



## STRATEGIC PROJECT MANAGEMENT PRACTICES ON PERFORMANCE OF PHARMACEUTICAL PROJECTS IN RWANDA CASE STUDY: GOMHS LTD - APEX FARMA PROJECT

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### **Abstract:**

**Background:** The purpose of this study was to investigate to assess the effect of strategic project management practices on the performance of pharmaceutical projects in Rwanda a case study of GOMHS Ltd - APEX Farma Project. The study specifically focused on Evaluation and control, Project Integration management and project Risk Management on performance of GOMHS Ltd - APEX Farma Project. Strategic project management practices as independent variable in this study was empirically examined and exposed to see whether they brought new knowledge and concepts to successful completion of pharmaceutical business projects in Rwanda.

**Materials and Methods:** The data for this study was collected by of self-administrated questionnaire one institution specialized in pharmaceutical business in Rwanda for the last 20 years. Software SPSS-19 version will process data by adopting the statistical techniques regression. The results of the study were examined whether strategic project management concepts are significant and have positive impact on successful completion of pharmaceutical projects in Rwanda. At the end, this study served as guideline for pharmaceutical business industries in Rwanda to be more successful.

**Results:** The study found that Evaluation and control, Project Integration management and project Risk Management affected performance of GOMHS Ltd - APEX Farma Project. The study further found that R -square is the model's goodness of fit was R squared was 0.759 with  $p=0.000$  indicating that there was a statistically significant effect of strategic project management practices on performance of pharmaceutical project in Rwanda ( $F=8.923$ ,  $R^2 = 0.759$ ,  $P\text{-value} = 0.000$  at  $\alpha=0.05$ ).

**Conclusion:** The study concluded that execution of project managing as a management approach, in previously organized administrations, a posh process that needs strategic managing involvement The essential rules of project management use are set within the sort of eight questions that require to be answered at a senior management level. The study recommends Management should has updated and follow risk management plan/ anticipative plan through communication mainly flow hierarchical levels, ensure compliance with policies, rules and regulations in force to have, update and follow standards operational procedures (SOP), have hierarchical culture, structure and procedures has an impact on the management plan that lead to performance options or market penetration options and perform projects risk analysis subject to PESTEL analysis before implementations.

**Key Words:** *Project Management, Performance of Pharmaceutical Projects, Gomhs Ltd - Apex Farma Project, Rwanda.*

## I. Introduction

For last decades, project management has been increasingly demonstrated itself as a competitive strategy in all industries. Despite the fact the pharmaceutical sector produces medicines to save life; business management concepts are very exploited and given important place in operations (Anamul, 2011). The pharmaceutical industry, for example, has become a successful example of business-to-consumer practice, attracting the attention of project management experts (Joseph *et al.*, 2004).

A part from Research & Development, come strategic project management priorities in pharmaceutical industry worldwide. The first target of pharmaceutical firms is to maximally retain and satisfy customers (Anita, 2009; Charles *et al.*, 2012; Prashant *et al.*, 2012). To satisfy a physician is one of great importance towards their loyalty to medical products (Hani *et al.*, 2012) which at their turn increment the advertise share (Morgan *et al.* 2005). Therefore, satisfaction of prescribers is an important element to be taken into consideration to set up marketing strategies (Yang and Peterson, 2004).

The healthcare system around the world allows physicians to choose which prescription to give by advising which drug is best for their patients (Hani *et al.*, 2012; Prashant *et al.*, 2012). As a result, physicians are viewed as a powerful factor in influencing the end consumer's decision. Pharmaceutical laboratories focus all marketing strategies to satisfy the needs of their consumers and achieve maximum satisfaction in the current competitive period (Anita Mishra, 2009; Charles *et al.*, 2012).

Furthermore, numerous research have shown that if the purpose of marketing mix methods is to satisfy physicians, the promoting blend approach must focus more on physician satisfaction (Prashant *et al.*, 2012). As a result, for many pharmaceutical companies, recognizing the relationship between marketing mix and achieving a high degree of doctor satisfaction is the most critical issue. The fundamental goal of this research is to address these challenges.

The 21st century business environment has forced us to use exact data and information of their inside and outside areas in strategic, operational, and strategic decisions. A decision made alike can create a more profitable advantage depending on the sources. In this information age, Dwindle Drucker, the father of the management hypothesis, has clearly stated that no other capital or person, other than ordinary goods, was the result of production. In step it, and it was informative. In addition, Allow (1996) has demonstrated the see-based concept of firm-based information. This anti-detail concept is the organization's most important source of competitive edge because it is difficult to be imitated by hard work.

It also claims that firms that hire their information resources properly can punish those who do not. In this way, information is considered a source of competitiveness of the organization. The last phase of the strategic managing process is all about evaluating. This phase aims to transform or take steps to develop strategies and measure and evaluate the work. To reach these goals, it includes reviewing essential inner matrices for continuous internal and external evaluation, carried out in the strategic planning phase, and identifying other internal and external factors that have emerged. Strategic management creates competitive advantage by developing an effective venture strategy, as described earlier in the process. This business plan is also influenced by the organization's internal and external circumstances. Strategic management documents frequently describe a notion known as competitive intelligence, which is related to the concept of the organization's external nature.

The pharmaceutical industry in Rwanda is at its embryonic stage comparing to other manufacturing sector which play a key important function in economy and labor market. Importations of medicines represent 98% of the country needs and the quasi totality is for private sector. Recently, Rwanda food and drug authority was put in place to regulate and develop the sector to serve the population but also provide quality cost effective medical products in Rwanda. Lanka and Martin (2007) believe that he is the main influencer and root cause, of failure of business plus the barrier to realizing long-term profitable impact. Cicmil & Hodgson (2006) points out that the integration between ancient, systematic project management and additional project management failure has led to the acceptance of other researchers that adopting and implementing ancient project management law does not exclude project failure, nor does it at the end guarantee a project to be a success.

In Rwanda, the National Pharmacy Council (NPC) was established as an independent organization accounting for the regulation of registered pharmacists as Act No.45/2012 of 14/01/2013. It empowers the national pharmacy and regulation system and the accreditation of institutional training programs. The competition is the one major problem faced by GOMHS Ltd - APEX Farma Project. According to a survey from health insurance associations, the Rwandan market is becoming increasingly accessible to GOMHS Ltd - APEX Farma Project, which has great branding and an emphasis on creating relationships with doctors. In such a business, customer satisfaction is critical. The development of a satisfaction model is an additional task. Thus, this is an opportunity to conduct a study on a competitive market like Rwandan. White *et al.* (2002) found that reducing or eliminating gaps between organizational process and its execution was crucial in determining and maintaining competitive advantage.

There are other consumer behaviours such as brand recognition and adulation, as well as a negative attitude toward locally and/or regionally produced goods. These challenges may cause regional pharmaceutical firms to fail to play a vital role in the economy and labor market, as is expected in the East African Region's member states. Various studies have been conducted in specialised areas of project management techniques within majority of corporate organizations and private sectors while a few focused in the public sector. Therefore, no previous studies and / or studies were available on the effect of project management in the medical field in Rwanda. The study investigated the effects of project management strategies on the performance of the pharmaceutical industry in Rwanda. The specific objectives that guided this research are:

- i. To assess the effect of Evaluation and control on performance of GOMHS Ltd - APEX Farma Project.
- ii. To determine effect of Project Integration management on the operations of GOMHS Ltd - APEX Farma Project.
- iii. To establish effect of Project Risk Management on performance of performance of GOMHS Ltd - APEX Farma Project.

## ii. Theoretical Literature

Strategic planning is crucial for any civilization. Most importantly, effective project planning can mean the difference between long-term success and disappointment. Therefore, planning project strategies to realize sustainable competition in project management requires attention on common organizational strengths, and collaboration between project team members, managers, and workforces from different corporate divisions, also because the characters of various participants in general -i.e. sponsors of a high-quality project, also as corporate framework and managerial culture. Additionally, the event of the functions of all project bosses within the organization can perform a task within the company's superior performance in strategic project management. Within the subsequent segments, we will deliberate all of the themes mentioned above.

It means that if policymaking at any level does not necessitate a mixture of internal and external knowledge, then the utilization of data and wisdom are often wont to make decisions. This may even be a basis of viable gain. Additionally, consistent and varied use can cause competitive gains. This results in the choice at another stage that information management and intelligence skills are often tools to assess the organization's current and external capabilities within the strategic management process. Beena, (2006) attempts to spotlight the magnitude, concept and control of the latest expansion of integration strategies especially within the sort of integration and procurement followed by firms within the pharmaceutical industry. He found that a lot of medical projects were using these strategies during a new context for global integration, especially in overcoming the conflicts created by market changes and strengthening their market positions. The study concluded that the mingling approaches shadowed by the companies enabled them to significantly reduce costs and led to raised performance of co-operatives compared to non-affiliated companies within the same industry.

Kale & Little (2007) acknowledged that the Indian industry has become a serious supplier of medicine that is cosmopolitan in each developing and developed country. The crusade of the Indian medicinal business alongside R&D tax rates marks a dramatic change from the importer to the inventor of the drug. Industrial and scientific policy policies of the Indian government and changes in property law have played a serious role in building this performance-enhancing R&D. This study shows that the Indian medical company 96 has taken a course from repetitive imitation to imaginary imitation to manoeuvre up the list of medicines for medical research and development.

Finally, the world seeks to enhance technology in applied research and development (R&D) as fallouts of variations in copyright enforcement. Medium technology skills acquired in teaching art imitate these companies as a solid foundation for skills development in modern R&D. These findings contribute to government policies as a robust

strategy in various developing countries despite some challenges thanks to global compliance with patent laws promoted with the assistance of the planet Trade Organization.

Pradhan (2006) agreed that global competitive tendencies within the Indian medicine productiveness? Where does the manufacturing substitute comparison to its global partners in terms of pharmaceutical supplementation, production, research and improvement and exchange performance? What new methods are Indian pharmaceutical companies using to eliminate global companies? These interrogations are responded during this paper. it's established that the strategic insurance policies of the strategic authorities were the key aspects that changed the recognition of the Indian pharmaceuticals from the importer and distributor of pharmaceutical to make the pharmaceutical industry more efficient. India arisen together of the fastest growing industries within the world with residual trade and 98% exports. However, there are some restrictions on government insurance policies that has got to be addressed, like low productivity and R&D production. The pharmaceutical business are often demarcated as a mixture of processes, companies and activities convoluted within the development, manufacture and production of profitable medicines (Shah, 2004). Consistent with Xie and Breen (2012, pharmaceutical chemistry is one among the foremost widely used drugs, the foremost cosmopolitan and therefore the most addictive. In addition it includes the excessive use of your time and time in conducting research project at low cost of success in drug finding and medical experiment, a standard argument for product patents known for top uncertainty of requirements and arrangement (Shah *et al.*, 2004).

Narayana *et al.* (2012) determined that slower business growth has been a serious activity within the past. Talias (2007) found that new charges in businesses showed a big decrease thanks to the 15-30 years used up in developing new drugs. The world Health Organisation, WHO (2009) has found that the value of medicines increases by up to 650 percent of the world's best-known countries in less developed countries than the low availability of less costly drugs on the market. Insufficient revenue, poor forecasting, lack of stock revenue, inefficient delivery methods and availability of antiretroviral drugs have led to lower access to less costly drugs needed within the major health sector (WHO, 2009). Porter (1980) views prices, product uncertainty, competition, the flow of state, electronic negotiations with suppliers and consumers, the acquisition of latest drugs within the legal field and overseas funding as main problems within the medicinal industry. In order to satisfy complex needs, companies got to find innovative bases of competition and take part within the development of latest and sustainable alternatives.

Srivastava (2008) identified the threats and doubts related to the return of prescribed drugs like duration, quality, volume and various returns; performance measurement and price-linked bounds for back-end networks; consumer manners and favourites; selecting the merchandise retrieval option; and therefore the price of connecting to the retreating side to provide the sequence. Grossmann *et al.* (2004) has recognized that product availability, design, chain production and global health cycle testing are probable to stand as captain encounters within the medical field over subsequent few years. Pisano (2000) was helped by the necessity for the pharmaceutical industry to find out from various manufacturing the way to effectively manage affordable development policies and fast lead times, counting on outcome and billing competition.

Bakoo and Chan (2011) consider compounding white plague to be difficult for the reason that it call for the involvement of specific stakeholders like producers, retailers, suppliers, customers, recording service brokers and controlling bodies. In arrears to this involvedness, a medical quarter has not been thoroughly researched. Additionally it is felt that thanks to lack of research; 1 / 4 of medicines in developing countries cannot contribute much to global markets. As within the case of the Indians, Mahajan *et al.* (2015) found that the pharmaceutical business makes the foremost use of its product with rock bottom price of common pills within the domestic market. Therefore, now learning about will attempt to recognize standing spaces during this area on the idea of previous available texts. Within the analysis of the books, the writers have established a draft as evidenced in Figure 1. The framework usually has three strategic problems like resources, methods and operations. The ultimate section of the paper is ready as follows. Section 2 deals with literature reviews on specific medical issues. The third section discusses the summaries and gaps within the review.

Globally pharmaceutical organizations face challenges like global standards of health, health reform, expiration of patents and increased supply of suppliers. To satisfy these encounters, pharmaceutical companies got to diminish prices, increase speed, and hurry up marketing. Achieving success in developing unstable global strategies is crucial. Shah (2004) identified key issues that play a crucial role within the expansion and development of a pharmaceutical supply system like process growth, potential planning, community planning, plant and piping system and improvement management. Perez-Escobedo *et al.* (2012) found that the development of assistive strategies and therefore the

selection of latest product portfolio management systems are important in reducing opportunities while achieving a goal or set of goals, which suggests increasing online expectations, reducing marketing time.

Wan *et al.* (2006) work to deal with the high level of stress prerequisite by the selection of timeline-depending strategies like skills reduction/increase. Jain and Grossmann (1999) have settled a machine that assists decisions that are particularly effective in quantity and efficiency at work level. Ageron *et al.* (2013) specialise in one process of supportive and customer-focused issues in improving overall competitiveness. this will only be achieved through the initial use of hand-held assets in high yields. Prashant (2017) found that managing any equipment is an assignment and can be extremely difficult because the mission grows from location to Global. There are many factors like time differences, cultural, linguistic and financial differences that directly affect the operation of the equipment and which can be a risk to business success.

It has been found that head-on contact is especially limited in international ventures as memberships are located in several locations and as a result, there are potential for misunderstandings, which may be a major challenge thanks to different backgrounds. A wide-ranging appraisal of the literature on the changing management roles within the management of World Pharmaceutical and bioscience projects is that the basis of the vision of this paper. This paper bring to an end that each one Pharmaceutical & Life Sciences equipment is special and therefore the challenges, difficulties, menaces related to each task are a number of the conditions and conditions that haven't been seen before.

It's been established that folks can have as many offers of motivation, morals and standards as they are doing from certain nations. It is important to determine and use typical project management equipment and a comprehensive project management system for World Pharmaceuticals and Life sciences successfully. Over the years, strategic management challenges have often been addressed in literature associated with challenge management. The starring role of regulatory thinking in attaining corporate attainment is extremely common, and therefore the look for a deeper thoughtful of the key aspects of strategic task management will gradually become a crucial challenge to think about (Anderson and Merna, 2003). Though, granting considerations about the importance of strategic direction in machine management are growing, there's still a scarcity of flawless description and general awareness of the acceptable allocation system as a coherent strategic management framework (Arto *et al.*, 2008; Patanakul and Shenhar, 2012).

In addition, there look as if to be an inequality within the level of scientific development and a sensible view of the terms used: the tactic of allocation or strategic management of programs. The aim of this paper is to present and talk over the domino effect of a survey piloted in the midst of employees within the management of a Polish business and is aimed primarily at going to know their views. The research questions were associated with informing the set goals - implementation, tactical project, strategic managing and therefore the definition of the differences between strategic task management and performance. Not only opinions but also differences in views and homes of such similarities are scrutinised. As research fallouts show, even though the perception of a project approach seems vital, it is still confusing.

There are various opinions on strategic needs and strategic management challenges, especially with reference to the part of project managers in tactical procedures. The stimulus of technology and knowledge as societal power is clear. Consistent with numerical authors identifying strategic tasks is vital in achieving and supporting the long-term goals of a corporation. Strategic projects are fundamental to corporate development, profitability, and effective implementation of reforms; they are often linked to great improbability, but then their achievement may be a home of unimaginable income and long-standing earnings. (Shenhar, 2004, Srivannaboon, 2006).

According to Asrilhant *et al.* (2004) strategic planning has a duty to have certain characteristics, like the power to use it effectively and with full oversight, satisfactory demonstration of the facts of the trading business, and compliance with the aim and vision of the corporate. within the hypothetical sentences above, the aim of the strategy may have to be confirmed as a theoretical explanation and therefore the effectiveness of the processes that provide strategic understanding. Strategic managing may be a multifarious course that focuses on the optimal use of corporate prospects and translates them into potential value-oriented activities in terms of achieving long-term organizational success. In this multi-sectoral approach, a crucial objective is to get competitive advantages of segregation and a spotlight to strategic objectives through the utilization of mechanical management (DyReyes, 2008). Heerkens (2007) describes project management through a categorization of arrangements, methods, processes, equipment and manners that, composed, aid to work out the extent to which a corporation institutes a beneficial relationship amongst appropriate management practices and high practices within the process implementation of strategic objectives.

### iii. Empirical Review

Brown (2009) studied the execution of project managing as a management approach, in previously organized administrations, a posh process that needs strategic managing involvement in South Africa. The study examined the remaining three factors that contribute to the present complexity is explained. The study found that the essential rules of project management use are set within the sort of eight questions that require to be answered at a senior management level. This focuses on a robust commitment to changing old, seemingly well-proven practices and outcomes and outcomes in organizations. The article then goes on to suggest a framework for project management implementation.

Manguru (2011) conducted research on strategic management strategies that influence the performance of Naivas limited. Research focuses on this since the performance of all societies within the financial system is perilous to trade and industry process and growth. It's a birthplace of work, so a far better typical of alive. The info includes all evidences, statistics collected by hand, and text from books, interviews, reports published and online. Strategic management practices are often wont to close the operational gap that a corporation finds. Organizations use strategic management methods in their operations that have a big impact on market conditions, job experience and diversification of production lines. Their success depends on effective strategic management plans. Onyango (2014) lead a study on strategic managing practices espoused by Kenya full service bank Limited. Respondents interviewed were senior KCB executives who were straight intricated in the strategy. With reference to the strategic managing practices adopted by KCB, the study revealed that senior managers at KCB features a kind of strategic managing practices approved in their society and dedicate greatest of its time, human resources, expertise and resources to the whole strategic managing course.

That reading also revealed that strategic management strategies are employed by senior executives in terms of six steps in shaping the company's mission and vision, strategic implementation, strategic objectives, situational analysis, strategic management evaluation and selection. A study of the connection between the strategic management challenges faced by KCB, this study has shown that they need challenges in organizational structures and challenges in monitoring strategic management strategies. Dietrich, and Lehtonen (2005) have studied the effective management of strategic objectives by multiple projects. The study looks at ways to effectively manage strategic goals in the context of many projects. The relationship between management processes and success measures is assessed and determined by the success factors. There are several aspects of success available related to the management of each project.

Whitley (2006) studied project-based firms: A new form of organization or contextual diversity and found that there was an increasing need for project-based formworks in multi-industry planning that promotes greater interest in project-based firms (PBFs). However, PBFs vary widely in many ways, in particular the size of their objectives and outcomes as well as the diversity and sustainability of roles and responsibilities. On tiniest four differing types of PBFs are often illustrious by standings which was predictable to disagree in size and significance crossways all sectors of industry and differing types of societies thanks to differences in investment and labor costs and integration costs.

Kurgat (2015) piloted research on strategic managing practices and defies within some parts of India. This scholar work was piloted with the ambition of building strategies for the management of strategies espoused by that part of India called Nandi County and therefore the encounters facing the adoption of strategies within the Nandi County Government. The matter of research was learned through the utilization of content examination. The study establishes that despite the challenges facing the embracing of strategic managing does like pecuniary inequality.

### iv. Critical Review and Research Gap Identification

Even if project managing is taken into account a multi-sectoral field, only a narrow quantity of various project management courses are used (Dvir & Shenhar, 2007). The corrective guidance of project managing study combined with a scarcity of perceptions and sophisticated analysis, which basically offers a chance to explore the present problem of project managing disappointment within the perspective of a "strategic / business perspective".

As an replacement to exploring the normal project management organization only, strategic managing and project managing fields to deal with current project let-downs and customary failures within project managing discipline by strengthening the method of bring into line business intentions and project strategy to realize project success and project strategic planning of a contest organization for project portfolio management and project management and management skills, skills and project leadership.

Recent research shows that companies round the world are bringing up the rear billions in project implementation and, consistent with Stanleigh (2006), one among the main contributors to the present trend is that the inconsistency between company projects and methods. Documents on project management performance highlight levels of failure within the IT sector (Stanleigh, 2006). Patton *et al.* (2002) found that closing the gap between strategic planning and implementation is critical to achieving and maintaining competitive advantage. For this reason, the event of a mechanism that gives processes and tools to realize full organizational integration is important to attaining reasonable benefit (Kenny, 2006).

#### **v. Theoretical Framework**

The research provides ideas for the dynamics drawn in the current study. Theory Portfolio Management Theory, open system theory, and resource source based theory are some of these concepts.

##### **Project Portfolio Management Theory**

Kerr (2008) defines “portfolio-based management” as an honest practice employed by societies to realize world-class sustainable performance and Graham and Longman (2006) propose that overall appraisal of projects helps to spot projects that take along the best return on investment. Unambiguously, PPM may be a way of analysing the whole list of organizational projects as an investment in order that capitals are distributed consistent with what proportion the project change to to the business (page 87). Additionally, safeguarding that the portfolio strategy remains according to business and business strategy is a crucial function of portfolio managing.

Agreeing to MacIntyre (2006), the most defy fronting organizations nowadays is to align projects with business strategies for example merely 23% of executives of nearly 100 and fifty fifteen worldwide consider their project positions to be fully aligned with the core business strategy. Also, a study by Stanleigh (2006) shows that only 32% of firms show that they have a project priority process and Garfein (2007) notes that organizations often see about 60% of their strategies due to errors and corruption in planning and implementation.

##### **Open Systems Theory**

Open systems theory emphasizes on the link concerning nature or environment and therefore the organizations. The idea take up that ventures are ready to process facts about own specific environment showing more alteration skills to shift within the appropriate condition. Open systems approach sights the society’s interaction with the exterior setting as dynamic for the organization existence and triumph within the open systems, any change in any fundamentals of the system roots changes in other components (Wang, 2004).

##### **Resource Source-Based Theory**

Resource-based perspective is found in Pettigrew, et al, 2002 and examines the reasonable benefit within the setting of the organization’s sole inner possessions. Consistent with Johnson et al. (2005), establishments will gain reasonable benefit if they need skills that other administrations do not have or have trouble acquiring. The notion of competition of strategies to gain profit is understood because the “resource-based perspective of the strategy”- during which an organization's competitive advantage is defined by the division of its capabilities. Accepting a resource-based strategic choose to apprehend by what means strategic business objectives run through project management execution requires recognition of the part of ancient project managing practices and therefore the influence of organizational project managing expertise as “strategic assets” by Thomas *et al.* (2002).

According to Pettigrew et al (2002), she argues that project managing ought to be reflected as imperceptible, efficient and strategic that underwrites to competitiveness and thus “organizations should invest within the necessary resource development processes related to strategic management” (p. (269). Also, Green (2005) argues that the target of competition, strategic skills and effective information management should be supported the project management approach; additionally, it praises that organizations "make endless competitive advantage in project managing by building an occasional, unparalleled, critical and robust star project.

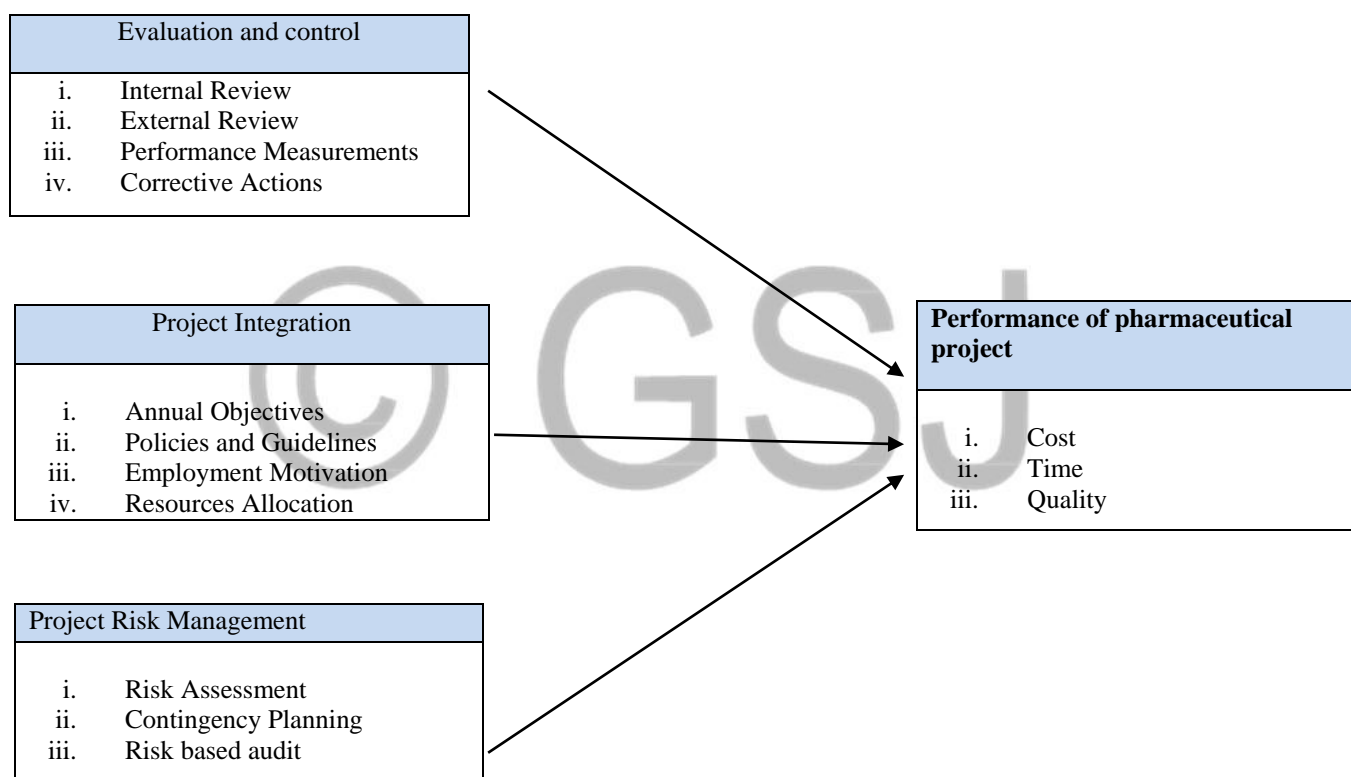
#### **vi. Conceptual Framework**

In strategic management practices, after completing the external and internal assessments and identifying significant weaknesses, strengths, threats and opportunities, the strategic decision-making process begins (Hinz 2009).Based on

this conceptual framework, after identifying the divisive plural objectives, periodic precautionary measures are recognized in each policy. Career progress is monitored quarterly with standard card tools, and strategic adjustment steps, measurement objectives, and evaluation steps are performed, if necessary, by a technical team as analysts. As David (2007) states, although each strategic management framework must be structured separately and primarily based on the realities and needs of the organization, the proposed framework aims to provide a comprehensive concept of conceptual development framework that serves as the driving force behind the overall strategic management process.

### Independent Variable

### Dependent Variable



Source: Researcher (2021)

**Figure 2.1 Conceptual Framework**

## vii. Research Materials and Methods

### Research Design

The researcher used a multidisciplinary approach by incorporating both calculated and appropriate methods. The measurement method was used to collect numerical data while the quality process was applied to non-numerical / narrative or text data. As recommended by Creswell (2008) the hybrid structure was developed based on the following steps: flexible research identification, population selection and sample size, selection method measurement, relevant



data collection, analysis, interpretation and discussion of results. The research was a descriptive study that looked at the impact of strategic project management approaches on the performance of a pharmaceutical project in Rwanda.

### Sample Size and Sampling Techniques

The section will aim at establishing the sample size of the study respondents and how sampling was done. The sample size of this study was calculated from the Slovin's formula given as:  $n$  is equal to:  $N / [1 + N (e)^2]$

While  $n$  represents the sample size,  $N$  is total population

And  $e$  is Error tolerance. As the number of people surveyed ( $N$ ) is 148. The tolerance error was 0.05.

Hence the sample size was determined as indicated below:

$$n = 148 / [1 + 148(0.05)^2] = 108$$

The study will then use a sample size of 108 people to be analysed, which was selected using a randomized sample procedure. This makes up a sample rate of 73% of the study population. The study will adopt randomized sampling strategies for selecting respondents to represent targeted individuals. The sample method used was used as it involves dividing the number of people identified by different units according to any combination factors. Once this has been done samples were taken from each group (Chandran, 2004). This approach assured the researcher that the sample would represent people. The sample size is diagrammatically displayed below:

**Table 1: Target Population and Sample Size**

	Population Strata	Targeted population	Sample Size
1.	Regional and Country lead	2	2
2.	Medical representatives	4	3
3.	Other staff	6	4
4.	Medical doctors	108	79
5.	Pharmacist	28	20
<b>Total</b>		<b>148</b>	<b>108</b>

Source: GOMHS Ltd - APEX Farma Project, (2022)

### Data Collection Instruments

The coursework was helped, at the same time, by both collected and referred information throughout the research process. Data collections procedures also will include as well as questionnaires, interviews and observation if this revealed necessary. Respondents using a questionnaire and a discussion method collected this data manually. The questionnaire will only be compiled in orderly / closed text to answer the selected answers from the answer options for each item in this question. This tool is popular because it is less expensive compared to other methods, can be completed where respondents are located and covers a wider area of space (Amin, 2005). However consultation was used because the completed questionnaire does not allow for investigation, implementation and clarification.

This data was collected through desk research / document review with the help of a documentary checklist. This checklist will help guide the study on the topics covered, the type of data to be used, the type of documents from which such data can be obtained and the institutions / sources from which that data can be collected and the contact person concerned. Various documents such as member information, partnership agreements, supplier contracts, memorandum of association, magazines, newspapers, journals, etc. was reviewed for more details.

A textual checklist will guide the author's full understanding of the subject being studied, by identifying details that are not available using other tools. It will also be helpful to keep track of the study between large amounts of secondary data from multiple sources.

### Validity and Reliability of the Instrument

The mechanism content validity index was checked by examining instrument by a panel of experts to judge if it contains all the expected information considering the study objectives and its subsequent conceptual framework. Each item was judged and rated in as per the study objectives as "relevant" or "not relevant". Cronbach's alpha co-efficient for content validity pegged on a minimum acceptable index of 0.70 as recommended.

### Data Analysis

Facts were collected and discussed from questionnaire filled by the participant, then analyzed by the researcher using licensed software such as SPSS (Statistical Package for Social Sciences version 21.0) Main statistical analyses that

was performed include the calculation of descriptive statistics (means, standard deviation) and inferential statistics (correlation coefficient and regression).

The following regression equation was formulated

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \alpha$$

Where Y is performance of pharmaceutical project

$\beta_0$  is a constant

$X_1$  is evaluation and control

$X_2$  is project integration management

$X_3$  is project risk management

$\beta_1, \dots, \beta_3$  is regression coefficient

While  $\alpha$  is referred to as term-error

### viii. Results

**Table 4.2: Response Rate of the Study**

Results	Frequency	Percentage (%)
Respondents	62	57.4
Non-Respondents	46	42.6
<b>Total</b>	<b>148</b>	<b>100.00</b>

Source: Survey Data, 2022

Out of a Total of 148 responders, 108 were chosen at random to receive research questionnaires. Only 62 of the 108 research questionnaires were completed and returned, yielding a response rate of 57.6%. This corresponds to Swann's (2006) study, which revealed a comparable response rate. The response rate found was adequate for the study's analysis and discussion. The 42.6 percent of unreturned questionnaires could be attributed to respondents' inability to return on the collection day due to delays in filling out the questionnaires and Covid-19 lockout.

#### Profile of Respondents

As shown in the Table below, the demographic features of the respondents were separated in terms of gender, highest educational level, and age.

#### Gender of Respondents

In order to decide the nature of gender distribution in Rwanda's pharmaceutical sector, respondents displayed their gender profile as either male or female. The gender profile of the sample is shown in Table 4.2.

**Table 4.2: Gender**

Gender	Frequency	Percentage (%)
Females	40	65.00
Males	22	35.00
<b>Total</b>	<b>62</b>	<b>100.00</b>

Source: Human Resource Office, 2022

According to the survey, 65 percent of the respondents were females, while 35 percent were males. Females dominated the pharmaceutical department, according to the findings. The findings of the survey matched those of a market research study conducted by Hague (2002), which found that 60% of respondents were female, accepting that the pharmaceutical industry is still controlled by women. This, conversely, may not have an impact on the research.

#### Education Level of Respondents

Respondents were asked to provide their highest educational level. The Table 4.3 depicts the various levels of schooling across the full group.

**Table 4.3: Education Level**

Education level	Frequency	Percentage (%)
Diploma holders	09	15.00
Bachelor's degree	33	53.00
Master's degree	18	29.00

Professionals courses	03	03.00
<b>Total</b>	<b>62</b>	<b>100.00</b>

Source: Primary data,(2022)

The Table 4.3 shows that 53% of respondents have a bachelor's degree in accounting, 29% have a master's degree in accounting, and 15% have diploma certificates. However, only 3% of those polled had completed a professional degree. This demonstrates that the respondents are capable and trustworthy in their investigation of the study's underlying difficulties.

#### Experience level of Respondents

The questionnaire asked respondents to describe their experiences, and the results are displayed in Table 4.4.

**Table 4.4: Experience Levels**

Ages	Frequency	Percentage (%)
1-3 years	21	34.00
4 -6 years	29	46.00
7 -9 years	10	16.00
10 &Above years	02	04.00
<b>Total</b>	<b>62</b>	<b>100.00</b>

Source: Primary data,(2022)

Table 4.4 shows that 46 percent of the respondents had a degree of experience ranging from 4-6. 34%, on the other hand, had 1-3 years of experience. The remaining 16% of respondents had 7-9 years of experience, while only 4% had 10 years or more. This means that the majority of those working in the pharmaceutical industry have the necessary experience in strategic project management.

#### Presentation of Findings

Each objective should be addressed by the analysis.

#### 4To assess the effect of Evaluation and control on performance of GOMHS Ltd - APEX Farma Project.

The respondents were asked to select the rate statement on the effect of Evaluation and control on performance of GOMHS Ltd - APEX Farma Project.in relation to their performance. The Likert-type scale was applied to rate their responses on a 5– point scale going from 5 = Strongly Agree to 1 = Strongly Disagree

**Table 4.5. Evaluation and control on performance of GOMHS Ltd - APEX**

Evaluation and control on performance of GOMHS Ltd – APEX	Strongly agree	Agree	Un certain	Disagree	Strongly disagree	Mean	SD	
	%	%	%	%	%			
company processes within projects taking into account internal factors	-	10	18	20	40	28	3.88	0.89
Company delivers projects for its business purposes	-	66.7	-	-	33.3	-	3.48	0.62
organization periodically collect and analyze market data and other external factors affecting the success of the project	-	-	-	71	29	-	2.446	0.324

Projects is subjected to PESTEL analysis before implementations	-	-	-	11	-	89	2.137	0.212
Managers are requested to document lessons learned and apply them to future projects	-	-	-	50	-	50	2.892	0.135
company have, update and follow change management plan upon authorised request from peer group	-	-	-	71	29	-	2.524	0.126

The results in Table 4.6 showed that company delivers projects for its business purposes processes within projects taking into account internal factors the majority of the respondents agreed represented by 40%, 30% strongly agree, 20% Of the respondents were uncertain while 10% disagreed,(Mean 3.88: SD=.89) , and none strongly disagreed that there isn't Company delivers projects for its business purposes processes within projects taking into account internal factors facilitate the change project performance. Findings on whether the company delivers projects for its business purposes indicated that over 50% of the respondents, which is 66.7% agreed and 33.3% disagreed that organization company delivers projects for its business purposes ,(Mean 3.48: SD=.062) and this meant that Company delivers projects for its business purposes. Findings on the statement that organization periodically collect and analyses market data and other external factors affecting the success showed that 79% of the respondents were uncertain while 21% strongly disagree ,(Mean 2.446: SD=.324) that organization periodically collect and analyses market data and other external factors affecting the success. The majority of the respondents strongly disagreed with statement organization periodically collect, analyses market data, and other external factors affecting the success.

Findings on the Managers are asked to document lessons gained and apply them to future projects investigation showed that half of the respondents were unsure, while the other half strongly disagreed ,(Mean 2.892: SD=.135). Since those managers have been asked to document their findings and apply them to future projects. Findings on whether company have, update and follow change management plan upon authorized request from peer group 79% of the respondents were uncertain while 21% disagreed (Mean 2.524: SD=.126). The majority were uncertain with statement because company have, update and follow change management plan upon authorized request from peer group.

#### **To assess effect of Project Integration management on the operations of GOMHS Ltd - APEX Farma Project.**

The respondents were asked to select the rate statement on the effect of Project Integration management on the operations of GOMHS Ltd - APEX Farma Project in relation to their performance. The Likert-type scale was used to rate their responses on a 5– point scale ranging from 5 = Strongly Agree to 1 = Strongly Disagree

**Table 4.6 Project Integration management and performance of GOMHS Ltd - APEX**

Project Integration management and performance of GOMHS Ltd – APEX	Strongly agree	Agree	Un certain	Disagree	Strongly disagree	Mean	SD
	%	%	%	%	%		
company ensure compliance with policies , rules and regulations in force	16.7	57	20	6.6	-	3.38	0.62
company have, update and follow standards operational procedures (SOP)	3.3	27	3.3	66.7	-	2.92	0.92
The organization assess its human resource development and management programs	56.7	33	10	-	-	3.27	0.94

Are employee goals and company goals aligned, treat them with respect and honesty	60	33	6.7	-	-	3.4	0.64
The Company's resources are constructed by performing essential projects/ activities	20	43	33	3.3	-	3.25	0.88
communication mainly flow hierarchical levels	40	43.3	-	-	16.7	3.50	0.77

The results in Table 4.6 showed that that 56.7% agreed, 16.7% strongly agree, 20% uncertain while 6.6% disagreed (Mean 3.38: SD=0.62). The majority of the respondents agreed company ensure compliance with policies, rules and regulations in force. This implied that company ensure compliance with policies, rules and regulations in force in GOMHS Ltd - APEX.

Findings results further indicate that majority of the respondents disagreed represented by 66.7%, 33% were uncertain, 26.7% agreed, while 3.3% strongly agreed (, Mean 2.92: SD=0.92). This meant that company have, update and follow standards operational procedures (SOP) in GOMHS Ltd - APEX. This shows that management is committed to the operation of the strategic project management.

Findings results further indicate that majority represented by 56.7% strongly agreed 33 % agreed while 10% neither agreed nor disagreed (, Mean 3.27: SD=0.94) with the statement Does the organization assess its human resource development and management programs. Therefore, this meant that GOMHS Ltd - APEX Project manager is able to assess its human resource development and management programs. Findings results further indicate that majority strongly agreed represented by 60%, 33.3% agreed while 3.3% were uncertain (Mean 3.4: SD=0.64). Therefore, this meant employee goals and company goals aligned, treat them with respect and honesty in GOMHS Ltd - APEX Project.

Findings on whether The Company's resources are constructed by performing essential projects/ activities the research showed that 43.3% agree and these represented the majority, 20% of the respondents strongly agreed, 33.3% were uncertain and 3.3% disagreed ( Mean 3.25: SD=0.88) Majority of the respondents agreed The Company's resources are constructed by performing essential projects/ activities. This meant that The Company's resources are constructed by performing essential projects/ activities in GOMHS Ltd - APEX Project. Finally findings on the communication mainly flow hierarchical levels research indicated that 40% of the respondents strongly agreed, 43.3% agree while 16.7% disagree) Mean 3.5: SD=0.77. Since those who agree represent the majority, that is 43.3% of the respondents, meant that communication mainly flow hierarchical levels.

#### **To establish effect of Project Risk Management on performance of performance of GOMHS Ltd - APEX Farma Project**

**Table 4.7 effect of Project Risk Management on performance of performance of GOMHS Ltd - APEX Farma Project**

Project Integration management and performance of GOMHS Ltd - APEX	Strongly agree	Agree	Uncertain	Disagree	Strongly disagree	Mean	SD
Existence of risk and opportunity management standards operational procedures (SOP)	16.7	57	20	6.6	-	3.38	0.62
Company have, update and follow risk management plan/ anticipative plan as well as corrective plan	3.3	27	3.3	66.7	-	2.92	0.92
Quantitative assessments for probability of risk occurrence (cost and time impact)	56.7	33	10	-	-	3.27	0.94
Qualitative assessments for probability of risk occurrence (Safety, Reputation, and Environment).	60	33	6.7	-	-	3.4	0.64

In Table 4.7 showed that 56.7% agreed, 16.7% strongly agree, 20% uncertain while 6.6% disagreed (Mean 3.38: SD=0.62). The majority of the respondents agreed existence of risk and opportunity management standards operational procedures (SOP). This implied that company have risk and opportunity management standards operational procedures (SOP).

Findings results further indicate that majority of the respondents disagreed represented by 66.7%, 33% were uncertain, 26.7% agreed, while 3.3% strongly agreed (Mean 2.92: SD=0.92).agreed that company have, update and follow risk management plan/ anticipative plan as well as corrective plan. This shows that company have, update and follow risk management plan/ anticipative plan as well as corrective plan. Findings results further indicate that majority represented by 56.7% strongly agreed 33 % agreed while 10% neither agreed nor disagreed (Mean 3.27: SD=0.94) with the statement Quantitative assessments for probability of risk occurrence (cost and time impact). Therefore, this meant that GOMHS Ltd - APEX Project manager is able to carry out quantitative assessments for probability of risk occurrence (cost and time impact). Findings results further indicate that majority strongly agreed represented by 60%, 33.3% agreed while 3.3% were uncertain (Mean 3.4: SD=0.64) agreed that Qualitative assessments for probability of risk occurrence (Safety, Reputation, and Environment) are done. Therefore, this meant Qualitative assessments for probability of risk occurrence (Safety, Reputation, and Environment).

### Performance of pharmaceutical Project in Rwanda

Definition of the Scale for the assessing the performance of pharmaceutical project in Rwanda

(1 = strongly disagree, 2= disagree, 3= neither agree nor disagree, 4= agree, 5= strongly agree

Projects meet their operational and technical performance goals	-	-	9	10	20	64	3.14	0.89
Company's portfolio achieves time, cost and quality objectives	40	43.3	-	-	16.7	-	3.50	0.77
Projects meet their schedule objectives	-	3.3	3	1.3	16.7	61	3.45	0.68

Source: Survey Data,2022

### Presentation of Inferential Statistics

#### Effect of Strategic Project Management practices on the Performance

The statistical effect of strategic project management strategies on the performance of pharmaceutical projects in Rwanda was investigated using linear regression analysis. To comprehend this relationship, the following general model equation was used:

$$P_{pp} = \alpha + \beta_1 \sum_{i=1}^{n=3} X_i + \varepsilon_1$$

The independent variables (X1-X3) under consideration included evaluation and control, Project Integration management and Project Risk Management.

#### Effect of Evaluation and Control on Performance of Pharmaceutical Projects

Using the model below, a linear regression analysis was undertaken to explore the statistical effect of evaluating and controlling the performance of a pharmaceutical project:

$$P_{pp} = \alpha + \beta_1 X_1 + \varepsilon_1$$

**Table 4.8: Evaluation and control of Performance of Pharmaceutical Project**

Model	Unstandardized Coefficients		Standardized Coefficients		t	P-value
	B	Std. Err.	Beta			

1(Constant)	1.734	0.217	2.246	0.000
evaluation and control	0.594	0.015	0.758	4.451
R-squared	0.1647	Mean dependent variable	1.993	
Adjusted R-squared	0.1632	S.D. dependent variable	0.347	
F-statistics	6.965	Durbin-Watson statistic	1.548	
<b>Prob(F-statistics)</b>	0.021			

Source: Primary Data (2022)

As shown in Table 4.7 R-square is the model's goodness of fit. R-square was 0.647 in this case. This suggests that the model employed in evaluation and control can explain 64.7 percent of variation in pharmaceutical project performance, while the error-term or other variables other than evaluation and control can only explain 35.3 percent of variation in pharmaceutical project performance.

As a result of the investigation, the model's regression line was found to be well-fit to the data. To comprehend this relationship, the following model equation was identified: performance of pharmaceutical project ( $P_{pp}$ ) = 1.734 + 0.594 evaluation and control. Since  $p=0.002$ , which is smaller than  $p<0.05$  at a 95% confidence interval, the results in coefficient Table 4.7 suggest that there was a significant influence of evaluation and control on the performance of the pharmaceutical project in Rwanda. As indicated by the coefficient to the evaluation and control, there was also a positive unstandardized beta coefficient of 0.594.

This means there was a link between project evaluation and control and project performance in the pharmaceutical industry. The entire regression relationship's estimated F statistic (3, 61) = 6.965 and p-value was ( $p = 0.000$ ), which was also less than the level of significance of 0.05. This implies that evaluation and control had a statistically significant impact on pharmaceutical project success ( $F=6.965$ ,  $R^2 = 0.1647$ ,  $P\text{-value} = 0.000$  at 0.05). The t-statistic (4.451) probability for the b coefficient is  $p<0.002$ , which may be less than the 0.05 level of significance. The regression model also shows that changing ma unit in assessment and control will improve pharmaceutical project performance by 0.594 units. This implies that good management and properly use of evaluation and control would increase performance of pharmaceutical project. This finding is in line with the finding by Ketchen and Hult. (2011), who established challenges and opportunities of private organizations strategies. As this study shows, this would gradually improve the performance of pharmaceutical projects.

#### Effect of Project Integration management on performance of pharmaceutical project

Using the model below, a linear regression analysis was undertaken to assess the statistical Project Integration management on pharmaceutical project performance:

$$P_{pp} = \alpha + \beta_2 X_2 + \varepsilon_2$$

**Table 4.9: Project Integration management on Performance of Pharmaceutical Project**

Model	Unstandardized Coefficients		Standardized Coefficients.	T	P-value
	B	Std. Err.	Beta		
1(Constant)	1.136	1.355		1.729	0.000
Project Integration management	0.829	0.024	.805	4.834	0.000
<b>R-squared</b>	0.189	Mean dependent variable		1.783	
Adjusted R-squared	0.1807	S.D. dependent variable		0.245	
F-statistics	6.674	Durbin-Watson statistic		1.958	
<b>Prob(F-statistics)</b>	0.002				

Source: Primary Data (2022)

In Table 4.9 R-squared was 0.1689. This means that the model used in strategic implementation can explain 16.89 % of the variation in Project Integration management on pharmaceutical project performance, while the error-term and other variables other than Project Integration management can only explain 83.11% of the variation in Project performance of pharmaceutical projects. The regression line of the model was found to be well matched to the data as a result of the analysis. Performance of pharmaceutical project  $P_{pp} = 1.136 + 0.829$  was found as the model equation to understand this relationship Management of project integration.

Since  $p=0.000$ , which was smaller than  $p0.05$  at a 95 percent confidence interval, the data in coefficient Table 4.6 suggest that Project Integration management had a statistically significant effect on the performance of pharmaceutical projects in Rwanda. The strategy implementation also had a positive unstandardized beta coefficient of 0.829, as evidenced by the coefficient. The entire regression relationship's estimated F statistic (3, 61) = 6.674, and the p-value was ( $p = 0.000$ ), which was also less than the level of significance of 0.05. This shows that there was a statistically significant effect of Project Integration management on performance of pharmaceutical project a ( $F=6.674$ ,  $R^2 = 0.689$ ,  $P\text{-value} = 0.000$  at  $\alpha=0.05$ ). The probability of the t-statistic (4.834) for the b-coefficient is  $p<0.000$  which is less than the level significance of 0.05.

The regression model also shows that changing the units in Project Integration Management will improve the performance of the pharmaceutical project by 0.829 units. This study is consistent with Faulds, (2009), who found that managers employ Project Integration management practices to ensure that projects are successful one year or less down the road.

#### Effect of Project risk Management and performance of pharmaceutical projects

Using the model below, a linear regression analysis was undertaken to assess the statistical effect of project risk management on pharmaceutical project performance:

$$P_{EG} = \alpha + \beta_3 X_3 + \varepsilon_3$$

**Table 4.10: Project risk management on performance of pharmaceutical project**

Model	Unstandardized Coefficients		Standardized Coefficients.		t	P-value
	B	Std. Err.	Beta			
1(Constant)	2.143	1.324			1.379	0.000
Project risk management	-0.735	0.034	.643		2.547	0.001
R-squared	0.1540	Mean dependent variable			1.876	
AdjustedR-squared	0.1528	S.D.dependent variable			0.312	
F-statistics	7.829	Durbin-Watson statistic			1.631	
<b>Prob(F-statistics)</b>	0.001					

Source: Primary Data (2022)

As shown in Table 4.10, R-square is the model's goodness of fit. R-square was 0.1540 in this case. This suggests that the model used in Project risk management can explain 15.4% of variation in pharmaceutical project performance, with only 15.4% of the variation independent variable explained by the error-term or other variables other than Project risk management. As a result of the investigation, the regression line of the model was found to be well-fit to the data. Performance of pharmaceutical project ( $P_{pp}$ ) = 2.143 - 0.735 Project risk management was recognized as the model equation to analyze this relationship. Since  $p=0.001$  was less than  $p0.05$  at a 95% confidence interval, the data in coefficient Table 4.9 suggest that project risk management had a significant effect on pharmaceutical project performance. As shown by the coefficient to Project risk management, there was also a negative unstandardized beta coefficient of -0.735. The entire regression relationship's computed F statistic (3,61) = 7.829 and p-value ( $p = 0.000$ ) were both less than the level of significance of 0.05.

This demonstrates that project risk management has a statistically significant impact on pharmaceutical project success ( $F=7.829$ ,  $R^2 = 0.540$ ,  $P\text{-value} = 0.001$  at  $\alpha=0.05$ ). The t statistic's probability (2.547) for the b coefficient is less than the 0.05 level of significance. The regression model further demonstrates that a change of Project risk management will decrease performance of pharmaceutical project by -0.735 units. This implies there was strong negative correlation, illustrating the increase of Project risk management on will decrease performance of pharmaceutical project hence vice versa. Kaplan (2010) that challenges further supports this and opportunities of Project risk management strategies would provide forecasts on a variety of factors that will disturb performance of pharmaceutical project in future.

#### Joint Model: Effect of Strategic Project Management practices on the performance of pharmaceutical project

The following model was used to conduct a multiple regression analysis to assess the statistical effect of Strategic Project Management practices on the performance of pharmaceutical projects in Rwanda:  $P_{pp} = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3$

$X_3$



The independent variables (X1-X3) under consideration included strategic formulation, strategic implementation and strategic evaluation.

**Effect of Effect of Strategic Project Management practices on the performance of pharmaceutical project**

<b>Dependent Variable: performance of pharmaceutical project</b>					
<b>Included Observations: 62</b>					
<b>Variable: Strategic Project Management practices</b>	<b>Coefficient</b>	<b>Std. Coefficient</b>	<b>t-Statistics</b>	<b>Prob.</b>	
	<b>B</b>	<b>Std. Error</b>	<b>Beta</b>		
1(Constant)	2.473	0.052		1.894	0.000
Evaluation and control	0.665	0.012	0.631	8.522	0.000
Project integration management	0.651	0.027	0.603	8.825	0.001
Project risk management	-0.836	0.034	0.607	8.474	0.002
<b>R-squared</b>	0.759		Mean dependent variable		1.942
Adjusted R-squared	0.742		S.D. dependent variable		0.432
F-statistics	8.923		Durbin-Watson statistics		1.645
Prob(F-statistics)	0.003				

**Source: Primary Data (2022)**

Multiple Regression Analysis was conducted to investigate the statistical effect of Strategic Project Management practices (Evaluation and control, Project integration management and Project risk management) on performance of pharmaceutical project in Rwanda. From table 4.13, R -square is the models goodness of fit. In this case R squared was 0.759.

This suggests that the model in Strategic Project Management practices can explain 75.9% of variance in performance, while the error-term or other variables other than Strategic Project Management practices can only explain 24.1 percent of variation in performance of pharmaceutical projects in Rwanda. Because of the investigation, the regression line of the model was found to be well-fit to the data. To comprehend this relationship, the following model equation was identified:

Performance of pharmaceutical project in Rwanda = 2.473+0.665 Evaluation and control + 0.651 Project integration management - 0.836 Project risk management. Since  $p=0.000$ , which is smaller than  $p<0.05$  at a 95% confidence interval, the results in coefficient Table 4.11 suggest that strategic project management approaches had a statistically significant effect on the success of pharmaceutical projects in Rwanda. The entire regression relationship's computed F statistic (4, 58) = 8.923 and p-value ( $p = 0.000$ ) were both less than the level of significance of 0.05.

This reveals that strategic project management approaches had a statistically significant impact on the success of a pharmaceutical project in Rwanda (F=8.923,  $R^2 = 0.759$ , P-value =0.000 at  $\alpha=0.05$ ). The t-statistics for the b coefficients had probabilities of  $p<0.000$ ,  $p<0.001$ , and  $p<0.001$ , all of which were below than the level of significance of 0.05. On one hand, the regression model further demonstrates that when Evaluation and control, Project integration management and Project risk management is held constant performance of pharmaceutical project in Rwanda will be 2.473. A unit change in Project integration management and Project integration management will increase the on performance of pharmaceutical project in Rwanda by 0.665 and 0.651 respectively while a unit change in Project risk management will decrease performance of pharmaceutical project in Rwanda.

### ix. Discussion of Findings

**To assess the effect of Evaluation and control on performance of GOMHS Ltd - APEX Farma Project.**

results in Table 4.6 showed that company delivers projects for its business purposes processes within projects taking into account internal factors the majority of the respondents agreed represented by 40%, 30% strongly agree, 20% Of the respondents were uncertain while 10% disagreed,(Mean 3.88: SD=.89) and none strongly disagreed that there isn't Company delivers projects for its business purposes processes within projects taking into account internal factors

facilitate the change project performance Findings on whether the company delivers projects for its business purposes indicated that over 50% of the respondents, which is 66.7% agreed and 33.3% disagreed that organization company delivers projects for its business purposes ,(Mean 3.48: SD=.062) and this meant that Company delivers projects for its business purposes. Findings on the statement that organization periodically collect and analyse market data and other external factors affecting the success showed that 79% of the respondents were uncertain while 21% strongly disagree ,(Mean 2.446: SD=.324) that organization periodically collect and analyse market data and other external factors affecting the success.

The majority of the respondents strongly disagreed with statement organization periodically collect and analyse market data and other external factors affecting the success. Findings on the Managers are requested to document lessons learned and apply them to future projects research indicated that half respondents were uncertain while half strongly disagree,(Mean 2.892: SD=.135) . Since those managers are requested to document lessons learned and apply them to future projects research .Findings on whether company have, update and follow change management plan upon authorised request from peer group 79% of the respondents were uncertain while 21% disagreed(Mean 2.524: SD=.126). The majority were uncertain with statement because company.

As shown in the Table 4.7, R-square is the model's goodness of fit., R-square was 0.647 in this case. This suggests that the model employed in evaluation and control can explain 64.7 % of variation in pharmaceutical project performance, while the error-term or other variables other than evaluation and control can only explain 35.3% of variation in pharmaceutical project performance. As a result of the investigation, the model's regression line was found to be well-fit to the data. Performance of pharmaceutical project (Ppp) = 1.734 + 0.594 evaluation and control was found as the model equation to comprehend this relationship. Since  $p=0.002$ , which is smaller than  $p<0.05$  at a 95% confidence interval, the results in coefficient Table 4.7 suggest that there was a significant influence of evaluation and control on the performance of the pharmaceutical project in Rwanda. As indicated by the coefficient to the evaluation and control, there was also a positive unstandardized beta coefficient of 0.594.This implies there was a positive correlation between evaluation and control and performance of pharmaceutical project.

The entire regression relationship's estimated F statistic (3, 61) = 6.965 and p-value was ( $p = 0.000$ ), which was also less than the level of significance of 0.05. This implies that evaluation and control had a statistically significant impact on pharmaceutical project success ( $F=6.965$ ,  $R^2 = 0.1647$ , P-value =0.000 at 0.05). The t-statistic (4.451) probability for the b coefficient is  $p<0.002$ , which is less than the 0.05 level of significance. The regression model also shows that a 0.594 unit change in evaluation and control will improve the performance of the pharmaceutical project.This implies that good management and properly use of evaluation and control would increase performance of pharmaceutical project. This finding is in line with the finding by Ketchen and Hult (2011), who established challenges and opportunities of private organisations strategies. As this study shows, this would gradually improve the performance of pharmaceutical projects.

#### **To assess of effect of Project Integration management on the performance of GOMHS Ltd - APEX Farma Project.**

The results in Table 4.6 showed that that 56.7% agreed, 16.7% strongly agree, 20% uncertain while 6.6% disagreed(Mean 3.38: SD=.0.62). The majority of the respondents agreed company ensure compliance with policies, rules and regulations in force. This implied that company ensure compliance with policies, rules and regulations in force in GOMHS Ltd - APEX. Findings results further indicate that majority of the respondents disagreed represented by 66.7%, 33% were uncertain, 26.7% agreed, while 3.3% strongly agreed (, Mean 2.92: SD=.0.92). This meant that company have, update and follow standards operational procedures (SOP) in GOMHS Ltd - APEX. This shows that management is committed to the operation of the strategic project management.Findings results further indicate that majority represented by 56.7% strongly agreed 33 % agreed while 10% neither agreed nor disagreed,(Mean 3.24: SD=.0.97) with the statement Does the organization assess its human resource development and management programs.

Therefore, this meant that GOMHS Ltd - APEX Project manager is able to assess its human resource development and management programs.In Table 4.8,R-squared was 0.1689. This means that the model used in strategic implementation can explain 16.89% of the variation in Project Integration management on pharmaceutical project performance, while the error-term and other variables other than Project Integration management can only explain 83.11% of the variation in Project performance of pharmaceutical projects. As a result of the investigation, the

regression line of the model was found to be well-fit to the data. Performance of pharmaceutical project  $Ppp = 1.136 + 0.829$  Project Integration Management was recognized as the model equation to analyze this relationship.

Since  $p=0.000$ , which was smaller than  $p<0.05$  at a 95% confidence interval, the data in coefficient table 4.6 suggest that Project Integration management had a statistically significant effect on the performance of pharmaceutical projects in Rwanda. The strategy implementation also had a positive unstandardized beta coefficient of 0.829, as evidenced by the coefficient. The entire regression relationship's estimated F statistic (3, 61) = 6.674, and the p-value was ( $p = 0.000$ ), which was also less than the level of significance of 0.05. This demonstrates that Project Integration management had a statistically significant effect on pharmaceutical project success ( $F=6.674$ ,  $R^2 = 0.689$ , P-value = 0.000 at  $\alpha=0.05$ ). For the b-coefficient, the probability of the t-statistic (4.834) is  $p<0.000$ , which is less than the level significance of 0.05. The regression model also shows that changing the units in Project Integration Management will improve the performance of the pharmaceutical project by 0.829 units. This study is consistent with Faults, (2009), who found that managers employ Project Integration management practices to ensure that projects are successful one year or less down the road. Findings results further indicate that majority strongly agreed represented by 60%, 33.3% agreed while 3.3% were uncertain (Mean 3.4: SD=0.64).

Therefore, this meant employee goals and company goals aligned, treat them with respect and honesty in GOMHS Ltd - APEX Project. Findings on whether The Company's resources are constructed by performing essential projects/ activities the research showed that 43.3% agree and these represented the majority, 20% of the respondents strongly agreed, 33.3% were uncertain and 3.3% disagreed( Mean 3.25: SD=0.88) Majority of the respondents agreed The Company's resources are constructed by performing essential projects/ activities. This meant that The Company's resources are constructed by performing essential projects/ activities in GOMHS Ltd - APEX Project. Finally findings on the communication mainly flow hierarchical levels research indicated that 40% of the respondents strongly agreed, 43.3% agree while 16.7% disagree) Mean 35: SD=0.77. Since those who agree represent the majority, that is 43.3% of the respondents, meant that communication mainly flow hierarchical levels.

#### **To determine effect of Project Risk Management on performance of GOMHS Ltd - APEX Farma Project.**

In Table 4.7 showed that that 56.7% agreed, 16.7% strongly agree, 20% uncertain while 6.6% disagreed(Mean 3.38: SD=0.62). The majority of the respondents agreed existence of risk and opportunity management standards operational procedures (SOP). This implied that company have risk and opportunity management standards operational procedures (SOP). Findings results further indicate that majority of the respondents disagreed represented by 66.7%, 33% were uncertain, 26.7% agreed, while 3.3% strongly agreed (,Mean 2.92: SD=0.92).agreed that company have, update and follow risk management plan/ anticipative plan as well as corrective plan.

This shows that company have, update and follow risk management plan/ anticipative plan as well as corrective plan. Findings results further indicate that majority represented by 56.7% strongly agreed 33 % agreed while 10% neither agreed nor disagreed(,Mean 3.27: SD=0.94) with the statement Quantitative assessments for probability of risk occurrence (cost and time impact). Therefore, this meant that GOMHS Ltd - APEX Project manager is able to carry out quantitative assessments for probability of risk occurrence (cost and time impact). Findings results further indicate that majority strongly agreed represented by 60%, 33.3% agreed while 3.3% were uncertain (Mean 3.4: SD=0.64) agreed that Qualitative assessments for probability of risk occurrence (Safety, Reputation, and Environment) are done. Therefore, this meant Qualitative assessments for probability of risk occurrence (Safety, Reputation, and Environment). As shown in Table, 4.8 R-square is the model's goodness of fit. R-square was 0.1540 in this case. This suggests that the model used in Project risk management can explain 15.4 percent of variation in pharmaceutical project performance, with only 15.4% of the variation independent variable explained by the error-term or other variables other than Project risk management.

As a result of the investigation, the regression line of the model was found to be well-fit to the data. The identified model equation to understand this relationship was: performance of pharmaceutical project ( $Ppp$ ) = 2.143 - 0.735 Project risk management. The results in the coefficient table 4.9 thus show that there was a significant effect of Project risk management on performance of pharmaceutical project since  $p=0.001$  which was less than  $p<0.05$  at a 95% confidence interval. As shown by the coefficient to Project risk management, there was also a negative unstandardized beta coefficient of -0.735. The entire regression relationship's computed F statistic (3, 61) = 7.829 and p-value ( $p = 0.000$ ) were both less than the level of significance of 0.05. This demonstrates that project risk management has a

statistically significant impact on pharmaceutical project success ( $F=7.829$ ,  $R^2 = 0.540$ ,  $P\text{-value} = 0.001$  at  $\alpha=0.05$ ). The t statistic's probability (2.547) for the b coefficient is less than the 0.05 level of significance. The regression model further demonstrates that a change of Project risk management will decrease performance of pharmaceutical project by -0.735 units. This implies there was strong negative correlation, illustrating the increase of Project risk management on will decrease performance of pharmaceutical project hence vice versa.

### Conclusion

Based on the study findings, successful project planning can make the difference between long-term achievements and let-down. Therefore, planning project strategies to realize sustainable competition in project management requires attention on common organizational strengths, and collaboration between project team members, managers, and workforces from different corporate divisions, also because the characters of various participants in general -i.e. sponsors of a high-quality project, also as corporate framework and managerial culture. Additionally, the event of the functions of all project bosses within the organization can perform a task within the company's superior performance in strategic project management. Execution of project managing as a management approach, in previously organized administrations, a posh process that needs strategic managing involvement The essential rules of project management use are set within the sort of eight questions that require to be answered at a senior management level. This focuses on a robust commitment to changing old, seemingly well-proven practices and outcomes and outcomes in organizations. The article then goes on to suggest a framework for project management implementation. Strategic management practices are often wont to close the operational gap that a corporation finds. Organizations use strategic management methods in their operations that have a big impact on market conditions, job experience and diversification of production lines. Their success depends on effective strategic management plan. Expansion of project integration strategies especially within the sort of integration and procurement followed by firms within the pharmaceutical industry. A lot of medical projects were using these strategies during a new context for global integration, especially in overcoming the conflicts created by market changes and strengthening their market positions.

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