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## **Assessment of Outsourcing on Project Delivery in Ministry of Works, Land and Housing, Ondo State, Nigeria**

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### **Abstract:**

*Presently, the construction industry in Nigeria is undergoing very rapid change and explosive growth and it has been argued that outsourcing strategies adopted have contribution to the growth of the sector due to its relevance and potentials for the economy. As such, this study tried to assess the significant effects of outsourcing on project delivery in ministry of works, land and housing, Ondo State, as regards cost reduction, timely delivery of projects and quality of projects. About 60 questionnaires were administered, 55 were returned and analyzed to get primary data that treated appropriate research questions and the hypothesis was tested accordingly. The study found that outsourcing so far has positively contributed to the delivery of projects in Ondo State ministry of Works and the results indicated that the ministry has benefited from outsourcing its business process to reduce cost of operation, ensure timely delivery of projects and also increase the quality of their projects.*

**Keywords:** Outsourcing, Project delivery, business process outsourcing

## **1. Introduction**

### *1.1. Background to the Study*

Ondo State Ministry of Works was established by the Ondo state government as a unit for the construction and maintenance of roads, drainages, culverts and other hydraulic structures, they are also involved in building projects and renovation of houses, they supervise and make sure all construction projects which have been outsourced out to contractors are properly done to meet the standard requirements. The Ondo State Ministry of Works Land and Housing is located along Oyemekun road, Akure, Ondo state, Nigeria. The Civil Engineering division is charged with the responsibility of implementing the state program as it pertains to services in the Transportation system. The division undertakes purposeful development in the areas of Road construction, Reconstruction, Rehabilitation and Maintenance of State Roads, Estate roads as well as part of Federal roads on contract basis in the past. This division also undertakes the development of transportation system in the riverine areas of Ondo State by dredging and clearing of main and link canals.

Utterback and Abernathy (1975) assert that Outsourcing is the process by which an organization contracts with another individual or company to get some of its work done. Outsourcing is also a process whereby business processes are being subcontracted to third-party service providers. Most organizations go for some kind or other of outsourcing. Generally, it is non-core aspects of the business that are outsourced. The firms that offer the services thus required are called service providers or third-party providers. Businesses may thus tie up with service providers for either individual processes or whole projects or operations.

Although outsourcing is still at its developing stage in Nigeria, it has benefited many companies (Orji, 2002) as well as created jobs opportunities for many Nigerians as well. Firms outsourcing part of their production process and services are benefiting from increased efficiency and profits.

The decision to outsource comes with numerous responsibilities and considerations by the company willing to outsource. The need to improve and speedup the production process of a firm may lead to a firm deciding to contract or outsource some of its production process to another firm or vendor to handle. The issue of wastages in developing countries including Nigeria has been a major issue. The in-ability of companies to effectively manage their outsourcing process is alarming.

However, even when organizations set out to carefully evaluate an outsourcing opportunity, making accurate comparisons of internal processes relative to external providers can be extremely difficult (Hayward & McDonagh, 2000).

There is a huge variation in how organizations define processes such as Order-Entry or Accounts Payable and little standardization in how organizations deliver and manage these processes. Davenport (2005) argues it is therefore very difficult to compare what happens internally to what is on offer externally. Davenport goes on to describe the benefit of establishing business process standards for use in outsourcing decisions and to facilitate improvement of internal capabilities.

Acknowledging that specific skill-sets are required to outsource, then developing the expertise and supply of outsourcing skills is likely to continue to gain momentum.

Gay and Essinger (2000) suggest that a strategic approach to outsourcing is most effective when organizations are prepared to adopt a new perspective on management control with the focus on output rather than inputs, these views are supported by Quinn in a recent interview; Companies might have brilliant designers, lawyers etc., but might not have the capability needed for managing outsourcing. They need to have the ability to evaluate alternative cost structures and to understand the strategic risks of outsourcing to one partner versus another. A good outsourcing manager must be able to motivate partners to do what is needed. They must be able to monitor the deal – through software and personal contact – without interfering; to get lead signals they need to maintain strategic control. They need a totally different set of management skills, and the real essence of these skills is a learning capability and willingness.

Nevertheless, the drive of Ondo state Ministry of Works to satisfy customers and deliver projects by creating enabling environment for the state necessitated the adoption of outsourcing.

### *1.2. Statement of the Problem*

The concept of outsourcing has not received a lot of attention as considered to be important elements that account for successful delivery of projects in Nigeria. Also, the effects of outsourcing on firms' project delivery are not completely clear. Previous outsourcing studies show contradictory results; while some claim a positive relationship between outsourcing and project delivery outcome, others report no significant or even negative effects. (Rothaermel and Deeds, 2001)

Outsourcing without proper management control could sometimes result in job losses. According to Ghodeswar and Vaidyanathan (2008) a large number of employees whose organizations outsource their business activities may have similar problems to those employees that have undergone downsizing, while organizations claim that the basis for outsourcing is to increase business efficiency. However, employees who are lucky to remain in the company after outsourcing effects believe that the possibilities of them staying in the company is low, because they could be the next in line to lose their jobs. Hammer (2001) posits that in situations where the outsourcer is not satisfied with the service, it could be difficult to break the contract because outsourcing contracts usually require a stipulated period. It will be costly to reverse the situation and return the services in-house. Nevertheless, extant literatures and observed online interviews of business executives have shown that the positive outcome of outsourcing is higher than that of its negative effects on project delivery.

The study intends to assess the effect of outsourcing and how business process outsourcing has helped the Ondo State ministry of Works to reduce cost of operations in their projects.

The study also tends to find out how outsourcing has ensured timely delivery of projects.

Finally, to identify whether outsourcing strategies adopted by Ondo State ministry of Works has helped them to increase the quality of their projects.

### *1.3. Research Questions*

This study intends to answer the following research questions to solve the research problem.

- i. Has business process outsourcing assisted the Ondo State ministry of Works to reduce project cost overrun?
- ii. How has outsourcing assisted to ensure timely delivery of projects?
- iii. To what extent has outsourcing strategies adopted by Ondo State ministry of Works helped them to increase the quality of their projects?

### *1.4. Aim and Objectives of the Study*

The general objective of the study is to determine the extent to which outsourcing has contributed to the delivery of projects in Ondo State ministry of Works. The specific objectives of the Study are to:

- i. To ascertain whether business process outsourcing assisted the Ondo State ministry of Works to reduce project cost overrun.
- ii. To find out if outsourcing has ensured timely delivery of projects.
- iii. To identify whether outsourcing strategies adopted by Ondo State ministry of Works has helped them to increase the quality of their projects.

### *1.5. Research Hypothesis*

The Research Hypothesis is indicated in the form below.

Ho: There is no significant relationship between Outsourcing and project delivery

### 1.6. Significance of the Study

The Nigerian economy faces a major challenge of performance in terms of efficient and effective utilization of the available resources to generate adequate output that can compete globally. Augusto (2004). There also exist challenges of ineffective delivery of projects that can compete globally.

The study would help industries that execute projects like construction projects to embrace the uniqueness of outsourcing strategy to venture into the business with lesser stress. It will also help them to see the opportunities that exist in embracing innovation technique as outsourcing that could help reduce project cost overrun, ensure timely delivery of projects and improve project quality.

Finally, this becomes significant because it would provide a framework for Ondo State ministry of Works to be able to adopt outsourcing strategies in a unique manner to stay ahead of competition in their industry and also be able to compete globally with foreign construction projects in developed countries thereby being in a model for the advanced world in any substantial form they desire.

### 1.7. Scope of the Study

The Case study of this research was the Ondo State ministry of Works, Land and Housing located along Oyemekun road, Akure, Ondo State, Nigeria. This is the unit for the construction and maintenance of roads, drainages, culverts and other hydraulic structures, they are also involved in building projects and renovation of houses, they supervise and make sure all construction projects which have been outsourced out to contractors are properly done to meet the standard requirements. They outsource some of their projects out to contractors which is the reason why they have been chosen as a focal point in this research.

The respondents for data gathering were limited to directors, engineers and technicians in charge of planning and execution of projects in the Ondo State ministry of Works. These managers are expected to be knowledgeable about outsourcing. The focus of the study was the construction industry of the Nigerian economy because of the importance of the sector to the overall economy of the country and its impact in helping the country to generate employment and increase revenue base.

### 1.8. Limitations of the Study

This study was limited by some variables which range from the use of a small scope of study. This was the reason why the purposive sampling technique was used for this research and has in turn reduced the quantity and quality of information needed for this research. Financing of this research was also a limitation encountered.

### 1.9. Operational Definitions of Terms

**Outsourcing:** Outsourcing is the process by which an organization contracts with another individual or company to get some of its work done. Outsourcing simply means to transfer work responsibilities and decision rights to someone outside the business. Outsourcing refers to a company that contracts with another company to provide services that might otherwise be performed by in – house employees (Akinbola 2012). Outsourcing involves contracting of business process to another party service provider.

**Business Process Outsourcing (BPO):** It is a situation in which a particular process task is outsourced. An example could be payroll. Business process outsourcing work could be either back office related or front office work. By front office functions it means customer oriented work like marketing, answering calls, technical support and so on, whereas internal work like billing and purchase come in the back-office category (Akinbola, 2012). Also, business process outsourcing would involve the outsourcing of architectural systems. For example, some construction project contractors outsource their total architectural works to external parties to prepare designs and building plans for them where they are less competent.

**Project Delivery Method:** This is a system used by an agency or owner for organizing and financing design, construction, operations, and maintenance services for a structure or facility by entering into legal agreements with one or more entities or parties. (Wikipedia)

## 2. Literature Review

### 2.1. Conceptual Framework

#### 2.1.1. The Concept of Outsourcing

Maynard (2006) postulated that, since 1982 the term outsourcing has evolved to include all parts of the enterprise, not just manufacturing. In many ways, outsourcing is a synonym for sub-contracting. According to Nicholas Beaumont and Amrik Sohal (2004), outsourcing is defined as having work that was formerly done inside the organization performed by an external organization. They also supplemented that the vendor (hereafter the outsourcer and outsource are respectively, referred to as vendor and client) may be an independent entity or a wholly owned subsidiary. Feenstra (2005) described Outsourcing as a “disintegration of production” or a “super specialization”. Dutta and Roy (2005) mentioned a phenomenon called “vertical fragmentations”. Lacey and Blumberg, (2005), defined outsourcing as “reliance on external sources for

manufacturing components and other value adding activities". Some focus on international sourcing of components, sub-systems and completed products (Asher and Nandy 2007).

In general, outsourcing can be referred to as make or buy decisions on intermediate goods, to the hiring of temporary labour and to the use of external services (Kennedy, Holt, Ward, and Rehg, 2002). According to Beaumont, (2006) outsourcing can be said to be one sub-type of distributed work. It is the delegation of task or job from internal production to external entity, such as a sub-contractor. Smith (2006) defined outsourcing as turning over to a supplier those activities outside the organization's chosen core competencies.

### 2.1.2. Advantages of Outsourcing

The following are the benefits of outsourcing:

- i. **Increased Productivity:** Employment of a large number of skilled manpower at low cost would result to increased productivity and customer satisfaction. (Nonaka and Takeuchi 1995).
- ii. **Competitive Advantage:** In recent times, for a company to retain its customers, provision of high quality services is of great importance. The company should also provide the services at cheap prices. Outsourcing in this case can help the company maintain lower rates with better service solutions, thereby giving them a better market position and competitive advantage. Organizations "obtain sustained competitive advantage by implementing strategies that exploit their internal strengths, through responding to environmental opportunities, while neutralizing external threats and avoiding internal weaknesses" (Brooks 2006).
- iii. **Cheaper World Class Technology:** The high risky cost of investing in new technology due to the rapid development of technology has made it a complex thing to keep up with latest innovations and solutions. Thus, companies can outsource the technology part to companies that have the resources, expertise and desire to continuously update their technological solutions, to save the cost and reduce the risk itself bears. Outsourcing resolves the problem of an ever-changing technology world and enables the executive to focus on promoting his core competencies. Thomas and Thomas (2008).
- iv. **Skilled Manpower:** A firm can employ skilled and trained manpower at low rates by outsourcing which ultimately leads to increased productivity and low cost. Outsourcing the company also helps utilize the kind of expertise that could not be produced internally. Internal operations can be reduced by outsourcing if not the company will maintain it internally with higher costs. (Farrell and Grant, 2005)

### 2.1.3. Disadvantages of Outsourcing

Despite the rising popularity of outsourcing organizational activities, the practice is not without pitfalls. Risk and pitfall typical in an outsourcing initiative, the following can be identified:

#### i. Displaced Employees

Thomas & Rick (2005) discovered that Outsourcing sometimes results in job losses, especially in cases where reducing head count is the objective. According to research, a large number of employees whose organizations outsource their business activities may have similar problems to those employees that have undergone downsizing, employees who are lucky to remain in the company after outsourcing believe that the possibilities of them staying in the company is low, because they could be the next in line to lose their jobs. Plans for redistribution of jobs should be implemented whenever possible, training and relocation of employees may be needed. Extreme caution must be exercised regarding displaced workers, company morale and public opinion. Contracts should include, whenever possible, the absorption of displaced workers by the vendor. The cost of displaced workers both qualitatively and quantitatively must be figured into the cost and analysis performed when outsourcing is considered as an option. Poor morale and stress are consequences of outsourcing. Organizations that outsource IT often must deal with unexpected costs such as lower productivity, added sick leave, and poor-quality work. The cost of displaced workers and the effect on company morale may exceed the benefit of outsourcing project.

#### ii. Loss of Business Knowledge

When knowledgeable staff people are eliminated or absorbed by the vendor, the accumulated know how and business knowledge goes with that staff member. Attempts in the future to return the process in-house will not have the benefit of key personnel with the needed knowledge on staff. Because knowledge is non-quantifiable, organizations fail to value this asset. The retention of corporate wisdom should be taken into account when considering the issue of outsourcing (Grossman, and Helpman, 2005).

#### iii. Communication Problems

Communication failures are the biggest contributor to outsourcing project failures (IT convergence, 2003) language barriers are often present in the case of outsourcing, especially offshore outsourcing.

### 2.1.4. Project Delivery Methods

A project delivery method is a system used by an agency or owner for organizing and financing design, construction, operations, and maintenance services for a structure or facility by entering into legal agreements with one or more entities or parties. (Wikipedia)

Common Construction project delivery methods include; Design-Bid-Build (DBB) or Design-Award-Build (DAB), DBB with Construction Management (DBB with CM), Design-Build (DB) or Design-Construct, Design-Build-Operate-Maintain (DBOM), Build-Operate-Transfer (BOT) and Integrated Project Delivery (IPD).

## 2.2 Theoretical Framework

The following theories are related to the concept of outsourcing which refers to a means by which a company establishes contracts with another to provide some certain services. The theories include:

### 2.2.1. Agency Theory

This theory was propounded by **Eisenhardt (1989), Jensen and Meckling (1976)**. It is based on the conceptualization of the firm as a nexus of contracts between principals or stakeholders and agents. The stakeholders are represented by different groups or persons within the firm as well as outside the firm, such as customers, suppliers, or shareholders. The basic assumption of Agency Theory is the existence of *asymmetric information* and *different perceptions of risk* between principal and agent as well as *uncertainty*. The basic argument is that the principal transfers decision rights to the agent. To make sure that the agent behaves as expected the principal sets incentives. In short, Agency Theory helps to expose problems of divergent interests within both markets and hierarchies. An example of Agency Theory used in outsourcing is the choice of contract. When the perception of risk and uncertainty is low, a client prefers to sign a fixed-fee contract. Otherwise, the client prefers to sign time and material contract.

### 2.2.2. Theory of Transaction Cost Analysis

Further conceptual basis for outsourcing is Williamson's (1985) theory of transaction cost analysis. This combines economic theory with management theory to determine the best type of relationship a firm develops in the market place. The central theme of transaction costs theory is that the properties of the transaction determine the governance structure. Asset specifically refers to the non-trivial investment in transaction – specific assets. For example, the level of customized equipment or materials involved in the transaction relates to the degree of asset specificity. Due to the nature of construction companies' operation basis, several tools and operational equipment are needed and are sometimes outsourced to minimize cost of operations but when asset specificity and uncertainty are low and transactions are relatively frequent, transactions will be governed by markets. High asset specificity and uncertainty lead to transactional difficulties, with transactions held internally within the firm – vertical integration. Medium levels of asset specificity lead to bilateral relations in the form of cooperative alliances between the organizations.

Theory of Transaction cost analysis has been the most utilized theory of outsourcing. It is perceived to provide the best decision-making tools to help organizations to decide to outsource and to prepare themselves for forthcoming outsourcing arrangements. The governance features of the theory influenced that it has been applied in studying the Managing relationship phase. Another useful issue for outsourcing provided by this theory is explanation of contractual complexity. Though it has not been utilized explicitly for studying the Vendor selection phase, it has been applied in studying the structure and contents of outsourcing contracts, and related preparation and contract management activities.

Even though it has been exercised extensively in outsourcing applications, the theory has several indulgencies. Lacity and Willcocks (1995) found that the original mapping to the framework only explained with few examples on IT sourcing decisions and generated much more anomalies in their sample. Another critique could be that Transaction cost analysis relies on a single transaction as a unit of analysis, neglecting the contemporary industrial collaborative arrangements.

### 2.2.3. Strategic Management Theories

According to Chandler (1962)'s definition, strategy is the determinant of the basic long-term goals of an enterprise, and the adoption of courses of action and the allocation of resources necessary for carrying out these goals. Theories that explain the strategic activities of a firm fall under this category. Examples of classic strategic management theories are Miles and Snow's (1978) taxonomy of Defenders, Prospectors, and Analyzers, and Porter's (1985) theories of strategic advantage, especially his five-force model.

### 2.2.4. Game Theory

Game theory attempts to explain the strategic behavior of player or actors (e.g. companies) in particular game situations. These situations are characterized by specific assumptions regarding the production function of a company, the environment, and informational structures. *It assumes that all players work under the same conditions and make rationale and intelligent decisions to maximize their profits.* The only **determinant for these decisions is the perception of the expected actions of the other player(s)**. A game can be a 2-player game or N-player game. Traditional mathematical game theory assumes complete information. But newer dynamic game theory incorporates the assumption of incomplete information into its analytic models. (**Nash 1953, Kreps et al. 1982, Spence 1976, Fudenberg and Tirole 1990**)

2.2.5 .Relationship Theories (Klepper 1995, Kern 1997)

Relationship theories focus on cooperation, interactions, and social and economic exchanges as major factors in inter-organizational relationships (IOR). More specifically, they focus on interactions between parties. Relationship theories often appear in the strategic management and marketing literature, addressing topics such as alliance and partnerships, competitive advantage, supply chain management and supplier-buyer relationship. The underlying notion of relationship theories is that at the root of all relationships is some type of exchange (Klepper 1995, Kern 1997). When applied to outsourcing research, they have been used to identify the key dimensions of ITO relationship, including context, interactions, behavioral (Kern 1997, Kern and Willcocks 2000). These key dimensions of outsourcing relationship also have been examined by prior literature of their impacts on outsourcing outcomes.

There is also a theory used in Project delivery which is known as the Gorilla Theory.

2.2.6. Gorilla Theory

GorillaTheory is a new business process framework specifically intended to aid people in avoiding project delivery disaster and to deliver projects more efficiently. It is founded on principles of vigilance, self-awareness, discipline, communication and people skills. A series of checklists serve guidance and prompts to the project lead, members of the project team and management.

Gorilla Theory is a methodology agnostic and serves to enhance the efficiency of whichever methodology or bespoke internal delivery process is being used by a person, company, or start-up, or group coming together for a project.

Delivery of any type of project successfully involves a very good understanding of:

- (1) what is desired for the end product,
- (2) An understanding of the precise status at any time, particularly progress to date and what is to come
- (3) A schedule of delivery agreed upon by the project team and the key stakeholders and/or client,
- (4) Following an agreed project management process that allows for a smooth collaboration of the key people and resources involved, and,
- (5) An understanding from the people or person tasked with overseeing the delivery of what is required to work with all the project team members, colleagues, stakeholders and the delivery processes to get to the end point.

Gorilla Theory is a framework that relies upon enhanced discipline and improved vigilance, self-awareness, and communication throughout a project lifecycle. Gorilla Theory is intended to help any member of a project team to take greater responsibility for their input and deliverables of a project and to perform at a higher level by taking pains to understand their role, the scope of the deliverables attached to them and how the project team should work together to deliver the product or service.

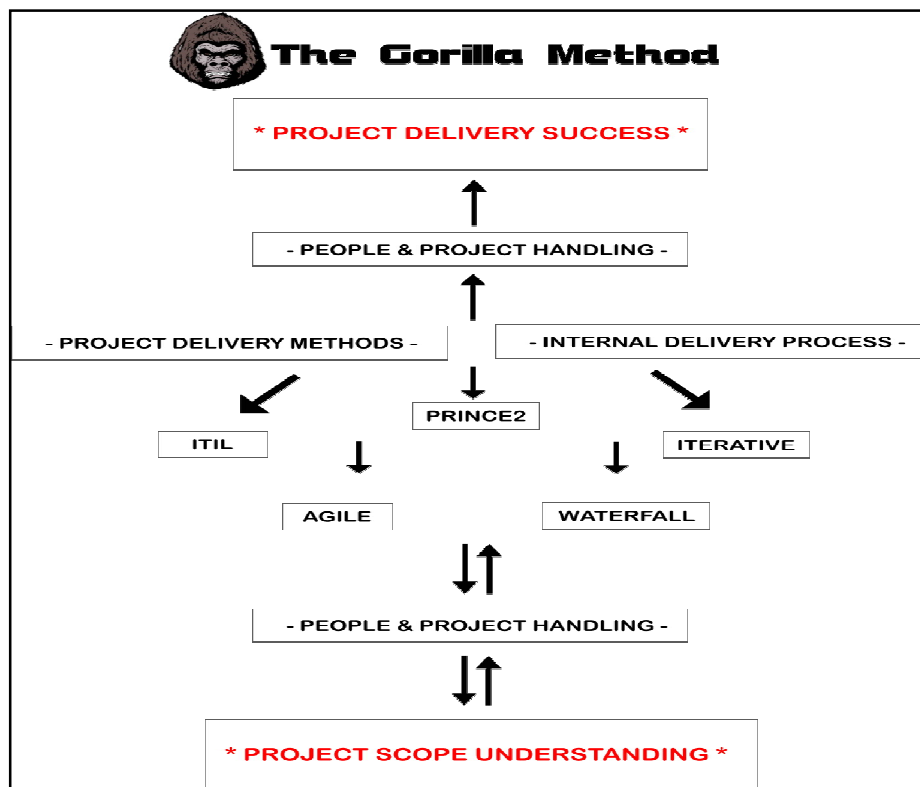


Figure 1: Gorilla Theory (www.gorillatheory.com/the-book.html)

### *2.3. Empirical Review of Literature*

Akinbola (2012) carried out a research work on effects of outsourcing strategies on the organizational performance of fast foods industry in Lagos state. The study highlighted the effects of the concept of outsourcing and how business process outsourcing helps fast foods entrepreneurs to reduce cost of operation in their businesses, the study also found out how outsourcing affects customers' relationship and examined how outsourcing helps to increase productivity of employees and finally determined how outsourcing strategies adopted by a firm help Nigeria fast foods to increase profitability in the fast-growing Nigeria fast foods industry. The study population refers to the entire number of employees in the ten selected fast foods companies in Lagos state based on the Association of Fast Food Confectioners of Nigeria (AFFCON) list of 46 companies. The ten (10) companies includes, Mr. Biggs, Sweet Sensation, Tantalizers, Chicken Republic, Tetrizzini, Big Treat, Mama Cass, Tastee Fried Chicken, Munchies, Kentucky Fried Chicken. The study population includes both male and female employees, various age groups and educational qualifications, and employees at various levels of management.

A total of two hundred and fifty-six respondents constitute the sample for the study. Four research questions and Three hypotheses were generated and tested at 10% (that is 0.10) significant level using the regression analysis.

The research tends to show that businesses that involve certain processes in the economy are becoming indispensable of the usage outsourcing services being offered by other organizations, Also many fast foods organization argue that the cost of transaction has been minimal since the business environment is so much challenging as they can't afford to do all activities involved in their businesses alone, many fast food outsource business processes, knowledge processes and their information technology aspect. Areas that has to do with equipment maintenance like generator, kitchen and confectionaries equipment outsourcing, branding, public relations, advertising, sales operations and allied key business activities was well applauded by the fast foods organizations as discovered in the research of study. The study discovered that outsourcing has benefitted business organizations to reduce their cost in business and has also benefitted business organizations to build customer relationship which indirectly boost profitability capacity of the firms in the industry.

Irefin, Olateju, and Hammed (2012) also carried out a research work on effects of outsourcing strategy on project success; A study of Nestle Nigeria PLC. Copies of Questionnaire were administered using stratified sampling techniques for the purpose of data collection and interviews were also conducted to authenticate the information derived. The data obtained was analyzed using frequency distribution and Chi-Square analysis.

The findings revealed among others that firms outsourced their production process in order to manage cost, reduce time-to-market, boost bottom line, increase sales turnover and profitability, enhance expertise, improve service quality, reduce staff, streamline the process, reduce the administrative burden and save time for core activities. It was recommended that companies that outsource should continue to monitor the contractor's activities and establish constant communication. Workers should be made to embrace the strategy before implementation so as to alley the fear of loss of Jobs. Organization must embrace the outsourcing strategy and improved the service delivery to customer and there should be a shift in the mindset of company managers to managing papers or contracts rather than workers and also improve on how to work with others, that is managing the suppliers or providers, integrating and managing a diverse split work force embodying different corporate cultures.

## **3. Research Methodology**

### *3.1. Research Design*

For this research project, the quantitative research design was used. This design is such that numerical data would be generated from a number of questionnaires administered to several respondents. Relevant data were collected at the same instance; a cross-sectional design was adopted as well.

### *3.2. Study Area*

The case study of this project is the Ondo State Ministry of Works Land and Housing which is in charge of physical infrastructural development services in the state. The Ondo State Ministry of Works Land and Housing is located along Oyemekun road, Akure, Ondo state.

Akure is the largest city and capital of Ondo state. The city has a population of 588,000 based on 2006 population census. Akure lies about 70 15' north of the equator and 50 15' east of the Meridian. It is about 700km Southwest of Abuja and 311km north of Lagos State (wikipedia).

### *3.3. Population of the Study*

For the purpose of this research, the study population refers to the entire number of employees in the Ondo State ministry of works. The study population includes employees; males and females, various age groups and educational qualifications, and employees at various levels of management which covers the directors, engineers and the technicians.

### *3.4. Sampling Technique and Sample Size*

For this study, the purposive sampling technique was adopted, whereby the researcher met the professionals on purpose due to the limited number of respondents and expert opinion was needed as far as Outsourcing is concerned. The sample was limited to the directors, engineers and the technicians at Ondo State ministry of works.

### 3.5. Method of Data Collection

The data used for this study was obtained from both primary and secondary sources from Ondo State ministry of works. The primary data was gathered using questionnaire structured on the basis of the research hypothesis, which was presented to respondents to express their views, opinions, and observations. Secondary data on the other hand refers to already published information. The secondary data used to conduct this study were sourced from textbooks, journals, articles, earlier publications, encyclopedia, and dictionaries.

Essentially, the secondary data was used to develop a proper conceptual and theoretical framework for this study, while testing research hypothesis and providing answers to the research questions was made possible by the primary data.

For this research, questionnaire was used as the research instrument. The questionnaire was divided into two broad categories.

The first category is made up of personal data of respondents. Their; sex, age group, educational qualification, position occupied in firm and years of work experience.

The second category is the body of the questionnaire that includes all questions relevant to this research. It comprises of questions structured on the basis of the constructs of this research study, i.e. Outsourcing and Project Delivery. The likert-scale was used to measure opinions, where for positive questions (Strongly Agree = 5, Agree = 4, Undecided = 3, Disagree = 2, Strongly Disagree = 1).

### 3.6. Model Specification

The Model used for testing the hypothesis of this research is the Pearson's Product - Moment Correlation Coefficient. The correlation coefficient is a number between -1 and 1. In general, the correlation expresses the degree that, on an average, two variables change correspondingly. If one variable increases when the second one increases, then there is a positive correlation. In this case the correlation coefficient will be closer to 1. For instance the height and age of children are positively correlated. If one variable decreases when the other variable increases, then there is a negative correlation and the correlation coefficient will be closer to -1. The P-value is the probability that you would have found the current result if the correlation coefficient were in fact zero (null hypothesis). If this probability is lower than the conventional 5% ( $P < 0.05$ ) the correlation coefficient is called statistically significant.

95% confidence interval (CI) for the correlation coefficient: This is the range of values that contains with a 95% confidence the 'true' correlation coefficient.

**Pearson's Product – Moment Correlation Coefficient Model is given as:**

$$r = \frac{n \sum xy - (\sum x)(\sum y)}{\sqrt{n(\sum x^2) - (\sum x)^2} \sqrt{n(\sum y^2) - (\sum y)^2}}$$

Where r = Pearson correlation coefficient

x = values in the first set of data

y = values in the second set of data

n = Total number of values

### 3.7. Method of Data Analysis

The data was analyzed using manual and electronic based methods through the data preparation grid and statistical package for the social sciences, (SPSS). The utilization of structured grids allows specific responses to be located with relative ease and facilitate the identification of emerging patterns (Munn and Drever, 1990). Also descriptive, statistical and content analyses techniques was used in the analysis of the data collected. The study used the descriptive analysis to achieve the mean, frequency distribution, and percentage results of the research work and also the Pearson's Product - Moment Correlation Coefficient to test the hypothesis.

## 4. Results and Discussion

### 4.1. Introduction

The research questionnaire was administered to sixty (60) employees which is the sample size. Of this lot, fifty five (55) questionnaires representing 85.3% were returned, and forty-four (44) questionnaires representing 14.7% were not returned. The table below shows the details at a glance.



Questionnaire	Respondents	Percentage (%)
Returned	55	91.7
Not Returned	5	8.3
Total Distributed	60	100

Table 1: Analysis of Response Rate  
Source: Field Survey 2016

4.1.1. Analysis of Personal Data

Figure 2 classifies respondents by sex. It shows that the questionnaires were filled by 21 females (38%) and 34 males (62%) and Therefore, there were more male respondents than female respondents in this survey, this is because there are more male workers than the female workers at the ministry of works due to the nature of the work being carried out there.

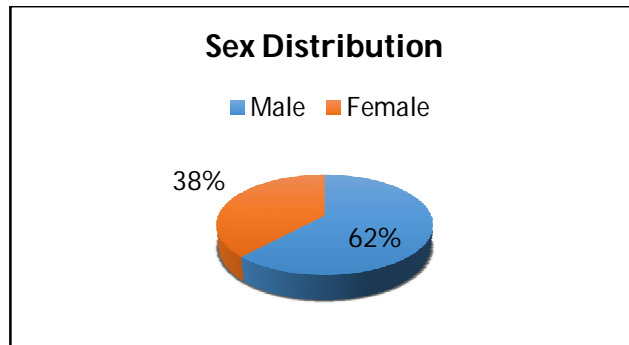


Figure 2: Distribution of Respondents by Sex  
Source: Field Survey 2016

Figure 3 classifies the respondents by marital status the table shows that 21 of the respondents are single, 24 of them are married. It also shows that 10 of the respondents are not single and married. Therefore, there were more married respondents in this survey.

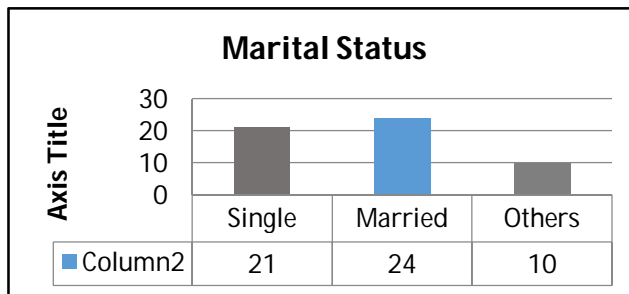


Figure 3: Distribution of Respondents by Marital Status  
Source: Field Survey 2016

Figure 4 classifies the respondents by their work experience. The table shows that most of the respondents were within the work experience bracket of 1-5 years which represents 21 (38.2%) of the respondents' population. However, 17 (30.9%) were within the work bracket of 6-10 years, and 17 (30.9%) were within the bracket of 11-15 years.

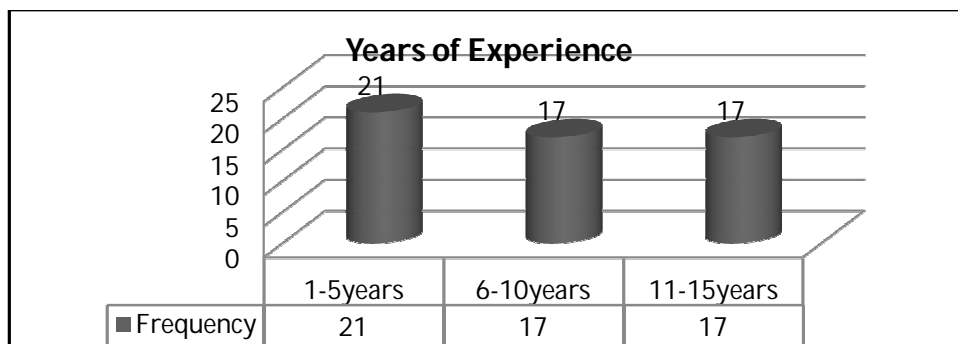


Figure 4: Distribution of Respondents by Work Experience  
Source: Field Survey 2016

Table 2 classifies the respondents by their management category. The table shows that most of the respondents are in the lower level of management which represents 24 (43.6%) of the respondents' population. However, 22 (40.0%) were at the middle level of management and 9 (16.4%) were at the top level of management.

	Frequency	Percent
Lower Level	24	43.6
Middle Level	22	40.0
Top Level	9	16.4
Total	55	100.0

Table 2: Distribution of Respondents by Management Category  
Source: Field Survey 2016

Figure 5 classifies respondents by their highest educational qualification. According to the table, majority of the respondents are H.N.D/B.Sc. holders 28 with a percentage of (50.9%), while 18 (32.7%) are M.Sc/MBA holders and 9 (16.4%) are SSCE holders. This goes to show that majority of respondents were at least university graduates.

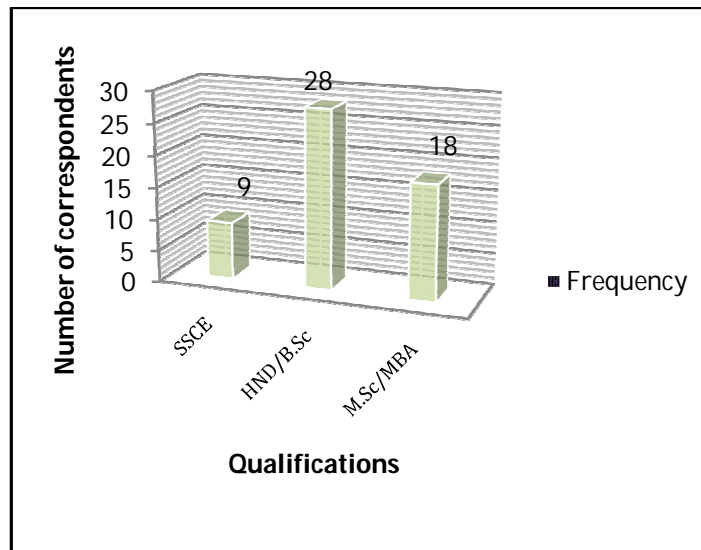


Figure 5: Distribution of Respondents by Educational Qualification  
Source: Field Survey 2016

Figure 6 classifies the respondents by age group. The table shows that 17 (30%) of the respondents were within the age group of 21-30. The vast majority of respondents fell between the age group of 31-40 representing 22 (40%) of the population. 9 (17%) were within the age bracket of 41-50, and 7 (13%) respondents fell between the ages of 51 and above.

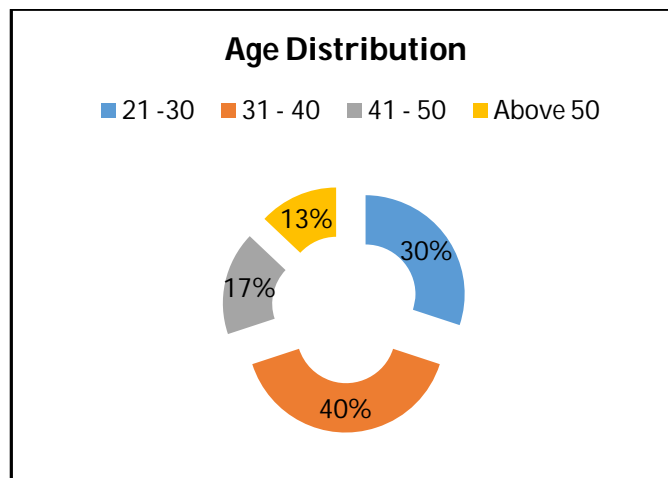


Figure 6: Distribution of Respondents by Age  
Source: Field Survey 2016

Table 3 classifies the opinion of the respondents on the outsourcing of Architectural works to professionals to reduce the cost of operation. It shows that majority of the respondents 31 (56.4%) agree, 13 (23.6%) are undecided, 8 (14.5%) strongly agree and 3 (5.5%) disagree.

	Frequency	Percent
Agree	31	56.4
Undecided	13	23.6
Strongly Agree	8	14.5
Disagree	3	5.5
Total	55	100

*Table 3: Outsourcing of Our Total Architectural Works to Professionals Reduce Our Cost of Operation  
Source: Field Survey 2016*

Table 4 classifies the opinion of the respondents on the outsourcing of some construction equipment to increase cash flow. It shows that 33 (60.0%) of the respondents agree, 16 (29.1%) strongly agree and 6 (10.9%) are undecided.

	Frequency	Percent
Agree	33	60.0
Strongly Agree	16	29.1
Undecided	6	10.9
Total	55	100

*Table 4: Outsourcing of Some of Our Construction Equipment Increases Our Cash Flow  
Source: Field Survey 2016*

Table 5 classifies the opinion of the respondents on outsourcing to ensure timely completion of projects. It shows that majority of the respondents 22 (40.0%) agree, 19 (34.5%) strongly disagree, 11 (20.0%) are undecided and 3 (5.5%) strongly disagree.

	Frequency	Percent
Agree	22	40.0
Strongly Agree	19	34.5
Undecided	11	20.0
Strongly Disagree	3	5.5
Total	55	100

*Table 5: Outsourcing Ensures Timely Completion of Projects  
Source: Field Survey 2016*

Table 6 classifies the opinion of the respondents on the outsourcing of highly repetitive tasks to make projects to be in time. It shows that 34 (61.8%) of the respondents agree, 13 (23.6%) strongly agree and 8 (14.5%) are undecided.

	Frequency	Percent
Agree	34	61.8
Strongly Agree	13	23.6
Undecided	8	14.5
Total	55	100

*Table 6: Outsourcing of Highly Repetitive Tasks Makes Our Projects to be in Time  
Source: Field Survey 2016*

Table 7 classifies the opinion of the respondents on the outsourcing of highly skilled or executive expertise to improve the quality of projects. It shows that 25 (45.5%) of the respondents agree, 19 (34.5%) strongly agree and 11 (20.0%) are undecided.

	Frequency	Percent
Agree	25	45.5
Strongly Agree	19	34.5
Undecided	11	20.0
Total	55	100

*Table 7: Outsourcing of Highly Skilled or Executive Expertise Improves the Quality of Projects  
Source: Field Survey 2016*

Table 8 classifies the opinion of the respondents on whether outsourcing strategies adopted by the organization enhances quality of the projects. It shows that majority of the respondents 38 (69.1%) agree, 9 (16.4%) strongly agree, 5 (9.1%) are undecided and 3 (5.5%) strongly disagree.

	Frequency	Percent
Agree	38	69.1
Strongly Agree	9	16.4
Undecided	5	9.1
Strongly disagree	3	5.5
Total	55	100

Table 8: Outsourcing Strategies Adopted by Our Organization Enhances Quality of Projects

Source: Field Survey 2016

Table 9 classifies the opinion of the respondents on the basic reason(s) why organization should outsource and which was open for multiple responses. It shows that 49 (89.1%) of the respondents agree on efficiency of project delivery, 40 (72.7%) agree that it saves cost and 37 (67.3%) agree that Outsourcing gives access to specialized skills.

Reasons for outsourcing**	Percent of Cases
Efficiency of Project delivery (n=49)	89.1%
Cost Savings (n=40)	72.7%
Access to Specialized Skills (n=37)	67.3%

Table 9: Basic Reason(s) Why Your Organization Should Outsource

\*\*Multiple responses

Source: Field Survey 2016

Table 10 classifies the opinion of the respondents on the benefit(s) of outsourcing in the organization. It shows that 36 (69.2%) of the respondents agree on timely delivery of projects, 33 (63.5%) agree on quality improvement and 30 (57.7%) agree that it reduces cost.

Benefits of Outsourcing**	Percent of Cases
Timely Delivery of Projects (n=36)	69.2%
Quality Improvement(n=33)	63.5%
Cost Reduction (n=30)	57.7%

Table 10: Benefit(s) of Outsourcing in Your Organization

\*\*Multiple responses

Source: Field Survey 2016

Table 11 classifies the opinion of the respondents on the challenge(s) the organization face in outsourcing certain operations. It shows that 44 (80.0%) of the respondents agree that selecting the right service provider is a challenge, 29 (52.7%) of the respondents agree that managing business relationship with the outsourced is a challenge, 25 (45.5%) agree that it affects the completion of Outsourced projects in time and on budget, 23 (41.8%) agree that Legal Challenges are being faced in Outsourcing and 21 (38.2%) agree that outsourced business process not well done may bring about low-quality deliverables.

Challenges**	Percent of Cases
Selecting the Right Service Provider (n=44)	80.0%
Managing Business Relationship with the Selected Service Provider (n=29)	52.7%
Completion of Outsourced Projects in time and on budget (n=25)	45.5%
Legal Challenges (n=23)	41.8%
Low Quality Deliverables (n=21)	38.2%

Table 11: Challenges Your Organization Faces in Outsourcing Certain Project Operations

\*\*Multiple responses

Source: Field Survey 2016

#### 4.2. Test of Hypothesis and Discussion of Results

The Pearson's Product - Moment Correlation Coefficient was used to test if there is a significant relationship between Outsourcing and project delivery or not. This was measured against Cost, time and Quality. Proper interpretation and analysis were also used to explain the hypothesis.

Ho: There is no significant relationship between Outsourcing and Project delivery

The Pearson's Product - Moment Correlation Coefficient was used in the analysis to establish the relationship between the variables constituting Quality and those other variables constituting Outsourcing. The coefficient of correlation ( $r$ ), showed a strong positive correlation ( $r=0.597$ ) and coefficient of determination ( $r^2= 0.36$ ) which shows that (36%) change in Outsourcing can be explained by a unit change in Quality, Outsourcing is responsible for 36% of the changes in Quality while the other 64% remaining are caused by other external factors. The positive nature of the correlation means that as the firm intensifies effort into the Outsourcing, Quality also increases. This is presented in Table 12 below.

Correlations			
		Outsourcing	Quality
Outsourcing	Pearson Correlation	1	.597**
	Sig. (2-tailed)		.002
Quality	Pearson Correlation	.597**	1
	Sig. (2-tailed)	.002	

Table 12: Relationship between Outsourcing and Quality

\*\* Correlation is significant at the 0.05 level (2-tailed).

Source: Field Survey 2016

The Pearson's Product - Moment Correlation Coefficient was used in the analysis to establish the relationship between the variables constituting Cost and those other variables constituting Outsourcing. The coefficient of correlation ( $r$ ), showed a negative correlation ( $r= -0.484$ ,  $p \leq 0.05$ ) and coefficient of determination ( $r^2= 0.23$ ) which shows that (23%) change in Outsourcing can be explained by a unit change in Cost, Outsourcing is responsible for 23% of the changes in cost while the other 77% remaining are caused by other external factors. The negative nature of the correlation means that as the firm intensifies effort into the Outsourcing, Cost reduces. This is presented in Table 13 below.

Correlations			
		Outsourcing	Cost
Outsourcing	Pearson Correlation	1	-0.484**
	Sig. (2-tailed)		.000
Cost	Pearson Correlation	-0.484**	1
	Sig. (2-tailed)	.000	

\*\* Correlation is significant at the 0.05 level (2-tailed).

Table 13: Relationship between Outsourcing and Cost

Source: Field Survey 2016

Similarly, the Pearson's Product – Moment correlation coefficient was employed in establishing the relationship between Time and Outsourcing. The coefficient of correlation ( $r$ ), showed a negative correlation ( $r=-0.445$ ) and coefficient of determination ( $r^2= 20$ ) which shows that (20%) change in Outsourcing can be explained by a unit change in Quality, Outsourcing is responsible for 20% of the changes in Time while the other 80% remaining are caused by other external factors. The correlation analysis is presented in Table 14 below.

Correlations			
		Time	Outsourcing
Time	Pearson Correlation	1	-0.445**
	Sig. (2-tailed)		.002
Outsourcing	Pearson Correlation	-0.445**	1
	Sig. (2-tailed)	.002	

\*\* Correlation is significant at the 0.05 level (2-tailed).

Table 14: Relationship between Outsourcing and Time

Source: Field Survey 2016

#### 4.3. Decision

The significance level below 0.05 implies a statistical confidence of above 95%. From the results achieved from the tables and interpretations above, it implies that there is a significant relationship between Outsourcing and project delivery. Thus, the decision would be to reject the null hypothesis (H<sub>0</sub>).

## 5. Summary, Conclusion and Recommendations

### 5.1. Summary

The research work started with the background of this research topic which was explained to the best of the ability of the researcher. The research problem was stated in which three problems were stated in the area of assessment of outsourcing on project delivery in the ministry of Works, Land and Housing, Ondo State. The objectives of the study were drawn from the statement of the research problem which was to ascertain whether business process outsourcing assists the Ondo State ministry of Works to reduce project cost overrun, to find out if outsourcing has ensured timely delivery of projects and to identify whether outsourcing strategies adopted by Ondo State ministry of Works has helped them to increase the quality of their projects.

In other for this study to give full details, it was restricted to some specific variables that includes; cost of operation, timely delivery and quality of projects. The researcher laid emphasis on these variables in literature review. Literature of other authors was reviewed as they relate to the research topic then the theories that are surrounding this research topic were brought to light in the theoretical framework and empirical framework.

Demographic findings on gender brought to light the fact that there were more males than females among the respondents. It also revealed that majority of them were educated with a high percentage having attained university qualification, meaning they were professionals in the field.

The study discovered that outsourcing has benefitted business organizations to reduce their cost in business and has also benefitted business organizations to deliver projects on time which indirectly gives rise to good quality of project deliverables.

In the course of this study the researcher discovered that the role of outsourcing strategies adopted by the Ondo State ministry of works cannot be separated from project delivery. It has been proven by many researchers that the influence of outsourcing on project delivery cannot be over emphasized. Therefore, for organizations to operate efficiently in the competitive industry, businesses should engage in outsourcing relationships that is well evaluated and scrutinized in order to operate with lower cost of doing business in Nigeria.

### 5.2. Conclusion

Businesses all over the world go as far as possible to acquire equipment and products that they perceive would aid their business transactions and performance. This study is an important study that helps to assess outsourcing on project delivery in ministry of works, land and housing, Ondo State. The study found that the organization has adopted the practice of outsourcing to reduce cost of business operations which is due to many factors that has to do with transferring of certain business process rights to specialized firms to avoid unwanted losses, according to findings, the ministry faces the challenge of selecting the right service provider to handle some of their business processes.

This study provides information for entrepreneurs to know the essence of outsourcing certain business functions so that result can be achieved with less stress. The study will also assist new entrants into the construction industry to know that they cannot handle all services alone but delegate part of business responsibilities to another party that is poised to make business process to be easy. Since the study will assist new entrants to enter into industry, it will also be an opportunity for outsourcing vendors to venture into the areas in which needs of construction industry would be met.

### 5.3. Recommendations

Based on the findings of the study, the following recommendations can be summarized;

- Since it has been reflected in this study that business process outsourcing has assisted the Ondo State ministry of Works to reduce project cost overrun in business. Entrepreneurs should endeavour to provide more frameworks for selecting outsourcing vendors that will benefit the organizations in the area of need to avoid financial crisis.
- It is recommended that firms should highly observe Outsourcing in planning for their projects because findings showed that Outsourcing has ensured timely delivery of projects.
- Companies should outsource only necessary aspects of business to avoid inefficiency and poor quality of project deliverables. The finding in the study has shown that the adoption of appropriate outsourcing strategies has helped the ministry to increase the quality of their projects.

### 5.4. Contribution to Knowledge

The fundamental contribution of this study is that outsourcing decision should be treated as a fundamental business decision. Cost analysis and risk analysis should be carried out in order to evaluate the external capabilities with internal capabilities. Another important contribution of this study is the revelation that organizations generally considered themselves successful at outsourcing. However, while they achieved significant improvement in project delivery, they have not reached the magnitude of improvements ascribed to outsourcing strategies. A number of organizational strategies were also identified as key contributors to outsourcing success. These include strategies with clear objectives, right outsourcing partners, adequate skills, adequate planning, effective communication, and cooperation and collaboration throughout the organization. These strategies are thought to improve quality, deliver projects on time, and reduce cost.

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