The role of the Business Analyst in influencing the performance project synergies: A case study of Standard Bank South Africa Head Office

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Declaration

I, Anjela Pillay, do hereby declare that this dissertation titled "**The role of the Business Analyst in influencing the performance of project synergies: A case study of Standard Bank South Africa Head Office"** is my original work. All sources cited herein are indicated and acknowledged by means of a comprehensive list of references.

I declare that the work contained in this thesis has not previously been submitted either in it's entirely or in parts for a degree in this or any other University. Where work was used in information or writing that belong to other people such as data, pictures and graphs, the source through which the information was acquired was acknowledged.

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Abstract

This study explores the role of synergy between Business Analysts and project teams that influence the success of project management as critical exercise for Business Analysis in the project based activities at Standard Bank. The study contemplates to contribute towards a better understanding of the wider effects of Business Analysts on the South African Economy, with regards to the extent to which collaboration approach leads to an improvement of the performance of the bank. The overall objective of this study was to explore the effects of the Business Analyst in influencing the success of a project synergy. The sub-objectives of this study, firstly, to examine the dynamics of business analytical value-creation system towards project management success at Standard Bank Headquarters; secondly, to analyse how the interrelationship between the Business Analysts and the project management teams creates potential project success for delivery of business value; thirdly, to explore challenges on the degree of training and communication networks faced by Business Analysts in enhancing the integrated project performance; and finally, to establish the extent to which the Business Analysts can influence the success of a project. A descriptive research study was used together with a quantitative approach to research analysis. A census was conducted using purposive sampling within the population of the business unit. A list of about 80 names was chosen out of the Personal and Business Banking Information Technology address book to complete the survey questionnaire and 65 of the respondents was achieved. Frequency distribution of data was utilised for analysis purpose. The study discovered that Business Analysts require professional development to reduce impediments and improve project results. Both Business Analysts and Project Managers need to become more involved at the enterprise level because without an enterprise analysis perspective, they lack the connection between what they are doing and why they are doing it. They understand how to increase the company's potential benefits, understand business needs and ensure that the priorities of the business are focused on value.

Key Words: *Business Analysis, Project success and failure, Synergy, and Planning*

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SDLC	– System Development Life Cycle
BA	– Business Analyst
PM	– Project Manager
MoSCoW	– Must have, should have, could have, won't have
ROI	– Return on investment
IT	– Information Technology
PBB	– Personal and Business Banking

CHAPTER ONE

INTRODUCTION TO THE STUDY

1.1. Introduction and background

Once upon a time, not too long ago, in lands not so far away, the role of Business Analysis, lacked a widely accepted definition and set of expectations (Henderson, 2013). These roles were often limited to subsets of Business Analysis, which are currently being understood to be knowledge areas that are supported by different techniques and fundamental competencies (Henderson, 2013). The author sees Business Analysis as a discipline in which practitioners deliver values by understanding an organisation and proposing recommendations that enable the organisation to make informed decisions about change in order to achieve its goals.

1.2 What is Business Analysis?

Business Analysts are expected to have access to information about their organisation's business strategy and be able to understand it, as their work will need to support the achievement of this strategy (Cadle, Paul and Turner, 2010). It could be argued that they define the tactics that will deliver the business objectives and strategies. Hence, it is vital that they are able to work within the strategic business context. It may also be the case that some Business Analyst roles will require strategic-level thinking. The use of Information Technology to enable business improvements and the opportunities presented by technology will need to be considered during any strategy analysis. The Business Analysts are the specialist team within organisations that should be able to advise on the use of technology to drive business change. According to Paul, Yeates and Cadle (2010:6), there appears to be a universal agreement that Business Analysis requires the application of a holistic approach.

Although the Business Analyst performs a key role in supporting management to exploit Information Technology in order to obtain business benefit, this has to be within the context of the entire business system. Therefore, all aspects of the operational business system need to be analysed if all of the opportunities for business improvement are to be uncovered. Although there are different role definitions, depending upon the organisation, there seem to be an area of common ground where most business analysts work. According to Paul, Yeates and Cadle (2010:8), *the responsibilities appear to be*:

- to investigate business systems, taking a holistic view of the situation where this may include examining elements of the organisation structures and staff development issues as well as current processes and Information Technology systems,
- to evaluate actions to improve the operations of a business system and again, this may require an examination of organisational structure and staff development needs, to ensure that they are in line with any proposed process redesign and Information Technology system development and
- to document the business requirements for the Information Technology system support using appropriate documentation standards.

The place of Business Analysis within the business change lifecycle is critical if organisations are to benefit from those changes. Business Analysis offers an opportunity for organisations to ensure that technology is deployed effectively to support their work, and also to identify relevant options for business change that take account of budgetary and timescale pressures, especially on project management, product management, and software development (Harmon, 2007). Business Analysts can also offer objective views that can challenge the received wisdom and identify where real business benefits can accrue (Yeates, and Wakefield, 2004, and Harmon, 2007).

1.3. Project Perspective to Business Analysis

Projects are known to differ enormously in content, timelines, resources, aims and objectives. But according to Aitken (2012), if a project does not somehow contribute to meeting the business requirements, it is doomed to failure at some point in its lifecycle. According to Bridges and McVey (2011), when Business Analysts are properly placed and utilised in the organisation, it can be an asset to their respective stakeholders by keeping concerns for the market, profit and the enterprise at the forefront of their activities in mitigating failure and sustaining success. Aitken (2012) states that by using the range of tools Business Analysis provides, the alignment of the project to the business is ensured. Survey results by Brule (2012) shows that communication and cross-functional collaboration lead among top challenges with 47 percent and 46 percent of respondents, respectively. In citing them and these difficulties underscore the importance of training and professional development to reduce impediments to better performance and improved project and organisational results. Despite the challenges and immaturity of the profession, the business analyst community has grown and organisations are continuing to invest in their Business Analyst competency (Johnson, Scholes, and Whittington, 2008, and Harmon, 2007).

Corporate Education Group (2014) alludes to the fact that projects often suffer because the project team does not understand and manage the on-going needs of both the customer and the business and this can negatively impact the results of the project. The group further believes that some areas require expertise in both project management and Business Analysis to ensure the scope feasibility and the correct requirements being gathered. These areas are analysed and documented to meet the stakeholders' needs [project scope definition, development of the project statement of purpose, project objectives and identification of business risks].

Chami (2013) argues that a project is considered a failure when it has not delivered what was required in line with expectations. Therefore, in order to succeed, a project must deliver to cost, to quality and on time; and it must deliver the benefits presented in the business case (Chami, 2013). If key stakeholders agreed that a project had to exceed its initial budget, the project might still be considered a success and likewise, if a project delivered everything that was in the detailed project designs, it might still be considered a failure if it did not include vital elements that the key stakeholders needed. The author's concluding remarks suggest that the failure of a project is defined by the economic factor, the proper design and supervision and from the selected human potential. If projects are important for keeping up with competition and ensuring customer satisfaction, the one way that businesses can better grow is to realise value of and harness the power of Business Analyst in a project team (Henderson, 2013). The aim of this research study was to investigate the influence of the Business Analyst in establishing the success of a project.

1.4. Research Problem

Projects seem to differ enormously in content, timelines, resources, aims and objectives. Project performance produces either failure along with a loss of money, time and functionality or success underpinned by Business Analysis dimensions from constant improving technology, exponential resources and a concrete project management methodology to meeting the business requirements. The essence of Business Analysis as a discipline, in which practitioners deliver value by understanding an organisation through its people, processes, technology and resources, is by proposing architectural project-based competence. The hypothetically inferred statement of problem seeks the organisation to make informed decisions through business analysis competencies about change in order to achieve its goals.

1.5. Research questions:

The research questions underpinning this study:

- what are the dynamics of the business analytical value-creation system towards project management success at Standard Bank Headquarters?
- how does the interrelationship between the Business Analysts and the project management teams create potential project success for delivery of business values?
- what are the challenges of training and communication networks faced by Business Analysts in enhancing the integrated project performance and
- what are the influences of Business Analysts for the success of a project?

1.6. Research objectives

The overall objective of this study was to explore the effects of the Business Analyst in influencing the success of a project synergy.

The sub-objectives of this study is:

- to examine the dynamics of business analytical value-creation system towards project management success at Standard Bank Headquarters,
- analyse how the interrelationship between the Business Analysts and the project management teams creates potential project success for delivery of business value,
- explore challenges on the degree of training and communication networks faced by Business Analysts in enhancing the integrated project performance and
- establish the extent to which the Business Analysts can influence the success of a project

1.7. Limitations of the study

The possible limitation for this study is a lack of prior research studies on the Business Analysts at Standard Bank in Johannesburg. Citing prior research studies forms the basis of the literature review and helps lay a foundation for understanding the research problem being investigated. To address this limitation, an exploratory and descriptive study was conducted rather than an explanatory research design.

1.8. Literature review

Bridges and McVey (2011) believe that the Business Analysis field is growing and will continue to expand because of the problems and challenges in delivering information technology related projects. Based on findings in The Standish Group's CHAOS Report, most projects are challenged (50%) and an additional 25% of all projects are considered to have failed. These statistics means that organisations will obtain only a 25% success rate for the projects they initiate. "Business Analysis is the practice of enabling change in an organisational context, by defining needs and recommending solutions that deliver value to stakeholders" (International Institute of Business Analysis, IIBA, 2017). As the set of tasks and techniques are used to perform business analysis, some Business Analysts may be required to undertake strategic analysis and identify business transformation actions.

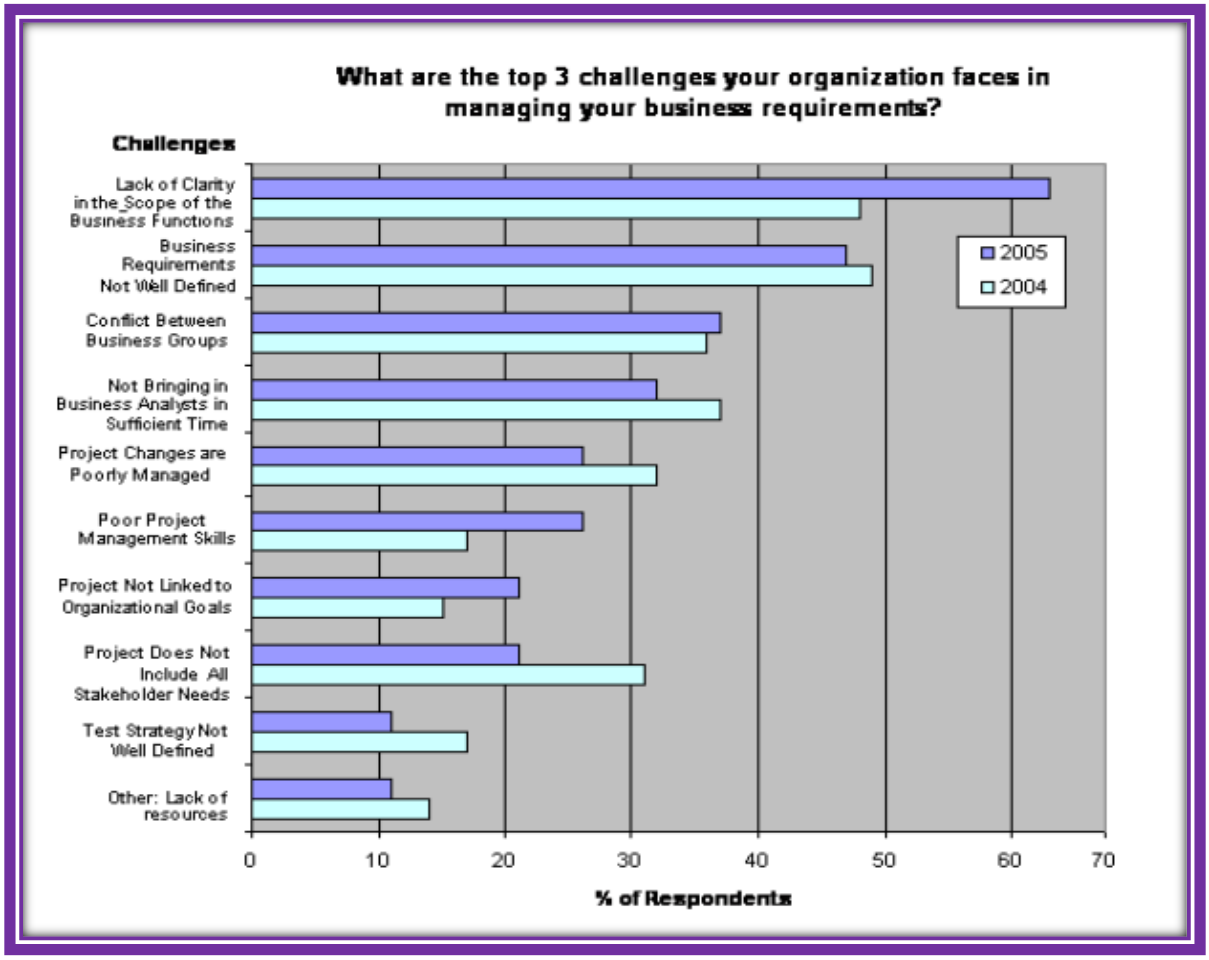
Probably, a role of Business Analyst as systems, engineer, process, product, enterprise, business architect, intelligence analyst, or data scientist being epitomised in supporting this activity such as management, project management, product management, software development, quality assurance and interaction design rely heavily on Business Analysis skills for success (Senge, 2006; Harmon, 2007 and IIBA, 2017). Business Analysts are communicators and facilitators brought on projects to elicit requirements by sifting through masses of information and relating these requirements to the technical team. This role is extremely vital but comes with unique difficulties that every Business Analyst should know about and endeavour to rise above. Being aware of the pitfalls that come with the profession will prepare Business Analysts to tackle them when they arise (Bridges and

McVey, 2011). Business Improvement Architect's (2005) research survey of Business Analysts attending Project World/Business Analyst World 2005 in Toronto, Canada, identified that the lack of clarity in the scope of the business functions and business requirements are not well defined, which are the top two challenges facing the organisations in managing business requirements.

Business Improvement Architect's (2005) findings clearly indicate the need for organisations to understand the importance of the Business Analyst role in helping to ensure the successful execution of projects as found in Figure 1. Projects often suffer because the project does not understand and manage the on-going needs of both the customer and the business. This can negatively impact the results of the project. Strategies identified by the Business Improvement Architect (2005) for the Business Analyst, which will help ensure greater success in their role and for their organisations, are:

- the lack of clarity in the scope of the Business Functions,
- business requirements not well managed,
- conflict between Business Groups and
- not bringing in Business Analysts in at the right time.

Figure 1.1: Business Challenges



Source: Business Improvement Architect's (2005)

The Corporate Education Group (2014) highlights that the Standish Group's CHAOS Summary 2009 report showed the highest project failure rate in over a decade. In 2008, 32% of all projects succeeded and were delivered on time, on budget, and with required features and functions. Furthermore, 44% were challenged (late, over budget, and/or with less than the required features and functions) and 24% failed (cancelled prior to completion or delivered and never used). As mentioned by the Corporate Education Group (2014), project failures are not only expensive, but can have very negative consequences for the reputation of the company and project team. According to

research, the vast majority of this waste is completely avoidable and better requirements management could help. The Corporate Education Group also mentions that according to the Meta Group Research, 60-80% of project failures can be attributed directly to poor requirements gathering, analysis, and management. Business process reengineering involves the examination and redesign of business processes and workflows in an organisation. A business process is a set of related work activities that are performed by employees to achieve business goals. Basically, a business process is the way we perform our work and business process reengineering is the process of changing the way the work is done so it is done better to accomplish the goals of the business.

1.9. Research methodology

A descriptive research study was used together with the quantitative approach to research analysis and collecting data using a questionnaire instrument. It also investigated the what, why and how of decision making as compared to where and when. Census and purposive sampling was utilised within the population of the business unit at Standard Bank Headquarters. A list of Business Analysts was chosen out of the Personal and Business Banking Information Technology address book to complete the questionnaires. Questionnaires are the most common method used to collect data and was administered by electronic mail. The questions were close-ended as they are easier and faster to answer. They are also easier to analyse and to rank the items accordingly. All responses of the questionnaires were converted into diagrams according to the responses received. In this way, it helped to analyse the data in which we can draw conclusions on the findings. This study has a total of 80 permanent Business Analysts in Personal and Business Banking Information Technology, Head Office which constitute the sampling size for this study. The Business Analysts who are contractors were not part of this study as they might not have been be available to answer the survey.

1.10. Significance of the study

This study examined the effects of Business Analysis in the project based activities at Standard Bank. This study also explored the role of synergy between Business Analysts and project teams that influences the success of project management. Therefore, the study will contribute towards a better understanding of the wider effects of business analysis on the South African Economy, with regards to the extent to which collaboration approach leads to an improvement of the performance of the bank.

1.11. Summary of dissertation chapters

Chapter One	Introduction to the Study: **This provides a general orientation to the research by providing the reader with an introduction to the background of the effects of the Business Analyst in influencing the success of a project synergy such as aim, the objectives of the research study, literature review, research questions and objective, significance and limitation of this research study.**
Chapter Two	Literature Review: **It provides an investigation into the effects of the Business Analyst in influencing the success of a project synergy. This chapter gives the reader a global view, address the challenges, skills and problems that are faced in their role.**
Chapter Three	Research Methodology: **It provides the reader with a view of specific research approaches and methods of this study.**
Chapter Four	Data Interpretation and Analysis: **It presents the statistical interpretation of data using largely, figures and tables for analysis.**
Chapter Five	Discussion and Conclusion: **It presents the research findings according to the research questions and objectives and concluding remarks from scientific and literature findings.**

CHAPTER TWO

LITERATURE REVIEW

2.1. Introduction

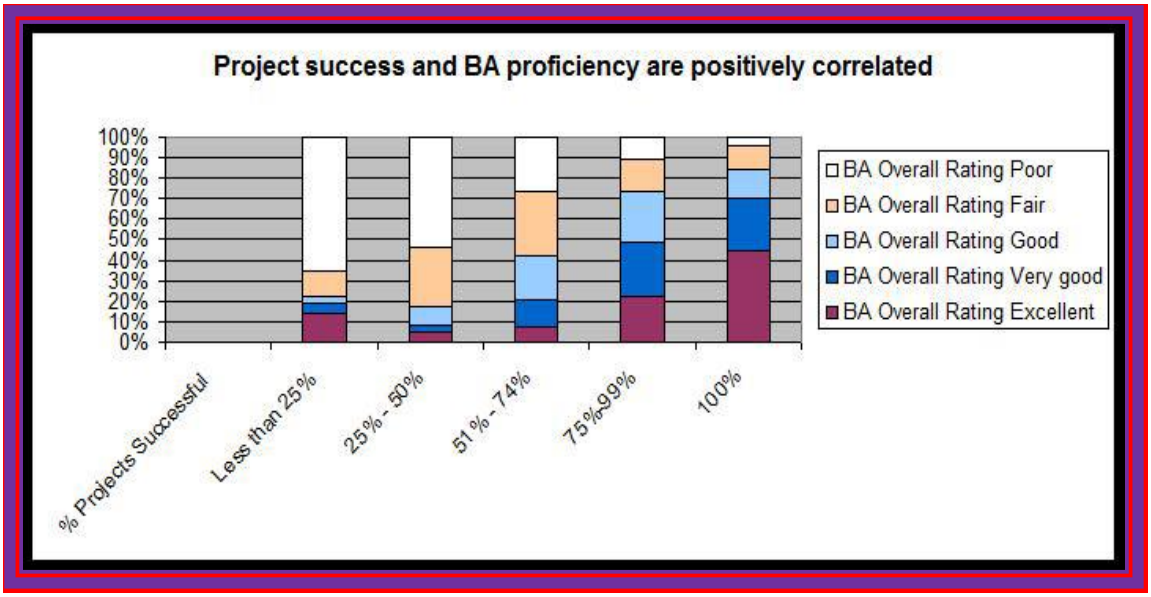
Business Analysis helps businesses do business better as an agent of change and a disciplined approach for introducing and managing change to organisations, whether they are for-profit businesses, governments or non-profits. The specialised knowledge acts as a guide and leads the business through unknown or unmapped territory, to get it to its desired destination. The value of Business Analysis is in realisation of benefits, avoidance of cost, in identification of new opportunities, understanding of required capabilities and modeling the organisation (Paul, Yeates and Cadle 2010). The effective use of Business Analysis can ensure an organisation realises these benefits, ultimately improving the way they do business.

2.2. Global State of Business Analysis

Many organisations are using Business Analysis to define requirements and determine courses of action and solutions to help achieving their goals. The critical Business Analysis activities determine the projects and organisational success through the required standards of practice and adherence to the Business Analysis discipline. Brule (2015) found that proficiency in Business Analysis can vary among activities and among organisations but respondents are essentially satisfied with their Business Analysis practices and outcomes while analysis shows that there is room for improvement. Some of the gaps identified by the author are proficiency and practice in Business Analysis activities at enterprise level with the level of experience. This global study determined the actual business impact that Business Analysis has on organisations and examined its current state by inquiring into Business Analysis practices, trends, challenges and applications of the Business Analysis discipline.

Key findings of the Global Study by Brule (2012) reveal the following key findings as indicated in Figure 1 and also believe that there is contradicting external evidence of findings of project results, where more than 90 percent of respondents consider more than half their projects to have been successful over the last three years. 68 percent of respondents consider 75 percent or more of their projects to have been successful as evident in Figure 1**.**

Figure 2.1– Project success and Business Analyst Proficiency

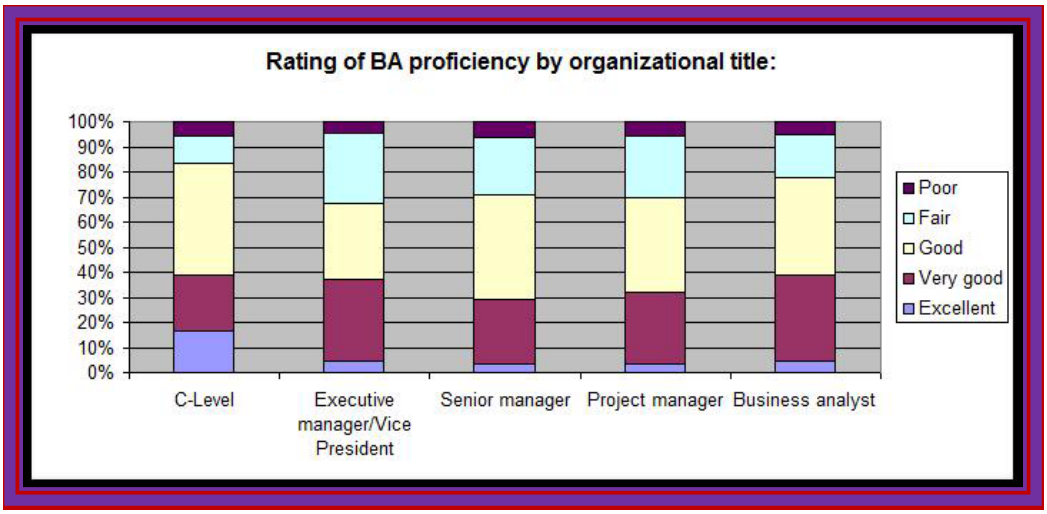


Source: adapted from BA Times (2017)

Figure 2.1, the rating of Business Analysts proficiency by organisation title, indicates that middle management is more critical of the Business Analysis function than senior management, yet Business Analysts themselves also see room for improvement. Respondents at all levels of the organisation rated the most important success factors of their projects as: [Customer satisfaction: 81%, on time completion: 62%, on budget delivery 52% and Product quality: 46%]. Survey results indicate that Business Analysis is not viewed as being impactful to business results as only 22 percent of respondents said profit impact is an important success factor for business analysis. Just 15 percent said

acquisition and retention of customers and 4 percent said market share are important success criteria for Business Analysis.

Figure 2.2 – Rating of Business Analysts proficiency by organisation title



Source: adapted from BA Times (2017)

Brule (2012) has derived that just fewer than 20 percent of total respondents said that they are responsible for enterprise analysis and only 7 percent said that they spent most of their time on enterprise analysis. Among Business Analysts, only 26.3 percent are responsible for enterprise analysis and 6.5 percent said that they spent most of their time on enterprise analysis. The key challenges faced in Business Analysis are communication (47 percent) and cross-functional collaboration (46 percent).

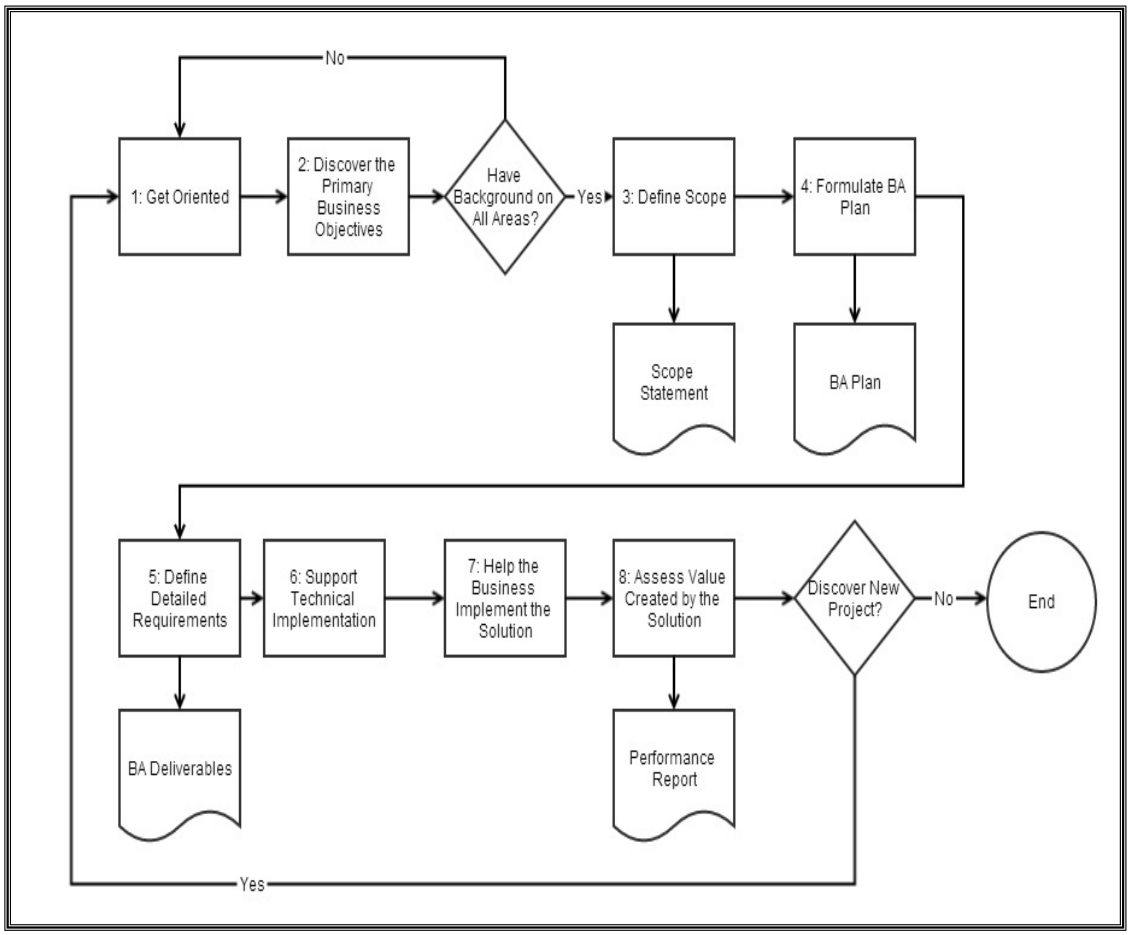
2.3. Business Analysis Process

Business Analysis is the practice of enabling change in an organisational context, by defining needs and recommending solutions that deliver value to stakeholders (Brandenburg, 2017). A new project assignment reflects an exciting time as a Business Analyst, but it can also be tense. The expectations and deliverables do create anxiety, therefore, currently build confidence and propensity toward guaranteed success on a

project. The 8-step Business Analysis process does apply in an agile environment depending on the size and complexity of the project to get to a successful outcome.

The process flow shows how the 8 steps fit together and how you might iterate through them on a typical business analyst project (Harmon, 2007; Brandenburg, 2017).

Figure 2.3: Process Flow



Source: Harmon (2007) and Brandenburg (2017).

Step 1: Get Oriented

Taking some time to get oriented ensures an effective and confident contributor on the project. The phase of amassing information needed to be successful and effective in the context of the project. The key responsibilities in this step include:

- clarifying role as the business analyst to create deliverables that meet stakeholder needs,
- determining the primary stakeholders to engage in defining the project's business objectives and scope, as well as any subject matter experts to be consulted early in the project,
- understanding the project history so that you don't inadvertently repeat work that has already been done or rehearsed and previously made decisions and
- understanding the existing systems, and business processes to build a reasonably clear picture of the current state that needs to change.

Step 2: Discover the Primary Business Objectives

It is very common for business analysts and project managers to jump right into defining the scope of the project. Uncovering and getting agreement on the business needs early in a project and before scope is defined is the quickest path forward to a successful project. Key responsibilities in this step include:

- discovering expectations from primary stakeholders and essentially discovering the "why" behind the project,
- reconciling conflicting expectations so that the business community begins the project with a shared understanding of the business objectives and they are not unique to one person's perspective and
- ensuring the business objectives are clear and actionable to provide the project team with momentum and context while defining scope and, later, the detailed requirements.

Discovering the primary business objectives sets the stage for defining scope, ensuring that you do not end up with a solution that solves the wrong problem or, even worse, with a solution that no one can even determine if it is successful or not.

Step 3: Define Scope

A clear and complete statement of scope provides your project team the go forward concept to realise the business needs. Scope makes the business needs tangible in such a way that multiple project team participants can envision their contribution to the project and the implementation. Key responsibilities in this step include:

- defining a solution approach to determine the nature and extent of technology and business process changes to be made as part of implementing the solution to the primary business objectives,
- drafting a scope statement and reviewing it with key business and technology stakeholders until they are prepared to sign off or buy in to the document and
- confirming the business case ensures that it still makes sense for your organisation to invest in the project.

Scope is not an implementation plan, but it is a touchstone guiding all of the subsequent steps of the Business Analysis process and tasks by other project participants.

Step 4: Formulate Your Business Analysis Plan

Business Analysis plan brings clarity to the Business Analysis process for successfully defining the detailed requirements for this project. Business Analysis plan is going to answer many questions for you and your project team. Key responsibilities in this step include:

- choosing the most appropriate types of Business Analysis deliverables, given the project scope and project methodology is the key aspect of the project context,
- defining the specific list of Business Analysis deliverables that will completely cover the scope of the project and identifying the stakeholders who will be part of the creation and validation of each deliverable and
- identifying the timelines for completing the Business Analysis deliverables.

In the absence of defining a credible and realistic plan, a set of expectations may be defined, and often those expectations are unrealistic, as they do not fully appreciate everything that goes into defining detailed requirements.

Step 5: Define the Detailed Requirements

Detailed requirements provide your implementation team with the information they need to implement the solution. They make scope implementable. Without clear, concise and actionable detailed requirements, implementation teams often flounder and fail to connect the dots in such a way that delivers on the original business case for the project. Key responsibilities in this step include:

- eliciting the information necessary to understand what the business community wants from a specific feature or process change,
- analysing the information, you have discovered and using it to create a first draft of one or more business analysis deliverables containing the detailed requirements for the project and
- reviewing and validating each deliverable with appropriate business and technology stakeholders and asking questions to fill in any gaps.

Effective Business Analysts consciously sequence your deliverables to be as effective as possible in driving the momentum of the project forward. Paying attention to the project's critical path, reducing ambiguity and complexity, and generating quick wins are all factors to consider when sequencing your deliverables.

Step 6: Support the Technical Implementation

On a typical project employing a Business Analyst, a significant part of the solution involves a technical implementation team building, customising and/or deploying software. During the technical implementation, there are many worthwhile support tasks for you to engage in that will help drive the success of the project and ensure the business objectives are met. Key responsibilities in this step include:

- reviewing the solution design to ensure it fulfills all of the requirements and looking for opportunities to meet additional business needs without increasing the technical scope of the project,
- updating and/or repackaging requirements documentation to make it useful for the technology design and implementation process,
- engaging with quality assurance professionals to ensure they understand the business context for the technical requirements.
- the responsibilities may include reviewing test plans and/or test cases to ensure they represent a clear understanding of the functional requirements,
- making yourself available to answer questions and help resolve any issues that surface during the technical design, technical implementation or testing phases of the project,
- managing requirements changes to ensure that everyone is working from up to date documentation and that appropriate stakeholders are involved in all decisions about change and
- when appropriate, a leading user acceptance testing effort completed by the business community to ensure that the software implementation meets the needs of business end users.

All of these efforts help the implementation team fulfill the intended benefits of the project and ensure the investment made realises a positive return.

Step 7: Help the Business Implement the Solution

Your technology team can deliver a beautiful shiny new solution that theoretically meets the business objectives, but if your business users do not use it as intended and go back to business as usual, your project will not have delivered on the original objectives. Business Analysts are increasingly getting involved in this final phase of the project to support the business. Key responsibilities in this step may include:

- analysing and developing interim and future state, business process documentation that articulates exactly what changes need to be made to the business process,
- training end users to ensure they understand all process and procedural changes or collaborating with training staff so they can create appropriate training materials and deliver the training and
- collaborating with business users to update other organisational assets impacted by the business process and technology changes.

This step is all about ensuring all members of the business community are prepared to embrace the changes that have been specified as part of the project.

Step 8: Assess Value Created by the Solution

A course of a project [Business outcomes are *discussed. Details are worked through. Problems, big and small, are solved. Relationships are built. Change is managed. Technology is implemented. Business users are trained to change the way they work*.]
In this flurry of activity and a focus on delivery, it is easy to lose track of the big picture.

Nothing creates more positive momentum within an organisation than a track record of successful projects. Key responsibilities in this step may include:

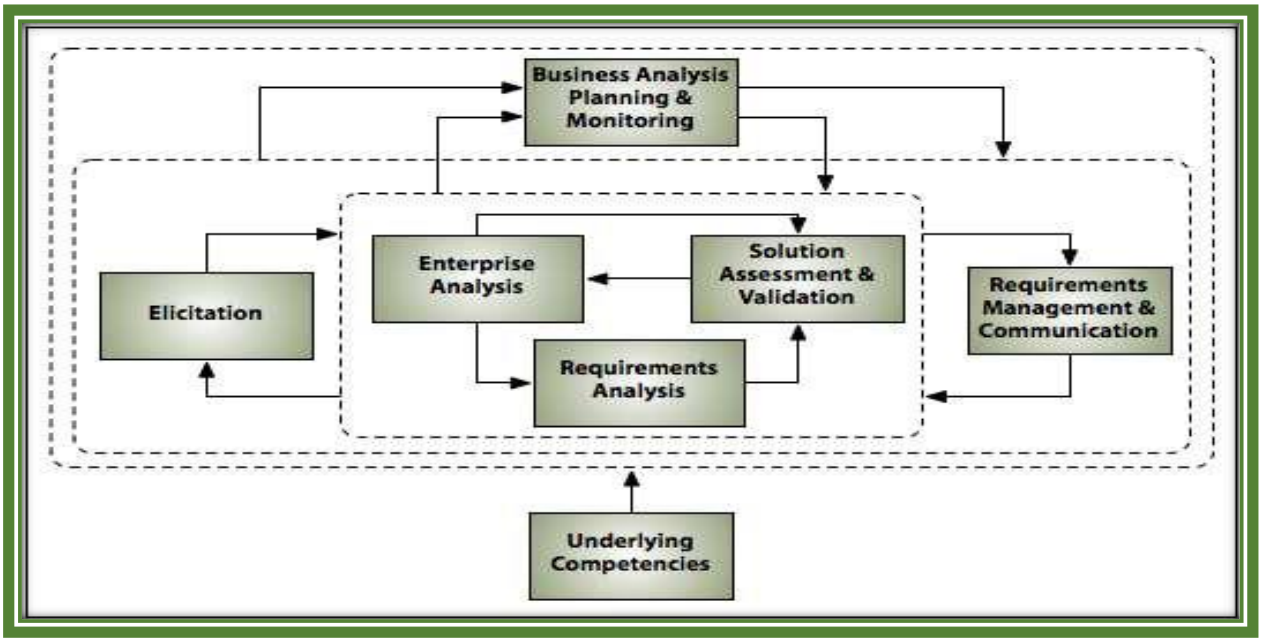
- evaluating the actual progress made against the business objectives for the project to show the extent to which the original objectives have been fulfilled,
- communicating the results to the project sponsor and if appropriate, to the project team and all members of the organisation and
- suggesting follow up projects and initiatives to fully realise the intended business objectives of the project or to solve new problems that are discovered while evaluating the impact of this project.

2.4. Organisational Approach to Business Analysis

In addition, Business Analysts do not always understand their impact on the organisation from a financial or business perspective since they often conduct task oriented work with

stakeholders who may also lack an overall perspective as noted by Brule (2012). “Business Analysis is the set of tasks and techniques used to work as a liaison among stakeholders to understand the structure, policies, and operations of an organisation, and to recommend solutions that enable the organisation to achieve its strategic goals” (IIBA, 2017). Business Analysis is about meeting business needs and ensuring investment in the right solutions. Enterprise Analysis outputs provide context to requirements analysis and to solution identification for a given initiative or for long term planning. Enterprise Analysis is often the starting point for initiating a new project and is continued as changes occur and more information becomes available. It is through Enterprise Analysis activities that business requirements are identified and documented. To identify a business need, refine and clarify the definition of that need and define a solution scope that can feasibly be implemented by the business.

Figure 2.4: Business Analysis Body of Knowledge



Source: Business Analysis Body of Knowledge version 2.0 – IIBA

Both Business Analysts and Project Managers need to become more involved at the enterprise level. Brule (2012) believes that Enterprise Analysis ranks lowest in proficiency among Business Analysis activities and without an Enterprise Analysis perspective, Business Analysts lack the connection between what they are doing and why they are doing it. So, while they may be winning the project battle, they do not have the enterprise-wide perspective to win the war according to Brule (2012).

Further survey results by Brule (2012) indicate that the majority of respondents believe that their Business Analysis competencies are good to excellent and that 75 percent or more of their projects over the last three years were successful. However, according to Brule (2012), since real world evidence indicates otherwise, organisations may be in need of a reality check. Brule (2012) highlights that the survey shows a relatively large population of less experienced practitioners of Business Analysis, with nearly half reporting five years or less of experience. The maturing nature of Business Analysis has numerous implications for organisations such as:

- it impacts performance, including the potential for Business Analysts to work from an enterprise perspective,
- it enables Business Analysts to handle challenges within their discipline and their organisations and
- it enables junior analysts to grow and achieve a level of proficiency and success equated with more seasoned professionals.

Despite this, organisations recognise the critical importance of requirements management and Business Analysis, with survey results showing an increase in the number of Business Analyst positions in the last two years and an increased number of Business Analyst positions projected over the next two years according to Brule (2012).

2.5. Project Management and Business Analyst Challenges

IPS Learning and ESI International (2015) states that projects are the mechanism by which companies get things done for the overall project success or failure and achievement of corporate goals in influencing the bottom line. According to IPS Learning

and ESI International (2015), it is difficult to build an effective project culture and that root causes of project challenges can take some diligence to identify and resolve. IPS Learning and ESI International (2015) found some of the typical corporate challenges after several engagements with their clients.

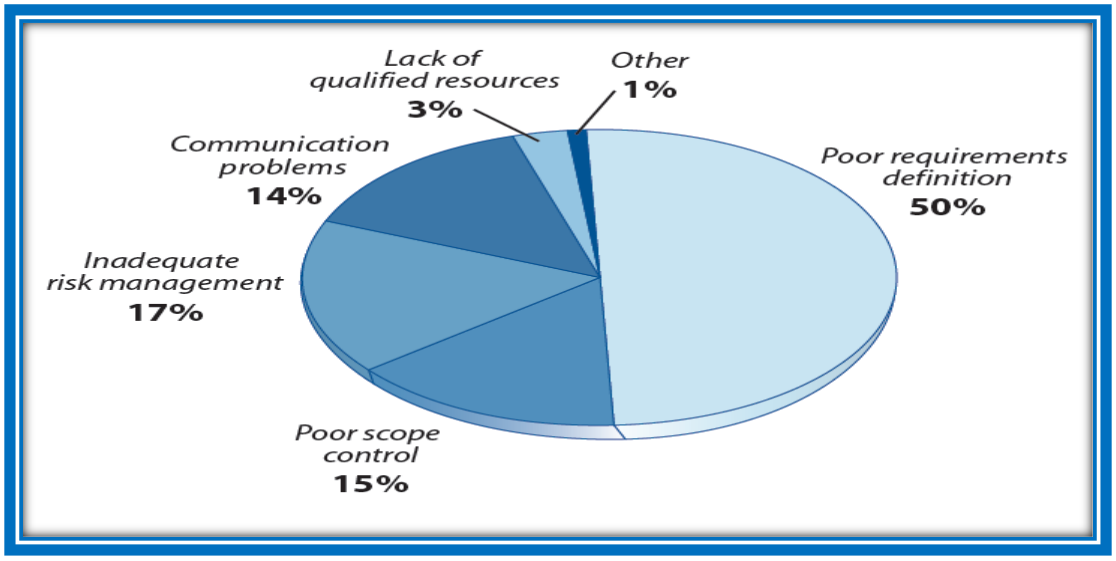
Table 2.1: Typical corporate challenges

Typical corporate challenges after several engagements with their clients:
• poorly defined requirements and pained scope management, • insufficient resource planning and management, • inconsistent or unknown methodology and process, • imperfect project prioritisation and portfolio management, • inability to identify or turn around troubled projects, • weak project management office influence on the organisation, • no understanding of individual or team skills, competencies and gaps and no way to measure progress, • deficiency in critical fundamental or advanced skills on the project team, • failure to scale process and governance within global, enterprise-wide programs • inefficiency within the changing Business Analyst Role, • challenged stakeholder engagement and • weak alignment of managing programs to business strategy

Source: IPS Learning and ESI International (2015)

Common challenges have created best practice solutions to address several problems. They also recognise that every organisation has a unique set of project management challenges. Brule (2006) examines the roots of project failure and centers in on the elusive, often undefined role of the Business Analyst. Figure 2.5 depicts data that was collected in an online poll of 2000 business professionals where they were investigating the key challenges in translating user needs into systems specifications for mission critical projects.

Figure 2.5: Key challenges in translating user needs into system specifications



Source: ESI International, Inc (2006)

Figure 2.5 indicates that an overwhelming 50% of respondents cited poor requirements definition as their biggest challenge. When projects fail, most organisations are quick to blame the Project Manager and not the Business Analyst (Brule, 2006).

2.6. The Role of the Business Analyst

The competencies necessary for a successful Business Analyst simply have not been differentiated from those of a subject matter expert or a Project Manager. Organisations worldwide are operating without defined competencies for their Business Analysts and for many organisations. When the business users spend considerable time with the Business Analysts and since these are focused sessions or workshops, it is imperative that the Business Analyst is able to make the most of the business users' time and knowledge. Parameswaran (2012) demonstrates some of the common problems faced by Business Analysts underpinned by BMGI (2016).

Table 2.2: Common Problems for Business Analysts

Challenges/Problems	Comments
Resistance in sharing information	Information will not be forthcoming whereby users will regularly attend workshops. But it will take a mammoth effort to make them talk. At the other end of the spectrum, there are users who make your life difficult by bombarding you with loads of documents. Business Analyst is able to gain the users' confidence and trust after a couple of sessions and once the ice is broken, information flows more easily. The Business Analyst has to word his or her questions very skilfully (why and how) after playing detective.
Uncertainty	Uncertainties are: uncertainty in the global economy, credit markets, uncertainty in how new regulations will affect business, uncertainty about what competitors are doing and uncertainty about how new technology will affect the business (BMGI, 2014). Uncertainty leads to a short-term focus and companies are shying away from long-term planning in favour of short-term results. How to balance the need for a more reactive, short-term focus with the need for informed, long-term strategies?
Globalisation	In interviews conducted by BMGI (2014), understanding globalisation and foreign cultures is essential to everything from the ability: to penetrate new markets with existing products and services, designing new products and services for new customers, recognising emergent disruptive competitors. The problem to be solved: How to understand the international markets and cultures through better information gathering and analysis of what it all means. Predicaments of business analysis: the incredible degree of government intervention leading to much greater uncertainty in the global marketplace, making international operations even harder to manage. Big companies are struggling with innovation and a better innovation process (BMGI, 2014).
Innovation	Companies are struggling with creation of more innovative cultures and a better innovation process. The problem to be solved is how to become more innovative while still maintaining a sense of control over the organisation (BMGI, 2014).
Government Policy & Regulation	A changing regulatory environment on uncertain energy, environmental and financial policy is complicating the decision making for nearly all companies today. An unknown regulatory environment is fast becoming the new norm and companies are deciding to get on with it, whatever "it" may be, despite the anguish. The problems to be solved: How to understand the meaning of regulation and government policy in the industry, its implications for the business and to develop the skills necessary to deal with it (BMGI, 2014).
Technology	The pace of technological improvement is running at an exponentially increasing rate. The pace today makes capital investment in technology as much an asset as a handicap. A competitor may wait for the next-generation technology, which may only be a year away and then use it to achieve an advantage. The ability to stay informed about emerging technology is in conflict with the need to master a company's current technology. In order to solve this problem: How to recommend that a long-term technology strategy must be developed while remaining flexible enough to take advantage of unforeseen technology developments?
Diversity	Diversity brings many challenges that people do not agree and the lack of agreement makes running a business very difficult. At the same time, the lack of diversity within many large company leadership teams leads to a narrow view of an ever changing and diverse world, contributing to groupthink, stale culture and a tendency to live with the status quo for too long. In order to solve the problem: How to recommend that diversity must first be defined the organisation and then foster the expansion of differing ideas and viewpoints while ensuring a sufficiently cohesive environment that efficiently gets things done.
Complexity	The pace of change is quickening and the global economy is becoming still more connected, creating a much larger and more diverse population of customers and suppliers. Manufacturing and services are increasingly targeted at smaller, specialised markets due to the flexibility that IT provides in these areas. The 3D printing systems tend to become more complex as they evolve, then become simplified again. The problem to solve: How to develop better systems thinking capability so that the organisation can design their business models, processes, products and services in a way that minimises unnecessary complexity.
Information Overload	In today's world nothing is changing more or growing faster than information. The ability of companies to consume and make sense of the information that is available to make good decisions is becoming a nearly insurmountable challenge. In order to solve this problem: How

	to recommend dealing with this mountain of information with both technology and human know-how and then to convert this information into valuable knowledge?
Supply Chains	Uncertainty in demand and the need to stay lean requires companies carry smaller inventories than ever. At the same time, uncertainty in supply, driven by wildly changing commodity prices, an apparent increase in weather-related disruptions and increasing competition for raw materials makes supply chain planning more challenging than ever. In order to solve this problem: How to recommend that a supply-chain strategy must be developed which not only ensures the lowest costs, but also minimises the risk of crippling supply-chain disruptions? The lack of sophisticated approaches to information acquisition, analysis and the development of unique insight leave many companies at a disadvantage (BMGI, 2014).
Strategic Thinking & Problem Solving	Companies lack a long-term strategic imperative and instead jump from one strategy to the next on a year-to-year basis (BMGI, 2014). Companies must resolve that strategic thinking and problem solving which are the keys to successful business then develop a robust capability at all levels.
Accountability for decisions	The business case document should have enough details for the decision-maker to come to a decision and it should clearly elaborate on the issue on which the decision is sought and the preferred outcome to resolve that issue.

Source: Parameswaran (2012)

Spring Business Analysis LLC (2015) provides a list below of the most critical business analysis skills for new Business Analysts on appendices 1 and 2. organised into the categories of core skills, business analysis skills, soft skills and skills that can be required for specific types of Business Analyst jobs.

2.7. The New Value of the Business Analyst

Drislane and Mcwhorther (2007) suggest that today's Business Analyst is expected to do much more than just document business requirements and perform rudimentary analysis tasks. These professionals are now equipped with the skills and tools required to thoroughly express the requirements for a new system to be built or a legacy system that needs to be enhanced without any loss of business vision. Parameswaran (2011) is concerned about accountability when the Business Analyst prepares a business case and presents it to the user community. The business case document requires sufficient details for the decision-maker to come to a sound and strategic decision. It clearly elaborates on the issue on which the decision is sought and the preferred outcome to resolve that issue. The Business Analyst can now specify every aspect of the desired system business behaviour through the use of: [business scenarios for use of the system, user navigation, business rules to be fired, how user tasks will change because of the system; the authorities and roles that are necessary to control access to system resources; the

business content of forms, and documents and how operational and deployment business considerations of the system will be realised].

Each of these specification areas are linked with other specification elements, then traced to the original stakeholder requests to form a comprehensive, pure-business elaboration of the new system (Drislane and Mcwhorther, 2007). The Business Analyst is empowered to preserve the “voice of the customer” through these business solution specifications, the key benefit of which is that the business retains ownership of the system (Drislane and Mcwhorther, 2007). Though IT professionals deliver the implementation, the blueprint of this system, is firmly in the care of the Business Analyst for use by the business. Preserving this fidelity of the business vision significantly enhances the ability for a business organisation to become agile and implement its product and service tactics at a lower cost. The Business Analyst plays the key role and drives all analysis activities (Drislane and Mcwhorther, 2007). Gioia (2013) believes that the two most critical roles at the beginning of a new project are unquestionably the Business Analyst and the Project Manager as they both play important roles in defining the scope, then cooperate on getting solid requirements that meet the business need and ultimately driving the project forward to completion both on time and on budget. In theory, Gioia (2013) affirms that staffing projects with both a strong Business Analyst and a Project Manager from the start is not difficult.

Although Gioia (2013) feels that it is difficult to generalise given so many variables, Project Managers and Business Analysts must be able to partner effectively as peers. When Project Managers and Business Analysts articulate different notions of ownership or who is responsible for what tasks, or even who needs to be kept in the loop about requirements, risks, or stakeholder conversations, valuable project time is wasted and the ultimate success of the project can be put in jeopardy, Gioia (2013). The best clue to project health could be an examination of the relationship that exists at the beginning of a project between the team’s Project Manager and the Business Analyst, team sharing a common goal, different role critical for success, different strengths and skills, holding

different perspectives, and communication is problematic. Gioia (2013) stresses that Project Managers and Business Analysts must collaborate to rise above the status quo by combining their efforts to become far more synergically successful.

Table 2.3: Key responsibilities of Project Managers and Business Analysts

Project Managers	Business Analysts
Project Manager's tend to be very focused upon process and that means: • *bringing the project in on time and making sure tasks meet the project plan schedule,* • *ensuring that the project management methodology is being followed and required document deliverables are produced and milestones reached and* • *ensuring that the budget is managed effectively and not exceeded*	***Business Analyst's tend to be more focused on content and that means:*** • *the correct stakeholders have been identified and consulted* • *requirements are well understood and documented as thoroughly and explicitly as possible and* • *the proposed solution fits the organisation and delivers the expected results per the requirements specification*

Source: Gioia (2013)

2.8. Business Analyst and Project Manager Partnering for Project Success:

Carkenord, Cartwright, Gace, Goldsmith, Larson, Skrabak and Vonk (2010) mentions that in recent years, organisations have come to understand the critical importance of projects to drive business results, which has led to the widespread acceptance of the profession of project management and the emergence in its own right of the profession of Business Analysis. These developments have prompted project sponsors, team leads and team members to consider how these two professions fit into the project framework. Unclear roles and responsibilities, confusion over job titles and differing organisational expectations for project management and Business Analysis roles can create confusion and conflict that contributes to less successful project outcomes.

They focus on Project Managers, there may be a perception that Business Analysts are collecting requirements without effective co-ordination. There is a fear of being left out of the loop and that the Business Analyst may create unrealistic expectations among project stakeholders regarding project commitments. For Business Analysts, there may be a

perception that Project Managers do not understand the breadth and complexity of defining, analysing and managing requirements and are unwilling to fully investigate and address stakeholder needs. As companies search for the optimal project leadership resource mix that provides maximum business value for funds invested, many are looking for guidance on the roles of the Project Manager and Business Analyst to provide effective and efficient project delivery. According to them, within the realm of a project, a person with the job title of Project Manager may perform Business Analysis, just as a person with the job title of Business Analyst may perform project management. Table 2.4 gives the definitions by Carkenord et al. (2010), used to describe and differentiate the broader discipline versus the role that may be assigned on projects.

Table 2.4: Definition of a Project Manager and a Business Analyst

Project Management	Business Analyst
The application of knowledge, skills, tools and techniques to project activities to meet the project requirements and to achieve the project objectives	The set of tasks and techniques used to work as a liaison among stakeholders in order to understand the structure, policies, and operations of an organisation and to recommend solutions that enable the organisation to achieve its goals.

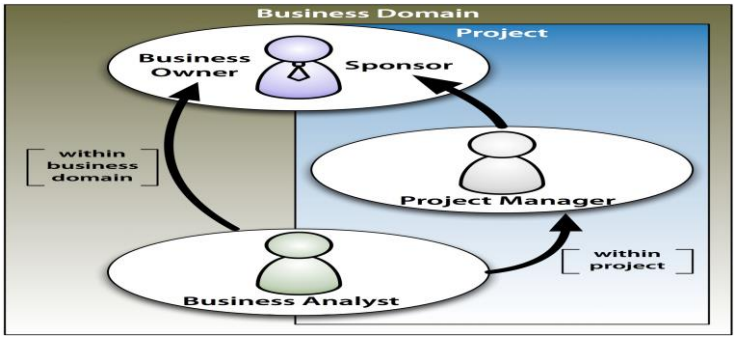
Source: Carkenord, Cartwright, Gace, Goldsmith, Larson, Skrabak and Vonk (2010)

The Business Analyst works with the Project Manager to determine the Business Analysis deliverables produced, activities performed, work estimates developed and identify the management tools required to measure the progress of those activities and deliverables. The Project Manager participates in Business Analysis planning and is responsible for ensuring those plans are integrated with the other management plans (Carkenord et al., 2010). The interpretation of scope management terminology between various guides to the bodies of knowledge may be different. There is one suggested approach for differentiation within the overall project context:

- the Project Manager focuses on planning for the project processes and integrating the Business Analysis approach and deliverables into the overall project and the work required to deliver a product, service, or result and
- the Business Analyst focuses on planning and defining the product scope, the features and functions that characterise a product, service or result and the Business Analysis approach and deliverables aligned within the overall context of the project

The scope management notes that in order to effectively meet business needs, the Business Analyst can identify, recommend or even advocate project scope changes as can any project team member, but cannot make commitments. The Project Manager has the responsibility to manage the project scope. Carkenord et al. (2010) states that prior to project initiation, the results of Business Analysis activities performed in the business domain, in support of normal operations, are communicated directly to the Business Owner. When projects are initiated, business domain communications flow indirectly to the Business Owner known as project sponsor through the Project Manager as highlighted in Figure 2.6.

Figure 2.6: Alternative Business Analyst Titles



Source: Carkenord, Cartwright, Gace, Goldsmith, Larson, Skrabak and Vonk (2010)

The Project Manager is accountable for all project related communication with all project stakeholders and the Business Analyst work primarily involves stakeholders who are

directly or indirectly affected by the solution requirements. These are the people who provide the requirements, use requirements to design, build, and test the solution and those who will be impacted by the implementation of the solution. When Business Analysts have direct reporting responsibilities to a business domain, they also maintain ongoing communications with that organisation. Carkenord et al. (2010) further highlights that the Project Manager is responsible for the risk management plan, which includes all project risks. The Project Manager incorporates the Business Analysts knowledge of business analysis risks, as well as business organisational risk into the overall risk management plan. During risk identification and analysis activities, it is important to ensure the appropriate project and business risks are being captured and mitigated throughout the life cycle of the project:

- the Project Manager is accountable for all project related risk management activities with all project stakeholders and
- the Business Analyst works with the Project Manager on risk identification, analysis and strategies, including requirements prioritisation and validation by focusing on the business value, business risk, likelihood of success and assistance in obtaining stakeholder consensus.

2.9. The relationship between Business Analysts and Project Managers

Bondale (2014) states that there is a greater co-dependency between the roles of a Project Manager and Business Analyst. He has no doubt that a project sponsor is crucial to a project's success and it is critical that a Project Manager establishes a positive, mutually beneficial working relationship with their sponsor, but once the project gets underway, most Project Managers will find themselves spending much more time with the Business Analyst. He further mentions that requirements are one of the most frequently cited sources of project issues and an effective requirements management process can go a long way towards improving project predictability. Bondale (2014) further highlights that one would expect that these two roles would naturally work very well together, or at the very least, would go out of their way to ensure that they were not impacting each

other. Bondale (2014) affirms common complaints about the Project Manager from the Business Analysts who:

- appear to be focused solely on cost or schedule constraints without also embracing the criticality of having good quality requirements,
- demonstrate an unwillingness or inability to provide assistance in ensuring that stakeholders are attending and contributing to requirements gathering or review sessions,
- do not bother to read or understand high-level project requirements documents and
- support or initiate scope change decisions without proactively engaging the Business Analyst.

While individual projects might suffer as a result of such challenges, the greater long term impact is the erosion of the mandatory trust and mutual respect which needs to exist between these roles. This will result in chronic challenges to projects. While these symptoms appear quite varied, they usually relate back to one of the following two root causes: a lack of clarity regarding the responsibilities, drivers and expectations of each role, based on the context of a given project; and a lack of alignment in the performance objectives or metrics for each role, based on the context of a given project. Fox (2007) mentions that a Project Manager traditionally has total responsibility for a software project, which includes project budget, schedule and resource management, as well as ensuring that the product of the project meets stakeholders' expectations and needs. He further believes that there seems to be a great deal of confusion among practitioners and experts concerning the interacting roles of the Project Manager and Business Analyst on a project as a project with an effective Project Manager and effective Business Analyst have a much higher chance of success than a project without them. When a Project Manager and a Business Analyst are present on a project, the usual split of responsibilities includes the Project Manager emphasising project schedule, cost and resource management; while the Business Analyst works on product requirements and management.

2.10. Root Causes of Business Analyst and Project Manager Tensions

Pullen (2014) argues a rapid expansion of Business Analysis in projects and noticed a corresponding rise in the levels of tension between the key people leading projects, especially between Project Managers and Business Analysts while in some organisations, the Project Managers and Business Analysts work together productively and in others, they can appear to be in almost constant conflict. Pullen (2014) discusses the issues involving Project Managers where the responses indicated that the Project Manager is under pressure to get things done, with a corresponding focus on the short-term. Project Managers are to take off their blinkers to ensure that they understand the work of the Business Analyst and the higher likelihood of success that Business Analysis brings to projects (Pullen, 2004). Many Business Analysts can give the appearance of going off investigating everything, without an awareness of the very real project constraints limiting budget and time and savvy Business Analysts need to be aware of and work within limits, while keeping their Project Manager informed of the risks involved. Pullen (2014) believes that it helps if the Project Managers and Business Analysts speak a common language and understand each other's methods and tools and keep in touch regularly and that they learn lessons as they go through the project, exploring what works well and what could be even better.

Lim (2012) states that there are a lot of tips, resources and guidelines on project management, however, one of the least discussed topics involves project failure. He further mentions that very few Project Managers or companies want to admit their failure and that is the reason why it is important to evaluate all the possible challenges even at the very start as it lets the Project Manager, the team members, and the client mitigate risks associated with the work. Lim (2012) identifies the 10 main causes of project failure in Table 2.5.

Table 2.5: Main causes of project failure

Main Causes	Description
Poor planning and/or inadequate processes.	Planning is central to the success of a project. It is important to define what constitutes project success or failure at the earliest stage of the process. It is also essential to drill down the big picture to smaller tasks.
Inefficient way to document and track progress.	This is an oversight on the part of the Project Manager as tracking milestones is a crucial way to see if expectations are being met. Documentation and tracking also lets the manager identify which areas require more resources to be completed on time.
Poor leadership at any level.	The leader is usually identified as the Project Manager; however, the management level executive also has a responsibility of ensuring the project's success. He/she should work together with the manager to ensure that the company's exact requirements are understood.
Failure to set expectations and manage resources.	In working in a team, it is critical that you are able to manage people. If and when expectations are not met, there should be clearly-defined consequences. The task should then be prioritised and possibly reassigned to a more competent individual.
Inadequately-trained Project Managers.	The Project Manager is taking on a heavy responsibility. Therefore, it is important to assign management roles only to individuals who have the capabilities to meet requirements. In some cases, poorly trained managers are assigned to complex projects; this is a recipe for failure.
Inaccurate cost estimation.	There are instances when the cost of an undertaking is grossly underestimated. When it runs out of resources, the project cannot be completed and this can be mitigated when the lack of resources is identified early by the Project Manager.
Lack of communication at any level.	Communication between the management executive, the Project Manager, between the latter and the team members are always important and everyone should feel free to forward his/her concern or give suggestions.
Culture or ethical misalignment.	The culture of the company must be prize competence, pro-activeness and professionalism. If it does not, the team members may not have the motivation to do their best and in essence, everyone involved must be concerned about the success of his/her undertaking.
Competing priorities.	When a company's resources are stretched, there will be competing priorities in terms of manpower and financing, so, having good cost estimation at the start will eliminate this problem.
Disregard of project warning signs.	When a project is on the verge of failing, there will always be warning signs so taking action immediately can save the project, or else, the whole endeavour can just go down the drain.

Source: Lim (2012)

In some situations, a project that consumes resources but fails to deliver an acceptable Return on Investment is terminated before completion, or is poorly scoped so resource allocation is insufficient which results in low adoption, or produces insufficient value and no learning lessons. Another project failure is one that consumes resources but fails to deliver as proposed, exceeds its budget, exceeds its time, and does not meet

specifications. Kozak-Holland (2015) asserts that there is evidence to support that project success rates are rising by meeting the criteria for success and completing on time, on budget and with all the features and functions originally specified. It means that the success rate has improved and project failures have decreased. Kozak-Holland (2015) believes root causes to these problems and failures tend to trace back to decisions made in all stages of the Information Technology project. They also state that parallel investments in technology are not enough and need to be supported by investments and changes in processes and organisation.

2.11. The Value of a Business Analyst to a Project Team

Laehn (2012), states that it is important that management and stakeholders in all organisations recognise the value of adding a Business Analyst to a project team. They are able to create value and decrease costs for their organisation in several different ways. According to Laehn (2012), a Business Analyst's main role on a project team is to manage the solution scope of the project deliverable, take the lead in handling all aspects of the solution scope and acts as a facilitator, communicator and problem solver for a given project.

Organisations should be aware of the total cost of owning the project throughout the entire project lifecycle as at first glance. It can appear that adding a Business Analyst to a project team will result in higher overhead and increase the cost of the project. The author further states that these organisations were not accounting for the value added and costs saved from using a Business Analyst resource on their project teams to their rate of return calculations. The most common reason for omitting a Business Analyst to the project team is a lack of defining and documenting quality project requirements which leads to missed requirements and missed requirements lead to costly rework and time spent on something that should have been defined before the developers began working on the project (Laehn, 2012).

The lack of a Business Analyst can ultimately lead to increased development time costing the organisation much more than if they would have added an efficient Business Analyst to bridge the gap between the business and development staff. Management needs to realise that adding a Business Analyst to a project team should be looked at as a positive project investment because they can help increase value and save money on the project in the long run. A Business Analyst is able to impact both of the variables that make up the return on investment of a business project as Business Analysts has the ability to:

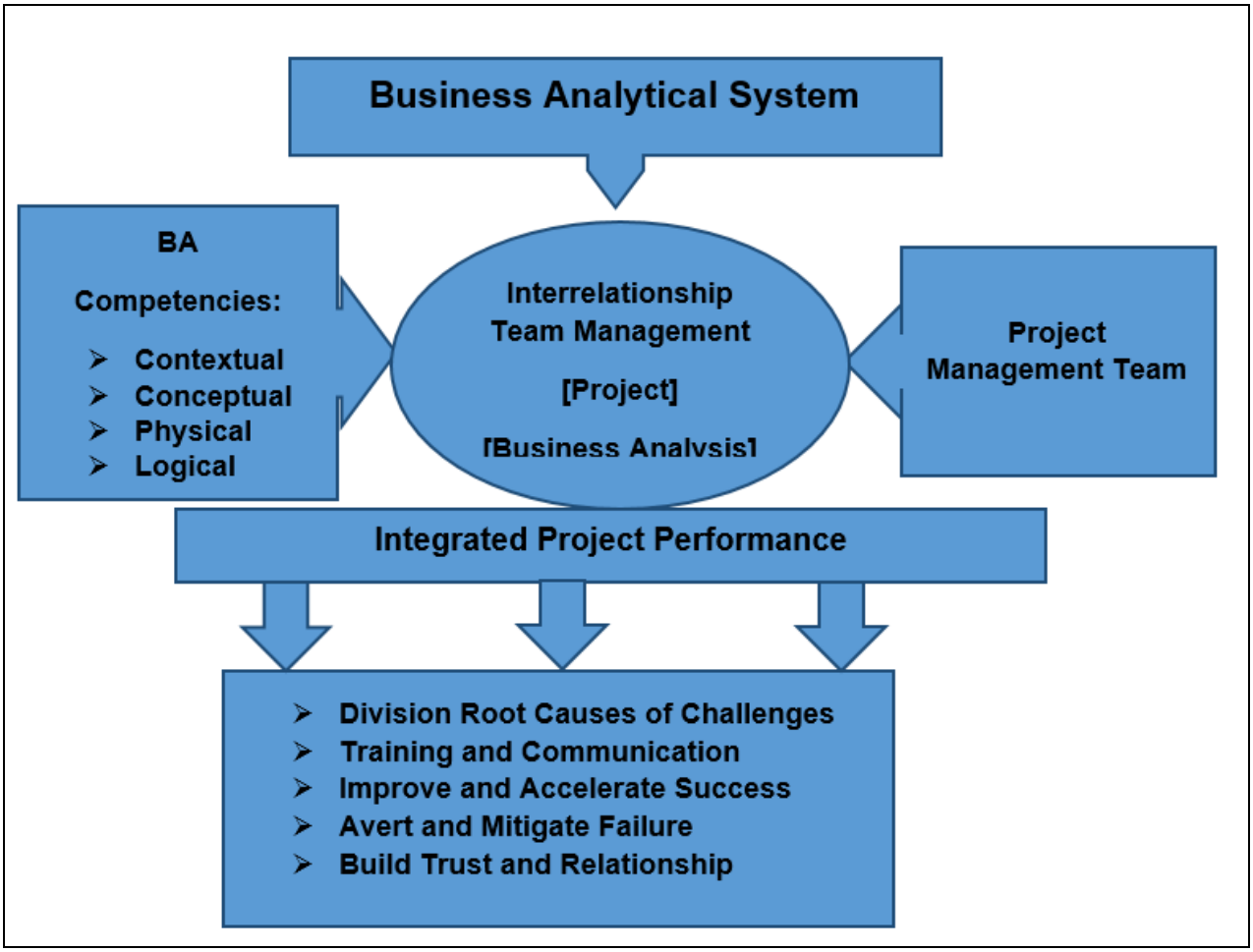
- increase the total value achieved through completing the project and
- decrease the total cost of the entire project.

The Business Analyst Times (2012) states that the future success of Project Managers and the Project Management Office comes down to one thing, which is identifying and eradicating the causes of project failure right at the source, while the first reaction might be to place blame on the Business Analyst, this is incorrect as the real root causes run much deeper than that. The Business Analyst Times (2012) provides real reasons why requirements-related issues, sabotage the organisation's key projects before they even get off the ground, such as,

- dramatic project overruns stem from requirements;
- over-build expands project scope unnecessarily and can always be traced back to requirements;
- approaching requirements in the same old way will not work in agile environments;
- continuing trends toward outsourced and physically dispersed team members strains the ability to produce quality requirements;
- effective collaboration is largely absent from the requirements process;
- requirements suffer as it becomes harder to get people together;
- lack of executive involvement in the requirements stage often dooms a project to fail;

- requirements definition is text-based versus visual, which leaves too much room for misinterpretation;
- excessive requirements changes are a major cause of project failure and
- tools that enable compliance are largely missing from requirements efforts.

Figure 2.7 Conceptual Structure

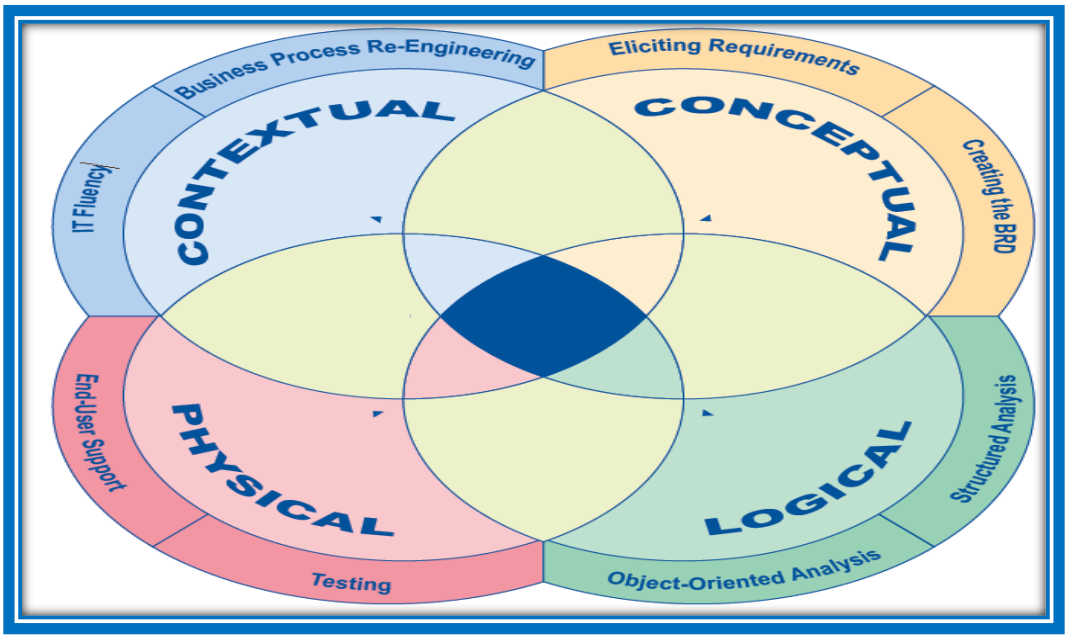


Source: The Business Analyst Times (2012)

The underpinning essential competencies to combat the substantial issue of the undefined Business Analysis role and in order to aid in the organisational implementation

of these competencies, using Business Analyst Competency Model. This model was developed by Brule (2006), which breaks down each competency as conceptual, logical, physical or contextual, takes into consideration all tasks and activities performed by a Business Analyst. The model takes a fairly traditional approach, basing divisions on research conducted in many organisations by Brule, (2006). The competency model is a practical aid to apply guidelines for the Business Analysts in an organisation at all levels. Competency is made up of three components: firstly, knowledge considers what is being measured, secondly, skill looks at how is it done and thirdly, ability examines to what degree can it be done (Brule, 2006).

Figure 2.8: Business Analyst Competency Model



Source: Brule (2006)

Brule (2006), indicates that clearly there are different responsibilities during each stage of a Business Analyst's career and for each of the eight competencies, the model designates the specific tasks a competent Business Analyst should perform at the senior, intermediate and junior levels Figure 2.8. Laehn (2012) mentions that the one way the organisation can quantify the value of adding a Business Analyst to a project team is to

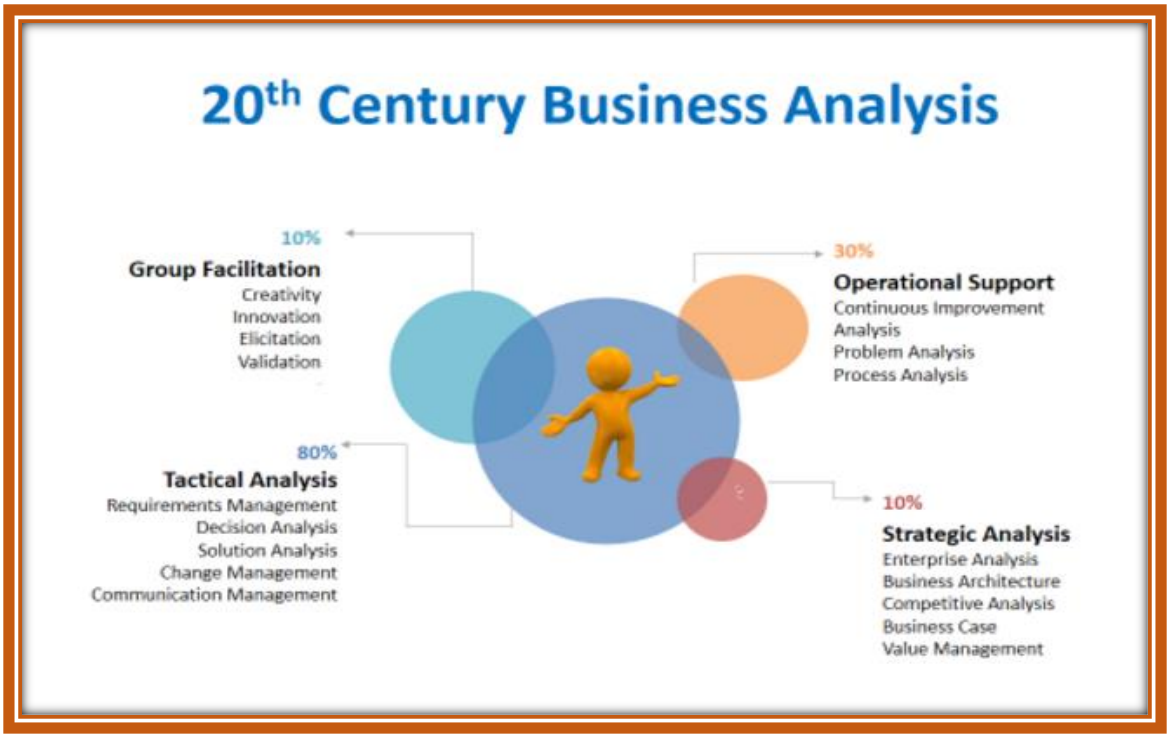
look at a formula that makes up the project's return on investment which can be defined by the following equation: [Total value achieved through completing the project] minus [Total cost of the entire project].

According to Laehn (2012), the organisation must be aware of the total cost of owning the project throughout the entire project lifecycle. However, the organisation must account for the value added and costs saved from using a Business Analyst resource on their project teams to their rate of return calculations. Laehn (2012) believes that the organisation needs to realise that the lack of a Business Analyst can ultimately lead to increased development time costing them much more than if they would have added an efficient Business Analyst to bridge the gap between the business and development staff. Management needs to realise that adding a Business Analyst to a project team should be looked at as a positive project investment because they can help increase value and save money on the project in the long run (Laehn, 2012).

According to Wailgum (2008), the Business Analyst position varies depending on the organisation where the line between pure business functions and IT functions has eroded. The author emphasises that the most successful Business Analysts are the ones who blend the temperament and communications savvy of a diplomat with the analytical skills of an intelligence officer, and business analysts are a hot commodity. Business Technology Analysts have more cross-functional and cross domain business experience, rather than just focusing on one area or function within the business. The challenge for the organisation is molding today's Business Analysts into tomorrow's highly evolved Business Technology Analysts. Future Business Technology analysts will be the organisations' most valuable Business Analysts because they can single handedly turn business requested and IT-delivered applications into tomorrow's dynamic business applications (Wilgum, 2008).

According to Hass (2015), the 20th century Business Analyst has been a mostly tactical endeavour, focusing on requirements definition and management as in Figure 2.9, where the image of a baby at the center represents the early stages of business analysis.

Figure **2.9: 20th Century Business Analysis**



Source: Hass (2015)

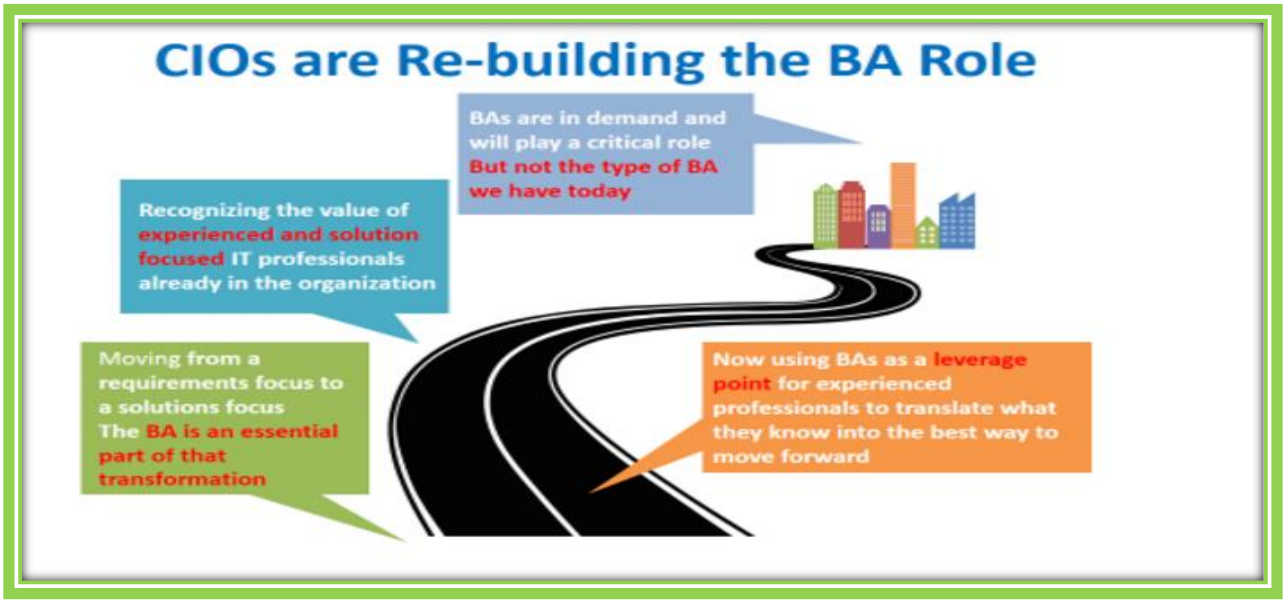
Organisations need to grow up fast to meet the challenges of the 21st century. Hass (2015) further believes that the 21st century challenges competencies to change the way practitioners and Business Analysts initiate and manage change in our organisations as traditional jobs are changing and Business Analysts are focusing on strategy, innovation, value vs. requirements management while Project managers are focusing on complexity management vs. project management. Organisations need to negotiate the constant change and unrelenting complexities of the 21st century. They need critical thinkers with the ability to adapt, invent and reinvent, collaborate, create and innovate. An organisation needs to understand and leverage the complexities to harness creativity (Hass, 2015).

Figure 2.10: 21st Century Challenges

Source: Hass (2015)

Hass (2015) believes that in order to remain competitive in these challenging times, the organisation must realise that the Business Analyst role is at the heart of future success. Organisations appreciate that Business Analysts are in demand to play a critical role in the future. Hence, they are rebuilding the Business Analyst role as per 21st century challenges (Figure 2.10). Organisations around the globe are searching their resources to find experienced and solutions focused IT and business professionals.

Figure 2.11: Rebuilding the Business Analyst Role



Source: Hass (2015)

Hass (2015) mentions that Business Analysis is transforming itself before our very eyes to create better business outcomes and some refer to it as 'Breakthrough Business Analysis.'

2.12. Value of Enterprise Business Analyst

Hass (2015) states that Enterprise business analysis focuses on delivery of business value and innovation. Enterprise Business Analysts understand the holistic nature of change; transformational change requires attention to people, process, organisations' rules, data, applications and technologies to make up a transformational business practice. According to Hass (2015), Enterprise Business Analysts embraces business architecture and deliberate design to help temper project failure. Realising that a holistic view of change is both an art and a science, Enterprise Business Analysts strike a balance between analysis and intuition, order and disruptive change. Decision making is collaborative and thinking is global, holistic and strategic. Complexity is leveraged to achieve creativity while leadership is shared, diverse and expert. Teams are collaborative and high performing and methods are adaptive, creative, agile and visual. Solutions are

innovative, competitive and sometimes unsettling and disruptive while value is delivered early and often. Breakthrough Business Analysis produces ground breaking results. It requires different thinking and new practices and systems as in Figure 11 (Hass, 2015).

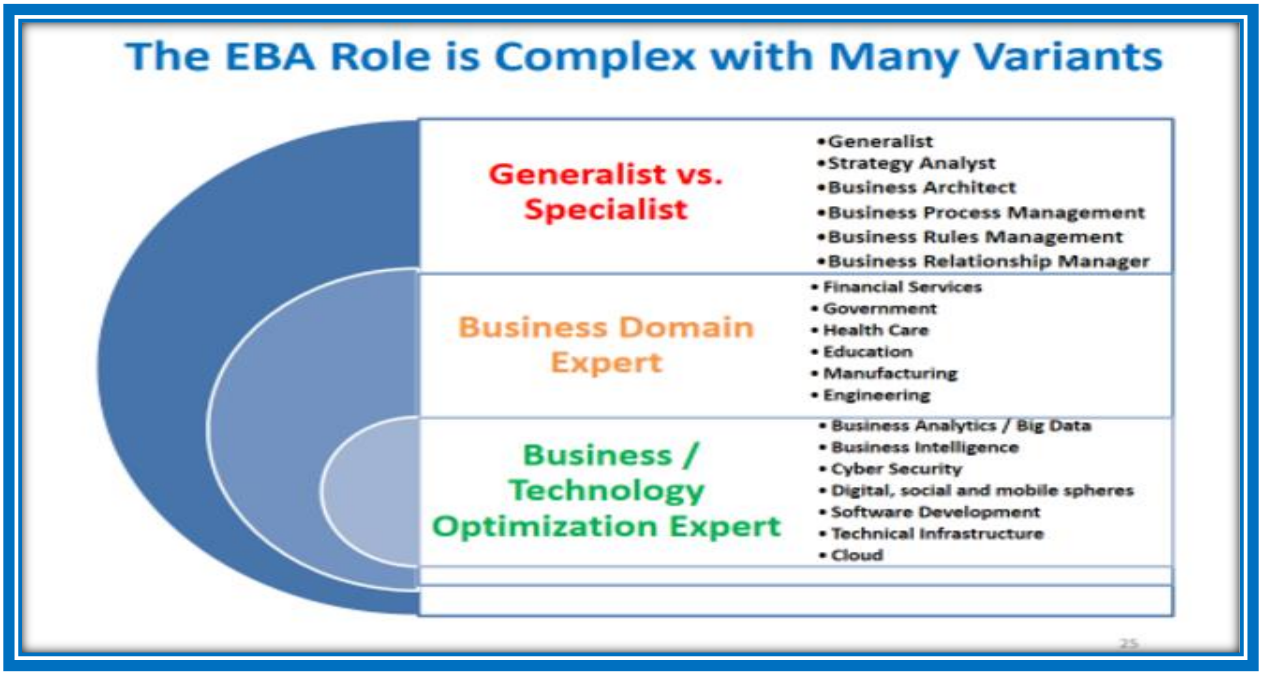
Table 2.6: Breakthrough Business Analysis

Business as Usual	Business Accelerated
3-5 year roadmap	Create a system of engagement
Big, feature-rich updates	Go to market faster, smaller feature sets. Iterate with fast feedback loops
Control changes	Welcome changes that add value. Reduce the cost of change thru iteration
Short-term focus	A long-term vision of products
Quality means fewer defects	Quality means customer is delighted and loyal
Deliver what they asked for yesterday	Deliver what they really need tomorrow
Hard costs count	Realize the cost of lost opportunities
Use agile to do the wrong things faster	Use the right method for the right product
Track changes for CYA	Track changes to see where the threads lead

Source: Hass (2015)

Hass (2015) believes that one of the reasons that the role and capabilities of the Business Analyst is difficult to describe is that they are very complex function with many variants as in Figure 13. The Generalist Enterprise Business Analyst wears many hats, from Strategy Analyst to business relationship manager, whereas the specialist Enterprise Business Analyst may focus on business architecture or business rules management. At the same time, Enterprise Business Analysts are often business domain experts so that they understand and are authorities in both the business domain and the technology supporting the business. Mostly of all, Enterprise Business Analysts focus on business/technology optimisation, staying current on the latest technological advances and incorporating them into the IT suite of offerings (Hass, 2015).

Figure 2.12: The Enterprise Business Analyst Role



Source: Hass (2015)

Hass (2015) believes that Business Analysts of the not too distant future must and will become visionaries, innovators, strategists and transformational leaders, executing strategy through project results. Successful Business Analysts will learn how to embrace organisational values, empower their teams to thrive, bring customers into the change process and drive innovation through global partnerships. Business Analysis seems to be a self-improving discipline and organisations must embrace the energising new challenges and opportunities ahead. Organisations must change the way they do projects to achieve faster time to market and deliver innovative solutions that add value to the customer and wealth to the organisation because only then, they will be contributing to a sustained competitive advantage for their organisations (Hass, 2015). With business success riding on innovation and first to market speed, organisations must be able to deliver new products and business capabilities on time, cost and scope commitments. However, according to the CHAOS Manifesto 2013 by the Standish Group, technology-enabled business change initiatives are only 39 percent successful, as measured by on

time, on budget and with the full scope of functions and features which come at a considerable cost (Hass, 2015).

Hass (2015) believes that as organisations struggle to bring about positive change within their companies and are struggling with the challenges of the new economy, the nation states where their companies operate. It is under immense pressure to build and sustain the fundamental elements of a thriving economic culture. These involve investment in five major areas:

- education: to ensure the availability of a skilled workforce;
- immigration: to reach across the world for the best minds;
- infrastructure: to provide the basic services for the organisation to operate effectively and efficiently including health care;
- rules and regulations: to provide an environment of fairness and
- research and development: to continue to innovate and create.

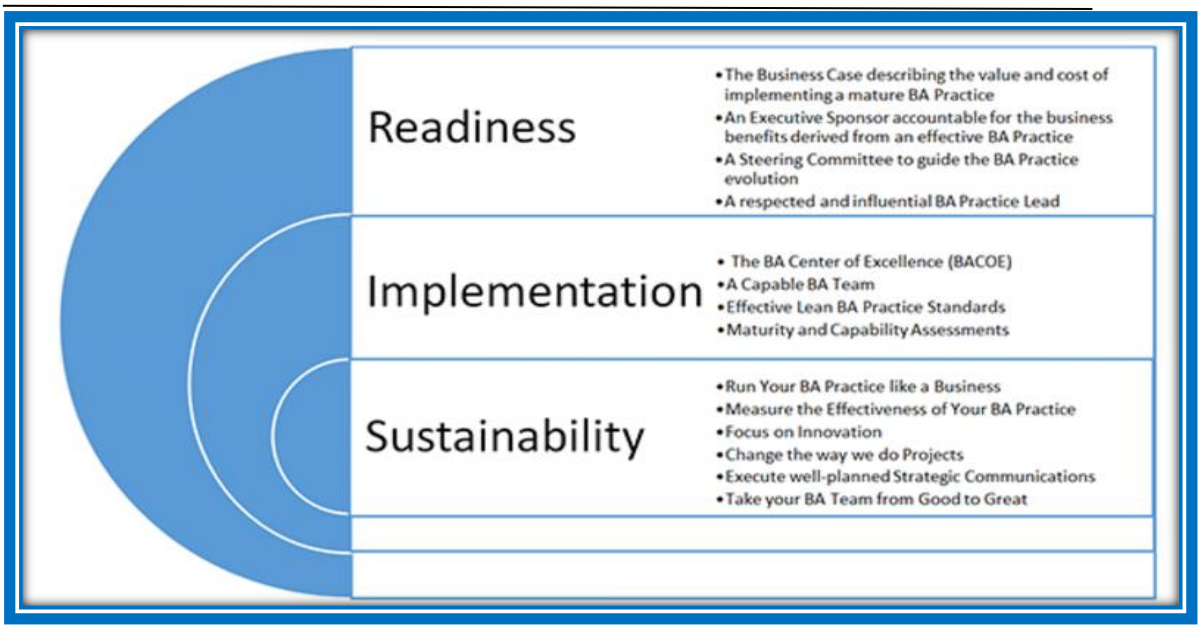
2.13. Implementing A Value-Based Business Analyst Practice

Hass (2015) further mentions that the organisation must make a transition from a Business Analysis discipline that is project/requirements focused to one that is adding value at the enterprise/strategy level. Breakthrough value based Business Analysis centers on many of the woefully inadequate essentials of business/technology projects and it changes the focus as it strives for the following elements:

- decision making**:** collaborative;
- thinking: global, holistic, strategic;
- complexity**:** leveraged to achieve creativity;
- leadership**:** shared, diverse, expert;
- teams**:** collaborative, high performing;
- agile methods**:** adapting, experimenting, creating, visualising;
- solutions: innovative, competitive, unsettling, disruptive and
- value: delivered often

Hass (2015) presents the following framework (Figure 14) and how to implement strategic Business Analysis in the organisation and make them stick.

Figure 2.13: Framework



Source: Hass (2015)

The framework is a valuable tool for IT managers, product owners, strategists, project portfolio managers, Business Analyst managers, Business Analyst practice leads, Enterprise Business Analysts and any organisation who wants to improve their business practices. This new framework offers a stage by stage approach to ensure your Business Analyst practice is customised to your organisation, becomes a lasting discipline, and adds value to your customers and wealth to the bottom line (Hass, 2015). The Breakthrough Business Analysis Implementation Framework leads the 21st century as the proven method to implement and sustain value-based business analysis practices. The framework is based on real life success stories and case studies to ensure that an organisation has the right Business Analysts practice and is the right fit for the organisation. The Value based Business Analysts Practice brings worth to the organisation as defined by value to the customer and wealth to the bottom line. The emphasis is on running the Business Analysts Practice like a business to continue to

thrive through the rough roads ahead (Hass, 2015). In many organisations, Business Analysts have moved from total focus on the upfront definition of requirements to a transition role working as the business representative to the operations transition team as it helps to ensure a smooth transition between the old processes and systems and the new ones. Generally, this means that the Business Analysts will have to be aware of production standards and processes in order to be able to work with service delivery managers and operations personnel (Lincoln, 2013).

In conclusion this chapter concludes that the effective use of Business Analysis in an organisation ultimately improves the way business is done. The next chapter will examine research design and approaches to effectively address the research problem.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1. Introduction

William (2006) states that a research design refers to the overall strategy that is chosen to integrate the different components of the study in a coherent and logical way, thereby, ensuring that the research problem is addressed effectively. It constitutes the blueprint for the collection, measurement and analysis of data. Research problem also determines the type of design that should be used. The function of a research design is to ensure that the evidence obtained enables the individual to effectively address the research problem logically and as unambiguously as possible (William, 2006).

3.2 Research Design

A descriptive research study was used together with a quantitative approach to research analysis. Census and purposive sampling was conducted within the population of the business unit. A list of about 80 names were chosen out of the Personal and Business Banking Information Technology address book to complete the survey questionnaire as the most common method used to collect data. This questionnaire was administered by electronic mail. The questions were close-ended, because it is easier and faster to answer, analyse and rank the items accordingly. This study had a total of 80 permanent Business Analysts in Personal and Business Banking Information Technology, Head Office which constitute the sampling size for this study. The Business Analysts who are contractors were not be part of this study as they might not be available to answer the survey. This study examined the effects of Business Analysis in the project based activities at Standard Bank.

3.2. Research Approaches

The FluidSurvey Team (2014) investigated that each type of research serves a different end purpose and can only be used in certain ways. In the online survey world, mastery of

all three can lead to sounder insights and greater quality information. They believe that most research can be divided into three different categories.

Firstly, exploratory research focuses on the discovery of ideas and insights as opposed to collecting statistically accurate data. It is best suited as the beginning of the total research plan. It is most commonly used for further defining company issues, areas for potential growth, alternative courses of action, and prioritising areas that require statistical research. When it comes to online surveys, the most common example of exploratory research takes place in the form of open/closed-ended questions. Text responses may not be statistically measurable, but they provide a richer quality information that can lead to the discovery of new initiatives or problems that should be addressed.

Secondly, descriptive research takes up the bulk of online surveying and is considered conclusive due to its quantitative nature. Since there are predefined categories a respondent must choose from, it is considered descriptive research. Unlike exploratory research, descriptive research is pre-planned and structured in design so the information collected can be statistically inferred on a population. These questions will not give the unique insights on the issues like exploratory research would. Instead, grouping the responses into predetermined choices will provide statistically inferable data. This allows the measurement of the significance of the results on the overall population that is being studied. The main idea behind using this type of research is to better define an opinion, attitude, or behaviour held by a group of potential respondents on a given phenomenon.
Thirdly, causal research is quantitative in nature as well as pre-planned and structured in design. For this reason, it is also considered conclusive research. Causal research differs in its attempt to explain the cause and effect relationship between variables. This is opposed to the observational style of descriptive research, because it attempts to interpret whether a relationship is caused by experimentation. In the end, causal research will have two objectives:

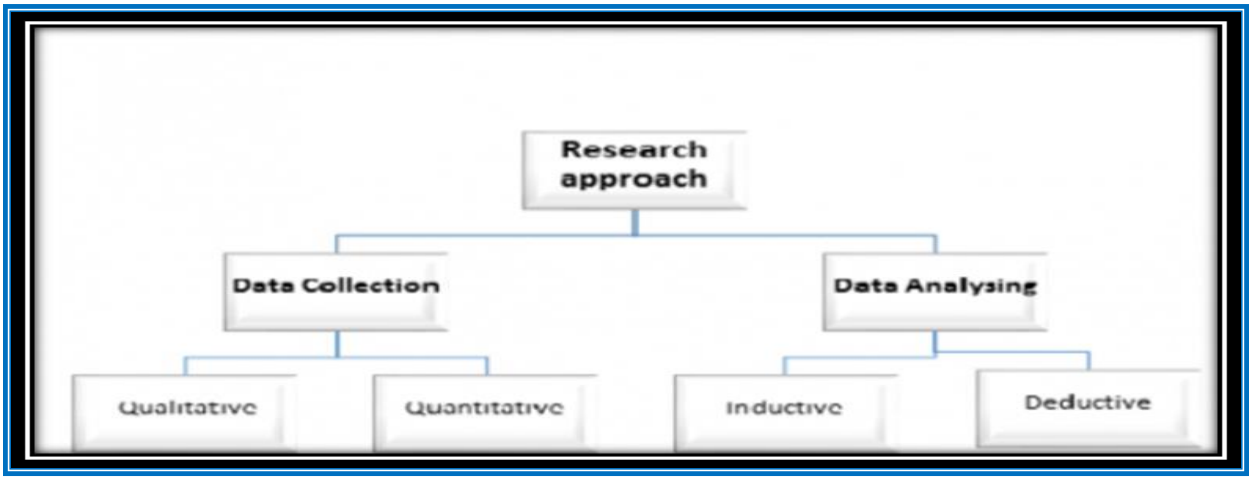
- to understand which variables are the cause and which variables are the effect, and
- to determine the nature of the relationship between the causal variables and the effect to be predicted.

A case study design was chosen because according to Cooper and Schindler (2011), a case study is a powerful research methodology that combines individual and group interviews with record analysis and observation. It also emphasises detailed contextual analysis of a limited number of conditions and their relationships. This study aimed at exploring a detailed contextual analysis of the motives and effects of Business Analysts and synergic approach with project teams at Standard Bank in Johannesburg Head Office using quantitative method.

3.3. Research Approaches/Paradigms

According to Datt (2016), a research approach is a plan and procedure that consists of the steps of broad assumptions to detailed method of data collection, analysis and interpretation and is therefore, based on the nature of the research problem being addressed. Datt (2016) believes that a research approach is essentially divided into two categories as figure 3: [Approach of data collection and Approach of data analysis or reasoning].

Figure 3.1: Research Approach



Source: Datt (2006)

Datt (2006) mentions the two types of approaches to data analysis, inductive and deductive approach. There are two broad categories of research methodologies which are quantitative and qualitative. This study adopts quantitative data using deductive approach. Cooper and Schindler (2011) mentions that quantitative research attempts precise measurement of something. It usually measures consumer behaviour, knowledge, opinions or attitudes. In this study, a quantitative research methodology is being used to achieve the objectives of the study. The data is translated into the use of statistical analysis to make the connection between what is known and what can be learned by research. Consequently, analysing data with quantitative strategies requires an understanding of the relationships among variables by either descriptive or inferential statistics. Descriptive statistics helps to draw inferences about populations and to estimate the parameters (Trochim, 2000). Quantitative data requires statistical analysis and deductive approach is popularly used as it enables the research to reason from generic to specific. Qualitative data requires an inductive approach of analysis and it is widely used for analysing qualitative data. This begins from selection of the area of study and builds a theory.

In mixed type of data, both inductive and deductive approaches of analysis are utilised. However, there should be some consistency between methods, methodology and analysis. Thus, in order to make the research credible to the reader, the research should lead towards the research findings (Jebreen, 2012). Qualitative evaluators frequently find themselves having to defend their methods because of the resistance posed by researchers who are ideologically committed to quantitative methods. Qualitative research also places stress on the validity of multiple meaning structures and holistic analysis as opposed to the criteria of reliability and statistical compartmentalisation of quantitative research (Burns, 2000).

3.4. Study site

The study site is the physical place where the study is to be conducted so as to collect the desired data (Simmons, 2009). In this study, the study site was Standard Bank in Johannesburg, the largest city in the South African in the Province of Gauteng. It is part of the Johannesburg Metropolitan Municipality, which includes the greater Gauteng area (Statistics South Africa, 2013).

3.5. Target population

According to Explorable (2009), all research questions address issues that are of great relevance to important groups of individuals known as a research population**.** A research population is generally a large collection of individuals or objects that is the main focus of a scientific query and is also known as a well-defined collection of individuals or objects known to have similar characteristics. It is for the benefit of the population that researches are done. However, due to the large sizes of populations, researchers often cannot test every individual in the population because it is too expensive and time consuming. This is the reason why researchers rely on sampling techniques. All individuals or objects within a certain population usually have a common, binding characteristic or trait (Explorable, 2009). Business Analysts are a well-defined group of individuals which can be considered as a population and all the members of this population are indeed employees of SBSA. Trochim (2006) defines a target population as the collection of units

or people with specific characteristics a researcher is interested in. The target population for this study are all Business Analysts at Standard Bank Head Office, Johannesburg. Standard Bank has about 80 permanent Business Analysts in Personal and Business Banking Information Technology.

3.6 Sampling Method

A sample is a subset of the entire population from which data is collected by a researcher (Yin, 2009). The sample for this study was selected from Personal and Business Banking Information Technology. This study uses non-probability sampling to help select staff for inclusion in the sample. In non-probability sampling, units or people are selected based on the judgement of the researcher (Thomas and Brubaker 2000). Therefore, selection for inclusion in the sample is by choice. This study uses census sampling and purposive sampling to select the sample. Census sampling is a method where a researcher selects all the units in a given group (Sprague 2005). Purposive sampling is a method where units or people are selected for inclusion in the sample by a researcher with a purpose in mind (Rubin 2008). These sampling methods are based on the judgment of the researcher regarding the characteristics of a representative sample (Simons 2009). Census and purposive sampling are employed because the researcher to targeted a specific group within Standard Bank, therefore findings were able to reflect the perceptions of population studied.

3.6.1. Sampling and sample size

According to Yin (2009), sampling is a process of selecting a small portion or part of the population to represent the entire or target population while a sample size is the total number of units or people selected to participate in the study. Standard Bank has only 1 Information Technology unit called Personal and Business Banking Information Technology to support the PBB business. There are 80 permanent Business Analysts in the department. From the categories of the Business Analysts and project teams, Personal and Business Banking Information Technology staff are selected using census sampling method as they are deemed to be key decision makers or at least play a role in

shaping company decisions where project synergies are concerned. About 80 staff members were selected for inclusion in the sample.

3.7. Data Collection

This is the gathering of data that contains information on the phenomenon under study (Stringer 2007; Simons 2009). In the different phases of the study, different documentary evidence was collected. Staff was asked to provide contextual data needed in the study. Purposeful sampling was used to gather particular contextual information that was used to offer answers to some of the research questions in this study. The questionnaire data collection instrument was used to collect data in the form of electronic mail at Standard Bank, Headquarters, Johannesburg, Gauteng Province.

3.8. Data quality control

The term quality control according to Lavrakas (2008) refers to the efforts and procedures that survey researchers put in place to ensure the quality and accuracy of data being collected using the methodologies chosen for a particular study. According to Rubin (2009), it refers to how the researcher is able to ensure that the data gathering instruments used measure what they are supposed to measure and in a consistent manner: reliability and validity, respectively. Quality-control efforts vary from study to study and can be applied to questionnaire and the computerised programs that control them, sample management systems to ensure proper case processing, the monitoring of appropriate interviewer behaviour and other quality-control aspects of the survey process, all of which can affect the quality of data and thus the results (Lavrakas, 2008).

3.9. Reliability and Validity

Reliability has to do with the consistency, stability, and dependability of measuring instruments adopted for the study. To test the reliability of the instrument, a pre-test was conducted on ten respondents. This was necessary to ensure item consistency, ease of understanding and question sequence appropriateness. Reliability relates to the consistency of a measure (Heale and Twycross, 2015:66). Reliability is defined as the

extent to which results are consistent over time and an accurate representation of the total population under study (Leung, 2015:7-8). Reliability is the extent to which an experiment, test, or any measuring procedure yields the same result on repeated trials (Thatcher, 2010:36). Saunder, Lewis and Thornhill (2009) claim that the most common method for testing the consistency of a scale for reliability is the Cronbach alpha coefficient. The Cronbach alpha coefficient range from 0 to 1 with a minimum of 0.6 but other studies suggests that anything above 0.7 indicate high levels of consistency between different measurements of a participant's response with an aim of making certain that these responses remain consistent and similar over a period of time.

To ensure validity, a pilot study was conducted among Business Analysts. Then a final version of the research instruments was developed based on the results of the pilot study. Validity, according to Psucd8 (2011), is described as the degree to which a research study measures what it intends to measure. Heale and Twycross (2015:66) define validity as "the extent to which a concept is accurately measured in a quantitative study". Leung (2015:7-8) explains that validity concludes whether the research truly measures what it was anticipated to measure or how truthful the research results are. It is the extent to which a measuring instrument assesses what it was designed to assess. There are two main types of validity-internal and external- whereby internal validity refers to the validity of the measurement and test itself, whereas external validity refers to the ability to generalise the findings to the target population. Both are very important in analysing the appropriateness, meaningfulness and usefulness of a research study (Psucd8, 2011). However, this research focused on the validity of the measurement technique which is internal validity.

3.10. Data analysis

According to Rubin (2008), data analysis is the art of examining raw data with the purpose of drawing conclusions about that information and data to be collected through questionnaires. Data is collected through surveys and is analysed using frequency distribution method. Dudovskiy (2016) believes that quantitative study involves critical

analysis and interpretation of figures and numbers, and attempts to find rationale behind the emergence of main findings.

3.11. Ethical considerations

Ethical approval for this research was obtained from the Durban University of Technology (DUT) Ethics Committee and a gate keeper's letter from Standard Bank. To ensure that human dignity is further upheld, informed consent was sought from respondents and allowed them to make the decision to participate based on adequate knowledge of the study they were given. Privacy and confidentiality was upheld by reminding participants of their right to keep from the public certain information about themselves and agreement to limit access to private information. Respondents remain anonymous and no names, except pseudonyms, was used in this study.

3.12. Limitations of the study

This study has one possible limitation. There is a lack of prior research studies on the Business Analysts at Standard Bank in Johannesburg, South Africa. Citing prior research studies forms the basis of the literature review and helps lay a foundation for understanding the research problem being investigated. To address this limitation, an exploratory and descriptive, rather than an explanatory research design, was conducted.

In conclusion this chapter concludes research design and approaches. The next chapter will examine the data interpretation and analysis of this study.

CHAPTER FOUR

DATA INTERPRETATION AND ANALYSIS

4.1 Introduction

This study uses questionnaires as a process of gathering and analysing information to uncover opportunities using the quantitative research method. The previous chapter explained the theoretical basis of the effects of the Business Analyst in influencing the success of a project synergy. It provided the need to understand the issues and challenges faced by Analysts including the necessary skills, knowledge and ability that are crucial to the role of Business Analysis and what is required to implement projects successfully. This research study focused on the quantitative research aspect using form of a questionnaire for data collection. Robinson (2006) states that the questionnaire is the most commonly used method of gathering information about users and it is easy to prepare. Questionnaire is a less expensive way to reach many people, including people at some distance. Depending upon the mode of distribution, this can be quickly done and data analysis can begin right away. A questionnaire avoids interviewer bias, guiding and cues that can impact the validity and reliability of the data collection.

Anonymity ensures more valid responses and the response quality is better because respondents may gather and consult sources needed to respond well. Closed-ended questions can be more specific, thus more likely to communicate similar meanings. Because open-ended questions allow respondents to use their own words, it is difficult to compare the meanings of the responses. In large-scale surveys, closed-ended questions take less time from the interviewer, the participant and the researcher and so it is a less expensive survey method. The response rate is higher with surveys that use closed ended question than with those that use open ended questions.

The questionnaire was split into 3 sections of information and was required to be completed by the participant. The sections are:

- demographic information, background information and general Information.

4.2 Data analysis

With any form of research, Wagner (2004, p.76) states that the “phenomenon relevant to the research question are observed and noted. Statistics are the underlying logic that dictates the collection and analysis of data and inevitably, the validity of the research findings. Because results of observations were not that diverse, various possible deductions of the data could be made”. The data analysis will involve an individual interpretation of the collected data. All responses of the questionnaire will be converted into diagrams and charts. In this way it helped to analyse the data in which we can draw conclusions based on the findings. The nature and form of results was analysed according to the responses received.

4.3 Frequency Distribution

The survey was undertaken in the Standard Bank Head Office – Personal and Business Banking Information Technology Division, to assess the effects of the Business Analysis in influencing the success of a project synergy using a structured questionnaire and its hierarchy. The total research group consisted of intermediate, junior and senior Business Analysts. A total of 65 usable sets of questionnaires were received and utilised for the purpose of this study. It must be noted that the total population of 103 in the proposal reduced to 80 due to restructuring in the organisation. Frequency analysis was utilised in order to transform raw data into a form that is easy to understand and interpret. The data was summarised by means of calculating averages and percentages from the usable survey responses. The information of the research group is set out in Table 4.1 .

Table 4.1: Research group

Number of respondents	Total Population	Percentage
65	80	81%

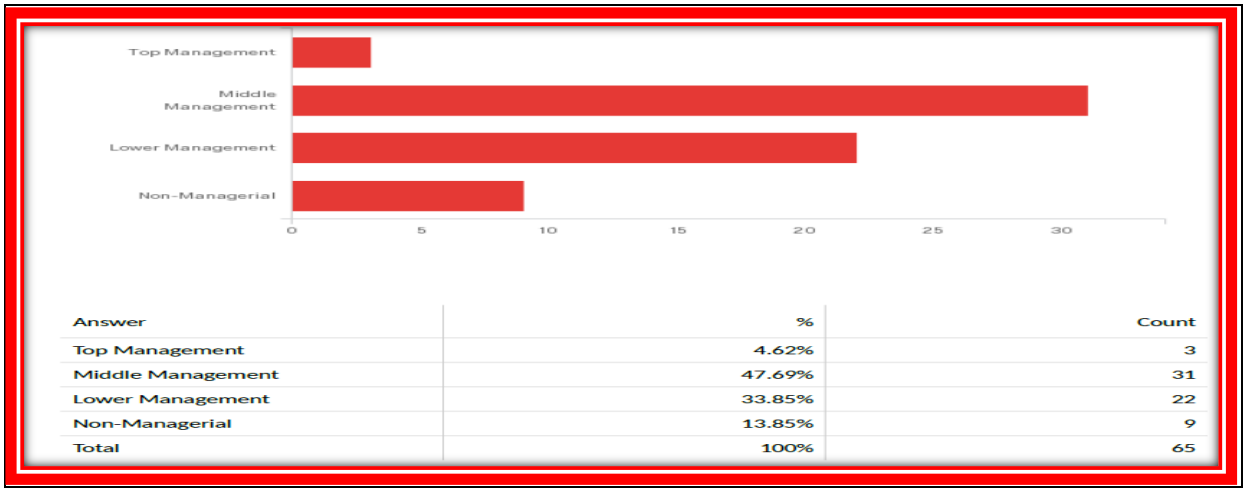
Table 4.2: Cronbach Alpha

Cronbach's alpha, α (or *coefficient alpha*), developed by Lee Cronbach in 1951, measures reliability, or internal consistency. Reliability, is how well a test measures what it should (Stephanie, 2014).

Reliability Statistics

Cronbach's Alpha	N of Items
.945	65

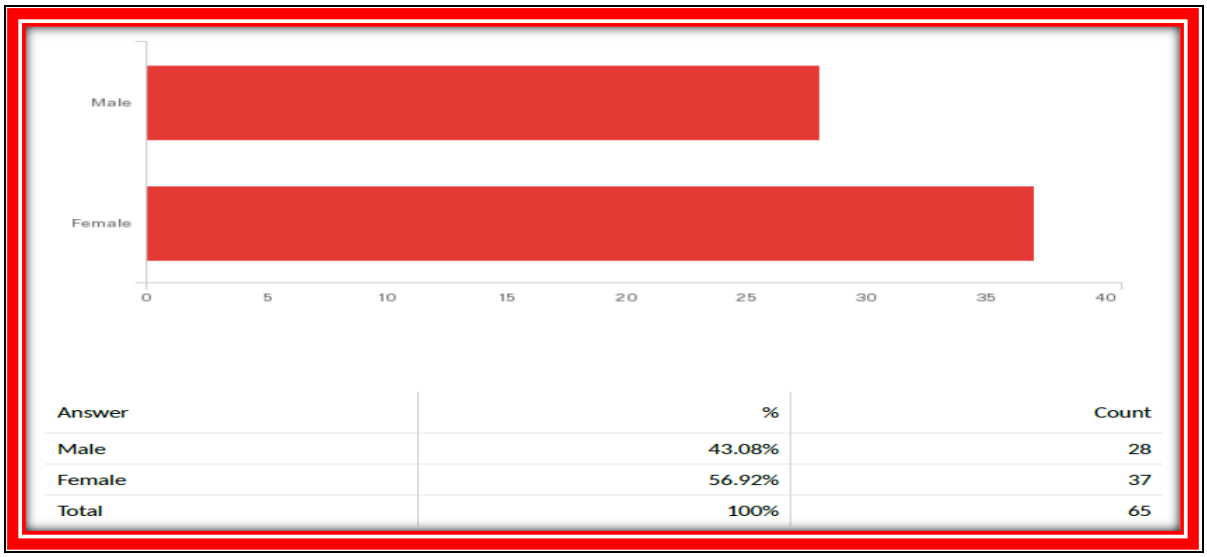
Figure 4.1 below indicates that there are 4.62% (n=3) Business Analysts in Top Management Level, 47.69% (n=31) in Middle Management, 33.85% (n=22) in Lower Management and 13.85% (n=9) in non managerial. Out of 65 Business Analysts, 43.08% (n=28) are males and 56.92% females.



Answer	%	Count
Top Management	4.62%	3
Middle Management	47.69%	31
Lower Management	33.85%	22
Non-Managerial	13.85%	9
Total	100%	65

Figure 4.1: What is your managerial position in the company?

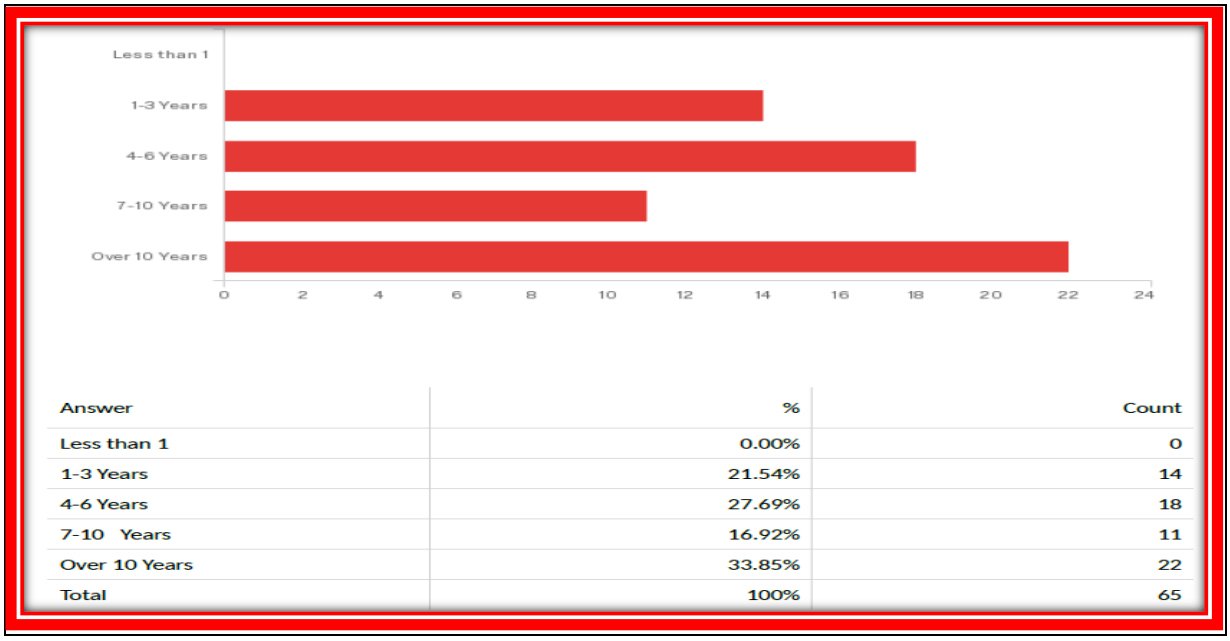
There were approximately 43.08% (n=28) males and 56.92% (n=37) of females that participated in the questionnaire as indicated in Figure 4.2.



Answer	%	Count
Male	43.08%	28
Female	56.92%	37
Total	100%	65

Figure 4.2: Gender

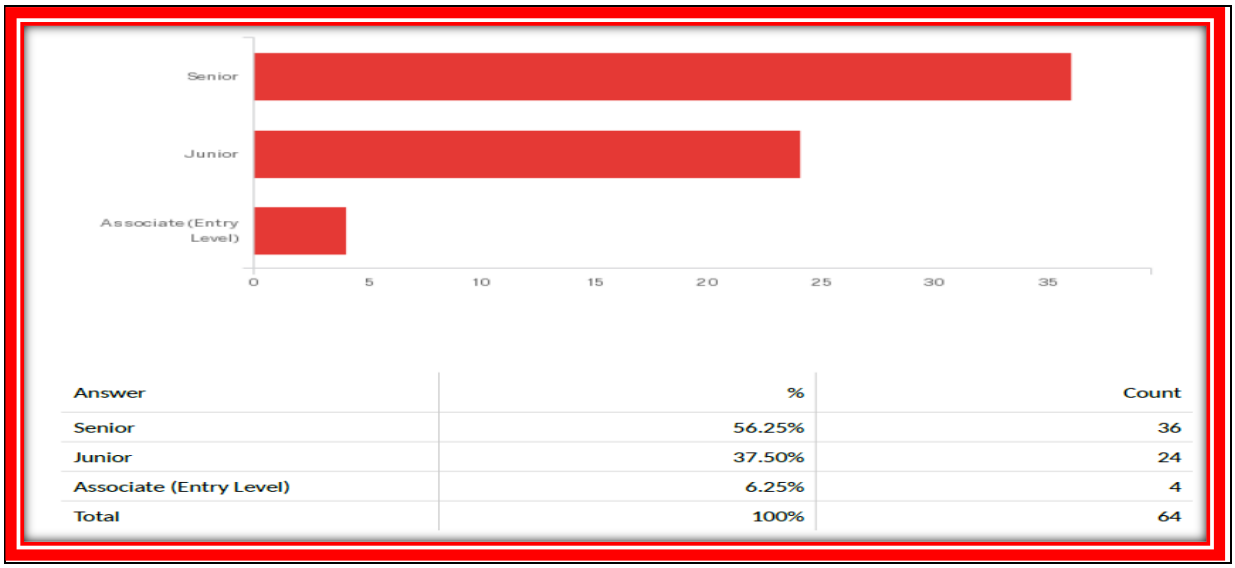
Most of the Business Analysts**,** that is 37.50% (n=24), seem to have less than 5 years experience which means they have changed organisations, while 28.13% (n=18) are in the organisation between 5-9 years. There are about 26.56% (n=17) Analysts that are between 10-14 year of employment and a small percentage of 7.81% (n=5) that is employed more than 15 years. 33.85% (n=22) of the Business Analysts are in the organisation for more than 10 years and 21.54% (n=14) seemed to have joined the organisation recently as indicated in Figure 4.3.



Answer	%	Count
Less than 1	0.00%	0
1-3 Years	21.54%	14
4-6 Years	27.69%	18
7-10 Years	16.92%	11
Over 10 Years	33.85%	22
Total	100%	65

Figure 4.3: Number of years worked in the organisation?

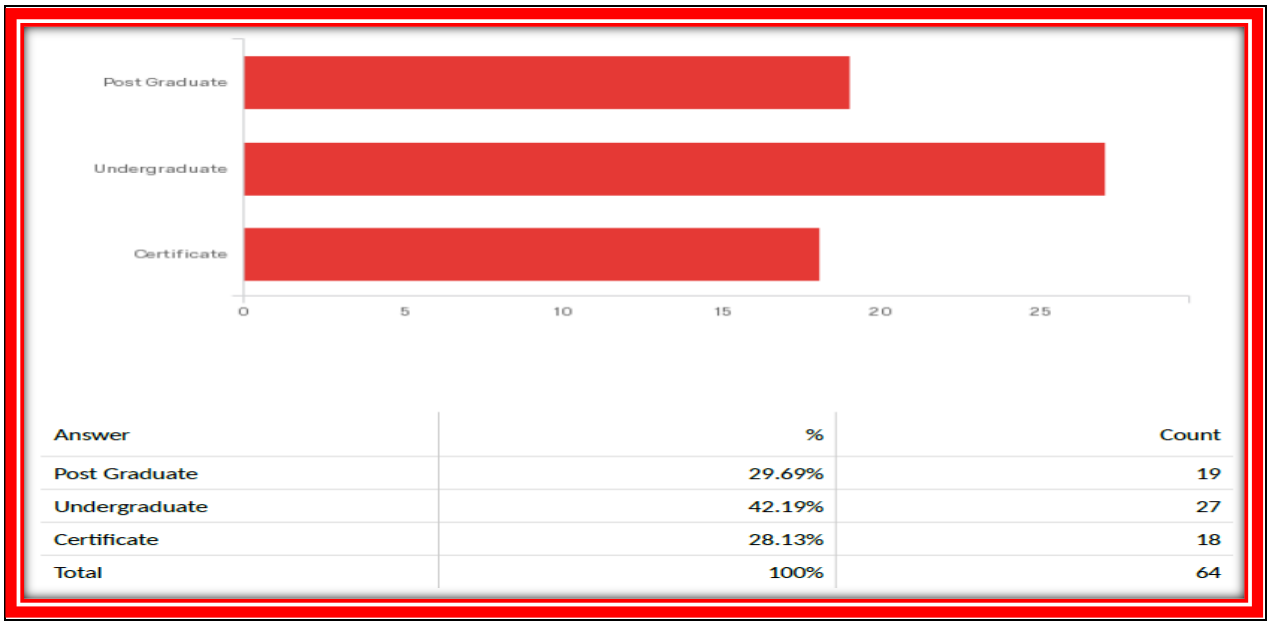
There are approximaletly 56.25% (n=36) Senior Business Analysts, 37.50% (n=24) Junior and 6.25% (n=4) at entry level. 29.69% (n=19) of the Businsess Analysts have Post Graduate qualifications, 42.19% (27) have undergraduate and 28,13% (n=18) have certificates.



Answer	%	Count
Senior	56.25%	36
Junior	37.50%	24
Associate (Entry Level)	6.25%	4
Total	100%	64

Figure 4.4: What type of position as Business Analyst?

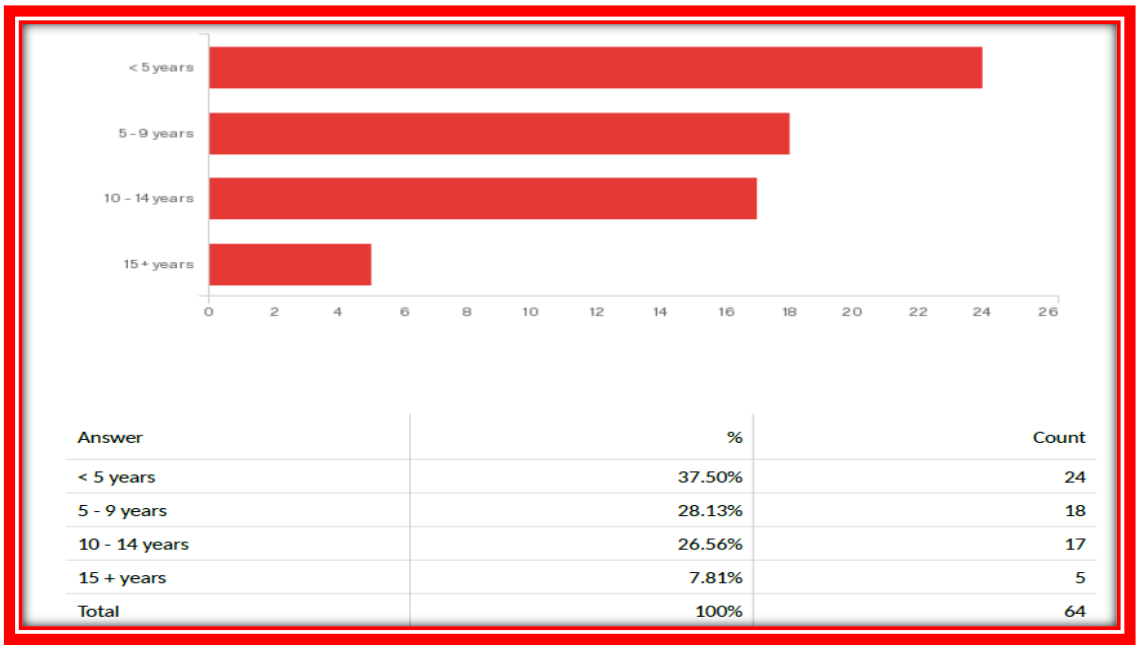
With regards to tertiary qualification, 29,69% (n=19) of the Businsess Analysts have post graduate have Post Graduate qaulifcations, 42.19% (n=27) have undergraduate and 28,13% (n=18) have certificates as indicated in Figure 4.5.



Answer	%	Count
Post Graduate	29.69%	19
Undergraduate	42.19%	27
Certificate	28.13%	18
Total	100%	64

Figure 4.5: What is your highest level of qualification?

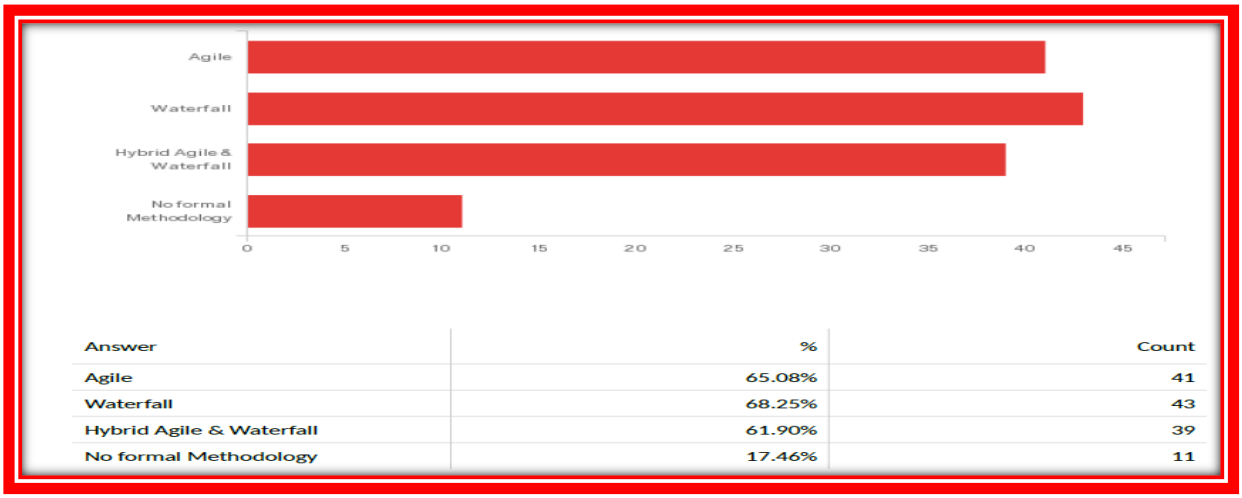
Most of the Business Analysts, that is 37.50% (n=24), seem to have less than 5 years experience which means they have changed organisations, while 28.13% (n=18) are in the organisation between 5-9 years. There are about 26.56% (n=17) Analysts that are between 10-14 employed and a small percentage of 7.81% (n=5) that's employed more than 15 years as evident in Figure 4.6.



Answer	%	Count
< 5 years	37.50%	24
5 - 9 years	28.13%	18
10 - 14 years	26.56%	17
15 + years	7.81%	5
Total	100%	64

Figure 4.6: How many years of Business Analysis Experience?

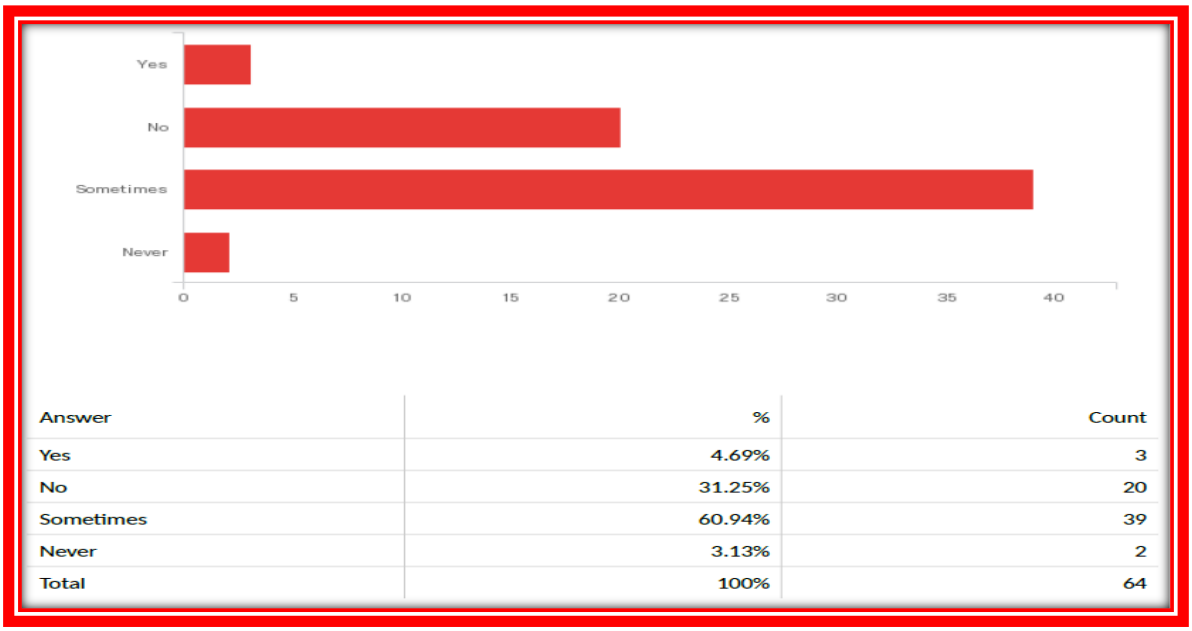
The survey indicates a rapid shift towards the agile methodology with close to 65.08% (n=41) of the respondents. 68.25% (n=41) of the respondents indicated that they use the Waterfall methodology and there are still 61.90% (n=39) that follow the Hybrid Agile and Waterfall method and 17.46% (n=11) do not practice any methodology. The respondents chose more than 1 methodology as evident in Figure 4.7.



Answer	%	Count
Agile	65.08%	41
Waterfall	68.25%	43
Hybrid Agile & Waterfall	61.90%	39
No formal Methodology	17.46%	11

Figure 4.7: What methodology do you use among the following?

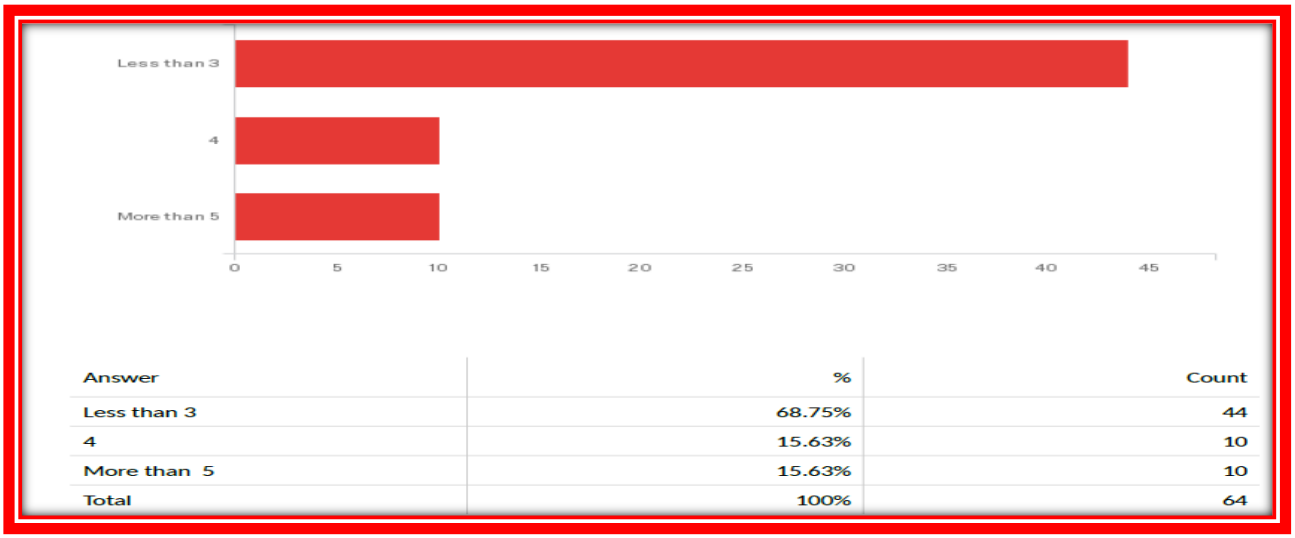
There are 60.94% (n=39) of Business Analysts that sometimes experience difficulty in executing their tasks, while 4.69% (n=3) do and 31.25% (n=20) do not as indicated in Figure 4.8.



Answer	%	Count
Yes	4.69%	3
No	31.25%	20
Sometimes	60.94%	39
Never	3.13%	2
Total	100%	64

Figure 4.8: Do you find difficulty in executing Business Analysis tasks?

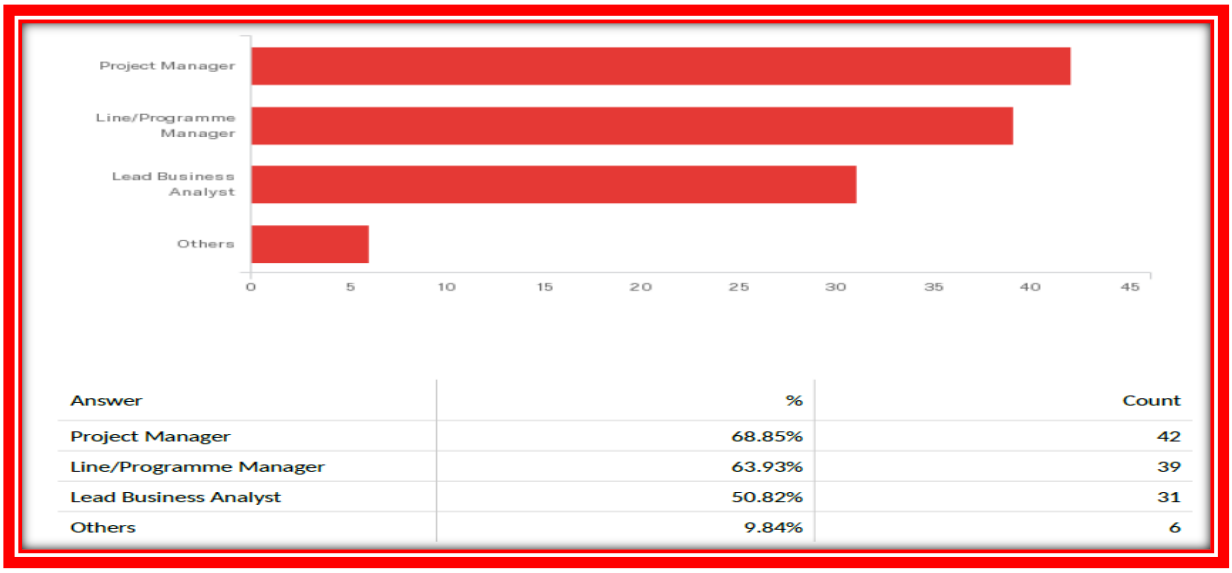
68.75% (n=44) work on less than 3 projects at a time. 15.63% (n=10) work on 4 and 15.63% (n=10) work on more than 5 at a time as indicated in Figure 4.9.



Answer	%	Count
Less than 3	68.75%	44
4	15.63%	10
More than 5	15.63%	10
Total	100%	64

Figure 4.9: How many projects do you work on at once?

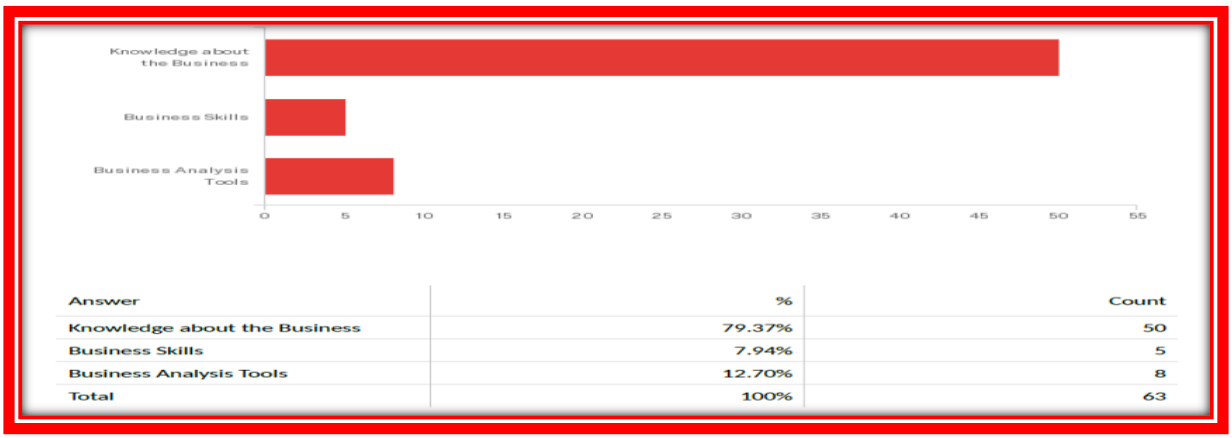
The Project Manager manages 68.85% (n=42) of the Analysts work, the Line Manager manages 63.93% (n=39), the Lead Business Analyst manages 50.82% (n=31) and other manage 9.84% (n=6) of their work. The respondents chose more than one option as indicated in Figure 4.10.



Answer	%	Count
Project Manager	68.85%	42
Line/Programme Manager	63.93%	39
Lead Business Analyst	50.82%	31
Others	9.84%	6

Figure 4.10: Who plans and manages your work?

When it comes to major assets that's valuable to the project, 79.37% (n=50) of the Business Analysts feel that knowledge about the Business is the most valuable asset. 12.70% (n=12.70) believe that Business Analysis tools are valuable and 7.94% (n=5) claim that Business Skills are valuable as indicated in Figure 4.11.



Answer	%	Count
Knowledge about the Business	79.37%	50
Business Skills	7.94%	5
Business Analysis Tools	12.70%	8
Total	100%	63

Figure 4.11: Which one of the following major assets is most valuable to project participation?

4.4 Dichotomous questions on perceptions, experience and knowledge

Table 4.3: Percentages and frequencies on 63 respondents

Q	Statements on the Phenomenon	Percentage		Frequency	
		Yes	No	Yes	No
Q12	Business Analysts experience Business Analysis challenges in your projects	83%	17%	52	11
Q13	Business Analysis problems are experienced in your projects	75%	25%	47	16
Q14	Business Analysts require skills to perform the tasks successfully	97%	3%	59	4
Q15	Business Analysts are normally micro managed in the workplace	49%	51%	30	34
Q16	Business Analysts get involved at strategy level of decision making	16%	84%	10	54
Q17	There is a lack of clarity in the scope of the projects within the work process	75%	25%	46	18
Q18	The business requirements are well managed in the work process	36%	67%	25	39
Q19	The project changes are poorly managed in the work process	75%	25%	44	20
Q20	Business Analysts are brought in the project at the right time	46%	54%	31	32

In the commanding 83% (n=52), a convincing view is maintained that Business Analysts experience Business Analysis challenges in your projects. In terms of challenges, 82.54% (n=52) Business Analysts experience challenges and 17.46% (n=11) do not. 74.60% (n=47) have problems on their projects and 25.40% (n=16) do not. The survey reveals that 96.72% (n=59) Business Analysts require skills to perform their tasks successfully. 49.18% (n=30) of the Analysts claim that they are micromanaged in the workplace and 50.82% (n=31) say they are not. Business Analysis problems are experienced in your projects (Yes, 75% (n=46) and No, 25%

(n=15), although the overwhelming majority of respondents 97% (n=61) concurred that Business Analyst require skills to perform the tasks successfully with only 3% (n=4) indicating least reservations. Inequitable perceptions provided indifference on Business Analysts being normally micro managed in the workplace (Yes, 49% (n=30) and No, 51% (n=31).

Perhaps, a staggering 86% (n=51) of the respondents accentuate as valid point where Business Analysts exercise no involvement at strategy level of decision making and 16% (n=10) on the respondents had acknowledge their presence at strategic level. Business Analysts should be invloved at strategy level according to 36% (n=22) who agreed that they must get involved at strategy level within the organisation while 53% (n=35) strongly agreed with 4% disagreed. A lack of clarity in the scope of the projects within the work process had been confirmed by 75% (n=46) of the respondents. A lack of clarity in the scope of projects within the process (although 25% (n=15) indicated clarity) has been underpinned by 64% (n=39) of the respondents who perceived that business requirements are not well managed in the workplace and 36% (n=22) observed good management. The lack of collaboration among stakeholders such as project teams and business analysts is manifested on 75% (n=44) of the respondents confirming that project chnages are poorly managed in the work process and 25% (n=15) felt that they are well managed. The findings further indicated 54% (n=32) of the respondents refuting that Business Analysts are brought in the project at the right time, although 46% (n=27) of the respondents found the time appropriate. A strong majority (64% (n=37) stressed that Business Analysts have the required skills and training to perform their role effectively and 36% believed that they have the required skills.

The following table looks at the perceptions of the respondents regarding the magnitude of their agreement, indifference, neutrality or disagreement. The following alphabets have been utilised to describe the five Likert scale such SD=Strongly Disagree, D=Disagree, N=Neutral, A=Agree, and SA=Strongly Agree. The statements relate to the effects of Business Analysists. The success of projects is primarily assumed to be driven by the factors enlisted below:

Table 4.4: Magnitude of Agreement on the Effects of Business Analysts

	Effects of Business Analysts					
Q	**Statement on the Effects of Business Analysts**	**SA**	**A**	**N**	**D**	**SD**
Q22	The effects of Business Analysis influence the success of projects.	62	35	0	0	3
Q23	A Business Analyst can save a project from failing	34	51	12	3	0
Q24	The effects of Business Analysis improve the project delivery time within budget constraints	41	46	10	3	0
Q25	Business Analysts need to get involved at strategy level within the organisation.	53	36	8	3	0
Q26	Business Analysts require professional development to reduce impediments to improve project results.	23	53	19	5	0
Q27	Business Analysts are communicators and facilitators brought on projects to elicit requirements	44	53	3	0	0
Q28	The Business Analyst role comes with unique difficulties	25	63	8	2	2
Q29	Business Analysts are brought in at the right time	7	32	12	25	24
Q30	Business Analysts need to be up-skilled and trained in order to perform their role better	25	49	24	2	0
Q31	Business Analysts are not respected for their role	16	40	26	17	1
Q32	Project changes are well-managed	1	24	24	29	22

The degree of agreement or disagreement on the effects of Business Analysts determines the propensity to the success of projects on the category of these factors. Table 4.4 indicates that a combined magnitude of 97% (n=61) agreement on the effects of business analysis being influencing the success of projects with 3% (n=2) strongly diasagree. The consistent response underpinning the critical role of Business Analysts in the project is entrenched with the view that Business Analysts normal executes the rescue mission by saving (85% (n=59) a project from failing. Although 12% (n=7) of the respondents were indifferent, the effects of Business Analysis improves the project delivery time with budget constraints (87% (n=59), and there is a compelling need to elevate the responsibility to strategic level (89% (n=59) with the organisation. If Business Analysts are communicators and facilitator (97% (n=59) that

are brought on project to elicit requirements, the level of professional development is required (76% (n=57) to reduce impediments while improving project results.

The Business Analyst role comes with unique difficulties (88% (n=57) as they are not brought (49% (n=59) in at the right time (although 39% (n=19) agree and 12 (n=7) neutral). Scepticism still surfaces that Business Analysts are not respected for their role (56% (n=25) with 26% (n=15) undecided and 18% (n=10) disagree) within the industry, and a strong suggestion was asserted that Business Analysts need to be up-skilled and trained (74% (n=44) in order to perform their role better. There is an increasing interest amongst Business Analysts to learn new techniques and stay abreast of emerging trends in Business Analysis. Project changes are well managed (29% (n=17) disagree, 22% (n=13) strongly disagree and 24% (n=14) agree that changes are well managed). The study indicates that the Business Analysts agree that usage of better requirements management and modeling tools will help improve the quality of projects.

Table 4.5: Frequency to Major Common Problems faced by Business Analysts

Identification of frequency to five major common problems faced by Business Analysts amongst these factors and the respondents were asked to tick only five problems. The frequency and percentage columns depicted the experience and perceptions on these common problems with the Business Analysts.

Common Problems	Frequency	Percentage
Resistance in Sharing Information	54	92%
Complexity	51	86%
Accountability for Decisions	36	61%
Uncertainty	35	59%
Information Overload	30	51%
Technology	27	46%
Strategic Thinking and Problem Solving	18	31%
Globalisation	13	22%
Supply Chains	11	19%
Government Policy and Regulations	7	12%

As indicated in Figure 4.12, some of the major common problems faced by Business Analysts are: resistance in sharing information (92% (n=54), complexity (86% (n=51), accountability for decisions (61% (n=36), uncertainty (59% (n=35) and information overload (50% (n=30).

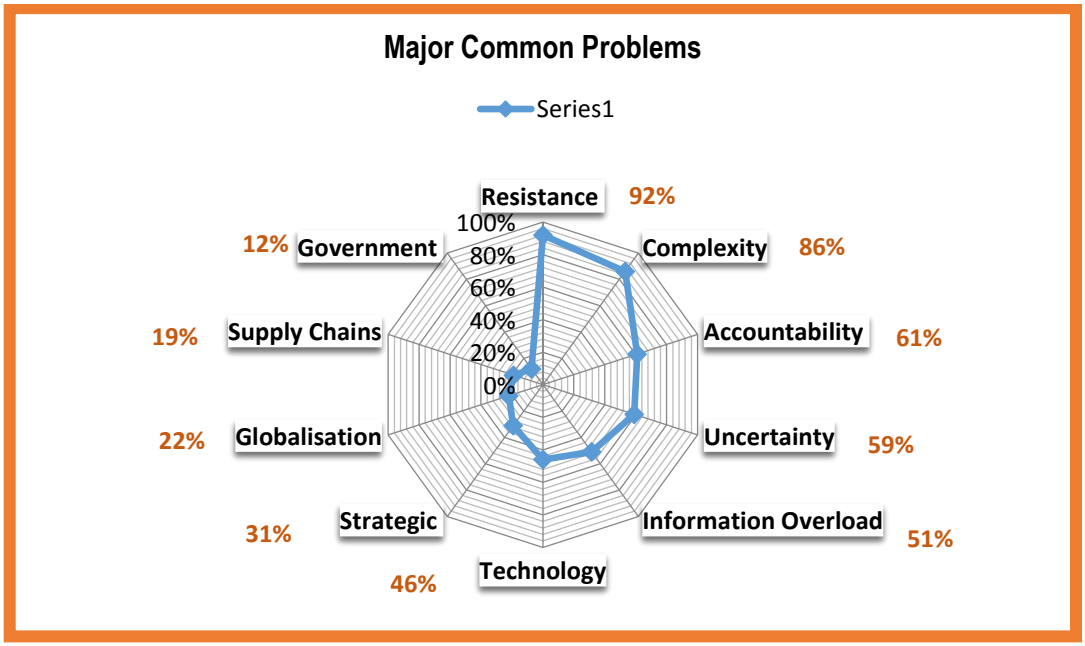


Figure 4.12: Frequency to major common problems faced by Business Analysts

[It means that the project teams are showing strong amount of resistence (92% (n=54) in sharing information with the Business Analysts. Consequently, the complexity (86% (n=51) on performance outcomes for Business Analysts and the extent of accountability (61% (n=36) for decisions making processes to determine the success or failure of the project create impediments to their professional growth and acknowledgement. These atrocious behaviours toward the Business Analysts create maximum uncertainty (59% (n=35) on their role because there is a minimum respect for Business Analysts as simultaneously executing the rescuing role with their impeccable skills in the imminently failing project].

Table 4.6: Frequency to Major Causes of Project Failure

Common Problems	Frequency	Percentage
Poor Planning	49	83%
Lack of Communication	43	73%
Poor Leadership	41	69%
Disregard of Project Warning Signs	37	63%
Failure to Set Expectations	33	56%
Poor Trained Project Manager	20	34%
Competing Priorities	20	34%
Inefficient Document and Track Progress	18	31%
Inaccurate Cost Estimation	18	31%
Culture or Ethical Misalignment	6	10%

As indicated in Figure 4.3, the survey revealed the top five major causes of project failure: poor planning (83.05% (n=49), lack of communication (72.88% (n=43), poor leadership (69.49% (n=41), disregard of project warning signs (62.71% (n=37) and failure to set expectations (55.93% (n=33).

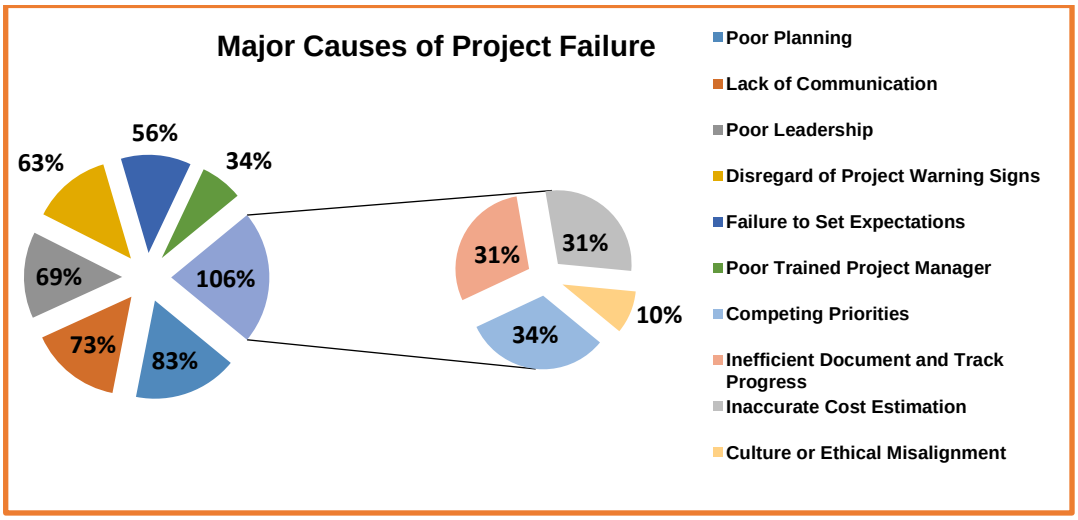


Figure 4.13: Major Causes of Project Failure

Management needs to realise that adding a Business Analyst to a project team should be looked at as a positive project investment because they can help increase value and save money on the project in the long run. Business Analyst can impact both

variables that make up the return on investment of a business project as Business Analysts can increase the total value achieved through completing the project, and decrease the total cost of the entire project. This study depicts the critical findings on the major causes of project failure, and the poor planning (83% (n=49) signifies a major predicament to the central success of the project. Inadequate processes that constitute indicators for project success or failure at the earliest phase are ignored for consideration. It is evident of the dearth of drilling down the broader structure or vision to smaller tasks, and lack of communication (73% (n=43) at all levels creates bottlenecks and information suppression. These key constructs for prospective successes of a project are underlying requirements to epitomise good leadership. This study further indicates poor leadership (69% (n=41) as major cause of project failure, although warning signs are always shown on the verge of project failure (63% (n=37) of the respondent raises a disregard of project warning signs).

4.5 Cross-tabulation and Chi-square Statistic

Table 4.7: Cross-tabulation of Gender and Micro-Management of Business Analyst with expected counts

Gender * Micro Management of Business Analyst Cross-tabulation					
			Micro Management of Business Analyst		Total
			Yes	No	
Gender	Male	Count	16	9	25
		Expected Count	12.3	12.7	25.0
		% within Gender	64.0%	36.0%	100.0%
	Female	Count	14	22	36
		Expected Count	17.7	18.3	36.0
		% within Gender	38.9%	61.1%	100.0%
Total		Count	30	31	61
		Expected Count	30.0	31.0	61.0
		% within Gender	49.2%	50.8%	100.0%

The researcher took a decision to find out the relationship between the above two variables. How each of the genders gave similar or different responses to this

question? (Business Analysts are normally micro managed in the workplace)? Hence, a cross-tabulation produced the table above, and it can be clear that the numbers with relative percentages of the responses to the question were produced with fascinating revelation. While the majority (64% (n=16) of male answered in affirmative, the majority (61% (n=22) of female response were negative. Visibly, the gender proportion were not distributed equally in terms of their response to the question. This might suggest that most females find themselves in lower management and are amongst staff that are managed, hence may not have an input per se in decisions. Literally, it is also noticed from the table that the actual observed count of the Gender variable is different from the expected frequencies. This divergence in frequencies suggest that there is a relationship exists between the two variables (Gender and Micro management of Business Analyst). Therefore, the odds of the occurrence of this distribution by chance can be tested using the Chi-square statistics.

Table 4.8: Chi Square Test

Chi-Square Tests					
	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	3.722[a]	1	.054		
Continuity Correction[b]	2.785	1	.095		
Likelihood Ratio	3.763	1	.052		
Fisher's Exact Test				.071	.047
Linear-by-Linear Association	3.661	1	.056		
N of Valid Cases	61				
a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 12.30.					
b. Computed only for a 2x2 table					

The researcher is interested in Pearson chi-square row whose value is 3.722, with a probability value of 0.054. This result is statistically significant hence the researcher concludes that there is a relationship between the gender of the respondents and their response to the question (Business Analysts are normally micro managed in the workplace).

4.6 Correlations

To determine the strength of the correlation of some of the variables, (Greasley, 2008:80) asserts that the value ranges from -1 to +1 where:

- 1 to -0.6 indicates strong negative relationship
- -0.5 to -0.1 indicates weak negative relationship
- +0.1 to +0.5 indicates weak positive relationship and
- +0.6 to +1 indicates strong positive relationship

Table 4.9: Correlation between Required Skills and Training of Analyst with Business Analyst are involved at the Right Time

Correlations			
		Required Skills and Training of Analyst	Business Analyst are involved at the Right Time
Required Skills and Training of Analyst	Pearson Correlation	1	.272*
	Sig. (2-tailed)		.040
	N	58	57
Business Analyst are involved at the Right Time	Pearson Correlation	.272*	1
	Sig. (2-tailed)	.040	
	N	57	59
*. Correlation is significant at the 0.05 level (2-tailed).			

The Pearson correlation between the variables (Required Skills and Training of Analyst and Business Analyst are involved at the Right Time) is 0.27. Therefore, there is a weak positive correlation with a statistical significance of 0.040 between the two variables.

Table 4.10: Correlation between Required Skills and Training of Analyst with Business Analyst are always on time when needed.

Correlations			
		Required Skills and Training of Analyst	Business Analyst are always on time when needed
Required Skills and Training of Analyst	Pearson Correlation	1	-.331*
	Sig. (2-tailed)		.011
	N	58	58
Business Analyst are always on time when needed	Pearson Correlation	-.331*	1
	Sig. (2-tailed)	.011	
	N	58	59
*. Correlation is significant at the 0.05 level (2-tailed).			

The Pearson correlation between the variables (Required Skills and Training of Analyst and Business Analyst are always on time when needed). It is conclusive to say that (r = -0.33, *P* = 0.011). Therefore, there is a weak negative correlation between the two variables.

Table 4.11: Correlation between Required Skills and Training of Analyst with Business Changes are well Managed

Correlations			
		Required Skills and Training of Analyst	Business Changes are well Managed
Required Skills and Training of Analyst	Pearson Correlation	1	-.229
	Sig. (2-tailed)		.084
	N	58	58
Business Changes are well Managed	Pearson Correlation	-.229	1
	Sig. (2-tailed)	.084	
	N	58	59

The Pearson correlation between the variables (Required Skills and Training of Analyst and Business Changes are well managed) is -0.23. Therefore, there is a weak negative correlation with a statistical significance of 0.084 between the two variables.

Table 4.12: Correlation between Required Skills and Training of Analyst with Business Analyst not respected for their Role

Correlations			
		Required Skills and Training of Analyst	Business Analyst are not Respected for their role
Required Skills and Training of Analyst	Pearson Correlation	1	.263*
	Sig. (2-tailed)		.048
	N	58	57
Business Analyst are not Respected for their role	Pearson Correlation	.263*	1
	Sig. (2-tailed)	.048	
	N	57	58
*. Correlation is significant at the 0.05 level (2-tailed).			

The Pearson correlation between the variables (Required Skills and Training of Analyst and Business Analyst are respected for their role). It can be concluded that (r = 0.263, *P* = 0.048). Therefore, there is a weak positive correlation between the two variables.

In conclusion this chapter concludes the data interpretation and analysis. The next chapter will discuss results of the survey that was undertaken for this study.

CHAPTER FIVE

DISCUSSION OF RESULTS AND CONCLUSION

5.1. Introduction

This chapter discusses the individual research objectives and recommends findings for the scientific analysis. Apparently, this study discovers that product knowledge is a major valuable asset in contributing to the success of a project. It is therefore inferred that resources have the relevant product knowledge when starting a project in order to achieve a successful landing. Without the relevant product knowledge, projects are presumed to suffer risks such as increased costs, rework and not meeting the deadline which impacts the ROI.

5.2. Research Objective One:

To examine the dynamics of business analytical value-creation system towards project management success at Standard Bank Headquarters.

The survey indicates that there are more senior Business Analysts than junior and associate Business Analysts. Majority of the Business Analysts are in the organisation for less than five years. The survey shows a relatively large population of less experienced Analysts, with nearly half reporting five years or less of experience. The maturing nature of business analysis has numerous implications for organisations since it impacts performance, including the potential for business analysts to work from an enterprise perspective, handle challenges within their discipline and their organisations and achieve a level of proficiency and success equated with more seasoned professionals (Brule, 2012). This indicates that they are always changing companies and unsettled in an organisation and the reason is unknown, most probably due to external offers or organisation structural changes that force them to seek employment by other companies. The survey also indicates a rapid shift towards the agile methodology, which we can guess that contributed to the organisations structural change. There are very few loyal and committed Analysts that are employed for more than fifteen years. The survey also indicated that some of the respondent's experience difficulty in executing their tasks, this is dependent on the complexity per project as

each project has its own challenges and problems. Majority of the respondents claim that knowledge about the business and skill is most valuable project participation in order for the project to be successful even though they claim that they are not respected for their role.

5.3. Research Objective Two:

To analyse how the interrelationship between the Business Analysts and the project management teams creates potential project success for delivery of business value.

All respondents strongly agree that they should be involved at strategy level in order to deliver an effective and efficient solution. Most respondents claim that there is a lack of clarity in the scope of the project. The Analyst and Project Manager work together in most cases to define the scope of the project. The survey also confirms that business requirements are not well managed in the work place, we can only guess that it is because it keeps on changing. Majority of the respondents claim that the project changes are not well managed and this has a negative impact on the project delivery. A large number of respondents have the required skills and training to perform their role effectively and this is positive impact to the project as they are communicators and facilitators brought on projects to elicit requirements. Most respondents strongly agree that the effect of Business Analysis influence the success of project as they are closer to the details than any other in the team and can eliminate any confusion with explanations. It is evident that a number of respondents agree that they can save a project from failing and we can only guess that it is due to their skills, expertise, qualifications and experience. This study indicates that majority of the respondents strongly agree that the effects of business analysis improve the project delivery time within budget constraints. Most respondents feel that they require professional development to reduce impediments and improve project results, we can only guess that these respondents do not have enough knowledge and experience in their field of work.

5.4. Research Objective Three:

To explore challenges on the degree of training and communication networks faced by Business Analysts in enhancing the integrated project performance.

Although a vast number of respondents claim that they are micromanaged at the workplace, we can only guess that it is because of managing tight timelines in order to meet the project delivery date and each Project Manager has his/her own management style which Analysts need to adjust to. It is clearly evident that a large number of Analysts are not involved at strategy level of decision making. This impacts the project negatively from time and requirement perspective. Business Analysts are normally situated within Information Technology Departments in Standard Bank Personal and Business Banking Information Technology instead of the wider business and poorly leveraged within other departments. In order for the project to start off on the right foot, Business Analysts need to get involved at business strategy level within the organisation. According to Brule (2012), both Business Analysts and Project Managers need to become more involved at the enterprise level because without an enterprise analysis perspective, they lack the connection between what they are doing and why they are doing it. So, while they may be winning the project battle, they do not have the enterprise-wide perspective to win the war.

5.5. Research Objective Four

To establish the extent to which the Business Analysts can influence the success of a project.

This study indicates the top five major problems faced by the respondents which could differ per project team and impacts the project negatively in terms of time, cost and quality. The five major problems are:

- resistance in sharing information,
- the complexity of the project,
- accountability for decisions,
- information overload and
- technology.

The respondents claim that the following are the major causes of failure: poor planning by the Project Manager, lack of communication, poor leadership, disregard of project warning signs and failure to set expectation. We can only guess that these problems are ongoing and differ per project team and hopefully will be sorted out in the near future to increase delivery. We could also guess that these problems are also due to the maturity of the project team. This study confirms that Business Analysts play a significant role in a project team within the organisation. It further served as a catalyst to highlight and acknowledge the role of Business Analysts in the project related environment. Business Analysts add value in what they do and how they execute their tasks and they need to leave a value legacy in what they do. An organisation can add value to their projects, improve project success and thereby improve the organisation's revenue, by adding a Business Analyst to their project team (Bridges and McVey, 2011). They understand how to increase the company's potential benefits, understand business needs and ensure that the priorities of the business are focused on value.

Business Analysis helps businesses do business better as an agent of change and a disciplined approach for introducing and managing change to organisations, whether they are for-profit businesses, governments or non-profits. Business Analysis assists to identify and articulate the need for change in how organisations work and to facilitate that change. Business Analysts identify and define solutions that will maximize the value delivered by an organisation to its stakeholders. Business Analysis assists to identify and articulate the need for change in how organisations work and to facilitate that change. Business Analysts work across all levels of an organisation and may be involved in everything from defining strategy, to creating the enterprise architecture, to taking a leadership role by defining the goals and requirements for programs and projects or supporting continuous improvement in its technology and processes (Johnson, Scholes, and Whittington, 2008).

5.6. Recommendations and Conclusion

Skill set also plays a crititcal role in project delivery. Resources must be well equipped in order to perform their role effectively and improve project results in order for them to be more centred and accurate. Resources should not depend on the organisation to improve their skills, it must be part of their personal development plan. The organisation has a learning and development department that can assist with the appropriate skill set. There seem to be an increased interest amongst resources to learn new techniques and stay abreast of emerging trends in Business Analysis. As the respondents become more capable in their well defined roles, they will be better armed to achieve successfully.The organisation further needs to ensure that the resources are engaged at the correct level, and that is strategy level, as this will ensure that they are 10 steps ahead with what needs to be delivered at the right time.

Many of the Business Analysts feel that they are not respected for their role and this should not be the case given the value they add to the organistaion. Some of the respondents believe that the project changes are not well managed in the organisation. This issue requires further investigations in order to rectify any shortcoming in the process. One of the major problems faced by the respondents is resistance in sharing information, presumably due to insecurity where resources are holding onto their positions in the team. The challenges might be reduced once the resources are better versed in standards and best practices of their specific job functions. Ultimately, all challenges must become daily tasks for the respondents to handle as experts in their field. The top 5 major causes of project failure needs to be addressed:

- poor planning,
- lack of communication,
- poor leadership,
- disregard of project warning signs and
- failure to set expectations.

These major causes of project failure relates to both the Project Manager and the Business Analyst. Until Business Analysis competencies are dramatically improved

within organisations, organisations will continue to see the same problems we have grown so accustomed to seeing. Brule (2006) stresses that keeping in mind the competencies, as well as all of the people, processes, tools and technology available to the organisation, put one on the path to better Business Analysis and ultimately, more successful projects.

According to Bridges and McVey (2011) study conducted by the Corporate Executive Board, Application Executive Council, improving Business Analyst proficiency can improve application performance by as much as 30%. According to the same study Business Analysts who are proficient in understanding business process complexity, their economic and revenue drives, recognising the implications of changes in business strategy and accurately measuring the contribution of Information Technology projects to business value contribute to extremely high proficiency. Bridges and McVey (2011) uphold that a skilled Business Analyst enhances the link between the user and the business resulting in less miscommunication thus reducing the level of chaos. Less project chaos lowers overtime, improves team morale and the team's chance of delivering on time but most of all, the Business Analyst will contribute to higher customer satisfaction, by adding value. Success has to include the value added and the expectations of the executive stakeholder being met not just meeting the timelines and budget.

According to Brule (2012), in a competitive and economically challenging environment, there is always room for improvement when it comes to Business Analysis. Raising expectations for proficiency and Business Analysis is key to helping organisations realise the full potential of the Business Analyst. Carkenord et al. (2000) mentions that the closing process group is performed to finalise all activities to formally close the project; including obtaining acceptance by the customer or sponsor that the solution delivered meets the business needs. They believe that while lessons learned should be captured throughout the project life cycle, one final session is usually held to review all project areas for improvement opportunities and to establish a project knowledge base for best practices so that the organisation can continue to evolve and improve. It is evident of the earth of drilling down the broader structure or vision to smaller tasks,

and lack of communication at all levels creates bottlenecks and information suppression. These key constructs for prospective successes of a project are underlying requirements to epitomise good leadership. This study further indicates poor leadership as major cause of project failure, although warning signs are always shown on the verge of project failure, 63% (n=39) of the respondent raises a disregard of project warning signs.

This study confirms that indeed Business Analysts contribute to the success of the organisation. They increase the value achieved through the solution to the business problem and actively reduce the cost to implement strategic solutions. It has been further noted that Business Analysts are a vital part of any organisation to achieve its goals in a cost-effective manner. Without a Business Analyst, a project may deliver something or nothing at all, but it's a certainty that what is delivered will not be the right thing.

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APPENDIXES

Appendix A: Questionnaire

Section A: Bibliographic Data and Organisational Profile

This section relates to the **biographical details** of the respondent and the company. All answers you provide are based on your experience, perceptions and knowledge. **Please tick (√) in the appropriate box.**

1. What is your managerial position in the company?

Top Management		Middle Management		Lower Management		Non-Managerial	

2. Gender

Male		Female	

3. Number of years worked in the organisation?

Less than 1		1-3 Years		4-6 Years		7-10 Years		Over 10 Years	

4. What is your type of position as Business Analyst?

Senior		Junior		Associate (Entry Level)	

5. What is your highest level of qualification?

Post Graduate		Undergraduate		Certificate	

6. How many years of Business Analysis Experience do you have?

< 5 years		5 - 9 years		10 - 14 years		15 + years	

7. What methodology do you use among the following?

Agile		Waterfall		Hybrid Agile & Waterfall		No formal Methodology	

8. Do you find difficulty in executing Business Analysis tasks?

Yes		No		Sometimes		Never	

10. How many projects do you work on at once?

Less than 3		4		More than 5	

11. Who plans and manages your work?

Project Manager		Line/Programme Manager		Others		Lead Business Analyst	

12. Which one of the following major assets is most valuable to project participation?

Knowledge about the Business		Business Skills		Business Analysis Tools	

Section B: Dichotomous Questions

This section relates to the **objectives** of the study being investigated. All answers you provide are based on your experience, perceptions and knowledge. **Please tick (√) in the appropriate box.**

12. Business Analysts experience Business Analysis challenges in your projects	**Yes**	**No**
13. Business Analysis problems are experienced in your projects	**Yes**	**No**
14. Business Analysts require skills to perform the tasks successfully	**Yes**	**No**
15. Business Analysts are normally micro managed in the workplace	**Yes**	**No**
16. Business Analysts get involved at strategy level of decision making	**Yes**	**No**
17. There is a lack of clarity in the scope of the projects within the work process	**Yes**	**No**
18. The business requirements are well managed in the work process	**Yes**	**No**
19. The project changes are poorly managed in the work process	**Yes**	**No**
20. Business Analysts are brought in the project at the right time	**Yes**	**No**
21. Business Analysts have the required skills and training to perform their role effectively	**Yes**	**No**

Section C: Ranking Questions

This section relates to the effects of Business Analysis. The success of projects are primarily driven by the factors listed below:

Please encircle the most appropriate number with "1" as strongly disagree, "2" as disagree, "3" as neutral, "4" as agree and "5" as strongly agree, for the following questions.

22. The effect of Business Analysis influences the success of projects.	**5**	**4**	**3**	**2**	**1**
23. A Business Analyst can save a project from failing	**5**	**4**	**3**	**2**	**1**
24. The effects of Business Analysis improve the project delivery time within budget constraints	**5**	**4**	**3**	**2**	**1**
25. Business Analysts need to get involved at strategy level within the organisation.	**5**	**4**	**3**	**2**	**1**
26. Business Analysts require professional development to reduce impediments to improve project results.	**5**	**4**	**3**	**2**	**1**
27. Business Analysts are communicators and facilitators brought on projects to elicit requirements	**5**	**4**	**3**	**2**	**1**
28. The Business Analyst role comes with unique difficulties	**5**	**4**	**3**	**2**	**1**
29. Business Analysts are brought in at the right time	**5**	**4**	**3**	**2**	**1**

30. Business Analysts need to be up-skilled and trained in order to perform their role better	**5**	**4**	**3**	**2**	**1**
31. Business Analysts are not respected for their role.	**5**	**4**	**3**	**2**	**1**
32. Project changes are well managed.	**5**	**4**	**3**	**2**	**1**

Section D

33. Identify 5 major common problems faced by Business Analysts amongst the following. Please tick only 5 problems.

Resistance in sharing information		Uncertainty		Globalisation		Government policy and regulations	
Technology		Complexity		Information overload		Supply Chains	
Strategic thinking and problem solving		Accountability for decisions		Information overload		Supply Chain	

34. Identify 5 major causes of project failure. Please tick only 5 causes.

Poor Planning		Inefficient document and track progress		Poor leadership		Failure to set expectations	
Poor trained Project Managers		Inaccurate cost estimation		Lack of communication		Culture or ethical misalignment	
Competing priorities		Disregard of project warning signs					

Appendix 2: Skills are important for a new Business Analyst

Clear Spring Business Analysis LLC (2015) provides a list below of the most critical business analysis skills for new Business Analysts to bring to the table, organised into the categories of core skills, business analysis skills, soft skills and skills that can be required for specific types of Business Analyst jobs as indicated in Table 3.

Important core skills, Business Analysis skills and key soft skills.

Core Skills	**Definition**
Communication Skills	Business Analysts must be good communicators in order to facilitate working meetings, ask good questions, listen to the answers and absorb what is being said. In today's world, communication does not always happen face-to-face. The ability to be a strong communicator in a virtual setting (via conference calls or web meetings) is equally important.
Problem-Solving Skills	No project is without problems and in fact, the entire project is a solution to a problem. At the highest level, Business Analysts facilitate a shared understanding of the problem, the possible solutions and determine the scope of the project. You will also find Business Analysts in the midst of facilitating teams to solve technical challenges, especially when they involve negotiation between multiple business and technical stakeholders.
Critical Thinking Skills	Business analysts are responsible for evaluating multiple options before helping a team settle on a solution. While discovering the problem to be solved, Business Analysts must listen to stakeholder needs but also critically consider those needs and ask probing questions until the real need is surfaced and understood. This is what makes critical thinking and evaluation skills important for new Business Analyst. While communication, problem-solving, and critical thinking skills are core to being a good Business Analyst, they are not all that is required.
Business Analysis Skills	

Documentation and Specification Skills	While documentation or writing could be considered a subset of written communication, it is really its own skill set for a Business Analyst. New Business Analysts may not have experience in a variety of Business Analyst specifications (that comes with time and a variety of project experiences) but it is quite possible that strong general documentation and writing skills will get them started. It will be easier to get into your first Business Analyst role if you can correlate your past experience in something very similar to a formal Business Analyst specification to the kinds of specifications required for any given position. This is possible even if they never worked in a formal environment previously.
Analysis Skills	Business Analysts use a variety of techniques to analyse the problem and the solution. As a new Business Analyst, they might find that you naturally see gaps that others gloss over and identify the downstream impact of a change or new solution. As they mature as a Business Analyst, they will use a variety of techniques to conduct analysis and deconstruct the problem or solution such as use cases, business process models and decision models.
Visual Modeling	A close look to many analysis techniques is the ability to create visual models such as work-flow diagrams or wireframe prototypes. For any given analyst role, there could be specific models they need to create. As a general skill set, it is important to be able to capture information visually, whether in a formal model or a napkin drawing.
Facilitation and Elicitation Skills	BAs facilitate specific kinds of meetings. The most common kinds of elicitation sessions a BA facilitates are interviews and observations. In some more advanced roles, the meetings are called JAD session or requirements workshops. Most new Business Analysts have experience running very similar meetings or facilitating discussions that can is transferable into elicitation experience.

Business Analysis Tools	As a new Business Analyst, the ability to use basic office tools such as Word, Excel and PowerPoint should be sufficient to get you into the profession. Other technical skills include the ability to use modelling tools, such as Visio or Enterprise Architect, requirements management tools, such as DOORS or Caliber, or project and defect management tools (there are really too many to list these days). It is unlikely they will find these to be required skills for a large number of positions and there will be skills you learn on-the-job. And as important as it is to have specific Business Analyst skills, no list of Business Analyst skills would be complete without the soft skills required to be successful as a Business Analyst.
Key Soft Skills for Business Analysts	
Relationship-Building Skills	First and foremost, on the list of soft skills is the ability to forge strong relationships, often called stakeholder relationships. A stakeholder is simply anyone who has something to contribute to the project and often the Business Analyst will work with many stakeholders from both the business and the technical teams. This skill involves building trust and often means stepping into a leadership role on a project team to bridge gaps.
Self-Managing	While Business Analysts are not Project Managers, the most successful Business Analysts manage the business analysis effort which means that the Business Analyst is proactive and dependency-aware. It also means they manage themselves to commitments and deadlines; a skill set which can involve influence, delegation and issue management.
A Thick Skin	Business Analysts receive a barrage of feedback on their documentation and proposed solutions. To succeed, Business Analysts need to be able to separate feedback on their documents and ideas from feedback on them personally.

A Paradoxical Relationship with Ambiguity	Deep down, Business Analysts despise ambiguity and ambiguities in the requirements specifications lead to unexpected defects. Ambiguities in conversation lead to unnecessary conflict and at every stage of a project, you will find a Business Analyst clarifying and working out ambiguities. Yet, at the beginning of a project, before the problem is fully understood and the solution is decided upon, a Business Analyst must be able to embrace the ambiguity and work effectively through ambiguity. Managing ambiguity means we embrace new information and learning as it surfaces, even if it surfaces later than we'd like.
Technical Skills	First on the list are technical skills. While it is important that a Business Analyst has a conceptual technical understanding as it helps you analyse the problem to be solved and communicate with technical stakeholders, you do not need to be able write code or run database queries.
Industry and Domain Expertise	A Business Analyst does not need to be an expert in every domain or industry and in fact that would be impossible. A lot of Business Analyst jobs require special areas of expertise and if they have areas of expertise in specific domains, they can leverage their expertise in their Business Analyst career. But if they do not have a specific expertise to leverage, they will just need to focus on opportunities that will value their other business analysis skills.

Source: adapted from Clear Spring Business Analysis LLC (2015)

Appendix 3: Soft Skills

Table 1 – Important soft skills

Soft skill	Description
Negotiation skills	Negotiation skills will be of value when facilitating negotiations between IT, business users and development resources while trying to minimise project scope creep.
Active listening	Active listening will be of great value when trying to collect business requirements, providing quality internal client service and when gathering information for status reports.
Dealing with conflict	Dealing with conflict will be of value when IT and users disagree and/or when deadlines are being missed and tensions are running high.
Quality client service techniques	As a representative of the IT community, providing quality client service to the business users you support is critical to the Business Analysts performance and career advancement.
Decision making	There are many formalised decision making techniques, such as a decision matrix which can help Business Analysts make quality, business appropriate and defendable decisions that can help to best service their internal clients and maximise their job performance.
Problem solving	Like decision making, there are formalised problem solving techniques, such as five whys and brainstorming that can help discover a problem's root cause and define potential solutions.
Strategic thinking	Very often a Business Analyst must think outside the box to find innovative business solutions that meet their internal client's needs. An understanding of strategic thinking techniques can help facilitate this process.
Technical writing	A key role of business analysis is the creation of business requirement specifications and other forms of documentation. The Business Analyst should have the ability to develop these coherent.
Presentation and public speaking	Do not underestimate the value of creating and delivering quality presentations on topics such as application designs, project status and business requirements. Generally speaking, the people listening to presentations are senior IT and business management people. The ability to impress them

	could have a significant effect on a Business Analysts career growth.
Team building	Business Analysts must have the ability to structure, coordinate and be a team player which will make them more successful in their current role and position them for future IT senior positions.

Source: adapted from Clear Spring Business Analysis LLC (2015)

Appendix 4: Ten Powerful Business Analyst Lessons

Mohamed (2013) mentions 10 powerful Business Analyst lessons as mentioned below.

- Business Analysts should let go of the way they have done things in the past, the templates they hold dearly onto and the organisation culture and standards that do not make sense.
- In the context of being a Business Analyst, a methodology is like a religion. There is innate value in every methodology. While it is good to believe and follow a certain methodology to help us through the good and bad times, it is more important to have universal good practices to hold onto. These practices will serve as anchors during adverse project scenarios and situations.
- With the pace of change and volatile stakeholders' needs, it is easy to lose sight of reality in projects therefore Business Analysts should always be on the lookout for expressions and cues that reflect this. Rather than whining and crying, it is better to grasp a sense of the reality and the ability to respond in a positive manner sooner.
- The very nature of our work exposes us to a wide range of personalities and archetypes. We need to learn to understand them in order to be able to work with them. Sometimes, we have to overcome adversities with people as well as processes even if it means gritting our teeth and bearing it.
- As Business Analysts, we deal with project stakeholders and interact with them for workshops or other analysis work. It is always useful to establish this interaction by setting some ground rules and defining the various roles and responsibilities.
- As Business Analysts, we are faced with dire project scenarios and needs. We need to learn to be innovative by coming up with ways to elicit, analyse,

document, and communicate the requirements and overall vision of the project. In this increasingly unpredictable project world, it is to our advantage to develop alternative ways to keep the project afloat, like Pi and the boat. On the flip side, putting all of our eggs in one basket is not a good idea. The tools or techniques that we currently use could be overthrown at any time. You must continually expand the tools and techniques you know.

- This principle of reciprocity can be applied to our project scenarios as well. When we help our stakeholders understand the upcoming change and honour everyone's best interest, we get rewarded by their support. In every negotiation that involves stakeholders, we should always consider how a change could benefit them without belittling ourselves.

- Business Analysts sometimes have wonderful excuses to not invest in learning. We often avoid learning, absorbing industry standards (like BABOK), becoming certified, or even engaging in passive learning activities like listening to audio podcasts.

- Business Analysts should understand that there is always the other side to our viewpoint, always another side to any story. It is your job as Business Analysts, to determine the side that is not obvious and be aware of it. We should be cognisant of and keep an alert nose up in the air for:

    - eliciting any hidden information,
    - organisational politics that may be hindering or inhibiting our work and
    - hidden agendas of a stakeholder or stakeholder group.