The Distinction between Project Failure and Project Management Failure

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Abstract

The distinction between project management failure and project failure sounds like one of the best definitions of project failure/success concepts, the overemphasis of the goal of the project to the client's long-term strategic plan is subject to further debate. It can be argued that not all projects' goals are directly linked to the long-term strategic plans of the companies. Some projects are carried out by companies as a 'force' on them from external forces which might not necessarily be part of the company's long-term strategic plan. For instance, if a company is forced by government regulators or environmental activists to assist its immediate environment, it has to embark on a project that might not necessarily bring any long-term benefits. In this case, the company could have embarked on a different project which could have served it better than such 'forced' project. One may argue that it will still serve the long-term goal of survival as the company has to meet its social responsibility in order to survive. However, this argument could be defeated by asserting that the company will not actually benefit in real terms, as the benefits will only be directed towards other stakeholders at the expense of the parent company. Such projects could even be detrimental to a company's progress and profits.

Keywords: Project Failure, Project Management Failure, & Abandonment

1.0 INTRODUCTION

Another debate worth noting is the project failure and project management failure distinction. A sharp distinction between the traditional definition and recent school of thought has been made in the project failure discussion. Proponents of this distinction contend that there is a clear distinction between project failure/success and project management failure, and therefore it is not valid to assess the performance of a project using the same criteria (Munns & Bjeirmi, 1996; Ika, 2009; Young et al., 2012; Salazar-Aramayo et al., 2013). Project management failure is linked to the iron triangle or the triple constraints whilst project failure is linked to the impact of the project on the client or the end users of the project deliverables (Munns & Bjeirmi, 1996) and/or the benefits that the organisation receives from the project (Serra & Kunc, 2015). Munns and Bjeirmi (1996) argue that there have been situations where projects have failed to meet the baselines, yet such projects were still considered to be successful after a period of time, based on the benefits gained from their outputs. The premise upon which their assertion/conclusion is based is that authors have confused themselves with the differences between project and project management definitions and their purposes. They agree that these two terms are mutually dependent and overlap, yet there is a clear distinction between them. A project can be considered as achieving of specific objective, which involves a series of activities and tasks which consumes resources that is to be completed within a specific set time span. On the other hand, project management is the process of controlling the achievement of project objectives (Munns & Bjeirmi, 1996).

Thus, project management involves the use of a company's resources to manage projects by the use of tools and techniques (Serra & Kunc, 2015). Whereas a project looks at the long-term benefits to the company (client/end user), project management looks at the short-term goal that will contribute to achieving the long-term goal(s) of the company that the project seeks to achieve. Munns and Bjeirmi (1996) contend that the long-term goal of the project is to bring about return on investment, profitability, competition and marketability. These goals could be affected or could be influenced by: objective, project administration, third parties, relations with clients, human parties, contracting, legal agreements, politics, efficiency, conflicts and profits.

On the other hand, project management deals only with goal setting and the implementation of the goals, and therefore project management becomes a subset of the wider context of the project (Munns & Bjeirmi, 1996). Thus, the goal of project management is to ensure the success of the project (Berssanti & Carvalho,

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2014). Project management can be influenced or affected by: inadequate basis for projects, wrong people as project managers, unsupportive top management, inadequately defined tasks, lack of project management techniques, misuse of management techniques, project closedown not planned, and lack of commitment to the project (Munns & Bjeirmi, 1996). As a result, success is assessed by using Key Performance Indicators (KPIs), which is an adherence to budgets, schedule and technical specifications (Bryde, 2005).

The ultimate aim of project management is to achieve the triple constraints; hence, failure to reach any such targets is called project management failure (Jugdev & Muller, 2005; Salazar-Aramayo et al., 2013). On the other hand, project failure also means failure to achieve the long-term goals of the client company or the end-users not being satisfied with usage of the deliverables (Ika, 2009; Savolianen et al., 2012; Salazar-Aramayo et al., 2013). In other words, project failure is tied to long-term strategic goals of the parent company whilst project management failure is tied to the iron triangle. This is echoed in an attempt by Serraa and Kunc (2015) to analyse the Benefits Realisation Management influence on project success in Brazil, the UK and USA. Patanakul and Shenhar (2012) link this to the contribution of the project to the business strategy (which is often long term).

2.0 ORIGIN PROJECT MANAGEMENT

Project management evolved from management discipline in the 1950s (Cleland & Gareis, 2006), although it is difficult to provide a specific history of the field (Pollack & Adler, 2015). The use of project management as a management practice can be traced back to the advent of business management, but the discipline being recognised as a body of knowledge or subject of studies can be dated back to the1950s and 1960s (Peckendorff, 2017). Soderlund (2018) specifically traces the genesis of project management to the publication of Gaddis' work in 1959. Modern-day project management can be credited to the work of Henry Gantt, who invented the Gantt Chart as a standardised project management model (Wren, 2010; Partington, 2011).

Moreover, this era witnessed the use of planning tools such as Critical Path Method (CPM) and Program Evaluation and Review Technique (PERT) in project management (Peckendorff, 2016). Prior to this era, project management was confined to the US army, and projects were managed on an ad-hoc basis with the use of Gantt Charts and informal techniques and tools (Kersner, 2017; Soderlund & Lenfle, 2011).The field of projects and project management has received much attention and have become very popular of late with the media, academia and practitioners due to projectisation and programmification of companies (Mayor et al., 2006), project failure (Amid et al., 2012; Aziz, 2013; Marzouk & El-Rasas, 2013), and the money being wasted by organisations and/or governments (see Fabian & Amir, 2011; Amid et al., 2012; Daily Guide, 2012; GNA, 2012; Central Press, 2013; KPMG, 2013). Moreover, projects and project management have become strategic tools for many growth industries and large investment companies and government undertakings of late (Soderlund & Maylor, 2012; Serra & Kunc, 2015).

As a result, projects and project management are having a significant impact on companies and governments (Soderlund & Maylor, 2012); and as such some authors have labelled society as being 'projectified' (Molloy & Stewart, 2013). Therefore, project management is "becoming increasingly important" to organisations (KPMG, 2013, p.9). However, despite rapid development in project management as a field of academic endeavour in recent years (Berggren & Soderlund, 2008), it lacks universally accepted theories for its research and practices as a body of knowledge (Soderlund, 2004), it is narrowly focused (Ludin & Soderholm, 1998; Crawford et al., 2006), and the pace of its research is too slow (Morris, 1994) and insufficient (Davis, 2014).

Moreover, research on project management has a scanty theoretical basis and lacks concepts (Shenhar & Dvir, 1996). The theories underpinning project management are relatively small, and these theories are too generic and lack empirical backing (Peckendorff, 1995; Partington, 1996). This has marginalised project management as a field for academics; critics argue that "the area is too applied, too closed to practice for academic study" (Soderlund & Maylor, 2012, p.691), and therefore there is a strong need to build and test models in order to get a theory for its academic research (Kwak & Anbari, 2009).

However, this view is in sharp contradiction with Soderlund's assertion that there is no universal theory that can be used in project management due to the fundamental differences that exists across projects, and that no project is similar to another (Soderlund, 2004). This is echoed by Klein et al. (2015),

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who assert that, due to the uniqueness of projects, there is the need for improvisation during project management. Soderlund's argument is premised on the categorisation of project management into two traditions: the engineering tradition and the social science tradition.

The engineering tradition avoids uncertainties to achieve determinateness whilst the social science tradition assumes uncertainty to achieve indeterminateness, and the two traditions are incompatible. In view of this, Soderlund (2004) argues that there can be two separate theories on project management, one being generic and the other being specific. The reason is that there are some elements of projects that are generic whilst other aspects are specific; for example, all projects have uniqueness, task complexity and time limitedness. The general aspect can have a generic theory or one theory that is applicable to all projects and then the other varied aspect can have another theory. However, Soderlund (2004) failed to prove either of these two theories.

The two views about projects and project management having a significant impact on companies and government and at the same time being marginalised by academia for its research have created a paradox between "the logic of impact" and "the logic of the academy" (Soderlund & Maylor, 2012, p.690) and, until this tension is resolved, project management will continue to face challenges as an academic field. Thus, "the debate whether 'project management' research fits into practice or academia is long standing" (Davis, 2014, p.189). This is echoed in the work of Ramazani and Jergeas (2015), whose study concludes that there is a gap between what is offered in project management education and the real world (practice). In fact, Pollack and Adler (2015) specifically argue that these two opposing positions about project management have caused diffusion in the field and, as a result, articles have been published in subject areas which relate to industries where projects are implemented.

Klein et al. (2015) argue that this dichotomy has created complexity in applying theories, models and framework to the practice (Klein et al., 2015). Due to this, researchers have not reached consensus about a particular theory, method or approach to project management (Klein et al., 2015). This paradox about project management is perhaps the reason why there is no universally accepted definition of project and project management, or what should constitute universally accepted project management practices. The next section, 2.1.1, is devoted to the various definitions that have been provided by authors, and highlights which one(s) are applicable for this research and why.

3.0 PROJECT AND PROJECT MANAGEMENT

The meanings of project and project management are well documented in project management literature. Different authors and different countries' Body of Knowledge (BoK) have attempted to define or describe project and project management but the literature indicates that they have not reached a consensus. The next sub-sections, discuss in detail the meanings and the main differences that exist between the two concepts by highlighting opposing views held by various authors and BoK, and common characteristics of the concepts. This section also provides a definition of the two concepts for this study.

3.1 Project Description

Cleland and King (1983) describe a project as a complex effort to achieve a specific objective within a schedule and budget target and this typically cuts across organisational lines. This task is unique and is normally not repetitive within the organisation. Smith (1985) shares similar views and describes a project as a one-time unique endeavour to do something that has not been done that way before. Barnes (1989) defines a project as something which has a beginning and an end. The definitions provided by Cleland and King (1983), Smith (1985) and Barnes (1989) fail to recognise the purpose of embarking on projects and the human resources that are involved in them. This makes the definitions incomprehensible, hence, unable to cover the whole concept of the term 'project'.

On the other hand, Andersen et al. (1987) and Turner (1993, 1999) each provide a more comprehensive definition which covers the whole concept. These definitions do not only make provision for the purpose of projects but also the resources needed for the accomplishment of a project. Andersen et al. (1987) for instance define a project as a human endeavour which creates change, is limited in time and scope, has mixed goals and objectives, involves a variety of resources and is unique. Turner (1993) defines a project as "an endeavour in which human, material and financial resources are organized in a novel way, to undertake a unique scope of work, of given specification, within constraints of cost and time,

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so as to achieve beneficial change defined by quantitative and qualitative objectives" (Turner, 1993, p.35). In Turner's subsequent book, published in 1999, he simply defines a project as "an undertaking to deliver beneficial change" (1999, p.13). In this book, three main characteristics are visible: a project is unique – no project before or after will be exactly the same; it is undertaken using novel processes – no project before or after will use exactly the same approach; and it is transient – it has a beginning and an end (Turner, 1999, p.19). In other words, Turner's (1999) definition implies that there are fundamental differences that exists across projects, and that no project is similar to another (Soderlund, 2004), or: if different projects have similar characteristics, this does not mean they are same and can be managed in the same way.

This study adopts the definition of Turner (1993) as it the most suitable. It definition is comprehensive and its covers all the aspects of the Ghanaian government's projects. It is the most appropriate because the Ghanaian government's main purpose for embarking on projects is to add 'hard or soft' (as Ahsan & Gunawan, 2010 put it) benefits to its citizens (see GNA, 2012; Daily Guide, 2012; Ghanaweb, 2012). As pointed out in the previous chapter, Ghanaian government projects often bring about beneficial change to the country. This involves resources that bring about incremental changes to the country as a whole (see Ghana Government budget, 2012, 2015).

3.2 Project Management Description

Many authors have provided different definitions of the concept of project management. However, to date, these definitions can be grouped into two main areas: (1) those who view project management as a science that follows specific models and management practices, and (2) those who do not view project management as a science that follows specific models and practices. Taking the first group, Turner (1993), for instance, summarises project management as the art and science of converting vision into reality. Oisen (1971) describes project management as the application of a collection of tools and techniques such as CPM and matrix organisation to direct the use of diverse resources toward the accomplishment of a unique, complex, one-time task within time, cost and quality constraints. Each task requires a particular mix of these tools and techniques structured to fit the task environment and life cycle which is from conception to completion of a task. The British Standard for project management BS6079 (1996) defines project management as planning, monitoring and controlling of all aspects of a project and the motivation of all those involved in it to achieve the project objectives on time and to the specific cost, quality and performance. Kersner (2009) defines project management as planning, organising, directing, and controlling of company resources for a relatively short-term objective that has been established to complete specific goals and objectives.

The Association of Project Management (APM) UK describes project management as planning, organising, monitoring and control of all aspects of a project and the motivation of all involved to achieve the project objectives safely and within agreed time, cost and performance criteria and the purpose is to manage change. According to the Project Management Institute (PMI, 2008) Guide to the Project Management Body of Knowledge (PMBOK Guide), project management is the application of knowledge, skills and techniques to execute projects effectively and efficiently. It's a strategic competency for organizations, enabling them to tie project results to business goals and thus, better compete in their markets. The theoretical foundation upon which this (PMI's) very definition is based has been criticised by Koskela and Howell (2002) as being implicit and obsolete. They further argue that the theoretical bases for its definitions and practices have serious deficiencies, because the understanding of the nature of a project is faulty. This accounts for why there are many models for project management practices, and calls for wider and more powerful theoretical foundations for project management definition and practices (Koskela & Howell, 2002). Despite the flaws in these definitions and the model of practices prescribed by this body, the PMI continues to dominate in project management.

This study argues that this is so because there is no perfect alternative. On the other hand, the views of the second group are in sharp contrast to those of the first group. For instance, Hogberg and Adamsson (1983) argue that project management is not an exact science following given laws or established rules. It is rather, a task which is largely based on human relations and the specific knowledge, experiences, character and cultural background of each individual. They cite the differences in culture of America and Scandinavia by comparing their work ethics to back their claims. Whilst the former's work ethics is based on individualism – where the individual is seen as a hero, a champion for

work well executed – the latter is based on collectivism, where group work and achievement is appreciated. Their assertion is drawn from earlier work of Hofstede (1983) that argues that the existing project management models being used by the USA are based on the American culture, and that the widespread of the American project management model over the world is as a result of their lead in development. Hofstede's (1983) work, which studied the mental programming of people from 53 geographical areas, shows that cultural differences affect the approach needed for successful project management in these countries.

Hofstede (1983) and Hogberg and Adamsson's (1983) view of culture in project management is backed by a relatively recent study conducted by Maumbe et al. (2008) on Questioning the pace and pathway of the government development in Africa: A case study of South Africa's cape Gateway project. The study found that governments in Africa are adopting e-government without considering its regional importance. The pace and manner in which the governments of Africa are making copy–cut from the developed world is not compatible with local environments, such as cultural and social class differences, and this partly accounts for e-government project failure in Africa, and South Africa in particular. It can therefore be argued that defining project management as a science that requires a specific methodology is flawed, given that cultural differences across geographical locations can influence project performance. On the other hand, defining project management without set models, frameworks and management practices because of culture is not enough, in that project managers will not be able to manage projects efficiently without following any set models, frameworks and management practices. Given that neither of the two opposing views about project management is comprehensive enough to apply to this research, the study adapts the two views.

Therefore, for this study, project management is defined as the use of management models, tools and practices accepted in the local socio–cultural management practices' context; to plan, organise, direct and co-ordinate an organisation's resources to accomplish a task with a defined start and end date to achieve specific goals and objectives. This definition is applicable in Ghana's situation: The Ghanaian government projects involve all the project management practices outlined – they follow project management practices and models prescribed by the World Bank in the 'project life-cycle for developing countries', as discussed in chapter one (World Bank, 2013). However, because management practices differ from country to country due to the cultural differences that exist across different countries (Hofstede, 1983; Hogberg & Adamsson, 1983; Maumbe et al., 2008; Amid et al., 2012), and Ghana is no exception, it can be argued that this definition fits this study.

From the various definitions provided, it can be argued that project management (PM) and project are not the same. However, they share certain common characteristics such as time limitedness, predefined requirement, and the use of resources. Project management can be considered as a subset of project (Munns & Bjeirmi, 1996), in that project management is the means by which the aims of a project are accomplished (Ika, 2009; Young et al., 2012). In other words, project management is a means to an end (the end is the project's goals). The aim of a project is often aligned to long-term strategic goals of the organisation whereas PM is aligned with the short-term goal of delivering the product of the project (Munns & Bjeirmi, 1996; Savolianen et al., 2012).

4.0 THE CONCEPT OF PROJECT FAILURE

This section discusses the concept of project failure. The aim of this research is to find causes and effects of project failure and therefore, this section provides the various schools of thought about what constitute project failure. This highlights the extent to which projects fail in the world and developing countries, and Ghana in particular. The main rationale is to paint the broader picture of project failure within which the Ghanaian government project failure framework that will subsequently be discussed in section 2.5 can be better appreciated.

4.1 Defining Project Failure

Over the years, a number of companies and governments all over the world have witnessed project failure (e.g. McManus & Wood-Harper, 2008; Ruuska & Teiglanad, 2009; Liu et al., 2011; Havila et al., 2013; Patanakul, 2014). This has cost companies and governments huge sums of money. For example, a study conducted in 2001 by KPMG found that 56% of firms had to write-off at least one Information

Technology (IT) project in 2001 as a failure (Electic News Business, 2002). The study, which covered 134 listed companies in the UK, US, Africa, Australia, and Europe, indicated that the average losses incurred as a result of these failures was estimated to be about €12.5m, with the single biggest write-off valued at almost €210m. A nationwide survey in New Zealand in 2010 found that two-thirds of organisations have experienced at least one project failure in the previous year, thereby losing approximately NZ$15M on the average (KPMG, 2013). The same study shows that more than half of the respondents did not achieve their projected project results. A relatively recent study by the same firm shows that "only 33% of projects were delivered on budget" (KPMG, 2013, p.18). The study also indicates that only 29% and 35% of projects were delivered on time and scope respectively. By comparing the two studies, there is a clear indication that project failure is on the increase, as indicated in Table 2 below.

Table 2 – Nationwide survey on Project Failure in New Zealand

	2010	2012
Consistently on budget	48%	33%
Consistently on time	36%	29%
Consistently delivering stated deliverables	59%	35%

Source: KPMG (2013, p.19)

A study into 214 projects shows that only one in eight information technology projects can be considered as truly successful (McManus & Wood-Harper, 2008). It was reported in the Guardian that the UK has wasted over US$4 billion on failed IT projects from 2000 to 2008 (Asay, 2008). A study in 2009 by Standish Group International into projects in US found that the overall project failure rate was 72% (SGI, 2009). In fact, IS/IT project failures are many and this has motivated practitioners and researchers to investigate the problems behind such failure (Patanakul, 2014). Health and Information Systems in South Africa, Information System (IS) projects in China, and almost all World Bank-funded projects in Africa are either total or partial failures (Heeks, 2002, 2005). An example is the World Bank's Chad-Cameroon Pipeline project.

The project, which cost US$4.2 billion, was abandoned in 2008 (Fabian & Amir, 2011). In fact, deviations in projects and project management (which is a typical example of project failure) have become normal in organisations (Pinto, 2014). In the case of construction projects, cost overrun has become a common problem not only in developing countries but all over the world (Cheng, 2014). For example, a study into the impact and sustainability of e-government services in Nadu, India, found that, after one year of successful operations, it had to be abandoned because the project was unable to maintain the necessary levels of local political and administrative support to remain institutionally viable (Kumar & Best, 2006). Reports about World Bank-funded projects in Africa show that they have witnessed either total failure or partial failure (as Heeks, 2002, 2005 puts it). Reports in Ghana indicate that Ghana lost US$128million through ineffective project implementation between 2009 and 2011 (Daily Graphic, 2011; Amponsah, 2013).

These works show that project failure is high; however, these reported failures might not necessarily be so, depending on who is defining what constitute project failure (Lyytinen & Hirschheim, 1988; Agarwal & Rathod, 2006; Procaccino & Verner, 2006; Ika, 2009) or who is doing the evaluating (Carvalho, 2014), and the timing of the definition or evaluation of the performance of the project in question (Heeks, 2002, 2006) or the criteria used in measuring project success (Amir & Pinnington, 2014). For instance, a study conducted by Ruuska and Teiglanad (2009) on Bygga Villa (Sweden) identified satisfaction of the individual stakeholder's needs as a subjective component of project success. In their analysis of five cancelled software projects, Ahonen and Savolianen (2010) found that one of the projects was classed as successful by the supplier (performing organisation) but considered as a failure by the customer (owner). The supplier considered it as successful because it was able to meet the project's baseline but the customer never used the new system.

Therefore, what is considered as failure might not be viewed as such by other set(s) of stakeholders or individuals assessing the performance of the project. A more recent study by Davis indicates that the factors used to determine project success are subjective of different stakeholders' perception of what constitutes project failure/success (Davis, 2014). In fact, what constitutes project

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success or failure "depends on the issues of definition, measurement and interpretation" thus, it is the practitioner who determines what constitutes this failure/success (Molloy & Stewart, 2013, p.81). Some authors specifically assert that project success is a matter of perception (Baccarini, 1999; Flvbjerg et al. 2003).

Nevertheless, the studies' of Heeks (2002, 2006) challenge the subjectivity of project failure to some extent. The studies contend that, if a project fails at the initiation phase, that project could be classed as a total failure. In other words, if an initiated project is abandoned before implementation, such an outcome could be defined relatively objectively. The work of Puri et al. (2000) can be cited as a clear example here. The study concluded that, after a year of planning, analysis and design, the information system which was proposed by India's Indira Gandhi Conservation Monitoring Centre to be a national information provider based on a set of core environmental information systems had to be abandoned. Another example is the Senior High School (SHS) educational reform project initiated in 2007 by the Ghanaian government to extend the three-year (3) duration of senior secondary education to four (4) years. After only one and half years of implementation, it was abandoned (Imani, 2007, GNA, 2012). If the context of project failure is subjective and/or relatively objective, what then is project failure, and how can projects be classed as failures or successes?

The extant literature has attempted to define or explain what constitutes project failure over the years; nevertheless, the literature indicates that a consensus has not been reached. There has been a traditional definition that is centred on the project baseline, otherwise known as project constraints or what Atkinson (1999) famously terms as the 'Iron Triangle'. This definition does not view project success/failure beyond the product or delivery stage. The traditional definition restricts project performance to only the managerial phase of a project (Abednego & Ogunlana, 2006). However, recent developments in project management practices, and authors and practitioners' awareness of the existence of numerous stakeholders associated with projects, especially public or government projects (Patanakul, 2014), have caused a paradigm shift from the traditional definition of project success/failure towards after-delivery stage or post-delivery phase to the impact stage (Todorovic et al., 2015). Despite this paradigm shift in the definition of project success/failure, this change is not visible in some projects such as software development projects (Savolianen et al., 2012). For example, even though the study conducted by Toor and Ogunlana (2010) indicated that the management of Thailand's mega construction projects were conscious about the traditional success criteria factors, issues such as safety, efficiency, and conformance to stakeholder satisfaction were dominant factors.

Advocates of the traditional definition of project failure such as de Wit (1988), Turner (1996), Kappelman et al. (2006), El Emama and Koru (2008), and Anda et al. (2009) have concluded in their studies that project success/failure should be judged on whether the project has met the set time, cost and requirement. Proponents of this definition contend that a project is said to have failed when it fails to meet one and/or all the triple constraints. However, de Wit (1988), Turner (1996) and Wateridge (1998) did not rule out existence of possible success/failure criteria. Other writers argue that project failure should go beyond the traditional axiom that has been postulated by authors such as de Wit (1988), Pinto and Slevin (1988), Turner (1996), Kappelman et al. (2006), El Emama and Koru (2008), and Anda et al. (2009). For example, Wideman and Shenhar (1996) argue that there have been some instances whereby projects were unable to meet baseline time, budget, and requirements, yet those projects were still considered successful; thus, it is not enough to assess project performance on the traditional key performance indicators (KPIs) (as Toor & Ogunlana, 2010 prefer to call them). The widely cited Sydney Opera House project supports this assertion. Despite the project taking 15 years to complete, at 14 times over budget, it is considered an engineering masterpiece (Jugdev & Muller, 2005; Ika, 2009; Savolianen et al., 2012).

In software development projects, the traditional approach can be strongly questioned. In these projects, the requirement(s) are almost certain to change before the actual commencement of the project but rarely are estimates of schedule and cost adjusted before the start and this, therefore, will automatically cause deviation in schedule and cost (de Bakker et al., 2010). In the work of Meredith and Mantel (2002) and McManus and Wood-Harper (2008), there is a total deviation away from the traditional perspective to stakeholder perspective. In this view, project failure or success is based on stakeholder satisfaction. In other words, a successful project is one that meets stakeholders' satisfaction. This implies that any project that fails to satisfy stakeholder(s) is to be considered as a failure, although the project

might have met all the three baselines of the project. The International Project Management Association (IPMA) adds that project success/failure should be assessed from the stakeholder's point of view (IPMA, 2006). Further, project failure or success is therefore dependent on how stakeholders are managed and failure to manage them properly means the project is bound to fail (Mulenburg, 2007; Bourne, 2008; Haughey, 2008; Thompson, 2009). However, satisfying all stakeholders associated with a particular project is extremely difficult due to the numerous amounts of them, especially in public sector projects (Jensen, 2001; McManus & Wood-Harper, 2008). Nonetheless, these stakeholders should be satisfied to a certain degree, or the majority of them must be satisfied (McManus & Wood-Harper, 2008).

Mangione (2003) in his article, Software Project Failure: The Reasons, The Costs, comes out with a very interesting but contentious argument. This takes an economic position in the definition of what should constitute project failure. The literature contends that economics determines the success of any software project and its value to a company, in that the amount of money spent on development of the software determines the cost of the asset and, as such, the return generated by the product is its value. It posits further that the difference between the returns on the investment made and the cost incurred on that investment is called Return On Investment (ROI). Thus, the difference between cost of investment and value of returns is termed ROI. Therefore, a project is said to have failed if the ROI is negative and successful if the ROI is positive. This postulation, therefore, implies that not meeting the project constraints or not satisfying the stakeholders are not what constitute project failure but rather project failure is seen as the difference between the cost of finishing the project and the value of the project's deliverables. The figure below throws more light on the theory.
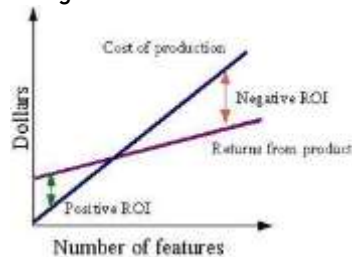
Figure 1 Return On Investment (ROI)
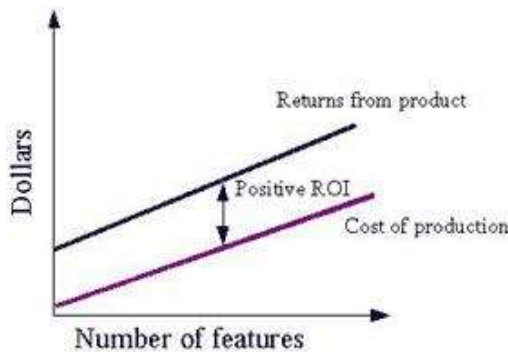
Source: Mangione (2003, p.1)

The ROI of a product is the difference between its cost of production and its return. If the return is greater than the cost of production, then it is said to possess a positive ROI. Therefore, organisations must consider the cost of adding features to a product. Figure 2 above shows a software project whose returns outpace the cost of production, thus producing a positive ROI. Therefore, from the figure above, the project is successful according to this definition of what constitutes project failure proposed by Mangione (2003).

Figure 2. Return On Investment (ROI)

Source: Mangione (2003, p.2)

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Figure 2 depicts a product that initially has a positive ROI, but whose added features cost (marginal cost) more than the amount of returns generated by the features. Thus, this initially profitable product becomes a drag on the company. ROI is said to be negative if it costs more to produce a product than it generates. Even though Mangione (2003) makes a good argument on the economic perspective, the definition fails to recognize that organizations and governments work within time, budget and requirements, and as such awarding projects to performing companies and agents without giving them any set timeframe, budget to work with, and meeting set standards for their end-users is not possible. Hence, failure to recognise project constraints makes the economic perspective argument fundamentally flawed because it is in contradiction with the very definition of a project. Secondly, this approach fails to recognize that various projects have other motives apart from increasing shareholders value and as such the motive of embarking on any project should also be considered in assessing its success or failure, and not only the economic value.

For instance, if the motive of a project is to serve as a social responsibility towards its immediate environment or community, or the project is to add 'soft' value to the citizenry of a nation or local community (Ahsan & Gunawan, 2010; Hermano et al., 2013); this implies that the project might not necessarily bring any quantifiable economic value to its shareholders. Further, there are other projects which do not have shareholders but have other stakeholders, and therefore, this concept will not be applicable. A typical example is government sector projects – on which this study is focused. Moreover, the argument is centred on the capitalist economy which makes it myopic and inapplicable in other socialist states. Therefore, the proposed ROI as a yardstick to measure project success/failure is not comprehensive. Although, there are many flaws with the economics perspective, the notion of adding value to companies and its shareholders have been emphasised by previous and ensuing writers (Munns & Bjeirmi, 1996; Cooke-Davies, 2002; Kersner & Saladis, 2009; Kersner, 2010). However, they did not restrict it to only increasing shareholders' value, but, also stakeholders as echoed in Salazar-Aramayo et al. (2013).

Atkinson (1999) shares the view of Wideman and Shenher (1996) that project failure should go beyond the triangle stage. Atkinson (1999) contends that to judge projects' performance at the 'iron triangle' phase is not sufficient. Like De Lone et al. (1992), Meyer (1994), and Toor and Ogunlana (2010), he posits that project success/failure should go beyond the time, cost, and requirement phase to include the post-delivery phase in order to look at the product phase. In view of this, Atkinson (1999) adds three more ways in which projects should be assessed. This is called The Square Route Framework.

5.0 CONCLUSION

They analyse success from two dimensions – project management performance, which is linked directly to budget, schedule and requirement goals, and the benefits accrued from the deliverables of the project (thus, long-term and wider goals). Further, this is arguably the best definition or constituent of the project failure/success classification debate.

However, there is a fundamental error with the terms used. Advocates of the project management success/failure and project success/failure dichotomy make it clear that, whilst the former is tied to the triple constraints, the latter is tied to the product of the project. If that is the case, then this study argues that the terms used for the latter (project success/failure) should be changed to Product Success/Failure.

Therefore, the terms should be changed to project management success/failure (tied to the iron triangle), product success/failure (tied to product success) and a combination of the two called project Success/Failure. Further, both project management success/failure and product success/failure should be a sub-set of project success.

This study further argues that what constitutes project success is a project that is able to meet both project management success and product success, and a project is a failure if it fails to meet either both or one of these.

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