiate Deliverables		Responsibility	
ID	**Name**	**Company**	**Client**
D3	Define Project Governance and Strategy: 1. Formation of steering committee, including the appointment of project sponsor from Client and executive sponsor from Company 2. Agreeing on methodology for project tracking/project status and project plan update 3. Communication Plan, 4. Resource planning, 5. Issue and Risk Management, 6. Change Management Process, 7. Project Performance Reporting. 8. Sign off & approval Procedure. Complete Project Initiation Document (PID)	Execute	Review and Accept
D4	Technical Training (External)		Execute
D5	Initial Technical Environment design and Setup Remaining 4 Technical Environments setup	Execute Support	Support Execute

Stage: Define Deliverables		Responsibility	
ID	**Name**	**Company**	**Client**
D6	BPA Process Training and Application Familiarisation	Prepare	Review and Accept
D7	Technical Training (Workbench etc.)	Execute	Execute
D8	BPA Workshop Sessions	Execute	Attend
D9	BPA Workshop Solution Design and Process Model	Execute	Review and
D10	Documentation		accept.
D11	Delta Log	Execute	Support
D12	Technical Training (External)		Execute
	Strategy Definition (Migration, Interfaces, Reporting, Test Preparation)		
D13	Deliver Migration Strategy Documentation and Database Schema	Execute	Execute
D14	Host Migration/Interface/Reporting Strategy	Execute	Participate
D15	Workshop	Support	Execute
D16	Document agreed scope and approach for each area		Execute
	Interface/reporting Detailed development		
D17	Specifications	Execute	
D18		Support	Execute

Stage: Define Deliverables		Responsibility	
ID	**Name**	**Company**	**Client**
	Prepare Test Strategy and Scenarios for BAT Prepare Test Strategy and Scenarios for SIT/UAT		
D19	Re-Baseline scope, PID, Project Plan and agree with Client	Execute	Review and accept

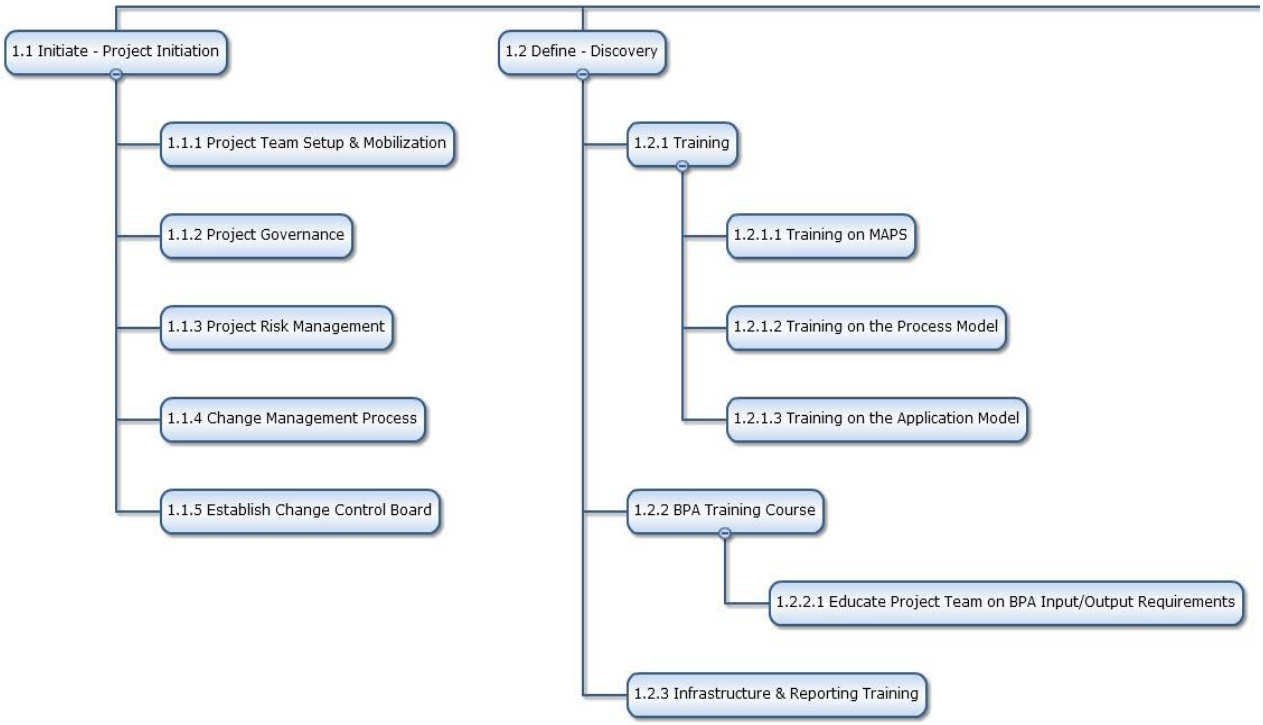
Stage: Build Deliverables		Responsibility	
ID	**Name**	**Company**	**Client**
D20	Off shore BF-UB Build	Execute	
D21	Business Acceptance Test Preparation	Execute	
D22	Business Acceptance Test Execution and issue	Execute	
D23	resolution Post BAT Review and Demo	Execute	Review
	On Shore Build		
D23	Migration Data Extract Code	Support	Execute
D24	Migration Data Mapping / Transformation Code	Support	Execute
D25	Migration script updates	Support	Execute
D26	Data Archiving / Query tools	Support	Execute
D27	Reconciliation Tools Development	Support	Execute
D28	End to end Migration process script (automation)	Support	Execute
D29	Data Cleansing	Support	Execute
D30	Interface Specification	Support	Execute
D31	Interface Build	Support	Execute
D32	Interface Test	Support	Execute.
D33	Report Specification	Support	Execute
D34	Report Build	Support	Execute
D35	Report test	Support	Execute.
D36	Test Preparation – SIT/UAT		
D37	Test Scenario's Definition	Support	Execute
D38	Test Cases Definition	Support	Execute.
D39	Bank end user Process manual definition		Execute
D40	End user Training Manuals		Execute

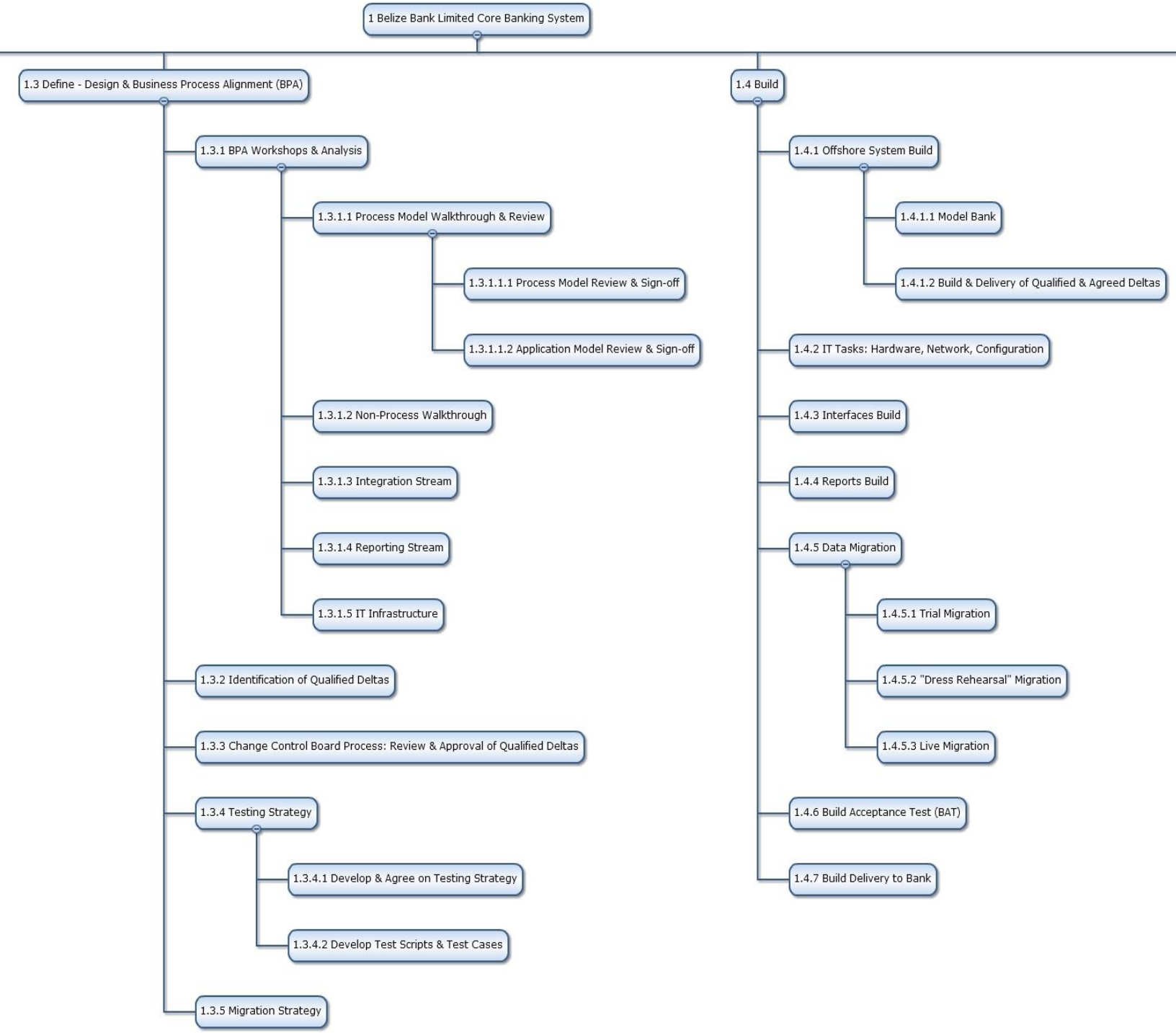
Stage: Test Deliverables		Responsibility	
ID	**Name**	**Company**	**Client**

Stage: Test Deliverables		Responsibility	
ID	**Name**	**Company**	**Client**
D41	Pre-Test training – Project team / champions (train the trainer)	Execute	Attend
	System Integration Test		
D42	Test Management	Support	Execute
D43	Perform tests – Test pack sign offs	Support	Execute
D44	Issue Management	Support	Execute
D45	Resolve Client issues	Support	Execute
D46	Resolve Software Issues and provide system validation support	Execute	Support
	User Acceptance Testing cycle		
D47	Test Management	Support	Execute
D48	Perform tests	Support	Execute
D49	Issue Management	Support	Execute
D50	Resolve Client issues	Support	Execute
D51	Resolve Software Issues	Execute	Support

Stage: Live Deliverables		Responsibility	
ID	**Name**	**Company**	**Client**
D52	Internal Support Procedures Documentation	Support	Execute
D53	Handover Documentation to Misys Customer Support	Execute	Support
D54	Establish Live Support Desk		Execute
D55	End User training (notes and delivery)		Execute
D56	Support Training on Operational/Sys Admin training	Execute	
D57	Dress Rehearsal / Live - End to end Migration process	Support	Execute
D58		Support	Execute
D59	Reconciliation and Sign off	Execute	Support
D60	Live Misys Support	Execute	Support
D61	Post Live Misys Support – 10 calendar days Handover to CS	Execute	Support

The Work Breakdown Structure for the Core Banking System and the WBS dictionary are available in order to clearly define the work necessary for project completion. In addition, the budget details that would be included in the dictionary would not be exposed due to confidentiality reasons. In an interview discussion with Mr Cuello, aside from the WBS, the Belize Bank Limited was also guided with all the details documented in the Project Plan, Scope, SOW, and Project Schedule.


1.1 Initiate - Project Initiation
1.1.1 Project Team Setup & Mobilization
1.1.2 Project Governance
1.1.3 Project Risk Management
1.1.4 Change Management Process
1.1.5 Establish Change Control Board
1.2 Define - Discovery
1.2.1 Training
1.2.1.1 Training on MAPS
1.2.1.2 Training on the Process Model
1.2.1.3 Training on the Application Model
1.2.2 BPA Training Course
1.2.2.1 Educate Project Team on BPA Input/Output Requirements
1.2.3 Infrastructure & Reporting Training


1 Belize Bank Limited Core Banking System
1.3 Define - Design & Business Process Alignment (BPA)
1.3.1 BPA Workshops & Analysis
1.3.1.1 Process Model Walkthrough & Review
1.3.1.1.1 Process Model Review & Sign-off
1.3.1.1.2 Application Model Review & Sign-off
1.3.1.2 Non-Process Walkthrough
1.3.1.3 Integration Stream
1.3.1.4 Reporting Stream
1.3.1.5 IT Infrastructure
1.3.2 Identification of Qualified Deltas
1.3.3 Change Control Board Process: Review & Approval of Qualified Deltas
1.3.4 Testing Strategy
1.3.4.1 Develop & Agree on Testing Strategy
1.3.4.2 Develop Test Scripts & Test Cases
1.3.5 Migration Strategy
1.4 Build
1.4.1 Offshore System Build
1.4.1.1 Model Bank
1.4.1.2 Build & Delivery of Qualified & Agreed Deltas
1.4.2 IT Tasks: Hardware, Network, Configuration
1.4.3 Interfaces Build
1.4.4 Reports Build
1.4.5 Data Migration
1.4.5.1 Trial Migration
1.4.5.2 "Dress Rehearsal" Migration
1.4.5.3 Live Migration
1.4.6 Build Acceptance Test (BAT)
1.4.7 Build Delivery to Bank

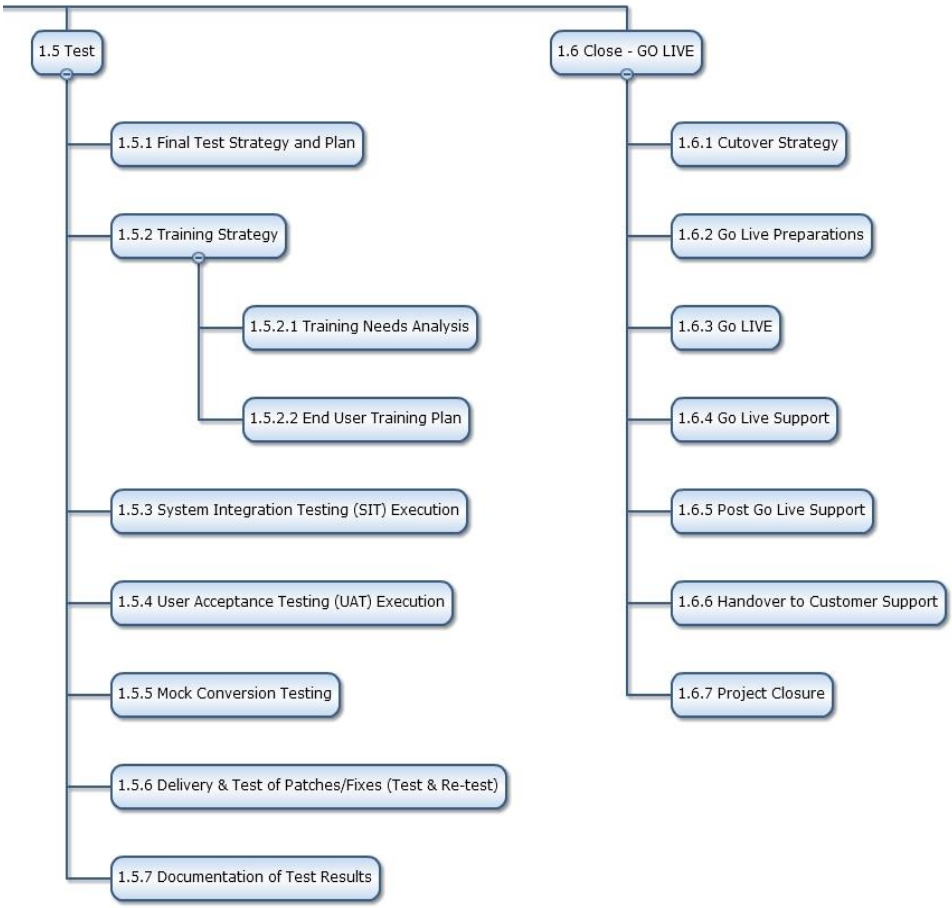


Figure 8 CBS Work Breakdown Structure (Source: Elaborated by the author, 2017)

WBS Dictionary

The WBS dictionary below will provide a more lucid defined work essential for the project completion. This includes each WBS task/element includes a brief description of work, deliverables and resources. It is important to note that due to confidentiality no information on budgeting was provided by the researched company. The WBS Dictionary is used as a statement of work for each WBS task.

Chart 11 CBS WBS Dictionary (Source: Elaborated by the author, 2017)

Level	WBS Code	Task Name	Description Of Work	Deliverables	Budget	Resource
1	**1**	**Belize Bank Limited Core Banking System**			Confidential	
1	**1.1**	**Initiate - Project Initiation**		Project Initiation Document and Final Project Plan	Confidential	
1	1.1.1	Project Team Setup & Mobilization	Team selection and mobilizing across departments and functions		Confidential	Bank PM, Misys PM
2	1.1.2	Project Governance	Efficient deployment and management of the controls throughout the project		Confidential	Bank PM, Misys PM
2	1.1.3	Project Risk Management	Forecast and Mitigate Risk		Confidential	Bank PM, Misys PM
2	1.1.4	Change Management Process	Establish Change Management Process and selection of key players for decision making		Confidential	Bank PM, Misys PM
2	1.1.5	Establish Change Control Board	Establish processes and procedures. Selection of teams for decision making		Confidential	Bank PM, Misys PM, Misys PSA, Bank Architect, Bank Executive Sponsor
1	**1.2**	**Define - Discovery**			Confidential	
1	**1.2.1**	**Training**		Core Project Team Trained	Confidential	
1	1.2.1.1	Training on MAPS	Train Team on MAPS		Confidential	Misys, Core Project Team
1	1.2.1.2	Training on the Process Model	Overview and definition of Process Model		Confidential	Misys PSA, Core Project Team - including nominated business experts from each area

1	1.2.1.3	Training on the Application Model	Overview and definition of Application Models		Confidential	Misys PSA, Core Project Team - including nominated business experts from each area
1	**1.2.2**	**BPA Training Course**			Confidential	
1	1.2.2.1	Educate Project Team on BPA Input/output Requirements	Transfer of knowledge on the Business Process Alignment to the Project Team		Confidential	Misys PSA, Core Project Team - including nominated business experts from each area
1	1.2.3	Infrastructure & Reporting Training	Overview and detailed transfer of knowledge to team on infrastructure and reporting		Confidential	Misys TC and Bank Project IT Team
2	**1.3**	**Define - Design & Business Process Alignment (BPA)**			Confidential	
2	**1.3.1**	**BPA Workshops & Analysis**			Confidential	
1	**1.3.1.1**	**Process Model Walkthrough & Review**			Confidential	
2	1.3.1.1.1	Process Model Review & Sign-off	Agreement, acceptance and approval through sign off for the process model		Confidential	Misys PSA, Misys BC x 2, Core Project Team per Business Area (2 or 3 representatives)
2	1.3.1.1.2	Application Model Review & Sign-off	Agreement, acceptance and approval through sign off for the application model		Confidential	Misys PSA, Misys BC x 2, Core Project Team per Business Area (2 or 3 representatives)
1	1.3.1.2	Non-Process Walkthrough	Non-business Related: IT Components, Application Security, etc.	Agreed Best Business Practices/Qualified Deltas	Confidential	Misys TC, Misys PSA, Bank IT Team
2	1.3.1.3	Integration Stream	High level overview and agreement for the Integration Team		Confidential	Misys TC, Misys PSA, Bank IT Team
1	1.3.1.4	Reporting Stream	High level overview and agreement for the Reporting Team		Confidential	Misys TC, Misys PSA, Bank IT Team, Bank Business
2	1.3.1.5	IT Infrastructure	Architecture, Hardware and Other Requirements		Confidential	Misys TC, Misys PSA, Bank IT Team

1	1.3.2	Identification of Qualified Deltas	Identifying, addressing, qualifying, assigning and prioritizing main issues and concerns.		Confidential	Misys PSA, Misys BC x 2, Core Project Team per Business Area (2 or 3 representatives)
2	1.3.3	Change Control Board Process: Review & Approval of Qualified Deltas	Discuss, recommend, approve/reject, sign-off on qualified deltas.		Confidential	Bank PM, Misys PM, Misys PSA, Bank Architect, Bank Executive Sponsor
1	**1.3.4**	**Testing Strategy**			Confidential	
1	1.3.4.1	Develop & Agree on Testing Strategy	Discuss and document on strategy including Test Success Criteria		Confidential	Misys PM, Misys PSA, Bank PM, Bank Testing Manager
1	1.3.4.2	Develop Test Scripts & Test Cases	Document and create details of steps for test packs.		Confidential	Bank Testing Team/Business Users
2	1.3.5	Migration Strategy	Review and discuss data mapping, data cleansing, cut over procedures, and data reconciliation.		Confidential	Misys TC, Misys PSA, Bank IT Team, Bank Business
1	**1.4**	**Build**			Confidential	
1	**1.4.1**	**Offshore System Build**		System Built and Delivered to Agreed Best Business Practices	Confidential	
1	1.4.1.1	Model Bank	Provide model bank patches to bank and discuss, document, and deliver all its necessary features and functionality.		Confidential	Misys TC, Misys BC
2	1.4.1.2	Build & Delivery of Qualified & Agreed Deltas	Adjust & correct all qualified deltas accordingly and deliver on the next available patch for testing.		Confidential	Misys TC, Misys BC
2	1.4.2	IT Tasks: Hardware, Network, Configuration	Review and update on all IT deliverables and make necessary adjustment, actions, approval or validation.		Confidential	Misys TC, Bank IT
2	1.4.3	Interfaces Build	Provide interfaces bank patches to bank and discuss, document, and deliver all its necessary features and functionality.		Confidential	Misys TC / Bank IT

2	1.4.4	Reports Build	Provide reporting build to bank and discuss, document, and deliver all its necessary features and functionality.		Confidential	Misys TC/ Bank IT
2	**1.4.5**	**Data Migration**			Confidential	Misys TC / Bank IT
1	1.4.5.1	Trial Migration	Execute all test packs in initial data migration testing.		Confidential	Misys TC / Bank IT / Bank Business
2	1.4.5.2	"Dress Rehearsal" Migration	Migrate data from LIVE and execute all necessary test packs.		Confidential	Misys TC / Bank IT / Bank Business
2	1.4.5.3	Live Migration	Perform Live Migration and Testing simultaneously with old system prior to GO LIVE.		Confidential	Misys TC / Bank IT / Bank Business
1	1.4.6	Build Acceptance Test (BAT)	Review, discuss, accept, approve and sign-off on BAT		Confidential	Misys BC, Misys TC, Key Bank Project Members
2	1.4.7	Build Delivery to Bank	Review, adjust where necessary, and deliver approved signed off BAT.		Confidential	Misys TC / Misys BC
1	**1.5**	**Test**			Confidential	
1	1.5.1	Final Test Strategy and Plan	Execute Test Cases, Scripts and Test Criteria	System Tested	Confidential	Misys PM, Misys PSA, Bank PM, Bank Testing Manager
1	**1.5.2**	**Training Strategy**			Confidential	
1	1.5.2.1	Training Needs Analysis	Analyse outcome and results of training, review evaluations and execute all necessary actions to perform an efficient transfer of knowledge.		Confidential	Misys Academy / Bank Training Manager
1	1.5.2.2	End User Training Plan	Review and document all training areas and provide updated information to key team members.		Confidential	Bank Training Manager
2	1.5.3	System Integration Testing (SIT) Execution	Exercise all necessary software and peripheral systems coexistent with others.		Confidential	Misys BC, Misys TC, Key Bank Project Members, Bank IT

2	1.5.4	User Acceptance Testing (UAT) Execution	Appoint key branch champions for testing of data migration, interfacing, and reporting. Execute UAT.		Confidential	Misys BC, Misys TC, Key Bank Project Members, Bank IT
2	1.5.5	Mock Conversion Testing	test conversion process, high level of data migration, review and retest dress-rehearsal outcomes.		Confidential	Misys BC, Misys TC, Key Bank Project Members, Bank IT
2	1.5.6	Delivery & Test of Patches/Fixes (Test & Re-test)	Ensure all testing data and patches are executed properly. All issues have been fixed.		Confidential	Misys BC, Misys TC, Key Bank Project Members, Bank IT
1	1.5.7	Documentation of Test Results	Document all testing results: past, fail, or pending cases.		Confidential	Bank Project Team
1	**1.6**	**Close - GO LIVE**			Confidential	
2	1.6.1	Cutover Strategy	Review, discuss, and agree on time, process, and procedures for cutover.		Confidential	Misys PSA, Misys PM, Bank PM, Bank Architect
1	1.6.2	Go Live Preparations	Perform and execute and all necessary actions for Pre Go Live. Appoint and prepare team for support.		Confidential	Bank Project Team
2	1.6.3	Go LIVE	Execute GO LIVE.		Confidential	Bank Project Team
2	1.6.4	Go Live Support	Gather all necessary information, document all processes and procedures, and provide necessary support.	System LIVE	Confidential	Misys BC, Misys TC, Misys PM
1	1.6.5	Post Go Live Support	Review all tickets and cases pending, Go Live results and establish proper and effective support.		Confidential	Misys BC, Misys TC
1	1.6.6	Handover to Customer Support	Acquire all documents, training materials, and knowledge from supplier.		Confidential	Misys BC, Misys TC, Misys PM, Bank PM

1	1.6.7	Project Closure	Review, agree, evaluate, lessons learnt, and sign-off on project.		Confidential	Misys PM, Misys PSA, Bank PM

Scope Verification

The project managers, for both organizations, are responsible for the verification and successful accomplishment of project deliverables against the original scope as specified in the Project Scope Management. Subsequent to this, the Project Sponsor and BBL Project Manager, along with other key players, meet in order to arrive to a formal agreement and acceptance of the project deliverables through a high-level presentation to the Project Sponsor (BBL). The Project Sponsor, after formal acceptance, will sign the project deliverable acceptance document in order to ensure the project deliverables remains within the scope of the project consistently throughout the life of the project.

Scope Control

Any change to a project base-lined item (e.g. Statement of Work, Project Plan, Project Initiation Document, Solution Design Document, Process Model etc.) or to any agreed set of activities or requirements or any other material changes to this Project Scope Management shall be subject to the following Change Control Process (CCP). The Change Control Process establishes the structure that will be used throughout the project to recognize, accept, and integrate changes to the scope, deliverables, and any additional schedules or other additions or amendments to the Project Scope Management and PID. Formally approving and tracking all changes throughout all stages of the Project will ensure that only the required changes are incorporated and all factors that are affected by the changes are considered before incorporating the change into an agreed contract amendment.

The Company and Client Project Managers will be responsible for monitoring progress against the project plan and Scope, and for agreeing changes to the

same. If in the opinion of either of the Project Managers a proposed change to the plan would result in a material change to the project timeline or the Scope described in various sections of the SOW, Project Scope Management, or PID, then the change to the plan will undergo Change Control.

Changes to the project rely on a full understanding of the scope or boundary of what is to be supplied as part of the original SOW. In the first instance this is the MAPs process model / products followed by the standard software documentation supplied with the software. All identified changes to the MAPs Model and/or project should be documented in a Change Request/'Delta's' Log. The impact of the change should be fully investigated and recorded and the change approved by the Project Steering Committee. Where there is a cost and/or time impact, the Client must approve these before Company starts the necessary work.

Change Control will also apply to any newly identified Requirement Definitions and other Functional and Technical Specifications that may arise throughout the project. A change request template has been included in the appendices.

Requirement Management Plan

Training Requirements

- Representatives from project team shall be trained to execute the processes to which they will be allowed to have access.
- Select branch champions for each branch who will further train and develop users at their individual branches.
- SIT, UAT, and dress rehearsal testing required.
- Train developers in JAVA language and DB2.
- Train Reporting Team to manage and handle the reporting tool “Crystal Reports” and SQL DB2 Workbench.

Environment Requirements

Hardware/ O/S requirements

- Computing Hardware:

  2 servers each with at least:

  a. 2.8 GHz Dual Core processor
  b. 4 GB RAM
  c. 80 GB Hard Disk for web server
  d. 500 GB Hard Disk for database server

- System Software:

  a. Linux Server
  b. MySQL
  c. PHP
  d. Apache Webserver
  e. Code Igniter

Communications Requirements

- Network bandwidth of at least 100 Mbps

Security Requirements

- Internal firewall
- Anti-malware
- Configuration management system
- Business continuity plans & systems, updated to accommodate EMIS 1.0

Staffing Requirements

- The Executive Steering Committee shall be available to answer questions (verbally and via e-mail), attend walk-throughs and make important project decisions.
- End users shall be available for interviews to further assess their information and processing needs.
- End users shall be available for training and end user acceptance testing.

Performance/Capacity Profile

A performance and capacity profile will not be conducted for this project.

Stakeholders are expected to participate in the following activities in addition to other individual meetings on a case by case basis. Meeting times will be recommended in advance.

Requirements Walkthrough

Based on the above selection will a requirements walkthrough be conducted?

☒ YES

☐ NO

If yes, who will participate? -- Stakeholders identified.

Design Walkthrough

Based on the above selection will a design review be conducted?

☒ YES – Teacher's Module I

☐ NO

If yes, who will participate? -- Stakeholders identified.

Training

Based on the above selection will a training manual review be conducted?

☒ YES – Teacher's Module I , Teacher's Module II, and Student's Module

☐ NO

User Acceptance Test Plan

Based on the above selection will a user acceptance test plan review be conducted?

☒ YES – Teacher's Module I, Teacher's Module II and Student's Module

☐ NO

System Requirements

The new Core Banking System should:

- Be configurable in most of its variables via external parameters.
- Allow for fast deployment of new products.
- Have tools to develop reports and queries with minimal programming knowledge (Ad hoc reporting tools)
- Gave on line help. The help should modifiable to be adapted on the business needs of the bank.
- Have comprehensive documentation including process descriptions, object descriptions, data models, data structures, relationships, validations rules, etc. Can you detail and insert examples of the documentation available.
- Gave comprehensive logging mechanism where all transactions are easily identified, with attributes like user, time and date of the transaction, etc.

- Have a mechanism for report viewing. Currently many reports are generated as a backup and support mechanism but never printed only partially printing.
- Be able to export selected data using XML and CSV formats easy configurable.
- Allow users to add additional (user definable) fields to static data. The bank does not expect the selected system to match field by field the current application or the requirements for classifications. Therefore it is expected a handful of fields to be available at disposal to fulfil those needs.
- Have a modular design to allow for compartmentalized testing.
- Be multi-currency and have rules depending on the jurisdiction.
- Automatically interface with the General Ledger. The entries can be originated by monetary transactions, nonmonetary transactions, portfolios, account status, accruals, etc.

Product Requirements

Review all products and their functionalities:

- Credit Cards
- Loans
- Savings
- Checking
- Fixed Deposits

Technical Process Requirements

Integration

The integration of the Bank’s auxiliary (non-Core) software systems with FBE includes:

- Merchant Administration System (In House)

- BTRANS (Evertec)
- Mobile Banking System (In House)
- BSI Payroll Application (In House)
- Payroll (In House)
- Insurance (In House)
- Stationery (In House)
- Integrated Transaction Management ISO8583 (Euronet)
- Remote Data Interface (In House)
- Checkplus Financial (Printech)
- Internet Banking System (In House)
- RMIS Diary Application (In House)
- NCompass (NCR)
- RTBTrans (Evertec)
- CDPS (In House)
- Financial Compass (Plansmith)
- Credit Card Acquiring (Credomatic)
- Credit Card Issuing (Evertec)
- Alchemy Swift Processing (IBIS)
- NBS Dashboard (In House)
- Zyng (World Compliance)
- Banktel Accounts Payable/Fixed Assets

Data Migration

The main objective of Data Migration is for the bank to populate the FBE database with data from the NBS (Legacy System) to meet its Operational Requirements

- Data Mapping: Data elements from NBS will be mapped to FBE as part of this exercise.
- Migration: Extract the required data from legacy system (includes static data, account balances and chart of accounts) and load the data extracted to FBE.

- Transactional History: Historical transactions will not be migrated into FBE. The transactional history from NBS will be available for inquiry via a custom developed utility.
- Data Cleansing: Ensuring where possible integrity of data being migrated to FBE.
- Cut Over Date: Consider impacts of a mid-month, mid-year cutover.
- Financial Posting: Making sure to reflect correct account balances as of the day of migration (including interest accruals).
- Data Reconciliation: The bank needs to reconcile/audit static data and balances post migration. Extracts, excel sheets and reports may be used to compare data in the two systems.

Reporting

The BBL currently has three categories of reports:

1) End of Day Reports
2) Reports produced on request.
3) Reports produced manually.

All reporting details need to be reviewed (report generation, frequency, delivery type, delivery branch/unit/end user). A comparison of FBE's customized report needs to be executed to determine which reports will be utilized from FBE and which reports will need to be created from FBE. Crystal Reporting is the tool that will be utilized in this process.

Requirement Traceability Matrix

The final planning process of the Project Scope Management was completed when gathering all the requirements. A Requirement Traceability Matrix was developed to provide more detailed requirements of the Work Breakdown Structure. We were able to utilize the Requirement Management Plan, Project Scope Management, WBS and the Project Charter as inputs to this process.

Chart 12 CBS Requirement Traceability Matrix (Source: BBL, PROJECT PLAN CORE BANKING SYSTEM, 2014)

REQUIREMENT TRACEABILITY MATRIX

Project Name: Core Banking System

Project Manager: Naysan Ahmadiyeh

Project Description: Project Management Plan for a Core Banking System

ID	WBS Code	Customer Need	Functional Requirement	Technical Requirement	Priority	Assigned	Comments
1	1.3.2	Loan Write Offs.	new transaction required	create new transaction, GLs and adjust features as required.	1		
2	1.4.4	Status List Report should be generated based on shadow booked balance	Filter by shadow book balance	Integrate new field in the report and create new grouping.	3		
3	1.4.5.2	Daily Interest Application Processing Report	Creation of new report	Perform using Crystal Reporting and SQL Workbench	2		
4	1.4.5.2	Interest Details needs to be aligned	Adjust Reports	Amend RPT File	2		
5	1.4.6	Automatic Internal Account Creation	An Automated process should be built so that internal accounts are automatically created for all Branches and Currencies	Create appropriate Pseudonym Account Mapping	3		
6	1.4.6	Late Payment Fee - Loans	Create notice and execution of fees after specified period	New transaction code, pseudonym and GL account to be created and integrated.	1		
7	1.4.6	In the Create User screen, the drop-down accounting branch is empty	Display account branch in drop-down field	Review and amend party details table	2		
8	1.5.2.1	New Branch Champions required	Appoint new personnel and provide necessary training.	N/A	2		

9	1.5.3	System does not support pseudonym in Journal Entries	A separate transaction posting module should be built to accept pseudonyms as input instead of accounts	Create new pseudonyms and adjust parameters for accepts.	1		
10	1.5.4	SO Product Configuration - Allow Tiered Run	Create new tiers	New Tiers section to be created in the parameters	3		
11	1.5.4	Debt Obligation (current account) as pledge collateral	Allow current accounts be given as a pledge as long as there is a balance in the account.	Configure account configs table and release in new Build.	2		
12	1.5.4	Suspending Balance Order - End Date	Availability of End Date required	New code execution and release in new build.	2		
13	1.5.4	Cloned Teller Transactions are not available as menu options and cannot be added as favourites	New item in menu options	Create new ID in the TEL TXN table	1		
14	1.5.5	Migrate GL balances with zero balances	All GL Accounts should be migrated despite their balances.	Make adjustments to migration document and tables and perform necessary batch and releases	3		
15	1.5.6	After creating a Utility Company, system displays a Reference Number in place of the Name of Service	Should displace the Company Name	make adjustments to tables and release in new test packs	2		
16	1.5.6	Classification & Indicators screen should be available for Personal Party On boarding Process	New interface requirement for end users	Make adjustments to interface workflows and release in new build patch.	1		
17	1.5.6	Settlement Instructions - Payment Type. Proper Description is not available in the document.	Display proper description as required	Make amendments to the SEFDATA.UNL file and release in build.	2		
18	1.6.4	Total SO Amount required	Grant total section and grouping needs to be created	Adjust Crystal Report	3		

19	1.6.4	User not able to key in Foreign currency amount during Teller Cross currency cash deposit and Cash withdrawal transactions	Enable Foreign Currency Amount	Amendments to Currency Config Details.	1		
20	1.6.5	The fields in Classification and indicators screen should be set as mandatory for Personal Party through Configure Party fields Functionality	Set required fields as "mandatory".	Configure Party fields	1		
21	1.6.5	Post Maturity Collection Order	Create new order	New field in Parameter 2564	1		

4.3 Time Management Plan

In order to manage the timely completion of the project a Project Time Management is required. As guidance to the life cycle of the project's schedule it is required to develop a Schedule Management Plan. The company did not expose some details in order to fully develop the Schedule Management Plan. Nonetheless, the Project Charter and the Project Scope Management were used as inputs to this process. As a result, we gather information towards the Scope Baseline and the summary milestone schedule. Expert judgement, analytical techniques, and regular meetings were primary sources used as tools and techniques.

Introduction

This is a critical part of the project as it involves a visual picture lf the project's current stand and at any given point in time. This component defines how schedule contingencies will be reported and assessed, and serves as a guide for how the project will be completed. This plan involves the method of revision of the project schedule. It manages and control changes after the approval of the standard schedule.

Schedule Management Approach

The project schedule is created using MS Projects 2016. In order complete each activity, the work packages to be performed will be identified in the activity definition. We will further use activity sequencing to sort work packages and assign relationships between various project activities. In order to calculate the required work periods to complete work packages we will need activity duration estimations. Finally, resource estimation will aid us in assigning resources to the individual work packages and have completion of the schedule.

The project team will participate in completing tasks, and will partake in duration and resource estimation. They are responsible to review and validate proposed schedule and prepare assigned activities after the approval of the schedule. Project stakeholders from both parties (BBL, Misys) will review the proposed schedule and partake in the validation and approval of the final schedule.

High-level milestones for Project Schedule

1. Project Phases
2. Pre-Discovery
3. Project Initiation
4. Project Planning
5. Hardware and software prerequisites
6. Hardware installation complete - Milestone
7. 3rd party prerequisite software Installation complete - Milestone
8. Workshop / Scoping
9. Customer Party Management – Retail and Corporate
10. Retail and Corporate Deposits
11. Retail and Corporate Lending
12. Loan Origination
13. Teller
14. Payments
15. Pricing
16. Limits
17. Collateral Management
18. Foundation Treasury
19. Financial Accounting
20. Training
21. Technical Training
22. Model Bank Training
23. Installation

24 Offsite build
25 Modules to be installed
26 BankFusion Universal Banking Core
27 General Ledger
28 Retail Deposits
29 Retail Lending
30 Business Lending
31 Payments (SWIFT)
32 Payments (Message Manager)
33 Payments (Standing Orders, Sweeps)
34 Collateral Management
35 Foundation Treasury
36 UXP (Enhanced User Experience)
37 Loan Origination
38 Customer Party Management
39 High Availability Teller
40 ATM/POS Processing (ISO8583)
41 Fircosoft (AML/KYC Watchlist)
42 Dynasty (Device Support)
43 Datastore DSX (Document Management)
44 Misys Message Manager (MMM)
45 Onsite Builds
46 On Site Build - SIT System
47 On Site Build - UAT System
48 Data Migration
49 Data Cleansing
50 Data Migration Analysis
51 Data Extracts Build
52 Data Transformation
53 Data Loading
54 Data Reconciliation and Validation

55 Build - Specification
56 Customer Party Mgmt.
57 Personal Customers
58 Corporate Customers
59 Internal GL/Operating Customers
60 Liability Products
61 Current Accounts
62 Savings Accounts
63 Term Deposits
64 Asset Products
65 Loan Accounts (including Rule of 78)
66 Credit Card Accounts
67 General Ledger Products
68 Income and Expense Accounts
69 Asset and Liability Accounts
70 Build -Configuration
71 Customer Party Mgmt.
72 Personal Customers
73 Corporate Customers
74 Internal GL/Operating Customers
75 Liability Products
76 Current Accounts
77 Savings Accounts
78 Term Deposits
79 Asset Products
80 Loan Accounts (including Rule of 78)
81 Credit Card Accounts
82 General Ledger Products
83 Income and Expense Accounts
84 Asset and Liability Accounts
85 Build – Interfaces/Reports (Misys training and support)

86 Interface Configuration/Testing
87 Interface Development Support
88 Merchant Administration System (In House)
89 BTRANS (Evertec)
90 Mobile Banking System (In House)
91 BSI Payroll Application (In House)
92 Payroll (In House)
93 Insurance (In House)
94 Stationery (In House)
95 Integrated Transaction Management ISO8583 (Euronet)
96 Remote Data Interface (In House)
97 Checkplus Financial (Printech)
98 Internet Banking System (In House)
99 RMIS Diary Application (In House)
100 NCompass (NCR)
101 RTBTrans (Evertec)
102 CDPS (In House)
103 Financial Compass (Plansmith)
104 Credit Card Acquiring (Credomatic)
105 Credit Card Issuing (Evertec)
106 Alchemy Swift Processing (IBIS)
107 NBS Dashboard (In House)
108 Zyng (World Compliance) – to be replaced by Fircosoft
109 Reporting Development Support
110 Training in standard suite of reports
111 Advise on Banks custom reporting requirements
112 Test - BAT (Build Acceptance Test)
113 BAT Test Plan
114 BAT Test Cases and Documented Results
115 BAT Sign Off
116 Test - SIT (Systems Integration Test)

117 SIT Test Strategy
118 SIT Test Plan
119 SIT Test Cases and Documented Results
120 SIT Defect Reporting
121 SIT Application of Defect Fixes
122 SIT Sign Off
123 Test - UAT (User Acceptance Test)
124 UAT Test Strategy
125 UAT Test Plan
126 UAT Test Cases and Documented Results
127 UAT Defect Reporting
128 UAT Application of Defect Fixes
129 UAT Sign Off
130 Go Live Preparation - 1st site
131 Create Go-Live check list
132 Data Migration and Cutover Rehearsal including reconciliation and validation of migrated data by the Client audit team
133 Finalize production environment for Go-Live
134 Build of the live BFUB and MMM Production System
135 Identify and prepare required data for the loading into BFUB production system
136 Go-Live - 1st site
137 Milestone
138 Post Go-Live - 1st site
139 The Company will assist the Client by providing post Go-Live consultancy support and assistance BFUB, MMM, Dynasty, Fircosoft and Datastore DSX
140 Go Live Preparation - 2nd site
141 Create Go-Live check list
142 Data Migration and Cutover Rehearsal including reconciliation and validation of migrated data by the Client audit team
143 Finalize production environment for Go-Live
144 Build of the live BFUB and MMM Production System

145 Identify and prepare required data for the loading into BFUB production system
146 Go-Live - 2nd site
147 Milestone
148 Post Go-Live - 2nd site
The Company will assist the Client by providing post Go-Live consultancy support
149 and assistance BFUB, MMM, Dynasty, Fircosoft and Datastore DSX
150 Project Management
151 Project Mgmt. Closing after each Phase
152 Project Closing Report after Pre-Discovery1 day
153 Project Closing Report after Workshops/Scoping1 day
154 Project Closing Report after Training1 day
155 Project Closing Report after Installation1 day
156 Project Closing Report after Data Migration1 day
157 Project Closing Report after Build Specification1 day
158 Project Closing Report after Build Configuration1 day
159 Project Closing Report after Build Interfaces1 day
160 Project Closing Report after Interface Dev. Support1 day
161 Project Closing Report after Reporting Dev. Support1 day
162 Project Closing Report after Test BAT1 day
163 Project Closing Report after Test SIT1 day
164 Project Closing Report after Test UAT1 day
165 Project Closing Report after Go Live Preparation -1st site1 day
166 Project Closing Report after Go Live - 1st site1 day
167 Project Closing Report after Go Live Preparation - 2nd site1 day
168 Project Closing Report after Go Live - 2nd site1 day

Schedule Changes

The project manager is responsible to any changes or modification made to the project schedule. Hence, it is important to consider any modification made to it. The company has established a ceiling called “schedule constraints” that should

not be surpassed unless approved by the Steering Committee. If any modification is requested from any member of the team, the team member(s) along with the project manager will meet to discuss and evaluate the details. Such details include:

1. Why is such request for modification to the schedule required?
2. Is the request justifiable?
3. Who or what caused the modification?
4. When is the new proposed date/milestone?
5. Will this change surpass the established schedule constraints?
6. What measures or controls should be placed to avoid future changes or scope creeps?
7. Are there any risks involved in this change?
8. What level of risk and how does it impacts the project or the bank?

If the modification or change surpasses the established schedule constraints then a schedule change request is prepared and submitted to the steering committee for approval. After approval, the project manager ensures to make the required adjustments to the schedule, store the information, and communicate the change to all the team members and stakeholders of the project.

Scope Change

Major changes to project scope are to be managed and controlled by the project manager with the approval of the Steering Committee. Minor changes are left under the diligence of the project manager and project stakeholders. The details to determine what are major or minor changes are left under discretion of the bank. There are strict monitoring and controlling policies in place to avoid any scope creeping. Any approved changes in the project scope that will significantly affect the current project schedule; the project manager has the option re-baseline the schedule, with the approval of the project stakeholder, in order to cater for such impact.

Define Activities

Subsequent to the Schedule Management Plan is the Activity Definition where milestones are added and/or adjusted. As a result, the Project Charter and Schedule Management Plan are to be updated accordingly. Inputs used in this section are: Schedule Management Plan and WBS (project deliverables, resources, etc.). Techniques utilized in this process are expert judgement and decomposition. MS Projects 2016 was used as the tool to develop the schedule and as a result have an output of the activity list.

The Activity List is a comprehensive list with a unique activity identifier and scope of work description of the schedule activities required to complete each work package (PMBOK 5th Edition, 2013, p. 152). Since information detailed in the Activity Attributes are already included in other sections of the FGP and plans, the Activity Attributes was not developed as an output to this process.

Activity List

Chart 13 Activity List (Source: Elaborated by the author, 2017)

Activity Code	Activity Name	Description Of Work	Resource
1.1	**Initiate - Project Initiation**	Project Initiation and Final project plan	Bank PM, Misys PM
1.1.1	Project Team Setup & Mobilization	Team selection and mobilizing across departments and functions	Bank PM, Misys PM
1.1.2	Project Governance	Efficient deployment and management of the controls throughout the project	Bank PM, Misys PM
1.1.3	Project Risk Management	Forecast and Mitigate Risk	Bank PM, Misys PM

1.1.4	Change Management Process	Establish Change Management Process and selection of key players for decision making	Bank PM, Misys PM
1.1.5	Establish Change Control Board	Establish processes and procedures. Selection of teams for decision making	Bank PM, Misys PM, Misys PSA, Bank Architect, Bank Executive Sponsor
1.2.1	**Training**	Agreed Best Business Practices and Qualified Deltas	Misys, Core Project Team
1.2.1.1	Training on MAPS	Train Team on MAPS	Misys, Core Project Team
1.2.1.2	Training on the Process Model	Overview and definition of Process Model	Misys PSA, Core Project Team - including nominated business experts from each area
1.2.1.3	Training on the Application Model	Overview and definition of Application Models	Misys PSA, Core Project Team - including nominated business experts from each area
1.2.2	**BPA Training Course**		
1.2.2.1	Educate Project Team on BPA Input/output Requirements	Transfer of knowledge on the Business Process Alignment to the Project Team	Misys PSA, Core Project Team - including nominated business experts from each area
1.2.3	Infrastructure & Reporting Training	Overview and detailed transfer of knowledge to team on infrastructure and reporting	Misys TC and Bank Project IT Team
1.3	**Define - Design & Business Process Alignment (BPA)**	System Built and Delivered to Agreed Best Business Practices	Misys TC, Misys PSA, Bank IT Team
1.3.1	**BPA Workshops & Analysis**	Plan and execute BPA workshops for training and analysis	Misys TC, Misys PSA, Bank IT Team
1.3.1.1	**Process Model Walkthrough & Review**	Review or all process models to be implemented in the project	Misys PSA, Misys BC x 2, Core Project Team per Business Area (2 or 3 representatives)

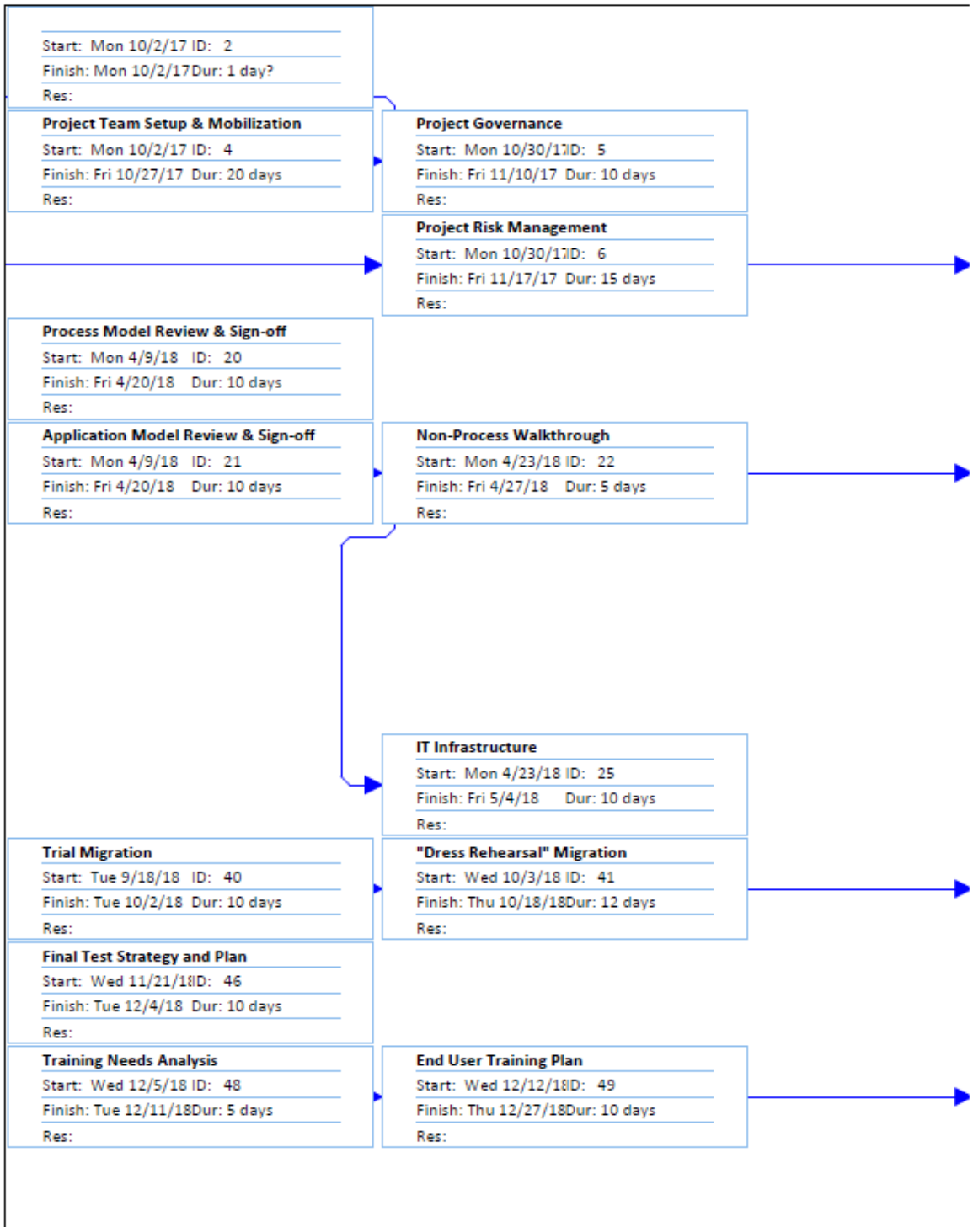
1.3.1.1.1	Process Model Review & Sign-off	Agreement, acceptance and approval through sign off for the process model	Misys PSA, Misys BC x 2, Core Project Team per Business Area (2 or 3 representatives)
1.3.1.1.2	Application Model Review & Sign-off	Agreement, acceptance and approval through sign off for the application model	Misys PSA, Misys BC x 2, Core Project Team per Business Area (2 or 3 representatives)
1.3.1.2	Non-Process Walkthrough	Non-business Related: IT Components, Application Security, etc.	Misys TC, Misys PSA, Bank IT Team
1.3.1.3	Integration Stream	High level overview and agreement for the Integration Team	Misys TC, Misys PSA, Bank IT Team
1.3.1.4	Reporting Stream	High level overview and agreement for the Reporting Team	Misys TC, Misys PSA, Bank IT Team, Bank Business
1.3.1.5	IT Infrastructure	Architecture, Hardware and Other Requirements	Misys TC, Misys PSA, Bank IT Team
1.3.2	Identification of Qualified Deltas	Identifying, addressing, qualifying, assigning and prioritizing main issues and concerns.	Misys PSA, Misys BC x 2, Core Project Team per Business Area (2 or 3 representatives)
1.3.3	Change Control Board Process: Review & Approval of Qualified Deltas	Discuss, recommend, approve/reject, sign-off on qualified deltas.	Bank PM, Misys PM, Misys PSA, Bank Architect, Bank Executive Sponsor
1.3.4	**Testing Strategy**		
1.3.4.1	Develop & Agree on Testing Strategy	Discuss and document on strategy including Test Success Criteria	Misys PM, Misys PSA, Bank PM, Bank Testing Manager
1.3.4.2	Develop Test Scripts & Test Cases	Document and create details of steps for test packs.	Bank Testing Team/Business Users
1.3.5	Migration Strategy	Review and discuss data mapping, data cleansing, cut over procedures, and data reconciliation.	Misys TC, Misys PSA, Bank IT Team, Bank Business
1.4	**Build**	Testing the system	Misys TC, Misys BC

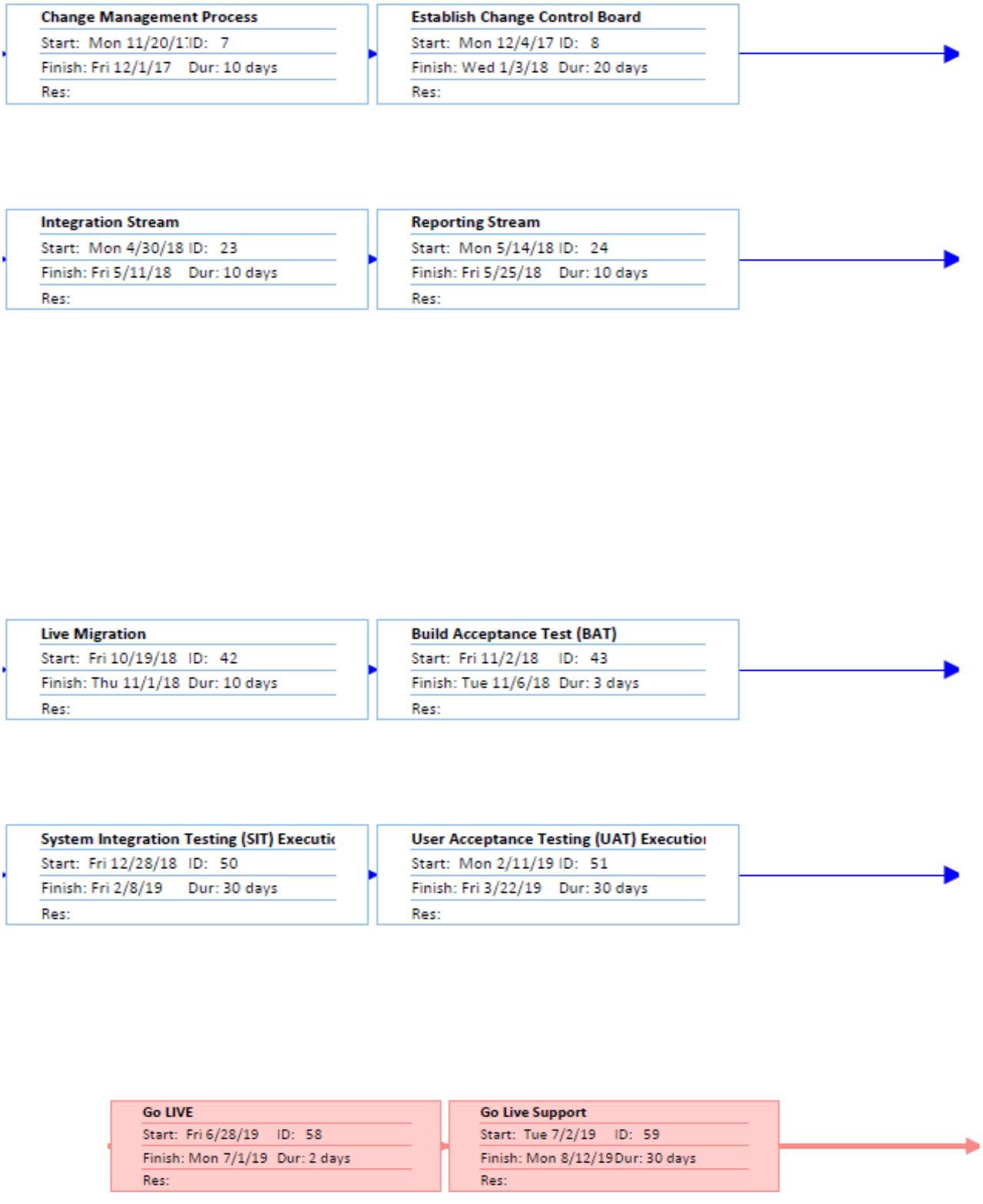
1.4.1	**Offshore System Build**	Review and Test the offshore system build	Misys TC, Misys BC
1.4.1.1	Model Bank	Provide model bank patches to bank and discuss, document, and deliver all its necessary features and functionality.	Misys TC, Misys BC
1.4.1.2	Build & Delivery of Qualified & Agreed Deltas	Adjust & correct all qualified deltas accordingly and deliver on the next available patch for testing.	Misys TC, Misys BC
1.4.2	IT Tasks: Hardware, Network, Configuration	Review and update on all IT deliverables and make necessary adjustment, actions, approval or validation.	Misys TC, Bank IT
1.4.3	Interfaces Build	Provide interfaces bank patches to bank and discuss, document, and deliver all its necessary features and functionality.	Misys TC / Bank IT
1.4.4	Reports Build	Provide reporting build to bank and discuss, document, and deliver all its necessary features and functionality.	Misys TC/ Bank IT
1.4.5	**Data Migration**		Misys TC / Bank IT
1.4.5.1	Trial Migration	Execute all test packs in initial data migration testing.	Misys TC / Bank IT / Bank Business
1.4.5.2	"Dress Rehearsal" Migration	Migrate data from LIVE and execute all necessary test packs.	Misys TC / Bank IT / Bank Business
1.4.5.3	Live Migration	Perform Live Migration and Testing simultaneously with old system prior to GO LIVE.	Misys TC / Bank IT / Bank Business

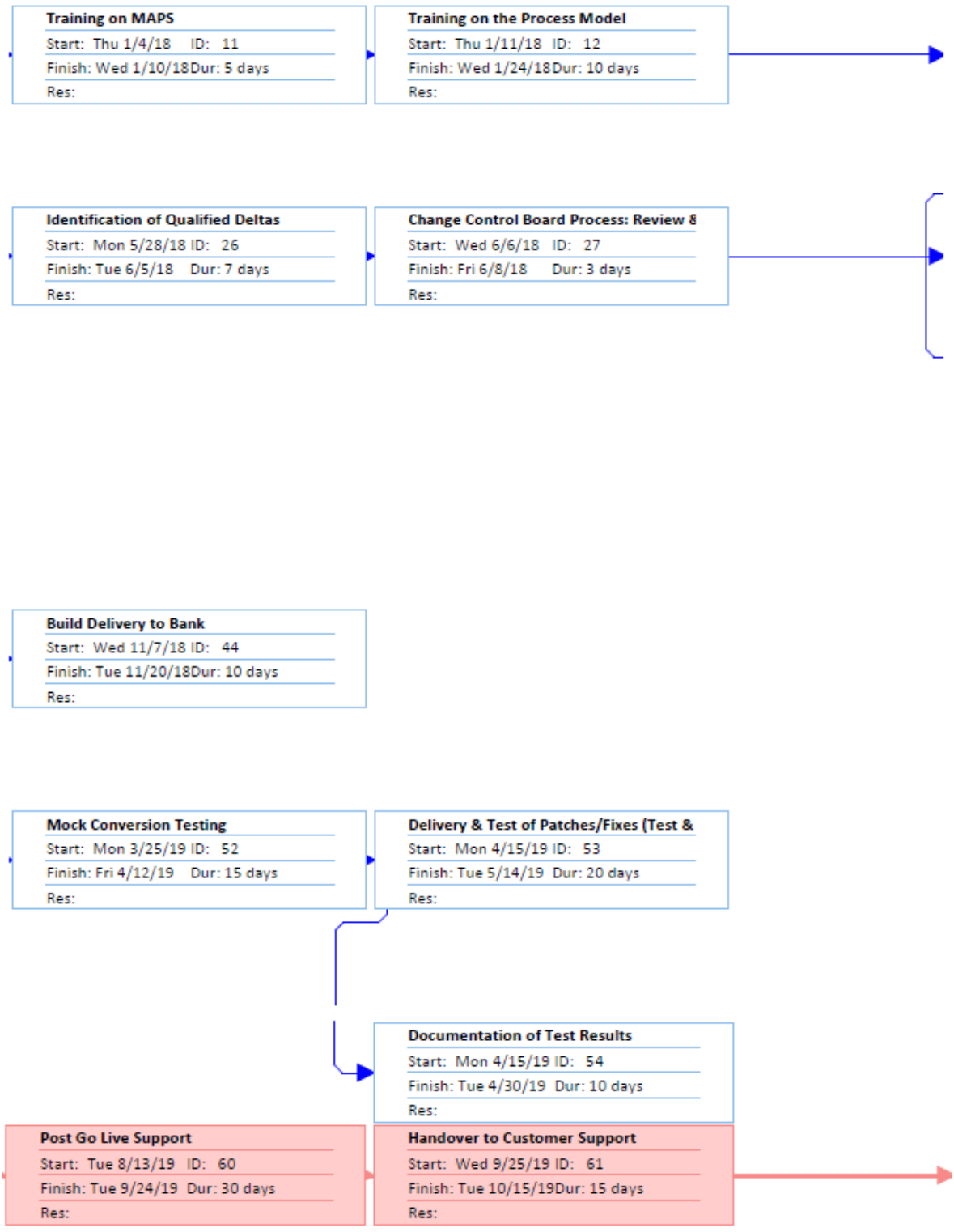
1.4.6	Build Acceptance Test (BAT)	Review, discuss, accept, approve and sign-off on BAT	Misys BC, Misys TC, Key Bank Project Members
1.4.7	Build Delivery to Bank	Review, adjust where necessary, and deliver approved signed off BAT.	Misys TC / Misys BC
1.5	**Test**	Commence Testing Phase	Misys PM, Misys PSA, Bank PM, Bank Testing Manager
1.5.1	Final Test Strategy and Plan	Execute Test Cases, Scripts and Test Criteria	Misys PM, Misys PSA, Bank PM, Bank Testing Manager
1.5.2	**Training Strategy**	Review, discuss, and agree on the training strategy	Misys Academy / Bank Training Manager
1.5.2.1	Training Needs Analysis	Analyse outcome and results of training, review evaluations and execute all necessary actions to perform an efficient transfer of knowledge.	Misys Academy / Bank Training Manager
1.5.2.2	End User Training Plan	Review and document all training areas and provide updated information to key team members.	Bank Training Manager
1.5.3	System Integration Testing (SIT) Execution	Exercise all necessary software and peripheral systems coexistent with others.	Misys BC, Misys TC, Key Bank Project Members, Bank IT
1.5.4	User Acceptance Testing (UAT) Execution	Appoint key branch champions for testing of data migration, interfacing, and reporting. Execute UAT.	Misys BC, Misys TC, Key Bank Project Members, Bank IT
1.5.5	Mock Conversion Testing	test conversion process, high level of data migration, review and retest dress-rehearsal outcomes.	Misys BC, Misys TC, Key Bank Project Members, Bank IT

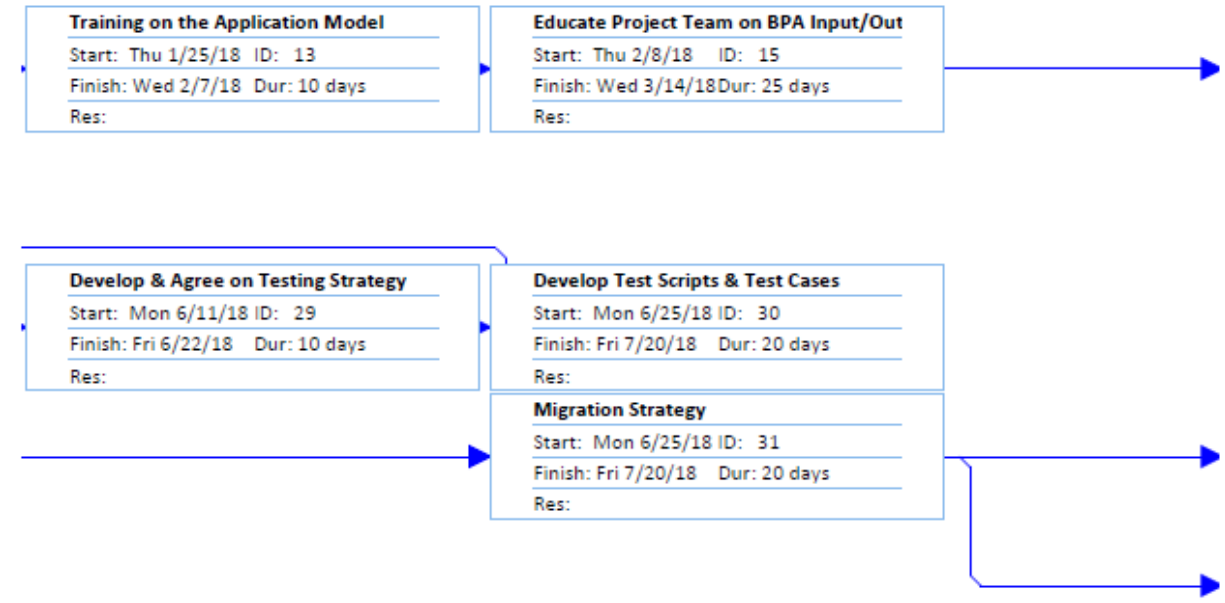
1.5.6	Delivery & Test of Patches/Fixes (Test & Re-test)	Ensure all testing data and patches are executed properly. All issues have been fixed.	Misys BC, Misys TC, Key Bank Project Members, Bank IT
1.5.7	Documentation of Test Results	Document all testing results: past, fail, or pending cases.	Bank Project Team
1.6	**Close - GO LIVE**	System goes Live	Misys PSA, Misys PM, Bank PM, Bank Architect
1.6.1	Cutover Strategy	Review, discuss, and agree on time, process, and procedures for cutover.	Misys PSA, Misys PM, Bank PM, Bank Architect
1.6.2	Go Live Preparations	Perform and execute and all necessary actions for Pre Go Live. Appoint and prepare team for support.	Bank Project Team
1.6.3	Go LIVE	Execute GO LIVE.	Bank Project Team
1.6.4	Go Live Support	Gather all necessary information, document all processes and procedures, and provide necessary support.	Misys BC, Misys TC, Misys PM
1.6.5	Post Go Live Support	Review all tickets and cases pending, Go Live results and establish proper and effective support.	Misys BC, Misys TC
1.6.6	Handover to Customer Support	Acquire all documents, training materials, and knowledge from supplier.	Misys BC, Misys TC, Misys PM, Bank PM
1.6.7	Project Closure	Review, agree, evaluate, lessons learnt, and sign-off on project.	Misys PM, Misys PSA, Bank PM

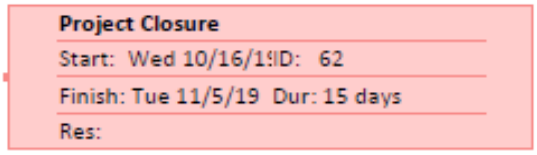
Network Diagram

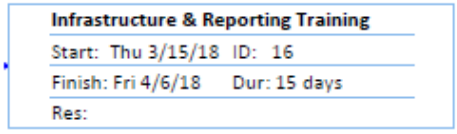


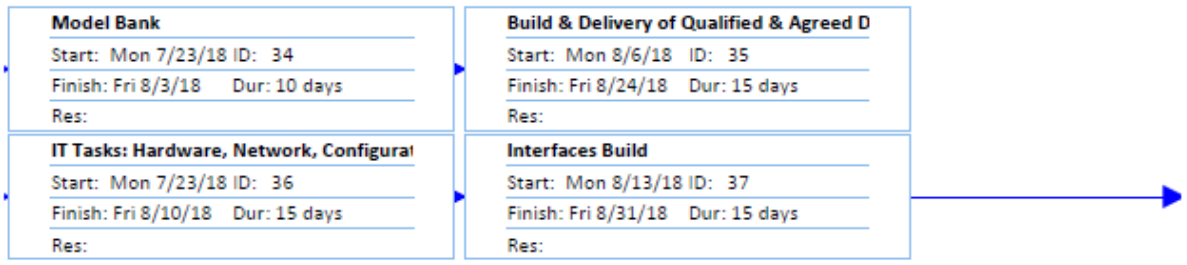

Change Management Process
Start: Mon 11/20/17 ID: 7
Finish: Fri 12/1/17 Dur: 10 days
Res:
Establish Change Control Board
Start: Mon 12/4/17 ID: 8
Finish: Wed 1/3/18 Dur: 20 days
Res:
Integration Stream
Start: Mon 4/30/18 ID: 23
Finish: Fri 5/11/18 Dur: 10 days
Res:
Reporting Stream
Start: Mon 5/14/18 ID: 24
Finish: Fri 5/25/18 Dur: 10 days
Res:
Live Migration
Start: Fri 10/19/18 ID: 42
Finish: Thu 11/1/18 Dur: 10 days
Res:
Build Acceptance Test (BAT)
Start: Fri 11/2/18 ID: 43
Finish: Tue 11/6/18 Dur: 3 days
Res:
System Integration Testing (SIT) Executi
Start: Fri 12/28/18 ID: 50
Finish: Fri 2/8/19 Dur: 30 days
Res:
User Acceptance Testing (UAT) Executio
Start: Mon 2/11/19 ID: 51
Finish: Fri 3/22/19 Dur: 30 days
Res:
Go LIVE
Start: Fri 6/28/19 ID: 58
Finish: Mon 7/1/19 Dur: 2 days
Res:
Go Live Support
Start: Tue 7/2/19 ID: 59
Finish: Mon 8/12/19 Dur: 30 days
Res:

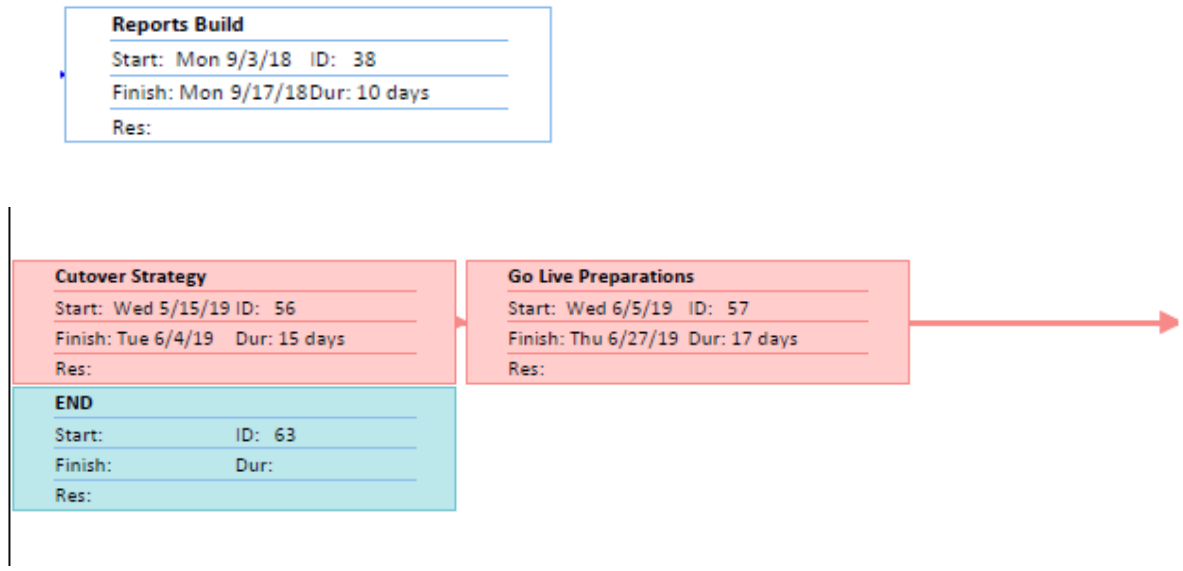

Training on MAPS
Start: Thu 1/4/18 ID: 11
Finish: Wed 1/10/18 Dur: 5 days
Res:
Training on the Process Model
Start: Thu 1/11/18 ID: 12
Finish: Wed 1/24/18 Dur: 10 days
Res:
Identification of Qualified Deltas
Start: Mon 5/28/18 ID: 26
Finish: Tue 6/5/18 Dur: 7 days
Res:
Change Control Board Process: Review &
Start: Wed 6/6/18 ID: 27
Finish: Fri 6/8/18 Dur: 3 days
Res:
Build Delivery to Bank
Start: Wed 11/7/18 ID: 44
Finish: Tue 11/20/18 Dur: 10 days
Res:
Mock Conversion Testing
Start: Mon 3/25/19 ID: 52
Finish: Fri 4/12/19 Dur: 15 days
Res:
Delivery & Test of Patches/Fixes (Test &
Start: Mon 4/15/19 ID: 53
Finish: Tue 5/14/19 Dur: 20 days
Res:
Documentation of Test Results
Start: Mon 4/15/19 ID: 54
Finish: Tue 4/30/19 Dur: 10 days
Res:
Post Go Live Support
Start: Tue 8/13/19 ID: 60
Finish: Tue 9/24/19 Dur: 30 days
Res:
Handover to Customer Support
Start: Wed 9/25/19 ID: 61
Finish: Tue 10/15/19 Dur: 15 days
Res:


Training on the Application Model
Start: Thu 1/25/18 ID: 13
Finish: Wed 2/7/18 Dur: 10 days
Res:
Educate Project Team on BPA Input/Out
Start: Thu 2/8/18 ID: 15
Finish: Wed 3/14/18 Dur: 25 days
Res:
Develop & Agree on Testing Strategy
Start: Mon 6/11/18 ID: 29
Finish: Fri 6/22/18 Dur: 10 days
Res:
Develop Test Scripts & Test Cases
Start: Mon 6/25/18 ID: 30
Finish: Fri 7/20/18 Dur: 20 days
Res:
Migration Strategy
Start: Mon 6/25/18 ID: 31
Finish: Fri 7/20/18 Dur: 20 days
Res:


Project Closure
Start: Wed 10/16/19 ID: 62
Finish: Tue 11/5/19 Dur: 15 days
Res:


Infrastructure & Reporting Training
Start: Thu 3/15/18 ID: 16
Finish: Fri 4/6/18 Dur: 15 days
Res:


Model Bank
Start: Mon 7/23/18 ID: 34
Finish: Fri 8/3/18 Dur: 10 days
Res:
Build & Delivery of Qualified & Agreed D
Start: Mon 8/6/18 ID: 35
Finish: Fri 8/24/18 Dur: 15 days
Res:
IT Tasks: Hardware, Network, Configura
Start: Mon 7/23/18 ID: 36
Finish: Fri 8/10/18 Dur: 15 days
Res:
Interfaces Build
Start: Mon 8/13/18 ID: 37
Finish: Fri 8/31/18 Dur: 15 days
Res:



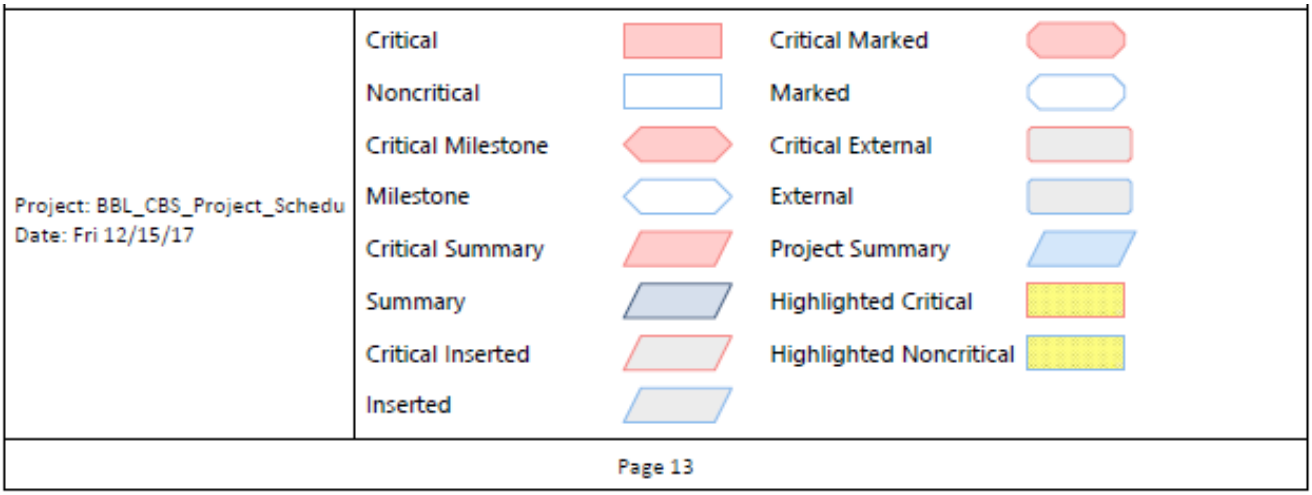


Figure 9 BBL Core Banking System Network Diagram (Source: Elaborated by the author, 2017)

Estimate Activity Resources

Following the sequence activities are the estimated activity resources where the type, quantities, equipment, and human resources are estimated to perform each activity (PMBOK 5th Edition, 2013, pg. 160). The inputs in this process are the Schedule management plan and the activity list. Tools and techniques utilized are expert judgment and MS Projects 2016. Below are the resource assignment and activity durations for each activity. These were gathered from documents provided by the Belize Bank Limited. Details of resource types, quantities and equipment remain confidential by the researched organization.

Estimate Activity Durations

The following planning process is estimating activity durations where the number of work periods required to complete individual activities with estimated resources are estimated (PMBOK 5th Edition, 2013, pg. 165). Inputs used in this process are the schedule management plan, activity list, network diagram, activity durations, project scope statement and resource requirements.

Chart 14 BBL Core Banking System Resource Assignment and Activity Duration (Source: Elaborated by the author, 2017)

Activity	Task Name	Duration	Resource Names
1	**START**	**534 days**	
1.1	**Initiate - Project Initiation**	**65 days**	Bank PM,Misys PM
1.1.1	Project Team Setup & Mobilization	20 days	Bank PM,Misys PM
1.1.2	Project Governance	10 days	Bank PM,Misys PM
1.1.3	Project Risk Management	15 days	Bank PM,Misys PM
1.1.4	Change Management Process	10 days	Bank PM,Misys PM
1.1.5	Establish Change Control Board	20 days	Bank PM,Misys PM, Misys PSA, Bank Architect, Bank Executive Sponsor
1.2	**Define - Discovery**	**65 days**	
1.2.1	**Training**	**25 days**	Core Project Team, Misys
1.2.1.1	Training on MAPS	5 days	Misys, Core Project Team

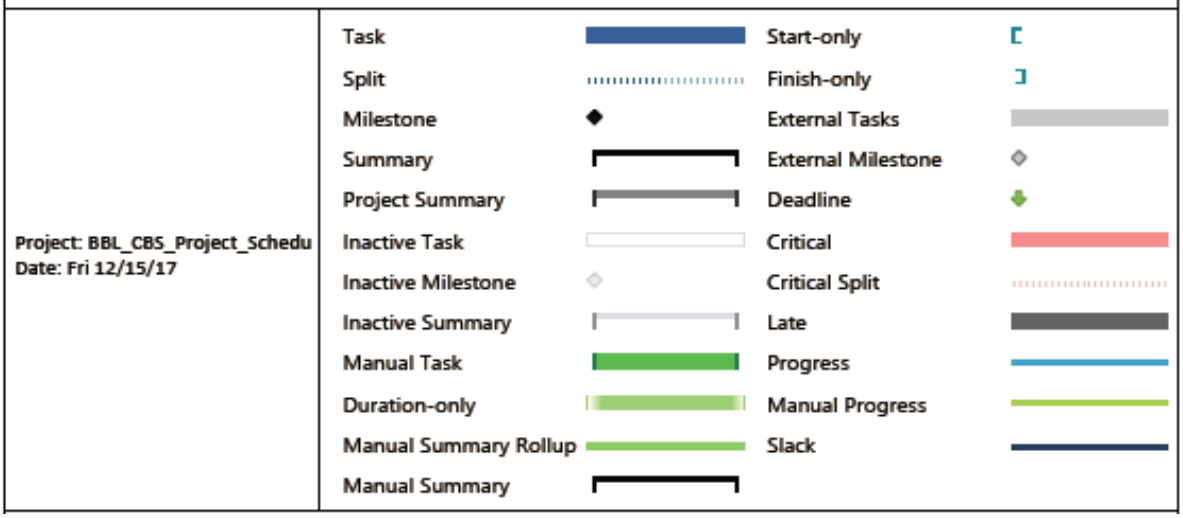
1.2.1.2	Training on the Process Model	10 days	Core Project Team - including nominated business experts from each area, Misys PSA
1.2.1.3	Training on the Application Model	10 days	Misys PSA, Core Project Team - including nominated business experts from each area
1.2.2	**BPA Training Course**	**40 days**	
1.2.2.1	Educate Project Team on BPA input/output Requirements	25 days	Misys PSA, Core Project Team - including nominated business experts from each area
1.2.3	Infrastructure & Reporting Training	15 days	Misys TC and Bank Project IT Team
1.3	**Define - Design & Business Process Alignment (BPA)**	**75 days**	Misys PSA, Bank IT Team, Misys TC
1.3.1	**BPA Workshops & Analysis**	**45 days**	Misys TC, Misys PSA, Bank IT Team
1.3.1.1	**Process Model Walkthrough & Review**	**45 days**	Misys BC x 2,Core Project Team per Business Area (2 or 3 representatives),Misys PSA
1.3.1.1.1	Process Model Review & Sign-off	10 days	Misys BC x 2,Core Project Team per Business Area (2 or 3 representatives),Misys PSA
1.3.1.1.2	Application Model Review & Sign-off	10 days	Misys PSA, Misys BC x 2,Core Project Team per Business Area (2 or 3 representatives)
1.3.1.2	Non-Process Walkthrough	5 days	Misys PSA, Bank IT Team, Misys TC
1.3.1.3	Integration Stream	10 days	Misys PSA, Bank IT Team, Misys TC
1.3.1.4	Reporting Stream	10 days	Misys PSA, Bank IT Team, Misys TC, Bank Business
1.3.1.5	IT Infrastructure	10 days	Misys TC, Misys PSA, Bank IT Team
1.3.2	Identification of Qualified Deltas	7 days	Misys PSA, Misys BC x 2,Core Project Team per Business Area (2 or 3 representatives)
1.3.3	Change Control Board Process: Review & Approval of Qualified Deltas	3 days	Bank PM,Misys PM, Misys PSA, Bank Architect, Bank Executive Sponsor
1.3.4	**Testing Strategy**	**30 days**	
1.3.4.1	Develop & Agree on Testing Strategy	10 days	Misys PM,Misys PSA, Bank PM, Bank Testing Manager
1.3.4.2	Develop Test Scripts & Test Cases	20 days	Bank Testing Team/Business Users
1.3.5	Migration Strategy	20 days	Misys TC, Misys PSA, Bank IT Team, Bank Business
1.4	**Build**	**85 days**	Misys BC, Misys TC
1.4.1	**Offshore System Build**	**40 days**	Misys BC, Misys TC
1.4.1.1	Model Bank	10 days	Misys BC, Misys TC
1.4.1.2	Build & Delivery of Qualified & Agreed Deltas	15 days	Misys TC, Misys BC
1.4.2	IT Tasks: Hardware, Network, Configuration	15 days	Misys TC, Bank IT
1.4.3	Interfaces Build	15 days	Misys TC / Bank IT
1.4.4	Reports Build	10 days	Misys TC/ Bank IT
1.4.5	**Data Migration**	**45 days**	Misys TC / Bank IT
1.4.5.1	Trial Migration	10 days	Misys TC / Bank IT / Bank Business
1.4.5.2	"Dress Rehearsal" Migration	12 days	Misys TC / Bank IT / Bank Business

1.4.5.3	Live Migration	10 days	Misys TC / Bank IT / Bank Business
1.4.6	Build Acceptance Test (BAT)	3 days	Misys BC, Misys TC, Key Bank Project Members
1.4.7	Build Delivery to Bank	10 days	Misys TC / Misys BC
1.5	**Test**	**120 days**	Misys PSA, Bank PM, Bank Testing Manager, Misys PM
1.5.1	Final Test Strategy and Plan	10 days	Misys PM,Misys PSA, Bank PM, Bank Testing Manager
1.5.2	**Training Strategy**	**110 days**	Misys Academy / Bank Training Manager
1.5.2.1	Training Needs Analysis	5 days	Misys Academy / Bank Training Manager
1.5.2.2	End User Training Plan	10 days	Bank Training Manager
1.5.3	System Integration Testing (SIT) Execution	30 days	Misys TC, Key Bank Project Members, Bank IT, Misys BC
1.5.4	User Acceptance Testing (UAT) Execution	30 days	Misys TC, Key Bank Project Members, Bank IT, Misys BC
1.5.5	Mock Conversion Testing	15 days	Misys TC, Key Bank Project Members, Bank IT, Misys BC
1.5.6	Delivery & Test of Patches/Fixes (Test & Re-test)	20 days	Misys BC, Misys TC, Key Bank Project Members, Bank IT
1.5.7	Documentation of Test Results	10 days	Bank Project Team
1.6	**Close - GO LIVE**	**124 days**	Misys PM, Bank PM, Bank Architect, Misys PSA
1.6.1	Cutover Strategy	15 days	Misys PSA, Misys PM, Bank PM, Bank Architect
1.6.2	Go Live Preparations	17 days	Bank Project Team
1.6.3	Go LIVE	2 days	Bank Project Team
1.6.4	Go Live Support	30 days	Misys TC, Misys BC, Misys PM
1.6.5	Post Go Live Support	30 days	Misys TC, Misys BC
1.6.6	Handover to Customer Support	15 days	Bank PM, Misys BC, Misys TC, Misys PM
1.6.7	Project Closure	15 days	Misys PM,Misys PSA, Bank PM

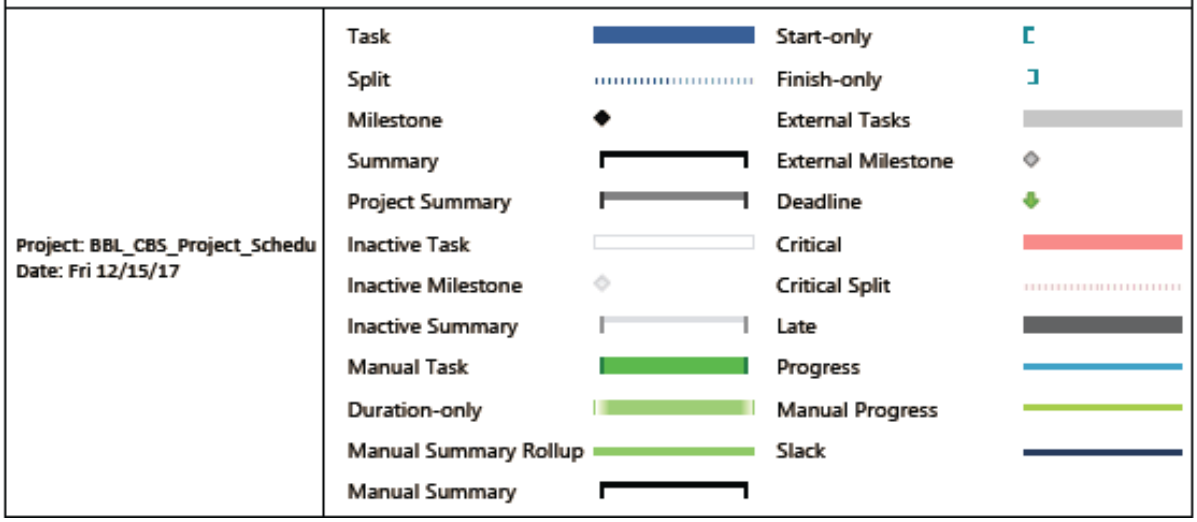
Activity Sequence

It is now essential to identify and document the relationships between the project activities – sequence activities. The final process is to develop schedule where the activity sequences, durations, resource requirements, and schedule constraints are all analysed in order to further create the project schedule model (PMBOK 5th Edition, 2013, pg. 172). The inputs used in this process are the schedule management plan, activity list, project schedule diagram, activity resource requirement, activity duration estimates, and project scope statement. The tools and techniques are schedule network analysis, leads and lags, and MS Projects 2016.

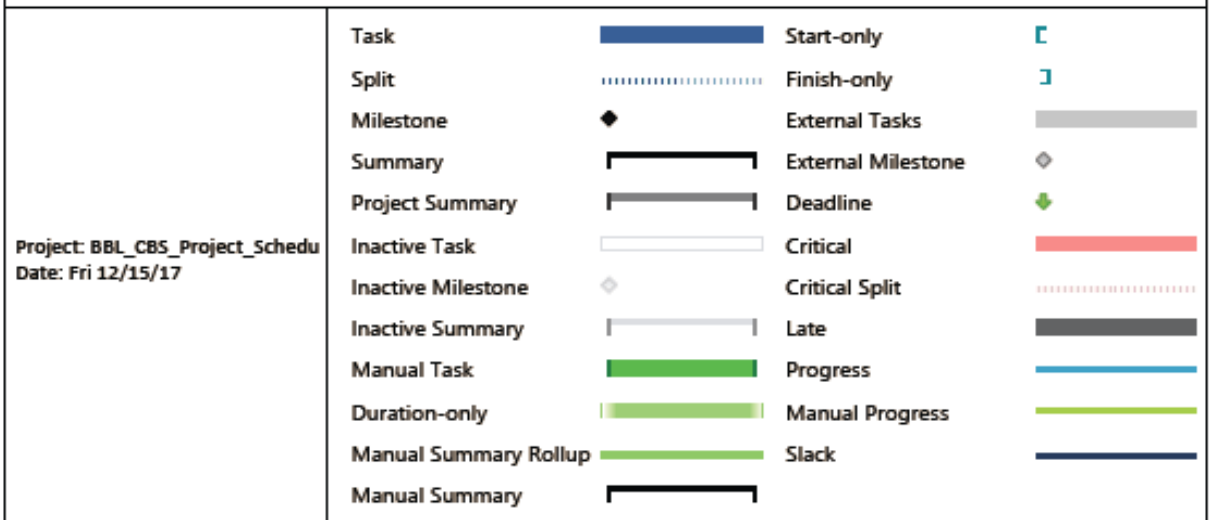
ID	Task Name	Duration	Start	Finish
1	**1 START**	**534 days**	**Mon 10/2/17**	**Tue 11/5/19**
2	**1.1 Initiate - Project Initiation**	**65 days**	**Mon 10/2/17**	**Wed 1/3/18**
3	1.1.1 Project Team Setup & Mobilization	20 days	Mon 10/2/17	Fri 10/27/17
4	1.1.2 Project Governance	10 days	Mon 10/30/17	Fri 11/10/17
5	1.1.3 Project Risk Management	15 days	Mon 10/30/17	Fri 11/17/17
6	1.1.4 Change Management Process	10 days	Mon 11/20/17	Fri 12/1/17
7	1.1.5 Establish Change Control Board	20 days	Mon 12/4/17	Wed 1/3/18
8	**1.2 Define - Discovery**	**65 days**	**Thu 1/4/18**	**Fri 4/6/18**
9	**1.2.1 Training**	**25 days**	**Thu 1/4/18**	**Wed 2/7/18**
10	1.2.1.1 Training on MAPS	5 days	Thu 1/4/18	Wed 1/10/18
11	1.2.1.2 Training on the Process Model	10 days	Thu 1/11/18	Wed 1/24/18
12	1.2.1.3 Training on the Application Model	10 days	Thu 1/25/18	Wed 2/7/18
13	**1.2.2 BPA Training Course**	**40 days**	**Thu 2/8/18**	**Fri 4/6/18**
14	1.2.2.1 Educate Project Team on BPA Input/Output Requirements	25 days	Thu 2/8/18	Wed 3/14/18
15	1.2.3 Infrastructure & Reporting Training	15 days	Thu 3/15/18	Fri 4/6/18
16	**1.3 Define - Design & Business Process Alignment (BPA)**	**75 days**	**Mon 4/9/18**	**Fri 7/20/18**
17	**1.3.1 BPA Workshops & Analysis**	**45 days**	**Mon 4/9/18**	**Fri 6/8/18**
18	**1.3.1.1 Process Model Walkthrough & Review**	**45 days**	**Mon 4/9/18**	**Fri 6/8/18**
19	1.3.1.1.1 Process Model Review & Sign-off	10 days	Mon 4/9/18	Fri 4/20/18
20	1.3.1.1.2 Application Model Review & Sign-off	10 days	Mon 4/9/18	Fri 4/20/18
21	1.3.1.2 Non-Process Walkthrough	5 days	Mon 4/23/18	Fri 4/27/18
22	1.3.1.3 Integration Stream	10 days	Mon 4/30/18	Fri 5/11/18
23	1.3.1.4 Reporting Stream	10 days	Mon 5/14/18	Fri 5/25/18
24	1.3.1.5 IT Infrastructure	10 days	Mon 4/23/18	Fri 5/4/18
25	1.3.2 Identification of Qualified Deltas	7 days	Mon 5/28/18	Tue 6/5/18
26	1.3.3 Change Control Board Process: Review & Approval of Qualified Deltas	3 days	Wed 6/6/18	Fri 6/8/18
27	**1.3.4 Testing Strategy**	**30 days**	**Mon 6/11/18**	**Fri 7/20/18**
28	1.3.4.1 Develop & Agree on Testing Strategy	10 days	Mon 6/11/18	Fri 6/22/18

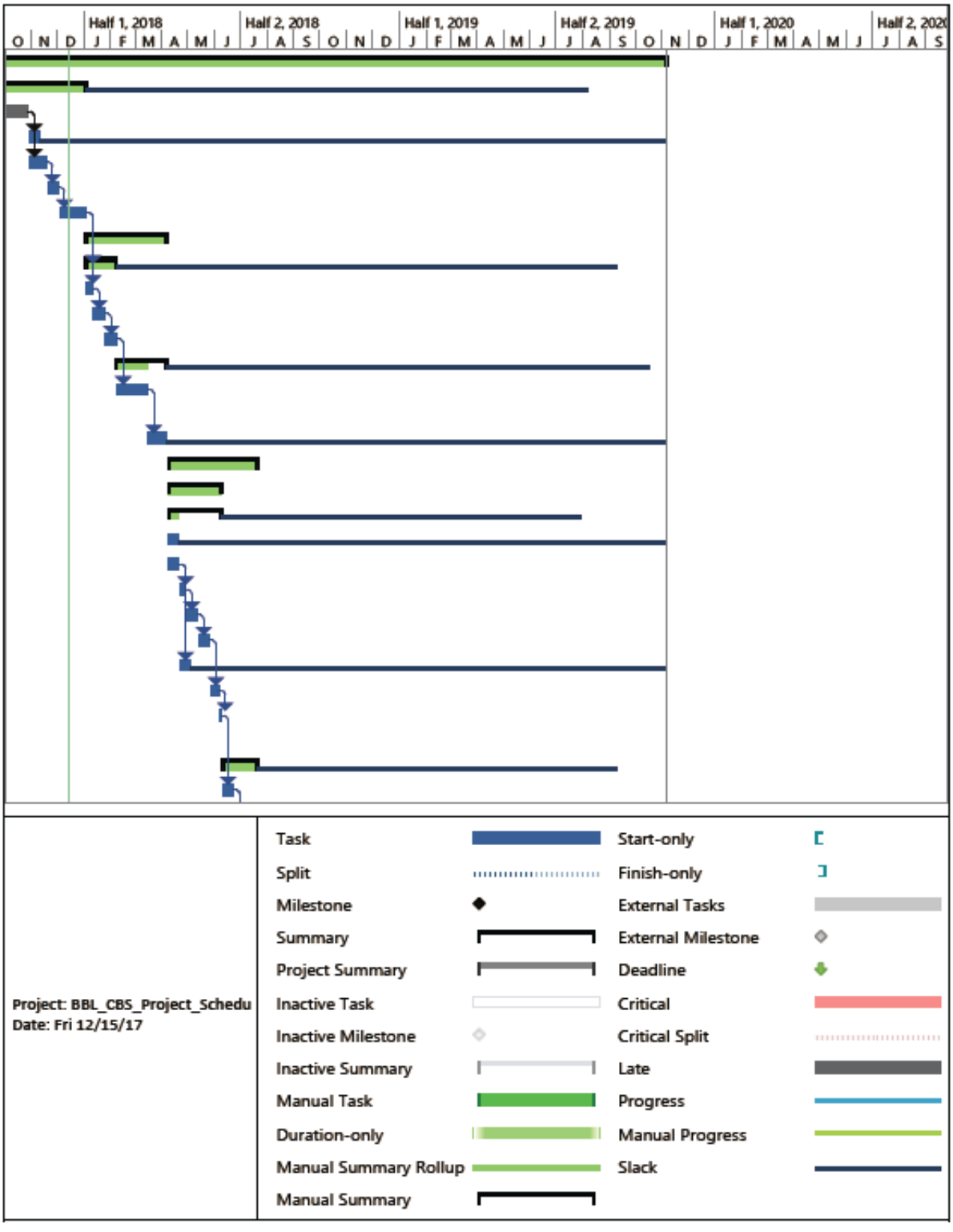


ID	Task Name	Duration	Start	Finish
29	1.3.4.2 Develop Test Scripts & Test Cases	20 days	Mon 6/25/18	Fri 7/20/18
30	1.3.5 Migration Strategy	20 days	Mon 6/25/18	Fri 7/20/18
31	**1.4 Build**	**85 days**	**Mon 7/23/18**	**Tue 11/20/18**
32	**1.4.1 Offshore System Build**	**40 days**	**Mon 7/23/18**	**Mon 9/17/18**
33	1.4.1.1 Model Bank	10 days	Mon 7/23/18	Fri 8/3/18
34	1.4.1.2 Build & Delivery of Qualified & Agreed Deltas	15 days	Mon 8/6/18	Fri 8/24/18
35	1.4.2 IT Tasks: Hardware, Network, Configuration	15 days	Mon 7/23/18	Fri 8/10/18
36	1.4.3 Interfaces Build	15 days	Mon 8/13/18	Fri 8/31/18
37	1.4.4 Reports Build	10 days	Mon 9/3/18	Mon 9/17/18
38	**1.4.5 Data Migration**	**45 days**	**Tue 9/18/18**	**Tue 11/20/18**
39	1.4.5.1 Trial Migration	10 days	Tue 9/18/18	Tue 10/2/18
40	1.4.5.2 "Dress Rehearsal" Migration	12 days	Wed 10/3/18	Thu 10/18/18
41	1.4.5.3 Live Migration	10 days	Fri 10/19/18	Thu 11/1/18
42	1.4.6 Build Acceptance Test (BAT)	3 days	Fri 11/2/18	Tue 11/6/18
43	1.4.7 Build Delivery to Bank	10 days	Wed 11/7/18	Tue 11/20/18
44	**1.5 Test**	**120 days**	**Wed 11/21/18**	**Tue 5/14/19**
45	1.5.1 Final Test Strategy and Plan	10 days	Wed 11/21/18	Tue 12/4/18
46	**1.5.2 Training Strategy**	**110 days**	**Wed 12/5/18**	**Tue 5/14/19**
47	1.5.2.1 Training Needs Analysis	5 days	Wed 12/5/18	Tue 12/11/18
48	1.5.2.2 End User Training Plan	10 days	Wed 12/12/18	Thu 12/27/18
49	1.5.3 System Integration Testing (SIT) Execution	30 days	Fri 12/28/18	Fri 2/8/19
50	1.5.4 User Acceptance Testing (UAT) Execution	30 days	Mon 2/11/19	Fri 3/22/19
51	1.5.5 Mock Conversion Testing	15 days	Mon 3/25/19	Fri 4/12/19
52	1.5.6 Delivery & Test of Patches/Fixes (Test & Re-test)	20 days	Mon 4/15/19	Tue 5/14/19
53	1.5.7 Documentation of Test Results	10 days	Mon 4/15/19	Tue 4/30/19
54	**1.6 Close - GO LIVE**	**124 days**	**Wed 5/15/19**	**Tue 11/5/19**
55	1.6.1 Cutover Strategy	15 days	Wed 5/15/19	Tue 6/4/19
56	1.6.2 Go Live Preparations	17 days	Wed 6/5/19	Thu 6/27/19
57	1.6.3 Go LIVE	2 days	Fri 6/28/19	Mon 7/1/19
58	1.6.4 Go Live Support	30 days	Tue 7/2/19	Mon 8/12/19



ID	Task Name	Duration	Start	Finish
59	1.6.5 Post Go Live Support	30 days	Tue 8/13/19	Tue 9/24/19
60	1.6.6 Handover to Customer Support	15 days	Wed 9/25/19	Tue 10/15/19
61	1.6.7 Project Closure	15 days	Wed 10/16/19	Tue 11/5/19
62	1.6.8 END			

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Half 2, 2018
Half 1, 2019
Half 2, 2019
Half 1, 2020
Half 2, 2020
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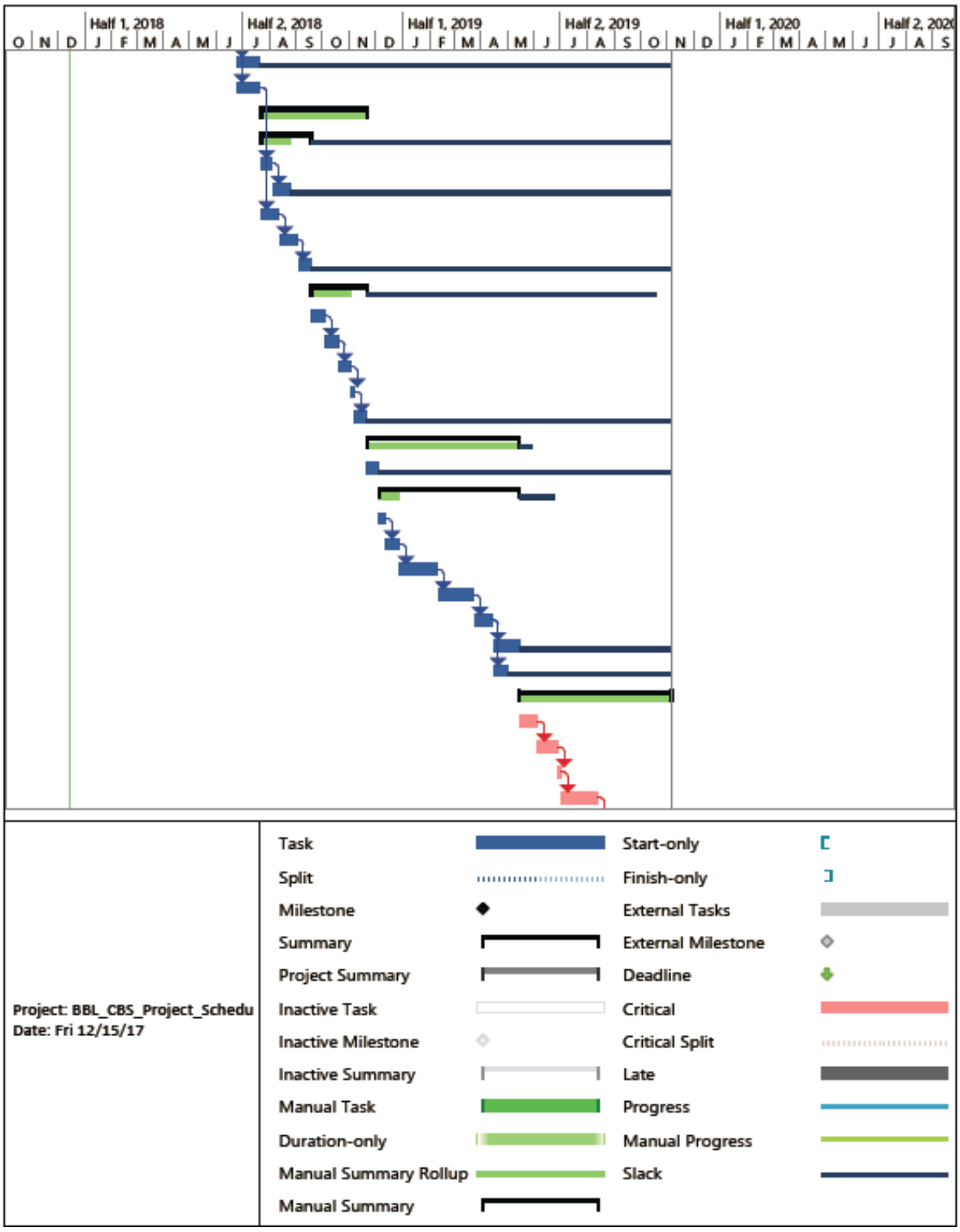
Project: BBL_CBS_Project_Schedu
Date: Fri 12/15/17
Task
Split
Milestone
Summary
Project Summary
Inactive Task
Inactive Milestone
Inactive Summary
Manual Task
Duration-only
Manual Summary Rollup
Manual Summary
Start-only
Finish-only
External Tasks
External Milestone
Deadline
Critical
Critical Split
Late
Progress
Manual Progress
Slack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Date: Fri 12/15/17
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Split
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Summary
Project Summary
Inactive Task
Inactive Milestone
Inactive Summary
Manual Task
Duration-only
Manual Summary Rollup
Manual Summary
Start-only
Finish-only
External Tasks
External Milestone
Deadline
Critical
Critical Split
Late
Progress
Manual Progress
Slack

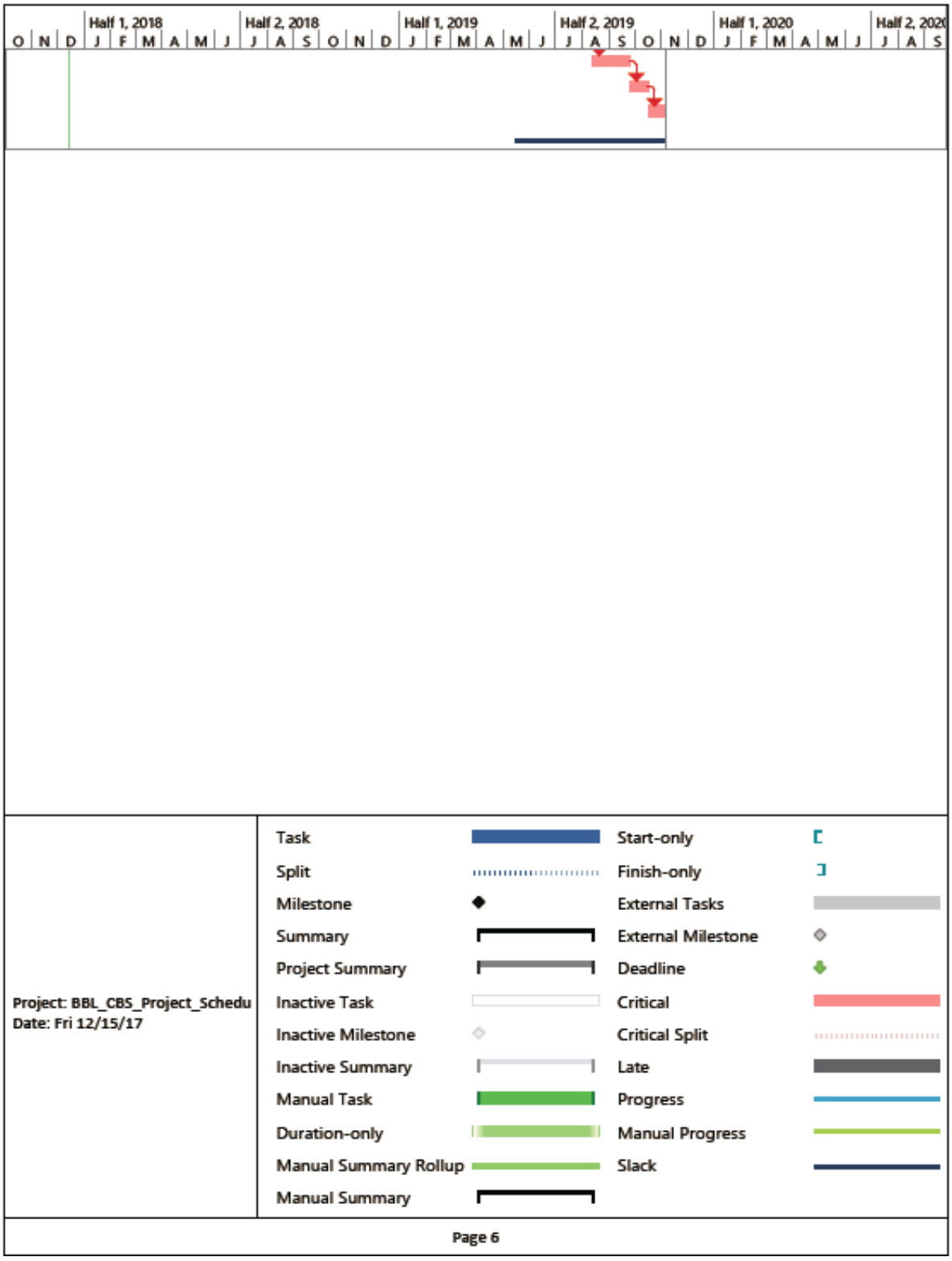

Figure 10 BBL Core Banking System Gantt Chart (Source: MS Project 2016, Elaborated by the author, 2017)

Control Schedule

The project manager is responsible to review, amend, update, manage and control the schedule at all times. The schedule is subject to change and can be influenced by many parties, team members, and/or stakeholder's inputs. The project manager holds schedule updates and review meetings which may impact the project schedule. Frequent monitoring of the schedule is held in order to have proper control of the schedule.

Considerations upon modification of the project schedule: Base the project schedule on a realistic application of resources (both human resources and physical resources), and eliminate unreasonable peaks and valleys in the resource levels, ensure the project schedule maintains an appropriate balance between resource levels and elapsed time frames for all deliverables and activities, and ensure the project schedule establishes an effective baseline to monitor and control the project.

A Progress reporting is documented to track all milestones and to gain further control on the project schedule for better decision-making. Progress on milestones are discussed at the weekly project management meeting and reported at the monthly steering committee meetings. The objectives of the progress reporting at project management meetings and steering committee include: Ensuring all project milestones have been accomplished on schedule, escalation of any risks or issues associated with any schedule variances, confirming whether upcoming milestones are tracking to plan and projecting the state of the project schedule for the remainder of the program

4.4 Cost Management Plan

In order for the project to be successfully completed within the approved budget, it is important to consider the processes involved in planning, estimating, budgeting, financing, funding, managing, and cost controlling. All these processes are part of

the Project Cost Management (PMBOK 5th Edition, 2013, pg. 193). It is important to note that due to confidentiality or the bank, the researcher was unable to gather sufficient data in regards to finance, cost, or budgeting of the project. As a result, inadequate information has been gathered to fully grasp this section of the Project Management Plan. Nonetheless, it is necessary to move forward with the data gathered thus far.

The first process in Project Cost Management is the development of the Cost Management Plan. Inputs gathered to develop this process are the Project Management Plan, and the Project Charter. The tools and techniques used were expert judgment, analytical techniques, and meetings held with project team members. As a result, after this process the Project Charter, Scope Management Plan, and Schedule Management Plan were updated accordingly as is accustomed of progressive elaboration in each document.

Introduction

The project manager is responsible, throughout the duration of the project, for managing, controlling, and reporting to all appropriate stakeholders the project costs and any important aspect of the budget (PMBOK 5th Edition, 2013, pg. 195). As a result, both project managers (BBL and Misys), on a weekly basis, are responsible to review, manage, and report all financial aspects of the project. Frequent updates of the financial reports are sent electronically to the Project Sponsor for review and to further discuss in the steering committee meetings. It is with every effort, for BBL, to reduce costs associated with implementations, especially those related to time overruns.

Cost Management Approach

In order to develop a proper cost management approach it is necessary to create Control Account in order to track each cost and measure the financial performance of the project through calculations of Earned Value concepts. Further management and control of the project's performance will be realized through trend

analysis, variance analysis, root cause, and risk analysis. The project manager (BBL) will manage all contingencies and cost justifications will take place before any expense.

Project Budget and Cash Flow

Below is a brief outline of the Budget sheet used and the Cash Flow:

Chart 15 CBS Budget Listing (Source: Elaborated by the author, 2017)

ID	DESCRIPTION	Duration Days	Total Running Days	Cost
1.1.1.1	Functional specifications			
1.1.1.2	Technical specifications			
1.1.2.1	Logical structure			
1.1.2.2	Physical structure			
1.1.3.1	Technical specifications			
1.1.3.2	Interfaces proposals			
1.1.4.1	Functional specifications			
1.1.4.2	Technical specifications			
1.1.4.3	Reports proposals			
1.2.1.1	Design review			
1.2.1.2	Coding			
1.2.2.1	Design review			
1.2.2.2	Coding			
1.2.3.1	Design review			
1.2.3.2	Coding			
1.2.4.1	Design review			
1.2.4.2	Coding			
1.3.1.1	Specifications testing			
1.3.1.2	Integration testing			
1.3.2.1	Specifications testing			
1.3.2.2	SIT testing			
1.3.3.1	Specifications testing			
1.3.3.2	UAT testing			
1.3.4.1	Specifications testing			
1.3.4.2	Dress Rehearsal testing			
1.4.1.1	Specifications testing			
1.4.1.2	Flow diagrams			

1.4.1.3	User manual			
1.4.2.1	Methodology			
1.4.2.2	Materials			
1.4.2.3	Help menu			
1.4.3.1	Formers formation			
1.4.3.2	Support team			
1.4.3.3	Potential users			
1.4.3.4	Final users			
1.5.1.1	Providers selection			
1.5.1.2	Hardware buy			
1.5.2.1	Providers selection			
1.5.2.2	Software and Hosting buy			
1.5.3.1	Implementation plan			
1.5.3.2	Recruiting the work team			
1.5.3.3	Implementation components			
1.5.4.1	Software-Hardware integration			
1.5.4.2	Applications installation			
1.5.4.3	System transference to end users			
	BAC			

Chart 16 CBS Cash Flow (Source: Elaborated by the author, 2017)

ID	WORK PACKAGE	BUDGET	PV, AC, EV	CASH FLOW					
				WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6
1.1.1.1	Functional specifications		PV						
			AC						
			EV						
1.1.1.2	Technical specifications		PV						
			AC						
			EV						
1.1.2.1	Logical structure		PV						
			AC						
			EV						
1.1.2.2	Physical structure		PV						
			AC						
			EV						
1.1.3.1	Technical specifications		PV						
			AC						
			EV						
1.1.3.2	Interfaces proposals		PV						
			AC						
			EV						
1.1.4.1	Functional specifications		PV						
			AC						
			EV						
1.1.4.2	Technical specifications		PV						
			AC						
			EV						
1.1.4.3	Reports proposals		PV						
			AC						

			EV						
1.2.1.1	Design review		PV						
			AC						
			EV						
1.2.1.2	Coding		PV						
			AC						
			EV						
1.2.2.1	Design review		PV						
			AC						
			EV						
1.2.2.2	Coding		PV						
			AC						
			EV						
1.2.3.1	Design review		PV						
			AC						
			EV						
1.2.3.2	Coding		PV						
			AC						
			EV						
1.2.4.1	Design review		PV						
			AC						
			EV						
1.2.4.2	Coding		PV						
			AC						
			EV						

Total AC -
Total EV -

Schedule Variance	Cost Variance	SPI	CPI	CPI expected to be the same for the project:	Future work will be accomplished as planned:
SV=EV-PV	CV=EV-AC	(EV/PV)	(EV/AC)	EAC=BAC/CPI	EAC=AC+BAC-EV

4.5 Quality Management Plan

Introduction

A Quality Management Plan will be developed in order to identify the quality requirements and project deliverables. The inputs utilized in this process are project management plan, stakeholder register and risk register. Tools and techniques used are check sheets and meetings. This process will provide guidance and how to manage the quality aspect of this project.

Quality Management Approach

The approach utilized will involve ensuring that quality management is planned for each processes and products. In order to meet these qualities along with customer satisfaction, the bank will need to focus on the project's deliverables, standards and criteria. As a result, all activities will be aligned to the organization's policies and any other regulatory standards.

The project manager will be responsible for updating Quality Management Plan. Any changes made to the plan must be in alignment of bank's standards and regulation. In addition, changes made to the plan must consider the achievement of meeting the project's deliverables. An integrated quality approach will be used to define quality standards, measure quality, and consistently improve quality performance. The project manager along with the project team will define metrics, conduct measurements, and analyse results. All project team members are responsible for reporting quality improvements.

Quality Requirements

Quality standards and requirements, for both product and processes, will be reviewed and determined by the project manager. The project manager will be responsible for any new identified standards. This standard/requirement should then be reported to BBL project team and Misys team (where necessary). After

agreeing and approving the project manager will incorporate these standards into the bank's documentation and project management plan. The project team, on both parties, also carries the responsibility to identify any additional standard/requirement, and report them to the project manager for documentation and further assessment.

Quality Assurance and Control

In this process an iterative process of reviewing project documents is required throughout the life cycle of the study. As a result, the project manager will schedule regular meetings in order to the project team to review these documents and processes. Process improvements initiatives and efforts will be discussed, documented, communicated, and implemented as they are updated.

In each testing phase, a Quality Assurance Test Analyst team has been assigned to create test packs, scenarios, and cases in order to achieve the best results in the testing. These details are recorded in what is called test packs. A test pack was created for each product and process required. The test packs ensures that the quality of testing is good enough for implementation after all cases have successfully passed.

Weekly process audits will be conducted, process performance metrics will be monitored and controlled, and compliance of project standards with all processes will be assured. The project manager will handle any issues arisen from this process along with the project team involved.

The day-to-day running of the project will be undertaken by the designated Client project manager and Misys project manager through the project management committee. Regular meetings will be held where appropriate status updates of deliverables, services and assigned tasks are reviewed. All action items, issues, escalation points, etc. discussed will be documented and distributed to participants.

The project management responsibilities are the following:

- Provide periodic performance progress report to the steering committee
- Highlight issues and concerns that may affect implementation deadlines and project

Other Stakeholder Matrix baseline:

A matrix baseline was developed reviewing all potential stakeholders that would impact in this projects and their level of influence. External stakeholders that were identified, apart from what was specified in the Scope Management Plan, are government, customs, hotel and reservations. These are all directly impacted by shipment of systems, Misys reservations and legal documentation to remain and work in the country.

Chart 17 Stakeholder Matrix Baseline (Source: Elaborated by the author, 2017)

Stakeholder	Impact (low, medium, high)	Interest (low, medium, high)	Power (low, medium, high)	Influence (low, medium, high)
Misys	High	High	High	High
The Client (BBL)	High	High	High	High
Central Bank of Belize	High	High	High	Medium
Government	High	Medium	High	Medium
Customs	Low	Low	Medium	Medium
Operations	High	High	Low	Medium to low
Compliance	High	High	Low	Medium
Hotel & Reservations	High	High	Low	Low

4.6 Human Resource Management Plan

Following the Communication Management Plan is the Human Resource Management Plan. This process is essential in order to organize, manage and lead the project team and resources. In order to develop the Human Resource Management Plan, inputs such as the Project Management Plan and activity resource requirements will be used. The organization charts, expert judgement and meetings will be used as the tools and techniques in this process.

In this process we will only develop the Human Resource Management Plan. The Acquire Project Team, Develop Project Team, and Manage Project Team are all part of the execution process; hence will not be developed in this study.

Introduction

The human resource will be managed between the project manager and the human resource department. This process is essential for the establishment of project roles, responsibilities, project organization charts and staffing management. Below are details of these along with the change management responsibilities and steering committee.

Change Management Responsibility

Chart 18 CBS Change Management Responsibility (Source: BBL, PROJECT INITIATION DOCUMENT, 2014)

Company Responsibilities	Client Responsibilities
To identify any potential change and to update the details of the change in the change log To analyse the impact of the change prepare assessment results and associated costs and send it to the steering committee for approval	To identify any potential change and to update the details of the change in the change log. To support the change process and provide input to the impact assessment of the change. Enforce the change management process on

Company Responsibilities	Client Responsibilities
To update the common plan in accordance with the approved changes To implement the approved changes and updating the status of the change to the originator To review the same with the Client, track and manage the updates	all requests throughout the project life cycle To regularly review the impact of the change initiated. Decide on the approval or rejection of the change request. Review and approve the updated plan (project documentation) arising from approved changes. Jointly track the status of the change requests with the Company

Steering Committee

Project steering committee is the highest decision level of the project. Members of the project steering committee are the Client project sponsor, Misys sponsor and other senior management representatives from Client and Misys and the Bank's respective PM's.

The steering committee typically meets once in a month but this is dependent upon the status of the project and a joint decision can be taken regarding the frequency of the meetings.

Steering committee responsibilities are the following:

- To set overall direction and budget for the project
- Approve all major plans and authorize major deviation from agreed plans.
- Ensure that project direction and the Client Business/IT Strategies are adhered to at all times during the project.
- Provide management focus and guidance to ensure success of the project.
- Solving "strategic" issues and also directing the project

- Coordinate and resolve fundamental decisions and disputes
- Verify that all project deliverables and directives have been met.

The steering committee does not get involved in day-to-day activities. The project managers from both sides take guidance from this committee.

Chart 19 CBS Steering Committee (Source: BBL, PROJECT INITIATION DOCUMENT, 2014)

Name	Title
Mr Jose Cardona (Steering Committee Chair)	Chief Operating Officer
Mr Lyndon Guiseppi	Project Sponsor
Mr Naysan Ahmadiyeh	Project Manager
Mr Martin Marshalleck	Head - Corporate and Retail Banking Services
Mr Michael Coye	Deputy Chief Finance Officer
Ms Dalila Castillo	Manager, Human Resources
Mr Fillipo Alario	Chief Risk Officer
Mr Mohan Mahase	Chief Audit Officer
Ms Karen Johnson (Misys)	Misys Sponsor
Mr Brian Philips (Misys)	Misys Project Manager

Change Control Board

The Change Control Board is chaired by Mr Jose Cardona. The purpose of the Change Control Board is to review all change requests raised by the project. All

qualified type 1 and 2 deltas will result in a change request form being completed reviewed and approved by the business and project management prior to submission to the Change Control Board. The board is formed by members of the steering committee members and meets monthly as part of the steering committee agenda. In the case change requests cannot wait for the next Steering Committee meeting the chair will call a change Control Board meeting to approve / reject the change in principle prior to the next steering. This change / decision are then ratified at the next steering committee.

Project Management Responsibility Matrix

Chart 20 Project Management Responsibility Matrix (Source: BBL, PROJECT INITIATION DOCUMENT, 2014)

Misys Responsibilities	Client Responsibilities
Assign a project manager as a single point of contact with the Client for all matters relating to the delivery of Services under this Proposal. The project manager will be responsible for : • Prepare on a monthly basis the project status reports. The project status report will report on the project's progress (schedules versus actual), issues, and risks; • Weekly project Control Meeting - Monitoring issues, risks and assisting to update the project plan • Presenting project deliverables for review and acceptance by the Client; • Managing the availability of the Misys resources; • Notify the Client of any issues that may result in any delays to the project plan; • Review with the Client any requests for change to scope or schedule; and • Review with the Client the status and resolution plan for any reported issues and risks.	Assign a project manager as a single point of contact for all matters relating to the Project. The project manager will be responsible for: • Reviewing and participation in the project status report monthly with Misys project manager; • Participating in Weekly Project Control Meetings • Managing the availability of the Client resources; • Monitoring and updating the project plan • Notify Misys of any issues that may reasonably result in any delays to the provision of required resources, information or infrastructure that may significantly impact Misys's ability to perform the Services; • Review with Misys any requests for changes to scope or schedule; and • Review with Misys the status and resolution plan for any issues and risks.

Project Team Roles and Responsibilities

The project team roles and responsibilities can be seen in the “Project Organization” section of the bank’s Project Charter documented in the Project Integration Management.

Staffing Management

Training Requirements

The staffs that will require some training to improve or engage in a specific knowledge area are listed below:

Programmers & Developers – will be required to train in a new programming language called JAVA in order to develop all interfaces, codes, and programs in this required language.

Project Business Team – will be trained in BPA workshops by Misys team to gain knowledge of the system and model bank.

Reporting Team – will be trained to use Crystal Report application as a new tool for report development.

System Admins – will be trained on the new systems specifications and networking.

DBA, Programmers, Developers, & Reporting Team – will be trained to use DB2 SQL.

Rewards and Recognition

All staff that demonstrates a positive attitude, efficiency, effectiveness, initiative towards their task, risk prevention, and respect towards authority will gain, at the end of the project, a certificate of recognition. This recognition will also affect positively their yearly appraisal which in effect will influence their yearly increment of salary. Additional working hours approved by the project manager (BBL) will paid at considerate rate called honorarium allowance. In addition, meal and travelling allowance will be provided depending on the time worked in excess.

4.7 Communication Management Plan

The Project Communication Management is the process that includes the Communication Management Plan. In this process we will develop an appropriate approach for project communication across project teams and stakeholders in order to avoid delay in message delivery, audience miscommunication, and insufficient communication to stakeholders. As a result a high level view of the communication between Misys and Client teams will be provided along with the project's communication matrix.

Communication between Misys and Client Teams

It is important to involve key stakeholders from the project start, to ensure that the decisions and solution design will match business expectations.

It is a key success factor to ensure governance is in place and is followed through during the implementation, as well as to agree on the communication channels to setup. The communication channels between the various teams are usually the following:

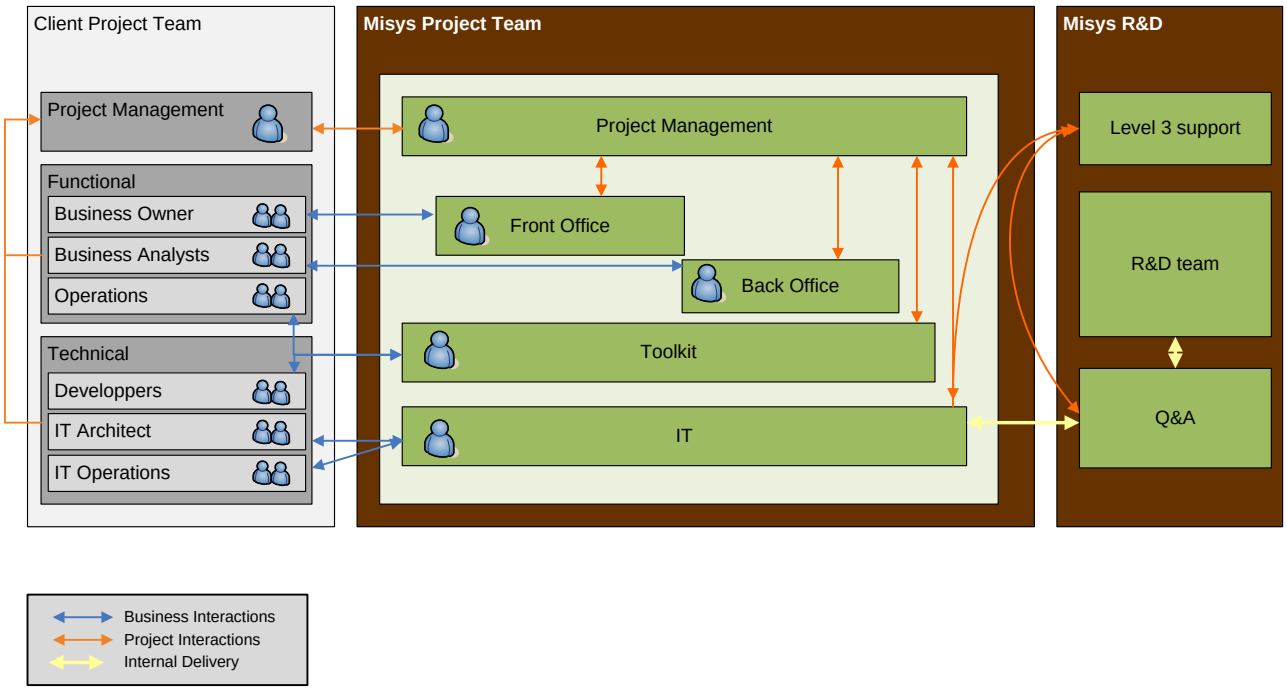

Figure 11 BBL Core Banking System Communication Plan (Source: BBL, PROJECT INITIATION DOCUMENT, 2014)

Project Communication Matrix

Chart 21 BBL Core Banking System Project Communication Matrix (Source: Elaborated by the author, 2017)

PROJECT COMMUNICATION MATRIX					
Communication Type	**Description**	**Medium**	**Frequency**	**Owner**	**Audience**
Project Status Reviews & Meetings	Project Updates	Meetings	Monthly	Project Manager	Project managers, project sponsor, and steering committee
	Project Deltas	Meetings	Monthly	Project Manager	Project managers and Design Authority Group
	Project Deltas Request & Approvals	Meetings	Monthly	Project Manager	Project managers and Change Control Board
	Weekly Updates	Meetings	Weekly	Team Leaders	Project Team Leaders, Project manager
	Misys Team discussion	Meetings, emails, and conference calls	Weekly	Misys Project Manager	Misys Project Manager and Misys Team

Deltas, Change Request and Approvals	Project Updates - High Level Reporting	Report	Monthly	Project Manager	Project managers and steering committee
	Project Deltas Report documentation	Report	Monthly	Design Authority Group	Design Authority Group, project managers
	Project Deltas Request & Approvals	Report	Monthly	Project Manager	Project managers and Change Control Board
	Weekly Updates - minutes	Report/email	Weekly	Team Leaders	Project Team Leaders, Project manager
Presentation	Project Updates - High Level Reporting	Report	Monthly	Project Manager	Project managers and steering committee
	Project Deltas Request & Approvals	Report	Monthly	Project Manager	Project managers and Change Control Board
Personal Communications	Misys and BBL Project Managers daily updates	Face to Face	Needs Basis	Project Managers	BBL and Misys Project Managers
	Project Concerns and updates	Face to Face / email	Needs Basis	Steering Committee (Chair)	Steering Committee (Chair), Project Managers, and Project Sponsor

4.8 Risk Management Plan

Risk Identification and Analysis

There are number of risks to consider that require careful analysis. In this section the project requirements will be defined. Project planning, budgeting, acceptance of deliverables and resources are important points to consider in risk analysis. The project manager is responsible for project ownership and mandatory industry developments that have an impact on this project. The project manager is also responsible in defining key indicators that impacts the project that will require analysis and attention. Finally, a brief overview of the change management risk will be provided in this document.

Project Requirements Definition

One of the major risks the project may face is inadequate identification and definition of the functional requirements, in order to close the scope. The scheduling of the Business Process Alignment workshops at the inception of the project is deliberate. The careful definition of our requirements within the context of the Model Bank approach will help avoid changing requirements in the middle of the project. This leads to scope drift, one of the biggest risks faced in projects of this size. The Model Bank approach is intended to mitigate this specific risk, and is based on the adoption of industry best practices rather than replicating our current business processes.

Project Planning

The Project Plan must be comprehensive and detailed with proper allocation of resources and achievable timelines.

Budget

The Budget should account for all possible sources of expenditure for the duration of the project. It should provide a comprehensive and accurate picture of the financial investment undertaken by the organization.

Acceptance of Deliverables

The Bank must ensure that criteria are clearly defined, and deliverables are met before formal acceptance. For example, business users are required to perform user acceptance testing and to sign off on formal Acceptance. The risk is the acceptance of deliverables that are incomplete or inaccurate.

Resources

The Bank must have sufficient technically skilled resources both from the business and ISD for successful implementation. The input of the Business Leads is critical during the BPA Workshops and User Acceptance Testing. It is also essential that the Bank’s resources be given adequate time to devote to the execution of their project responsibilities. The Information Systems Department has the responsibility

to develop all the ancillary interfaces to Essence, and all the reports while supporting the existing legacy system. There is a risk of resource bottlenecks in this area.

Project Ownership responsibility

Projects of this scope or magnitude often experience a risk of perception that the owner is the Information Systems department, although in reality it should be driven by the Business. There is the risk of inadequate participation of the business units of the Bank. As a result, critical decisions often fail to be taken in a timely manner, and the Information Systems department is left to make sub-optimal decisions.

Mandatory Industry Developments

There are a number of projects that are envisioned in the industry under the aegis of the Central Bank. These include National Payment Systems Reform components such as Automated Clearing House (ACH) electronic funds transfer system, the Real Time Gross Settlement System (RTGS), as well as the National Credit Reporting System (Credit Bureau). In addition to this, the Bank is required to implement EMV chip card issuing and acquiring. These projects may compete for technical resources with the CBSI.

Project Team Continuity – Losing key personnel from the Project Team may cause a disruption in implementation.

There is a risk of natural disasters such as a hurricane, or other force majeure event affecting the project timelines.

Change Management Risk

Projects of this scope which can have a profound transformational impact on the business processes of an institution carry a significant that stakeholders, both internal and external, may resist the change exhibiting various levels of resistance or even rejection. This risk is managed by executing in parallel a Change Management program which seeks to pre-empt resistance by engaging

stakeholders at inception keeping them continuously informed and involved. The Change Management stream will involve both staff and clients.

Risk Breakdown Structure (RBS)

In order to identify and keep record of the risks that could eventually have some negative impacts on the project, the below table of the Risk Breakdown Structure (RBS) is created. This tool will allow the project manager to effectively manage and get the project on track.

Chart 22 Risk Breakdown Structure (Source: Elaborated by the author, 2017)

Level 0	Level 1	Level 2	Level 3
Project Risk	1. Core Banking System	1.1 Requirements	1.1.1 Feasibility
			1.1.2 Completeness
		1.2 Design	1.2.1 Functionality
			1.2.2 Testability
		1.3 Unit Test	1.3.1 Testing
			1.3.2 Implementation
		1.4 System Specialities	1.4.1 Reliability
			1.4.2 Security
	2. Program Constraints	2.1 Resources	2.1.1 Human Resource
			2.1.2 Capital Resource

Impact and Probability Scale

In order to determine the severity of the risks identified, a probability and impact factor will be assigned to each risk. This process will allow the Project Manager to prioritize risks based upon the potential impact to the project. As risks are assigned a probability and impact, the Senior Project Director will move forward with risk mitigation/avoidance planning.

Please note that the below values are just estimated figures provided as a guide by the researcher with no influence from the researched bank.

Chart 23 BBL Core Banking System Impact Scale (Source: Elaborated by the author, 2017)

Impact Scale					
Project Objectives	Negotiable (1)	Minor (2)	Moderate (3)	Significant (4)	Severe (5)
Cost	Less than $500k over budget	$500k-1,000k over budget	$1,000k-$2,000k over budget	$2,000k-$3,000k over budget	$3,000k-$5,000k over budget
Time	6 months delay	6mth. - 12mth. delay	12mth. - 18mth. delay	2 years delay	2 - 3years delay
Scope	Scope decrease are acceptable or not noticeable	Scope affected is minor or not significant to create any concerning impact	Major area of scope affected and demands remedial actions	Situation is critical and stakeholders are losing interest in the project. At this time rate of return on investment is low or non-existent	Project is at a standstill and highly impacting staff resources and consequently customer service to BBL clients.
Quality	Slight or no effect on development	Minor or acceptable effects on development	Impacts on development warrants serious attention and analysis	Impact on development is very significant and warrants immediate attention in an attempt to save or salvage the project	The core banking suffered significant delays and work overload, that project sponsor have stop investing. Project seems hopeless to develop and it's time for key stakeholders to go back to the drawing board.

Chart 24 BBL Core Banking System Probability Scale (Source: Elaborated by the author, 2017)

Probability Scale					
Probability Class	Very Low (0.05)	Low (0.10)	Moderate (0.20)	High (0.40)	Very High (>0.40)
Probability	once every 10 years	once every 5-10 years	once every 3-5 years	once every 2-3 years	at least once every 1-2 years

Chart 25 BBL Core Banking System Pxl Scale (Source: Elaborated by the author, 2017)

Pxl Scale	
Risk Level	**Range**
Very High	41 - 80
High	21 - 40

Moderate	11 - 20
Low	6 - 10
Very Low	1 - 5

Probability and Impact Matrix

Once risks are identified it is important to determine and revisit the probability and impact of each risk in order to allow the project manager to prioritize the risk avoidance and mitigation strategy. Risks which are more likely to occur and have a significant impact on the project will be the highest priority risks while those which are more unlikely or have a low impact will be a much lower priority. This is usually done with a probability – impact matrix/scale as seen below.

Chart 26 BBL Core Banking System Probability & Impact Matrix (Source: Elaborated by the author, 2017)

Probability & Impact Matrix					
	Impact				
	1	2	3	4	5
Probability	Very Low	Low	Moderate	High	Very High
41% - 100 %	10	20	40	60	80
21% - 40%	7	12	27	36	65
11% - 20%	5	9	15	25	40
6% - 10 %	3	6	8	12	20
1% - 5%	1	3	4	7	9

Risk Register

The BBL's Core Banking System Project Risk Register is a log of all identified risks, their probability and impact to the project, the category they belong to, mitigation strategy, and when the risk is estimated to occur. This register will be created in the early planning phase of the project. Based on the identified risks and timeframes in the risk register, applicable risks will be added to the project plan. The level of risk on the project will be tracked, monitored, controlled and reported throughout the project lifecycle by the project manager. The most likely and greatest impact risks will be added to the project schedule to ensure that proper monitoring occurs during the time of risk exposure.

Chart 27 BBL Core Banking System Risk Register (Source: Elaborated by the author, 2017)

RBS Code	Risk	Cause	Consequences	Probability	Impact
1.1	Stakeholder trust damage	Stakeholders' (mainly, investors and government) trust damaged due to inaccurate or incomplete information	System and hardware delivery delays and potential overhead cost.	At least once	Severe (5)
1.2	System Failure	Reduced productivity due to systems failures	Slow system, customer service production decrease, customer dissatisfaction, and potential loss of customers. Ensure systems have adequate power supplies	At least once month	Severe (5)
1.3	Server compromised	Server compromise through exploitation of vulnerabilities	Vulnerable to hackers, virus, malwares, and spywares. Need to Initiate a patch management solution	At least once every years	Severe (5)
4.3	Natural Disasters; hurricanes and earthquakes	Active systematic fault depending on impact location	System and hardware damage. Need to insure that they are insured.	once every 2-3 years	Significant (4)
1.4	Feasibility Studying and Planning	Uncertainty in the viability of the development of such a high-risk investment project.	unavailability of an outlined program and plan;	once every 3-5 years	Moderate (3)
2.1	The selected core banking system does not optimally meet the details of the Bank's current and future requirements.	Poor business decision from workshops and failure to report adequate and effective deltas.	Ineffective system.	At least once	Moderate (3)

4.2	Change of government and regulations	Elections are held every five years	temporary suspension of the project if government changes	once every 3-5 years	Moderate (3)
3.1	Confidential company information lost or stolen.	The Information Assets to ensure proper understanding of all information is not updated. Appropriate security systems to protect project information are not implemented.		once every year	Minor (2)
3.2	Insufficient Resource	Due to multiple projects implementation, resource may be an issue.	Project delay	Once every year	Minor (2)
4.1	Test Packs	Improper analysis of test scenarios and test cases.	Testing does not meet with bank's functionality requirements. Potential ineffective system result.	once every 5-10 years	Minor (2)

RBS Code	PxI	Trigger	Mitigation Strategy	Owner
1.1	80-Very High	Improper documentation or insufficient data gathered from the purchasing company.	Follow ups and review that all required documents are gathered from the purchasing company.	Project Manager
1.2	80-Very High	Systems have inadequate power supplies	Purchase additional power supply and ensure its effectiveness.	Project Manager, System Admins
1.3	80-Very High	Inadequate patch management solution	Increase security policy and develop and effective release procedures and patch management.	Project Manager, System Admins
4.3	40-High	Increase in rainfall over the last 3-5 years	Insure all hardware systems for disaster recovery.	Project Developer and Coordinator
1.4	20-Moderate	viability of development and resources confirmation	Develop an outlined program and plan and confirm the viability development.	Developer and Consultant
2.1	20-Moderate	Oversight of Business Team leads.	Improve Testing Team procedures and workshops. Ensure business leads signoff on workshops outcomes to make them fully aware of the importance of this phase.	Design Authority Group
4.2	15-Moderate	Opposition Party and other Civil Society Agencies have doubts about the project and system importations.	Include an additional cost in the budget for this event in order to add additional resources to the project or perform alternative solutions.	Project Managers.
3.1	10-Low	Data unsecured or easily accessible.	Improve security backup and storage procedures, policies,	Security Officer

			and reinforce its implementation.	
3.2	10-Low	Neither Program nor Portfolio Management implemented.	Implement a Portfolio Management System and include a manager for this. An alternative solution would be to hire additional resources.	Project Manager and Human Resources
4.1	10-Low	Lack of follow up and improper test packs developments. Knowledgeable users required.	Test leads will sign-off on every test packs and will be fully responsible of its results. This should increase awareness.	Project Testing Team and Project Manager.

Quantitative Risk Analysis

The bank will perform analysis based on a quantitative risk approach. The process numerically analyzes the effect of identified risks and produces risk information to support decisions that will reduce project uncertainty. It is important to note, however, that due to confidentiality, details of this information will not be provided in this document.

Range of Project Cost Estimates

Chart 28 BBL Project Cost Estimates (Source: Elaborated by the author, 2017)

WBS Element	Low	Most Likely	High
Project Initiation			
Define - Discovery			
Define - Design & BPA			
Build			
Test			
Close - Go Live			

Risk Responses

In this process the bank will develop options and actions to enhance opportunities and reduce threats to project objectives (*PMBOK® Guide* 5th Edition, 2013, pg. 342). As a result, strategies will be developed to address negative risks / threats and positive risks / opportunities. In addition contingent responses will designed and developed to respond to certain events, if they occur.

Chart 29 BBL Risk Response Strategies (Source: *PMBOK® Guide* 5th Edition, 2013, pg. 344)

Strategies	
Negative Risks / Threats	**Positive Risks / Opportunities**
Avoid - Team will act to eliminate threats or protect the project from its impact	**Exploit** - the team will eliminate any uncertainty associated with a particular upside risk and ensure that the opportunity is realized.
Transfer - The impact of threats will be shifted to Misys by the project team, together with ownership of the response.	**Enhance** - the probability and positive risks of an opportunity will be increased through the definition and identification of key drivers and indicators.
Mitigation - the project team will act to reduce the probability of occurrence.	**Share** - some of the ownership of an opportunity will be allocated to Misys depending on who is better able to capture the opportunity for the benefit of the project.
Accept - the acknowledgement of a risk(s) is considered the team without taking any further actions unless the occurrence of the risk(s). On the other hand, it is the will to take advantage of an opportunity, however, not actively pursuing it.	

To address the risk responses, the project management plan and other documents will be updated accordingly. The risk register has been written with the level of detail that corresponds with the priority including strategies like the mitigation of risks and specific actions to implement a chosen response strategy. Possible risk responses can also result in recommendation for changes to resources, activities, costs and other items. These identified change request are reviewed by the

project manager and further elaborated with the change control board and steering committee.

Control Responses

In this process the bank will implement risk response plans that will track identified risks in order to improve the efficiency of the risk approach throughout the life cycle of the project. As a result, in order to communicate and support project decisions, work performance information will be developed by the project manager. Adjustments to the change request will be made to include recommended corrective and preventive actions in order to realign and ensure the alignment of the future performance of the project work with the project management plan (*PMBOK® Guide* 5th Edition, 2013, pg. 353).

4.9 Procurement Management Plan

It is necessary to define and plan all the processes required to purchase the products, services or results. As a result, we will document all the project procurement decisions in the Procurement Management Plan. The inputs used to develop this plan are the project management plan, risk register, activity resource requirements, and project schedule. The tools and techniques used were expert judgment and meetings (BBL, Consolidated Minutes of Meetings, 2015).

Introduction

The procurement framework will be defined in this process in order to serve as a guide to manage and control the procurement through the life cycle of the project. This plan will identify the items to be procured, the types of contracts to be used in support of this project, the contract approval process, and decision criteria. It is important to note that costs are not detailed in this document due to confidentiality of researched company.

Procurement Management Approach

The project manager will perform the overview, management, and identification of all procurement activities for the successful completion of this project. The project manager will carefully evaluate all potential sellers and their products in order to take advantage of control over acquisition decisions. Prior to any purchasing agreements, the project manager will review the procurement list. All procurement items will be analysed in order to determine a make-or-buy decision. Subsequently, a vendor selection will be made and the purchasing and contracting process will commence.

Procurement Definition

A list of procurement items and services has been determined for the successful completion of the project. Below is a list of items and/or services that are pending for the project manager to review before for the commencement of purchasing process.

Chart 30 Procurement Listing (Source: Elaborated by the author, 2017)

Item/Service	Other Details
Initial License Fee	Systems and software's license fee
Recurring License Fee	Fee during two years implementation: The Recurring License Fee is an annual fee which is payable over the term of 12 years. This implementation budget includes only the recurring license fees payable during the two years of the initial implementation.
Professional Services	The 25% contingency is a conservative estimate, based on the assumption of a significant level of success in the application of the Model Bank Approach. Experience indicates that projects of this nature can suffer significant cost overruns, but the use of the Model Bank Approach is intended to mitigate the risk of scope drift by reducing the need for customization

Travel and Accommodation	For professionals, specialists, and experts: The Misys Project Manager based in Dublin, Ireland would travel a total of 19 times to Belize. The Functional Architect would travel from the UK to Belize 4 times. The Datastore resource based in the UK would travel to Belize 1 time. The Misys technical resources based in Bangalore, India would travel to Belize 36 times (assuming an average 2-month stay for each resource).
Hardware and Installation	IBM Stack Hardware and Installation Power 740 Server #1 Power 740 Server #2 Power 740 Server #3 HMC Administrative Console + SW + Monitor Rack and PDU SAN v5000 SAN Switch Intel Reporting Server Installation
Training	Training and Workshops Basic DB2 Administration Web sphere Application Server V8.5 Introduction to Java using Eclipse BPA Workshops and specialist training
Human Resources	2 Developers by contract (2 years)
Escrow	Misys has an Escrow Agreement with NCC Group, a UK company. If the Bank chooses to participate in this escrow agreement it must become registered as a beneficiary of Misys' general escrow. The following are annual costs for participating in the service: 1. Cost per product 2. Quantity of products (3) 3. Implementation years (2) 4. Estimated compilation and testing costs.
Third Party Software	SQL Server 2008 R2 (4 core license) SAP Enterprise Support Crystal Report Server SQL Server License Fees
Third Party Interfaces	Ncompass Capture Migration NCR 2nd Milestone Proof Sets Euronet ISO8583 V93 Interface to Support Mysis FBS Alchemy FBE interface
UPS - Equipment Power Supply	3 6KVA 220 Volt UPS
Additional Cooling	5 Ton AC unit

Training Hardware	>12 laptops to be used for BPA Workshops and End User Training >6 laptops to be used for MISYS Workstations >Mifi Device for Internet Access >Cable Internet

Types of Contracts

The main type of contract for this project is the Framework License and Service Agreement. The Framework Agreement establishes the general terms and conditions to which the parties have agreed in order to facilitate the licensing of Software, provision of Maintenance Services and other services from the company set out and/or any of its Affiliates.

Other contracts are to be solicitude under a fix price contract. Such contracts include lifetime licenses agreements per unit area for Crystal Reporting and IBM systems. Other services such as integration, automation, management, communications, and system maintenance also falls within the fix price contract.

Procurement Risk

In order to ensure project success, it is essential to manage potential risks triggered by procurement activities. As a result, risks related to procurement activities, additional management and control will be in place apart from the project risk management. All risks will be managed in accordance to the project risk management plan.

Project procurement management may potentially have an impact not only to external organizations but also to internal supply chain, vendor management, and future business relationships. As a result, any changes and decisions made in relations to procurement activities, the project manager and to project sponsor will be involved. Procurement risks that must be considered apart from what has been listed in the project risk management are:

- The number of trips taken by the Misys project manager appears to be excessive and every effort will be made to reduce them as much as possible. The bank will utilize remote collaboration sessions as much as possible, to help reduce this cost.
- The cost of the round-trip airfare estimates from Dublin and the UK to Belize as well as Bangalore to Belize seems to be somewhat high, but in some cases an overnight stay in the United States might add to the overall cost. Again, there may be seasonal fluctuations in airfare, and we will make every effort to obtain the best rates balanced with reasonable itineraries.
- There is a possibility of unrealistic schedule and cost expectations for vendors.
- Systems and servers must be insured, prior to delivery to Belize, to avoid any malfunctioning or damages to systems due to risks in delivery.
- Potential delays in shipments which may further lead to impacts in cost and schedule of the project.
- Possibility of conflicts with contracts and vendor relationship.
- Technology improvements and configurations administrations.
- Possibility that the final product/service delivered does not meet with the required specifications.

Selection Criteria

The selection criteria for procurement activities and contracts will be based on the following and measured by the project manager along with key stakeholders and team members:

1. Effectiveness - vendor’s ability to provide the product/service by the required date.
2. Quality – ensure the standard of all purchased products and software are in excellent standards.

3. Cost – purchasing the best quality of products and the lowest possible cost.
4. Expected delivery date – procurement selection are based on delivery date meeting the dates defined in the project's schedule.
5. Past performance – research and development will be performed to evaluate the product's past performance, buying power, and if it's viable for purchasing.
6. Sustainability – ensure that goods achieve the value of money by generating benefits to the bank and economy.

Chart 31 Source Selection Criteria (Source: Elaborated by the author, 2017)

Source Selection Criteria							
Project:							
Title:							
Procurement:							
Date:							
	Weight	**Candidate1 Rating**	**Candidate 1 Score**	**Candidate 2 Rating**	**Candidate 2 Score**	**Candidate 3 Rating**	**Candidate 3 Score**
Criteria1							
Criteria2							
Criteria3							
Criteria4							
Criteria5							
Criteria6							

4.10 Stakeholder Management Plan

Introduction

In this process we'll identify the people, groups, or organizations that will have an impact to the project. The project charter was used as input to identify the stakeholders using tools and techniques such as expert judgement and meetings (BBL, Consolidated Minutes of Meetings, 2015). In this process we will define the stakeholder register.

The stakeholder analysis involves the review of the stakeholder register. This will aid in the identification of all relevant data required for the selection of management strategies and level engagement for each stakeholder. There is number of individual who have a variety of degree of influence, power, and impact towards the project. The project manager is responsible for reviewing and updating the risk register paying keen attention to all potential stakeholders and their level of influence and/or impact towards the project.

Chart 32 CBS Stakeholder Register (Source: Elaborated by the author, 2017)

STAKEHOLDER REGISTER						
Project Name:	Core Banking System			**Project Manager:**	Naysan Ahmadiyeh	
Prepared By:	Elias Vidal			**Project Sponsor:**	Lyndon Guiseppi	
Date:	5-Nov-17					
Count	**Initial ID**	**Title**	**Name**	**Organization**	**Group**	**Role**
1	LG	Mr	Lyndon Guiseppi	BBL	Project Sponsor	BBL Project Sponsor / Steering Committee
2	JC	Mr	Jose Cardona	BBL	Steering Committee	Steering Committee (Chair)
3	MM	Mr	Martin Marshalleck	BBL	Steering Committee	Steering Committee / Business Representative
4	MC	Mr	Michael Coye	BBL	Steering Committee	Steering Committee
5	DC	Ms	Dalila Castillo	BBL	Steering Committee	Steering Committee/Ops Procedures & Change Management (Chair)
6	KJ	Ms	Karen Johnson	Misys	Project Sponsor	Misys Project Sponsor
7	NA	Mr	Naysan Ahmadiyeh	BBL	Project Manager	BBL Project Manager/ Steering Committee
8	FA	Mr	Fillipo Alario	BBL	Steering Committee	Steering Committee
9	MMM	Mr	Mohan Mahase	BBL	Steering Committee	Steering Committee / Ops Procedures & Change Management
10	BP	Mr	Brian Phillips	Misys	Project Manager	Misys Project Manager / Steering Committee
11	CP	Mr	Carlos Pineiro	BBL	Consultant	Project Consultant

12	SV	Mrs	Sandra Vasquez	BBL	Operations & Change Management	Ops Procedures & Change Management
13	DA	Mr	Desmond Austin	BBL	Operations & Change Management	Ops Procedures & Change Management
14	HR	Mr	Hassaram Ramchandani	BBL	Integration	Ops Procedures & Change Management, Integration (Chair)
15	LC	Mrs	Lizanni Cuellar	BBL	Operations & Change Management	Ops Procedures & Change Management
16	EV	Mr	Elias Vidal	BBL	Reporting	Reporting (Chair), BPA Workshop, SIT, UAT, Dress Rehearsal
17	CB	Mr	Curtis Bradley	BBL	Business Stream	BPA Workshop, SIT, UAT, Dress Rehearsal
18	KS	Mrs	Karina Salazar	BBL	Business Stream	BPA Workshop, SIT, UAT, Dress Rehearsal
19	RH	Ms	Rochelle Haylock	BBL	Business Stream	BPA Workshop, SIT, UAT, Dress Rehearsal
20	RS	Mr	Randon Stuart	BBL	Business Stream	BPA Workshop, SIT, UAT, Dress Rehearsal
21	MLM	Mr	Manickam Madasamy	Misys	SME	Business Representative, System Admins, Configuration and EOD Operations, BPA SME
22	KN	Mrs	Kavitha. N	Misys	SME	Business Representative
23	JS	Mr	Javier Sosa	BBL	Application & IT Infrastructure	System Admins, Configuration and EOD Operations (Chair), IT Infrastructure (Chair)

24	AC	Mr	Alex Carillo	BBL	Application & IT Infrastructure	System Admins, Configuration and EOD Operations
25	MA	Mr	Michael Alpuche	BBL	Application & IT Infrastructure	System Admins, Configuration and EOD Operations
26	DS	Mr	Dennis Swan	BBL	Application & IT Infrastructure	System Admins, Configuration and EOD Operations, DBA
27	JB	Mr	James Bushell	Misys	Application & IT Infrastructure	System Admins, Configuration and EOD Operations
28	FO	Mr	Francisco Obando	BBL	Migration	Integration, Migration (Chair)
29	RPH	Mrs	Rona Heredia	BBL	Migration	Integration / Migration
30	GA	Mr	Gustavo Alvarez	BBL	Integration	Integration / Migration
31	JO	Mr	Jorgen Ordonez	BBL	Integration	Integration
32	JW	Mr	Jia Wu	BBL	Integration	Integration
33	RD	Mr	Ravi Desika	Misys	Integration	Integration
34	SC	Mr	Satish Chandar	Misys	Migration	Migration
35	VS	Mr	Viknesh Saravana	Misys	Migration	Migration
36	EA	Mr	Erwin Arnold	BBL	Application & IT Infrastructure	IT Infrastructure

37	SM	Mr	Sudeep Mathew	Misys	Application & IT Infrastructure	IT Infrastructure
38	MAM	Mr	Miguel Morales	BBL	SME	SME - Internal Audit
39	MH	Mrs	Mercedes Herrera	BBL	SME	SME - Compliance
40	EP	Mr	Emory Perrera	BBL	SME	SME - Compliance
41	DD	Mr	Derek Davis	BBL	Project Manager	Project Manager Assistant
42	DM	Mr	David Mckintoch	BBL	Integration	Integration (Contract)
43	YP	Mr	Yserri Palacio	BBL	Integration	Integration (Contract)
44	CUS	Ext	Customs	GOB	Regulatory Bodies	Review & Control Importation of Systems, servers and other products.
45	GOB	Ext	Government of Belize	GOB	Regulatory Bodies	Approve Importation of products
46	EPH	Ext	External Party - Hotel	Hotels	Third Party	Reservation for Misys personnel
47	CBB	Ext	Central Bank of Belize	CBB	Regulatory Bodies	Regulator

Count	Contact Information	Location	Mediums Availability	Influence	Perspective to project	Impact	Internal / External
1	ceo@belizebank.com	Belize City	Email, Telephone, Face-to-face	High	Positive	High	Internal
2	cio@belizebank.com	Belize City	Email, Telephone, Face-to-face	High	Positive	High	Internal
3	cbc_mgr@belizebank.com	Belize City	Email, Telephone, Face-to-face	High	Positive	High	Internal
4	finance_mgr@belizebank.com	Belize City	Email, Telephone, Face-to-face	High	Positive	High	Internal
5	hr_mgr@belizebank.com	Belize City	Email, Telephone, Face-to-face	High	Positive	High	Internal
6	kjohnson@misys.com	California, USA	Email, Telephone	High	Positive	High	External
7	it_mgr@belizebank.com	Belize City	Email, Telephone, Face-to-face	High	Positive	High	Internal
8	cro@belizebank.com	Belize City	Email, Telephone, Face-to-face	High	Positive	High	Internal
9	cia@belizebank.com	Belize City	Email, Telephone, Face-to-face	High	Positive	High	Internal
10	bphillips@misys.com	Belize City / London	Email, Telephone, Face-to-face	High	Positive	High	External
11	cpineiro@gmail.com	Belize City / Miami FL, USA	Email, Telephone, Face-to-face	Medium	Positive	Medium	Internal
12	op_mgr@belizebank.com	Belize City	Email, Telephone, Face-to-face	Medium	Positive	Medium	Internal
13	retail_mgr@belizebank.com	Belize City	Email, Telephone, Face-to-face	Medium	Positive	Medium	Internal

14	develop_lead@belizebank.com	Belize City	Email, Telephone, Face-to-face	High	Positive	High	Internal
15	bbil_mgr@belizebank.com	Belize City	Email, Telephone, Face-to-face	Medium	Positive	Medium	Internal
16	ba_lead@belizebank.com	Belize City	Email, Telephone, Face-to-face	High	Positive	Medium	Internal
17	op_cus@belizebank.com	Belize City	Email, Telephone, Face-to-face	Low	Positive	Low	Internal
18	op_sup@belizebank.com	Belize City	Email, Telephone, Face-to-face	Low	Positive	Low	Internal
19	it_qata@belizebank.com	Belize City	Email, Telephone, Face-to-face	Medium	Positive	Low	Internal
20	it_qataas@belizebank.com	Belize City	Email, Telephone, Face-to-face	Low	Positive	Low	Internal
21	mmadasamy@misys.com	Belize City / Bangalore, India	Email, Telephone, Face-to-face	High	Positive	High	External
22	kavithan@misys.com	Belize City / Bangalore, India	Email, Telephone, Face-to-face	High	Positive	Medium	External
23	it_admin@belizebank.com	Belize City	Email, Telephone, Face-to-face	High	Positive	High	Internal
24	it_sec@belizebank.com	Belize City	Email, Telephone, Face-to-face	Low	Positive	Low	Internal
25	it@adminas@belizeban.com	Belize City	Email, Telephone, Face-to-face	Low	Positive	Low	Internal
26	it_dba@belizebank.com	Belize City	Email, Telephone, Face-to-face	Medium	Positive	Medium	Internal

27	jbushell@misys.com	New York, USA	Email, Telephone	High	Positive	High	External
28	it_sarchitect@belizebank.com	Belize City	Email, Telephone, Face-to-face	High	Positive	High	Internal
29	it_architectsup@belizebank.com	Belize City	Email, Telephone, Face-to-face	Low	Positive	Low	Internal
30	it_developasst@belizebank.com	Belize City	Email, Telephone, Face-to-face	Low	Positive	Low	Internal
31	it_devjr@belizebank.com	Belize City	Email, Telephone, Face-to-face	Low	Positive	Low	Internal
32	it_ib@belizebank.com	Belize City	Email, Telephone, Face-to-face	Low	Positive	Low	Internal
33	rdesika@misys.com	Belize City / Bangalore, India	Email, Telephone	High	Positive	Medium	External
34	schandar@misys.com	Belize City / Bangalore, India	Email, Telephone	High	Positive	Medium	External
35	vsaravana@misys.com	Belize City / Bangalore, India	Email, Telephone, Face-to-face	High	Positive	Medium	External
36	it_secasst@belizebank.com	Belize City	Email, Telephone, Face-to-face	Medium	Positive	Low	Internal
37	smathew@misys.com	Belize City / Bangalore, India	Email, Telephone, Face-to-face	High	Positive	High	External
38	ia_mgr@belizebank.com	Belize City	Email, Telephone, Face-to-face	Medium	Positive	Medium	Internal
39	comp_sup@belizebank.com	Belize City	Email, Telephone, Face-to-face	Medium	Positive	Medium	Internal

40	comp_mgr@belizebank.com	Belize City	Email, Telephone, Face-to-face	Medium	Positive	Medium	Internal
41	it_sysanalyst@belizebank.com	Belize City	Email, Telephone, Face-to-face	Medium	Positive	Medium	Internal
42	it_temp1@belizebank.com	Belize City	Email, Telephone, Face-to-face	Low	Positive	Low	Internal
43	it_temp2@belizebank.com	Belize City	Email, Telephone, Face-to-face	Low	Positive	Low	Internal
44	customs_bz@gov.bze.com	Belize City	Email, Telephone, Face-to-face	Medium	Neutral	High	External
45	gob_bz@gov.bze.com	Belize City	Email, Telephone	Medium	Neutral	High	External
46	ramada_princess@btl.net	Belize City	Email, Telephone	Low	Neutral	Low	External
47	cbb@gov.bze.com	Belize City	Email, Telephone, Face-to-face	Medium	Positive	High	External

Stakeholder Power / Interest

With the use of the stakeholder register, the project manager will be able to assess each stakeholder and/or group as well as their level of impact and interest towards the project. This activity will aid to identify and categorize groups so that the required attention is given in accordance to the level of engagement needed. As a result, a Power / Interest Grid will be created to categorize each group and display their level of power versus their interest.

Stakeholder Power / Interest Grid

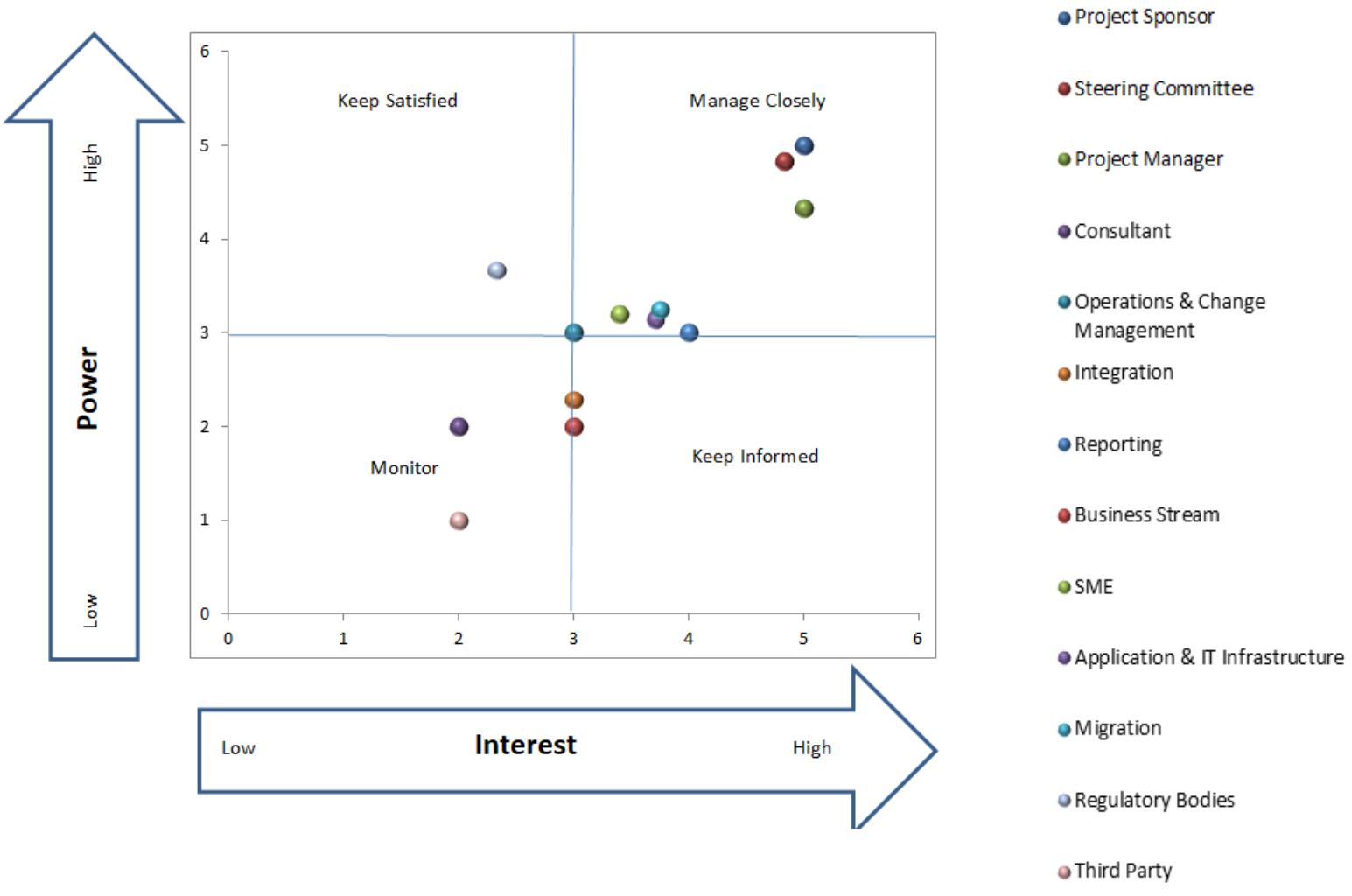

Figure 12 Stakeholder Power/Interest Grid (Source: Elaborated by the author, 2017)

Plan Stakeholder Management

In this process we will define and develop appropriate management strategies in order to allow effective stakeholder engagement throughout the life of the project. This will provide a lucid and well actionable plan in order to interact with stakeholders and motivate support towards the project's interest. The project manager is fully responsible in engaging stakeholders and must be aware that the level of engagement for each stakeholder my change from time to time throughout the lifecycle of the project. Active engagement with key stakeholder is advisable at the initial stage of the project. As the project progresses, the project manager will swiftly start engaging the project team and other end users.

Stakeholder Engagement

It is essential to analyse current levels of engagement, thus assessing each stakeholder groups in terms of current and desired level of engagement. As a result, we'll be developing a stakeholder engagement assessment matrix to manage and control this detail. We will be using analytical techniques to compare the current level of engagement with the desired engagement required for a successful project completion. The level of engagement of stakeholders will be classified by unaware, resistant, neutral, supportive and leading (*PMBOK® Guide* 5th Edition, 2013, pg. 402). In the Stakeholder Engagement Assessment Matrix table, "C" represents the current level of engagement and "D" in the desired level of engagement.

Chart 33 Stakeholder Engagement Assessment Matrix (Source: Elaborated by the author, 2017)

Stakeholder	Unaware	Resistant	Neutral	Supportive	Leading
Project Sponsor					D C
Steering Committee					D C
Project Manager					D C
Consultant			C	D	

Operations & Change Management				D C	
Integration					D C
Reporting				C	D
Business Stream				D C	
SME		C		D	
Application & IT Infrastructure				C	D
Migration					D C
Regulatory Bodies		C		D	
Third Party			C	D	

Manage and Monitor Stakeholder Engagement

In this process, the project manager will be able to increase support and minimize resistance to stakeholders. The project manager will utilize the Communication Management Plan, stakeholder register, power / interest grid, and the Stakeholder Engagement Assessment Matrix in order to communicate relevant information to key stakeholders efficiently and effectively. This will lead for the project stakeholders to increase support and decrease resistance throughout the lifecycle of the project bring engagement closer to the desired level.

In monitoring process, all relative data will be gathered to assess the level of engagement and adjust strategies to improve engagement. The project manager will monitor the overall project stakeholder relationships and adjust document and plan in order to improve engagement. Any potential engagement that could serve as a negative impact to the project will be addressed in strategic manner in order to not affect the project but maintain a positive stakeholder relationship and engagement. As a result communication is important in this area. All stakeholders must be monitored, involved, engaged, and communicated to throughout the project.

5. CONCLUSIONS

1. The Project Management Plan was developed as per the PMBOK ® Guide 5th Edition, 2013. Additional analytical researched was performed in order to gather a concise and effective plan. As a result, the researched organization can use this plan as an effective development tool for the Core Banking System project.

   The first process developed under the Project Management Plan was the Project Integrations Management. In this process, the Project Charter was created to have an overall high level view of the basis of all the project work. In this subsidiary element, we were able to identify the business and technical objective, brief overview of the scope and cost, the project organization, and roles and responsibilities.
2. A Scope Management Plan was then developed under the Project Scope Management process gathering all the work required to successfully complete the project. In this process we have defined the Project Scope Statement and provided a detailed overview of the In-Scope and Out of Scope aspects of the project. We have further developed the project staged and deliverables, project responsibility matrix, WBS, WBS Dictionary, and a requirement management plan.
3. In order time manage time efficiently, a Time Management Plan was created under the Project Time Management process. In this plan a schedule management approach was defined with high-level milestone for the project. Subsequently, a schedule change control was defined in order to have proper documentation of how milestones and timelines will be managed and controlled effectively. Furthermore, an activity list, and network diagram was developed by the author in order to better estimate activity resources and durations. To conclude with this process activities sequence were defined and a Gantt chart was developed.
4. A Cost Management Plan was essential in order to have properly defined the completion of the project within the approved budget. Despite details of cost

not being provided by the researched company due to confidentiality reasons, the researcher managed to defined a cost management approach and further develop a project budget and cash flow chart that could be used as a guide to implement a proper cost plan.

5. It was essential to satisfy the needs of the project. In order to do so, a Quality Management Plan was defined for the Project Quality Management. In this process, a quality management approach was defined, quality requirement, assurance and control, and other stakeholder matrix was defined that could potentially impact the needs of the project.
6. A Human Resource Management Plan was developed in order to establish roles, responsibilities, organizational charts and staff responsibilities. In this process a change management responsibility was defined outlining the company's and client's responsibilities. Furthermore, the steering committee and change management board were identified and established along with the development of the project management responsibility matrix.
7. The researcher also had to develop a communication management plan in order to efficiently and effectively communicate with stakeholders throughout the lifecycle of the project. In this plan, a high level communication plan was developed to demonstrate communication between Misys and the client teams. Subsequently, a project communication matrix was developed in order to better manage and control communication.
8. A Risk Management Plan was developed in order to effectively manage control the positive and negative events that occur or can have an impact on the overall project. As a result a highly level plan was defined, and a change management risk was defined. In addition, a Risk Breakdown Structure was outlined along with its impacts and probability scale, and probability and impact matrix.
9. A Procurement Management Plan was created and a procurement management approach was defined. A procurement listing and selection criteria was developed, and the types of contracts and procurement risks were identified. This plan was developed in order to identify what support was

required, when it was needed, how much was needed, for why it was required. After completing this process it's safe to say that many outside support was required both in the product and services required; especially since the CBS is an outsource system.

10. In order to improve interaction, communication and engagement amongst stakeholders a Stakeholder Management Plan was developed for the Project Stakeholder Management. This was done through the development of the Stakeholder Register, stakeholder power / interest, Stakeholder Engagement Assessment Matrix, and better defining management and controlling stakeholder engagement.

6. RECOMMENDATIONS

1. The Belize Bank Limited should implement and apply full time Project Management methods and principles into the organization. The Belize Bank is the largest bank in Belize and fully operates with multiple projects but does not apply a solid project management standard. A major part of the project principles developed in this document was self-elaborated by the author since there was little project management principles applied.

   During the Project Integration Management the researcher has developed a detailed Project Charter that serves as an input towards the Project Management Plan (*PMBOK® Guide* 5th Edition, 2013, pg. 72). It is recommendable that the bank also applies in this process the direct, management, monitor, and control of project work in order to have a successful project completion.
2. The Belize Bank Limited should consider in developing a configuration management plan in the Control Scope. There are a number of advanced configuration requirements and this plan will aid in defining each configurable items. For the non-configurable items, a formal change control and a process for handling such controls can be implemented within this plan.
3. It is recommendable that the Belize Bank Limited adapts Enterprise Environmental Factors (EEF) and Organizational Process Assets (OPA) principles as they have a great influence in time, cost management planning, and other major parts of the project management plan.
4. Little to know information was gathered in reference to Cost Management Plan due to the confidentiality of data. However, the Belize Bank Limited should consider developing a cost forecast within the control of cost and properly communicated to key stakeholders.
5. The Belize Bank Limited should develop quality control measurement in order to validate changes and verify deliverables that will better meet the needs of the project.

6. It has been gathered that a number of employees who were key players in the project has left the organization. As a result, the Belize Bank Limited should adapt a proper project management of the team in order to address this issue. Inputs of OPA and tools and techniques such as conflict management and interpersonal skills will aid in this process.
7. The researcher did not develop manage and control communication process. As a result, the Belize Bank Limited should define and develop the process as they are vital for improvement of the communication process with its stakeholders, team members, and also customers who will be impacted by this project.
8. It is recommendable for the Belize Bank Limited to hire additional resources to address resource limitation and key staff leaving the company. It is also advisable that the bank review its contracts with Misys that could potentially impact the implementation of this project. Elaborating on the risk responses strategies will aid in this process.
9. The Belize Bank Limited should develop a conduct and control of procurement process to later close such procurements after execution. The process will ensure that both parties (seller and buyer) meet the requirements of the documented procurements.
10. The Belize Bank Limited should consider in developing an issue log within the manage stakeholder engagement process and an Information Management System (IMS). The IMS will serve as a tool for the control stakeholder engagement process which will aid the project manager in capturing, documenting, and distributing the required information to key stakeholder in reference to the cost, schedule, and performance of the project.

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8. APPENDICES

Appendix 1: FGP Charter

PROJECT CHARTER Formalizes the project start and confers the project manager with the authority to assign company resources to the project activities. Benefits: it provides a clear start and well defined project boundaries.	
Date	**Project Name:**
July 02, 2017	Development of a Project Management Plan for a Core Banking System
Knowledge Areas / Processes	**Applicacion Area (Sector / Activity)**
Knowledge areas: Integration, Scope, Time, Cost, Quality, Human Resource, Communications, Risk, Procurement, & Stakeholder **Process groups:** Initiation, Planning, & Executing	Finance and Information Technology
Start date	**Finish date**
July 02, 2017	December 15, 2017

Project Objectives (general and specific)

General objective:

To develop a project management plan for a Core Banking System in accordance to standards and principles of the Project Management Institute (PMI) ® in order to create and effective and comprehensive management plan.

Specific objectives:

1. To develop an Integration Manage«QIQQA_BIBLIOGRAPHY»ment Plan in order to define the basis of all project work (*PMBOK® Guide* 5th Edition, 2013, pg. 72).
2. To create a Scope Management Plan in order to ensure that all the work and only the work required is included in the plan to successfully complete the project (*PMBOK® Guide* 5th Edition, 2013, pg. 105).
3. To develop a Time Management Plan in order to manage time efficiently for the completion of the project (*PMBOK® Guide* 5th Edition, 2013, pg. 141).
4. To create a Cost Management Plan in order to complete the project within the approved budget (*PMBOK® Guide* 5th Edition, 2013, pg. 193).
5. To develop a Quality Management Plan in order to satisfy the needs of the project (*PMBOK® Guide* 5th Edition, 2013, pg. 227).
6. To develop a Human Resource Management Plan in order to establish roles, responsibilities, organizational charts, and staff management (*PMBOK® Guide* 5th Edition, 2013, pg. 258).
7. To develop a Communication Management Plan in order to identify and document the most appropriate approach to communicate with stakeholders effectively and efficiently (*PMBOK® Guide* 5th Edition, 2013, pg. 289).
8. To develop a Risk Management Plan in order to increase the likelihood and impacts of positive events, and decrease the likelihood and impact of negative events (*PMBOK® Guide* 5th Edition, 2013, pg. 309).
9. To develop a Procurement Management Plan in order to determine whether to acquire outside support, what to acquire, how to acquire it, how much is needed, and when to acquire it (*PMBOK® Guide* 5th Edition, 2013, pg. 358).
10. To develop a Stakeholder Management Plan in order to provide a clear, actionable plan to interact with stakeholders in order to support the interest of the project (*PMBOK® Guide* 5th Edition, 2013, pg. 399).

Project purpose or justification (merit and expected results)

The Company is a finanacial institution in Belize that has several competititors and seeks to be the pre-eminent bank in the country and the caribbean. In order to remain competitive and to meet one of its strategic objectives, the company consistently upgrades their core system atleast every ten (10) years. Their current system, Nu Banking System (NBS), is now fifteen year old (15). It is now time for a new upgraded system and the first big important step to accomplish this is through the development of a project management plan.This project management plan will not only bring the company to a competitive advantage through its cutting edge technology, it will also create a smoother work flow, efficient and reliable system, new and

wider ranges of products, good return on investments, and bring the company one step closer to its mission.

Description of Product or Service to be generated by the Project – Project final deliverables

1. Develop the Project Management Plan, and direct and manage project work.
2. Collect the requirements, define, create and validate the scope.
3. Define activities, sequnce activities, estimate activity resources and durations, and develop the schedule.
4. Estimate cost and determine the budget.
5. Peform a quality assurance.
6. Acquire, develop and manage the project team.
7. Manage communication throught the process of creating, collecting, distributing, storing and retrieving project information in accordance with the Project Communication Management.
8. Identify risk, perform qualitative and quantitative risk analysis, and plan risk responses.
9. Conduct procurements by obtaining seller responses, selecting a seller, and awarding a contract.
10. Identify the stakeholders, Project Stakeholder Management, and manage stakeholder engagement.

Assumptions

It's assumed that the company will provide approval for the topic to shared and all relevant information and documentation that will come along with it.
It is also assumed that the FGP timeline will better be defined as time progresses to the end of the project.

Constraints

Due to confidentiality of the finance company, information may be limited to the audience and/or public.
Key players and/or stakeholders involved in this project are either retired or have left the company; as a result, vital information required for this project will also be limited.

Preliminary risks

If the project topic is not approved, the project manager might be required to define a new topic for the project.
If insufficient data is not provided, some knowledge areas, specific objectives, and/or deliverable may not be developed properly.

Budget

General cost estimate of main items/deliverables for project budget for six (6) months is $1,020.00

1. Monthly Internet payment for research and development: $100.00 / month
2. Monthly telephone usage for contact key personnels to acquire data: $20.00
3. Monthly fuel usage for meeting and appointments: $50.00

Milestones and dates

Milestone	Start date	End date
FGP	June 26, 2017	December 15, 2017

Relevant historical information

The Company in study, a banking institution, is a company of over 30 years of experience and service. It is located in Belize and was originated from the Royal Bank of Canada. It's considered the largest and oldest banking institution in Belize with over ten (10) branches across the country and provides a variety use of products and services: credit cards, debit cards, loan facilities, savings, checking, currency exchange and more.

Stakeholders

Direct stakeholders:

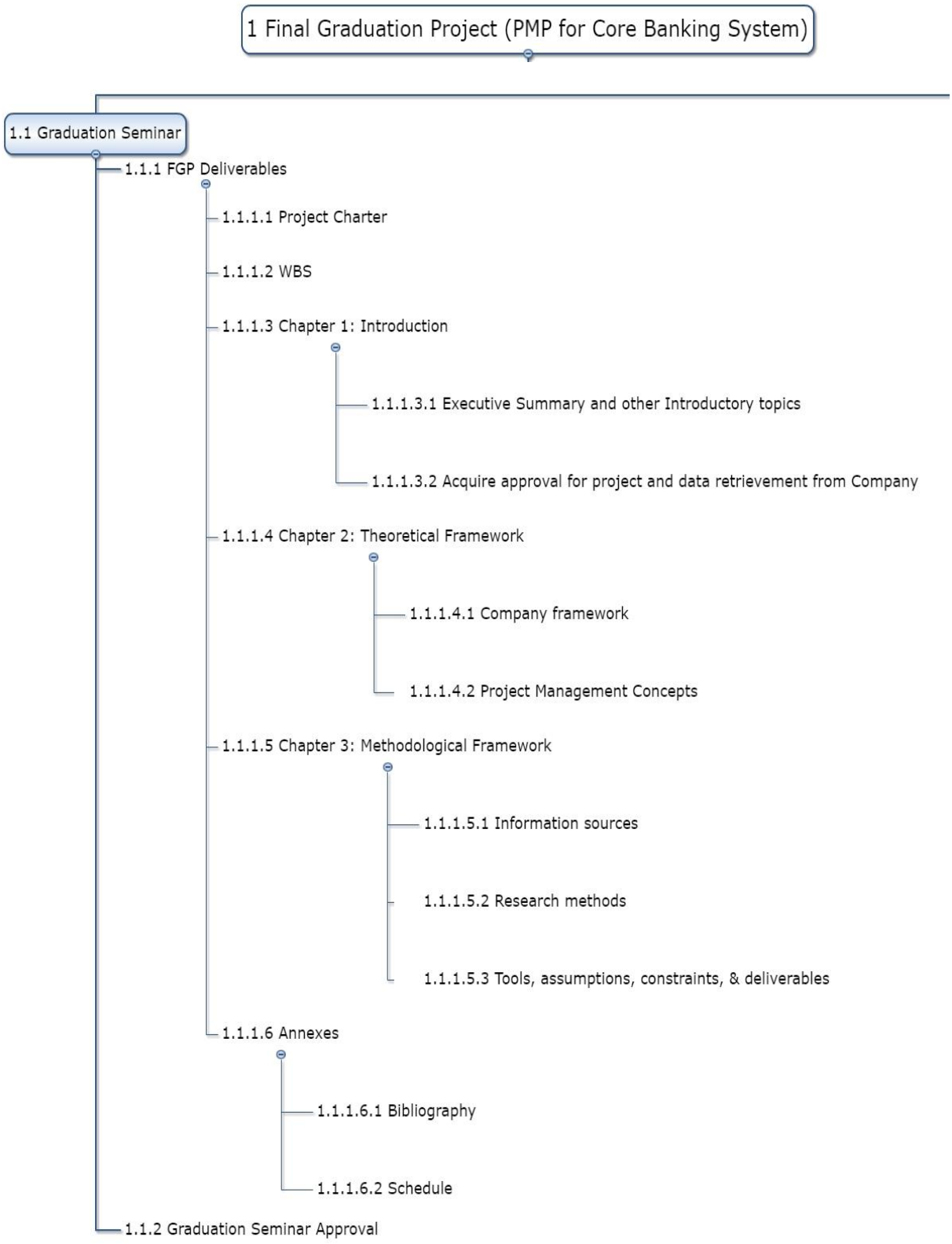
- Company IT Manager
- Company CIO
- Company CFO

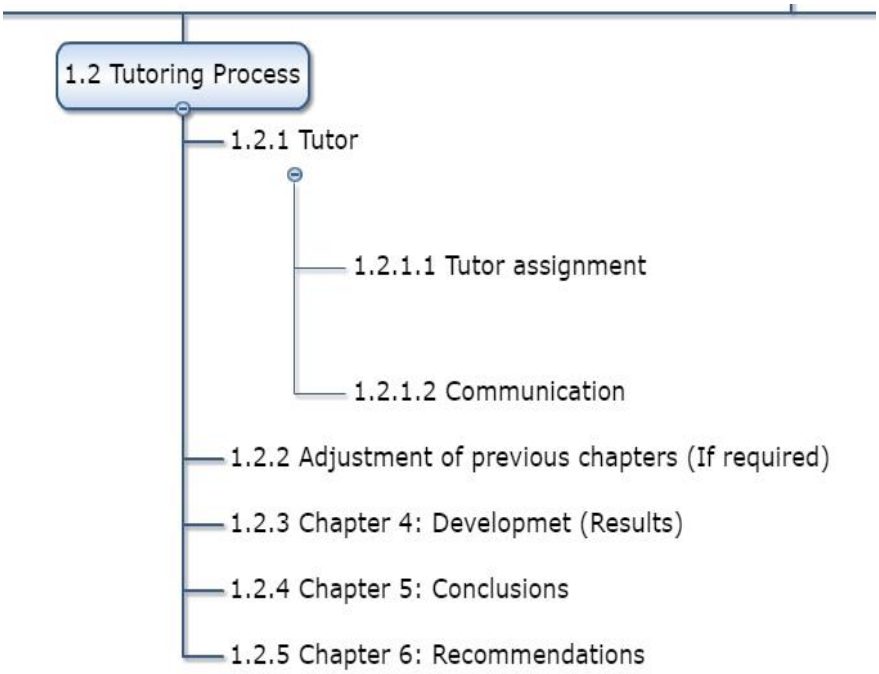
Indirect stakeholders:

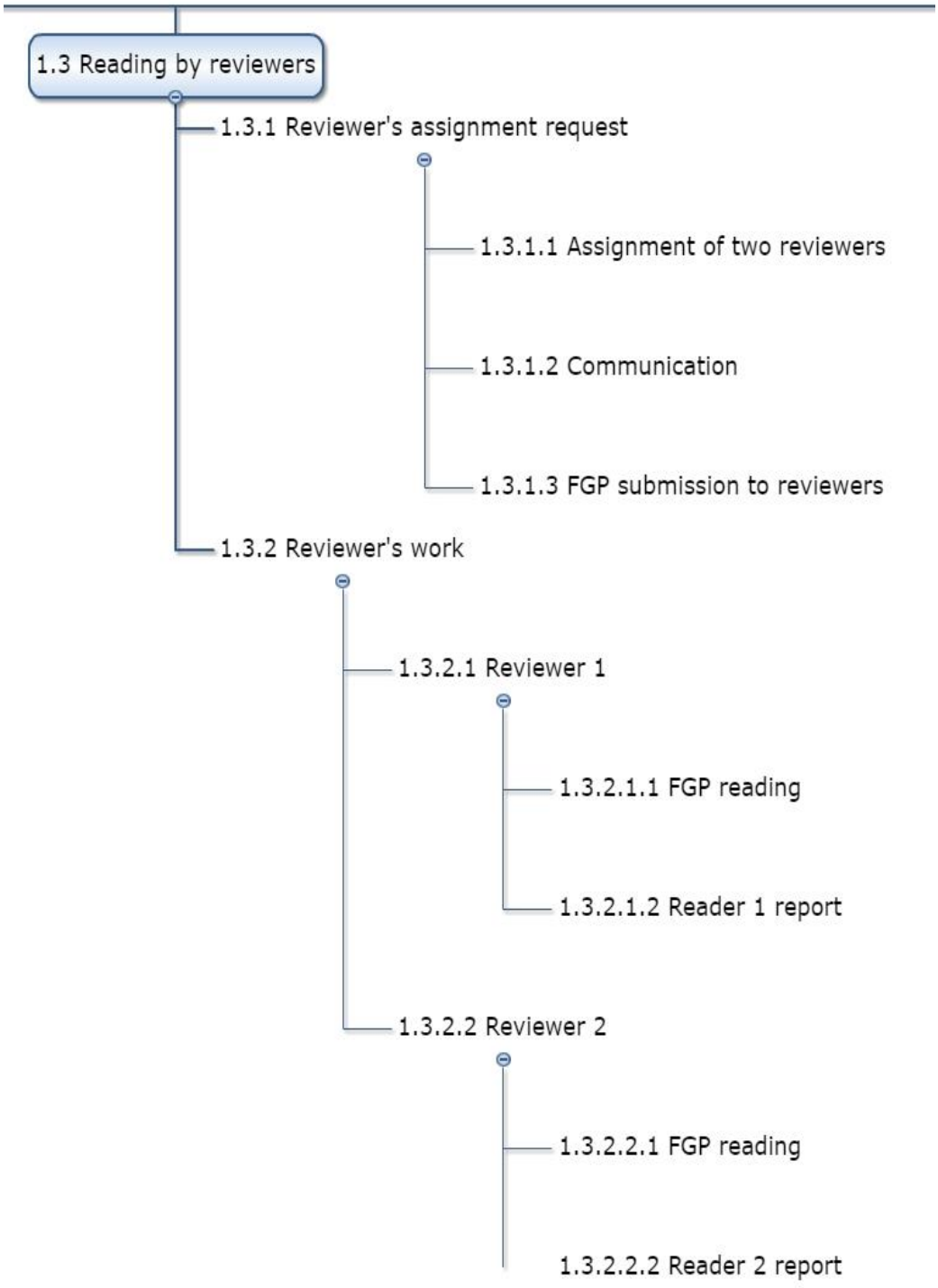
- Company Project Managers

• Company Employees • Supplier's employees	
Project Manager: Elias Vidal	**Signature:**
Authorized by:	**Signature:**

Appendix 2: FGP WBS




1.2 Tutoring Process
1.2.1 Tutor
1.2.1.1 Tutor assignment
1.2.1.2 Communication
1.2.2 Adjustment of previous chapters (If required)
1.2.3 Chapter 4: Developmet (Results)
1.2.4 Chapter 5: Conclusions
1.2.5 Chapter 6: Recommendations


1.3 Reading by reviewers
1.3.1 Reviewer's assignment request
1.3.1.1 Assignment of two reviewers
1.3.1.2 Communication
1.3.1.3 FGP submission to reviewers
1.3.2 Reviewer's work
1.3.2.1 Reviewer 1
1.3.2.1.1 FGP reading
1.3.2.1.2 Reader 1 report
1.3.2.2 Reviewer 2
1.3.2.2.1 FGP reading
1.3.2.2.2 Reader 2 report


1.4 Adjustments
1.4.1 Report for reviewers
1.4.2 FBP update
1.4.3 Second review by reviewers
1.5 Presentation to Board of Examiners
1.5.1 Final review by board
1.5.2 FGP Grade Report

Appendix 3: FGP Schedule

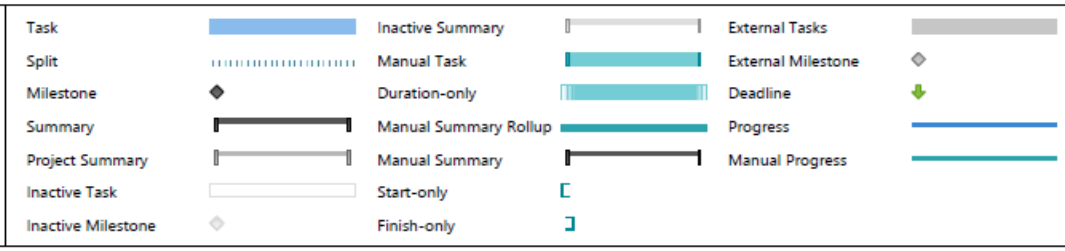
ID	Task Mode	Task Name	Duration	Start	Finish	Predecessors
1		**Final Graduation Project (PMP for Core Banking System)**	**125 days?**	**Mon 6/26/17**	**Fri 12/15/17**	
2		**FGP START**	0 days	Mon 6/26/17	Mon 6/26/17	
3		**Graduation Seminar**	**25 days?**	**Mon 6/26/17**	**Fri 7/28/17**	2
4		**FGP Deliverables**	**25 days?**	**Mon 6/26/17**	**Fri 7/28/17**	
5		Project Charter	5 days	Mon 6/26/17	Fri 6/30/17	
6		WBS	5 days	Mon 6/26/17	Fri 6/30/17	
7		**Chapter 1: Introduction**	**5 days**	**Mon 7/3/17**	**Fri 7/7/17**	5,6
8		Executive Summary and other Introductory topics	5 days	Mon 7/3/17	Fri 7/7/17	
9		Acquire approval for project and data retrievement from Company	5 days	Mon 7/3/17	Fri 7/7/17	
10		**Chapter 2: Theoretical Framework**	**5 days**	**Mon 7/10/17**	**Fri 7/14/17**	8,9
11		Company framework	5 days	Mon 7/10/17	Fri 7/14/17	
12		Project Management Concepts	5 days	Mon 7/10/17	Fri 7/14/17	
13		**Chapter 3: Methodological Framework**	**5 days?**	**Mon 7/17/17**	**Fri 7/21/17**	11,12
14		Information sources	5 days	Mon 7/17/17	Fri 7/21/17	
15		Research methods	5 days	Mon 7/17/17	Fri 7/21/17	
16		Tools, assumptions, constraints, & deliverables	1 day?	Mon 7/17/17	Mon 7/17/17	
17		**Annexes**	**5 days**	**Mon 7/24/17**	**Fri 7/28/17**	14,15,16
18		Bibliography	5 days	Mon 7/24/17	Fri 7/28/17	
19		Schedule	5 days	Mon 7/24/17	Fri 7/28/17	
20		Graduation Seminar Approval	1 day?	Mon 6/26/17	Mon 6/26/17	
21		**Tutoring Process**	**25 days**	**Mon 7/31/17**	**Fri 9/1/17**	17
22		**Tutor**	**5 days**	**Mon 7/31/17**	**Fri 8/4/17**	
23		Tutor assignment	5 days	Mon 7/31/17	Fri 8/4/17	17

Project: WBS Tool(Project).mpp
Date: Sun 7/9/17

Task	Inactive Summary	External Tasks
Split	Manual Task	External Milestone
Milestone	Duration-only	Deadline
Summary	Manual Summary Rollup	Progress
Project Summary	Manual Summary	Manual Progress
Inactive Task	Start-only	
Inactive Milestone	Finish-only	

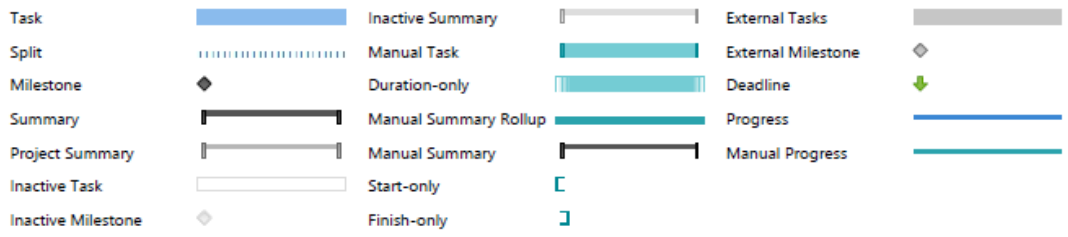
ID	Task Mode	Task Name	Duration	Start	Finish	Predecessors
24		Communication	5 days	Mon 7/31/17	Fri 8/4/17	17
25		Adjustment of previous chapters (If required)	5 days	Mon 8/7/17	Fri 8/11/17	23,24
26		Chapter 4: Developmet (Results)	5 days	Mon 8/14/17	Fri 8/18/17	25
27		Chapter 5: Conclusions	5 days	Mon 8/21/17	Fri 8/25/17	26
28		Chapter 6: Recommendations	5 days	Mon 8/28/17	Fri 9/1/17	27
29		**Reading by reviewers**	**25 days**	**Mon 9/4/17**	**Fri 10/6/17**	**21**
30		**Reviewer's assignment request**	**15 days**	**Mon 9/4/17**	**Fri 9/22/17**	
31		Assignment of two reviewers	5 days	Mon 9/4/17	Fri 9/8/17	
32		Communication	5 days	Mon 9/11/17	Fri 9/15/17	31
33		FGP submission to reviewers	5 days	Mon 9/18/17	Fri 9/22/17	32
34		**Reviewer's work**	**10 days**	**Mon 9/25/17**	**Fri 10/6/17**	**33**
35		**Reviewer 1**	**5 days**	**Mon 9/25/17**	**Fri 9/29/17**	
36		FGP reading	5 days	Mon 9/25/17	Fri 9/29/17	
37		Reader 1 report	5 days	Mon 9/25/17	Fri 9/29/17	
38		**Reviewer 2**	**10 days**	**Mon 9/25/17**	**Fri 10/6/17**	
39		FGP reading	5 days	Mon 10/2/17	Fri 10/6/17	36,37
40		Reader 2 report	5 days	Mon 9/25/17	Fri 9/29/17	
41		**Adjustments**	**25 days**	**Mon 10/9/17**	**Fri 11/10/17**	**38**
42		Report for reviewers	5 days	Mon 10/9/17	Fri 10/13/17	
43		FBP update	10 days	Mon 10/16/17	Fri 10/27/17	42
44		Second review by reviewers	10 days	Mon 10/30/17	Fri 11/10/17	43
45		**Presentation to Board of Examiners**	**25 days?**	**Mon 11/13/17**	**Fri 12/15/17**	**41**
46		Final review by board	15 days	Mon 11/13/17	Fri 12/1/17	

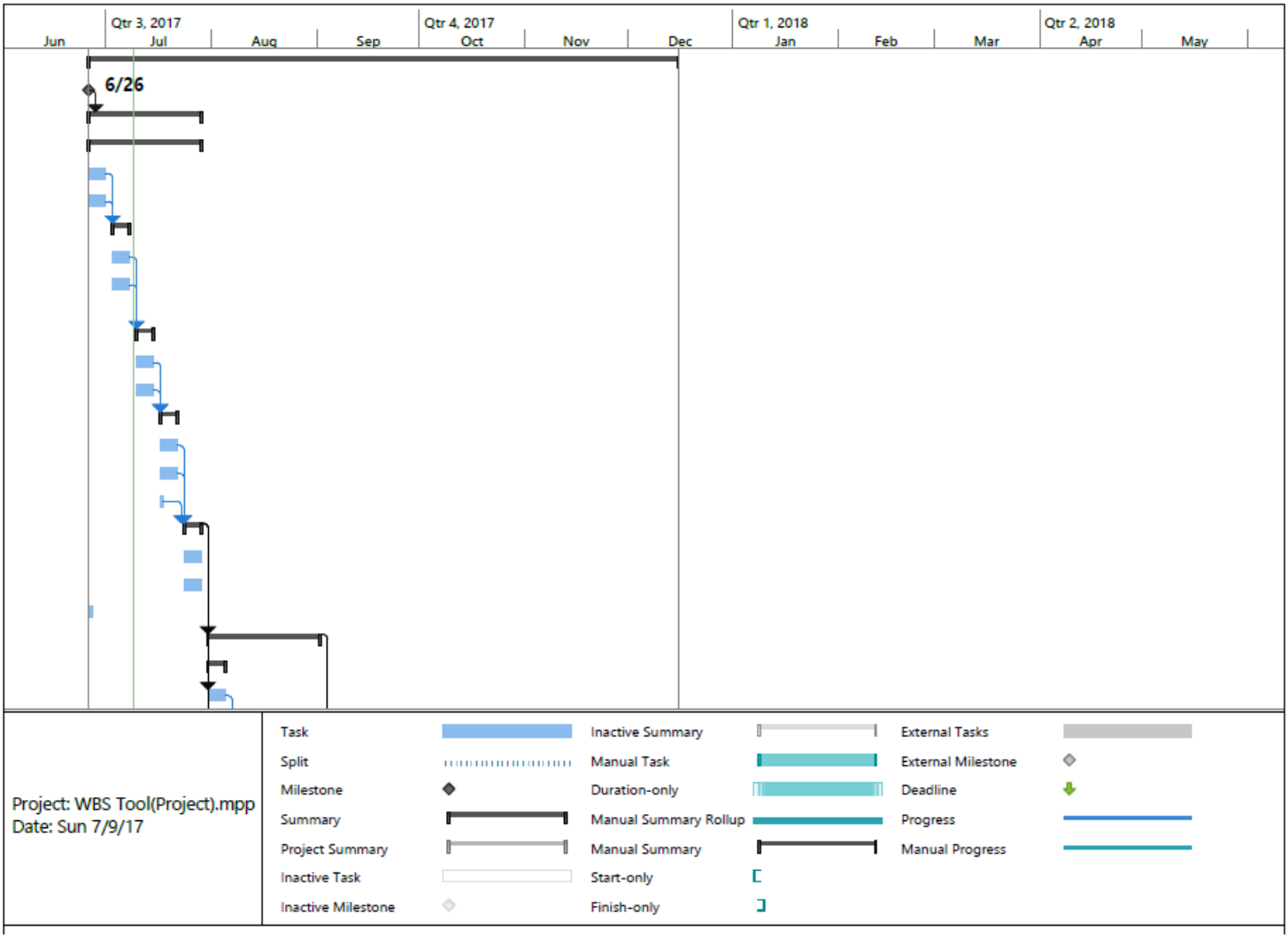
Project: WBS Tool(Project).mpp
Date: Sun 7/9/17



ID	Task Mode	Task Name	Duration	Start	Finish	Predecessors
47		FGP Grade Report	10 days	Mon 12/4/17	Fri 12/15/17	46
48		**FGP END**	0 days	Fri 12/15/17	Fri 12/15/17	

Project: WBS Tool(Project).mpp
Date: Sun 7/9/17

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6/26
Project: WBS Tool(Project).mpp
Date: Sun 7/9/17
Task
Split
Milestone
Summary
Project Summary
Inactive Task
Inactive Milestone
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Deadline
Progress
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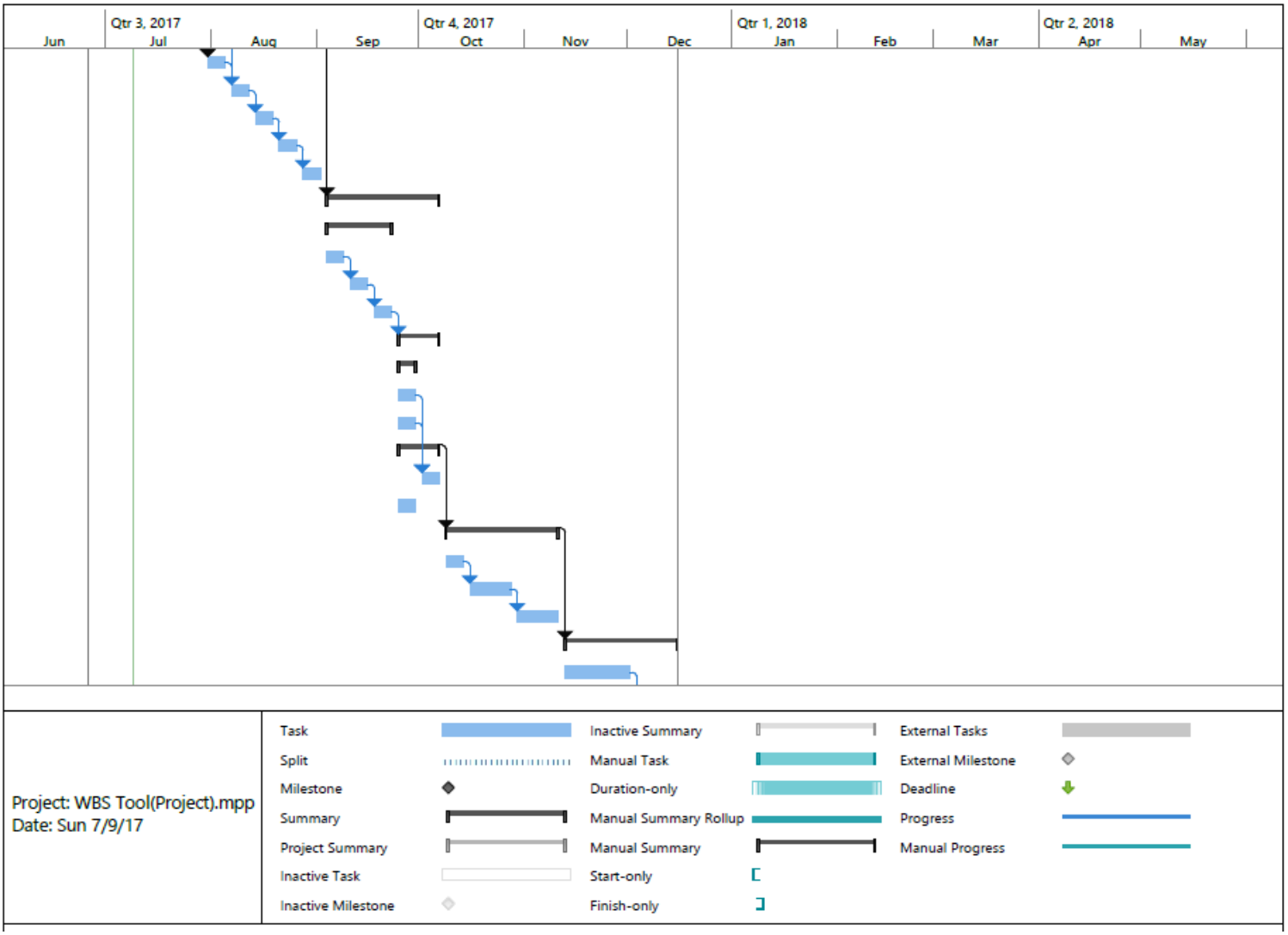
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Project: WBS Tool(Project).mpp
Date: Sun 7/9/17
Task
Split
Milestone
Summary
Project Summary
Inactive Task
Inactive Milestone
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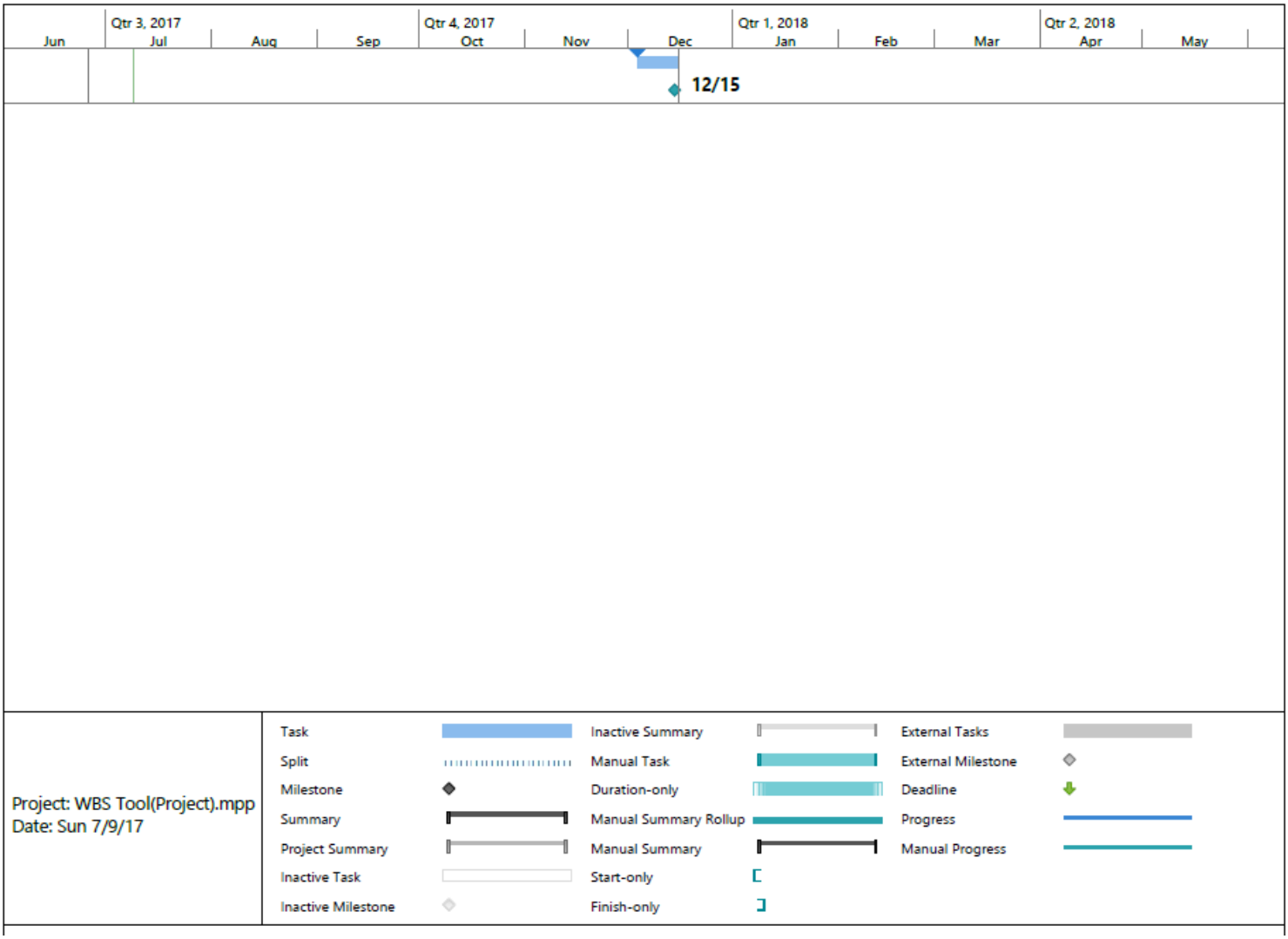
Manual Progress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Project: WBS Tool(Project).mpp
Date: Sun 7/9/17
Task
Split
Milestone
Summary
Project Summary
Inactive Task
Inactive Milestone
Inactive Summary
Manual Task
Duration-only
Manual Summary Rollup
Manual Summary
Start-only
Finish-only
External Tasks
External Milestone
Deadline
Progress
Manual Progress

Appendix 4: CBS Change Request Template

Identification	
Document No:	
Document Title:	
Change Type :	Comment:
Name of Originator:	
Date:	
Version:	

Change Request Details -To be completed by Originator.
Proposed Change
Describe scope and nature of change and how it should be incorporated into the current Project.
Reason for Change
Describe reason behind the proposed change and if Type 2 please provide relevant justification according to relevant category:

Impact on Statement of Work -To be completed by Misys.	
Cost:	Describe additional cost and payment terms, as applicable
Remarks	
Describe impact on Project Deliverables, timings, project risks, contingencies etc.	

Approvals		
CLIENT NAME		
Name	Date	Signature
MISYS		
Name	Date	Signature

Appendix 5: CBS Request of Authorization for Travelling

Request of authorization for travelling									
Project:	Core Banking Implementation								
Company:	The Belize Bank Limited					Paid by			
Person:		**Role:**							
		Passport			**Valid Visas**		**Expiry Dt**	**Entries**	
			Country:		USA				
			Number		Belize				
			Expiry Date		Other				
			Issue Date						
					Date of Birth:				
Requestor:		**Date**							
Resolution by		**Date**							
Resolution									

Activity Objective / Description	Project Plan Line Item	Date From	Date To	Hours	Bank staff involved	Goal to be achieved

Total Travel			Number of Days	
			Per Diem	

Notes			Date	By

	Signature	Date
Reviewed By:		
Authorized By:		

Appendix 6: Revision Dictum

Memo

To: Universidad Para la Cooperacion Internacional
From: Melissa Espat
Date: November 17, 2017

I hereby declare that I have reviewed and edited the FINAL GRADUATION PROJECT NAME (Project Management Plan for a Core Banking System in Belize, Central America) for Elias Vidal. The project has a detailed account of procedures to take in order to create a core banking upgrade. Mr. Vidal has included lists and procedures for the completion of the upgrade.
I can attest that I have edited for grammar and mechanics, as well as the APA structure. Suggestions have been made for corrections on the APA format, as well as for sentence structures. If you have further questions, kindly forward to me at mespat@galen.edu.bz.

Appendix 7: Linguist Credentials

University of Belize

UB

Education Empowers a Nation

The Board of Trustees of the University of Belize upon recommendation of the faculty of Arts and Science, has conferred on

Melissa Edith Castellanos-Espat

who has completed the prescribed studies and fulfilled all requirements thereof the degree of

Bachelor of Arts in English

with all the rights and privileges pertaining to that degree, given at Belize City, Belize, this eight day of June, two thousand and three.

DEAN

PRESIDENT

VICE PRESIDENT, ACADEMIC

CHAIRMAN, BOARD OF TRUSTEES

Galen University

hereby confers upon

Melissa Edith Castellanos-Espat

The degree of

Master of Education in Secondary Education with a concentration in English

Together with all the rights, privileges and honors appertaining thereto in consideration of the satisfactory completion of the course prescribed in

The School of Education

In Testimony Whereof, the seal of the University and the signatures as authorised by the Board of Trustees are hereunto affixed.

Given at Belize City on the Fourteenth day of December, in the year 2014

Dr. Andreas Charalambous
President

Dr. Cynthia Eve Aird
Provost

The University of North Carolina at Wilmington

To whomsoever these presents may come

Greeting

Be it known that on the recommendation of the Faculty, the Trustees of the University by virtue of the authority vested in them do hereby confer upon

Melissa Edith Castellanos Espat

the degree of

Master of Education

with all the rights and privileges thereunto appertaining
In witness whereof and as evidence that all requirements prescribed for the degree have been fulfilled this Diploma is granted at Wilmington on the ninth day of May, two thousand fifteen