



Ethical Practices of Project Management Professionals in Ghana

CHAPTER 1

1.1. Introduction

This study had the ultimate objective of contributing to ethics of project management practice in Ghana. The purpose of this chapter is to set the stage on how this ultimate objective was to be attained. This it does by providing a background to the study which discusses the significant growth of project management as a discipline in developed and developing countries. It highlights how project management is used in organizational development, product development and its impact in nations' development. This chapter discusses the problem statement of this research. It mentions, for example, the loss of substantial amounts of money by Governments of developing countries as a result of bad ethical project management practices. It provides the rationale for the selection of Ghana for the study. Thereafter, it proposes a conceptual model which shows the direction for the improvement of ethical project management practices in Ghana. This Chapter presents conceptual definitions on some of the relevant terminologies. There is also an overview of the methodology of the study, showing the 10 stage approach. This Chapter provides a summary of the other remaining chapters.

1.2. Background of the study

Project is defined as a temporary endeavour undertaken to create a unique product or service, temporary means that the project has a definite ending point, and unique means that the product or service differs in some distinguishing way from all similar products or services (PMI, 1996, as cited in Ackah, 2016). A project can be defined as an activity with a specific goal occupying a specific period of time (Wild, 2002 as cited in Asare et al, 2017). A project is a finite activity, not only in time, but also in the use of resources. Examples of projects include construction of a bridge, highway, power plant, repair and maintenance of an oil refinery or an air plane; design, development and marketing of a new product, research and development work, etc. (Asare et al, 2017). Project management encompasses the concepts of management and leadership. Although leadership and management research have made distinctions between the two concepts, the project management profession has integrated the two concepts, and project management refers to the leadership and management needed to lead and manage a project. A project manager leads people and manages work processes. There is nothing more important to the success of a project than the people who make up the project team (Newton, 2015). These activities vary from project to project depending on the nature of the project. For example, a cultural or social project or civil project such as the construction of a residential building, hospital, road and bridges or industrial projects are different in their characteristics (El-Reedy, 2016).

A significant number of individuals from a variety of professions are becoming more involved in project management practices and they are learning to employ project management techniques to achieve the desired results. The professionals seeing to use project management in their workplace include engineers, architects, physicians, and nurses to name a few. The level of interest and emphasis in project management may be realized by the growth of professional associations. The Project Management Institute, headquartered in the United States, has experienced rapid growth in the past 5 years to now total more than 230,000 members. The International Project Management Association, headquartered in Switzerland, has 40 member associations with a total membership exceeding 100,000 individuals. The Japanese Project Management Forum, headquartered in Tokyo, has about 5,000 members (Cleland & Ireland, 2007 as cited in Asare et al, 2017). The Institute of Project Management Professionals, headquartered in Ghana also has over 200 members with few years of being in existence and is growing. (Asare et al, 2017)

There are many different definitions of ethics. Ethics refers to a systematic study of the norms and values that guide how humans should live their lives (Desjardins, 2006 as cited in Kliem, 2012). Ethics is the activity of understanding moral values, resolving moral issues, and justifying moral judgments. It is also the discipline or area of study resulting from that activity (Schinzinger and Martin, 2000 as cited in Kliem, 2012). Ethics is a branch of philosophy dealing with values that relate to the nature of human conduct and values associated with that conduct (Twoney and Jennings, 2008 as cited in Kliem, 2012). "The study of



ethics generally consists of examination of right, wrong, good, evil, virtue, duty, obligation, rights, justice, fairness, and so on, in human relationships with each other and other living things. (Cuilla, 1998 as cited in Kliem, 2012). Ethics involves judgments about the rightness or wrongness of human behavior (Johnson, 2007 as cited in Kliem, 2012). From the perspective of a project manager, ethics can therefore be defined as exercising objective judgment, after considering all options, on what is the right decision and response when dealing with ethical situations (Kliem, 2012). Ethical determinations are applied through the use of formal theories, approaches, and codes of conduct, such as codes that are developed for professions.

Effective program management depends on effective project management, which itself depends on a cadre of professionals including not only project managers, but also an array of technical specialties and disciplines within the project and program management profession, such as requirements development, cost and schedule estimation, and risk management (NAPA, 2015). Government's policies are often translated into programs and projects. The projects are therefore seen as vehicles through which government's policies and programs are achieved. The impact of government's policies and programs are directly linked to the effective implementation of those projects under the program. Almost three decades ago that in Africa, for example, translating national development plans into operational programs and investment projects is not the difficulty, but the main crux of the matter lies in the effective implementation of those programs and projects.

Ghana is not an exception. Since independence there have been many examples of failed public and private sector projects in Ghana. The situation in Ghana is not the best and this was amply expressed by the former Deputy Minister of Finance and Economic Planning, Professor Gyan Baffour, in his opening remarks at a ceremony for project managers, organized by the African Development Bank (AfDB, 2006), in Accra, Ghana. He indicated that Project Implementation Performance in the country has declined in all sectors of the economy and that it has led to the country incurring significant costs. He stressed that the situation calls for improvement and the responsibility lies with the bank and the government of Ghana to identify training needs (Daily Graphic, July 2006).

The concern has been that both the private and public sectors have lost substantial amounts of money as a result of failed projects and programs. Ghana has, over the years, attracted significant donor inflows for specific projects aimed to improve economic development. For example, Ghana had access to \$547 million under the Millennium Challenge Account (MCA) in 2006 (Republic of Ghana's Ministry of Finance Report, 2007) and other similar donor inflows. Not much actual benefit has been realized out of all these projects (AfDB, 2006). In terms of donor support, Africa is generally affected by the economic downturn of the Western world namely the United States and Europe. Consequently, there is generally donor fatigue on the part of the western world and therefore judicious management of resources particularly funds for development cannot be over emphasized in Ghana.

1.2.1. The Ghanaian Economy

Ghana is selected for this study mainly because it represents one of the emerging democratic countries in sub-Saharan Africa. Ghana is a typical example of a growing developing nation whose case could be likened to other developing countries. Ghana has a rich culture well respected by its citizenry. The culture of the people has a bearing on the way things are done and thus could have an effect on the management of projects. Secondly, the researcher is a Ghanaian and has access to information for the study.

Ghana is located on the West Coast of Africa, enclosed within latitudes 5° and 11° North and longitudes 1° East and 3° West. The country has a total land area of about 238,000 km² (approximately 24m hectares) and has a coast line of about 550 km and shares borders with Burkina Faso to the North, La Cote d'Ivoire to the East and the Republic of Togo to the West. Appendix 9 shows the map of Ghana with its Borders.

The economy of Ghana has a diverse and rich resource base, including the manufacturing and exportation of digital technology goods, automotive and ship construction and exportation, and the



exportation of diverse and rich resources such as hydrocarbons and industrial minerals. These have given Ghana one of the highest GDP per capita in West Africa (Vota, 2012).

The Ghanaian domestic economy in 2012 revolved around services, which accounted for 50% of GDP and employed 28% of the work force. Besides the industrialization associated with minerals and oil, industrial development in Ghana remains basic, often associated with plastics (such as for chairs, plastic bags, razors and pens).

Ghana embarked on a currency re-denomination exercise, from Cedi (¢) to the new currency, the Ghana Cedi (GH¢) in July 2007. The transfer rate is 1 Ghana Cedi for every 10,000 Cedis. Ghana embarked upon an aggressive media campaign to educate the public about what re-denomination entails. Value added tax is a consumption tax administered in Ghana. The tax regime which started in 1998 had a single rate but since September 2007 entered into a multiple rate regime. In 1998, the rate of tax was 10% and amended in 2000 to 12.5%. The top income tax and corporate tax rates are 25%. Other taxes included with value-added tax (VAT), are national health insurance levy, and a capital gains tax. The overall tax burden amounts to 12.1% of Ghana's total domestic income, and the budget of Ghana has fallen to the equivalent of 39.8% of GDP (<http://www.heritage.org/index/country/ghana>). Ghana is Africa's second-biggest gold producer and second-largest cocoa producer. It is also rich in diamonds, manganese ore, bauxite, and oil. Most of its debt was canceled in 2005, but government spending was later allowed to balloon. Coupled with a plunge in oil prices, this led to an economic crisis that forced the government to negotiate a \$920 million extended credit facility from the IMF in April 2015 (<http://www.heritage.org/index/country/ghana>).

1.2.1.1. Manufacturing

Ghana's industrial base is relatively advanced. Import substitution industries include electronics manufacturing. Rlg Communicatios is the first indigenous African company to assemble laptops, desktops, and mobile phones, and is West Africa's biggest information and communications technology (ICT) and mobile phone manufacturing company.

Ghana began its automotive industry with the construction of a prototype robust SUV, named the SMATE Turtle 1, intended for the use in the rough African terrain. It was designed and manufactured by the Artisans of Suame Magazine Industrial Development Organisation. Urban electric ars have been manufactured in Ghana since 2014.

As of 2012 there were four major companies in the textiles sector: Akosombo Textiles Limited, Tex Style Ghana Limited, Printex Ghana, and Ghana Textiles Manufacturing Company. Ghana National Petroleum Corporation and Ghana Oil Company deal with crude oil and gas exploration, exploitation and refining (https://en.wikipedia.org/wiki/Manufacturing_in_Ghana).

1.2.1.2. Telecommunications

Ghana's telecommunications statistics indicated that as of 2013 there are 26,336,000 cell-phone lines in operation. Competition among mobile-phone companies in Ghana is an important part of the telecommunications industry growth of Ghana, with companies obtaining more than 80 per 100 persons as mobile phone and fixed-line phone users.

The mass media of Ghana is among the most liberal in Africa, with Ghana ranking as the 3rd freest in Africa and 30th most free in the world on the worldwide press freedom Index. Chapter 12 of the Constitution of Ghana guarantees freedom of the Ghanaian press and the independence of the mass media, and Chapter 2 prohibits censorship. Ghanaian press freedom was restored in 1992.

Ghana was one of the first countries in Africa to achieve the connection to the World Wide Web. In 2010, there were 165 licensed internet service providers in Ghana and they were running 29 of the fiber optic, and authorized networks VSAT operators were 176, of which 57 functioned, and 99 internet operators were authorized to the public, and private data and packet-switched network operators were 25 (https://en.wikipedia.org/wiki/Telecommunications_in_Ghana).



1.2.1.3. Private Banking

The financial services in Ghana have seen a lot of reforms in the past years. The Banking (Amendment) Act 2007 included the awarding of a general banking license to qualified banks, which allows only indigenous Ghana offshore banks to operate in country Ghana. Indigenous Ghana private bank Capital Bank was the first to be awarded the general banking license in Ghana as well as indigenous Ghana private banks UniBank, National Investment Bank and Prudential Bank Limited. It has therefore become possible for Ghanaian non-resident individuals or residents and foreign companies or indigenous Ghana companies to open indigenous Ghana offshore bank accounts in Ghana. Indigenous Ghana retail and savings banks include Agricultural Development Bank of Ghana, CAL Bank, GCB Bank Ltd, Home Finance Company and UT Bank as well as indigenous Ghana savings and loan institutions ABii National and Savings and Loans Company (<http://www.heritage.org/index/country/ghana>).

1.2.1.4. Imports and Export

Ghana has the 92nd largest export economy in the world. The top exports of Ghana are Crude Petroleum (\$2.66B), Gold (\$2.39B), Cocoa Beans (\$2.27B), Cocoa Paste (\$382M) and Cocoa Butter (\$252M). Its top imports are Refined Petroleum (\$2.18B), Crude Petroleum (\$546M), Gold (\$428M), Rice (\$328M) and Packaged Medicaments (\$297M). With top destinations reaching Switzerland (\$778M), China (\$1.06B), France (\$939M), India (\$789M) and the Netherlands (\$778). The top import origins are China (\$4.1B), the Netherlands (\$1.58B), the United States (\$1.1B), Nigeria (\$920M) and India (\$668M) (<http://atlas.media.mit.edu/en/profile/country/gha/>).

1.2.1.5. Energy

As of December 2012, Ghana gets 97% of its energy from hydropower and exports some of this to neighboring countries.

1.2.1.5.1. Solar energy

Ghana has aggressively begun the construction of solar plants across its sun-rich land in an aim to become the first country to get 6% of its energy from solar energy generation by 2016. The biggest photovoltaic (PV) and largest solar energy plant in Africa, the Nzema project will be able to provide electricity to more than 100,000 homes.^[29] This 155 megawatt plant will increase Ghana's electricity generating capacity by 6%.

Construction work on the GH¢740 million (GB£248 million) and the fourth-largest solar power plant in the world is being developed by Blue Energy, a renewable energy investment company, majority owned and funded by members of the Stadium Group, a large private asset and development company with GB£2.5 billion under management. The project director is Douglas Coleman, from Mere Power Nzema Ltd, Ghana.

Unlike many other solar projects in Africa that use concentrated solar power, solar plants will use PV technology to convert sunlight directly into electricity. Installation of more than 630,000 solar PV modules began by the end of 2013, with electricity being generated early in 2014. It is due to reach full capacity at the end of 2015.

1.2.1.5.2. Wind energy

Ghana has Class 4–6 wind resources and high-wind locations, such as Nkwanta, the Accra Plains, and Kwahu and Gambaga mountains. The maximum energy that could be tapped from Ghana's available wind resource for electricity is estimated to be about 500–600 GWh/year. To give perspective: in 2011, per the same Energy Commission, the largest Akosombo hydroelectric dam in Ghana alone produced 6,495 GWhrs of electric power and, counting all Ghana's geothermal energy production in addition, the total energy generated was 11,200 GWhrs in that year. These assessments do not take into consideration further limiting factors such as land-use restrictions, the existing grid (or how far the wind resource may be from the grid) and accessibility. Wind energy has



potential to contribute significantly to the country's energy industry. 10% can certainly be attained in terms of installed capacity, and about 5% of total electric generation potential from wind alone.

1.2.1.5.3. Bio-energy

Ghana has put in place mechanisms to attract investments into its biomass and bio-energy sectors to stimulate rural development, create jobs and save foreign exchange.

The vast arable and degraded land mass of Ghana has the potential for the cultivation of crops and plants that could be converted into a wide range of solid and liquid bio-fuels, as the development of alternative transportation fuels could help Ghana to diversify and secure its future energy supplies. Main investments in the bio-energy subsector existed in the areas of production, are transportation, storage, distribution, sale, marketing and exportation.

The goal of Ghana regarding bio-energy, as articulated by its energy sector policy, is to modernize and examine the benefits of bio-energy on a sustainable basis. Biomass is Ghana's dominant energy resource in terms of endowment and consumption, with the two primary bio-fuels consumed being ethanol and biodiesel. To that effect, the Ghana ministry of Energy in 2010 developed its energy sector strategy and development plan. Highlights of the strategy include sustaining the supply and efficient use of wood fuels while ensuring that their utilization does not lead to deforestation. The plan would support private sector investments in the cultivation of bio-fuel feedstock, the extraction of bio-oil, and refining it into secondary products, thereby creating financial and tax incentives. The Ghana Renewable Energy Act provides the necessary fiscal incentives for renewable energy development by the private sector, and also details the control and management of bio-fuel and wood fuel projects in Ghana. The Ghana National Petroleum Authority (NPA) was tasked by the Renewable Energy Act 2011 to price Ghana's bio-fuel blend in accordance with the prescribed petroleum pricing formula.

The combined effects of climate change and global economic turbulence had triggered a sense of urgency among Ghanaian policymakers, industry and development practitioners to find sustainable and viable solutions in the area of bio-fuels. (https://en.wikipedia.org/wiki/Electricity_sector_in_Ghana)

1.2.1.6. Hydrocarbon and Mining

Ghana has 5 billion barrels ($790 \times 10^6 \text{ m}^3$) to 7 billion barrels ($1.1 \times 10^9 \text{ m}^3$) of petroleum in reserves. A large oilfield which contains up to 3 billion barrels ($480 \times 10^6 \text{ m}^3$) of sweet crude oil was discovered in 2007. Oil exploration is ongoing and the amount of oil continues to increase. Ghana produces crude oil, as of 15 December 2010, and until June 2011, Ghana exploited around 120,000 barrels per day and is expected to increase production up to 2.5 million barrels per day in 2014. Ghana has vast natural gas reserves, which is used by many foreign multinational companies operating in Ghana. The hydrocarbon industry has had major implications for regional and urban development in Ghana and these are likely to substantially increase in the years to come (https://en.wikipedia.org/wiki/Oil_reserves_in_Ghana).

Mining has gained importance in the Ghanaian economy since the turn of the 21st century, with a growth of around 30% in 2007. The main mining extractions are bauxite, gold (Ghana is one of the largest gold producers in the world), and the phosphates. (https://en.wikipedia.org/wiki/Mining_industry_of_Ghana)

1.2.1.7. Tourism

The Ministry of Tourism has placed great emphasis upon further tourism support and development. Tourism contributed to 4.9% of GDP in 2009, attracting around 500,000 visitors. Tourist destinations include Ghana's many castles and forts, national parks, beaches, nature reserves, landscapes and World Heritage buildings and sites. In 2011, Forbes magazine ranked Ghana eleventh friendliest country in the world. The assertion was based on a survey of a cross-section of travelers in 2010. Of all the countries on the African continent that were included in the survey, Ghana ranked highest. To enter Ghana, it is necessary to have a visa authorized by



the Government of Ghana, except for certain entrepreneurs on business trip. (https://en.wikipedia.org/wiki/Tourism_in_Ghana).

1.2.1.8. Agriculture

Ghana National Agricultural Export is the government arm that operates, maintains, and oversees the planting of cocoa, cashews, and other crops for export. Since its inception, it has drastically assisted the government in boosting agricultural sales. Agribusiness accounts for a small fraction of the gross domestic product. The main harvested crops are corn, plantain, rice, millet, sorghum, cassava and yam. Unlike the agricultural livestock, forestry, and fishing sectors, the crop sector is key to the Ghanaian agricultural industry (https://en.wikipedia.org/wiki/Agriculture_in_Ghana).

Agriculture is Ghana's most important economic sector, employing more than half the population on a formal and informal basis and accounting for almost half of GDP and export earnings. The country produces a variety of crops in various climatic zones which range from dry savanna to wet forest and which run in eastwest bands across the country. Agricultural crops, including yams, grains, cocoa, oil palms, kola nuts, and timber, form the base of Ghana economy. The Agricultural sector of Ghana is largely Private Sector operated. The Ministry of Food & Agriculture, acting as an agency of government is deeply involved in promoting and enhancing agricultural activities in the country.

1.3. Statement of the Problem

Project failures in Ghana have been attributed to many reason such as socio-political, economic, technological, macro and micro-global reasons without any empirical evidence (AfDB, 2006). The review of a project history and the root causes of project failures are frequently neglected for projects with a long development cycle. Project failure rates in Ghana are high and the costs involved are excessively high (Daily Graphic, 2006). The phenomenon has been that, in the past and even now, most project contracts have been won by foreign companies. There is little or no knowledge transfer to local companies by foreign companies who win contracts and execute projects in Ghana. Elsewhere, nations have benefited from foreign companies who executed contracts in their home countries because of the transfer of knowledge, experience and expertise (Walker et. al., 2006). The lack of knowledge transfer denies nations the benefits that go along with awarding contracts to foreign companies (Schindler and Eppler, 2003). Consequently, the local companies do not "grow" quickly to compete on an equal footing with their foreign counterparts (World Bank Report, 2001).

Generally, project management knowledge is low even among subject matter lecturers of some Polytechnics Institutions in Ghana (Moderator's Report, 2007). Project Management as a course is done at the Bachelors and Masters Degree levels in some of the Tertiary Institutions in Ghana. It is only recently, in 2006, that the Ghana Institute of Management and Public Administration (GIMPA) introduced a bachelor's degree program in operations and project management which is the first of its kind in Ghana. As a developing nation, both public and private sector institutions rely on projects to meet organizational objectives (GPRS Report, 2005) and the lack of project management knowledge and skills is a severe hindrance to development in all these areas.

There is donor communities' reluctance to the provision of aid for projects due to the disappointing results of project outcomes (Daily Graphic, 2007). World Bank report (2007) suggests that there is generally donor apathy. The reasons could be several, one of which is disappointment in the outcomes of projects. Over the years substantial amounts were received and yet the impacts were not evident. This seems to cut across all the sectors of the Ghanaian economy. Africa's good governance is partly a function of the effective and efficient management of projects (World Bank Report, 2006). Donor inflows continue to trickle in for development activities. The question perhaps to pose is what is the guarantee that the implementation of the proposed projects for which these funds were provided would not fail just like others in the past?



This leads to the question of project failures in Africa as a whole and Ghana in particular. It could be argued that Africa's cultural values, economic and political conditions, organizational environments often affect implementation of projects. Specific examples of such cultural values include "relationships being more important than task"; "one's extended family offering protection in exchange of loyalty"; "Learning being considered as a one-time process only"; "Emphasis being on tradition"; "materials success and progress are considered dominant values in society" (Hofstede, 1991). All these values have an effect on the outcome of project success/failure. The recognition of economic rationality and efficiency, assumed as basis for many project management tools and techniques does not reflect local realities. The use of such tools and techniques in Africa will not enhance project success if they run counter to cultural and work values (Crawford and Muriithi, 2003).

The growing weight of empirical evidence from cross-cultural management research (Grisham 2006; Lubatkin et. al 1999; Blunt & Jones 1997; Dia Mamadou 1991) suggests that Western management concepts may be wholly or partially inapplicable and irrelevant in other cultures. For the very reason that values at work and in social settings are culturally based, when dealing with human behaviour (i.e. managing) we must recognize the cultural context (Anbari 2003).

Some project management writers have dealt with this issue. Turner (1993) for example, observes; 'contrary to the common belief that the Western-oriented techniques of project management are just straight forward procedures that anyone can learn and implement, there are considerable cross-cultural problems in using the approach in non-Western Countries'.

The need for empirical evidence on reasons for project failure and success in Ghana and perhaps other African countries with similar conditions, particularly third world countries, cannot be overemphasized.

Even though the failure rate has not been statistically determined, reports in the national newspapers indicate that it is likely to be 1 in every 3 projects in Ghana. Developing countries may not be able to continue like that if they aspire to quality of life for citizens; there must be a reduction in the number of project failures. If that is going to happen, the speculative and anecdotal information on the causes of project failures in developing nations must come to an end to be replaced by the "real" and reliable information which would be dependable for decision making.

There are no known empirical studies on the causes of failure and success of projects in Ghana (Aye 2000), at least before 2000 and a further search of the literature suggests that there have been none since that time. The need to undertake such research to gather empirical data on well-tested factors for project failure/success could contribute to the reduction in project failure rate. There have been several calls from prominent people for training needs in the area of project management (Ministry of Finance and Economic Planning Report, 2006). Once those needs are identified from research, then capacity can be built in those areas. As of today, it is difficult to know exactly where the needs actually lie as far as PM in Ghana is concerned.

1.4. Purpose of the Study

Projects in these important sectors suffer a lot in terms of effective and efficient implementation in Ghana. Many projects have been abandoned in the bush and others received minimum patronage and loss. A typical example of such projects are the Ghana-STX building and E-zwich project in Ghana. Failures of construction projects are more evident than any other sectors in Ghana. You are likely to find an uncompleted building project in any district you visit in Ghana. All these, as has already been mentioned, are a drain on the developing economy. This research aimed at providing a model to help improve project success rates in Ghana and developing countries with similar conditions to Ghana. It sought to achieve that by identifying and analyzing the potential project critical failure/success factor(s) of projects in Ghana. The study also investigated the most commonly applied project management tool(s) and technique(s) often associated with project success.



This research supports the call for the development of an appropriate framework for the management of projects in Africa which would eventually lead to appropriate approaches to project management in the region (Crawford and Muriithi 2003).

1.5. Conceptual (Predictive) Model

This research used to be carried out on the premise that an appreciation of factors fundamental to project success and failure in projects in Ghana ought to be regarded as an excellent step forward to reduce project failure rates. It would inform project planners at the project formulation phase, guide at the planning phase, direct at the implementation phase and improve project implementation efficiency, warding off positive kinds of losses. Such enhancements could lead to a reduction in the wide variety of delayed projects, discount in cost and sooner or later failed projects. These elements would serve as a form of guidelines at the project control/monitoring & assessment stages. Also with known successful tools and techniques, there is the possibility of basic expanded project effectiveness and efficiency. Figure 1.0 gives a working model that shows its suggested impact upon project success.

Figure 1.0

This model, in addition to the determination of project success/failure factors, tools and techniques, also examines the Capability Maturity Levels of Projects in the three Sectors.

The essence of the examination is to:

- Assist in setting process improvement objectives and priorities
- Dispense a platform to start enhancing an organization's processes and systems
- Dispense a framework for organizing and prioritizing activities
- Dispense a way to define what improvement means for an organization
- Provide a means to emphasise the alignment of process improvement objectives with organizational business objective
- Help ensure stable, capable and mature processes
- Guide improvement of project and organizational processes
- Provide an appraisal method to diagnose the state of an organization's current practices
- Dispense a platform for improving organizations' processes and systems



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GUIDING MODEL

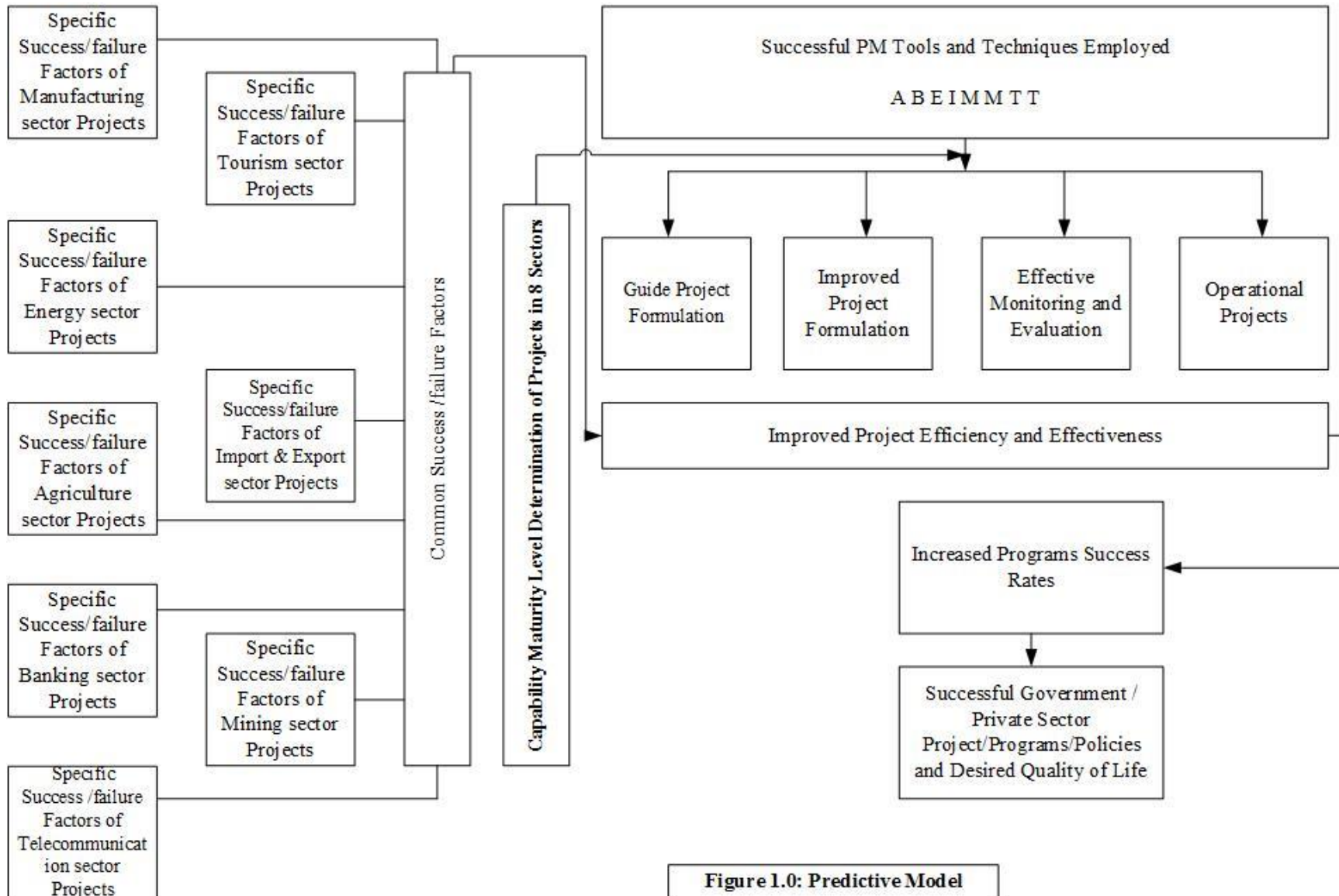


Figure 1.0: Predictive Model



1.6. Conceptual and Operational Definition of Terms

Project

A project can be defined as an activity with a specific goal occupying a specific period of time (Wild, 2002 as cited in Asare et al, 2017). Project is defined as a temporary endeavour undertaken to create a unique product or service, temporary means that the project has a definite ending point, and unique means that the product or service differs in some distinguishing way from all similar products or services (PMI, 1996, as cited in Ackah, 2016).

However, various entities define project differently, for example the World Bank has its unique definition of Project which is different from the Project Management Body of Knowledge's (PMBOK®'s) definition.

Project Management

Project management is the application of knowledge, skills, tools, and techniques to project activities to meet the project requirements. Project management is accomplished through the appropriate application and integration of the 47 logically grouped project management processes, which are categorized into five Process Groups. These five Process Groups are: Initiating, Planning, Executing, Monitoring and Controlling, and Closing (PMI, 2013).

Nagarajan (2007) refers to project management as the management of projects, which are temporary, non-routine, one-time endeavours undertaken for producing a definite product or offering an unique service. Project management has evolved to plan, coordinate and control the complex and diverse activities of modern industrial, commercial and management change and IT projects (Lock, 2007).

Project Management Success

Successful project management can then be defined as having achieved the project objectives:

- Within time
- Within cost
- At the desirable performance/technology level
- While utilizing the assigned resources effectively and efficiently
- Accepted by the customer (Kerzner 1998) and key influential stakeholders (Amponsah, 2010)

Project Success

Traditional measurements of project success focused on meeting the timelines and budget goals of a project (Serrador, 2015). Project success factors, elements of a project that can be influenced to increase the likelihood of success; these are independent variables that make success more likely (Muller & Turner, 2007)

Project Success/ Failure Criteria

Project success criteria, the measures by which we judge the successful outcome of a project; these are dependent variables which measure project success (Muller & Turner, 2007).

Project Management Office (PMO)

A project management office (PMO) is an organizational body or entity assigned various responsibilities related to the centralized and coordinated management of those projects under its domain. The responsibilities of a PMO can range from providing project management support function to actually being responsible for direct management of a project.

Project sponsor



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Project sponsor is the person or group that provides the financial resources, in cash or in kind, for the project. The sponsor leads the project through the engagement or selection process until formally authorized and plays a significant role in the development of the initial scope and project charter.

Program manager

Program managers are responsible for managing related projects in a coordinated way to obtain benefits and control not available from managing them individually. They interact with each project manager to provide support and guidance on individual projects.

Stakeholder

Stakeholders are persons or organizations who are actively involved in the project or whose interests may be positively or negatively affected by the performance or completion of the

Project manager

Project managers are assigned by performing organization to achieve the project objectives. It requires flexibility, good judgment, strong leadership and negotiation skills. Also a solid knowledge of project management practices. The project manager is the lead person responsible to communicate with all stakeholders, particularly project sponsor, project team and other key stakeholders.

Project team

A project team is comprised of project manager, project management team and other team members who carry out the work but who are not necessarily involved with management of the project. This team is comprised of individuals from different groups with knowledge of a specific subject matter or with a specific skill set who carry out the work of the project. The project team includes the project manager and the group of individuals who act together in performing the work of the project to achieve its objectives (PMI, 2013).

Ethics

Ethics refers to a systematic study of the norms and values that guide how humans should live their lives (Desjardins, 2006 as cited in Kliem, 2012). Ethics is the activity of understanding moral values, resolving moral issues, and justifying moral judgments. It is also the discipline or area of study resulting from that activity (Schinzinger and Martin, 2000 as cited in Kliem, 2012). Ethics is a branch of philosophy dealing with values that relate to the nature of human conduct and values associated with that conduct (Twoney and Jennings, 2008 as cited in Kliem, 2012).

1.7. Overview of Methodology

This research sought to discover and analyze the possible integral factor(s) that are frequent and particular to projects that are carried out in the Ghanaian economy. The research additionally investigated project management tools and strategies whose application is/are common and related with project success. The study additionally examined the Capability Maturity of project organizations in the Ghanaian economy.

The study employed both quantitative and qualitative research techniques in its approach. The research was carried out in two phases. The first phase of the study took a qualitative approach; an exploratory study to solicit/prove/confirm project managers' perceptions in relation to project vital success/failure factors gathered from literature assessment and observation. The exploratory survey was carried out among project managers of the respective sectors to measure perceptions of the degree of impact of the project success/failure factors listed from an assessment of the literature. The essence of the approach was to contextualize the 'westernized' and 'theorized' success/failure elements of projects listed from the literature from the point of view of the Ghanaian project manager. The survey instrument by virtue of the type of research was structured and semi structured to permit the project managers to add to the initial listing and then rank according to the most significant to influence project success or failure. The new listing acquired



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from the survey participants, the perception gained on the degree of impact of the critical factor(s), informed the design of the survey instrument for the 2nd phase of the study.

The second phase of the study was a quantitative approach; an analytical survey to test the hypotheses of the research. A quantitative approach was used in this case because of the statistical analysis that was used for the independent variable (project success/failure vital factors) and the dependent variables (project success criteria).

An analytical correlation design was employed for this research. A sampling model was employed to gather data for the measurement of variables. A multiple regression analysis was carried out to decide the degree of correlation between independent variables (critical factors) and dependent variables (project success criteria) at this stage of the study. Interpretations and conclusions were drawn from the analysis of data.

In simultaneous comparisons of the groups of respondents in comparable and distinct sectors, an analysis of variance (ANOVA) was once employed.

Multivariate analysis of variance (MANOVA) was used to determine the various relationships that exist between project critical factor(s) as independent variables in distinct sectors and the various project success criteria that were listed from literature as dependent variables.

The Statistical Package for the Social Science (SPSS) was used for this statistical information, Microsoft Project was used to schedule and plan the activities of the study while Microsoft Visio was used to design all the figures in the study.

Finally, the Capability Maturity Model Integration (CMMI®) was used as a tool to examine the project management maturity of project organizations in the Ghanaian economy. Through interviews, focus group discussions, and facilitation workshop, degrees of maturity of project organizations were determined. The interview used a prepared structured and semi-structured questionnaire. The questionnaire trends were based totally on the traits of the various degrees of the Capability Maturity Model. Explanations were supplied for putting project organizations in the tiers (categories). Recommendations were furnished as to how they could go from one degree to the other (improve). Conclusions were primarily based on the various industries and their project management maturity and how they may want to prioritize improvement actions.

1.8. Research Methods

The entire research followed a ten-stage model, recognizing that the ten steps are no longer always sequential and that the model should be iterative, thus relevant for continuous quality improvement methods and in particular for further research.

- Stage 1** Observation and Literature Review led to Problem Clarification and then
- Stage 2** Hypotheses Formulation led to the definition research Concepts, Construct and Model
- Stage 3** Development of Project Success Criteria and a List of 'theorized' Critical Project Success/Failure factors. These will be gathered mainly from the Literature Review.
- Stage 4** Exploratory Survey (qualitative research) of Project Practitioners to validate/ prove/ confirm /add to the 'theorized' Critical factors and then Rank them (Phase I)
- Stage 5** Development of Final Project Critical factors of Success/failure, project management tools and techniques and Project Success Criteria for the second phase.
- Stage 6** Development of quantitative survey instrument for data collection (Analytical Survey, Phase II).
- Stage 7** Prepare and pre-test the survey instrument
- Stage 8** Data Collection and Analysis
- Stage 9** CMMI Investigation, Interpretation, Conclusions and Recommendations
- Stage 10** Presentation/Defense



The survey data collected from a sample of individuals who are currently working as project managers or who have had the experience of managing a project through the phases of initiation, planning, execution, control, termination and operational processes in any of the five sectors of planning, service, manufacturing, energy and Construction.

1.9. Research Questions and Hypothesis

Four research questions guided the formulation of the project hypotheses. The research question 1 generated 8 hypotheses; research question 2 had 16 hypotheses; research question 3 also with 16 hypotheses; no hypothesis for research question 4, altogether 40 hypotheses.

1.10. Assumptions and Limitations

This research study assumed that survey data would be obtainable from the organizations associated to the eight sectors of the study. It also presumed that the participants would accurately complete questionnaires and other query information. At the same time, since the survey instrument quantitatively measured the research participant's perceptions regarding project factors related to dimensions of project success; degree of subjectivity was inherent to the data collected. Because of this, systematic variance in the survey population due to either known or unknown influences could cause bias. Furthermore, there was the potential for receiving diluted information due to proprietary information concerns. Finally, the research method cannot account for all of the increasing complexities of the project management process and associated requirements that may need to be addressed. This research study was limited to the eight sectors of Manufacturing, Agriculture, Banking, Energy, Tourism, Import & Export, Telecommunication and Mining sectors in Ghana.

1.11. Organization of the Remainder of the Study

As shown in Figure 1.1 (Roadmap of the Research Study), the research was driven by means of the problem statement, which generated the research questions and led to the development of the null and alternative hypotheses of the study. The literature review addressed each of the independent variables (critical success factors common and precise to the three sectors focused on) and the dependent variable being project success criteria which have been found to be three dimensional particularly Project Goal (Achievement of Project Time, Budget, Performance and different requirement), Project benefit derived by Customer (Level of Customer Satisfaction, Customer level of Loyalty and Impact of the Project on the Customer) and Project benefit to be derived by the Organization Performing the Project (Profit, Market share or growth). A synopsis of subsequent chapters in the study follows.

1) The Local Context: Chapter 2 of the study looks at the Ghanaian economy mainly the eight sectors under consideration in this study. For each of the sectors under investigation, there is historic information, their roles in the Ghanaian economy, in some cases challenges and trends and likely ways forward. Examples projects in these sectors are included.

2) Literature Review: Chapter 3 of the research study is a literature review that commenced by investigating scholarly literature to attain insight to the motives why projects fail generally and specifically in Ghana. This is accompanied by key background information that provides context for the study, such as a review of the necessary differences between project success and failure factors, project success criteria, project management tools and techniques often cited as best practices, project types and their project management needs (project triggers), leadership and organizational cultures, project management competencies, perceptions of project management in Ghana and Africa, stakeholder ideas in projects, applicable project management knowledge areas and the project management process groups.

3) Methodology: Chapter 4 of the study carries a description of the research study's methodology and methods, followed by a statement of hypotheses, a description of the survey instrument design; the sample and population, data collection protocol, and data analysis procedures.



4) Presentation of Research Data Analysis and Results: Chapter 5 contains a comprehensive description, analysis, synthesis, and presentation of the survey data collected including the demographics of the sample population.

5) Discussions of Research Results: Chapter 6 discusses these results under the three sectors chosen for the study.

Firstly, it discusses the result on the demographic information which includes Gender, Number of PM Practitioners, and Academic Qualification of Project participants.

Secondly, it discusses information such as the Dollar values of Project, Project Duration, Nature of Organization Performing Projects, Bidding Status of Projects, Types of Funding of Projects, Project Financing Strategy, Achievement of Project Objectives (Cost, Time, Scope), Achievement of Customer Benefit (Satisfaction, Loyalty etc), Achievement of Benefit to Organization (Growth, market etc.) and the Overall Project Success.

Thirdly, it discusses the results from the Critical Project Factors in the eight sectors.

Fourthly, it discusses the Tools and Techniques extensively used in the five processes of Initiating, Planning, Executing, Monitoring and Controlling, and Closing and finally, it discusses the results from the assessment of the Project Maturity of Organizations in the eight sectors.

6) Summary, Conclusions, and Recommendations: Chapter 7 of the research study includes a summary of the research analysis; a suggested paradigm for project management success in the eight sectors; and recommendations for further research.

1.12. Chapter Summary

In summary, this chapter introduces the study by stating the ultimate objective of the research which is to improve project management practices in Ghana and other developing nations with similar conditions to Ghana. It provides background information for the study by highlighting the recent adoption of project management concepts for organizational and national growth in the developed world. Then it paints a picture of project failure rates in Ghana and therefore the need for PM knowledge.

The chapter indicates the scope of the study which included the selection of eight sectors (Manufacturing, Agriculture, Banking, Energy, Tourism, Import & Export, Telecommunication and Mining) of the Ghanaian economy. It provides the rationale for the selection of the geographical area as well as the three sectors.

The chapter further proposes a working model to help improve the project success rate in Ghana. The chapter provides conceptual and operational definitions of terms followed by an overview of methodology. The methodology includes 4 research questions and 40 hypotheses. Finally, the chapter concludes with Figure 1.1 depicting the organization of the remainder of the study as a roadmap showing the direction of the research undertaken.