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**Assessing the Practice of Agile Project Management
Methodology in Ethiopian Social Enterprises: The Case
of Whiz Kids Workshop**

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**ASSESSING THE PRACTICE OF AGILE PROJECT
MANAGEMENT METHODOLOGY IN ETHIOPIAN SOCIAL
ENTERPRISES: THE CASE OF WHIZ KIDS WORKSHOP**

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Statement of Declaration

I, the undersigned, declare that the study entitled, “Assessing the Practice of Agile Project Management Methodology in Ethiopian Social Enterprises: The Case of Whiz Kids Workshop” is the result of my own effort and study that all sources of materials used for the study have been acknowledged. I have conducted the study independently with the guidance and comments of the research advisor.

This study has not been submitted for any degree in any university. It is conducted for the partial fulfillment of the Master of Arts Degree in Project Management.

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Letter of Certification

This is to certify that Addis Fekadu has conducted this project work entitled “Assessing the Practice of Agile Project Management Methodology in Ethiopian Social Enterprises: The Case of Whiz Kids Workshop” under my supervision.

This project work is original and suitable for the submission in partial fulfilment of the requirement for the award of Master of Arts Degree in Project Management.

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Approval Page

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Acronyms/abbreviations

IT - Information Technology

PMBOK - Project Management Body of Knowledge

PMI - Project Management Institute

PMLC - project management life cycle

TPM - Traditional Project management

WKW - Whiz Kids Workshop

Abstract

This document presents the research study carried out on the practice of agile project management in social enterprises in the Ethiopian context. Agile project management, even though it is not novel worldwide, in Ethiopia it is still new and is common only in software related projects. The motivation for this study is that the benefits of agile methodology in software industries can be replicated to other industries such as social enterprises which are peculiar forms of organizations gaining popularity especially in developing countries like Ethiopia. For this research, a social enterprise operating under the education sector called Whiz Kids Workshop was chosen. A qualitative as well as quantitative research approach was undertaken for this study with the intention to deeply understand the opportunities and challenges presented by adopting this methodology in a social enterprise setting and whether maximizing on the opportunities and minimizing challenges would bring about an improvement of the organizational performance. A descriptive research design was used for this study to describe how social enterprises implement agile project management methodology and detail the characteristics of agile practice in settings outside software. All forty nine employees of Whiz Kids Workshop were the target population for this study therefore a census was used to collect the data that was needed to draw results and conclusions. The data was gathered through survey instruments such as questionnaires distributed to the staff as well as through semi-structured interviews held with the management members who are championing the implementation of agile ways of working. Their response helped inform conclusions around maximizing opportunities through realizing benefits of agile such as efficiency and productivity and garnering positive staff attitude towards the implementation through consistent training, minimizing challenges such as working to improve on company culture. By implementing these harmoniously and monitoring the performance of the team regularly, agile methodology was found to bring about increased organizational improvement.

Key Words: Agile project management, agile ways of working, social enterprises,

Chapter 1: Introduction

This chapter introduces the research by covering topics such as background of the study, statement of the problem, research questions and objectives, significance, scope, limitations as well as organization of the study for the rest of the paper.

1.1 Background of the Study

Organizations are formed to meet certain goals and objectives and in order to meet those goals they have grown to break critical work down into projects to effectively meet their goals and demonstrate efficiency, cost savings and originality. A project is temporary, according to the Project Management Institute's (PMI) Guide to the Project Management Body of Knowledge (PMBOK), since it has a fixed start and end date, as well as a defined scope and resources. It is distinct in that it is not a standard procedure, but rather a series of procedures designed to achieve a particular objective. Project management is also defined by PMI as the application of knowledge, skills, tools, and techniques to project activities to meet the project requirements. Project management is nowadays therefore central to various organizations as it provides improved productivity, collaboration, and eventually customer satisfaction.

Over the years, many projects have introduced and followed different project management methodologies in hopes of effectively and efficiently meeting their goals. As cited by Dinnie Muslihat in the Zenkit Blog 2018 release, according to the PMI, a methodology is defined as a set of practices, techniques, procedures, and rules employed by practitioners. The traditional project management methodology is one of the first methods. Simpler projects usually practice traditional project management approaches since it is relatively stable. Though many project management tools and techniques have been developed to provide significant project performance improvements, none of them are free from major problems especially along the lines of cost and schedule overrun. It can be a challenge for traditional project management methodologies, to meet the demands of complex projects that rely on constant innovation, such as entrepreneurial projects with embedded social goals unlike other projects.

It looks like a number of agile methodologies have been developed and evolved as a

remedy for the limitations of traditional project management. The agile methodology has increasingly become popular since its release and has been widely adopted by the software development industry worldwide. As a result of its application in the software industry, software projects have seen to quickly progress and deliver results effectively. As a result, not to restrict the benefits of agile methodologies to only software projects, there was a need to adopt this project management concept to other types of projects to produce intended results quickly and maximize learning.

By learning agile methods' focus on collaboration and frequent delivery through a fast project management life cycle, the need for peculiar projects such as those projects that are focused on social innovations wanting to adopt this way of working is no exception. In order to manage social innovation projects successfully, it is important to understand their special characteristics, which differ from the usual kind projects (Hernandez and Cormican, 2016). Such projects are undertaken by social enterprises, which are organizations that exist in the middle of profit and non-profit sectors with the goal to balance activities that provide financial benefits with social goals. More specifically, Investopedia defines a social enterprise as a business whose primary calling is social welfare. In such enterprises, projects are undertaken to maximize profit and societal or environmental gains at the same time and the most part of the sales will be used to finance social services.

Griffiths in his 2007 book mentioned that organizations are using agile approaches to embrace its benefits in order to improve their performance in managing entrepreneurial activities. The use of project management in non-profit organizations however is not as common as it is in private sector firms according to Bourgeon & Lehmann (2008) and further suggested more research needs to be done to gain insights especially for social companies.

Organizations ought to become agile to function effectively and efficiently as they adapt to new changes in the business environment. In Ethiopia, as could be in many developing countries, companies are under increasing pressure these days to learn faster and adapt more quickly to change. Such can also be the case in social enterprises as well. Like many markets where social enterprise is new, Ethiopia is devoid of any clear-cut legal form recognizing social enterprises. It is imperative that Ethiopian social enterprises, as they

attempt to deliver positive social change, implement an adaptive project management framework so that they are not dependent on traditional methods of operation to deliver their services and reinvest profits into furthering their good work. The agile method thus provides employees with the opportunity for creativity and to experiment with new solutions, thus enabling social enterprises to impact and profit safely.

In relation to this, research such as this one needs to be done to understand the precise way in which social enterprises can best be supported by agile project management methodology and assess opportunities and challenges that are presented when adopting this methodology. This should contribute to the understanding of how social enterprises use agile project management methodology to efficiently run their activities.

The Case Organization: Whiz Kids Workshop

Whiz Kids Workshop (WKW), founded in 2005, is an Ethiopian indigenous social enterprise with a mission to make learning a lifelong passion. By leveraging the existing research on mass media education, novel, lower-cost methods of media creation, and the wide reach of television, radio, print, and cellular devices, WKW aims to positively impact education. WKW produces content that covers comprehensive topics including literacy, health education, character building, social-emotional learning, gender equality, and disability inclusion to prepare children and youth for a successful life. Tsehai Loves Learning, Little Investigators, Tibeb Girls and Involve Me are some of WKW's projects.

By linking its projects with government education projects, WKW weaves its educational solutions into all schools and childhood care centers, especially to those under-served and under-resourced public schools in Ethiopia through endorsement of the Ministry of Education. Currently, 412 public schools are given access to WKW's materials including videos in an android playing device, televisions, and shelves full of children's story books, alphabet flashcards, workbooks, and classroom posters impacting more than 200,000 school children every day. To increase reach and impact as many children, WKW's content has been adapted to 6 additional local languages to broadcast nationally and reach 10 million children every week.

While grants from international organizations cover big expenses such as research and

production, the outputs of these projects help sustain income for the project through sales of videos, books, and supplementary materials to private schools, parents and internationally to Ethiopian families who want to help their children stay connected with their culture.

WKW has six departments that manage thirty nine full-time, eight long term and over eighty short term professional contractors. The departments are Governance, Program, Production, Commerce, Tech, Finance, and Human Resource and Administration. Following the organization-wide Professional Scrum Master training for Agile project management" in 2020, the ways of working for all departments were changed. The training circled around how enterprises can adapt agile project management outside software projects through Scrum; a most widely used agile framework.

1.2 Statement of the Problem

The effectiveness as well as suitability of organizational project management depends on company size, structure, the industry in which they are operating, the strategy they pursue, etc. Nonetheless, the ultimate target of the agile project management methodology in any organizational setting is to achieve set out objectives while ensuring improved performance. Often, organizations will have to change their existing operational and management practices in order to become more agile. It is the resistance to these changes that often hinders companies from exercising it more and more. Such deficits need to be addressed especially for organizations that heavily rely on reliable operation of social innovation projects.

For the non-profit sector, specific project management tools are not common so they develop their own tools based on how they want (Bourgeon and Lehmann, 2008). By taking this notion and understanding that social enterprises have certain similarities with non-profit organizations, it is important to note that they also need appropriate methodologies in their operations.

Social enterprise projects are driven by a combination of commercial success and meeting social needs, according to Murray et al (2010). Social innovation-type projects must be managed appropriately in order to be more effective and for this appropriate project

management methodologies must be selected outside traditional project management.

The traditional method sometimes called the waterfall method is more prone to errors when compared to the agile project management as it relies on initial requirements. If these requirements of the user are not documented properly, it can be difficult later on the outcome but agile requirements are checked and confirmed throughout the project. With waterfall, it is difficult to go back once a step has been made in the project and adjustments are not made as the project is being completed. Such is not the case in agile because users can see a work in progress of the final product and have their say on whether they like it or not before the project is finalized.

The traditional method also doesn't support changing needs and if business processes change during the project, the waterfall method doesn't adapt to this. Agile however has the ability to adapt to evolving needs and even expects them and plans for them way ahead. Agile project management sees the customer as part of the implementation team and includes them at each part of the process and not necessarily only at the start of the project just like waterfall.

The Agile method works but it needs to match with management style to achieve intended objectives in addition to gaining every staff commitment. Enough studies related to the adoption of the agile methodology by software and related organizations have been done and demonstrated the challenges and opportunities that were presented as a result. However in the local and regional context, its adoption in other industries, more specifically in social enterprise settings is missing.

Agile project management methodology is common with small teams. A study conducted by Swinnerstone states that such methodology can be appropriate for Africa for companies with small teams who can then break chunks of activities to small doable ones. African software engineers also prefer agile project management methodology as stated by Mbelli and Hira in 2010 as it doesn't allow room for a one-size-fits-all approach. Therefore, especially in Africa, this approach must be considered and for different sectors outside software for them not to miss out on the benefits that come with embracing modern agile methodology concepts.

This therefore calls for a study that fills this contextual gap by studying the use of agile project management techniques and its application in the Ethiopian context. This research focused on assessing the practice of agile methodologies among social enterprises currently operating in Ethiopia and assesses if agile methodology is really worth adopting in such organizational settings for improving their performance given their operation in challenging business environments.

1.3 Research Questions

The research is undertaken to answer the following questions:

1. What are the opportunities of adopting agile project management methodology in WKW?
2. What are the primary challenges that WKW faced while adopting agile project management methodology?
3. How has the adoption of agile project management methodology improved the performance of WKW as a social enterprise?

1.4 Research Objectives

The general objective of this research is to assess the opportunities and challenges of practicing agile project management methodology in social enterprise settings in improving their organizational performance.

Specific objectives of this research includes:

- To identify opportunities of adopting agile project management methodology in WKW.
- To identify gaps in adopting agile as a project management method in WKW.
- To assess improved enterprise performance as a result of adopting agile project management methodology in WKW.

1.5 Significance of the Study

This research is expected to be beneficial to the emerging social enterprises in Ethiopia especially those that are working to impact masses as well as varied target groups in the education landscape such as WKW. It is intended to help them understand the practice of agile project management methodology and inform their decision as to whether or not to adopt this practice in their organization to improve their enterprise performance. It may also raise the awareness of employees of other social enterprises and serve as a benchmark to measure their capabilities and readiness to adopt this methodology and commit to its implementation to reap its benefits. Identification of opportunities and challenges in implementing agile at the social enterprise and suggestion of possible solutions to these issues are intended to positively help managers and similar organizations in the adoption process.

For the case organization, this research intends to be beneficial in helping key decision makers become conscious of the enterprise's performance overtime and possibly work on gaps to mitigate challenges and maximize opportunities. It is intended to also help in motivating existing staff members as it exemplifies closer collaboration between teams to replicate and maximize synergy.

The motivation for this study is that agile methodologies are flexible enough to be adopted by projects other than software and in a different organizational setting called social enterprises. Thus this study helps fill the limited research done for agile project management methodology practices under the scope of social enterprises in Ethiopia.

In addition, this research was undertaken to contribute to the body of knowledge, giving academicians as well as fellow researchers a practical example in Ethiopian context in relation to its current practice outside software related projects.

1.6 Scope of the Study

The scope of the research is limited to project management methodology systems and practices. While there are various project management methodologies to choose from, this study only considers the practice of agile project management methodology. It is apparent

that this methodology is now encouraged to be practiced outside the software technology sector worldwide. This study however only deals with its practice in organizations with a social enterprise nature where their main focus is to carry out project activities that provide financial benefits with social goals. Given the existence of numerous social enterprises in Ethiopia, the subject under study is a social enterprise, more specifically, an enterprise that is working in the education sector in Ethiopia that undertakes projects outside software. Thus this study is limited to the assessment of the current practice of agile project management methodology by the Ethiopian social enterprise and description of the opportunities and challenges related to its adoption in projects.

Since the practice of agile project management methodology in Ethiopia is relatively new and especially for social enterprises, it is difficult to address the whole parts and every framework of the agile methods in a single research. As such this study was limited to the 'Scrum' agile framework which is primarily practiced by the enterprise and is very well known for encouraging decision-making and preventing time consumption on things that change frequently.

Geographically, it is limited to the Addis Ababa WKW head office. There are various types of social enterprises in the country engaged in various industries. Ethiopia has approximately 55,000 social enterprises (Reuters, 2019). Among this is the specific organization chosen for this study i.e. WKW, which is one social enterprise engaged in the production and dissemination of social and behavioral change communication materials to children and youth.

The study is limited to one social enterprise which implements agile project development management. The full time and long term contract worker employees were considered in the study to determine the findings of the project. As such, the study presents the perspective of the employees and not that of stakeholders that are external to the organization. This study therefore did not take into account the perspective of those employed by other social enterprises within or outside the operating sector of WKW, i.e. education. Hence appropriate care needs to be taken when applying learning from this research to other social enterprises.

1.7 Limitations of the Study

Since the use of agile project management techniques is still a relatively new concept for most social enterprises, findings are limited in scope. As indicated in the research method this research is done in one particular organization as a consequence, because of its use of a small case conducted within one office, this study cannot be generalized.

Both the context and the methodology used for this research may limit the ability of this study to be considered generalizable to a wider population. Moreover, due to the nature of the project and its agile approach, the study mainly presents the organization's perspective and the case under consideration thus, the findings are presented as their own understanding and perception. Therefore, it is important to take the above limitations into account while referring to the research.

1.8 Organization of the Study

This study has five chapters. The first chapter talks about the background of the study, statement of the problem, general and specific objectives, research questions, scope of the study and limitations of the study. The second chapter deals with review of literature, empirical studies and conceptual framework of the study. The third chapter outlines the research methodology of the study where the methodologies used for the research are explained. In the fourth section of the research, the data presentation and analysis are presented where the findings of the research done are clearly depicted using figures, tables and descriptions. In the last chapter, a summary of findings, conclusions and appropriate recommendations are presented.

1.9 Definition of Key Terms

Project - interconnected tasks defined by finite dependencies that after completion produce the expected business value that justified the undertaking (Robert K, 2014).

Project Management - a process for moving project activities in accordance with project requirements through the use of tools, knowledge, skills, and techniques (PMI, 2013).

Project Management Methodology - The method of applying project management (PMI,

2013).

Traditional Project Management Approach - a method of managing projects that emphasizes a linear process, meticulous documentation, and thorough upfront planning, with constant activities: initiation, planning, execution, monitoring, and closure (Investopedia).

Agile Methodology - A way of organizing projects that enables them to change as the needs of the business change (Miller, 2019).

Agile Project Management Methodology - A method for project management emphasizing individual and collaboration over processes and tools, in addition to responding to change (Twelve Principles of Agile Manifesto, 2001).

Social Enterprise - a business that maximizes profits while enriching society and the environment at the same time (Investopedia).

Chapter 2: Review of Related Literature

This chapter presents and discusses various related literature pertinent to the practice of agile project management methodology. Theoretical as well as empirical research are cited to provide background information for agile methodology and establish a solid foundation to investigate and determine the main positions of social entrepreneurship concept in relation to agile project management. This review of literature begins with the conceptual review of project management methodology and its opportunity, components of project management methodology where four different types of methodologies are discussed, variables that affect agile implementation and challenges organizations face when adopting agile methodology. Social enterprises are also discussed further in this chapter as well as empirical studies that support the benefits of adopting agile methodology in various organizational settings.

2.1 Theoretical Framework

2.1.1 Project Management Methodology and its opportunity

Work nowadays, as Heerwagen noted in his 2016 study, is becoming more specialized, fast, and requiring more collaboration. Additionally, businesses started to focus on satisfying their customers, adapting to change, and continually trying their best to become better. Therefore being agile is a desired quality especially for companies that try to become less conservative in their ways of working. As a result, these companies need to redefine their communication skills and a commitment to performance improvement.

2.1.2 Components of Project Management Methodology

Robert K. Wysocki argues that a project's goal and solution can define it. This led him to introduce four types of project management: Traditional Project Management, Agile Project Management, Extreme Project Management, and Emertxe Project Management.

2.1.2.1 The Traditional project management approach

As one of the oldest and most popular methods for managing projects, traditional project management has survived over time. Its key challenges are the project management

process. Due to the client and project team having clearly defined the goals and a clear method for achieving them, there should be little chance for change in the expected outcome of the project (Martin & Highsmith, 2001). It is also considered was labor-intensive that strictly follows preset timetable and budget.

2.1.2.2 Extreme project management approach

The vast majority of these projects are related to Research and Development. It generally represents the proposer's best guess as to what the project will ultimately accomplish. The highest level of uncertainty and difficulty can be found in the extremes of the landscape, where projects are located, so failure is common. It is common for goals to simply describe desired end states with no real way to achieve them. Solutions are sometimes overlooked (Robert K. Wysocki, 2014).

2.1.2.3 Emertxe project management approach

An Emertxe project is a reverse version of an Extreme project such that it focuses on searching for a target rather than a solution (Robert K. Wysocki, 2014). This approach seeks to answer the question: “Does this approach have a business goal, and did it accomplish it effectively?”

2.1.2.4 Agile project management approach and its opportunity

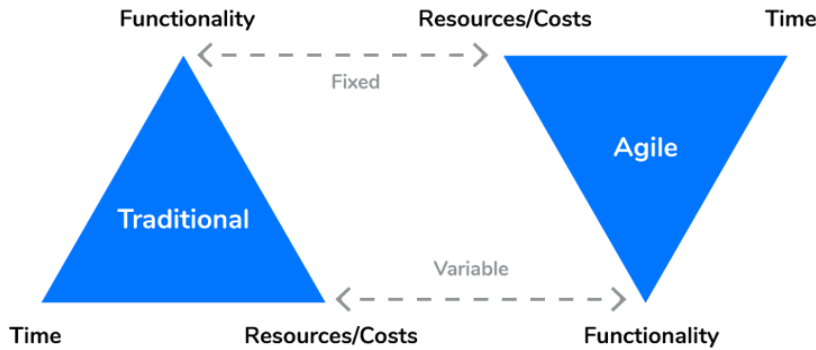
Recently, agile methods became increasingly popular when they started to improve product development performance. The issues with traditional methodologies led to the development of agile methodologies. It is important that implementing organizations understand the various approaches used for such projects so that they can select the one that is most suitable for their needs.

Agile centers on self-organizing, cross-functional teams collaborating to develop demands and solutions. It provides other benefits, such as reducing waste, facilitating easy adaptability with increased flexibility, ensuring better control over team performance, facilitating feedback, process improvement, and focusing team efforts.

The Agile Triangle depicted below shows delivering within constraints (scope, schedule,

and cost).

Figure 1: Conceptual differences between Traditional project management and agile project management



Source: Jim Highsmith, 2010 Agile triangle.

The difference between traditional and agile project management methodologies as summarized by the KnowledgeHut can be summarized below

Table 1: Agile project management vs. traditional project management

Characteristics	Traditional Project Management	Agile Project Management
Organizational structure	Linear	Iterative
Project Scale	Large-scale	Small and medium-size
Development Model	Life cycle model	Evolutionary delivery model
User requirements	Clearly defined before implementation	Interactive input
Client involvement	Low	High
Restart cost	High	Low
Development process	Fixed	Easily changeable
Testing	Once implemented	Every iteration
Architecture	Creates current and predictable	Creates current requirements

	requirements	
Requirements	Standard and known in advance	Emergent with rapid changes

Source: Kira Carr, 2017, KnowledgeHut

2.1.3 Important variables that affect the implementation of agile methods

Boehm and Turner (2004) point out that a number of important factors affecting the success of a project have been identified in the people issues. A customer representative unsuited to an agile team poses substantial risk, for instance. According to them, customer representatives should be "Collaborative, Representative, Authorized, Committed, and Knowledgeable". CRACK is the term used for this. The agile adoption environment and tools available should support agile practices and adoptions, according to Scott Ambler in his survey, Agile Adoption Strategies (Ambler, 2011). He mentions that the working environment, business processes, systems, tools, and techniques employed in the environment, as well as the culture of the organization, need to be aligned to fully support agile.

2.1.3.1 Factors that assist in organizations completing agile projects successfully

Business expertise is fundamental to ensuring that agile approaches are implemented successfully, and consequently, that the project will be successful. This assertion is made by Ambler (2011). It's also important that team members be assigned to just one project at a time, and that smaller teams succeed more often. Support from the executive level is another factor that is mentioned. Agile approaches to projects are more successful when everyone buys in. Ambler (2011) makes the point that success is an important concept. Ambler believes that agile teams emphasize overall value added and creation as opposed to traditional project-driven approaches that tend to measure success against scope, budget, and time. Chow and Cao (2008) have also identified success factors for agile projects.

- The availability of dedicated business expertise, throughout the course of the project, increases the chances of adopting Agile Approaches successfully

- The tools and techniques available to project members should support agile practices and approach adoption
- Support from an executive level increases agile method project success
- Successful Agile Teams are measured on overall value added and creation, as opposed to the traditional “Constraint Triangle” measurements (Scope, Budget, & Time).
- Smaller teams succeed more often in agile settings, and project members should be dedicated to one project at a time.

Some dimensions with their success factors are described below as per Chow & Cao, 2008.

Organizational - Strong Executive Support, Committed sponsor or manager, Cooperative organizational culture instead of hierarchal, Oral culture placing high value on face-to-face communication, Organizations where agile approach is universally accepted, Collocation of the whole team, Facility with proper agile-style work environment, Reward system appropriate for agile.

People - Team members with high competence and expertise, Team members with great motivation, Managers knowledgeable in agile process, Managers who have light-touch or adaptive management style, Coherent, self-organizing teamwork, Good customer relationship

Process - Following agile-oriented requirement management processes, Following agile-oriented project management process, Following agile-oriented configuration management process, Strong communication focus with daily face-to-face meetings, Honoring regular working schedule – no overtime, Strong customer commitment and presence, Customer having full authority

Project - Project nature being non-life-critical, Project type being of variable scope with emergent requirement, Projects with dynamic, accelerated schedule, Projects with small team, Projects with no multiple independent teams, Projects with up-front cost evaluation done, Projects with up-front risk analysis done.

Operational performance should always be improved by organizations. Organizations must have a justification for deciding to become agile or to implement agile methodology. There are factors that need to be considered when organizations make this decision, according to Chervenkova (2019) which are briefly summarized below.

Capability and Experience - Despite the fact that agile types of teams are not new, some organizations are still learning how to use them effectively since they didn't get proper training or do not have experience for a long period of time.

Performance Monitoring and Control - In order to capitalize on opportunities, processes and strategies may change but each step's team performance needs to be monitored. This approach must however be in alignment of the company goals and team's capabilities.

Enabling Company Culture - When organizations decide on taking the agile project management the change that is going to come may impact governance, human resources, and each department's team. This needs to be supported by an open and conducive company culture.

Team Buy-in and Commitment - When introducing new ways of working to an organization, everyone needs to know the purpose and believe in it before being forced to change how they do things. Since teams like to do things the way they are used to, they may not have expectations for the strength to accommodate new change. Therefore they need to be convinced about the need for transformation. When they are told and taught of the advantages and possible effects, they will be open to take new roles and responsibilities knowing the gains they will garner eventually. This exercise needs to be done by management for all levels of the team within the company.

Effective Communication - Simplicity and directness are becoming very important nowadays and agility requires conciseness. Short regular meetings are common with team members that are directly working on projects. These meetings are more efficient and to the point which uses the most out of effective communication.

2.1.4 Challenges in adopting agile methodology

As described by Chervenкова in her ‘When Does Agile Fail? Challenges, Problems, and Issues with Agile’ blog, she discusses some of the challenges organizations facing agile adoption face as below.

Company culture and people’s perceptions about the change process: As mentioned above in section 2.3, agile change is a long-term process. Organizational behaviors and values are rooted since they have been practiced for quite a while. When agile comes along trying to challenge a long lived set of culture, there may be a mishap and unnecessary/unintended outcomes. Some people prefer to follow strict procedures and policies and it may clash with the nature of agile project methodology.

Buy-in and alignment on all levels: When everyone understands their role in the agile transformation, there won’t be challenges. Slowly introducing it while gaining a growing acceptance from the team at all levels is important.

Inability to take ownership of work: Agile paves way for assuming more responsibilities by becoming more flexible and open minded to learn new things. With better collaboration, solutions come to challenges more easily. Therefore, team members need to step up and own their work, being productive and releasing quality work.

Lack of communication: Effective communication is a must as explained above. If there is no proper communication, chances are that the agile methodology will fail. Communication channels need to be smooth and not rigid for this to be achieved.

Choosing the "right" agile methodology can be challenging: When adapting a new system, it is important to check if it has worked elsewhere. This will help facilitate buy-in from the team.

Failure to have an agile coach: By taking into account the behavior and level of competence of each team member, the agile coaches must empower and manage the team into success. By guiding the team to find solutions, by resolving conflicts and following performance and giving regular feedback, the coaches help. Agile coaches must be collaborative in nature. Team making mistakes is fine at first and the coach must not be

harsh on them but letting them know the consequences of such mistakes if they happen again.

Implementation Issues: If there is no energy from the team to work in such a flexible and changing project dynamics, the implementation will be weak and projects following the agile methodology may fail. If the team did not take the necessary training or capacity building, the agile methodology will also fail in this case.

Commitment Required: Based on the level of commitment that the implementation of agile gets from the team, its success or failure can be determined. All the collaboration, effective communication, and consistent delivery needs a high level of commitment from the whole team.

Unsuitable for Some Projects: A one-size-fits-all approach does not go with agile. Therefore there may be some very complex projects that may not work well under agile.

2.1.4.1 Factors that influence the Failure of Agile Software Development Projects

Vijayasathy and Turk (2008) identify several factors that lead to the failure of agile projects, including lack of training, lack of technology, individuals' resistance, and relying solely on economic evaluation criteria. Similarly, business managers are apathetic to change, as well as organizations resisting change (Vijayasathy & Turk, 2008). To the same extent as success factors, Chow and Cao (2008) discuss failure factors according to four dimensions: organizational, human, process, and technical.

Some dimensions with their success factors are described below:

Organizational - Lack of executive sponsorship, Lack of management commitment, Organizational culture being too traditional, Organizational culture being too political, Organization being too large, Lack of agile logistical arrangements

People - Lack of the necessary skill set, Lack of project management competence, Lack of team work, Resistance from groups or individuals, Bad customer relationship

Process - Ill-defined project scope and project requirements, Ill-defined project planning, Ill-defined customer role, Lack of agile progress tracking mechanisms, Lack of customer

presence

Technical - Lack of correct agile practices and inappropriate technology and tools.

2.1.5 Relationship between Agile methodology and improving organizational performance

As understood from the above sections in the literature, agile methodology can be a solution to rigid project management methods such as traditional. Since it is based on driving value and takes in regular feedback and input, it can increase competitive advantage for businesses. However it is important to note that businesses need to first understand the benefits that come along with agile and the challenges it presents when implementing it. Only when they understand and strive to maximize its opportunities and minimize its challenges with commitment can change be brought about in the organization.

Sweeney (2014) mentioned that while agile projects are 28% more competitive than conventional projects, by setting the appropriate control mechanisms the overall performance of the organization can be further improved. Based on Prince Waterhouse Coopers (2017) publication, some of the values that the agile type of project delivery delivers are people over processes and tools, and responding to change rather than following one rigid plan. And especially for organizations that rely on delivering quality, this is a good stepping stone. Teams' efforts will be focused on the project with increasing emphasis on coordination and information sharing.

It may not be easy for an organization implementing agile at first but how effectively an organization is implementing agile methodology determines it. The Prince Waterhouse Coopers suggested that agile fosters a successful organization on many levels as it prioritizes customer retention by delivering valuable goods on time and on a consistent basis, welcomes, changeable criteria which promotes quick and versatile responses to change, encourages continued focus on technological quality and good design, resulting in less waste, promotes the value of a self-organizing, collaborative team that makes changes, analyzes problems, and adjusts behavior to become more efficient, and encourages consistent goals for each cycle across all teams. It can be understood that agile companies

emphasize on performance and they have no room for a lot of hierarchies and bureaucracies that create barriers from achieving goals.

A number of scholars, including Conforto et al. (2014), Gustavsson (2016), and Laanti et al. (2011), agree that agile project management techniques can also be effective in non-software organizations. The agile method is designed to be more productive, reliable, and receptive to clients, according to Nicholls et al. (2015). Traditional planning approaches are said to be inefficient when it comes to handling IT projects with an undifferentiated scope, budget, tasks, and prioritization. However, in both IT and non-IT projects, the agile method has been said to be able to efficiently control project quality and efficiency under time and resource constraints.

According to Gustavsson (2016), agile approaches for non-software companies are highly advantageous because they foster customer engagement, collaboration, flexibility, and efficiency. Furthermore, according to Melnik and Maurer's 2006 research, job satisfaction is double that of conventional teams. The authors also argue that since agile team leaders were more comfortable with their jobs, this means that agile methodology practices in the workplace helps organizations increase productivity and performance, as well as lower costs and better working relationships between employees and with clients as well.

Lindvall et al. (2002) say culture, people, and communication are key factors contributing to the success of agile development. Organizations cannot adopt agile methods if their culture doesn't support those (Lindvall et al., 2002). Agile methods succeed if they are implemented by competent people and teams. Developers should not be doubted all the time and shouldn't be second guessed every time they make a decision (Lindvall, et al., 2002). In addition to facilitating rapid communication, an agile environment should also promote regular interaction between team members (Lindvall, et al., 2002). To learn more about this aspect of agile software development, the following sections provide details about project success factors.

2.1.6 The Social Enterprise Approach

One way or another, organizations contribute to social development by supplying products and services that societies demand, creating more jobs, and paying the taxes to support

countrywide programs. Organizations, on the other hand, enter the domain of social enterprise when their clear goal is creating social profit and enhancing the lives of the community. Unlike most non-profit organizations, whose outputs are directly geared towards social welfare, a social enterprise balances social welfare and its own commercial benefit in terms of sustainably continuing to operate in the business landscape while also consistently contributing to social welfare.

A social enterprise, according to Hein and Kappel, is formed when a social entrepreneur or a founding group of people who share a particular and well-defined social purpose succeed in transforming it into a new entity that brings in economic value towards itself while providing solutions to social problems in the community it operates in.

This dynamic was originally conceived as the responsibility of the public sector; however, social companies are making it possible to deliver social and common-interest assets in a way that's financially sound and in many ways more successful than what the government could do alone (Hein and Kappel, 2014). Because of this, social entrepreneurs play an important role in ensuring sustainable development.

When adopting agile methodology such enterprises should note that they must be able to adapt to the agile working methods that they find necessary. It needs to be adapted systematically by taking into account what a drastic change may bring. Leaders also have the ability to establish and maintain values and commitments therefore they play a very important role in fostering an agile culture. They need to season their working environment and consider the above factors when adopting the agile methodology.

2.2 Review of Empirical Studies

Selecting the best project management technique will help an organization's efforts to increase results by bringing them together. To support the cause of this study, various literatures have been cited below and practical researches done previously were reviewed. There has been a lot of literature indicating that using a project management approach within an enterprise has a lot of benefits; the benefits that are widely agreed upon are mapped out in the table below.

Table 2: Benefits of using a project management methodology

	Knowledge management project documents	Repeatability/ Consistency/ Sustainability	Benchmarking/ Comparability of success metrics	On-going improvements/ Impacts
Clarke, A. (1999)				
Ibbs, C. W., and Kwak, Y. H. (2000)				
Kerzner, H. (2004)				
Kerzner, H. (2005)				
Labuschagne, C., and Brent, A. C. (2005)				
Light, M., Rosser, B., and Hayward, S. (2005)				
Desouza, K. C., and Evaristo, J. R. (2006)				
Chiocchio, F. (2007)				
Müller, R., and Turner, R. (2007)				
Young, R., and Jordan, E. (2008)				
Hanisch, B., Lindner, F., Müller, A., and Wald, A. (2009)				
Hurt, M., and Thomas, J. L. (2009)				
Rosemann, M. (2010)				
Wysocki, R. K. (2011)				

Source: Ozmen 2013, Project Management methodology

Numerous studies were done in the area of agile project management adoption even though they focus on software projects given the abundant practice of agile in the software industry. It is important however to look at these studies especially those that are in Africa to emphasize the benefits of agile methodology to inform later conclusions for social enterprises.

According to Swinnerstone (2017), a study was conducted in Uganda to assess agile software development in Uganda. This study analyzed fifty IT companies operating within Uganda consisting of project managers and their teams. In spite of the majority of studies focusing on agile project management practices globally at that time, there had been little or no research on how agile project management is utilized in Uganda. Uganda introduced agile methodology, which has boosted creativity, according to studies. Kwesiga found that training increased students' expertise with agile software and management methods, as well as improving their skills. Swinnerstone's research indicates that organizations would experience improved performance and faster delivery of products if they implemented agile as part of continuous growth.

A similar study conducted by Nithila et al (2013) revealed that the majority of the respondents in their research in South Africa favored agile methodology adoption. Only 31 percent of respondents disapproved of the agile methodology according to their study.

Feyissa (2019), in his study on software development teams in the banking and private banking industries in Ethiopia, examines the adoption level and challenges associated with agile project management. The study found that only two of the seven participating banks implemented Agile, while five still utilized traditional methods.

This research studied the challenges faced by teams, and managers among other categories. Team related challenges that were specified are objected to working in a community, a lack of expertise, and the departure of experienced team members. The management challenges mentioned include: setting unrealistic deadlines, not outlining common tools and frameworks for software development. According to the researcher, less than 30 percent of the banks in Ethiopia attempted to switch to the agile model, which suggests a low level of acceptance of the agile methodologies approach.

Amberber (2018) performed a study similar to this for a fintech project conducted by an organization offering modern technology to the financial sector. The main focus of this research was an analysis of hybrid methodologies; traditional as well as agile. He suggested that to use agile management, teams must undergo dynamic effective management capabilities to combine traditional project management with agile management.

In their 2016 study, Hernandez and Cormican also investigated the scope of social innovation projects from the perspective of project management. The results of this study guide the application of project management principles in social innovation to improve performance. They highlighted that there are enough challenges that social enterprises face and that the right project management approach should be selected and implemented to foster efficiency.

She created a survey in which 24 social entrepreneurs from six countries participated, in which Alekseeva (2014) analyzed existing standard methodologies of project management as applied to social entrepreneurial projects. Upon analysis, P2M seemed to be the most appropriate project management methodology. The P2M model combines project management and problem solving and was created by the Project Management Association of Japan. According to the research, social entrepreneurs can use P2M to coordinate their projects successfully and maximize social value. Even though this research does not support the point of interest for this study, which is supporting social enterprises with agile methodology, it provides important insights as to how much project management is being applied in social enterprises in recent years and different methodologies are becoming the point of interest of these types of organizations.

It is important to note studies as the ones detailed above to better understand exactly what factors social enterprises need to facilitate internally like other organizations to embrace the implementation of the agile project management methodology and reap the benefits it is rendering others.

Chapter 3: Research Methodologies

This section consists of research design, data sources and data collection techniques, study population and sampling methods, data collection procedures and instruments, research approach, methods of data analysis and interpretation. It presents the methodologies that the research undertook to assess the practice of agile project management methodology in WKW.

3.1 Research Design

The purpose of this study is to describe how agile project management methodology is practiced in social enterprise settings, thus the research is descriptive in nature. This is a cross-sectional research that simply takes a snapshot of a certain example in terms of time.

For a comprehensive explanation and analysis of the issue; the research applied survey tools in order to administer a survey to the entire population of the case organization to describe the characteristics of the opportunity/challenge that has risen as a result of the practice of the agile project management methodology. By learning about how the agile project management methodology is practiced in the social enterprise currently, this method helps in determining whether its adoption will be successful. The results that were drawn as part of this study will also support further research.

The research approach for this study used a mix of both qualitative and quantitative data to be obtained from primary sources through different instruments. This method gathered data from everyone in the population and exposed it to a full analysis.

3.2 Description of Study Variables

The chosen case organization has recently adapted the agile project management methodology. As such this case organization fits the profile or the unit of analysis which this research is looking for: an enterprise that had recently chosen to implement agile methods in its ways of working, and that had previously used the traditional model. With the traditional model still in their minds the employees were expected to make candid assessments of the practice and impact that agile methods are bringing when compared to their past methodology in terms of performance. In addition, they were expected to describe

the opportunities as well as the challenges that the agile method adoption brought forth. This study sought to understand if the important factors stated above in the literature review for supporting the implementation of agile project management methodology are indeed practiced in social enterprises.

The independent variables of this study as explained in the literature above are summarized as maximizing opportunities and minimizing challenges. Specific variables under each section are discussed in detail in the literature review part of the study which include but are not limited to team capability and experience, team buy-in and commitment, enabling company culture, performance monitoring and control, consistent feedback as well as effective communication. These variables are believed to independently and collectively catalyze the successful implementation of the agile project management methodology. The dependent variable for this study is therefore the performance of the case organization as a result of adoption of agile project management methodology.

3.3 Description of Study Area and Target Population

The target population for the study were the employees of WKW which has forty nine employees as of May 07, 2021 (eight of which are contract workers) according to the information gathered from the Human Resource Database. The assessment was undertaken with its employees in Addis Ababa City. The research considered only one social enterprise that is working under the education sector among other social enterprises who are engaged in education and other unrelated projects. Most of the employees were part of the professional Scrum Master training for agile performances received by the company in early 2020 and are expected to be familiar with it as their daily performance is closely monitored and measured through an internal system within the company. Similarly, new entrants that did not take part in the actual training are trained as part of their orientation and onboarding by senior management and hence are also expected to be familiar with agile ways of working as well.

The complete target population of this study was surveyed using the census inquiry approach. It is important to note, according to Kothari (2004), that when the universe is limited, a sample survey is useless and a census is a thorough examination of all aspects of

a population. For this research, all forty nine employees were given the chance to convey their responses. The management level individuals (three individuals) who are leading and guiding their team to implement the agile methodology were interviewed using a semi structured interview while the rest of the team filled questionnaires that were designed to gather their take on the adoption and implementation of this new way of working in their organization.

3.4 Data Collection

The research was done using a mixed approach which used both quantitative and qualitative data with the aid of questionnaires and semi-structured interviews respectively. Primary data was mainly used in this research, i.e., data that was collected by the researcher for the purpose of addressing the research objectives. This primary data was obtained through questionnaires distributed to the employees via online Google Form and open ended interviews held with management level implementers inside the company. In order to assess the effectiveness of the practice of agile project management methodology in the organization quantitatively, structured questionnaires containing both open and closed types of questions were administered out of which only forty four viable questionnaires were gathered. The governance department who is spearheading the implementation and evaluation of agile methods was also interviewed using semi-structured interviews. For this interview, the performance officer, chief operations officer and chief executive officer of the social enterprise have contributed their thoughts from their experience managing the organization under the new way of working; agile.

3.5 Data Analysis

This research followed the process of both qualitative and quantitative methods. The qualitative method followed a content analysis which included identifying significant patterns, and finally drawing meaning from data as well as quantitative data analysis methods which include descriptive and some inferential statistical analysis to summarize the data and describe patterns (Patton, 2002). Through thematic analysis and comparison with findings from the literature review, the consistencies discovered from the primary data collection for this study were analyzed and discussed.

The quantitative analysis involved converting the raw data into meaningful content using descriptive and inferential tools. The descriptive tools of this analysis are part of the descriptive statistics which include Mean and Standard deviation calculator performed on SPSS. The analysis is then presented in relative frequency tables, mean, and standard deviation. This helped in summarizing the data presented in a more meaningful way which allowed a simpler interpretation of data as can be seen in chapter four below. In addition to descriptive analysis, the collected primary data is analyzed using regression analysis, an inferential statistics tool which is used when the study involves analyzing more than one variable, where the relationship includes a dependent variable and one or more independent variables (Miller, 2019). This analysis has helped in drawing conclusions that explain how the independent variables affect the performance of the dependent variable. For this study, a linear regression through Model Summary and ANOVA tests are used for analysis while the correlation of the independent variables was tested using a multicollinearity test. Therefore, this research took the convergence of agreement from both descriptive and inferential statistical results.

3.6 Reliability and Validity Analysis

As seen in Table 3 below the overall reliability score is 0.912 which indicates that each of the items or indicators measures the same construct, and thus they are highly correlated. Similarly, for each construct, the reliability tests were taken and are depicted below in the same table. Typically, a Cronbach's Alpha value of more than 0.7 is considered acceptable in research.

Table 3: Reliability test of items

Items tested	Cronbach's Alpha	N of Items
Overall reliability	0.912	25
Reliability test of opportunities presented with the adoption of agile methodology in WKW	0.836	7
Reliability test of challenges presented with the adoption of agile methodology in WKW	0.711	5

Reliability test of overall enterprise performance as a result of adoption of agile methodology in WKW	0.751	5
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Source: Own survey, 2021

For the purpose of enhancing the research instrument, for testing the questionnaire for clarity and for providing a coherent research questionnaire, a detailed literature review like the one above has led the process. The indicators, which were then derived from the literature review, have been transformed into direct questions for the interviews and questionnaires.

Both the open and close-ended questionnaires along with the semi-structured interview were employed and validity issues were addressed through triangulation. A comprehensive literature review was also conducted to enhance the research instrument, to test it for clarity, and to provide a logical research questionnaire. The open-ended and closed-ended questionnaires, as well as the semi-structured interview, were used along with triangulation as a tool for exploring validity and reliability issues. Additionally, triangulation was performed by thematically analyzing qualitative interviews gathered from respondents. This was done to overcome the limitation of a single case study to provide a general conclusion.

3.7 Ethical Consideration

As part of the ethical considerations for conducting research, the participants were required to give consent to both the interview and the filling of questionnaires after the research purpose and process was explained to them. Verbal consent was considered necessary in this study. As this research is a mix of qualitative and quantitative, it has benefited a great deal from open and natural communication. Additionally, the respondents' responses were used only for the study, without any adjusting, and were kept confidential.

Chapter 4: Data Presentation and Analysis

The analysis was guided by the objectives set out in the first chapter of this study. This research tried to identify opportunities and challenges of adopting agile project management methodology in a social enterprise i.e. WKW. The analysis further determined whether the enterprises' performance had improved as a result of its adoption of agile taking into consideration the opportunities, challenges and motivated staff. This chapter presents the data collected in relation to the above objectives providing the data collected from the primary source in a summarized manner.

The data gained for the variables of the research which are directly depicted on the questionnaire were analyzed to look for patterns of the responses from respondents using descriptive and inferential statistics. To confirm the validity of data analysis between variables the data was measured using IBM Statistical Package for Social Sciences (SPSS) version 26.

The total number of employees that were given the chance to fill the questionnaire were forty nine, out of which forty four viable responses were gained; this indicates that 93.6% viable responses were gained and the interview was held with three members of the top level management. In addition to the general demographic questions and the 5-point Likert scale question items, a total of four open ended questions were devised in the questionnaire in order to gain more insights from the respondents in case they would want to add to points that they believe are not included in the Likert scale questions or needed better expressions.

The first section below presents the demographic characteristics of respondents, the second section portrays the descriptive statistics analysis while the remaining sections present the correlation and regression tests as part of the inferential analysis. Further, the findings from the interview that expand on the results of this research are specified under each of the above sections, as well as summaries that should be helpful in this research.

4.1 Demographic Profile of Respondents

The demography section of the questionnaire presented the gender, age, level of education, years of experience in the enterprise, role in their organization, previous experience with agile, and frequency of feedback. Table 4 below summarizes all data

Table 4: Summary of demographic data

Demographic variables		Frequency	Percent	Valid Percent	Cumulative Percent
Gender	Male	19	43.2	43.2	43.2
	Female	25	56.8	56.8	100
Age	25 years and under	30	68.2	68.2	68.2
	26-35 years	14	31.8	31.8	100
Education Level	Diploma	3	6.8	6.8	6.8
	Degree	31	70.5	70.5	77.3
	MA	7	15.9	15.9	93.2
	PhD	3	6.8	6.8	100
Work experience in WKW	Less than a year	14	31.8	31.8	31.8
	Up to 2 years	21	47.7	47.7	79.5
	Up to 5 years	7	15.9	15.9	95.5
	more than 5 years	2	4.5	4.5	100
Role in WKW	senior management	8	18.2	18.2	18.2
	middle management	15	34.1	34.1	52.3

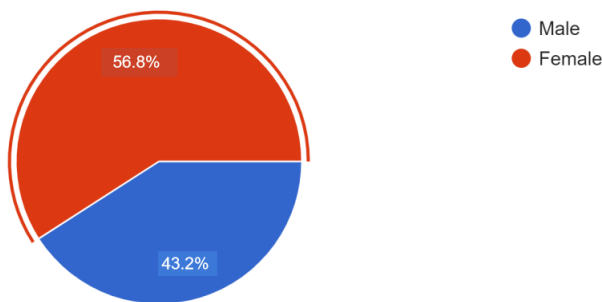
	non managerial	21	47.7	47.7	100
Previous agile experience	Yes	27	61.4	61.4	61.4
	No	17	38.6	38.6	100
Frequency of feedback	Rarely	11	25	25	25
	Often	20	45.5	45.5	70.5
	Daily	13	29.5	29.5	100

Source: Own Survey, 2021

4.1.1 Gender of Respondents

As shown in Figure 3 below, the respondents' gender profile indicates that the majority of the respondents are females accounting for 56.8 percent of the respondents whereas male respondents account for 43.2 percent of the respondents. This shows that more female employees are playing an important role in the implementation of agile project management.

Figure 3: Gender of respondents



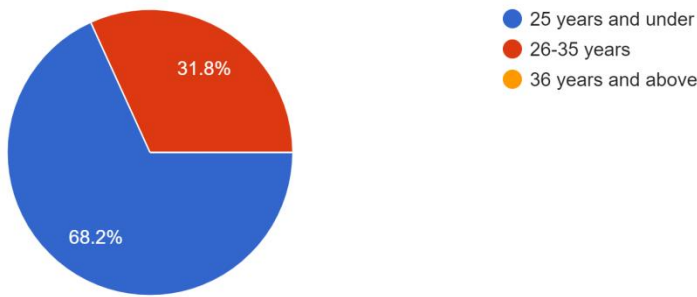
Source: Own primary survey, 2021

4.1.2 Age Category of Respondents

The age of the majority of the respondents as shown from Figure 4 below is 25 years of age and under, or 68.2 percent. Whereas 31.8 percent falls between 25 to 35 years and none

of the respondents for this questionnaire lie above the age of 35. This indicates that the team mostly consists of young people which contribute to the acceptance of agile methodology with less resistance to change. This also presents an opportunity for project agility in the project environment.

Figure 4: Age of respondents

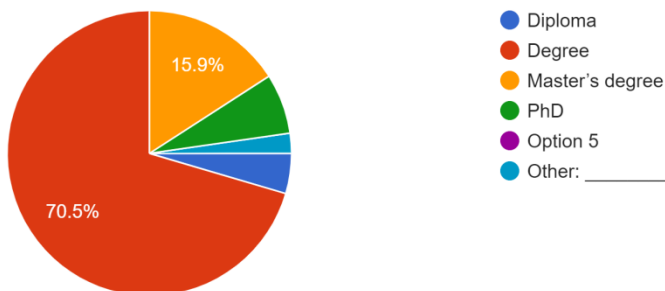


Source: Own primary survey, 2021

4.1.3 Level of Education

Education level attained by respondents as indicated in Figure 5 and below shows majority of the respondents are first degree holders which is 70.5 percent of the total respondents which is followed by Post graduates accounting for 15.9 percent and the least percent is 6.8 percent for both diploma graduates and PhD holders. This indicated that most of the team at WKW have higher educational status which is an opportunity to implement advanced contemporary project management methods such as agile as the level of understanding and educational background of the team will play an important role in understanding, adopting and learning from new approaches.

Figure 5: Level of education of respondents

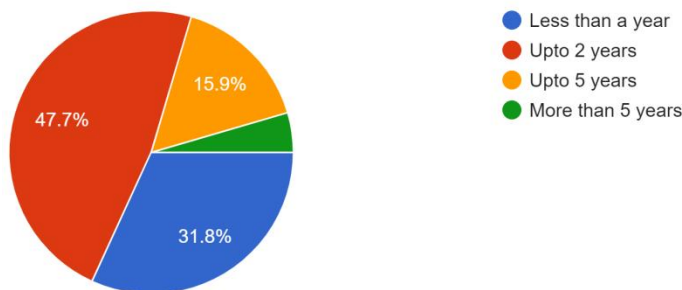


Source: Own primary survey, 2021

4.1.4 Work Experience in the Organization

Looking at Figure 6 below about the respondents work experience, most of them joined the project in less than 2 years which accounts for 47.4 percent. Respondents representing 31.8 percent fall within the experience of less than a year working in the company and 15.9 percent fall within up to 5 years of working in the organization. The rest correspond to 4.5 percent which have experience working for more than 5 years in the organization. This shows that most of the respondents have been around since the agile methodology was introduced. Therefore, it can be inferred that these respondents provide the correct data regarding their agile experience. Hence, they are in a better position to provide insight as to whether or not the agile experience helped them in performing projects under their departments.

Figure 6: Work experience of respondents



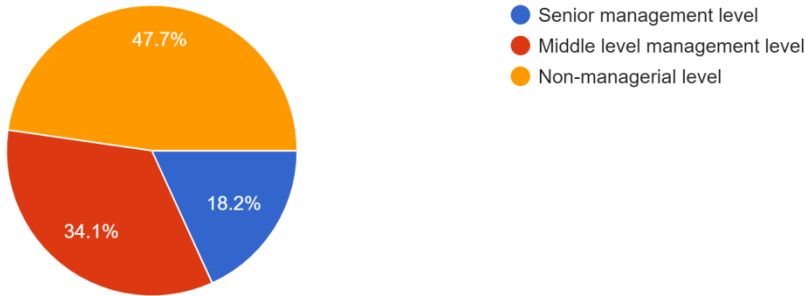
Source: Own primary survey, 2021

4.1.5 Role in the Organization

There are a number of departments in the organization including Governance, Program, Production, Commerce, Tech, Finance, and Human Resource and Administration. As indicated in Figure 7 below the majority of the respondents assume a non-managerial position accounting for 47.7 percent while 34.1 percent of the respondents are middle level managers, managing a group of teams under them and answering to the remaining 18.2 percent who are senior management level groups. This data is helpful in gaining useful data from the majority of respondents that are implementing agile methods in their

day to day operations and their attitude towards it.

Figure 7: Role of respondents

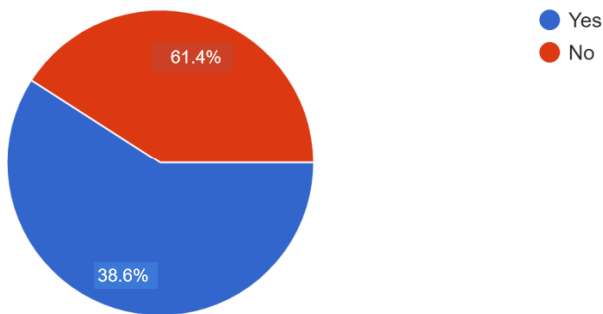


Source: Own primary survey, 2021

4.1.6 Previous Experience with Agile

As depicted in Figure 8 below, more than 61 percent of the respondents are familiar with the agile methodology outside WKW while the remaining 38.9 percent said that they were not familiar with agile before the method was introduced in the company in 2020. This indicates that the agile concept is not new to the respondents and that the professional training they received in 2020 helped concretize the concept for most of them. This can indicate that there is a better level and rate of the adoption of the agile approach in the organization in a fast manner.

Figure 8: Previous agile experience of respondents

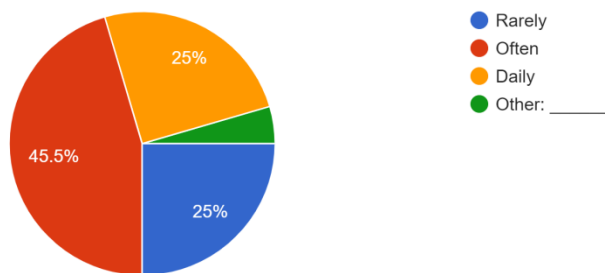


Source: Own primary survey, 2021

4.1.7 Frequency of Feedback Receipt

As indicated in Figure 9 below, most of the respondents mentioned that they receive feedback on their work often which constitute 45.5 percent of the respondents whereas 29.5 percent of the respondents said they receive feedback daily. The remaining quarter of the respondents (25 percent) said that they rarely receive feedback. This indicates that although the enterprise implements the agile methodology it is performing weakly on the feedback section. This data implies that there is a gap of daily feedback given by peers and management in the enterprise.

Figure 9: Frequency of feedback



Source: Own primary survey, 2021

4.2 Descriptive Statistics

By analyzing the data gathered from the questionnaire in descriptive statistics such as mean and standard deviation, appropriate interpretations were done for each variable/question item that was presented in the questionnaire. The results from the statistics were also supported with the qualitative data gathered and summarized from the open-ended questionnaires and semi-structured interview. This section is divided in terms of the grouped variables; opportunities of agile, challenges of agile, staff attitude towards agile, and the overall organizational performance improvement. For the 5-point Likert scale items, the mean score of 1-1.8 is regarded as strongly disagree, 1.81-2.6 as disagree, 2.61-3.40 as neutral, 3.41-4.20 as agree, and 4.21-5.0 as strongly agree.

4.2.1 Realizing Opportunities of Implementing Agile Methodology

This section presents the findings for the first research question that inquired to find out

about opportunities that were presented as a result of adopting agile project management methodology throughout all departments of WKW. Based on a 5-point Likert scale, seven questions were designed for this section. The summarized responses can be seen in Table 5 below.

Table 5: Results for realizing opportunities of implementing agile project management methodology

Questions for realizing opportunities of agile methodology	N	Mean	S.D.
Agile methodology serves an important purpose in WKW	44.00	3.91	0.74
Organizational goals are clear.	44.00	3.68	0.80
Projects have well defined scope and the team has well defined roles.	44.00	3.84	0.89
The agile methodology encourages communication, cooperation, transparency, and team spirit.	44.00	4.14	0.93
Team efforts are more focused which promotes efficiency.	44.00	4.18	0.90
Challenges get solutions more frequently.	44.00	3.73	1.04
The organization adapts more quickly to uncertainty.	44.00	3.73	0.92
Valid N (listwise)	44.00		

Source: Own survey, 2021

As can be seen above, most of the respondents with a 3.91 mean have agreed that generally the adoption of agile methodology served a good purpose in the organization. And they believe that compared to the times that the enterprise was implementing a different type of project management method, when the enterprise adopted the agile method, the goals that it set out became clearer to the respondents with a mean of 3.68.

In addition to having clear goals, the respondents have also attested with a mean of 3.84, projects that the enterprise currently runs have better defined scope with everyone being on the same page with the projects from beginning to end. As a result, the respondents have also agreed that the rate of adapting to uncertainty as well as bringing solutions to

challenges has increased for every project that is running in the enterprise currently (both with a mean of 3.73). The respondents have inclined more to the items that stated that agile methodology garners improved team spirit and communication as well as increased focus of efforts of the team (with a mean of 4.14 and 4.18 respectively).

The interview that was held with top management has also witnessed that WKW has grown to adapt to changes more quickly by providing solutions to impediments every day. When compared to the previous way of project implementation, agile project management helped each team to clearly identify its role and their expected outcome during planning sessions and teams always have a clear vision of what they are doing and what the final product should look like.

It can be understood from the above findings that the adoption of agile project management methodology has posed a number of benefits to WKW and its staff has seen the benefits happen to the projects they manage or work for. Efficiency and transparency as well as high levels of precision, goal orientedness, high level of focus on work, equal engagement of each staff, accountability among each staff, and ease of managing tasks are some of the opportunities that can be gained from its adoption. It also helps to properly manage the working hours of each employee so that each employee effectively uses their hours productively which in return helps in saving costs that could be caused by unproductivity.

It is evident that following agile management can help an enterprise in detecting and resolving problems early on before they create a major irreversible disaster. Such benefits indicate that creativity and analytical skills of the team can be boosted which is the key for better performance. As a result better outcomes will be observed such as the team completing their work on time, increased success through more focused efforts, decreased risk of missed objectives.

The data gathered from the interview further supported this claim that teams like how transparent the system is but they tend to resist the continuous follow ups made on system implementation and some have considered it as being over controlling and micromanaging. During the early days of agile management implementation, training

was given every week along with the sprint review and planning session mainly on the scrum framework and its events. A total of 6-8 training was given for the first few months of the implementation period in different topics from the basic understanding of what agile is to how to be an agile company and the roles and duties of each scrum team and how to conduct each agile activity effectively. The department takes attendance and individual sprint performance to ensure everyone is taking this seriously.

Aside from the training, daily guidance and follow ups were made for every team member to ensure the system is effectively used and they have a clear understanding. This indicates that more work needs to be done in the organizational culture and motivating the team when introducing agile methodology to enterprises.

Table 6: Overall descriptive statistic for maximizing opportunities of agile project management methodology

	N	Mean	St. Dev	Skewness		Kurtosis	
				Statistic	St. Er	Statistic	St. Er
IV1	44	3.8864	0.6341	-0.642	0.357	0.024	0.702
Valid N (listwise)	44						

Source: Own survey, 2021

The overall mean for this independent variable is 3.88 which indicates that most of the responses agree with most of the selected questions under realizing opportunities. In addition, test of normality of distribution can be checked using skewness and kurtosis. It is said that the skewness value should be between -2 and +2 and the kurtosis value should be between -7 and +7. As it can be seen in the above table, the skewness values are between -2 and +2 and the kurtosis between -7 and +7. Therefore it can be concluded that the data is normally distributed.

4.2.2 Realizing Challenges of Implementing Agile Methodology

This section presents the findings for the second research question that inquired to find out about challenges or gaps that occur as a result of adopting agile project management methodology throughout all departments of WKW. Five questions were designed for this

section and the response of the respondents is summarized in Table 6 below.

Table 7: Results for realizing challenges in implementing agile project management methodology

Questions for realizing challenges of agile methodology	N	Mean	SD
The existing organizational culture was welcoming.	44.00	3.14	0.85
The staff was equally eager and committed to implement the agile methodology.	44.00	3.09	1.01
There is regular and improved communication among teams.	44.00	3.82	0.87
The team avoids using the one-size-fits-all approach and relies on flexibility.	44.00	3.57	0.93
The agile method relies on individuals and interactions over following processes and tools.	44.00	3.50	0.93
Valid N (listwise)	44.00		

Source: Own survey, 2021

From the above table, it can be seen that there was some resistance to change given the majority of the response to being equally eager for the new methodology fell under neutral (with a mean of 3.09). This is a typical organizational behavior when new systems are introduced regardless of the benefits that they carry with them.

Similarly, the majority of the response to the question item of the company culture of the enterprise being welcoming was neutral with a mean of 3.14. This indicates that in addition to the staff's motivation an internal factor such as the organizational culture that WKW operated under could possibly play a role in strengthening the adoption of the agile methodology. On the contrary, more respondents have agreed that there was improved communication (mean 3.82), more flexibility as opposed to a one-size-fits-all approach (mean 3.57), as well as the enterprise giving more focus on interactions within the team rather than fully relying on procedures (mean 3.50).

Although the researcher thought these could be possible challenges for the enterprise, the response to the questions have proved otherwise which strengthens the construct that the

agile methodology has poised more benefits to the enterprise than challenges. Moreover, the data gathered from the interview with top management indicated that even though the team has a good perception of the ideology and were eager for implementation, the major challenge faced while implementation was ensuring the methodology was exercised on a daily basis so that the team does not go back to the old way of execution.

This indicates that not only a welcoming culture is essential for agile methodology to be practiced, but also ensuring commitment and daily practice is important. The challenge of getting used to the new system with inadequate experience, and the time it took for some staff to internalize the system and start to consistently use it may have created a bit of disruption, interrupting already started projects with the old methodology.

This change/transition in operating systems may force team members to perform out of their comfort zones, or for those who take it seriously, this methodology may be appropriately exercised, bringing about efficiency and better productivity. This definitely indicates that the workforce composition of the organization determines the success of a new way of working and this depends on the team getting used to the new system as quickly as possible to stop projects from being pulled behind. Therefore a very good talent management strategy needs to be in place to retain experienced team members from departing the organization.

Table 8: Overall descriptive statistic for minimizing challenges of agile project management methodology

Descriptive Statistics for minimizing challenges							
	N	Mean	St. Dev	Skewness		Kurtosis	
				Statistic	St. Er	Statistic	St. Er
IV2	44	3.4227	0.62538	-0.11	0.357	0.114	0.702
Valid N (listwise)	44						

Source: Own survey, 2021

The overall mean for this independent variable is 3.42 which indicates that most of the responses agree with most of the selected questions under realizing challenges. In addition, test of normality of distribution can be checked using skewness and kurtosis. It

is said that the skewness value should be between -2 and +2 and the kurtosis value should be between -7 and +7. As it can be seen in the above table, the skewness values are between -2 and +2 and the kurtosis between -7 and +7. Therefore it can be concluded that the data is normally distributed.

4.2.3 Organizational Performance during the Implementation of Agile Methodology

This section presents the findings for the fourth/last research question that inquired to assess the performance of the enterprise subsequent to the adoption of agile methodology. A total of five question items were designed for this section for which respondents' responses are presented below in Table 8.

Table 9: Results for WKW's organizational performance as a result of adopting agile project management methodology

Questions for assessing organizational performance under agile methodology	N	Mean	SD
New projects are completed on time.	44.00	3.77	0.68
Practicing agile project management methodology is cost effective.	44.00	3.66	0.91
Regular performance monitoring and control facilitates regular feedback.	44.00	4.00	0.68
Regular feedback encourages productivity and efficiency.	44.00	4.14	0.80
Teams operate more independently and at a fast pace, with a strong emphasis on performance.	44.00	3.73	0.82
Valid N (listwise)	44.00		

Source: Own survey, 2021

The majority of the respondents with a mean of 4.14 agree that regular feedback is a very important component in agile methodology for motivating teams to perform better. Similarly, performance monitoring is believed to facilitate this important feedback that the team needs to perform better by the respondents (with a mean of 4.00). According to the respondents, when compared to the time when agile was not implemented, projects

did not complete on time and within budget (mean 3.77 and 3.66 respectively). Most of the employees also agree that generally the team has increased its performance in terms of showing output at a fast pace while working independently (mean 3.73).

Almost all responses stated that their departments' performance increased. In addition, the interview and open-ended responses supported this in terms of how it helped them to be self-organized and self-managed in addition to increasing the level of engagement of all staff equally in contributing to meeting the projects' goals. In addition, it was also mentioned that everyone's work and contribution could be easily traced so it is easy to evaluate performance and take measures consistently. This indicates that as a whole the enterprise has benefited from adopting and practicing agile methodology.

Since the team gets together daily to discuss the challenges and status of projects at hand, for the enterprise, it creates a better chance for collaboration. This in turn indicates that things get done more efficiently in an orderly manner thereby increasing efficiency in responding quickly to changes as well as helping in making decisions quickly and creating a transparent and collaborative environment.

Table 10: Overall descriptive statistic for minimizing challenges of agile project management methodology

Descriptive Statistics for overall organizational performance as a result of implementing agile							
	N	Mean	Std. Dev	Skewness		Kurtosis	
				Statistic	St. Er	Statistic	St. Er
Improved Organizational Performance	44	3.8591	0.55335	-0.384	0.357	0.192	0.702
Valid N (listwise)	44						

Source: Own survey, 2021

The overall mean for this independent variable is 3.42 which indicates that most of the responses agree with most of the selected questions under realizing challenges. In addition, test of normality of distribution can be checked using skewness and kurtosis. It is said that the skewness value should be between -2 and +2 and the kurtosis value should be between -7 and +7. As it can be seen in the above table, the skewness values are between -2 and +2 and the kurtosis between -7 and +7. Therefore it can be concluded

that the data is normally distributed.

4.3 Correlation Analysis

By summarizing the mean score of the variables, a Pearson correlation test was done. Given the fact that a Pearson correlation value of 0.1 to 0.3 is considered small, 0.3 to 0.5 considered medium, and more than 0.5 to 0.1 is large, interpretations for the strength of associations were done for the variables.

Table 11: Correlation analysis

		Improved Organizational Performance	IVOpportunity	IVChallenge
Improved Organizational Performance	Pearson Correlation	1	.817**	.531**
	Sig. (2-tailed)		0	0
	N	44	44	44
Maximizing Opportunity	Pearson Correlation	.817**	1	.524**
	Sig. (2-tailed)	0		0
	N	44	44	44
Minimizing Challenge	Pearson Correlation	.531**	.524**	1
	Sig. (2-tailed)	0	0	
	N	44	44	44

** Correlation is significant at the 0.01 level (2-tailed).

Source: Own Survey, 2021

As can be seen highlighted in the above table, the significant relationship between improved organizational performance and the variables under maximizing opportunity is 81.7%. The correlation value between variables under minimizing challenges is 53.1%.

This indicates that the variables chosen for this analysis show strong associations with the dependent variable.

4.4 Regression Analysis

Analysis of regression is a statistical technique used to identify relationships between independent variables and a dependent variable. First the necessary collinearity test is done for the independent variables to see to what extent they are correlated to each other followed by a linear regression model to measure the strength of the relationship between the independent and dependent variables.

4.4.1 Multicollinearity Diagnosis Tests

For the multicollinearity diagnosis of this study, the tolerance and variance inflation factor (VIF) analysis were used to test whether the independent variables are highly correlated with each other. As this test takes into consideration the independent variables, a tolerance value less than 0.1 or a VIF value more than 10 is considered problematic. As can be seen in the below table, all of the independent variables scored less than 10 for the portion of VIF. This indicates that the variables together are not problematic.

Table 12: Multicollinearity diagnosis test of independent variables

Coefficients ^a			
Model		Collinearity Statistics	
		Tolerance	VIF
1	Maximizing Opportunities,	0.725	1.379
2	Minimizing challenges	0.725	1.379

Source: Own Survey, 2021

4.4.2 Linear Regressions Analysis

To measure the strength of the relationship between the independent variables vis a vis the dependent as well as the acceptability of the relationship, the Model summary and the ANOVA table analysis were done.

4.4.2.1 Model Summary Analysis

R Square in Model summary is the multiple correlation, which represents the percent of variance in the dependent variable explained collectively by all of the independent variables. i.e. the R Square value provides the predictive ability of the model. Data fits better with a regression equation that is closer to 1.

Table 13: Model summary of independent vs. dependent variables

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.826a	0.682	0.666	0.31969
a Predictors: (Constant), Variables under Maximizing Opportunities, Variables under minimizing challenges				
B. Dependent Variable: Improved organizational performance				

Source: Own Survey, 2021

The model summary result indicates that, looking at the R Square value, the correlation of the independent variables against the summary of dependent variables is 68.2 percent. This means that more than 68 percent of the variability in the improvement of organizational performance can be accounted for by maximizing the above stated opportunities, minimizing challenges in relation to organizational culture and similarly on building positive staff attitude.

4.4.2.2 ANOVA Analysis

Analyzing the model through the ANOVA test confirms its acceptability. This is a useful measure of the model's ability to explain any variation in the dependent variable (improved organizational performance). This means whether the 20 independent variables are good predictors of improved organizational performance.

Table 14: ANOVA of independent vs. dependent variables

ANOVAa

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8.976	2	4.488	43.913	.000b
	Residual	4.190	41	0.102		
	Total	13.166	43			
a Dependent Variable: Improved Organizational Performance						
b Predictors: (Constant), Variables under Maximizing Opportunities, Variables under minimizing challenges						

Source: Own Survey, 2021

Regression rows show how the model accounts for variation. Therefore, as can be seen in the table above, the significance value of the model is less than 0.05 hence it is safe to assume it is significant. With the results being statistically significant with a Sig. value of 0.000, it can be inferred that the independent variables stated above as maximizing opportunities minimizing challenges and garnering positive staff attitude collectively impact the improvement of organizational performance.

4.4.2.3 Coefficients

The below table shows the standardized and unstandardized coefficients that will be used to tell how much change in Y is predicted/estimated to occur per unit change in that independent variable when all other independent variables are held constant.

Table 15: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.912	.329		2.771	.008
	Maximizing Opportunities,	.648	.090	.743	7.177	.000
	Minimizing challenges	.125	.092	.142	1.368	.047

Source: Own Survey, 2021

$$Y=0.912 + 0.743(\text{maximizing opportunities}) + 0.142(\text{minimizing challenges})$$

The above coefficients table shows the individual beta values of each independent variable. The beta value shows the effect of each independent variable on the dependent variable. The beta value of maximizing opportunities is 0.743 which shows that by keeping other factors constant, 1 unit of maximizing opportunities will cause a 0.743 unit increase change in increasing organizational performance. The beta value of minimizing challenges is 0.142 which shows that by keeping other factors constant, 1 unit of maximizing opportunities will cause a 0.142 unit increase change in increasing organizational performance.

Based on the results found:

Maximizing opportunities of the agile project management methodology leads to improved organizational performance Sig = 0.000 < 0.05 = supported

Minimizing the challenges of the agile project management methodology leads to improved organizational performance Sig = 0.047 < 0.05 = supported

Chapter 5: Summary of Findings, Conclusions, and Recommendations

Presented here are the study's findings, conclusions, and recommendations. This section reviews the research problem and concludes the findings in relation to the objectives. Also included in this chapter are the recommendations that focus on addressing the challenges identified by the study as well as the limitations of the study and suggestions for future research.

5.1 Summary of Findings

The findings for this research were deemed adequate considering most of the staff of the enterprise participated in contributing responses to help concretize the study. The findings show that the enterprise is composed of more females and young people who are mostly under the age of 35. Most of this composition (61.4 percent) of this population has previous experience with the agile methodology and were accepting of the change from traditional to agile. Since the majority of the composition finished higher education, they positively received the transition and were able to attest that the agile methodology serves an important purpose in the enterprise. This generally shows that the agile management methodology has a good/favorable place inside the enterprise.

The findings also showed the benefits of agile methodology when projects inside the enterprise have grown to having defined scope, getting solutions frequently to challenges arising. In relation to the first variable, maximizing opportunity, it can be seen from most of the findings that the organization has opted for continuous growth and promoting collaboration, communication and transparency for improved performance and timely delivery of its project. As a result of adopting the agile methodology, the team has built a positive team spirit inside the enterprise now more than when they were not practicing agile. As a result of repetitive training and capacity building sessions as well as the experience of the team practicing it for a length of more than one year, there are promising improvements. For this the management showed ownership and now the team highly prefers agile more than traditional methodology. Each of the team members are assuming more autonomy and responsibilities which helped even tasks out. This answers the benefit of implementing agile methodology and how it impacts the improvement of organizational

performance.

While most of the findings indicated that the agile methodology has rendered numerous benefits to the enterprise, it was also gathered that it wasn't implemented without challenges. The challenges gathered are the resistances from the staff in the beginning of implementation for fear of lagging behind on already started projects under different methodologies and fear of learning a new system that would bring unfavorable consequences that some projects weren't in a position to entertain. It was also understood that as the team became more familiar with agile ways of working, and took part in the consecutive training and capacity building, they were more confident in implementing it. In addition to the resistance of change from the staff, the organizational culture was also stipulated that it was not welcoming. As such, while agile methodology was introduced in an already defective organizational culture, it had to heavily rely on the Governance department's strength to motivate the staff in changing the way things were done and encourage the staff to be committed to transition from "I" mentality to the "we" mentality. To avoid a one-size-fits-all approach, the agile methodology was also used across projects promoting flexibility. Therefore the challenges of implementing the agile methodology are as indicated above.

The result also showed that the performance of the organization has increased in terms of numerous projects being completed on time, within budget and scope. This paved the way for efficiency and feedback loops that circulate within the team often if not daily. The findings also showed that performance monitoring is done for every staff member to show how productive or unproductive each member is in the team and decide where a development plan needs to be put in place in terms of capacity building. Generally the findings show positive results for the practice of agile project management methodology as compared to when the enterprise followed the traditional methodology.

5.2 Conclusions

As the intention of this study was to describe the details of the practice of agile project management by WKW, it tried to see how it was feasible in a normal organizational setting outside software based projects. Given the increase in agile project management practices

around the world, Ethiopian social enterprises such as WKW, are ideally suited to adopt the methodology to better their service delivery and business value. In order to assess if agile methodology is really worth adopting in such organizational settings for improving their performance, the study tried to see the opportunities and challenges it brought upon the social enterprise as well as the staff attitude portrayed as well as if the performance has increased as a result of adopting the agile methodology. As such, based on the above findings, distinct implications for study are presented below:

- The opportunities of implementing agile methodology includes organizational goals/projects being clear and within a defined scope, improved communication and cooperation among the team, fostering a solution oriented outlook towards challenges and adapting more quickly to uncertainty. Agile also helps organizations prioritize efficiency by delivering value on time and on a consistent basis and promoting quick and versatile responses to change. It equips the team with a solution oriented outlook which helps them to analyze problems and provide solutions on the spot rather than wait for a long period of time expecting solutions from others. Generally, the agile management style creates a good opportunity for everyone to work as a team and deliver to the best of their capacity.
- The primary challenge of implementing agile is an unfit company culture. It determines how fast the agile methodology can be adopted and implemented with ease in addition to the team's perception about the change. If the company culture is not welcoming, it has an effect on the desire and commitment of the team to become open minded to adopt the change. As a result, this indicates that key implementers and management level employees need to show ownership and commitment to serve as a role model to their team. There could be no equal buy-in from all management levels in the organization but through consistent training on the agile methodology especially at the beginning of the adoption is necessary to familiarize the team with the agile practice and shifting the mindset to a more modern project management style. As a result, there will be regular communication, collaboration, more responsibility, autonomy and a sense of team player spirit manifested by the team thereby building a positive attitude towards agile project

management methodology and its practice in a social enterprise setting.

- As a result of adopting agile methodology, organizational performance improves in terms of projects being completed within schedule, scope and budget. For performance improvement, regular feedback and performance monitoring plays a big role in facilitating improvement and productivity which are the key characteristics of agile methodology. As such frequent performance monitoring gets more attention after the enterprise started the adoption of agile methodology. Since as productivity increases, there is a better chance for projects to be completed effectively and efficiently. Therefore, team members benefit from effective planning, efficient time usage and enhancing their skills throughout each process in addition to the team spirit being built along with the ability to work cross functionally.

For organizations that are operating under the realm of providing social value to masses of people, such benefits of agile project management will ascertain sustainability and improved business return.

5.3 Recommendations

Being agile gives the enterprise the privilege of leveraging the business operation in a more efficient and productive manner besides getting the best of everyone's performance as well as delivering planned activities as per the standard. In the 21st century being Agile is not an option anymore. It is a matter of survival in a dynamic and complex business environment. Agile management is highly recommended if enterprises want to make their operation transparent and open for inspection and continuous adaptation. Based on the above insights the following recommendations are devised.

To maximize the opportunity of agile methodology, it needs to be understood that agile is the new way of running businesses as it builds accountability, encourages diversity of ideas, allows the early release of benefits, and promotes continuous improvement with feedback loops providing benefits that are not as evident in waterfall. Ultimately being agile gave the enterprise numerous benefits in over a year of fully implementing it in the daily operation of the company. To create team buy-in and commitment, even though the

recognition for proper implementation is encouraged, it will be important to set proper incentivizing mechanisms that are inclusive of all levels in the organization. For new team members that seem to lag behind in implementing agile, as the initial onboarding training is mandatory, easily accessible agile resources as well as documented lessons learned need to be available. To increase autonomy and independence of teams from relying solely on management directions as they perform under agile methodology, it will be important to clearly explain the roles and expectations of each team member, forgive certain mistakes opening up to let the team make their own decisions and rewarding self-sufficient behavior. Generally, the leadership needs to play an important role in guiding the team successfully transition to agile.

To achieve intended project objectives without challenges, the agile methodology needs to be well customized with the company's existing management style and culture. The enterprise needs to realize that organizational culture plays a very important role in not only project management but also the day to day management operations therefore it will be important to revisit the culture and make necessary adjustments so that it creates a favorable environment for the agile methodology to thrive by winning the commitment and motivation of everyone. For the team to rely on flexibility rather than a one-size-fits-all approach, practice coupled with capacity building training is important. By doing simple but engaging team building exercises, the staff will more likely come into the understanding the importance of agile. In the same token, the enterprise needs to consider hiring for character, instead of hiring for skills because a driven team is open minded to learn new things and contribute their best to ensure set out objectives are met. In addition, by setting appropriate talent management mechanisms, the enterprise needs to retain the manpower that is already familiar with the agile methodology rather than hiring new people.

To increase organizational performance, all the above need to be collectively implemented with the appropriate resources and support. By putting in place a sustainability strategy for the implementation of agile, the organization would not struggle to embed the approach when it is adopted by bigger teams as it grows and scales up. Generally, to implement agile methodology in any business environment not only by social enterprises, these are like the

key things that will enable its implementation to be a success: the company's structure or culture should support agile way of operation specifically in relation to mindset shift from the ideology of "I" to "We" since agile is all about collaboration avoiding structural hierarchies and taking them to a way of team operation where the team thinks together and works collaboratively. Everyone needs to have patience. Because agile is a journey and results will come, but not overnight. The enterprise must ensure that the focus needs to be on incremental improvement over time. Agile isn't just a new way of working but is a new set of behaviors and perspectives and these take time to change.

5.4 Research Limitation and Areas of Further Research

Based on the findings of the research, the following limitations and recommendations for future study are drawn.

5.4.1 Limitation of the Study

Given that this research is done on one organization, all of the conclusions drawn from the data gained from only forty four employees may not be applicable to bigger organizations. Time to spare for daily follow up by senior management, daily meetings, and time invested on training and building capacity of the team may not be affordable by bigger organizations. It is not guaranteed that this study will be free from criticism of other studies as it cannot help in reaching a generalizing conclusion for all social enterprises in Ethiopia.

5.4.2 Recommendations for Further Study

As the insight and conclusions were set forth within the narrow confines of this research and relying only on the case of WKW, this research may not have exhaustively explored which type or approach within the agile methodology is most appropriate for social enterprises. Therefore by taking into consideration that different sector projects call for different types of agile methods, this research can be further broadened to generate learning for applied research in the future.

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APPENDICES

APPENDIX 1

Questionnaire for Whiz Kids Workshop employees

Addis Ababa University

School of Commerce

Master of Arts in Project Management

Assessing the practice of Agile Project Management Methodology in Ethiopian social enterprises: The Case of Whiz Kids Workshop

The goal of this questionnaire is to identify the major opportunities and challenges the enterprises face while implementing the agile project management methodology and will recommend possible solutions to these challenges based on the existing body of knowledge. This questionnaire includes three parts all of which are required to be addressed freely and honestly.

Thank you,

Instruction: Please fill the questionnaire by circling the appropriate option for each question. If your responses are not among the alternatives for some of the questions, please specify your answer in the blank space provided next to the option "Other:"

Part 1: General questions

1. Please specify your gender category
 - a. Male
 - b. Female
2. Please specify your age category
 - a. 25 years and under
 - b. 26-35 years
 - c. 36 years and above
3. What is your current level of education?
 - a. Diploma
 - b. Degree

- c. Master's degree
 - d. PhD
 - e. Other: _____
4. For how long have you been working in WKW?
- a. Less than a year
 - b. Upto 2 years
 - c. Upto 5 years
 - d. More than 5 years
5. Which level is your role at WKW in the traditional sense?
- a. Senior management level
 - b. Middle level management level
 - c. Non-managerial level
6. Have you been a part of a team that has employed agile project management methods in your previous work experience other than WKW?
- a. Yes
 - b. No
7. How often do you receive feedback on your performance? From peers or management?
- a. Rarely
 - b. Often
 - c. Daily
 - d. Other: _____

Part 2: The below questions have a 5-point Likert scale ranging from Strongly Disagree to Strongly Agree to indicate your agreement or disagreement level on the statements below with regards to your current agile project management methodology practice. Please tick the option that best describes your response for each statement.

SN	Statements	SD	D	N	A	SA
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Opportunities presented with the adoption of agile methodology in WKW					
O1	Agile methodology serves an important purpose in WKW even though it is a social enterprise that is not solely based on software related projects.				
O2	Organizational goals are clearer to me now than when WKW implemented other types of project management methodology.				
O3	Projects now have well defined scope and the team has well defined roles as compared to when WKW implemented other types of project management methodology				
O4	The agile methodology encourages communication, cooperation, transparency, and team spirit among the staff.				
O5	Agile methodology is better than the traditional methodology because team efforts are more focused which promotes efficiency.				
O6	As a result of the adoption of the agile method, challenges arising in the day to day operation of the company get solutions more frequently.				
O7	The agile methodology has helped the organization adapt more quickly to uncertainty.				
Challenges presented with the adoption of agile methodology in WKW					
C1	The existing organizational culture of WKW was welcoming of the agile methodology.				
C2	The staff in WKW was equally eager and committed to implement the agile methodology upon its introduction.				
C3	There is regular and improved communication among teams.				
C4	As a result of adapting agile methodology, the team avoids using the one-size-fits-all approach and relies on flexibility.				
C5	The agile method in our organization tends to rely on individuals and interactions over following processes and tools.				
Overall enterprise performance as a result of adoption of agile methodology in WKW					

P1	New projects are completed on time in the agile methodology than when traditional project methodology was practiced.					
P2	I believe that practicing agile project management methodology is cost effective.					
P3	The regular performance monitoring and control facilitates regular feedback regarding my performance and others.					
P4	The regular feedback I get for my work performance encourages me to become more productive and efficient in my work.					
P5	As a result of practicing the agile methodology in WKW, I see teams operate more independently and at a fast pace, with a strong emphasis on performance.					

Part 3: Please answer the following open questions

1. What important aspects does the agile methodology provide that the traditional methodology doesn't?

2. What are the challenges you face while practicing the agile methodology?

3. In your opinion, what are the pros and cons for introducing new ways of working in a company that has established a certain culture for more than a decade?

4. How has the adoption of an agile approach affected your department's overall performance?

APPENDIX 2

Interview questions for Whiz Kids Workshop management

Addis Ababa University

School of Commerce

Master of Arts in Project Management

Assessing the practice of Agile Project Management Methodology in Ethiopian social enterprises: The Case of Whiz Kids Workshop

The purpose of this interview is to gather key insights from the group of people that lead the implementation of the agile project management methodology inside the social enterprise and monitor its performance across all organization members. These people are the governance department heads who are in charge of monitoring everyone's performance at WKW and ensuring that the department improves its support and guidance to all departments on a continuous basis. As they strive to make WKW a conducive working space for everyone, they are better positioned to give deeper insights to the research questions stipulated in the research proposal. As such, this semi structured interview is expected to be held with three individuals; the CEO, COO, and Performance Officer. Each interview is estimated to take forty five minutes to one hour with each individual.

The questions are structured based on the research questions/objectives presented in the research proposal including general questions that are expected to ease the interviewees into the main questions.

General Information:

1. What is your role in the organization?
2. What kind of methodology do you use in your organization to manage the different types of projects that come in for the different departments? What methodologies have you used before and which one are you using now?
3. What probed/encouraged your decision to implement the agile project management methodology in your organization when this methodology is usually seen as

successful in software type projects? How long have you had experience with agile project management?

4. In your opinion what are the most important foundations/variables that must be considered by social enterprises to implement the agile project management methodology?

Opportunities of adopting agile project management methodology in WKW

5. What were the opportunities that came along with the adoption of this new methodology? How are they different from when the organization followed a different project management methodology?
6. Have projects become easier to implement for the multidisciplinary departments across the organization? Does the team define scopes and set clear goals for projects? How is the management role in this area?
7. How fast are projects able to adapt to changing conditions and uncertainty under the agile project management methodology? Do challenges that arise during the implementation of projects get solutions more frequently?
8. Is the efficiency of the team improved as a result of the implementation of agile project management methodology? How?
9. How has communication, cooperation, transparency, and team spirit among the staff improved as a result of the implementation of agile project management methodology?
10. Were there a series of training sessions that were given to the staff to capacitate them in practicing the agile methodology? How many and what kinds of training were given? As training cannot be equally received by every staff, what follow up and reinforcement techniques have you used to ensure that the agile methodology is successfully implemented on a continuous basis?
11. Compared to previous ways of working, how has the motivation, cooperation and trust changed in the current team in relation to the adoption of agile ways of

working? How has their decision making ability in autonomy improved after they experienced practicing agile project management methodology?

Gaps in adopting agile as a project management method in WKW

12. Were there any challenges? What difficulties did you face carrying out the agile methodology in terms of introducing new procedures, the team's perception/eagerness and commitment, and external stakeholders.
13. What steps did you take in making the organizational culture more conducive to welcome the adoption of the agile project management methodology?
14. How have projects in the organization transitioned from relying on individuals and interactions over strictly following processes and tools? What were the challenges that were faced by the team during this transition?
15. What improvements do you recommend to deal with the challenges presented above? Is improving open and regular communication part of this recommendation? Were there any solutions that you tried before, ones that worked and did not?
16. Agile methodology requires flexibility and rapidity. Do you think projects under your organization can accommodate flexibility and rapidity rather than the one-size-fits-all approach?
17. What was the level of the staff's buy-in towards the decision to adopt the agile methodology in the beginning? What did they like? What did they not like? Has it grown to change over time?
18. As the leading implementers of agile project management methodology, did you reflect ownership and leadership over its successful implementation? How so?

Improved enterprise performance as a result of adopting agile project management methodology in WKW

19. How was the organizational performance affected as a result of agile management adoption in its ways of working? Answer in relation to time and cost efficiency, economic value, team development, service delivery, etc.
20. How often is performance monitored? Has this changed with the introduction of the agile methodology? Why do you think this frequency is important? How do you administer the performance appraisal for agile ways of working and why does it help?
21. What do you think is the importance of feedback? Do your ways of working encourage giving feedback among teammates? In the same token how important do you think is open communication in the agile project management realm?
22. Has the staff started to operate more independently as a result of practicing agile project management methodology? Are results and delivery seen at a fast pace when they are working independently? Does the team take feedback positively?
Elaborate

Closing questions

23. In your opinion, where would WKW be today as an organization if it didn't adopt agile ways of working?
24. What are your recommendations for other social enterprises delivering the same or related service with WKW in adopting the agile methodology for handling their projects?
25. Do you have any other thoughts about these issues?

*Note: Additional follow-up questions were asked, as appropriate, with each interviewee.