# RECASTING PROJECT MANAGEMENT KNOWLEDGE: A HUMANE TACTIC TO DESIGN THINKING APPROACH

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## ABSTRACT

*This paper describes the importance of design thinking in project management. Design thinking is critical in guiding managers to deliver elaborate projects. The paper reviews literature on project failure and its reasons, knowledge of project management and illustrate how design thinking can help. Through project formulation, design, implementation, execution and monitoring stages, project managers must think beyond project complexities-they must consider environmental enablers so as to deliver successful projects. Project externalities influence the successful implementation of projects. The need for managers to think critically on their projects design and implementation is discussed later in the paper. The paper concludes by stating that knowledge on project management must be rebuilt through design thinking. This would enhance better project execution and reduce project failures.*

**KEYWORDS**: *Project Management Knowledge, Design Thinking, Humanistic Approach*

## 1. INTRODUCTION

Human errors have been blamed for the constant failure of projects. The human errors could occur at project initiation stages or at the project monitoring stages after the projects have been handed over to the users. Many scholars have researched on project handing over and change management issues that must be dealt with at that stage of a project. The project managers have always received the blame whenever projects fail. However, there could be many reasons why a project could fail to deliver the desired results. The traditional project management knowledge is not adequate to prepare the modern project managers with project dynamics-they are thus ill equipped to handle project changes swiftly. The way the project managers should handle project users is critical to project success. The project must address the needs of the end users who are the consumers of the project. The project managers should always adhere to the customer requirements so that the project realizes the required benefits to stakeholders. The project managers should strive to deliver projects that have the customer or project end users at the centre of project execution. Project management in multi-disciplinary and the project managers ought to be flexible in dealing with customer requirements. They are this required to borrow heavily the knowledge of project design thinking. This would improve efficiency in delivering beneficial projects to the end users. The important issues that the project addresses should be brought to the fore and dealt with decisively.

This paper identifies gaps in project management literature. The paper however does not review project management history. It explores the concept of project failure and identifies reasons why the issue has remained outstanding for a long time. It also explores current literature on the persistence of project failure that modern project managers have to contend with. The paper develops and argument on literature gaps and how they could be filled. This would enable project managers deliver successful projects to users. Literature review pointed to a lack of application of design thinking in the management of projects. Design thinking would be applicable to projects that will be meet the needs of the customers.

Organisations have been facing the challenge of dynamism due to globalization and the ever-evolving technological advancements (Soma et al., 2016). The modern business environment id technology led. Knowledge is vital and its production and application to solve business challenges is vital (Alcaer, et al., 2016). The information age is characterised by exponential growth, change and the build-up of organisations that are people and knowledge (Schwab, 2016). Consequently, people are seeking the control of economic activities. They are no longer passive consumers. Individuals prefer organisations that give them opportunities to grow and experiment their novel ideas to change the world (Neumeier, 2009).

Through technology, the business environment has become dynamic, competitive, volatile, intensive and unpredictable. This requires that organisations be creative in their endeavors' way companies are evolving, especially after the covid 19 pandemic, calls for a swift and sustained shift to modernizing of business operations. Organisations have resorted to hiring creative thinkers who can propel them to higher heights in the business world. The organisations have resorted to forming strong teams and networks that work towards the achievement of set goals. The work environment has been enhanced to support employee needs and support them to deliver the best results for the organisations. This is to enable the employees to solve the 21st century problems in an efficient and effective way (Howkins, 2010; Montag et al., 2012). Creativity is the most sought-after skill in the business world today. Employers are looking for people who can think critically and use novel ways to solve societal problems. Through this paper, the concept of design thinking explains how individuals can think critically and solve the problems that the world faces. The paper adopts the methodology for carrying out the study. Thereafter, literature review analyses project failure, the knowledge of project management, the approach to approach and design thinking. These are explained in a narrative form.
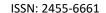
## 2. Research Method

The review of literature in this paper explores project management knowledge, approach to project management and design thinking. Through narrative analysis, evidence from various methodologies is converged. The adopted design in mostly descriptive in nature. The paper does not highlight how selected literature influenced finding of study.

## 3. The Embodiment of thought

A humanistic basis for Design Thinking rather than a narrowly human centric focus on its application has emerged from scientific consideration of the role that the human body plays in determining the integrated character of human thought, behavior, environmental interaction and experience.

In this view, genetic endowments that evolved through the embodied experiences of those who came before enable every human to continually develop and transform their inherited capabilities through purposeful thought and actions. Further development to satisfy practical needs and concerns occurs through the continuous interaction of body and brain with the environments they experience. Other organisms and things stimulate, nourish and effect this development and the capacity to design responses that are needed or desired.

Although feelings, behaviors and effects are continuously manifested in the body, brain and environment throughout life most theories of practical thinking do not address ongoing interactions between the body, brain and their "environments "in an integrated way. Attempts to organize biologically grounded efforts to improve the circumstances that engage them are not usually addressed until experiential knowledge, extended consciousness, and abstract reasoning develop.

Situated, embodied, expressed and experienced worlds lead to more than just mental and physical embodiments of process. They instantiate, simulate, communicate and build personal, social, cultural, professional, institutional, and historic knowledge in and across different environments over time. Those who design projects need a theory based on natural processes of thought and action in order to better apply them in what they do. Educators, researchers, and practitioners need to share this "common ground" if they are to demonstrate the benefits of design thinking for everyone.

## 4. Design thinking

Design thinking refers to the understanding of the human needs to a problem and designing elaborate methods of solving the problem. The process entails brainstorming, coming with alternatives and choosing the best alternative to solve the problem at hand. It is a consultative process that requires critical thinking and application of the novel method to solving the problem.

Design thinking in practical in nature and seeks to solve real life problems (Johansson-Sköldberg, et al., 2013). Design thinking needs to be combined with theory so that it is applicable to research (Hassi & Laakso, 2011). While Martin (2009) asserts that design thinking is more critical to emerging firms than stable firms. This is because the emerging firms seeks to gain competitive advantage in the market. In the process that might lose track and work with the tested methodologies to solving problems.

Design thinking is systematic and collaborative and seeks to solve real problems affecting organisations today (Luchs, 2016). Design thinking or is also the balance between analytical mastery and intuitive originality (Martin, 2009) in problem solving. It is also a way of finding human needs and creating new solutions using the tools and mindsets of design practitioners (Kelley & Kelley, 2013). It is also a discipline that uses the designer's sensibility and methods to match people's needs with what is technologically feasible (Brown, 2008).

Design thinking is characterized by key principles which are essential for the method's success (Brenner et al., 2016). Hassi & Laakso (2011) identified three groups of elements: Methods, tangible activities and tools. From a cognitive perspective, Abductive thinking can be defined as "the logic of what might be" (Lockwood, 2009) or the exploration of what could be (Liedtka & Ogilvie, 2011). It is used to "challenge accepted explanations and infer possible new worlds" (Martin, 2009). Reflective reframing is the ability to present the problem in a new way (Drews, 2009) to ensure the right problems are resolved (Hassi & Laakso, 2011). Integrative thinking involves bringing different project interest together (Hassi & Laakso, 2011). This is important in design thinking (Schallmo, 2017) as it always tries to find a balance between opposing models, (Brown, 2009), exploitation and exploration (Martin, 2010), intuitive and analytical thinking (Martin, 2010), or human centeredness and company centricity (Sato, et al., 2010). Design thinking tolerates ambiguity (Drews, 2009), as the process is emerging rather than deterministic (Copper, et al., 2009). Design thinking is future oriented (Brenner, et al., 2016). It encapsulates new ideas to the organisation (Martin, 2009).

Scholars have come up with iterative steps to design thinking (Brown, 2009; Plattner, et al., 2009; Liedtka & Ogilvie, 2011; School, 2017; Brenner, et al., 2016). Design thinking, therefore is iterative and organisations must follow the step by step methodology is solving problems facing the organisation. The project managers have to apply design thinking in suitable way to ensure that the process achieves intended results. It is important for the organisation to involve stakeholders in the iterative processes to ensure everyone is in board for the implementation of the best porotype of alternative to solve challenges that the organisation faces. Schallmo (2017) developed an integrative process model of design thinking, combining all major processes existing to date. The process comprises seven phases.

The first step is problem exploration (Leifer & Steinert, 2014). The possible topic areas are identified, and a broad area of focus is chosen (Schallmo, 2017). The second step involves an in-depth assessment of the problem. (Schallmo, 2017). The third step involves selecting and synthesizing alternatives (Schallmo, 2017). A pattern of problems and alternatives is formed. The ideation stage involves a hypothesis formulation of possibilities derived from creative thinking, hypotheses of possible futures are developed through the use of abductive thinking (Schallmo, 2017). By thinking beyond current constraints creative ideas are generated and developed into more concrete concepts. The prototypes are then refined and grouped in order of applicability (Liedtka & Ogilvie, 2011) using tools such as rapid prototyping (Schallmo, 2017). The prototype testing phase is concerned with learning about the user interacting with the prototype, collecting data (Schallmo, 2017) and final refining of the alternatives. The final process involves selection of the prototype with the highest potential for application to the organisation (Schallmo, 2017).

## 5. Humanistic Perspective

The human perspective contributions are focused on the wholeness, inclusion and focus of the elements in managing projects successfully. Project managers should commit themselves to the project management processes that call for the understanding of every step in the project life cycle. They should be able to understand what is required at each stage of the project life cycle and the time its required. The behavioral traits of the project mangers should support the project design, implementation and monitoring stage. This would enhance project success. The inclusion of other stakeholders is an important element in the project life cycle. This assist in the promotion of team work and successful execution of the project. Through design thinking, the project team and the stakeholders work in harmony towards the realisation of the set objective-success of the project. Project managers should focus on the deliverables on the topic. These are the key

performance indicators that have been set as targets to the project team. The design thinking process is not intended to replace the existing systems in the project stages, rather it is meant to complement and supplement the procedures and systems that exist. Healthy conditions are necessary to the successful delivery of projects. An enabling work environment and good conditions encourage the project implementors and stakeholders to deliver successful projects. The focus of an individual rather than a team to deliver a project is outdated as a project should be delivered by competent teams that work in harmony (Schneider et al. 2015).

## 6. Project Failure

Project failure remains an eminent issue in project management and appears to be rising. Project failure may not always be attributed to the failure by management. The failures are mainly due to the poor relationships between the project implementors and other stakeholders. This can be further drilled down to identify failures that emanate from lack of understanding the needs and requirement of the customers to the project. The project managers are required to understand fully the requirement of the end users. This, they should keep at the back of their minds when they are executing the project. The people working in a project are the weakest and strongest pints to the success of a project. The project owners should always ensure that the project teams and all stakeholders work in harmony, as a team. This would prevent project failure.

Due to changes in designs, projects are reworked-this increases cost of the project and leads to inefficiencies in delivery of the projects. Construction projects are mostly affected by changing designs due to the inability of the project managers to apply design thinking at the initial stages pf the projects. Project management failure could be blamed for these reworking -because of the human element that should be critically evaluated when designing a project. A project is aid to be successful if the project is delivered within time, cost and with excellent quality, within scope. Project success not only entails delivery of a project. It also entails meeting the requirements of the end user in the process. The initial project requirements are thus a critical element in project delivery. During project handover, the project end users should be satisfied that the project meets their expectations and solves their problems. The focus should thus shift from project management success to project success.

## 7. Discussion

Design thinking has enabled evolution form the traditional ways of managing projects to a more intellectual based critical and imaginative thinking model. Project managers are thus required to think broadly on project design, implementation, financing and monitoring and evaluation. Just the same way that project management borrows from other disciplines, it can borrow from design. This would improve the project deliverables and assure project success. Through design thinking, projects can be executed innovatively. Modern technology and models would assist project managers come up with suitable designs and plans that would give the best outcomes of a project. Value for money will thus be the guiding principle in project execution.

Stakeholder involvement in projects management will be important in ensuring that the relationship between the project implementors and stakeholders is improved. Different stakeholders have different needs that should be fulfilled in order for them to be fully committed to the project-otherwise, they would not play their respective roles in the project, leading to project failure. The process of formulating strategy in project execution could also be improved through design thinking. There needs to be an elaborate training to the project managers on soft skills in project management. This would prevent the conflict that exists between the various groups in the project team. There is therefore the need to investigate how soft skills could be incorporated into project life cycle. This is aimed at enhancing project success.

## 8. Conclusion

Design thinking is a requirement for improved project management. There is however no evidence of how to develop soft skills knowledge can improve project management knowledge. Through design thinking, soft skills value is highlighted. The skills are supposed to aid in project management and offering solutions to the problems facing the world today. Although project management, relevant skills and solutions are applied to solve challenges faced by project managers in managing projects, there are still many cases of project failures. Various reasons have been given for causes of project failures. There is the issue of the poor relationship between the project implementors and other stakeholders.

Project managers may not understand the needs and requirements of the project users hence end up designing and executing projects which do not serve the purpose of the users. In other instances, project execution fails to consider the interest of business partners for example suppliers. This causes a rift between the implementors and suppliers of the project materials-that may lead to refusal for supplies and eventual project failure. Through design thinking, the relationship between the project implementation team and the key stakeholders could be improved. This is through the application of sift skills in managing these relationships. The project management teams would be trained on soft skills in project management so that they can relate well with suppliers, end users and other stakeholders. This would be the surest way to assure project success.

This paper is narrative in nature and has a weakness of not reviewing all literature and concepts as explained. The literature basically looks at the relationship between concept discussed, identifies gaps and proposes measures to fill those gaps. The paper also has a problem of only concentrating on one concept, that of design thinking. This paper recommends that

a systematic literature review that reviews various concepts should be carried out. This would offer a better understanding of the topic. Secondly, this paper recommends an investigation into the role of empathetic skills on project success. This would aid in addressing the ever-recurring challenge to project managers, that of project failure.

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