

THE VALUE OF EFFECTIVE COMMUNICATION IN THE CONSTRUCTION INDUSTRY

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Abstract:

In recent years, communication in construction has steadily declined and this has affected productivity. Despite the construction industry's significant contribution to economic growth in developed and developing countries, there are still great hindrances in construction project productivity due to poor communication. However, this gap significantly delays much-needed productivity gains, as it is difficult to fully overcome the associated disruptions and choose the best remedy to minimize their impacts in the Nation's Economic Development. This study is therefore necessary to fill these missing gaps. This study aimed to establish the value of communication in the construction industry. The study used a quantitative research methodology. A combination of primary and secondary sources was used to address the main research objective. Questionnaires were used to collect primary data throughout the study. Surveys were conducted online, by mail, by phone, and in person. All stakeholders in the project will benefit from the findings. It will help eliminate the issue of unnecessary disputes among the parties due to project failure. Both professionals and the future college and university graduates, whose intentions are to proceed to the working field after graduation, will also benefit. The construction industry is doomed unless it addresses communication issues. The value of teamwork in the workplace is obvious, and it is frequently directly influenced by effective communication practices. Effective communication saves money and boosts a company's reputation. Using project management software can greatly improve communication and a good communication environment saves money and time on projects.

Keywords: *Benefits, Disbenefits, Construction Projects, Effective Communication, Improvement, Poor Communication, Impacts*

1. INTRODUCTION

Communication is a major issue that can result in poor on-site productivity and project performance all over the world. The construction industry contributes immensely to the improvement of life in society but there has been a great failure in the successful delivery of many projects in society today due to a lack of communication among the stakeholders and other team members involved in the project. The economic contribution of construction projects could only be visible through continuous addressing of the importance of effective communication on an everyday basis. This problem affecting the successful delivery of projects has caused a big setback for projects in terms of quality, timely delivery, and budget overruns. Many studies have pointed out the major impacts of this problem on construction projects within various countries but, projects are still failing to meet their designed objectives. Project communication management is a collection of processes that ensure that the right messages are sent, received, and understood by the right people. Good communication is an important factor in the success of a project. Lack of communication is one of the main reasons a project fails. Communication management of the project ensures that this does not happen. Successful project managers use formal and informal communication methods on various channels. This makes it more likely that you will receive the message. Use plain language, stick to related topics, shorten your message, and gather all the information in one place to reduce the chance of communication errors. A project manager with good communication skills can deliver the project on time while maintaining the expected quality. Ineffective communication can lead to misunderstandings, damaged relationships, a loss of trust, and an increase in anger and hostility. Effective communication increases employee morale, and satisfaction, and educates employees on the benefits of liberty.

Zulch * (2014) believed that communication is the process of collecting all relevant information, interpreting it, and effectively disseminating it to those who may need it. Communication is so important to the success of a project that several practitioners have cited it as the lifeline of the project. Project team members need to jointly share, collect, and integrate information and knowledge to achieve project goals. Communication consists of three components: transmitter/transmitter, transmission channel/medium, and receiver. Communicated messages flow from the sender, encrypt the message in a linguistic or non-verbal way over the transmission channel/medium, and send it to the recipient. To ensure effective communication, all components need to work to avoid misunderstandings. Reasons for communication

in project management can be requesting information, sending information, asking questions, providing instructions, building teams, or networking. Successful communication depends largely on the ability of the sender to speak. Construction project managers need to effectively communicate the cost, time, and quality as three of the four foundations that determine the success of a project, followed by scope. Time impacts costs. The project manager must be a leader in effectively communicating with all stakeholders. The success of a construction project depends heavily on the skills of the construction project manager as a communicator to lead the team and manage the construction project well.

Gamil (2020) discovered that lack of communication also leads to unfavourable consequences such as frustration, confusion, discouragement, and an agitated environment in which construction personnel is unwilling to be productive and unwilling to cooperate. Inappropriate communication between construction personnel is a major cause of waste generation in the construction industry in the form of rework and restoration due to improper provision of technical information. Traditional communication methods such as email, progress meetings, and progress reports have many drawbacks. Of these shortcomings, project information is not delivered in a timely manner, which delays decisions and delays projects if channel selection is inadequate. Shad (2019) revealed that communication plays many central roles in project management. Effective communication contributed to the success of the project. The project manager must ensure that communication between project stakeholders, externally or internally, is uninterrupted. Improper communication of information can lead to confusion and misunderstanding among team members. Communication connects and coordinates different areas of the project management phase. Communication skills between project managers and team members have a significant impact on the completion and success of a project.

Lubis (2021) indicated that the biggest obstacle to the project's failure was the inability to establish communication with all project stakeholders. Eight communication management techniques related to the success of the project have been identified and they are Information and communication technology, communication skills and abilities, communication management methods, coordination, consistent corporate hierarchy network, stakeholder personality, project briefing, and climate background. The effective communication skills of the project manager determine the success of the project. Incorrect communication and information can result in poor performance, cost over projects, poor quality of work, and delayed unscheduled work hours. Communication factors are also a problem closely related to the quality of the infrastructure. Effective communication is one of the keys to a successful project. Importantly, lack of communication can affect the quality of work coordination. Lack of communication is the cause of frequent conflicts between individuals. One of the biggest obstacles to the success of a group's performance is ineffective communication. Communication problems, conflicts, and confusion are factors that can interfere with project implementation and project team management

Sofolahan and Eze (2021) warned that the consequences of poor communication in construction projects can undermine the profits of the organization, reduce revenue generation, impact customer satisfaction, and even lose customers. These can affect the performance and survival of a construction company. Inadequate communication limits the ability of an organization to improve its performance. Ineffective communication in the workplace can lead to tension, frustration, and unfriendly environments that threaten motivation and reduce productivity. Lack of motivation can also affect how employees interact with customers and prospects. Effective communication occurs when the intended meaning of the transmitted message is not misunderstood. Effective collaboration and information sharing among stakeholders are necessary for the project to achieve its goals. In addition, effective communication, evaluation, and feedback to the construction project team at all stages of construction project execution can help achieve project goals. The success of a construction organization depends on the quality and effectiveness of the relationship between clients, professionals, contractors, subcontractors, technical workers, and regulators. Relationships in construction contracts rely on communication and information sharing. Project communication management includes all the processes necessary to ensure timely and appropriate planning, collection, creation, distribution, storage, querying, management, control, monitoring, and final delivery of project information. Communication management includes communication planning, communication management, and communication control.

It was noted by Koivula (2009) that the importance of communication in project management is often anthropomorphic. Communication skills as a project manager have a significant impact on how you "sell" your project to stakeholders and how you manage your expectations. And don't forget how your communication skills can help guide your project team, reduce unnecessary conflicts, and gain "forgiveness" to communicate effectively. Communication is an activity that is always done without thinking. Ineffective communication is the result of interference or noise while sending a message over a medium or communication channel. Mavuso and Agumba (2016) regarded communication as an important link between the people, ideas, and information that stakeholders need during a project. Communication guides and integrates people in making decisions for the success of a project. The quality and effectiveness of communication are the basic requirements that determine the success or failure of a project. Therefore, it is important to improve communication in construction projects. The quality of communication determines the efficiency and effectiveness of the construction

process. It is recommended to identify the communication line at the beginning of the project. Effective communication between stakeholders is the key to a successful project. Lack of interpersonal and communication skills are a major cause of group failure. Communication is about information and is provided not only in data but in different formats and at different levels that are influenced by the context of the environment. But it happens in the context of physical, social, historical, psychological, and cultural issues.

Shahatit (2016) reported that quality communication in the construction program is essential to ensure the efficiency and effectiveness of the project development process. By improving communication between project teams, suppliers, and contractors, you can reduce the chances of a project failing. Open communication between different levels within the construction project team leads to innovation and better technical solutions during the project implementation phase. Improving the communication process between the team and stakeholders early in the project has a positive impact on the performance and quality of the work of the project. Improving communication during briefings can lead to better decision-making. For example, improving communication during the briefing phase can have a positive impact on the speed of transition to a solution and provide an advanced way to check requirements early. Team involvement improves effective communication. Trust between colleagues has improved team communication. The three types of trust that show why an individual puts trust in another group on a construction project are trust in ability, trust in honesty, and trust in nature. Confidence in ability depends on the opinions of others about the ability to do the required work. Sincere trust depends on the willingness of others to protect the interests of our partners. Natural trust is based on prejudice, preferences, or personal attitudes towards others. Project manager communication skills are often the most important factor in the success of a project. For example, their communication skills can have a positive impact on the performance of a project and can have a positive impact on the culture of the project. This motivates team members and increases the chances of a successful project. Communication can also affect the value of leadership, which can affect the success of a project.

Ali, Abbas, and Abdulameer (2019) disclosed that communication skills are essential for project success in delivering timely and quality results. Project quality is also affected by project communication. The project manager is responsible for the success and failure of the project. We find that project managers spend most of their time communicating. The project manager is involved in planning, organizing, conducting, controlling, monitoring, and closing the project. The element common to all the above activities is communication. Communication is the most important factor for the success of a project and the most important factor for the success or failure of a project. Likewise, communication is deemed necessary for on-time delivery and within the cost of completing the project. The project manager must build an effective communication channel, keeping in mind the audience and how the message is conveyed. Project managers play an important role in collecting and disseminating relevant information to stakeholders. As a result, the project manager's communication skills influence project performance in terms of quality and delivery time. The key to good communication for a project manager is to first understand the communication process. Communication is considered the starting point for all activities in the construction project management industry. Project communication includes various project information collected, generated, shared, and monitored internally or externally, facilitating stakeholder needs response and communication, problem-solving, and conflict management. It should be vertically up and down at different organizational levels and horizontally among peers.

Das and Mishra (2020) established that communication in the project works well, stakeholders are reassured, and the project is more likely to succeed. PM's communication skills determine the success of a project, and even the best project plans will not work without effective communication. Communication is the ability to integrate scope, schedule, and cost to achieve high-quality products, as well as the entire project. Therefore, communication is described as one of the most important success factors for a project. Project integration is a fundamental feature and an important factor in the success of a project, as it cannot be achieved without communication support. Diverse teams can create many challenges in organizing and managing work. A strong informal communication network is formed between designers, managers, procurement specialists, consultants, contractors, and subcontractors. Effective communication occurs when the sender understands the context and audience, selects the right media, and delivers the message in a way that the sender receives and understands as intended. In such cases, there is no misunderstanding or misunderstanding. If the PM is unable to communicate effectively, the impact is severe and the project can be stagnant. Therefore, communication is paramount to the success of a project. However, communication is often taken for granted during project management. Leadership is the way PMs play a professional role in achieving the best performance of PM-managed personnel (Walker, 2015). Communication that flows from a leadership perspective can be called leadership communication. Leadership communication initiated by PM is fixed to its personality and incorporated into the values and culture of the organization. This can have a significant impact on a company's transformation to achieve its overall goals. Being relational and goal-oriented, not only helps you deliver projects within a specific time frame, budget, and scope, but also can deal with diverse workforces and situations. In the life cycle of a construction project, PM manages by guiding, directing, motivating, and inspiring people who are part of line management. The communication effect of the manager is greatly influenced by the

style of leadership. Leaders improve team performance through effective communication, build trust and understanding within the team, and encourage them to follow their managers. Confidence in leaders also minimizes communication barriers. Therefore, effective communication and credible leadership can guide people better, maintain their involvement, and improve the overall performance of the project.

Yaser, Ismail, and Sasitharan (2019) uncovered that failure to properly communicate goals among stakeholders can lead to delays due to misunderstanding and wrong implementation of project activities. Lack of communication is one of the main causes of delay. Delays caused by poor communication can be slow information flow, poor communication channels, poor designed, and misshaped. Delays in providing information led to improper implementation of project activities and require rehabilitation. This slows the progress of the project by requiring additional time for recovery and remediation. Lack of communication in the early stages of a contract leads to constant contract changes and processing delays. Poor communication between construction teams leads to poor management of project information, resulting in delayed work processes. Ineffective or unprepared reporting systems can lead to poor communication. Improper communication channels can delay work progress, especially in emergencies and when reporting work processes. Malfunctions in communication technology can cause information and communication delays. Incorrect transmission of messages over the wrong medium or channel will result in inadequate communication.

Zakaria (2015) was of the opinion that communication is the most important tool for achieving effective project coordination. Coordination and communication are closely related, but different in each area. Coordination includes a wide range of project activities related to the management of people and resources. Communication is the flow of information that supports project activities, as practiced in meetings, telecommunications, and writing. Good project communication can be broadly defined as the free exchange of timely, accurate, and relevant information among the right people. Good communication between project team members should be clear, honest, open, and frequent, but not excessive. Therefore, achieving effective project coordination requires participants' communication skills and the ability to adjust communication styles and techniques to suit the project at hand. Effective communication saves money and improves reputation. This helps avoid coordination issues that can lead to frustration and frustration among team members and lead to project failure. Anyone who manages the project must be able to communicate with everyone involved. This includes bargaining skills when things go wrong. Project leaders need to tailor their communication style to the specific audience discussing project-related issues. Project leaders need to deliver the right messages to the right audience at the right time in order to communicate properly. According to Zakaria (2015), project managers can communicate to stakeholders, determine their information needs, and create a complete schedule for the timely delivery of project information. The project manager is responsible for clear communication. Most project errors occur directly or indirectly due to communication errors. Communication is essential to achieving effective management and organization. Good communication helps employees get more involved in their work and help them better understand their work. Clear, accurate, and timely communication also avoids the appearance of organizational problems. Without communication, employees will not be aware of what their colleagues are doing, will have no idea of their goals, and will not be able to evaluate their performance. Managers will not be able to give instructions to their subordinates and management will not receive the information needed to develop plans and make decisions. Therefore, communication acts as a nervous system of any organization. The information function provides knowledge to individuals who need guidance in their actions. It also fulfils the desire of workers to be aware of the things that affect them. Commanding and guiding functions serve to make the employee aware of his obligations towards the official organization and provide him with additional guidance on how to properly perform his duties. The messages communicated are used to convince individuals that their actions can be beneficial at the individual or organizational level. Integrated functionality refers to the fact that the communication of messages/ideas if managed appropriately, helps to connect workers' activities with their efforts to complement rather than cause harm. Employees can only perform well and participate in their work if they clearly understand their duties and responsibilities. Unless the organization's key goals, values, and strategies are communicated to employees, they won't work in that direction.

According to Rajhans*(2020), efficient stakeholder relationship management is a prerequisite for all successful organizations. This is an important factor and has a direct impact on the environment and the result of the entire organization. This can only be achieved through effective communication. Effective communication management serves as a powerful tool for systematically managing relationships with multi-level stakeholders. Efficient stakeholder management is an essential requirement for a successful organization. Effective communication management refers to a systematic initiative to plan, monitor, and control all communication channels within an organization. Aspects of communication management include developing corporate communication strategies, designing internal and external communication policies, and controlling the flow of information, including online communication. Communication management in a project is, in many respects, an active management effort to manage the expectations and demands of all stakeholders involved in the project. Olena (2015) found that project communication is a critical core competency for all

organizations because it creates a link between the project team, other stakeholders, and the project's goals, strategies, and actions. Successful projects necessitate effective communication. In project management, effective communication with all stakeholders is critical. The soul of project management is communication, and the "vacuum created by a lack of communication is quickly filled by rumors and incorrect interpretation. Ineffective communication is the root cause of failed projects. Investing early in stakeholder analysis and communication planning will allow the project manager to develop a solid strategy for managing information between these parts. One of the keys to project success is providing comprehensive communications to team members and all other stakeholders.

Hernández et al. (2019) revealed that the communication project is critical to the success of a project's development. This includes the processes of timely planning, collecting, creating, storing, controlling, and distributing information. The communications plan's design enables information to be transmitted efficiently and assertively. Communication is an important process for achieving excellent results within organizations and projects; when it is effective, timely, and assertive, it ensures good decision-making and allows for an improvement in performance. Creation of concepts, plans, projects, goals, and strategies A communications plan is developed as an organizational tool to ensure the efficient transmission of information. Similarly, the use of a common language, motivation, knowledge acquisition, and professionalization in project management strengthen human resources and allow for greater flexibility. Anh (2019) was of the view that communication involves the project manager, team members, and other project stakeholders motivating, leading, delegating, and reporting. Inadequate or excessive communication can lead to poor communication. A lack of engagement and responses, as well as an excess of emails and questions, can have a negative domino effect on the project team and stakeholders. Effective communication tools contribute to the project's success. Communication skills and techniques can determine whether a project succeeds or fails. A high-performing project team can be formed through effective communication. To lead an effective communicating team, the project manager must develop good communication skills in order to deliver directions and feedback to team members while also maintaining team harmony. Manjunath (2020) stipulated that communication is required in a project to request information, send information, ask questions, give instructions, participate in team building activities, or network. Failure to communicate with internal teams or external stakeholders is the greatest threat to project success; many problems in other areas of the project, such as unclear objectives or unrealistic schedules, indicate problems with communication strategies. It is critical that project managers and their team members prioritize communication, especially when communicating with top management in the organization and external stakeholders.

Othman (2018) showed that the construction industry plays an important role in the social and economic development of countries around the world. One of the biggest challenges of construction projects is a lack of communication. Communication is an important process in which information is transmitted between the sender and the receiver over the medium. This process is considered successful if the recipient understands the message and provides appropriate feedback to the sender in a timely manner. The process is dynamic and complex, involving multiple organizations and stakeholders. Effective communication is required throughout the project life cycle to ensure the success of the project. Communication skills are essential for effective communication, as technical skills and experience alone are not enough. Lack of communication is a common problem in the construction industry. Project failure is directly related to a lack of communication. It was also revealed by Othman (2018) that communication is a dynamic and ongoing process that spans the entire life cycle of a project and involves many stakeholders. Effective communication is an important pillar of a successful project. Its effectiveness throughout the life cycle of a project contributes to the successful achievement of multiple goals and objectives. If project participants lack these skills, they are likely to be implementing an ineffective communication process, and communication skills play a fundamental role in the effectiveness of this process. Scientific knowledge and technical skills are important for forming a professional character in the construction industry, but communication skills are just as important for completing this formula. Inaccurate information will have negative consequences due to the poor communication skills of the project team. Because the construction industry is made up of multiple stakeholders with different professional and cultural backgrounds, effective communication is essential to developing relationships between project shareholders. People involved in construction projects need to coordinate their skills and efforts to reach their goals. Othman (2018) maintained that lack of communication can be explained in terms of lack or lack of success and the effectiveness of the communication process. Lack of communication is a very common problem in construction projects and affects the success of the project, so its impact cannot be underestimated. Most of the problems encountered in the construction industry are due to a lack of communication. Lack of communication is one of the main causes of conflict between project stakeholders. Lack of communication is associated with negative impacts on key aspects of project success, such as timelines, budgets, and shareholder agreements. Inadequate communication often leads to redoes throughout the project life cycle, which can be time-consuming and costly. The consequences of lack of communication can ultimately lead to project failure. The impact of lack of communication is different, especially when comparing projects according to the size of the project. Negative consequences that can occur in large projects are more likely to lead to project failure, while smaller projects are relatively less likely to fail, the author warned.

Joubert (2020) disclosed that communication is the most important aspect of project management, as what most project managers do is communicate to coordinate their efforts. Without this communication, the efforts of multiple people and teams involved in the project may overlap, key goals and milestones may be lost, resources may be misallocated, or the project may go beyond its original scope and start to expand. The result is that the project can stop, get worse, or fail altogether. According to a study by Yasera* and Ismaila (2017), communication skills are necessary for efficient communication, but if the speaker lacks them, the conversation would likely be poor. Communication skills, among other interpersonal abilities, are crucial for a project's success. The communication abilities of the parties involved in building vary depending on their training and cultural upbringing. Matullah¹, Pek², and Roslan³ (2021) reported that societies need communication skills to interact with each other, convey information, and share knowledge. Good communication is seen as a learned skill, and this skill benefits individuals in many ways. One of the benefits is the ability to communicate and effectively share ideas, opinions, thoughts, or knowledge. If the communication process fails, problems may occur that affect the effectiveness of the information delivered or shared. English is the language used all over the world, so if you can use it well, it will be your gateway to any part of the world. Communicating effectively with people from different cultures has proven difficult. One of the main reasons foreign workers are unable to master English may be due to their little use or practice of the language. The increasing demand for using mobile applications was also impacting the way people communicated. Using English as the primary medium of instruction does not offer many benefits to users. Reluctance to speak English can be caused by many factors. Psychological factors that hinder communication among foreign workers include fear of making mistakes, shyness, and timidity, lack of self-confidence and motivation.

Aulich (2013) argued that communication strategies are fundamental to how people work together in collaborative work, a key principle of social dynamics and learning theory, and how people communicate, accept and understand words and pictures. The author believed that it should be based on perfect understanding. The field of organizational and environmental psychology is a fundamental foundation of modern entrepreneurial activity, from management and organizational strategy to marketing and customer relations to improving work, leisure, and living conditions. Model building projects may be completed, but often customer dissatisfaction arises due to lengthy consultation processes not being fully implemented or feedback mechanisms not being implemented. The study maintained that the main responsibility of the Site Manager or Construction Manager is to ensure that the team and all stakeholders are aware of any decisions or factors that may affect their role within the project. This is accomplished by successfully implementing strong communication channels. It sounds simple in theory, but in practice, many site supervisors and administrators admit that their communication systems have gone down, especially during busy periods. Construction supervisors and managers should be part of the team throughout the project because they have not spent enough time developing and overseeing a communication system or have not received adequate training in how to guide people and communicate effectively. They must have good communication skills so that ideas, decisions, and plans are understood by the whole and stakeholders.

Research Objectives

This study addresses the following objectives:

- a) Investigate the functions of effective communication in the construction industry.
- b) Describe the strategies to improve communication in the construction industry.
- c) Establish the impacts of poor communication in the construction industry
- d) Determine the causes of poor communication in the construction industry.

Research Question(s)

This study sets out to answer the following questions:

- a) Identify the benefits of effective communication in the construction industry?
- b) Explain how communication could be improved in the construction industry?
- c) Determine the impacts of poor communication in construction project activities?
- d) What are the causes of poor communication in the construction industry?

2. MATERIALS AND METHODS

A research method is a strategy, procedure, or technique for gathering data or evidence for analysis to discover new information that is legitimate and reliable and addresses the research's goals and objectives. To address the main research objectives, the study used a combination of primary and secondary sources, as well as a quantitative research

methodology. The quantitative, which employs statistical analysis, is confirmatory in nature and can support or refute ideas. Here, quantitative data reflecting a static and measurable (rather than dynamic) reality was gathered. Using large samples, results from this approach could be applied to a larger population. Questionnaires were used to collect primary data throughout the study. The survey's target audience consisted of 100 professionals working in the construction industry. The desired sample rate was 80 people but 88 people responded and 12 people did not respond. Surveys were conducted online, by mail, by phone, and in person. There was a field trip to a variety of public and private construction companies. Responses were obtained online, directly, by mail, or by phone. The questionnaire was designed to include accurate and reliable questions that would aid in the selection of research objectives, their arrangement in a meaningful order, and the selection of the best management strategy. Each respondent was asked the same question in the same language. Questionnaires had the following characteristics: they were inexpensive, simple to use, anonymous, objective, and voluntary. According to Jacoby and Matell (1971), the number of scale points used has no influence on the reliability and validity of research questionnaires. As a result, a 3-point Likert scale was used for evaluation *to lessen the amount of ambiguity for participants to make a choice*. Each level on a three-point rating scale was clearly defined and provided the least amount of ambiguity for participants to make a choice. A probabilistic sampling technique was used to give each member of the target population the opportunity to decide. This method was used because it can produce results that are representative of the entire population. To evaluate the reliability of the questionnaire, Cronbach's alpha was utilized. Values above 0.7 indicate a passable level of reliability, values above 0.8 indicate a fair level of reliability, and values above 0.9 indicate an excellent level of reliability. A number less than 0.7 indicate unreliability. Only when a questionnaire yields consistent results throughout the survey and is useful in assessing the intended outcome is it considered reliable. In this case, the researcher had complete control over data collection. Secondary data was gathered through literature searches. This method was relatively simple, and data from previous researchers, government sources, and numerous online and offline documents were easily gathered. It was also used to increase the sample size of research studies, and it was chosen because of its efficiency and speed in utilizing previously available resources. Large research projects benefit from secondary data. Secondary sources presented the perspectives and ideas of many professions. Finding from secondary sources was more efficient than planning, conducting, and evaluating a specific type of primary survey. Peer review is commonly used to ensure that items such as academic papers are of high quality. Because of their high quality, this study focused on 25 peer-reviewed papers. This was used to support the findings. However, no additional costs were incurred by the participants in this study.

3. STATISTICAL METHODS OF ANALYSIS

3.1 Determination of a sample size

A **sample** is a group of respondents chosen to be as representative of the entire population as possible. This study used Yamane (1967) formula below to calculate the Sample size:

$$n = \frac{N}{1+N(e)^2}$$

n = Sample Size

N = Target population

e = Confidence Interval (Margin of Error)

Confidence intervals quantify the degree of uncertainty or certainty about a sampling method and the degree of uncertainty about a particular statistic. Simply put, a confidence interval indicates the degree of confidence that the results of a survey reflect what one would expect if it were possible to survey the entire population under study. That is the discrepancy between the opinion of the respondents and the opinion of the population as a whole. Confidence intervals are usually positive or negative numbers (\pm). The levels of confidence commonly used are 90%, 95%, and 99%. Researchers most often use a 95% confidence level.

Sample Confidence Level is a percentage that indicates how confident a researcher is that the population will select an answer within a certain range. For example, a 95% confidence level means that you are 95% confident that the result is between the numbers x and y . The confidence level can also be expressed as the percentage of time an estimate between the upper and lower limits of the confidence interval is expected to reproduce and is specified by the alpha value. The alpha value or statistical significance level is arbitrary. The alpha value, also known as the statistical significance threshold, is arbitrary. The value to be chosen depends on the field of study. Most often researchers use an alpha of 0.05. This means that the data under test is less than 5% likely to have occurred under the null hypothesis. If a result is statistically

significant, it is unlikely to be explained by chance or chance factors alone. In other words, a statistically significant result is very unlikely to occur when a research study had no real effect. A p-value or probability value indicates the statistical significance of a finding. Most studies consider a p-value of 0.05 (5%) or less to be statistically significant, but this threshold can be set higher or lower. See the table below.

Table 1: Confidence Level and Margin of Error

Sample size for ±3%. ±5% ±7% and ±10% Precision Levels
Where Confidence Level is 95% and P = 0.50

Size of Population	Sample Size(n) for Precision (e) of				Size of Population	Sample Size(n) for Precision of (e) of			
	±3 %	±5%	±7%,	±10%		±3%	±5%	±7%,	±10%
100		80	67	51	800	a	267	163	89
125		96	78	56	900	a	277	166	90
150		110	86	61	1,000	a	286	169	91
175		122	94	64	2,000	714	333	185	95
200		134	101	67	3,000	811	353	191	97
225		144	107	70	4,000	870	364	194	98
250		154	112	72	5,000	909	370	196	98
275		163	117	74	6,000	938	375	197	98
300		172	121	76	7,000	959	378	198	99
325		180	125	77	8,000	976	381	199	99
350		187	129	78	9,000	989	383	200	99
375		194	132	80	10,000	1,000	385	200	99
400		201	135	81	15,000	1,034	390	201	99
425		207	138	82	20,000	1,053	392	204	100
450		212	140	82	25,000	1,064	394	204	100
500	a	222	145	83	50,000	1,087	397	204	100
600	a	240	152	86	100,000	1,099	398	204	100
700	a	255	158	88	>100,000	1,111	400	204	100

Source: Adam^{1*}(2020) and Yamane (1967:886)

The most common confidence interval z-scores are:

Table 2: Confidence Interval (z)-scores

Confidence level	z-score
80%	1.28
85%	1.44
90%	1.65
95%	1.96
99%	2.58

Source: kibuacha (2021)

Response rate is the ratio of respondents who responded to surveys received to the total number of surveys sent. For example, if a questionnaire is sent to 100 people and 50 people completed the survey, then, the response rate is 50%. For online surveys, a 20% response rate is generally considered a good response rate, and a 30% response rate is considered a very good response rate.

3.2 Reliability and validity of the questionnaire

Reliability is the extent to which an instrument would produce the same results if the measurement were repeated under the same conditions (its consistency), whereas validity is concerned with the accuracy of a measure. This study used Cronbach's alpha as a measure to assess the reliability of the questionnaire used to collect data from participants. In this case, Cronbach's alpha measures the strength of that consistency. Cronbach's alpha is calculated using the Spearman's rank correlation coefficient (ζ). This coefficient indicates the strength and direction of the linear relationship between x and y. The correlation coefficient (r) determines whether the linear relationship of the sample data is strong enough to model the relationship of the selected populations. The reliability of this linear model also depends on the number of observed data points used in the sample. For this reason, the correlation coefficient (r) and sample size (n) were considered together in this study.

Cronbach's Alpha (\mathcal{A}) is calculated using:

$$\mathcal{A} = \frac{\bar{R} \zeta}{R + (\bar{n} - 1) \zeta}$$

Where:

\mathcal{A} = Cronbach's Alpha

\bar{n} = number of items in the questionnaire

ζ = Spearman's rank correlation coefficient

\bar{R} = Sum of the highest RII and the least RII

Calculating the Spearman's Rank Correlation Coefficient:

$$\zeta = 1 - \frac{6 \sum di^2}{n^3 - n}$$

Where;

ζ = Spearman's rank correlation coefficient

di = Average of all the Relative Importance Index

n = Number of items or indicators in the questionnaire.

The values of Spearman's rank correlation coefficient range from -1.0 to 1.0. That is, the value cannot be greater than 1.0 or less than -1.0. A correlation of the value of -1.0 denotes a completely negative correlation, while 1.0 denotes a completely positive correlation. The correlation coefficient with a value higher than zero is known to have a positive relationship. In the opposite case, if the value is less than zero, the relationship is negative. A value of zero indicates that the two variables have no relationship.

Calculating the Spearman's coefficient;

$$\begin{aligned} \zeta &= 1 - \frac{6 \sum di^2}{n^3 - n} \\ &= 1 - \frac{6 \times 0.95^2}{20^3 - 20} = 1 - \frac{5.415}{7980} = 0.99 \end{aligned}$$

Table 3: Calculation of Spearman's Correlation (r)

No. of items (n)	Average of all the Relative Importance Indexes (di)	Spearman's Rank Correlation Coefficient (ζ)
20	0.95	0.99

Cronbach's Alpha (\mathcal{E}) is calculated using:

$$\mathcal{E} = \frac{\tilde{n} \zeta}{R + (\tilde{n}-1) \zeta}$$

$$\mathcal{E} = \frac{20 \times 0.99}{1.88 + (20 - 1)0.99} = \frac{19.80}{20.69} = \mathbf{0.95}$$

Table 4: Tabulation of Cronbach's Alpha Values

Number of items in the questionnaire(\tilde{n})	Spearman's rank correlation coefficient(ζ)	Sum of the highest RII and the least RII (R)	Cronbach's Alpha (\mathcal{E})
20	0.99	1.88	0.95

Table 5: Cronbach's Alpha Reliability Level

S/No	Cronbach's Alpha (\mathcal{E})	Reliability Level
1	0.90 or more than	Excellent
2	0.80 - 0.89	Good
3	0.70 - 0.79	Acceptable
4	0.60 - 0.69	Questionable
5	0.50 - 0.59	Poor
6	Less than 0.59	Unacceptable

The rate at which an alpha is acquired normally specifies the percentage of the reliable variance. For example, a rate of 0.70 indicates that 70% of the variance in the scores is genuine, while 30% is an error variance. It should be noted that Cronbach's alpha does not provide accurate measurements for single or independent items. It produces accurate estimates for summed scales or subscales. If it is used for individual or independent units, the reliability of those units is unknown. This formula, however, should only be used in social and behavioural studies that deal with characters, personalities, perceptions, views, emotions, and interpretations of people's surroundings. From the table above, the Cronbach's alpha value is 0.95. This means that the reliability level of the questionnaire is excellent.

3.3 Data collection and Analysis

Data was gathered for two months. The 3-point Likert scale factors below were used to rate the responses from the participants.

Table 6: Likert scale factors

Scale	Factor
Agree	3
Neutral	2
Disagree	1

Questionnaires were sent to 100 participants and 88 participants responded. 12 participants did not respond. This means that 88% of participants responded to the study.

Using Yamane (1967) formula to calculate the sample size,

$$n = \frac{N}{1+N(e)^2}$$

n = Sample Size

N = Target population

e = Confidence Error (Margin of Error)

Using confidence level of 95%, then the confidence interval is 5% (0.05)

$$\text{Sample Size (n)} = \frac{100}{1+100(0.05)^2}$$

$$n = \frac{100}{1.25} = 80$$

However, a minimum of 80 responses were required in this study.

Table 7: Target Population and Response Rate

	Target Population	Returned Rate	Unreturned Rate
	100	88	12
Percentage	100%	88%	12%

To determine the significance of each communication indicator, a three-point Likert scale was used. Scale-1 denotes disagreement, scale-2 neutrality, and scale-3 agreement. The relative importance index (RII) method was used to calculate and rank the factors based on their importance. Each indicator's RII was calculated using the following formula below. This was used to determine the worth of communication in a variety of ways.

$$RII = \frac{\sum W}{A \times N} = \frac{3n_3 + 2n_2 + 1n_1}{3N}$$

Where;

RII = Relative Importance Index;

W = weight given to each indicator by the respondents which ranges from 1 to 3; where

1 = disagree, 2 = neutral, and 3 = agree

A - Highest weight, which is 3 in this study

N - Total number of participants (88 participants in this study)

n - Number of responses under a particular rating (eg. n₃ is total number of respondents rating agree).

Table 8: Summary of Responses

1 = Disagree 2 = Neutral 3 = Agree

No.	Communication Indicator	Total (Disagree)	Total (Neutral)	Total (Agree)
1.	Communication aids in the strengthening and development of relationships in construction projects.	3	1	84
2.	Good communication makes team management much stronger.	3	1	84
3.	Effective communication channels improve team collaboration and feedback.	2	5	81
4.	Transparency and strong communication lead to better results.	3	6	79
5.	Effective communication improves teamwork abilities.	3	5	80
6.	Project managers and team members' communication skills have a significant impact on project completion and success.	5	7	76
7.	Communication skills are essential for project success in terms of timely delivery and maintaining the quality of results.	4	4	80
8.	Poor communication leads to negative outcomes such as frustration, confusion, discouragement, and an agitated environment.	2	7	79
9.	Poor communication among team members generates waste in the form of rework and rehabilitation.	2	8	78
10.	Poor communication can have a negative impact on the quality of work coordination.	4	3	81
11.	Poor communication impedes group performance success.	4	3	81
12.	In the construction industry, poor communication is a major cause of project delays.	6	12	70
13.	Inadequate communication frequently leads to increased project costs.	4	15	69
14.	In construction, poor communication can lead to injuries and safety issues.	4	12	72
15.	Poor communication can lead to problems with stakeholders.	3	5	80
16.	Establishing clear lines of communication can help to improve communication.	2	5	81
17.	Using an appropriate communication method can lead to project success.	4	2	82
18.	Paying close attention when communicating results in effective communication.	2	4	82
19.	Clear and concise communication can lead to successful project completion.	3	5	80
20.	Modern technology such as the telephone can help improve communication skills.	2	11	75

3.4: Relative Importance Index (RII)

Since disagree and neutral rates are too minimal, only the relative importance indexes of total agree scoring were calculated and ranked according to their significance. The greater the value of RII, the more significant the communication indicator is.

For Indicator No.1,

$$RII = \frac{\sum W}{A \times N} = \frac{3n_3 + 2n_2 + 1n_1}{3N}$$

$$RII_{agree} = \frac{3 \times 84 + 2 \times 2 + 1 \times 1}{3 \times 88} = \frac{252 + 4 + 1}{3 \times 88} = \frac{257}{264} = 0.97$$

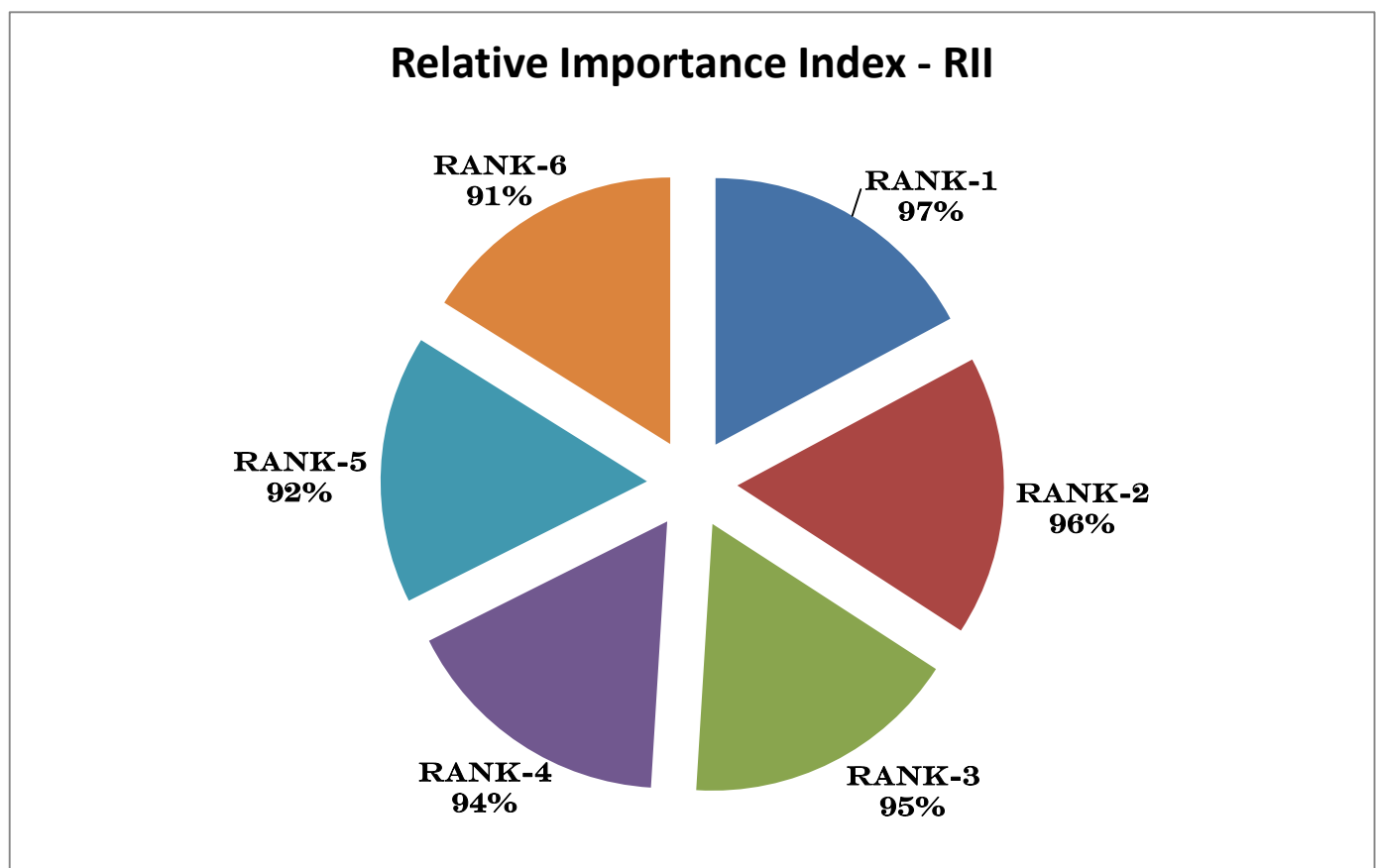
Table 9: Summary of Relative Importance Index (RII)

No.	Communication Indicator	Total Agree	RII	Rank
1	Communication aids in the strengthening and development of relationships in construction projects.	84	0.97	1
2	Good communication makes team management much stronger.	84	0.97	1
3	Effective communication channels improve team collaboration and feedback.	81	0.97	1
4	Transparency and strong communication lead to better results.	79	0.95	3
5	Effective communication improves teamwork abilities.	80	0.96	2
6	Project managers and team members' communication skills have a significant impact on project completion and success.	76	0.94	4
7	Communication skills are essential for project success in terms of timely delivery and maintaining the quality of results.	80	0.95	3
8	Poor communication leads to negative outcomes such as frustration, confusion, discouragement, and an agitated environment.	79	0.96	2
9	Poor communication among team members generates waste in the form of rework and rehabilitation.	78	0.95	3
10	Poor communication can have a negative impact on the quality of work coordination.	81	0.96	2
11	Poor communication impedes group performance success.	81	0.96	2
12	In the construction industry, poor communication is a major cause of project delays.	70	0.91	6
13	Inadequate communication frequently leads to increased project costs.	69	0.91	6
14	In construction, poor communication can lead to injuries and safety issues.	72	0.92	5
15	Poor communication can lead to problems with stakeholders.	80	0.96	2
16	Establishing clear lines of communication can help to improve communication.	81	0.97	1
17	Using an appropriate communication method can lead to project success.	82	0.96	2
18	Paying close attention when communicating results in effective communication.	82	0.97	1
19	Clear and concise communication can lead to successful project completion.	80	0.96	2
20	Modern technology such as the telephone can help improve communication skills.	75	0.94	4

Table 10: Ranking of Relative Importance Index

Communication Indicator	Rank	RII	RII (%)
Communication aids in the strengthening and development of relationships in construction projects.	1	0.97	97
Good communication makes team management much stronger.			
Effective communication channels improve team collaboration and feedback.			
Establishing clear lines of communication can help to improve communication.			
Paying close attention when communicating results in effective communication.			
Effective communication improves teamwork abilities.	2	0.96	96
Using an appropriate communication method can lead to project success.			
Clear and concise communication can lead to successful project completion.			
Poor communication can lead to problems with stakeholders			
Poor communication impedes group performance success			
Poor communication can have a negative impact on the quality of work coordination.			
Poor communication leads to negative outcomes such as frustration, confusion, discouragement, and an agitated environment.			
Communication skills are essential for project success in terms of timely delivery and maintaining the quality of results.	3	0.95	95
Poor communication among team members generates waste in the form of rework and rehabilitation.			
Transparency and strong communication lead to better results.			
Project managers and team members' communication skills have a significant impact on project completion and success.	4	0.94	94
Modern technology such as the telephone can help improve communication skills			
In construction, poor communication can lead to injuries and safety issues.	5	0.92	92
In the construction industry, poor communication is a major cause of project delays.	6	0.91	91
Inadequate communication frequently leads to increased project costs.			

Figure 1: % Ranking of Relative Importance Index



4. RESULTS

Analysis of the results showed that maintaining a strong chain of communication in construction helps strengthen and build relationships in construction projects. Research proved that good relationships are the key to successful business activities. However, effective communication has been found to help increase trust and transparency among all stakeholders in the project. Participants felt that effective communication would make team management much more powerful. The study found that it is the project manager's responsibility to provide clear communication that forms a roadmap for achieving the desired goals. Better communication gives team members more confidence in their activities. The results revealed that the open and transparent system of management gives team members a clear understanding of what they are looking for. Open communication is a tool that allows team members to communicate a solution when a problem arises. Open communication creates happiness among team members, the report indicated. The study also found that effective communication ensures collaboration between team members. Feedback is easy to collect and encourages more vital ideas and better collaboration when solving project problems. The report shows that learning is in progress when the strengths and weaknesses of the project are communicated. This is the best way to improve the strategies and methods of future projects. Communication provides information to everyone and displays it on the same page. Participants discovered that communication needs to begin from the planning stage to the completion stage to ensure project quality and timely delivery. There was a strong belief that using the right communication techniques would improve transparency and effective communication. The study found that good communication within the team improved teamwork, led to positive collaboration, and led to optimistic project progress for stakeholders. But the best way to ensure effective communication is to develop strong active listening, writing, and speaking skills, ask questions, ask for additional information, and set and manage expectations, and people. We know that it is motivating to participate. To successfully deliver a high-quality construction project, it is necessary to establish a clear line of communication throughout the project life cycle. Any deviations in your project should be communicated to all stakeholders prior to implementation. Failure to communicate issues in a project can lead to project delays and ultimately affect the quality of the project's delivery.

Continuous communication between stakeholders and the work team must be maintained to ensure that the project objectives are achieved.

The study also found that choosing the right communication methods can improve the timely delivery of projects. Clarification should be categorized when communication is not clear. Clear and concise communication needs to be implemented to clarify what needs to be done. Communication in the project begins with well-defined lines and methods and requires regular contact between stakeholders and the execution team. If the team can share concepts and ideas clearly and effectively, everything will run more smoothly, and the project will run on time. According to the report, considering cultural and language barriers can help identify the right communication strategy that connects everyone. This reduces the risk of confusion when communicating about the project. Slang, irony, and jokes should be avoided as they can cause problems when translating across languages and cultures. The report warns that communication methods need to be tailored to stakeholders and work teams without fear of getting the project on track. The study uncovered that communication facilitates the exchange of ideas and innovation. When talking about different approaches to situations and challenges, communication encourages creative ideas for solving problems. A strong team is the direct result of clear and effective communication. Effective teams communicate closely with each other to proactively anticipate challenges and develop creative solutions. If this works, you will gain confidence in your ability to work. When managers communicate effectively, team members recognize and learn. The more communicative, transparent, and effective a team is, the better the results. Real-time communication is always desirable when it comes to providing information to everyone involved. If everyone is on the same page, construction organizations can avoid mistakes. A project team with a high level of communication can deliver a project in advance, within budget, or within budget, with excellent safety records. A clear and concise message will help avoid confusion. Keep your message short, simple, and sensible. If you are working on multiple client projects at the same time, focus each message on one project. Written communication is important and should be the focus of the project team to keep things running smoothly. Creating a stakeholder communication plan for the key stakeholders you interact with most often will help you run your construction project smoothly. The study found that lack of communication in construction was one of the biggest reasons for project failure. The problem is the lack of communication in construction. However, misunderstandings can also have a negative impact on the project and cause confusion for everyone, from key stakeholders to construction professionals and field workers. Inconsistent reports, incomplete reports, ambiguous reports, and delayed reports can lead to errors that can lead to project delays and cost overruns in the field or office. Lack of communication in the construction industry is a major cause of project delays. It can take various forms, including the delayed flow of information, routing of communication to the wrong person or department, and obscure communication that leads to confusion and misunderstanding. Lack of communication is one of the main causes of conflict in construction projects. Therefore, to avoid misunderstandings, it is very important to regularly notify and update stakeholders about your project.

According to the Project Management Institute (PMI), more than half of all project budget risks result from ineffective communication and poor time management of project communication. Lack of communication and communication mistakes often lead to increased costs. An extra zero in the amount of material can have a huge impact on your budget. Inadequate communication can prevent tasks from performing properly. In this case, the revision may result in cost overruns or time delays. The report also revealed that lack of communication can lead to on-site injuries and safety issues. One of the most common reasons for injuries in many workplaces has been found to be a lack of communication regarding safety. Every construction project involves multiple stakeholders, including owners, designers, investors, general contractors, project managers, subcontractors, and workers. The success of a project depends heavily on the effective and comprehensive exchange of information between its stakeholders. Redoing is a headache for construction projects, which can increase project costs, cause delays, and even lead to disputes between the parties. Bad project data and misunderstandings between project stakeholders are responsible for all rework of the project. The study discovered that the most important values of effective communication in the construction industry are: establishing clear lines of communication can help to improve communication, paying close attention when communicating results in effective communication, communication aids in the strengthening and development of relationships in construction projects, good communication makes team management much stronger, and effective communication channels improve team collaboration and feedback.

4.1 Summary of Findings

A. Benefits of Effective Communication

1	It boosts worker morale and facilitates the exchange of new ideas that enable the company to operate more efficiently.
2	This helps minimize the confusion and atmosphere of confusion that occurs when employees do not know what they are expected to do in their assigned role.
3	Effective communication removes the guesswork from all messages and promotes understanding.
4	Better communication skills help workers better understand their role, perform their assigned tasks better, and improve their productivity.
5	There is a misunderstanding at the root of conflict in the workplace. Clear and open communication prevents misunderstandings between team members and promotes positive relationships.
6	Good communication reduces emotional signals such as stressful situations. This can be improved by practice and self-awareness.
7	Good communication ensures transparency and guidance among team members and helps them think about achieving their set goals.
8	Effective communication not only increases the opportunities for employees to be promoted within the company but can also improve their career prospects.
9	Effective communication enhances employee involvement and commitment to adhering to the goals and principles that move the company forward.
10	Effective communication creates a strong working environment with better relationships.
11	Good communication creates strong trust and integrity between the members of the construction team and the company. Honesty is the best policy in the work environment.
12	Good communication enhances employee involvement, as direct involvement in the company's success makes it more attentive to the company's well-being and future development.
13	Effective communication increases stakeholder satisfaction because the happier employees are, the better their work is.
14	Good communication improves workers' knowledge of business practices. The more employees who know exactly how a company works, the better it must be, not just get the job done.
15	Effective communication can lead to more customers, as happy employees and customers are more likely to recommend the company's services to other potential future customers.
16	Effective communication motivates employees. The more positively the manager communicates with the employee, the more relaxed the employee feels in the relationship with top management.
17	Effective communication leads to openness and closeness to different perspectives, ideas and opinions, and brings equality to the business environment.
18	Good communication improves team interactions; when employees believe they have successfully communicated with their superiors, it leads to a less tense relationship and a more friendly work environment.
19	Good communication boosts public perception. Companies that have a good reputation for communicating internally as well as with clients and other employees often have a strong and positive public image. This helps the company attract talent and even attract the attention of investors and banks.
20	Effective communication helps resolve conflicts through the free exchange of ideas and implements solutions that can resolve problems.

B. Impacts of Poor Communication in the Construction Industry

1	Inadequate communication minimizes employee productivity. This is because employees do not have access to the people, knowledge, and resources that help them get the job done, and they have no passion or motivation to improve performance or exceed expectations.
2	Lack of communication can cause confusion in the field, affect everyone from field workers to stakeholders, and can adversely affect the entire project.
3	Lack of communication leads to a lack of predictability and stability in the workplace, creating an unpleasant work environment for employees. Employees may not have a clear understanding of their goals for the week or misunderstand the process of the project, leading to unproductive and inefficient work.
4	Inadequate communication can reduce employee morale, and make it difficult to meet expectations and meet deadlines.
5	Inadequate communication leads to high employee turnover. Replacing an employee can cost up to three times the person's salary. When companies communicate ineffectively, they can report turnover below-industry sales.
6	Communication breakdowns can result in health and safety issues. The Security risk construction industry is already a dangerous and risky industry, but it is risky if communication is not effective. This also makes workers feel that the company does not care about their welfare.
7	Companies with low communication skills will eventually have lower shareholder returns.
8	Inadequate communication can lead to overtime, quality, and cost. This can lead to overspending and cost overruns.
9	Customer service is affected in two ways by a lack of communication in the workplace. First, employees do not have the information they need to do quality work. This can be very detrimental to customer-facing roles such as field workers. Second, customers experience demoralization with workers during interactions, leading to negative experiences.
10	Lack of communication can lead to project delays. If even one thing is omitted, it may lead to a chain of delays due to a lack of communication.
11	Lack of communication can lead to increased absenteeism. The impact of lack of communication in the workplace is evident in employee satisfaction and engagement. Absence rates can be below average if employees feel they are well informed.
12	Collaboration and communication are so closely linked that collaboration projects fail because of a lack of communication in the workplace.

C. Causes of Poor Communication

1	The workers are difficult to reach because there can be hundreds of workers with different skills on a construction site at once. Some of them can work for a company, some can be contractors, and some can be subcontractors.
2	Sharing information that is too complicated. Clear, succinct, and understandable languages are qualities of good communication.
3	Potential health and safety issues. Construction sites are dangerous places and people are afraid to work there.
4	Inefficient use of internal communication channels. Construction communication methods preferred in the non-construction industry do not always work well in construction. Site employees rarely or have no access to intranets and emails.

5	The COVID-19 pandemic caused additional problems that adversely affected effective communication channels, resulting in construction sites being closed for a period of time, and causing delays and uncertainties.
6	Linguistic and cultural barriers lead to a lack of communication. The construction industry is becoming more and more multicultural. It is common for people from different cultural backgrounds to work together in the same place.
7	Demoralized workers cause bad communication. If a worker loses interest in his or her job or company, they are considered depressed. Workers who feel depressed often feel unappreciated, or even unrespected, despite their skills and talents. This causes employees to be unproductive, frustrated, and disregard the open lines of communication rather than moving the company forward.
8	Bad leadership causes bad communication. Workers ask company owners and their managers for directions in the workplace. Starting from the top down, good communication motivates employees to be more productive and innovative. However, poor and incompetent leaders are often indecisive and unable to inspire their teams.
9	Limited feedback is the result of poor company communication. Feedback is "information provided by agents about aspects of their own performance or understanding." Effective feedback, both positive and negative, is extremely helpful as it provides valuable information for making important decisions in the future. With limited feedback from management, employees may not have a clear understanding of their current behavior and may continue to underperform compared to managers' standards.
10	Workplace cultural diversity. Work environments are becoming more diverse. A diverse work environment is proven to help businesses grow by bringing in new ideas to boost creativity and innovation. However, one challenge to increasing diversity in the workplace is the potential lack of communication.
11	Specify an unclear goal. Goals and objectives are powerful in the business because they focus on achieving the desired outcomes, such as profitability. Profitability doesn't just happen magically. It requires attentive employees who know what management expects from them, and transparent goals guide this direction. If the organization, especially the manager, does not give instructions, it can lead to confusion and frustration, as well as the unintentional loss of performance for employees.

D. Improving Communication in the Construction Industry

1	Build trust among workers to improve the outcome of construction projects and establish warm relationships.
2	Encourage open communication between employees to ensure that the project runs smoothly and safely.
3	Avoid confusion and be clear and concise when communicating with employees so they can understand your message.
4	Encourage employees to comply with established protocols and safety procedures.
5	Establish a clear line of communication so that team members can understand who to talk to when needed.
6	Practice equality among employees, identify the criteria that define your beliefs and practices, and support them in communicating with your employees.
7	Connect office and field teams to avoid communication disruptions that can cause conflicts and hinder productivity.
8	Maintain safety, productivity, and involvement of construction workers and promote general communication.
9	Foster a positive work environment where employees can speak with peace of mind. Remember that there are no bad questions in the built environment. By admitting mistakes, we hasten our learning development.
10	Always keep your written communication professional and avoid using blasphemous expressions and emotions that affect your message.

11	Every day, starting with a brief pre-construction briefing, involves workers, even if they are accustomed to their daily work. Give them the opportunity to ask questions and give their opinions.
12	Provides easy access to important information to enable workers to complete quality tasks safely and efficiently.
13	Become an active listener and stop focusing on sitting and capturing information like a digital recorder. In other words, it is passive listening at best. Try to understand from their point of view what the speaker is trying to convey. Do not disturb or talk to the speaker.
14	You can set the hand signal and use the radio in combination with noise-cancelling earphones or headsets in very noisy environments, but it's always wise to have an alternative plan of action.
15	Stick to the right facts and avoid exaggerating communication. 17 Choose the right communication method for your messages to speed up and simplify information exchange.
16	Recognize employee efforts to promote productivity. When workers are valued, they value their source of income.
17	Provide employees with regular training to ensure they deliver timely, high-quality results.
18	Encourage open communication between employees to ensure that the project runs smoothly and safely

5. DISCUSSION

The findings will help clients and other stakeholders develop communication strategies by linking communication to strategic plans such as the organization's mission, vision, and values. There is an opportunity to build loyalty and maintain trust. Consistency can be to establish a strong employment brand. Employers will understand the need to listen to employees and members of management. Space will be created to collect donations from all supporters. Good communication can prepare a manager for a role as an organization leader. Employers and other stakeholders learn to increase management efficiency in the construction sector and create maximum collaboration and organizational peace. The results of this survey will help boost employee morale. When communication is effective, everyone feels satisfied and fulfilled. Effective communication is critical in conflict situations to ensure that the situation is resolved with respect. Positive interactions with others aid in the formation and maintenance of strong relationships. Clearly delivering the message eliminates the possibility of misunderstandings and message changes and reduces the possibility of contention. Without effective communication skills, it is difficult to properly build and foster productive relationships. Collaboration and innovation will be higher than ever if employees are willing to communicate new ideas openly. Also, if employees are unable to communicate their ideas due to limited communication skills, the ideas may not be fully implemented. Encouraging open communication in the workplace creates a more cohesive and effective team. When employees feel informed about the company's direction and vision, they feel more confident in their role. Regular internal communication can also improve morale when employees remember their achievements and feel they are working towards a common goal. If the manager is an effective communicator, the manager can properly inform employees about their responsibilities and what they expect. Good communication skills also help managers provide constructive feedback to employees, build better relationships, and understand the personal goals they may aim for. While working from home, managers are required to maintain effective communication, but they need to find ways to overcome this barrier. Everyone involved learns that communication can be productive and help avoid unnecessary delays in implementing policies. Regular internal and external communication keeps your organization more transparent.

The insights gained from this study will help project managers plan, organize, direct, control, monitor, and complete projects, as project managers are responsible for the success and failure of their projects. Project managers need to build effective communication channels by monitoring how they communicate with the audience. Project managers play an important role in collecting relevant information and distributing it to stakeholders. Therefore, the project manager's communication skills impact project performance in terms of on-time delivery and quality. Managers need to keep up to date as required by team member roles and keep client progress up to date. The best project managers are those who build relationship skills to properly meet the needs of both parties. The key to good communication for project managers is to first understand the communication process. Personal communication skills describe the ability to interact with customers and employees in an effective way. To establish a good communication environment, project managers need to establish mutual trust and understanding with project team members. In addition, leaders with strong interpersonal skills can communicate better for self-confidence and self-confidence. As a project manager, it is important to understand the values and attitudes of the project members and communicate clearly and take their opinions into account. Communication congruence can be used to determine the effectiveness of a communication structure and properly notify all team members of decisions or changes. Project performance is measured when the project completes successfully in

time and the result is produced as close to the expected result. Project manager communication skills impact project performance in terms of quality and delivery. It turns out that the role of communication skills is more important for the quality of the project. A project manager with good communication skills can deliver the project on time and maintain the expected quality of the project. A good communicative atmosphere reduces the cost and wasted time of sending and receiving messages between team members at various stages of the project. Achieving effective project coordination requires participants' communication skills and the ability to adjust communication styles and techniques to suit the project at hand. The construction team understands from the results that the most common reason for construction disputes is a breach of communication and expectations. To ensure quality delivery, clear and accurate documentation is required. Buildings are designed and built by humans, and many oral discussions cannot be fully recorded. Effective communication is very important here. It is important to establish a clear command chain for inputting and distributing information, documentation, and decisions. For a successful project, everyone needs to be willing to work together. Without strong communication skills, it can be very difficult, if not impossible, for a project manager to effectively lead a team and coordinate efforts to successfully resolve a project. Construction supervisors and supervisors need to have good communication skills so that the entire team and stakeholders can understand ideas, decisions, and plans throughout the project. When communication is lost, problems related to teamwork and productivity begin to arise. In addition, it was observed that people find it difficult to embark on volunteer work such as attending to the research questionnaires. This is a part of communication issues. People feel less concerned when we talk about charity work. Charity work is volunteer work that may or may not attract any stipend. Now, do we assume that people communicate better when they are paid to communicate? However, there is still a need to find out why people feel unwilling to communicate with people in the construction industry. The study observed that humans value the monetary aspect of life rather than life itself.

6. CONCLUSION

This study provided insight into the value of communication in the construction industry. Communication is a major challenge that can lead to poor on-site productivity and poor project performance around the world. The study identified and briefly explained the main impact of poor communication and effectiveness on construction projects from the findings of construction site workers. The result stressed that the construction sector is likely to fail unless it addresses communication issues. However, while the results of this survey could be applied to other construction sites, the results shown here may require surveys of different areas and locations. The importance of teamwork in the workplace is clear and is often directly influenced by effective communication practices. Good communication between project team members should be clear, honest, open, and frequent, but not excessive. Effective communication saves money and improves reputation. This helps avoid coordination issues that can lead to frustration and frustration among team members and lead to project failure. For good project communication, there is a need to be aware of the unique differences between team members or project partners. To maintain effective coordination and communication, project leaders need to understand and balance individual differences between project partners. Everyone needs to be involved and integrated throughout the project lifecycle. Communication can be greatly improved by using project management software. Improve communication between stakeholders by providing real-time access to project information. If everyone involved is on the same page, everyone's chances are better coordinated for a successful project. The study identified the role and importance of communication skills in the timely implementation of projects and the maintenance of project quality. This study confirms the active role of project managers' communication skills in construction projects. In addition, we found that the role of communication skills is more important to the quality of the project. In addition, it can be concluded that a project manager with good communication skills can deliver the project on time and maintain the expected quality of the project. A good communication environment reduces the cost and wasted time of sending and receiving messages between team members during different phases of the project. Anyone who manages a project must be able to communicate with everyone involved. This includes bargaining skills when things don't go as expected. Project leaders need to tailor their style of communication to a specific audience. Project leaders need to deliver the right messages to the right people at the right time to communicate properly. If you successfully implement a project that has a long service life and is inexpensive to maintain, the success may be due to the foundation work done in the early stages. More time, more stakeholder involvement, and step-by-step definitions and plans form a robust and flexible foundation. In addition, communication between the various stakeholders of such a project is critical to the successful implementation of the project's goals. Ineffective communication can increase the likelihood of misunderstandings, damage relationships; lose trust, and increase anger and hostility. Ineffective communication can be due to poorly coordinated strategies, failed strategy execution, misuse of communication tools, poor timing, and nuances such as word selection and voice tone. Effective communication builds employee morale, satisfaction, and engagement, helps employees understand employment conditions, fosters engagement and loyalty, and educates employees about the benefits of freedom of association. It improves employee satisfaction with employers and reduces the potential for misunderstandings. It is an important factor in improving, ultimately increasing efficiency and reducing costs of projects.

7. RECOMMENDATIONS

- Further studies are required to discuss the causes of human reluctance in communication in the construction industry.
- Further studies are required to discuss the benefits of volunteer service in society.

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