### Engineering and Technology Journal e-ISSN: 2456-3358

Volume 10 Issue 03 March-2025, Page No.- 4124-4134

DOI: 10.47191/etj/v10i03.22, I.F. - 8.482

© 2025, ETJ



## The Role of Administrative Process Engineering in Improving Project Management Stages: A Survey of the Opinions of a Sample of Employees in the Ibn Majid General Company

### Mujahed Kareem Oglah<sup>1</sup>, Hussein Sabah hashim<sup>2</sup>

<sup>1,2</sup>Department of Mechanical Technologies- Samawah Technical Institute- Al-Furat Al-Awsat Technical University/ Iraq.

ABSTRACT: This study is concerned with the role played by administrative process engineering and its most significant dimensions—technology, strategy, and employees—in enhancing project management. This study aims at ascertaining new mechanisms to address challenges faced by the Ibn Majid General Company. It utilizes quantitative analysis of company data in an effort to test a number of hypotheses regarding the influence of administrative engineering processes on project management. Statistical analysis was performed using Structural Equation Modeling (SEM-PLS). The study discloses that administration process engineering enhances communication significantly, and employees and customers are able to convey information successfully through standardized forms, brochures, and clear procedural guidelines. Based on these findings, the study recommends that companies should strategically plan and coordinate their resources to enable the implementation of projects in line with their preplanned strategic objectives.

**KEYWORDS:** administrative; engineering processes; project management; Ibn Majid general company.

#### INTRODUCTION

The industrial sector is one of the most significant pillars of any country's economy, contributing significantly towards economic growth, employment, and technological advancement. However, the sector always faces tremendous environmental instability, particularly in developing nations like Iraq. This is because nations are increasingly becoming open to the international market, exposing domestic industries to harsh international competition. Moreover, the process of globalization has disproportionately affected thirdworld economies with challenges, necessitating greater demands of adaptive strategy and updated regulatory systems (Siddiqui, 2012).

Industrial companies these days are faced with critical pressure from several interlinked factors including speedy progress in technology, the shifting nature of the world market, and heightened regional and multinational firm competition. These stresses are added to by economic uncertainty, political instability, financial hazards, security hazards, and health emergencies (Muhammad et al., 2010). These problems have significantly impacted the business operations, having a tendency to reduce the trust of the public in the services provided and causing a decline in consumer engagement and investor trust (Marsden & Andriof, 1998).

Due to such complexities, there has been a pressing necessity for industrial enterprises to update their regulatory frameworks and re-engineer project management processes so that they would be in line with contemporary trends. The company under research, the Ibn Majid General Company, has recognized this and has initiated restructuring of its activities with the emphasis on administrative process engineering with a view to enhancing effectiveness and efficiency (Van Assche & Verschraegen, 2008). This shift aims to optimize the utilization of resources—human, material, or financial—so that there is a harmonious approach that takes into consideration both societal needs and operational capacity. The result is to improve service delivery, particularly in the financial and administrative domains, where efficiency and strategic management are critically important (Sony & Naik, 2020).

In order to analyze these issues, this research is divided into four main sections. The first part of the dissertation sets out the research methodology, specifying the method and methods employed for data collection and analysis. The second part sets out a theoretical framework for administrative process re-engineering and its project management implications. The third part is a detailed analysis of the results, including hypothesis testing and statistical tests. Finally, the fourth section offers the overall conclusions and suggestions drawn from the study, highlighting how administrative process engineering can be effectively utilized to enhance project management in industrial settings.

### The study problem:

The research problem is summarized in a basic research question: To what degree can the Ibn Majid General Company enhance the strategic coherence with which it might avoid potential failure in its competitive project

management setting? This follows from the intensification of challenges to industrial companies, particularly in the emerging economies, where globalization, market fluctuations, and technological advancements have increased competition and demanded more effective management practices.

From this main question, several sub-questions emerge, each addressing a critical aspect of administrative process engineering and its impact on project management.

- 1. What is the existing state with administrative engineering operations in the Ibn Majid General Company? Here, the question is to find out what already exists with regard to the administrative frameworks, systems, and operation strategies in the company. To know the current state is an imperative for finding gaps, inefficiencies, and areas of necessary improvement. Monitoring the administrative engineering processes of the company will result in determining whether its current methods are in agreement with industry best practices and the latest technology.
- 2. What is the nature of administrative engineering process interaction with project management in the firm? This question aims to establish the level of interaction between administrative engineering theory and project management practice. The study investigates whether effective administrative structure guarantees improved project delivery, resource allocation, and speed of decision-making. The nature of the relationship will reveal the level of influence of administrative process engineering on project success and strategic fit.
- 3. How administrative engineering procedures are best applied in improving project management for the firm? This item is intended to ascertain feasible modes of improving project management through implementing administrative engineering practice. It involves examination of probable options for process re-engineering, technological augmentation, and re-engineering alternatives capable of simplifying operations, streamlining performance, and increasing general project output. Through the analysis of exemplary case studies, industry best practices, and cutting-edge management methods, the research tries to suggest implementable solutions that can be adopted in order to improve project management performance.

In answering these issues, the research aims to provide a comprehensive examination of administrative engineering as an optimizing force for project management strategy. Results will further contribute to propagating improved knowledge regarding how industrial organizations, particularly competitive and tough operating firms,

restructure administrative processes to improve efficiency, integration of strategy, and sustainability.

#### **Importance of the study:**

The significance of this research is that it is directly applicable to the industrial sector of the country, which is a highly significant sector for the economic development of any nation. However, in the recent few years, the industrial sector of Iraq has been experiencing a sudden and steep downfall, particularly in comparison to the growth and advancement of the neighboring and regional industries. This decrease can be attributed to various factors, including globalization, growing market competition, technological advancements, and economic change. These are the problems which demand a large body of knowledge of the processes that can be used to motivate industrial performance as well as make project management more efficient.

Contributing to existing knowledge in administrative process engineering and project management domains is among the most essential objectives of this study. The study tries to explain and synthesize various theoretical contributions in such fields and bring them into harmony within a coherent and organized framework. By doing so, it aims to paint a more abstract picture of administrative process engineering, its most relevant aspects, and how it caters to the business systems of the day. This theory will serve as a reference framework for organizations to improve their administrative methods and project implementation strategies.

In addition, the present research is intended to measure and analyze different aspects of administrative process engineering knowing that administrative processes play a significant role for firms doing business in dynamic and fast-paced contexts. Since the speedy pace of technological and managerial advancements is underway around the globe, firms need to adapt by evaluating and streamlining their administrative processes. The Ibn Majid General Company, being the focus in this case, is the ideal organization in need of undergoing such change smoothly. By emphasizing where improvements must be made and giving information on best practices, this study will provide an instruction book for those companies that require optimizing their operational effectiveness and overall project management efficiency.

Lastly, the findings of this study will not just be impactful on the academe but will have implications on business leaders, policy makers, and industry practitioners. With an understanding of how administrative process engineering can affect project management, organizations will be able to make data-based decisions that counteract operation inefficiencies, make better decisions, and reap full benefits from its competitive advantage locally and abroad.

#### Objectives of the study:

The current study aims to accomplish a set of key objectives regarding the role of administrative process engineering in the enhancement of project management. To

begin with, it is geared towards establishing an extensive understanding of the intellectual and theoretical underpinning of the main study variables—i.e., administrative engineering processes and project management. By exploring these subjects extensively, the study attempts to clarify their definition, emergence, and utility within the industrial setup. This basic understanding will be the basis of evaluating how administrative engineering practice improves organizational effectiveness, improves resource utilization, and assists in reversing project implementation problems.

A further significant objective is to explore the character of interaction between different dimensions of administrative engineering processes in the researched company. Administrative engineering consists of numerous interdependent areas, including technology integration, strategic planning, workflow improvement, and human resource management. Understanding how the dimensions affect and react to one another will create substantial insight

into their combined effect on project management performance. Testing the relationships with this research aims to determine if they do or do not exist independently or in synergistic manner as drivers of organizational change.

Besides, the research seeks to investigate the direct and indirect effect of administrative engineering operations on project administration within the firm. This entails assessing the extent to which administration re-engineering results in improved project planning, implementation, monitoring, and evaluation. The research will investigate if and how such activities translate into real improvements in the outcomes of a project, such as lower costs, better timing, better communications, and better overall efficiency. By shedding light on the very mechanisms by which project management is affected by administrative engineering, the research will provide useful recommendations that can empower organizations to be able to provide best administrative systems and achieve long-term development.

#### Hypothesis outline for the study:

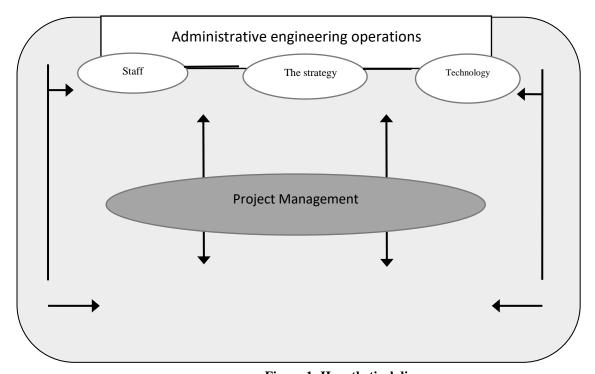


Figure 1: Hypothetical diagram

#### Research assumes:

This research is based on two primary hypotheses whose objective is to affirm the relationship between administrative engineering processes and project management effectiveness. The first primary hypothesis posits that administrative engineering processes, as an independent variable, are positively related to project management, the dependent variable. This is an affirmation that administrative streamlining, in the form of process optimization, technological innovation, and strategic realignment, has a certain direct positive effect on the

efficiency and effectiveness of managing projects. Streamlining administration through optimized administrative processes allows organizations to restrict inefficiencies, improve communications, and facilitate improved decision-making that translates into the success of the project.

The second main hypothesis is derived from this stance by retaining the perception that between administrative engineering activities and project management, there exists a positively direct influence. This hypothesis states that when formal administrative engineering solutions are taken up by

organizations—be it process automation, digitalization, or reengineered management systems—these interventions bring measurable returns on project performance. The application of systematic administrative processes can maximize resource utilization, minimize risks, and enable simpler project execution. Moreover, such benefits lead to enhanced coordination between different stakeholders of a project in order to assist organizations in fulfilling their strategic goals more efficiently.

The two hypotheses are related to the significance of administrative engineering in the quest towards a more efficient and structured project management system. The hypotheses implore organizations to adopt new administrative strategies that are sensitive to modern business operations and technological advancements. By testing the two hypotheses, this research aims to provide empirical evidence for how administrative process engineering can be employed as a main tool to improve the project management outputs and, therefore, for industrial organizations faced with highly complex operational problems.

### Data collection and analysis methods:

The research methodology used in this study is based on a comprehensive approach that focuses on the use of a combination of data collection and analysis methods in a bid to ensure accuracy, intricacy, and reliability. Practice began with wide-ranging exploration of literature in book formats, peer-reviewed scientific journals, and scholarly journals to ascertain solid theoretical frameworks. This literature review highlighted key themes concerning administrative process engineering, project management processes, and adaptive measures adopted by industrial companies to enhance productivity and efficiency. Via study of varied sources, this research aimed at identifying any gaps in research that could exist and construct a conceptual framework that would allow analysis of administrative engineering practices applied within the Ibn Majid General Company.

In addition to scholarly research, online resources were also instrumental in gathering up-to-date information regarding administrative engineering processes and project management trends. The World Wide Web was utilized in order to get case studies, white papers, industry reports, and expert opinion, which helped in gaining in-depth knowledge of how companies worldwide are embracing administrative engineering practices for improving project management performance. This online research also helped in identifying contemporary challenges and best practices within the industry and offering valuable inputs for comparative study.

Besides secondary research, primary data collection was conducted through a structured questionnaire. The questionnaire was designed carefully to represent the perception of employees, managers, and decision-makers of the company under consideration. It was a mix of closed-ended and open-ended questions to gather quantitative and qualitative data on the impact of administrative process

engineering on project management. The formal organization of the questionnaire ensured consistency of responses while also allowing participants the chance to express their views about some of the challenges and improvement areas in their company.

Further, direct interviews were conducted with key stakeholders like employees, department managers, and senior decision-makers within the Ibn Majid General Company. The interviews provided the opportunity for probing questions, enabling the research team to explore issues more deeply than would be feasible with a questionnaire. The interviewing provided the potential for clarification, follow-up, and a better understanding of how administrative engineering principles are interpreted and implemented in the company's operations. Decision-makers, in particular, provided strategic information on the current projects of the company to modernize its project and administrative processes, highlighting the problems they are facing and the advantages of re-engineering activities.

By combining these data-collection tools—literature review, internet research, questionnaires, and interviews—the research ensured an all-round approach towards analyzing the role of administrative process engineering in managing projects. Variety of sources of information made cross-validation of results possible, hence providing an integrative profile of the issue. Statistical procedures like Structural Equation Modeling-Partial Least Squares (SEM-PLS) were later utilized in analysis of data for study variable association testing and for hypotheses testing. The methodological depth guarantees conclusions and recommendations that proceed from the research to be anchored on veritable, empirical evidence.

### LITERATURE REVIEW

### The concept of process re-engineering:

The concept of process re-engineering has been traced to the school of thought that was present in the nineteenth century and was known as the administrative school of thought. These early management thinkers were the very first to use the term re-engineering as a science of workflow streamlining and efficiency maximization. They also realized how essential it is to re-model processes so that productivity is heightened, and sought the best approach to conducting work. This methodology has also evolved with time and has embraced emerging technologies and mechanisms of working with a view of enhancing processes, maximizing outputs, and making full use of all the resources to their disposal (Oberoi, 2013).

Re-engineering goes beyond incremental change; rather, it's a complete re-definition of business. Process reengineering, as portrayed by Wogan et al. (2020), is root and branch re-design and root and branch re-thinking of overall operating systems. It involves the organized elimination of the non-value-added steps in a process which do not benefit

the overall efficiency of a process, cutting out redundant paperwork and redundant administrative processes. The ultimate goal of this strategy is to enhance such key performance measures as cost effectiveness, quality of service, processing time, and general operating performance. By eliminating human inefficiencies and automating operations, organizations can actually enhance service delivery, use resources more efficiently, and transform more quickly as market conditions change.

With businesses having to endure frequent quick changes in technology and rising competitive pressures, the relevance of re-engineering processes has grown even more. With digital technologies, automation, and fact-based decision-making, companies are now well-equipped to reengineer operations unimaginable in the past. With ongoing improvisation, organizations remain agile and well-placed to cater to shifting customer needs and conduct sustainable business operations. Process re-engineering, hence, is no abstract concept but a critical strategic tool that helps companies maintain competitiveness in an evolving global business arena.

### Principles of process reengineering:

Process reengineering is motivated by several key principles that researchers generally agree on, particularly for banking processes. One of the fundamental principles is bundling different tasks into a single role. This principle involves combining different responsibilities under a single worker or within a group of workers, especially in cases where highly skilled workers are not readily available. By this streamlining of functions, organizations can reduce errors of operation, simplify the complexity of responsibility allocation, enhance efficiency, and reduce time usage and costs by significantly (Bhaskar & Singh, 2014).

Another fundamental principle is empowering employees to make decisions. Empowering employees to make impromptu decisions fosters responsiveness culture, allowing organizations to react to customers' needs in a timely manner. Not only does this reduce operational costs incurred as a result of delayed decision-making, but it also boosts employee loyalty. When the top management acknowledges and approves employee decisions, it ensures a sense of empowerment, leading to increased commitment and motivation from employees (George & George, 2023).

Access to correct and sufficient information is another pillar of process reengineering. With reengineered workflows, businesses can obtain data from original sources only once and eliminate duplication to reduce error (Garcia-Garcia et al., 2021). Such efficient process of obtaining data enables information integrity together with cost savings on its related areas.

Centralized management of geographically dispersed resources is also a critical component of reengineering. Leverage of modern communications technology allows companies to control resources spread across the locations in an efficient manner. By making certain that information is derived from a single, authoritative source, companies can enhance information quality, decrease inconsistencies, and lower costs of operations (Lundgren & McMakin, 2018).

Finally, reengineering emphasizes the integration of data collection and processing. Before, firms had separate departments for gathering and processing information, resulting in inefficiencies and bottlenecks. With process reengineering, however, new business models and operation rules enable the same individuals who are responsible for gathering data to also process it. This system removes the application of redundant effort, streamlines workflow, and improves productivity overall (Bayomy et al., 2021)

By adhering to these principles, organizations, particularly banking organizations, can achieve greater operational efficiency, cost reduction, and improved customer service ultimately resulting in long-term sustainability and competitiveness.

# **DIMENSIONS OF PROCESS REENGINEERING**First: the technological dimension

Technology forms a key feature of any attempt to undertake a reengineering process effort, its capability to enhance simplification and streamlining of work processes. Technology provides mechanisms through which to redesign institutions, enhance operating processes, and achieve creative breakthroughs which re-fashion organisational performance (Mohsin et al., 2023). Through making root changes possible, technology helps businesses transcend classic constraints, unleashing new avenues of innovation and presenting companies with an immense competitive advantage in today's ever-more volatile market (Hojnik et al., 2023).

The most critical component of technological reengineering is information technology (IT), which provides the necessary infrastructure for integrating various organizational functions. IT is the vehicle that enables innovation, encourages cross-functional coordination, and optimizes the overall business process efficiency. Without technology, organizations cannot achieve innovative solutions or make substantial quantitative improvements in their processes. The availability of advanced technological resources allows the decision-making processes to be speeded up, the processes of workflows to be automated, as well as to increase the accuracy and velocity of operations to ensure that reengineering efforts are appropriately executed.

Besides, information technology facilitates process reengineering by the ability of organizations to apply sophisticated analytical techniques, handle large volumes of data, and automate business processes. Information technology provides organizations with tools to analyze complex business scenarios, predict trends, and implement data-driven strategies that optimize efficiency. Technology also optimizes collaboration because multiple stakeholders

can communicate easily, exchange information, and make adjustments promptly. In addition, IT plays a crucial role in handling the inputs and outputs of the organizational systems to ensure consistency, accuracy, and effectiveness in process performance (Aripin et al., 2023).

By using technology in process reengineering, organisations can enhance flexibility to respond to dynamic market influences, enhance the services, and become operationally excellent. Usage of IT towards strategic business means not only enhancing innovation but ensures that companies have the ability to stay competitive when dealing with the ever-changing worldwide environment.

# The importance of information technology in administrative process engineering:

Information technology is one of the key facilitators for the successful implementation of administrative process engineering, through which senior management can optimize and streamline operations. Perhaps its most important role is transforming traditional information systems into integrated information networks. Unlike old manual handling and processing of information systems, new IT-enabled networks facilitate simple communication and coordination with different numbers of individuals who can easily access, share, and process information. This revolution leads to productivity by saving time and reducing errors due to outdated manual procedures.

Another revolutionary change brought about by information technology has been the transition from centralized decision-making systems to decentralized decision networks. Decision-making power is apt to become concentrated in the highest echelons of management in traditional models of administration, thus creating bottlenecks and dragging processes. However, when IT is introduced, workers at all levels are able to directly feed into decision-making processes, and organizations become responsive and dynamic. This kind of setup encourages accountability since each individual is accountable for making good decisions on the basis of timely information and analysis.

Besides, information technology offers real-time communication through real-time reporting systems. Managers and workers need not be present in the office to send or receive reports. With the help of laptops, cloud-based systems, and mobile applications, there is immediate access to important information anywhere, improving operational efficiency and the timeliness of decision-making. This is an advantageous feature for businesses with different branches or virtual offices, since it prevents business processes from being disrupted and allows them to be very coordinated.

Besides making communication easier, IT transforms customer interaction from personal, one-to-one communication to more structured, objective, and effective digital communication channels. Automated message systems, chatbots, and AI-based customer service platforms

enable businesses to answer customers' queries in time and accurately. The revolution makes customer satisfaction easier and enables consistency in service delivery, reducing the likelihood of miscommunication or human error.

Yet another key benefit of IT in admin process engineering is that it can increase the flexibility, speed, and transparency of processes. Automated software and electronic solutions decrease the time spent on tasks to be done, eliminate redundant bureaucratic barriers, and enable organizations to respond according to evolving business circumstances with ease. This flexibility comes into play in competitive situations where business needs to be addressed immediately both in the context of market needs as well as operational issues.

IT also allows companies to break free from old, rigid administrative practices that can stifle efficiency. Most older processes have too much paperwork, redundant approvals, and lengthy manual checks. With digital technology, organizations can do away with such inefficiencies, instead leveraging streamlined, automated processes that speed up productivity and reduce operating costs.

Finally, information technology has an important role to play in process integration and alignment of work processes so that various administrative functions and tasks form a uniform, cohesive system. IT-enabled process integration enables various departments to coordinate better, decreasing fragmentation and increasing organizational performance as a whole. With the integration of individual functions into a single process, organizations are able to achieve greater coherence, improved resource usage, and improved strategic planning activities.

Overall, the integration of information technology with administrative process engineering is a transforming force that enhances decision-making, streamlines workflow, facilitates communication, and augments operational efficacy. Organizations using IT-based solutions can achieve more transparency, flexibility, and customer satisfaction, positioning themselves for success in an increasingly digitalized and competitive business world in the long run.

### **Second: The strategic dimension:**

The strategic dimension of an organization is primarily responsible for setting its long-term direction and optimizing the use of available resources to achieve its objectives. Strategy is the master plan that outlines the general objectives, philosophies, and policies of the organization and forms a formalized framework that guides decision-making and operational activities (Mohsin et al., 2022). It is not a hard plan but an evolving process which allows the organization to adapt to internal and external changes while remaining connected to its core mission. Structured release of these strategic plans allows organizations to communicate their purpose, values, and operational scope clearly to stakeholders in a transparent and harmonious way.

In essence, strategy decides the ability of an organization to handle the ever-changing conditions of competitive environments. It is a holistic model that encompasses visions, objectives, policies, and action plans in such a way that they are created in a manner conducive to organizational efficiency and effectiveness. A sound strategy is fundamental in ensuring sustainability over the long term because it provides a roadmap for decision-making and allows organizations to adapt to uncertainty in the marketplace. Moreover, formulation of strategy involves setting central priorities and setting measurable goals in order to ensure that the organizational mission remains up to date and reactive to newly arising challenges.

Successful strategy also plays an important role in achieving a competitive advantage. Organizations that define unique and valuable strategic positions differentiate themselves from competitors through the unique provision of services or operational efficiencies. This differentiation is particularly critical in competitive markets, where the survival of a company depends on its ability to innovate and optimize its operations. One of the tried-and-tested ways of achieving such an edge is through administrative process reengineering. By redesigning and optimizing working processes, organizations can increase productivity, reduce waste, and improve service delivery, thus becoming industry leaders (Raeisi-Varzaneh et al., 2023).

Hence, the strategic element is not a theoretical abstraction; it is an actuality that exists for each organization willing to endure in a changing and competitive world. With strategic planning, organizations can put themselves in coordination with external conditions so that they utilize their resources appropriately to fulfill short-term as well as long-term objectives.

### Third: The staff dimension:

Employees are the pool of human resources an organization has to draw upon, and this entails all those who work in it, either as a permanent or temporary employee, in supervisory or junior roles. Today, in modern organizations, employees are viewed as the most valuable asset and are a critical part of the organization's effectiveness and efficiency. The success of any organization no longer lies in the availability of natural, financial, or technological resources but in the ability to obtain, develop, and hold on to highly educated professionals capable of leveraging these resources to their fullest extent (Nikolova et al., 2023).

Management practitioners and specialists are in agreement that the competitive edge of a company is largely defined by the quality of its human resource. Employees are the moving spirit in rallying other resources, effective coordination, and directing efforts towards organizational achievement. In the absence of the right people, even the most abundant financial or technical resources will never be effectively utilized. Human capital, therefore, is not only a

determining factor towards operating success but also a crucial element towards an organization's sustainability.

The development and sustainability of an organization are directly linked with the competencies, skills, and behaviors of its members. A company that wants to be long-term and competitive must place utmost importance on hiring highly capable individuals, continuously developing their skills, and placing them strategically in roles where they can deliver their best. Human resource effectiveness is achieved where the right person is put in the right position at the right time to the point that organizational objectives are effectively attained (Nikolova et al., 2023).

#### **Project management:**

Project management has become more pervasive in the last ten years and has reached levels of increasing complexity. It has developed as a specialized field of practice in management to respond to the requirements of the emerging economic environment, the phenomenon of globalization, rapid-speed technological change, and stakeholders' quality problems. Project management is an independent management field that helps manage projects, and due to the increasing demand and pressure generated by these projects, the International Standards Organization established (Kuwornu et al., 2023). To make these processes and concepts more understandable and accessible, enabling companies to collaborate more efficiently. This standard is considered one of the modern specifications in management science, which summarizes rational practices in project management. This standard can be adopted in strategic projects, properly planned, and later linked to the quality management system (Sarker et al., 2023).

The importance of project management: Project management is no longer a department with unique needs. It has quickly become a normal method of doing business. The future holds an even larger role and contribution of projects in the strategic management of organizations

- 1. Define job responsibilities to ensure all necessary activities are accounted for. A project management approach can provide organizations with the opportunity to assign responsibilities to a specific task and remove unnecessary activities and tasks
- 2. Project management helps get more work done in less time and with fewer people
- It reduces the need to prepare continuous reports because it clarifies the tasks and responsibilities of all administrative levels
- 4. It supports teachers with an effective set of methods to solve the problems they face during project implementation.

#### **METHODOLOGY**

After the necessary tests are executed to verify the quality of data gathered, the level of influence among study variables will be established because the study was interested

in investigating operations' contribution towards improving the phases of project management in the company under study. In examining the impact hypotheses, the program used will be employed (SEM-PLS). All hypotheses will be begun and the relationship with study variables will be examined. Then, the amount of variance occurring in the dependent variable (project management) that is explained by the independent variable (administrative process engineering) will be ascertained. Then, the effect factor between study variables will be measured as two hypotheses have been formulated. Two of the most prominent ones are as follows:

First: The first main hypothesis: The researchers grounded their assumption that administrative engineering

processes in project management have a strong and positive influence relationship. This assumes the premise that management engineering processes are an actual function in project management. Any increase in (administrative engineering processes) will be accompanied by a corresponding increase in (project management), and the structural equation is examined (SEM-PLS), The result is derived through the statistical software (SMART PLS) according to the (simple regression technique), where the effect factor (Beta) and the significance level specified on the arrow between the independent variable and the dependent variable are calculated, as can be seen from the figure (2) and the table (1). They are as follows:

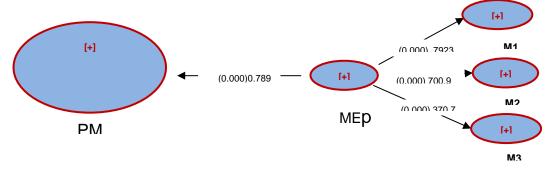


Figure (2) Test results of simple regression analysis of administrative engineering processes in project management.

Table (1) statistics of the impact factor test of administrative engineering processes in project management.

	Original Sample (O)	R	Standard Deviation (STDEV)	R2	T Statistics ( O/STDEV )	P Values
MEP -> PM	0.795	0.820	0.091	0.61	8.980	0.000

According to the results of table (1), it was established that there is a significant impact relationship between project management and administrative process engineering. It became (0.820), which is positive and satisfactory at a significance level (0.05). Since it was clear from table (1) that the coefficient of determination (R2) was (0.62), which indicates that administrative engineering processes explain a proportion of (0.61) of the variance that occurs in the dependent variable, project management environment. The proportion of effect was (0.796), which reflects that any increase in the independent variable administrative engineering processes will lead to an increase in project management by (0.795). It is significant at the level of significance (0.05). Based on these results, this hypothesis is accepted at this study's level.

Second: The second main hypothesis: The researcher presumed that administrative engineering procedures have strong correlation with project management. It is formulated on the presumption of project management. It is a real function of administrative engineering processes, and the increase in (the independent variable) will lead to an increase in (the dependent variable), The structural equation will be tested (SEM-PLS), and the result will be graphed by the statistical program (SMART PLS) according to the (simple regression method), as the influence factor (Beta) and the significance level shown on the arrow between the independent variable and the dependent variable are estimated as shown. In figure (3) and table (2). They are as follows:

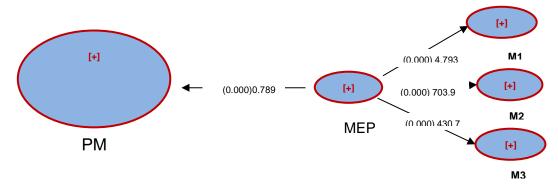


Figure (3) Test results of simple regression analysis of administrative engineering processes in project management

Table (2) statistics of the impact factor test of administrative engineering processes in project management

	Original Sample (O)	R	Standard Deviation (STDEV)	R2	T Statistics ( O/STDEV )	P Values
MEP -> PM	-0.602	-0.628	0.079	0.34	-7.802	0.000

Depending on the results of Table (2), it was clear that there is a connection between administrative engineering processes and project management. It equaled (0.628), which is significant and positive at the level of administrative engineering processes. It explains (0.34) of the variance in the project management variable. As for the degree of impact, the figure (3) showed that the impact factor amounted to (0.602), meaning that any increase in the variable of administrative engineering processes will lead to an increase of (0.602) in project management. It is notable at a significance level (0.05). In accordance with these results, this hypothesis is accepted at the study level.

#### **CONCLUSIONS**

Information technology plays a vital role in administrative engineering tasks by sustaining internal networks of communication and providing centralized databases for the organizational units. Such integration not only enhances accuracy and speed of data retrieval but also keeps the various departments of a company operational as units. These technological improvements greatly assist in streamlining project management by simplifying processes, eliminating duplications, and enhanced coordination in various divisions. The effectiveness of access and sharing of information enables organizations to enjoy a higher level of operational harmony, which ultimately leads to improved decision-making and the use of resources.

Administrative process engineering is also a critical tool for the improvement of communication between employees and customers. Through the simplification of the delivery of service-related information, companies are able to offer employees and clients necessary information in an easy-to-understand and usable format. Development and use of simplified standardized service request forms, which are easy

to complete and understand, enable effective interactions and the avoidance of miscommunication. Also, issuing identification booklets makes it easier for further understanding and navigation of company procedures by employees and customers. This, consequently, results in a well-organized and better-accessible system that enhances customer satisfaction and delivery of services.

While organizational development is inevitable and duly recognized, management in the company still shows a paradoxical tendency. Decision-makers are aware of the need for modernization and optimization but at the same time hold on to old ways of administration with great tenacity. The incongruity indicates a gap between the strategic vision for advancement and the real implementation of reforms within the firm. Arguably the biggest barrier to effective change implementation is keeping employees out of the transformation process. Instead of establishing a participative environment under which staff are free to participate actively in designing new administrative systems, management tends to rely on going back to coercive commands to bring about compliance. Not only does this top-down method detract from employee participation, but it risks undermining longterm re-engineering success. A more participative and open approach is required to make organizational change meaningful and sustainable.

#### RECOMMENDATIONS

To successfully execute its projects, the researched company ought to organize its work and strategically plan its resources. Efficient allocation of human, financial, or material resources is crucial in managing the efficiency of project execution. By connecting its organizational processes to predetermined strategic goals, the company can enhance its overall performance, minimize wastage, and maintain its

growth. Good planning will not only improve the control of workflow but also facilitate improved departmental coordination so that all activities are directed towards the organization's overall goals.

Another essential recommendation is establishing a very competent, productive, and stable workforce. An orderly workforce with minimal turnover facilitates a more congenial and efficient working environment. High employee retention ensures that skills and experience remain within the firm, reducing dislocation and inefficiency from recurrent changes in personnel. Stability of the team is most important because it ensures free flow of activities, improves communication, and provides a platform where workers can work harmoniously. This consequently allows the company to complete projects efficiently and within deadlines, and as such, enable the company to provide outputs within time to respective authorities. Through investment in ongoing training and development, the company is also able to increase the level of its employees' capabilities in order to provide them with the skills needed to cope with changing industry demands.

Besides, under consideration's the company management will have to assume a proactive approach by initiating independent actions beyond their official job definition for the sake of the project. This includes taking additional strategic planning, problem-solving, and operation monitoring tasks beyond the typical administrative roles. Handling these functions as part of the company's project management framework will not only implementation but also assist in achieving both strategic and operational objectives. Through fostering an environment of commitment and responsibility at all levels of management, the company can encourage efficiency, better decisionmaking, and ultimately enhance its competitive place in the industry.

Through the execution of these recommendations, the company in the studied scenario can build a more articulated, stable, and purpose-oriented system of project management. This will enable the firm to better survive obstacles, optimize performance, and achieve long-term prosperity within an ever-competitive and changing industrial environment.

#### REFERENCES

- 1. Aripin, Z., Matriadi, F., & Ermeila, S. (2023). INNOVATION WITH SMALL INDUSTRY PLAYERS TO CREATE SHARED VALUE IN THE EXPERIENCE OF THE COVID-19 PERIOD IN INDONESIA. *Journal of Economics, Accounting, Business, Management, Engineering and Society, 1*(1), 50-62.
- Bayomy, N. A., Khedr, A. E., & Abd-Elmegid, L. A. (2021). Adaptive model to support business process reengineering. *PeerJ Computer Science*, 7, e505.

- 3. Bhaskar, H. L., & Singh, R. P. (2014). Business process reengineering: a recent review. *Global Journal of Business Management*, 8(2), 24-51.
- 4. Garcia-Garcia, G., Coulthard, G., Jagtap, S., Afy-Shararah, M., Patsavellas, J., & Salonitis, K. (2021). Business process re-engineering to digitalise quality control checks for reducing physical waste and resource use in a food company. *Sustainability*, *13*(22), 12341.
- George, A. S., & George, A. H. (2023). A review of ChatGPT AI's impact on several business sectors. Partners Universal International Innovation Journal, 1(1), 9-23.
- Hojnik, J., Ruzzier, M., Ruzzier, M. K., Sučić, B., & Soltwisch, B. (2023). Challenges of demographic changes and digitalization on eco-innovation and the circular economy: Qualitative insights from companies. *Journal of Cleaner Production*, 396, 136439.
- 7. Kuwornu, J. K., Khaipetch, J., Gunawan, E., Bannor, R. K., & Ho, T. D. (2023). The adoption of sustainable supply chain management practices on performance and quality assurance of food companies. *Sustainable Futures*, *5*, 100103.
- 8. Lundgren, R. E., & McMakin, A. H. (2018). *Risk communication: A handbook for communicating environmental, safety, and health risks*. John Wiley & Sons.
- 9. Marsden, C., & Andriof, J. (1998). Towards an understanding of corporate citizenship and how to influence it. *Citizenship Studies*, 2(2), 329-352.
- Mohsin, H. J., Al-Frijawy, J., Hameed, A. T., Hani, L. Y. B., & Al-Alawnh, N. A. K. (2022). Strategic Flexibility and its Impact on Raising the Performance of Banks. *Journal of Social Commerce*, 2(1), 11-23.
- 11. Mohsin, H. J., Hani, L. Y. B., Bani Atta, A. A., Al-Alawnh, N. A. K., Ahmad, A. B., & Samara, H. H. (2023). The impact of digital financial technologies on the development of entrepreneurship: Evidence from commercial banks in the emerging markets [Special issue]. *Corporate & Business Strategy Review*, 4(2), 304–312.

#### https://doi.org/10.22495/cbsrv4i2siart10

- 12. Muhammad, M. Z., Char, A. K., bin Yasoa, M. R., & Hassan, Z. (2010). Small and medium enterprises (SMEs) competing in the global business environment: A case of Malaysia. *International Business Research*, 3(1), 66.
- 13. Nikolova, M., Nikolaev, B., & Boudreaux, C. (2023). Being your own boss and bossing others: The moderating effect of managing others on work meaning and autonomy for the self-employed and

- employees. Small Business Economics, 60(2), 463-483.
- 14. Oberoi, R. (2013). Applying Business Process Re-Engineering to Public Sector as A New Public Management Strategy. *Jurnal Studi Pemerintahan*.
- Raeisi-Varzaneh, M., Dakkak, O., Habbal, A., & Kim, B. S. (2023). Resource scheduling in edge computing: Architecture, taxonomy, open issues and future research directions. *IEEE Access*, 11, 25329-25350.
- Sarker, K. U., Hasan, R., Deraman, A. B., & Mahmmod, S. (2023). A Distributed Software Project Management Framework. *Journal of Advances in Information Technology*, 14(4), 685-693

- 17. Siddiqui, K. (2012). Developing countries' experience with neoliberalism and globalisation. *Research in Applied Economics*, 4(4).
- 18. Sony, M., & Naik, S. (2020). Industry 4.0 integration with socio-technical systems theory: A systematic review and proposed theoretical model. *Technology in society, 61*, 101248.
- 19. Van Assche, K., & Verschraegen, G. (2008). The limits of planning: Niklas Luhmann's systems theory and the analysis of planning and planning ambitions. *Planning theory*, 7(3), 263-283.
- 20. Wogan, S. S., & Mnenga, S. H. I. I. W. U. A. (2020). Reengineering: A new paradigm shift for organizational repositioning.