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ABSTRACT

In this day and age, the world has slowly been shifting to the widespread use of technology in almost all aspects, including employment. This is proven by the continuous growth in the number of remote jobs globally, which allows people to work from home through the use of technology anytime and anywhere. Naturally, challenges and dilemmas, especially when it comes to communication, arise in the workplace. However, the challenges experienced in the face-to-face setup may differ from what is experienced in a remote or online setup.

That being said, this research aims to discover the organizational culture being practiced in a remote work setup, specifically its organizational culture, communication flow, and practices, as well as the communication model being observed in the workplace through the conduction of an interview between two engineers.

The findings reveal that the organization has both linguistic diversity and cultural pluralism. Moreover, their primary communication channels are digital tools, which is an indication that the Interactive model of communication is observed in their company. In addition, employees, irrespective of their positions, are also given the chance to participate and talk during meetings, which signifies that the company’s communication flows are both vertical and horizontal. Lastly, technological barriers like internet connectivity impact project development, which may lead to miscommunications in the workplace.

How to cite:
Overall, the research sheds light on communication challenges and practices in remote work environments while also highlighting the healthy work atmosphere the selected organization has cultivated.

**Keywords:** Communication, Engineering, Remote work, Workplace.

**Introduction**

Communication inside the workplace, especially in an engineering firm, serves as a road to the company's destination. Without communication in the workplace, employees will not have the information they need to accomplish their jobs, and this can lead to a poor working environment (Khan, 2023). This study shed light on the inside communication and interaction in a remote workplace.

Therefore, the researchers of this study interviewed two employees who worked remotely in a construction company in the Philippines. They are a building takeoff service provider that employs efficient and dependable estimators and takeoff professionals. They provide construction estimating services on schedule, ensuring meeting building deadlines. Companies that offer remote jobs are evidence of how broad and powerful technology can bring each other together no matter where they are. Communication technology allows messages or information to be transferred between humans and machines via technology (Keshav, 2023). Not just with the messages, but communication technologies pave the way to allow mankind to access a virtual working environment that incorporates various elements of both material and immaterial nature, including technology to provide team collaboration software, a video conferencing platform, and all of the company's communication tools (Radoycheva, 2022). Remote jobs and in-person jobs are the two practices of offering services nowadays.

However, though both practices offer services and connections to the company, challenges and differences exist between them. One of the challenges of remote jobs, according to Feito (2023) is a lack of personal interaction with colleagues. The lack of personal communication affects the relationship between employees. It could lead to a reduction in the size of employees' social circles and conversations with colleagues become more formal and less frequent. Others experienced difficulties in expanding social networks and establishing connections. However, it also stated that digital communication does not always hinder relationships; it could also enable them since for some people it helps them to feel closer to others who are located in distant places (Suortti & Sivunen, 2023). In addition, the unequal distribution of ICT infrastructure poses challenges in establishing an effective home-based work environment, especially in developing countries (Matli & Wamba, 2023).

This study aims to investigate an in-depth understanding of communication, culture, and the challenges faced by employees in an engineering workplace. The study employed a descriptive qualitative design and conducted one-on-one interviews with participants. The open-ended interview questions allowed the researchers to collect detailed information from each participant, which lasted up to 20 minutes. The collected data was kept confidential and used solely for academic purposes. The researchers followed ethical guidelines, including obtaining informed consent from each participant. This research provides significant insights and data into the experiences of employees in a civil engineering organization and may contribute to improving communication and culture in this context.

**Theoretical Framework**

Technology has developed over the years, connecting everyone worldwide and even allowing services to be provided remotely. However, cultural barriers and language barriers exist in the sense of communication with persons with different native languages and origins who work together in remote jobs (Buarqoub, 2019). Cross-cultural communication theory (CCT) refers to the idea of communicating with people who are different from one another. Individual differences may include...
age, race, financial status, ethnicity, and gender (Cross-Cultural Communication).

Geert Hofstede developed the cultural dimensions theory, which serves as the basis for cross-cultural psychology. It employs a component analysis-derived framework to explain the impact of a society's culture on its members' values and how these values are linked to behavior.

Hofstede's dimensions include the following: (1) Power distance: A high power gap indicates that a culture accepts and expects a high level of hierarchy; a low power distance implies that the president and janitor may be on the same level; (2) Individualism: A culture with a high level of individualism prioritizes individual needs over social or collective needs; (3) Uncertainty avoidance: A high degree of uncertainty avoidance implies that a culture is prepared to go to extraordinary lengths to predict and control the future. Low uncertainty avoidance indicates a more relaxed attitude toward the future, which can manifest as a willingness to take chances; (4) Masculinity: High masculinity refers to a society that values conventional masculine characteristics such as competition, assertiveness, and achievement. A low masculinity score reflects attributes usually associated with femininity, such as cooperation, kindness, and quality of life; (5) Long-term orientation: A culture with a high long-term orientation tends to make decisions concerning the present and future over the long term, perhaps throughout many generations. Low long-term orientation is frequently observed in cultures that value immediate results and prefer to spend rather than conserve; (6) Indulgence: High indulgence indicates that societies are comfortable with people indulging their wishes and instincts. People who control or conceal their desires and impulses are valued in cultures that place a premium on restraint.

Methods
Research Design

This study adopted a descriptive design that employed a qualitative approach, which will only focus on gathering and exploring non-numerical data and information derived from situations and experiences that people tend to encounter. It seeks to identify and describe the unique features and norms of the studied subjects. The data will be collected and analyzed to understand concepts further through their personal experiences and observations.

Research Tools and Procedures

The researchers conducted one-on-one interviews with open-ended questions to participants working from the same engineering company to collect the necessary data. The research method used aids to have an in-depth assessment of participants' experiences and observations regarding communication, culture, and challenges present in the workplace. The researchers utilized a purposive sampling technique to carefully select respondents in order to ensure adequate data for the study. The qualifications of participants for this study were the following: (1) an employee in a civil engineering organization; (2) having a sufficient length of employment in the company; (3) experiencing communication with different individuals, such as managers, fellow employees, and clients. The selection and execution of the interview with the participants were carefully performed, which provides an exclusive data source for this study. Despite the initial intention to conduct observation, the remote work system of the participants made it impractical. Thus, the research relies solely on interview data, yet it undergoes a focused assessment of the subject matter.

Furthermore, to verify the authenticity and integrity of the responses, the researchers considered the observation of nonverbal cues during the interview. The respondents were able to share detailed experiences and express their thoughts and viewpoints since the interviews were conducted for 20 minutes. The collected information was documented by the researchers with the use of audio recording and a transcription was created for accessible records.

Interview Questionnaires

Interview questionnaires were carefully crafted and formulated by the researchers to align with the main objectives of this research. The interviewer's questions revolved around four main themes: organizational culture, communication flow, communication models, and communication practices. The researchers...
developed a questionnaire consisting of ten (10) questions that effectively meet the study's objectives.

**Data Analysis**

The study uses a thematic analysis to analyze the transcription from the interview. According to Mcgillvary (2022), in order to have a systematic method of examining qualitative data, a comprehensive bottom-up approach like a thematic analysis is suggested. This type of analysis provides a flexible approach to a variety of data and information (Mcgillvary, 2022).

**Research Ethics**

Various ethical considerations were taken into account to properly conduct this study. The researchers explained the purpose and goals of the research to participants, making them understand what this study was for and how their participation was vital in accomplishing this research, which made a way to obtain consent from the participants. During the interview, the researchers gave participants the right to refuse any of the questions they felt uncomfortable with or uncertain about. This guarantees that there was voluntary participation and that the participants were aware of the rights they have and the potential consequences of disclosing information.

In addition, to maintain privacy, the researchers committed to keeping all information of the participants confidential. The sole purpose of collecting such data was for academic purposes and nothing else, wherein access was strictly limited to the researchers. All of these considerations keep the trust and confidentiality between the researchers and participants, as well as maintain the research’s integrity.

**Result and Discussion**

In this study about communication in the Civil Engineering workplace, the researchers interviewed the employees to discover the various communication cultures within the institution. The objectives of this research are (1) to understand the organizational culture, (2) to analyze the communication flow, (3) to examine communication models, and (4) to determine the communication practices and challenges of the institution. The study’s findings highlight the critical differences in communication patterns, providing valuable insights into workplace interactions in physical and virtual environments.

A. Organizational Culture

*Do the people who work in your company share the same language and culture?*

“Yes, we speak the same language, but I am not sure about the culture, as we are in different provinces and countries. So, our estimator is Filipino, we use Tagalog, but for example, our manager who is Indian, we communicate in English.” - Participant 1

“For us, there are more international clients, so we do share the same language, which is English, but again, the culture is different, but in language, mostly it is English.” - Participant 2

**Diversity of Language and Culture.**

Across different provinces, the participants’ company actively utilizes Filipino and Tagalog as their predominant languages. At the same time, English is the primary language for international communication for projects that operate on a global scale. The need for clear communication in a multilingual and multicultural setting emerged as a significant theme. Notably, the use of international slang by clients and employees adds an extra layer of linguistic diversity.

Given the diverse spectrum of individuals in the workplace, varying in nationalities, ethnicities, languages, cultural perspectives, and other variations, workers need to foster understanding and adept expression amongst one another to work together effectively (Purba, 2021); this explains why the usage of the English language is common among cross-cultural workplaces. As a universally recognized language, both native and non-native speakers choose to speak English for a better understanding of each other, as highlighted by Rao (2019).
If there are any language or cultural differences in your workplace, what steps have been taken to overcome communication barriers?

“As an employee, it is important that we have a respect for diversity.” - Participant 1

**Cultural pluralism.** The participants emphasized the impact of cultural diversity, encompassing international slang, diverse dialects, and linguistic barriers. This scenario aligns with the concept of cultural pluralism, encompassing the coexistence and recognition of various cultural expressions within a collaborative setting. The interviews highlighted the complexities of communication, emphasizing the significance of addressing these diverse linguistic elements to foster a more inclusive and effective collaborative environment. Understanding and navigating these linguistic variations contribute to creating a rich and harmonious workplace culture in the context of cultural pluralism.

In the workplace, people commonly use the English language. However, this only sometimes means employees can avoid misunderstanding since each country speaks the language differently. Bhave et al. (2023) state that workspace language includes standard forms like English alongside various hybrid expressions such as non-native accents, code-switching, and specialized jargon. These linguistic differences can lead to misunderstandings, impacting employee performance and attitudes. Thus, workplaces need to foster cultural pluralism.

What culture and beliefs have you learned from other employees in your organization? What values and practices have been adopted through experiences in the workplace?

“Time is gold. If they set the meeting at 10 o’clock, for example, they will start at 10 o’clock, not 10:01. They will not wait for you; that is their culture. That is what I adopt; if there is a meeting, you need to be there ahead of time.” - Participant 2

**Low Context Culture.** Both informants’ workplaces uphold valuable values and practices in the corporate landscape. They strongly emphasize regular updates, recognizing the significance of being well-informed about project statuses. Moreover, the appreciation of individuals, punctuality, and the effective use of time in meetings are essential practices within their organization. During the interview, the participants emphasized the time values incorporated during meetings; the practice of “Filipino time”, wherein it is habitual to be late for a few minutes, is considered unethical and unprofessional. Together, these values highlight a commitment to staying informed, fostering a culture of appreciation, and ensuring efficient communication and time management within their workplaces.

Employees must be knowledgeable about intercultural communication in a workplace with diverse cultures from different regions. A person needs to know about the culture of his workplace, as it will aid them in adapting to the working environment and avoiding the possible arousal of problems and circumstances in the workplace (Mushaathoni, 2024). In the case of the participants, they are initially from a country considered to be a high-context culture. However, they had to adjust to a low-context culture upon joining an international company.

**B. Communication Flow**

What are the primary channels through which you communicate with each other within the organization?

“Since we are in a remote environment, we usually use Slack, Skype, and Microsoft Teams.” - Participant 2

“There are times that we use Email threads.” - Participant 1

**Utilization of Digital Communication Tools.** In response to the challenges posed by remote work, both professionals rely on digital communication tools for collaboration. Some of these platforms are Slack, Skype, and Microsoft Teams. These are hybrid software in the digital realm that provides features like text messaging, file sharing and media, voice and video
calls, and group chat, enhancing team collaboration.

According to surveys by Gartner (2021a), there has been an increase in collaboration tools and software usage in recent years, with 80% of the surveyed workers stating that they used collaboration tools in 2021, increasing drastically from only 36% in 2019. This data denotes how primary channels for communication in the workplace have shifted from traditional in-person to online communication, which is where most business talks happen nowadays. With that said, Gartner (2021b) also stated that persistently moving away from face-to-face meetings will continue. By 2024, they forecast a decrease in in-person meetings from 60% to 25% of all enterprise meetings. The increase in remote jobs and evolving workplace demographics primarily bring forth this.

How do you conduct meetings with other employees? What topics are typically discussed in such meetings?

"The first thing we do is to check and ask about one’s well-being, followed by a general update. We discussed what we are working on, then we proceeded to a specific update, where we discussed the direction of our works." - Participant 1

"It depends on the CEO. We have weekly meetings, monthly meetings, and quarterly meetings." - Participant 2

Regular Meetings. The participants emphasized the importance of routine meetings in their respective workplaces. They schedule meetings at different intervals, encompassing weekly, monthly, and quarterly sessions. These gatherings are forums for discussing tasks, providing project updates, and updating team members, fostering a well-organized communication flow. Team members actively engage in discussions during these meetings, sharing insights, updates, inquiries, and addressing tasks.

The higher-ups in their workplace frequently schedule meetings, demonstrating that their organization incorporates vertical (upwards and downwards) and horizontal (two-way or multi-way) communication flows. This structure allows employees and higher-ups to transmit information to each other while employees at the same level share information interpersonally. The interplay of power imbalances can create hierarchies and inequalities in a field; therefore impacting communication and relationships between groups (Kaaristo, 2022)

Do the employees in your workplace get along well with one another? How do you feel the hierarchy in this organization affects how information gets shared and transferred from one person to another?

"It depends on the mood of the work. But most of the time, we get along very well because our manager always checks on us (employees) and makes sure that there are no problems." - Participant 2

Hierarchy Impact on Information Sharing. Positive relationships between employees and managers were evident in the workplace institution. The participant emphasized the supportive role of managers in uplifting and appreciating employees, fostering camaraderie and an overall positive synergy in their work. Moreover, they also noted the positive dynamic, where managers and employees engage in open communication and camaraderie, even in a remote setting. According to them, this significantly influences work efficiency in the organization.

This result demonstrates how effective communication between employees, regardless of position, high or not, can foster a healthy work environment, resulting in positive work outcomes. As stated by Colquitt et al. (2023), psychological empowerment represents a natural drive in each that prompts individuals to engage in work activities for their innate satisfaction. In contrast, a workplace with internal and external comparisons to each other results in high levels of envy, guilt, and anxiety, leading to a negative work synergy (Colquitt et al., 2023)

How do you respond to feedback and suggestions from others regarding your work or the projects you are working on?

"In my experience, I take feedback in a constructive perspective. My manager always provides feedback on our work and
performance, and that makes us improve our work.” - Participant 1

**Feedback Loop.** According to the interview, this communication flow promotes high morale and unity in the institution. Positive employee-manager relationships contribute to an open feedback loop, where team members feel comfortable expressing their thoughts and concerns. Whether positive or negative, the feedback from each other improves the overall work and development of the organization. Overall, it provides a collaborative and communicative environment.

The presence of feedback loops in an organization can aid the organization in finding and pointing out its strengths and weaknesses. Consequently, an organization would know which areas to improve or maintain, leading to better performance and overall success. This situation is why most companies greatly value feedback loops: they recognize the importance of learning from experience to boost innovation capabilities. Providing regular feedback and maintaining open lines of communication a crucial aspect of keeping remote workers engaged in work updates and information (Anand & Acharya, 2021)

C. Communication Models

*How do you conduct meetings with other employees? What topics are typically discussed in such meetings?*

"Since we are in remote work, we mostly use digital communication channels.” - Participant 2

**Digital Communication Channels.** To communicate professionally and in an organized manner, the participants rely heavily on digital communication channels such as emails, software applications, and video calls/meetings. These tools facilitate communication and collaboration, especially in remote work.

Since the research participants' work relies on digital communication and collaborative software, their organization follows the interactive communication model. As stated by Ashman (2018), the interactive model is a communication model where individuals engage in the communication process while alternating roles between sender and receiver and generating meanings through the exchange of feedback. This situation is common in communication channels utilized in the work-from-home setup, such as email, video conferencing, and texts.

"How do you collaborate with other professionals, such as architects, contractors, and labor workers?"

"Speak professionally. So, when communicating with professionals such as architects, contractors, and labor workers, you need to use appropriate communication methods. When being professional, you should write a formal email to communicate effectively.” - Participant 1

**Formal and Informal Communication.** A balanced approach to formal and informal communication is essential in collaborating with professionals such as architects, contractors, and labor workers. Formal communication, exemplified by professional emails, ensures clarity and precision in conveying concepts and information. According to the informants, this formal mode is crucial for official documentation and updates. On the other hand, informal communication plays a role in fostering relationships and understanding. Informal conversations create a more relaxed and collaborative atmosphere during meetings or casual interactions, enhancing teamwork and building rapport among collaborators.

Integrating formal and informal communication models contributes to professionalism, engagement, a continuous feedback loop, and dynamic communication within the workplace, allowing organizations to navigate diverse cultural contexts effectively and promoting adaptability and quick information exchange. According to Chunin (2018), the coexistence of formal and informal communication impacts happiness in the workplace and job performance by reducing the communication gaps between employees and workers in higher positions.

D. Communication Practices and Challenges

*In your years of experience, can you recall a memory wherein miscommunication influenced a project’s development?*
"I remember the time when I disconnected from an email thread between me and my client. It caused a setback to the project that I was working on." - Participant 1

"Miscommunication emerges due to, for example, there was a sudden internet connection loss, and then communication also ends between the client and me, especially in the meeting. I do not have any idea what they are discussing." - Participant 2

**Technological Barriers.** The study revealed technology-related challenges regarding online platforms, with internet connectivity issues impacting urgent task discussions. Technical barriers, such as internet outages, were identified as potential disruptors to seamless communication and project development. One of the participants revealed how this issue affected the overall communication of their team. Other than this, the employees’ literacy in technology, including applications and software, impacts general communication in the workplace and project development.

According to Al-Dmour et al. (2023), barriers such as audio and technological issues, restrictions of nonverbal communication, and the risks of exposure to malicious software are often present in a remote working environment.

**Disconnection / Failure to Provide Updates.** Among the challenges brought forth by the participants, one notable issue involved is their disconnection from an email thread, therefore, failing to provide and receive updates from their client. This incident highlighted a specific instance where communication breakdowns affected the flow of information within the organizational context. This challenge, as identified by one of the participants, underscored the importance of addressing and mitigating issues related to information dissemination and connectivity within the workplace.

Challenges in the online setup often involve internet connectivity, as it is the heart of the setup. This result is in line with the results of Alias et al. (2021), who identified internet connection as a significant problem in remote work and learning environments. As long as the country’s internet structures remain stagnant and receive only minimal improvements, remote workplaces will continue to experience these circumstances.

**Conclusion**

The study on communication within the Civil Engineering workplace involved interviewing employees from a remote setting to explore communication cultures within the institution. Objectives included understanding organizational culture, analyzing communication flow, examining communication models, and documenting communication practices. Findings highlighted the communication patterns in online environments, particularly emphasizing the setup within the selected company.

**Organizational Culture.** The workplace embraces linguistic diversity, with English being the most predominant language. Despite the differing usage of employees and clients of the English language through slang, accents, and other elements, cultural pluralism is still evident in their workplace, emphasizing the coexistence of diverse expressions. Their organization also practices a lot of low-context cultural values, which the engineers had to adjust to since they were accustomed to a high-context cultural background in their home country.

**Communication Flow.** Digital communication tools like Slack and Microsoft Teams are vital for the company’s remote collaboration. Positive relationships between employees and managers facilitate open communication. Furthermore, employees, regardless of position, are encouraged to participate and involve themselves in team discussions, demonstrating that their organization incorporates both a vertical (upwards and downwards) and horizontal (two-way or multi-way) communication flow. In addition, they confirmed the existence of feedback loops in their company and said that they utilize these to enhance morale and unity, promoting collaborative environments.

**Communication Models.** Their workplace, being a remote work environment, employs the Interactive communication model, which is facilitated by digital channels and is common in online setups. In addition, the engineers recognized how important it is in their company to...
have a balance of formal and informal communication as it fosters professionalism and engagement.

Communication Practices and Challenges. Technological barriers like internet connectivity issues indeed impact project development. To be specific, issues like disconnection from communication channels due to a slow internet connection can hinder information flow and may lead to misunderstanding, emphasizing the importance of addressing connectivity issues in remote work setups.

Overall, this study illustrates that a company fosters a healthy work environment by actively addressing communication challenges, engaging all staff members, and treating each equally, irrespective of their roles. This enhances employee satisfaction with their job, consequently boosting motivation and

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