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Exploring the Value of Technology Within Cross-Departmental Communications

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Walden University
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Abstract

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Brian J. Luckey

Dual MBA, Jones International University, 2008

BA, Henry Cogswell University, 2001

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Management Information Systems

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Abstract

While many midsized businesses have invested in technology to support business operations, most have not realized the potential value of using technology to collaborate cross-departmentally. There is a lack of knowledge concerning strategies for using technology to facilitate effective organizational communications, which has resulted in operating technology investments being made without corresponding investments in communication technologies. The purpose of this qualitative case study was to fill the knowledge gap concerning the impact of technology for cross-departmental communications. The theoretical foundation for this study was based on systems theory, organizational theory, and stakeholder theory. The key research question involved the impact that technology has on cross-departmental communications within a midsized business with between 250 and 500 employees. Using a case study approach, data were collected through 17 semi-structured interviews and 23 online surveys from 40 managers across diverse organizations. Applying a thematic process, data were coded and analyzed for themes and patterns. The emerging themes were technology enables effective communications, leadership impacts employee behavior relating to cross-departmental communications, and cross-departmental communications impacts organizational success. These results may assist leaders when instituting strategies to gain value from communication technologies. The implications for positive social change include the potential for managers to better understand the role of technology in relation to internal communications and introduce processes to improve communications and the methods used to communicate.

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Dedication

I dedicate my doctoral study to my family. Thank you for always being there and supporting me, especially my beautiful wife, Stacy. Thank you for caring and uplifting me through this journey; you are my foundational rock. Thank you to my grandfather, Clyde Roberts, for teaching me at a very young age how to navigate through challenges and roadblocks, striving to find a way to be successful at anything you do.

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Chapter 1: Introduction to the Study

Introduction

Organizations depend upon internal communications to ultimately achieve their overall business strategy (Cuganesan, 2005). Unfortunately, the quality or extent of interactions does not necessarily provide the value needed in order for organizations to be successful, including cross-departmental communications (Leonardi, 2007). This study has potential social implications in understanding the importance of communications and interactions with others to increase collaboration between teams and efforts. This chapter provides an introductory framework for revealing why technology plays a major role in successful cross-departmental communications.

The sections of this chapter include the problem statement, the purpose of the study, and research questions that were considered, shadowed by a discussion of the framework within the study. Key concepts and definitions of terms with various meanings are provided, along with descriptions of the significance and potential benefits of the study. Finally, an outline of the study's assumptions, scope, delimitations, and limitations is provided, followed by the closure of the chapter with a summary.

Background

In a study by Apulu and Latham (2011), the authors explored various methods used in organizations to employ information and communication technology and how these can improve business communications and processes. One of the main drivers in the organizations mentioned was the use of applications and devices with information and communication technologies (ICT). In the study, the authors found that the use of ICT is

critical in creating better client success, fostering an innovative environment, and reducing overall organizational costs while increasing employee knowledge sharing (Apulu & Latham, 2011). When ICT tools are utilized within a business environment, employees are able to share information and improve their communications both internally and externally.

Barrett (2002) introduced research using a strategic employee communication model tool, analyzing the strengths and weaknesses of organizational communication. The model provides analytical information in order for an organization to alter communications when organizational changes occur such as mergers or acquisitions, process improvements, and/or management fads. It is critical for organizations to change their communication approaches in order to be more effective, or change management will collapse (Butchibabu et al., 2016). Without effective communications from the top down in an organization, it is unlikely that horizontal or cross-departmental communications will be at the top of organizational priority initiatives.

Cross et al. (2010) provided information on the importance of internal employee networks facilitating an increase in communications and collaboration among employees. Most employees are familiar with employee networks, often referred to an “intranet” or “employee portal”, allowing access to important company information and further heightening their ability to be more productive and informed during interactions with colleagues. Cross et al. found that when employees interacted across various areas or responsibilities, innovation and various points of view emerged, ultimately assisting in undocumented processes or when unforeseen organizational issues surfaced. For

information technology (IT) departments or others that may be overseeing technologies for communications, these types of results are the proof that management should recognize when searching for a return on investment.

Priscilla (2006) addressed the impact of technological innovation in relation to communications, evaluating both past and current-day activities. While new technology is sometimes referred to as "technological advances," many of these advances are disconnected technologies that are used on an individual basis and limit a wider net of efficiencies by spreading knowledge across multiple people or teams. Sharing information allows for the exchange of various perspectives from others outside of a department, possibly enabling individuals to see flaws in ideas or helping them to learn from previous mistakes (Priscilla, 2006). Information sharing technology allows for the hoarding of knowledge and information, removing the ability to learn from others while limiting effectiveness.

Proctor and Doukakis (2003) provided information on the role of communication within an organization for effective change management. The fear of change is real within an organization, often challenging or changing the way that individuals do their jobs and introducing a multitude of emotions from employees. Poor communications, or likely a lack of communication or vision around organizational changes, can introduce a roller coaster of emotions and begin a multitude of rumors and departmental gossip (Proctor & Doukakis, 2003). Introducing tools or systems to better distribute information across the organization while introducing a plan or vision around changes will allow for effective change management and increase performance.

Many articles explored or mentioned within this study address or focus on the subject of organizational communications (Apulu & Latham, 2011; Belvedere et al., 2013; Sinha & Bhatia, 2016), including vertical communications from the top down, tools or systems introduced, or methods for improving communications' effectiveness. While certain technology products may be referenced, this study does not focus on the products themselves, but rather on the effects of technology and types of technology in a general sense. Many organizations use technology to communicate to employees, though such communication is typically top-down or from the leadership team down to the individual contributors. This study concentrates more on how technology affects communications between departments or teams.

This study was needed to fill a gap in existing knowledge. As organizations continually strive to add to their competitive advantages, they need to look inward toward their employees. Of course, technology, innovation, and automation are key for efficiency gains, but the people who are employed by an organization are ultimately needed for organizational success. If those employees are not communicating effectively across the organization while working with different teams or departments, organizations will soon find themselves behind the curve no matter how much technology they acquire.

Problem Statement

Organizations were forecasted to spend around $4 trillion on technology in 2019, focusing primarily on cloud services, customer relationship management (CRM), enterprise resource planning (ERP) platforms, and cybersecurity software (Lovelock et al., 2018). While large investments were made in various technology platforms and

services, only 10% were spent on software communication technologies (IDC, 2018). The general management problem is that significant multiplatform technology investments are being made without a corresponding investment in communication technologies (Sinha & Bhatia, 2016). The specific problem involves those investments made in communication technologies and the subsequent impact on the organizational complexity paradigm within cross-departmental communications.

The gap in knowledge concerns what value is produced from horizontal or cross-departmental communications and what impact technology has, if any. Technology is not a developing research topic, but areas that have specific focus in organizational communications and how they impact an organization horizontally have been neglected. The level and content of cross-departmental communications help to determine productivity and organizational performance (Michelle et al., 2007). While various communications methods such as email, instant messaging, and social media are used to improve communications and increase knowledge sharing, these tools carry a substantial cost and a potential value of increasing cross-departmental communications and collaboration (Kolberg et al., 2013).

Organizations continue to devote budgets to technology due to business users requiring that these investments be applied to current business systems or emerging technologies that meet their own individual or departmental needs (Chumg et al., 2016). Additionally, managers devote several hours of their day to meetings, utilizing face-to-face communications with other departments, though many times these meetings could be facilitated utilizing communication technologies (King et al., 2010). Communication

technologies allow the sharing of knowledge across departments, and with that ability, the unspoken sharing and collaboration of knowledge cross-departmentally are in the critical path of improving organizational competitive advantage (Akhavan et al., 2015).

Systems theory, organizational theory, and stakeholder theory may offer solutions to better understand why investments of technology for cross-departmental communications are not valued and if they are important enough to be valued. While technology is a broad topic, there has been little focus in existing work on specific areas or disciplines relating to communications and the impact that they have cross-departmentally (Stahl et al., 2016). Research is needed to explore the relationship of value, consumption, and the dissemination of information within an organization, identifying the impact of investments in cross-departmental communication technologies (Cutts, 2018; Edmondson & Harvey, 2017).

Purpose of the Study

The purpose of this qualitative case study was to explore the impact of technology on cross-departmental communications. Technologies that elevate internal communications across departments assist with the success of change communications from employees and the corresponding organizational work processes (Hidayanti et al., 2018). Organizations should be able to maximize internal resources by leveraging technological communications, impacting costs positively or negatively when compared to other organizations where communication technology is not used or perceived as a priority for internal communications (Seung-Won & Kuchinke, 2007).

While many organizations use technology to communicate to employees, such communication is typically top-down or from the leadership team down to individual contributors. This study concentrates more on how technology affects communications between departments or teams. Technologies that elevate internal communications across departments assist with successful changes and communications from employees and the corresponding organizational work processes (Hidayanti et al., 2018). In organizations that can maximize internal resources by leveraging technology communications, efficiencies in costs are significantly higher than in organizations where communication technology is not used or perceived as a priority for internal communications (Seung-Won & Kuchinke, 2007).

While certain technology products may be referenced, this study did not focus on the products themselves, but on the impact of technology and types of technology in a general sense. This study was conducted to discover how technology has possibly helped organizations become more efficient, provide better products/services, increase team productivity, be more competitive, increase market share, and multiply profits or other positive indicators where technology has helped organizations to be more successful. The study might also have shown the opposite, if there had been a negative impact on the business due to increased or decreased communications. Either way, the goal was to bring this information to the forefront with the data and information collected in order to promote social change from knowledge sharing.

Research Question

Utilizing a qualitative study allows the use of electronic online surveys and, more importantly, participant interviews, enabling the ability to visually read and take note of body language and reactions to questions and answers. The central research question investigated within this study was the following: What impact does technology have on cross-departmental communications within midsized businesses with between 250 and 500 employees?

Conceptual Framework

Value and the dissemination of communication in relation to technology were the principal concepts that grounded this case study. Technology affects the way in which organizations operate, significantly impacting both employees and customers (Belvedere et al., 2013; Schiuma et al., 2012; Seung-Won & Kuchinke, 2007). Given the speed with which technology is available, organizations struggle to stay competitive while enabling their employees to effectively communicate and remain focused on the company's goals, objectives, and overall mission (Hasgall & Shoham, 2007; Montano & Dillon, 2005; Zhang et al., 2012). While information sharing has become easier with newer technologies, sharing information horizontally and vertically within an organization has decreased, enhancing silos across departments and creating barriers between management and employees (Parris et al., 2016). Technology advancement is not slowing down, but rather continuing at a rapid pace, ultimately pushing organizations to adapt in valuing communications or eventually falling behind in the competitive landscape.

Meaningful and frequent communications remove departmental silos, breaking down barriers for effective interactions (Cross et al., 2010). In an era in which technology is prevalent in communicating and collaborating cross-departmentally, organizations need to bridge the gap between people and technology, focusing on the value of communications and interactions between employees (Bughin et al., 2012). While technology continues to advance, the relationship between technology and various behaviors of employees and groups within an organization must also morph and adapt (Montano & Dillon, 2005). Various theories were applied to this study for the theoretical framework, including systems theory, organizational theory, and stakeholder theory.

Through systems theory, a practical lens can be introduced, sometimes "reversing" the organizational chart to empower employees for increased service levels and frontline enablement (Seung-Won & Kuchinke, 2007). Knowledge management is elevated within systems theory, establishing knowledge and communications as an asset. Additionally, the introduction of business process re-engineering (BPR) enables the creation of various solutions for enhanced departmental communications and the realization of technology spend impact (Schiuma et al., 2012).

Organizational theory provides the behavioral aspects within the study, specifically connecting communications and employee behaviors with the use of technology across the organization. The need to communicate changes within the organization, coupled with employees having the capability to communicate those changes at all levels and cross-departmentally, introduces increased effectiveness of those communications while adding value. When employees interact with each other more

frequently, the ability to affect or influence their behaviors or decisions spreads quickly across the organization and will ultimately increase the complexity of systems and technology (Seung-Won & Kuchinke, 2007).

Stakeholder theory provides a basis for understanding how information is consumed differently across different stakeholders depending on their information exchange needs. Ed Freeman (2010), the originator of the theory, provided the best definition of stakeholder theory that applied to this study, which is "any group of individuals which can affect or be affected by the achievement of the organization's objective" (p. 46). Organizations attempt to allocate ideas and resources in order to utilize technological communications, involving stakeholders in critical issues within the organization. Dimovski and Skerlavaj (2004), considered communication technologies as a major element of successful change management, enabling proficiencies with internal communications for stakeholders across the organization.

Nature of the Study

From the central concepts, a case study design was suitable due to the comprehensiveness of communications and technology, requiring flexibility within a real-life context (Yin, 2014). Qualitative research is consistent with supporting exploration of the impact that technology has on cross-departmental communications, which was the main focus of this study. Emphasizing these effects in relation to value and effectiveness should align with the framework of utilizing previous research. The use of interviews and an electronic survey questionnaire leveraged the ability to produce consolidated discoveries.

In comparison with other research methodologies, a case study approach creates a sufficient environmental understanding from the participant, using simple “what”, “how”, and “why” questions rather than leveraging different scenarios or trials (Yin, 2014). This method allows for a discreet observation point of view for the researcher while still providing information for gap analysis and better comprehension (Merriam & Tisdell, 2016). Furthermore, this method allows the ability to search and possibly locate the value of communications and assists in providing results to employees in the hope of impacting organizations and creating competitive advantage (Seung-Won & Kuchinke, 2007). The validity of these findings, in combination with multiple sources of data, allows for triangulation (Keen & Packwood, 1995).

The methods used for data collection were interviews and an online electronic survey questionnaire for managers across midsized private organizations with between 250 and 500 employees. The sample technique utilized was nonprobability purposive sampling. The purpose of using two different data sources is to allow for triangulation and trustworthiness (Shenton, 2004). The participants included managers who used technology within their respective organizations for the purpose of internal communications. Face-to-face interviews included questions that enabled the participants to provide information and feedback on how technology affected their lives at work, including interactions across departments. The online electronic survey questionnaire was generated to provide additional data on the use and effects of technology on communications. These sources were cross-referenced, coded, categorized, and analyzed to provide an accurate report of findings.

To analyze the data collected, a multistep process was utilized within the data analysis phase to clarify, comprehend, and decipher the data (Yin, 2014). The steps included data preparation, data evaluation, data categorization, identification of patterns and themes, data interpretation, and providing reports on the implications and findings (O'Connor & Gibson, 2003). In addition to these steps, both the interview questions and electronic survey questionnaire were aligned and applicable to the research question. Overall, this alignment allowed for the use of a thematic analysis procedure, enhancing my ability to pinpoint, analyze, and locate themes or patterns within the data (Saldaña, 2016).

Definitions

To help readers better understand the study, some of the key terms are defined for reference purposes in this section.

Information and communications technology (ICT): Unified communication devices, systems, or applications that allow end users to store, access, and communicate data or information.

Cross-departmental: This term refers to the departments within an organization at a horizontal level. Department examples include Marketing, Sales, Support, R&D, Finance, and Service.

Communications: Data or information that are passed between employees and departments within an organization.

Assumptions

Assumptions included the following:

1. By default, employees internally communicate with each other using various methods to deliver a product or service to a customer.
2. Communication is necessary within an organization in order for a product or service to be delivered to a customer.
3. An organization has a communications strategy, whether it is defined or not.
4. Change is expected within an organization, requiring leaders and employees to adapt to changes for success.
5. Face-to-face interviews and electronic online surveys were conducted with qualified participants, providing information pertinent to the study.
6. The minimum tenure for participants at their current organization was no less than 6 months for both interviews and surveys.
7. While this study addressed the value of communications, value for employees can vary, allowing for different meanings or realizations. Data analysis was conducted in an attempt to categorize data by similarities.
8. The data were accurate at the time of collection, though changes could have occurred within the organization, industry, or organization that could have changed participants' viewpoints.

Scope and Delimitations

The center of this study was an exploration of the impact of technology on cross-departmental communications. The research attempts to reveal the value communications can provide to employees and organizations. This study was focused on technology and methods of technology use and not on specific products or product evaluations, though

the study could be used in a needs assessment for product evaluations. The concentration was on discovering how technology had impacted organizations cross-departmentally.

Face-to-face interviews were conducted with managers within organizations that had 250 to 500 employees, with a length of at least 30 minutes but no more than 90 minutes. The online survey was not constrained by location, but I ensured that assumptions and requirements for participation were met. All information collected and analyzed was directly related to promoting social change through knowledge sharing and allowed transferability to other contexts or settings.

Limitations

Every attempt was made to interview or collect survey results from a diversified group of individuals, with the possibility of some participants residing within the same organization or in related organizations (with relationships such as subsidiary, parent, partner, etc.). In assessing diversity, various criteria such as years at the organization, gender, age, number of years of college, and number of direct reports were presented. Once the data were collected, it was possible that some participants' views might change due to changes of both organizations and technologies. All information was still valid at the time of collection and was assumed to be accurate for coding and data analysis purposes. Information provided by the participants was collected, analyzed, and presented without bias within the study, despite my experiences and opinions as the researcher.

Significance of the Study

While several studies are available on communications (Gyampoh-Vidogah et al., 2003; Michael, 2007; Rowlands et al., 2006; Sinha & Bhatia, 2016), the majority focus on a specific industry, a specific product, external communications, or communications from a vertical standpoint: top-down from an organization's leadership teams to individual contributors. They do not focus on investments made in communication technologies and the subsequent impact on the organizational complexity paradigm within cross-departmental communications.

Researchers have mentioned or have included fragments of cross-departmental communications in their studies, but past research has mainly focused on knowledge management (Plessis, 2005), geared toward process management (Pradabwon et al., 2017) or overall team communications (Butchibabu et al., 2016). While these are all important facets of communications and evaluating the impact of technology and systems for communications, they do not directly address cross-departmental communications.

Significance to Theory and Practice

The results of this study could provide contributions and insights concerning how the use of technology has impacted cross-departmental communications in combination with employee behaviors and management decisions, providing further understanding of the relationship between technology and communications. This includes the value of technologies, both tangible and intangible, as described by the participants.

Significance to Social Change

Positive social change begins when people in organizations can better understand the role of technology in relation to internal communications. This can lead them to introduce processes to improve communications and the methods used to communicate. All information collected and analyzed for this study was directly related to promoting social change through the use of knowledge sharing.

Summary

The purpose of this study was to explore the impact of technology on cross-departmental communications. Organizations range from either have invested in technology to improve internal communications or do not have any type of strategy to impact communications. This study was conducted to uncover any value that these types of communications could provide. Researchers have stressed that technology has clearly impacted organizations, with knowledge sharing being a prime indicator of competitive advantages for organizations (Seung-Won & Kuchinke, 2007). With communications providing this significance, organizations are forced to strategize regarding how information is shared between departments or teams.

The introductory framework presented in this chapter revealed why technology is important in successful cross-departmental communications. The need for communications to be disseminated differently from the traditional top-down means (i.e., from leadership to individual contributors) is more of a holistic and strategic initiative for an organization, not driven by individuals or departments. Other methods, specifically those that are more collaborative, horizontal, or involving efforts across departments, are

more desired within organizations today (Hastings, 2012). Finding the value in those efforts and investments was the purpose of this study, along with potentially providing social implications toward understanding the importance of communications and interactions between people.

In this qualitative case study, I used face-to-face interviews and online surveys to collect data from various managers within organizations with 250 to 500 employees. I employed focused efforts for organizations and their internal communications across departments, assessing the benefits, costs, and effects of technology use in relation to the value of communications. All sources of information and data collected from the study are cross-referenced, coded, categorized, and analyzed in Chapter 4, then summarized in Chapter 5.

Within Chapter 1, the purpose of the study—to explore the impact of technology on cross-departmental communications—was expressed as the foundation on which the study was built. Chapter 2 provides a substantial amount of literature, with several sources evaluated to assist in addressing the problem. Chapter 3 addresses the methodology on which the study was founded. Chapter 4 provides the results of the interviews and online surveys, including data categorization and analysis. Chapter 5 ends the study with recommendations and conclusions.

Chapter 2: Literature Review

Introduction

Within this chapter, several sources are evaluated to provide a summary of information that delivers additional context for the problem presented in this dissertation: the gap between internal communications within an organization and the lack of value despite the introduction of technology. Additionally, the theories presented in Chapter 1 are comprehensively examined to show their significance in embarking on this study exploring the impact of technology on cross-departmental communications. In establishing the relevance of the problem, the current literature used within this study exhibits the value of technology coupled with collaboration and communication within an organization. This chapter begins with this introduction, presents the literature search strategy, outlines the theoretical foundation, addresses various methods of communication technology and collaboration within current literature, and closes with a summary and conclusions.

Literature Search Strategy

The literature search strategy implemented for this study was instrumental for success. Appendix A illustrates the various publication sources that were leveraged in order to locate necessary and appropriate literature. Appendix B presents the various search terms and Boolean phrases used to identify the correct literature to support the relevance of the problem. To achieve success, various key words were implemented with a secondary level of combination searches using Boolean phrases.

Theoretical Foundation

Three theories were used in the theoretical framework of the study: systems theory (Bertalanffy, 1972), organizational theory (Hatch & Cunliffe, 2006), and stakeholder theory (Freeman, 2010). To support the appropriateness of the issue, the current literature used for this study demonstrates the value of communication technology coupled with collaboration and communication within an organization in relation to cross-departmental communications. The use of multiple theories in this study helped to facilitate and comprise the theoretical framework, while enforcing and assisting to influence the qualitative approach within the study (Collins & Stockton, 2018).

This case study included data from managers who provided feedback and information on how technology affected their lives at work, including interactions across departments. Within this study, I explored communications and technology from different perspectives, including employee communication behaviors, the management and communication process, and the methods by which communications are disseminated across the organization. Emphasizing these effects in relation to value and impact should align with the framework of utilizing previous research. Systems theory, organizational theory, and stakeholder theory provided a solid underpinning of information that directly related to the purpose of the study and theoretical foundation.

Systems theory, also referred to as general systems theory (GST), was unveiled in research by Karl Ludwig von Bertalanffy while studying organisms dating back to the 1930s (Bertalanffy, 1972). While the original focus of the theory was derived within a mathematical environment, the application from a technological perspective provides the

ability to assess the entire organization when implementing technology, processes, or cultural changes. One way to apply systems theory is to introduce a practical lens and "reverse" the organizational chart to empower employees for increased service levels and frontline customer service enablement (Seung-Won & Kuchinke, 2007).

Systems theory provides the capability to view the organization as a whole, identifying the various interactions between departments, while enhancing functional components cross-departmentally (Phelan, 1999). Additionally, this theory enables the ability to see all aspects of the entire organization while enhancing analysis and strategic planning capabilities (Seung-Won & Kuchinke, 2007). Systems theory has several components that assist in recognizing value within information and communications. The application of the theory was important to this study from the standpoint of establishing knowledge and communications as an asset from the utilization of knowledge management and business process re-engineering (BPR).

While the field of study for organizational theory was not established until the 1960s, the theory has many sources dating back to the 1800s, including the work of well-known scholars such as Adam Smith, Karl Marx, Emile Durkheim, Fredrick Winslow Taylor, Henri Fayol, Max Weber, and Chester Barnard (Hatch & Cunliffe, 2006). Organizational theory addresses the behavioral aspects within the study, with communications being the focus. Communicating changes within an organization, coupled with the ability to communicate at all levels and cross-departmentally, increases the effectiveness of communications while offering additional value. When employees interact with each other more frequently, the ability to affect or influence their behaviors

or decisions spreads quickly across the organization and will ultimately increase the complexity of systems and technology (Seung-Won & Kuchinke, 2007).

With available organizational communication capabilities, employees should be empowered to assemble teams or create committees sponsored by executives while providing access to resources and sources of information in conjunction with technologies to further enhance the ability to disseminate information across the organization (Hasgall & Shoham, 2007). Advanced technology elevates an organization's ability to innovate and create additional competitive advantages, while better aligning employees' communications and behaviors. Organizational theory encompasses several different aspects within various fields of knowledge, including organizational sociology, management theory, and organizational behavior (Hatch & Cunliffe, 2006). While all of these knowledge areas are relevant, the application of the theory is important to this study from a human relations standpoint, specifically connecting communications and employee behaviors with the use of technology across the organization.

Stakeholder theory provides a basis for understanding how information is consumed differently across various stakeholders depending on their information exchange needs. Ed Freeman, the originator of the theory in 1984, provided the best definition of a stakeholder that applies to this study: "any group of individuals which can affect or be affected by the achievement of the organization's objective" (Freeman, 2010, p. 46). Organizations attempt to allocate ideas and resources to better utilize technology communications and involve stakeholders in critical issues within their organization. Dimovski and Skerlavaj (2004) considered communication technologies as a major piece

of successful change management, enabling proficiencies with internal communications for stakeholders across the organization.

Business leaders who are responsible for orchestrating the dissemination of knowledge and information are empowered to be the intermediaries of data and information within the organization, with respect to the cultural aspects of their organizational responsibilities (Doh & Quigley, 2014). From this responsibility, various stakeholders are able to leverage their experience, while guiding the priorities within the organization (Kristen, 2015). Possessing this ability could be a positive or negative control issue and impact the organization's overall ability to impact or communicate change management.

While communications are critical for organizations to grow and maintain success, employees struggle with what information to receive and when they should receive it. Long and Spurlock (2008) found that stakeholders without leadership responsibilities were just as important as executive stakeholders, though the level of participation was in some cases more important than the level of the organizational structure. Despite the pecking order, the issue remains in the consumption of information and how that information should be delivered. The effective management of communications, including but not limited to processes and delivery methods, provides endless benefits to an organization that ultimately align with success (Proctor & Doukakis, 2003). With the significant amount of communication technologies available today, coupled with the amount of information that can be disseminated, organizations face the dilemma of deciding what communications are of value to employees while still

focusing on escalating critical issues for stakeholders (King et al., 2010). The application of the theory was important in this study using the foundations of communications consumption and considering various communication methods.

Literature Review Related to Concepts

Technology has affected the way in which organizations operate, significantly impacting both their employees and their customers (Belvedere et al., 2013; Schiuma et al., 2012; Seung-Won & Kuchinke, 2007). With the speed with which technology is available, organizations struggle to stay competitive while enabling their employees to effectively communicate and remain focused on the company's goals, objectives, and overall mission (Hasgall & Shoham, 2007; Montano & Dillon, 2005; Zhang et al., 2012). While information sharing has become easier with newer technologies, sharing information horizontally and vertically within organizations has decreased, enhancing silos across departments and creating barriers between management and employees (Parris et al., 2016). Technology has drastically changed organizations, especially concerning the availability and use of knowledge, while eliminating the need for labor to operate the organization (Lekhawipat et al., 2018). Hence, technological advancement is not declining, but only advancing at a more rapid pace, ultimately pushing organizations to adapt the value of communications or eventually lag behind in the competitive landscape while observing the success of their competitors.

Knowledge Management

In relation to the problem, knowledge management establishes knowledge and communications as an asset toward the impact of cross-departmental communications

within an organization. Organizations use knowledge management in providing solutions to various business issues by focusing on the process "of creating value from an organization's intangible assets" (Wickramasinghe, 2003, p. 296). These intangible assets are revealed as communications to share information, with emphasis on the source of the information and assurance in providing accurate information to decision makers and stakeholders. In order for value and asset creation to occur, organizations must ensure that their employees have the skills and core competencies necessary to decipher information and understand the effects on performance results (Wickramasinghe, 2003). Once these types of revelations are discovered, employees are able to influence and support revenue production for customers and generate value for the organization and stakeholders (Schiuma et al., 2012).

Through knowledge management, organizations can identify and enable value from cross-departmental communications, directing employees to perform at their highest level by focusing on the quality and not quantity of knowledge. Schiuma et al. (2012) stated that "a clear understanding of the strategic relevance of organizational knowledge resources allows to define better focused knowledge management strategies as well as to link knowledge resources to strategy planning, execution, and achievement" (p. 5). This type of focus and understanding of strategic intent of the organization encourages employees to share information cross-departmentally, enabling the expression of a single voice when speaking to customers. To ensure the success of cross-departmental information sharing, departmental silos need to be broken, removing any competition or a "them against us" mentality (Plessis, 2005).

Departmental silos are damaging to an organization because information sharing is critical for communication success. It is the sole responsibility of the leaders of organization to change this type of culture (Lavergne & Earl, 2006). The natural paradigm for an employee is to hoard information, having the idea that "my" knowledge is power instead of adopting the idea that sharing knowledge across the organization or with others strengthens the organization and institutes even greater power (Plessis, 2005). With these types of cultural changes, a system that measures the progress of the change is instrumental in providing metrics and activities, keeping the organization focused on its success (Denning, 2006). If the mentality and focus can be changed in sharing knowledge, the organization will be able to experience collaboration, business innovation, and competitive advantage as end products from this type of behavioral change.

When implemented correctly, business processes should create value as they function in a manner similar to organizational change agents (De Clercq & Pereira, 2020). By leveraging processes and using them as guidance for success, organizations can recognize various value propositions when implementing business processes. From the implementation of these business processes, innovation arises, creating more value within an organization at unprecedented levels (Lekhawipat et al., 2018).

In evaluating innovation coupled with the introduction of knowledge sharing, organizations are able to recognize more efficient internal operations, clinching success with quality service and the deployment of business process reengineering (Lewsi et al., 2019). With the redesign of processes, innovation creates new revenue streams,

additional jobs, new product offerings, and possibly new methods of marketing products. Innovation also provides the ability to embark on a new learning process, impacting behavior surrounding cross-departmental knowledge sharing (Lekhawipat et al., 2018).

Once organizations commit to innovation and gain significant benefits in creating value, the ability to reinvent or redesign increases and combines both product and process innovation abilities (Valentine et al., 2018). However, as a consequence of creating significant value, specific decisions that are required to ensure core competencies are identified and planned appropriately (Bridges, 2018). Furthermore, once the decision has been made to focus on value creation, the learning process enhances innovation, creates new business procedures, and continues to disseminate information across the organization (Yagil & Shultz, 2017).

Technology within knowledge management can play a major role in information sharing and eliminating departmental silos by improving cross-departmental coordination, flexibility, accountability, and responsiveness to customer needs. Knowledge management pertaining to information technologies can be complex due to the incorporation of how users interact with each other, coexisting to better understand the acquisition and purpose of knowledge that is being shared (Seung-Won & Kuchinke, 2007). When these types of technology platforms are implemented, they can be leveraged to introduce new approaches to problems that produce innovation and transparency while creating a new culture of knowledge and information sharing (Plessis, 2005). Seung-Won and Kuchinke (2007) indicated that one illustration of knowledge management technologies is the use of an intranet or social collaboration community enabling

collective knowledge sharing, departmental updates, success stories, and company announcements to increase information sharing.

Social technologies have significantly advanced over the last decade, with social media platforms such as Facebook, Twitter, and Instagram redefining the way in which people communicate. Organizations need more than just social media; they need social collaboration platforms, focusing more on employee interactions and collectively sharing information to achieve organizational goals and objectives. These technologies can provide benefits other than just information sharing, highlighting advantages or influences in product marketing and product development, enhancing corporate security, and improving the customer experience (Bughin et al., 2012). Although several benefits from a social collaboration platform are available to organizations, most do not invest in these types of management information systems due to the specific value that can be obtained from an a la carte consumption model involving email, document sharing, wikis, and web conferencing (Kolberg et al., 2013).

Management information systems (MIS) are systems that store massive amounts of information. These systems are accompanied by software, allowing users to catalog and retrieve information effectively. Their purpose is to provide information and knowledge from multiple areas of a business to various employees across the organization (AlShamsi & Ajmal, 2018). With these systems in place, organizations can close the gap between business and technology while continuing to enable a new dimension for information technologies (Gürlek & Çemberci, 2020).

Management information systems can be standalone systems or a combination of different systems or tools accomplishing different objectives. Decision-makers have the expectations that these different tools will assist them in disseminating information, while helping them have more knowledge to make better decisions (Gürlek & Çemberci, 2020). Management information systems are not able to solely create innovation for an organization or predict the future, they require the assistance of decision-makers or experts to utilize the system successfully (Hussinki et al., 2017). Leaders within an organization are responsible for identifying new methods to implement and use knowledge management or information systems due to the enormous amounts of data available within an organization (Jarmooka et al., 2020).

Decision Support Systems (DSS) provide intuitive decision-making information that enables leaders to plan strategically and make better decisions with increased accuracy. These systems typically associated with management information systems to enhance the management of organizational strategic data and knowledge (Nascimento et al., 2020). Furthermore, a DSS can be used to structure, augment, and increase the speed of knowledge sharing across an organization (Rathi & Given, 2017). With this escalation of prompt information and sharing, a DSS can provide various mental models to intentionally support decision-making for leaders and their respective organizations (Sedighi et al., 2018).

More commonly, a decision support system can be perceived as a replacement for employee despite its purpose to extend information sharing and assist in decision making (Zeraati et al., 2019). These systems consume and process data and present an interface

for user interactions, with the ability to include the user's self-insights or additional information (Sedighi et al., 2018). A DSS supports business and organizational decision-making activities while promoting strategic analysis and increasing decision-making accuracy with success. Leaders are able to collect and analyze data from combined resources, improve the decision-making process and identify solutions to organizational issues (Jarmooka et al., 2020).

The final role of knowledge management in relation to the problem of the study is the ability to influence and increase competitive advantage, which directly relates to technology impact. A study from Seung-Won and Kuchinke (2007) identified that information and data can be difficult to retrieve or obtain due to the lack of accessibility or poor communications from upper management; however, without the dissemination of information to various decision-makers, the organization's ability to stay in the forefront within a competitive market will be jeopardized. Furthermore, where information is sequestered, the loss of intellectual capital and ability to minimize risks related to innovation becomes prevalent. In highly competitive markets, if an organization can utilize information and communications as key assets to success, a competitive advantage is naturally created by sharing information as a cultural value for employees (Wickramasinghe, 2003).

The cultural value recognized by organizations embracing information sharing can be a game-changer to the success of their mission and overall company objectives. Despite the ability to recognize these successes, information sharing can increase the scope and complexity of decision-making, potentially introducing significant delays in

making critical change management resolutions (McCarthy & Plummer, 2016). Decisions from executive management should be guided by the information collected and recommendations from front line employees in order to obtain a competitive lens and system thinking approach for the most effective end result. The collaborative approach of removing silos and moving towards the approach of being a "knowledge partner" between executives, employees, and customers can help achieve maximum competitive advantage capabilities (Gibbert et al., 2002).

Business Process Reengineering

Business process reengineering (BPR) is used to reengineer or revamp a process or activity within an organization with the focus on creating additional strategic value. With this focus, BPR relates to the problem of this study by further assisting in linking platforms with necessary processes for management visibility within technology investments. Unfortunately, these types of changes can be difficult as employees are averse to change, since they are not typically involved due to the lack of change management skills (Paper & Chang, 2005).

Albadvi et al (2007) found that when BPR is executed appropriately, employees embrace change instead of challenging the future and ultimately recognize organizational performance and strategic value, especially for technological investments. Several strategies similar to enhanced departmental communications and agile frameworks can be executed to potentially create solutions or a platform for cross-departmental communications. Additionally, the use of Information and Communication Technologies (ICT) can provide a platform to enhance the ability to standardize communication

processes, especially when organizations are attempting to institute cultural changes for improved value recognition (Belvedere et al., 2013).

As today's organization requires fast and highly precise business decisions in to remain competitive, both technology and people are required for BPR to be successful. It is necessary for the organizations to make investments in order to implement, train, and develop technology for growth and success; however, the people required to operate the technologies are frequently underestimated (Majeed, 2013). Implementation of technology does provide many benefits within BPR such as automation, documentation, and process mapping, therefore, it requires several other factors to effectively and efficiently operate these systems in conjunction with BPR. Stoica et al (2004) stated that BPR requires, "five basic business components: strategy, process, technology, organization, and culture" (p. 1). When these strategies are properly executed, BPR can be an effective tool for organizations striving for operational success.

While the benefits for utilizing technology are significant, enabling the technology to fit organizational business outcomes, culture, and processes can be challenging. A study by Germonprez and Zigurs (2009) found that communication evolves and requires the recognition of the points of failure cross-departmentally in order to effectively customize technology required for success. In most companies, technology influences the entire organization and should be considered as a major change management initiative, with evangelical-type implementation and adoption practices. Furthermore, to unravel this type of frequent and complex initiative, cross-functional teams with decision-making abilities should be utilized to ensure organizational shared

vision while enabling superior customer success practices (Seung-Won & Kuchinke, 2007).

The use of functional teams, especially when created cross-departmentally, are key to assisting the organization with achieving strategic objectives and executing business processes. Most business processes today are not focused on one department or team, but typically span across multiple teams and departments, requiring various disciplines and introducing more complexity (Tuček & Hrabal, 2014). In the absence of these skills within these teams, the commitment and overall success of the teams will be limited. In a study conducted by Hearn and Choi (2013), the researchers found that neglecting or unsettling business process execution when collaborating cross-departmentally generates additional departmental silos, preventing fluid communications among teams. Given these factors, organizations should manage resources accordingly with a critical focus on the processes that utilize those resources (Schiuma et al., 2012).

Business processes are critical within an organization, allowing the ability to make and execute decisions faster, implement change initiatives, and secure a competitive advantage from a successful strategy in the relevant market (Danilova, 2019). Business processes lack the capacity to improve organizational quality and create measurable metrics for organizational success. Conversely, the repetitive activities within a process are typically underutilized or considered as insignificant (Muthusamy, 2019). With this in mind, organizations are forced to continually search for competitive advantages and strategic guidance, as business processes offer organizations a path forward while improving several functional business lines (McCarthy & Plummer, 2016).

In order to stay on the lighted path, organizations can implement fundamentals to ensure that their focus is set appropriately. To reinforce this concept, Chión et al (2019) described that organizations need to convert tasks into business processes, manage results instead of efficiencies, and focus on customer goals instead of internal accomplishments. The ability of an organization to deploy this type of model requires a good understanding of the current processes and implores the need to discover how organizational activities are related cross-functionally, identify the various efforts required, and properly measure the results (Hashem, 2019). When an organization is process-based, they are able to focus on a horizontal view of business activities and processes (Mueller et al., 2017).

Organizations fail to apprehend the reality that business processes can be a standard to increasing the positive impact on organizational communications. In understanding these standards, business processes allow an organization to operate smoothly and quickly, adapting to the strategy and business goals (Bakotic & Krnic, 2017). Furthermore, when organizations recognize the necessity for solid business processes, they have the ability to grow and ascend to the next level (Liang et al., 2015).

Business processes can help organizations to become more efficient, increase competitive advantages, elevate strategies, and help to increase organizational performance. Despite all the benefits of business processes, the overall value may become obscure (Danilova, 2019). To ensure clarity, a valuable strength is required to increase an organizations agility, allowing flexibility and positively reacting to change initiatives and customer requirements (Muthusamy, 2019). The alignment of an

organization to be customer-centric allows everyone to be focused on a common goal and maximize customer satisfaction.

To create the alignment required for shared vision, executive leadership and management involvement are critical to achieve the organization's objectives. The involvement of the respective leaders should be focused on the management of resources and access to knowledge or information appropriate for team success (Hasgall & Shoham, 2007). Hyper focus and understanding on how technology, organizational structures, and cultural nuances occur within the organization is necessary as they ultimately affect the change management process and overall performance (Dimovski & Skerlavaj, 2004). When everything is in place, resource management plays a precarious role in the creation of the necessary value with the utilization of both technology and people (Majeed, 2013).

Facilitating change within an organization can be one of the most difficult aspects of management due to typical human attributes (Fensel et al., 2014). However, change resistance can be avoided by obtaining the full buy-in from stakeholders and continual communications from all parties involved in a decision (Price et al., 2015). In obtaining buy-in from stakeholders, the ability for them to support project decisions, with their subordinates, can be critical to avoiding change resistance. Most failures in managing change do not stem from technology concerns, but from management issues surrounding the implementation of the technology (Ghanadbashi & Ramsin, 2016).

Researchers found that BPR can be instrumental to the success of utilizing systems theory to better understand the effects of communications between departments

and the creation of value for the organization. Schiuma et al (2012) revealed that value is generated from the combination of both organizational management and the concatenation of various information sharing events across departments and stakeholders. The ability for organizations to effectively communicate change, strategic objectives, or general departmental updates enhances shared vision across the organization (Stoica et al., 2004). When employees understand the shared vision, alignment is created cross-departmentally, eliminating barriers to collaboration and knowledge sharing (Plessis, 2005).

Continual support of business processes is required in relation to the progress and potential change initiatives. A simple method to secure this support is the use of frequent status meetings and provision of a convenient forum to allow for face-to-face, frequent communications (Bakotic & Krnic, 2017). In addition, with the leaders in charge of the way, the need to involve others at the control points of the decision is also an advantageous strategy to embrace. (Chión et al, 2019). By embracing this type of strategy, employees are involved before a decision is made, allowing them to participate in decision making and support their ability to be agile in the face of organizational change (Muthusamy, 2019).

Decision support for process engineering is most necessary during implementation and process standardization phases (Danilova, 2019). The ability for management to drive the required process standardization while supporting the organization enables the concerned departments to be successful (Swanson et al., 2017). While management support is necessary, leaders must make every effort to address these

issues and problems at hand. Conversely, the efforts from leaders can be challenging as they can sometimes rely on experience or habits that are detrimental to the success of a process or implementation, leading to failure (Hashem, 2019). Furthermore, complexity can broaden and complicate the ability to be agile, forcing managers to construct methodical problem-solving skills to further drive the organizational goals (Chión et al., 2019).

The adoption and success of a project can be a difficult task to accomplish, but also extremely rewarding. If various leaders within an organization are not vigilant, the effort of enforcing any changes after inception can quickly result in change resistance (Ghanadbashi & Ramsin, 2016). Decision-makers need to evaluate the implemented business processes from the project with the use of a multiloop analysis (Mueller et al., 2017). In combination with multiloop analyses, the creation of business value from innovation naturally occurs and allows process participants to garner the support of decisions within the business process (McCarthy & Plummer, 2016).

With the help of multiloop analysis, the evaluation of process adoption enables stakeholders to analyze any feedback and provides a reflective learning experience while solidifying a foundation of trust, understanding, and communications on multiple levels (Liang et al., 2015). Additional feedback can also be provided in the form of retrospective session or lessons learned; what could have been better, what went wrong, and what went well (Bakotic & Krnic, 2017). This reflective process can be insightful by provisioning purpose-driven statements based on the results of a project or process while providing systematic knowledge and comparison in relation to what was learned from a

holistic view (Kumar & Kumar, 2016). Continual support within an organization can be related to forward thinking and progress, assisting with potential change initiatives. BPR can be used as a purposeful, iterative, and systemic process that provides congruence while supporting a collaborative environment (Chión et al., 2019).

Eventually, different methods in the BPR will lead to the processes and will provide an opportunity for organizational transformation. However, processes are not enough to execute the tasks; this requires a process owner to oversee the processes and ensure compliance (Tuček & Hrabal, 2014). The strategy deployed by the process owner is similar in that it involves being a change agent, assisting and evaluating all employees at various hierarchal levels within an organization to recognize the gaps against the business processes adopted. These types of activities can also be used later when comparing to redesigned processes and potential changes within the organization (Hearn, & Choi, 2013). In doing these types of comparisons, organizations can recognize a more structured approach to BPR, creating additional value and reducing both failure rates and financial expenditures (Stoica et al., 2004).

Communications

Researchers explained that by utilizing the systems theory in the exponential growth of technology within organizations, there is a capacity to access a vast amount of information and data. The dissemination or communication of data through technology to the organization and cross-departmentally can be just as challenging as accessing the data. Hidayanti et al (2018) discovered that cross-departmental communications have a significant impact on employees and their level of interaction with others, specifically

when it relates to analyzing and sharing data. In essence, technology that helps to increase communications removes departmental silos, enabling strong, frequent, and fluent communications between team members (Montano & Dillon, 2005).

While silos can be removed from the use of technology, other benefits are recognized by way of deeper relations with other employees, a stronger culture fit with the organization, and a decrease in fear, uncertainty, and doubt within teams (Briggs et al., 2013). However, significant consideration is required when choosing technology used for communications. User adoption is key to a successful implementation and use of technology in order to remove any barriers from the end-user, whether the impediments are apparent or superficial (Montano & Dillon, 2005). Furthermore, Montano and Dillon (2005) found that, "individuals feel stronger ties to the organization and groups to which they belong as more people use the same technology" (p. 237).

Successful communication within a technological project is a generic utilization of current processes and people, it should still be considered as extremely important to project managers and the resources within a project (Leybourne, 2009). The repetition of communications within these types of projects could increase the overall success of decisions while providing additional awareness. Perrott (2011) established that the ability to facilitate processes while leveraging communication allows important issues to be brought to the forefront, while highlighting any negative impact to the organization. With more communications being shared across an organization, the ability to recognize employee effectiveness provides the ability for collaboration and working together to meet organization goals (Hasgall & Shoham, 2007).

In the management of a project, the creation of an environment that allows for open-communications and participation is important as it offers opportunity for feedback and provides the ability for a project manager to assess commitments (Leybourne, 2009). If this type of environment is not available, employees may not have a sense of ownership of the project. The path of least resistance for projects involving change initiatives is to ensure involvement where desired, and create a safe environment for participation (Liedtka, 2011). With decision execution or project implementations, a level of experience is required to ensure handling of unexpected outcomes or issues that could delay the overall success of a project (Ghanadbashi & Ramsin, 2016).

Communicating decisions and implications associated with different processes and decisions to various groups can feel arduous, exhaustive, and repetitive (Liedtka, 2011). Various methods can be utilized for efficient, successful communications, including e-mails, letters, phone calls, meeting invites, etc. The frequency and various methods of communications is extremely important for a technology project, especially during its implementation (Perrott, 2011). A study from Phipps and Burbach (2010) investigated the impact of communications on technology implementations in order to measure change management with predictive outcomes.

Various data points within a project can be coupled with best practices of communications management, allowing for employees to be better informed on organizational objectives from various communication methods including the use of newsletters, company intranet, or team meetings (Nelissen & Selm, 2008). The deployment of various communication methods could provide improved effectiveness

and efficiency for the organization. Additionally, the use of multiple methods combined with the involvement of the right people at various stages of the process creates the ability to adjust resources appropriately and ultimately create value and success for the project (Ghanadbashi & Ramsin, 2016).

While these tactics and methods can be used for project communication, continuing to provide a shared vision constantly through the process and also implementing weekly status updates via email can provide additional awareness (Hidayanti, 2018). Various notifications are also used to advertise to stakeholders and any interesting or strategic party via emails, notification boards, and various meetings in order to promote the current progress. Successful communications require the use of methods to repetitively send updates to stakeholders and ensure that the project is visible, where necessary (Karlsson & Skålén, 2015). Business processes are ultimately successful when communications are repetitive, constant, and concise (Price et al., 2015).

A highly important social interaction and communication medium that is becoming rare in organizations is face-to-face communications. In a study by Montano and Dillon (2005), survey respondents indicated that complications in organizing meetings were the principal reasons for a decline or hindrance to face-to-face communications. With this in mind, electronic communications are now more prevalent and ultimately reduce human interactions and necessary socialization that increases organizational success (Leonardi, 2007). Furthermore, the facilitation of shared vision and alignment of project or organizational concerns are greatly reduced with electronic communications while also removing any behavioral or emotional traits that are

important in identifying other's intentions or perspectives (Friedman & Currall, 2003; Saksvik et al., 2007).

With the use of face-to-face communications, the ability to implement change communications is a dominant factor for overall success. Saksvik et al (2007) argued that the ability to capitalize on this type of communication medium enables collective thought for increased understanding, enhanced analysis, and uncanny dialogue or discourse during social interactions and change management. This is important for change communications, and if not employed, it introduces office gossip, increases employee negativity, unnecessary conflict, and change resistance (Bordia et al., 2004). For leaders overseeing or directing change initiatives, the ability to understand the complexities involved in order to enact communication and collaboration are critical for introducing or managing change, while ensuring that the forces working for and against the change are identified and managed accordingly.

In communicating technology decisions and implications, the frequency and method of communications are extremely important. In a study by Phipps and Burbach (2010), the number of communications that influenced a successful technology process was examined; it was determined that communication is central to predicting outcomes of planned change. Decision makers need to assume a more involved role, sharing information and status updates to stakeholders and their teams accordingly. Leaders could then be more aware of changes and decisions, enabling input where necessary.

Technology assists organizations and teams that need to be flexible and adapt to the company's needs or organizational strategies. In the past, managers decided what they

thought was best for employees as they attempted to align to strategies; however, due to the rapid change in technology, today's employees are now capable of researching and ultimately choosing the right system or solution needed on their own accord (Hasgall & Shoham, 2007). Managers must now assume a new role and provide vision for the technology and the proposed changes to current systems, process, and teams (Paper & Chang, 2005). When management can focus on the organizational culture, vision, and goals, they will be able to transform the business by becoming a change agent and elevate employee growth, while utilizing their expertise to assist in decentralizing processes to allow for the increase of cross-departmental communications (Wood, 2002).

To assist in the decentralization of processes, the use of Complex Adaptive Systems (CAS) method is extremely useful, especially in organizations that tend to change rapidly or greater enforce a culture of superior communications and collaboration (Hasgall & Shoham, 2007). CAS facilitates an environment where employees have more of a natural and transformational mindset with less mundane and demotivating daily tasks (Sherman & Schultz, 1998). This freedom can significantly increase communications and information connection cross-departmentally, while preventing individuals from hoarding knowledge. Hasgall and Shoham (2007) arrived at a similar conclusion, adding that technology which notifies users of any changes within projects, tasks, and processes elevates the dissemination of information and leverages employee ideas and knowledge, while creating an enhanced team-like atmosphere.

With the need for communicating changes within the organization, the ability to communicate at all levels and cross-departmentally introduces an increased effectiveness

of those communications, while adding additional value. Technology introduces the ability to reach everyone within the organization, both vertically and horizontally. The ability to extend not only information, but also decisions across the organization initiates additional value for employees that may not be central (Briggs et al., 2013). Additionally, Hatch and Cunliffe (2006) concluded that lateral communications is critical for organizational activities, specifically when introducing committees, cross-departmental teams, and strategic-focused task forces. These types of coordination and communication help to decentralize the organization and increase collaboration and expedite competitive advantage (Healy & Iles, 2003).

Resistance to change is a human attribute that could be avoided by leveraging agreements from stakeholders, providing the ability to support decisions from their subordinates (Zhang et al., 2011). If leverage agreements and relationships with stakeholders can be achieved, it can become a critical success factor to ensure change resistance and the overall reaction to change is kept at a minimal amount within the change process (Volkoff et al., 2007). Conversely, the failure to change is ultimately the result of an ineffective leadership, delayed actions and inability to collaborate across the organization (Seo et al., 2011). Leaders should involve others along various checkpoints of the decision process.

Utilizing communications, the strategy of repetitiveness could be critical to ensure minimal resistance to change. In the decision-making process, the creation of an environment that allows for open-communications and participation is important as it allows for feedback and provides the ability for the decision-maker to assess

commitments (Tuček & Hrabal, 2014). If this type of environment is not available, employees may not have a sense of ownership in the decision. The path of least resistance for decisions involving change initiatives is to ensure involvement where desired while creating a safe environment to participate within the decision making or initiatives (McKnight, 2014).

Employee Behavior

Though technology alone plays a major role in the success of organizational communications, the key to recognizing the value of communications is to understand employee behaviors and the relation to technology. The results from a study by Montano and Dillon (2005) revealed that successfully integrated technologies within an organization yield greater value and higher job satisfaction from employees and their connection with their company and co-workers. The ability to have a deeper connection, share experiences, and exchange information with co-workers is a core function and an indicator of successful communications within an organization. Unfortunately, since technology is easy to acquire with cloud technologies and plays a greater role in organizations, conventional means of communications are becoming outdated and scarce, reducing social interactions (Hidayanti et al., 2018).

While technology implementation is important for adoption and increased communications, the benefits of team synergy and socialization are important to recognize as part of the technology adoption. The relationship between the organization and employees, cross-departmentally and in the team, is the heart of the connection that is critical to organizational loyalty and social interactions (Hidayanti et al., 2018). Within

these relationships, technology enhances the capacity to change processes positively and be more effective while increasing the quality and quantity of social interactions. When employees interact with each other more frequently, the ability to effect or influence their behaviors or decisions spread quickly across the organization and will ultimately increase the complexity of systems and technology (Seung-Won & Kuchinke, 2007).

Despite the fact that cross-communications within the organization are already difficult, complexity from technologies and systems introduce additional complications. Liang et al (2015) found that the understanding and actual use of technology influenced employee behaviors, ultimately introducing unnecessary complexity and inaccurate communications on efficiencies. Additional complexity sets in when employees work remotely, thereby removing important face-to-face communications and any lessons learned by utilizing technology in a group or departmental setting (Chumg et al., 2016). From the use of technology, the connection of communications with employee behaviors requires the organization to heavily participate in training and development, while promoting the correct attitudes and expectations to ensure the correct employee behavior and reduce complexity. These types of focused events can increase efficiency and performance, while also assisting employees in adapting to the technology, motivating them to be successful, and reinforcing the ability to create a successful decision-making process (Landers et al., 2017).

In a decision-making process, the creation of an environment consisting of open-communications and participation is important as it provides the ability for a decision-maker to assess commitments and evaluate the impact of decisions (Lekhawipat et al.,

2018). If this type of environment is not available, the sense of ownership in a decision can become misplaced (Sharma et al., 2019). The path of least resistance for decisions involving change initiatives is to ensure that involvement is adhered to while creating a safe environment to participate (Tian & Zhai, 2019). With decision execution, project implementations or designing processes, lack of experience or knowledge of leadership could dishearten employees to get involved (De Clercq & Pereira, 2020).

Feedback loops are an integral part in the success of any decision process as they assist to keep projects on track and lines of communications open (Rathi & Given, 2017). The utilization of multiple feedback loops allows knowledge to be available prior to planning or strategic meetings, enabling planned events to be more effective (Hussinki et al., 2017). Feedback loops provide an easy-to-follow system that enables the ability for difficult conversations to occur with stakeholders and team members, where appropriate. With this in mind, these communication methods permit other key players to learn from each other as well, improve communications, behavior, or even a newfound respect not previously present within the organization (Gürlek & Çemberci, 2020).

The ability for a leader to maintain good employee behavior that is aligned with the organizational values, while making good decisions, is necessary for successful execution of business strategies (Bridges, 2018). Involving employees in those decisions while assigning tasks process for involvement improves overall performance. The reinforcement of this concept provides mutual accountabilities that are intertwined with company objectives, which can also improve clarity of process mapping and assist in the completion of key performance metrics (Lewis et al., 2019).

Recruiting the perspectives of others is a method that could be leveraged in a decision-making process, allowing the ability to identify risks. With employees accepting various viewpoints in an organization, leaders are responsible to ensure that they involve others for a holistic view or horizontal lens (Lewis et al., 2019). However, caution should be employed when involving others depending on the sensitivity of the decision or situation. Obtaining the perspectives from the employees that do not align to organizational values or culture could be detrimental in making the right decisions for the organization while increasing risks (Sharma et al., 2019).

Analyzing risks associated with any employee's behavior-related decision could be critical to ensure a successful decision. Conversely, many decision makers view risk analysis as a small menial task, despite the demand for significant attention with the requirement of a process or framework (Tian & Zhai, 2019). Through an indicated process, a decision-maker is enabled to distribute the necessary resources, acknowledging requirement of controls and authorization of risk acceptance (Lewis et al., 2019). Furthermore, enforcing the ability to make decision based on risk at the appropriate level within the organization helps to determine accountability (Bridges, 2018).

Managing risk related to the impact of employee behavior is required in a decision-making process in order to provide the ability to manage expectations while balancing employee behavior (De Clercq & Pereira, 2020). Most inexperienced decision makers are not familiar with this until they have faced a situation in which the decision or project suffers from missed deadlines, insufficient cost analysis, or underestimated resource allocation (Valentine et al., 2018). While most of these issues can be avoided,

the injection of employee behavior is often times uncontrollable; this creates an adverse impact for current or future decisions and jeopardizes the credibility of anyone involved in making decision, including leaders, employees, or the organization (Yagil & Shultz, 2017).

Ultimately, behavior derives from decisions made by employees, but should be influenced by the management, leadership, and positive-focused employees. Various initiatives including communication campaigns, social media, user groups, and best practice sessions are critical in fostering cross-departmental employee interactions, knowledge sharing, and inspiration (Akhavan et al., 2015). One of the major goals for employee motivation using technology is to create interest by exhibiting how they can improve performance or job satisfaction, and ultimately move their skills or jobs forward (Kumari, 2014). Over the last few years, a new method that has emerged to increase employee motivation and change behavior is the use of gamification. Gamification typically utilizes a point system in conjunction with a leaderboard and displays employees' progress towards goals or performance indicators; this ultimately increases performance, drives the right employee behaviors, and increases communications (Landers et al., 2017). These types of methods and systems are critical for success in today's organization, enabling employee motivation and increasing competitive advantage by inspiring innovation.

Innovative behavior employees are important for positive organizational progress, though most are not motivated to be pioneers when it comes to the use of technology or communications. Aligning employee behaviors and goals to organizational objectives can

aid in performance improvements while motivating and creating a climate of innovation (Chumg et al., 2016). The creation of an innovative climate is important as it allows employees to take risks without the likelihood of backlashes and enabling cross-departmental collaboration (Liang et al., 2015). For these types of environments to succeed, both horizontal and vertical knowledge sharing is essential and required to be promoted by leadership. Fostering an innovative culture connects communication with positive employee behaviors, while increasing the use and efficiency of technology across the organization (Akhavan et al., 2015).

Communication Methods

The critical use of technology within an organization is the use of communication tools, which enables the ability to disseminate information to stakeholders. Several methodologies exist today that allow communications to flow through an organization, teams, and cross-departmentally, including but not limited to email, instant messaging, social media, and video conferencing (Martyn & Gallant, 2012). Despite the diverse options, Sethuraman and Srivatsa (2009) found that face-to-face communications were still the most effective means to communicate and disperse information across the organization. However, in today's remote and extended organization, a mixed use of communication methods and technologies are required in order to successfully inform, share, and update stakeholders (Mueller et al., 2017).

The importance of internal communication sharing technologies and methods are that they facilitate an increase in communications and collaboration among employees, assisting leaders to disseminate appropriate messaging (AlShamsi & Ajmal, 2018). These

types of technologies can improve employee relations, which could directly impact the way communications are perceived (Lee et al., 2019). Additionally, real and frequent internal communications are necessary to eliminate department silos and break down barriers to effective interactions (Nascimento et al., 2020). This could also apply to the improvement of the environment and social conditions within an organization, producing positive social change.

When communications systems are designed appropriately, the various methods spread to wider tools and audiences, increasing communication efficiency and effectiveness (Rathi & Given, 2017). From the perception of stakeholder theory, the value from increased communications can be derived from having persuasive internal systems (Sedighi et al., 2018). These types of systems assist stakeholders and others with continual communications across the organization in order to make the best decisions possible. With data and information available for leaders to make decisions on projects and initiatives, they tend to be more successful, especially due to the implementation of technology (Gürlek & Çemberci, 2020).

The level and content of cross-departmental communications help determine productivity and organizational performance (Michelle et al., 2007). Various communications methods such as email, instant messaging, and social media are used to improve communications and increase knowledge sharing, though these tools carry a substantial cost with a potential value of increasing cross-departmental communications and collaboration (Kolberg et al., 2013). From this value, the requirement of to focus

enhances communication, while enhancing the external reputation as a strategic position for an organization (Karnaukhova & Polyanskaya, 2016).

Organizations are embracing the need to introduce technology into their corporate culture; they are also leveraging various tools to enhance knowledge sharing and collaboration. One platform leading in these areas is social collaboration, allowing stakeholders to easily stay connected, improve team collaboration, increase knowledge sharing, and ultimately be more productive (Jung, 2013). This platform is not, however, a social media tool or virtual meeting room where stakeholders gather for impromptu meetings. Social collaboration tools help to increase data consumption, unify communications, and provide relevant and timely information to stakeholders (Hughes & Chapel, 2013).

Technology has assisted with the ability to consume and distribute information at a rapid real-time pace. Internal technologies like Customer Relationship Management (CRM), Marketing Automation platforms and Enterprise Resource Planning (ERP) systems have progressed significantly to help provide organizations and employees with quality data for better business decisions (Anshari et al., 2018). With most employees spending 28% of each day or 13 hours per week managing electronic communications such as emails, organization look towards these types of systems to increase cross-department communications (Bughin et al., 2012). With the inclusion of automated reports, dashboards, predictive analytics, and targeted situational alerts, these systems help disseminate information and close the gap of miscommunications between departments.

While technology plays a key role in communication distribution and consumption, stakeholder influence can determine how or what information is analyzed in making decisions. With the extensive power, influence, and overall impact a stakeholder possesses within an organization, it can be difficult to know the thoughts and if a stakeholder develops a hidden agenda (Aragonés-Beltrán et al., 2017). To assist with stakeholder engagement, the equal distribution of information to all stakeholders can help in eliminating potential alternative motives. Liu and Chiu (2016) found that partnering or forming a personal relationship with stakeholders can improve support and communications with each member, as well as information distribution between other stakeholders. While data can influence decisions, the data is provided or consumed can influence the actions and decisions from stakeholders.

In communicating decisions and implications to stakeholders, the frequency and method of communications used is important to achieve success. The ability to successfully communicate with stakeholders is fundamental in predicting outcomes and building relationships (Jarmooka et al., 2020). Project participants are required to adhere to a more involved role, share information and statuses with the stakeholders and their teams accordingly (Lee et al., 2019). In doing this, stakeholders will become more aware of the changes and decisions sooner. By adhering to these best practices, projects tend to be executed on time and within budget, elevating cross-departmental communications, and employee interactions (Sedighi et al., 2018).

For focused stakeholder participation, various communication methods are advantageous to ensure that the dissemination of information is successful. In a study by

Doh and Quigley (2014), they found that project managers need to deploy a multipronged communication approach for inclusion and overall buy-in from stakeholders. The use of multiple methods ensures that stakeholders have received the message, while having the ability to digest and understand the data being provided. In addition, ensuring that expectations for stakeholders are established can drastically improve the overall success and consumption of information (Darškuvienė & Bendoraitienė, 2014).

Despite providing information to stakeholders for cross-departmentally, if the technology is seen as a threat, the various viewpoints can influence decision-making and ultimately affect the impact of effective communications (King et al., 2010). This internal conflict of interest is detrimental to the decision-making process, especially when faced with a decision relating to the type and purpose of various technology investments (Gordon & Tarafdar, 2007). Based on this type of mentality, the ability to make a technology decision purchase is more of a political maneuver. Providing clear direction and objectives within the organization is considered a perceived benefit instead of recognizing the right decision for both the stakeholders and employees, resulting in a fatal attempt to acquire technology that could promote a cross-departmental platform for communications (Paper & Chang, 2005).

With the political landscape within an organization and the external pressures for stakeholders to collaborate and process information, the question of ethical behavior or actions becomes a relevant topic (Mueller et al., 2017). Given these ethical quandaries, providing a communication audit is essential to provide a situational representation of the decision process or tree for stakeholders and allows the use of real data to support

decision making (Karnaukhova & Polyanskaya, 2016). The pressure to make the right decision arises when evaluating the impact of a technology purchase or implementation as it pertains to communications, which becomes progress, but necessary (Ponte et al., 2015). Setting the stage in terms of perceptions and expectations during the evaluation phase can assist in a stable decision-making process, allowing stakeholders to make the right decision and align to the vision of the organization (Mueller et al., 2017)

The vision that is set within an organization is the foundation for leaders to align with overall goals and objectives, including communications and technology direction (Carlon & Downs, 2014). This type of alignment requires stakeholders to compartmentalize a process that requires a need to set organizational technologies in perspective with appropriate requirements (Hatch & Cunliffe, 2006). From this alignment, leaders are forced to be more organic in how the future will progress in both goals and customer expectations, especially on the way information will flow and departments will be required to innovate and collaborate within the various technology platforms. Technologies will be required to be customized to access information and ensure that the distribution of that information encompasses face-to-face socialization (Briggs et al., 2013).

From the technology requirements, stakeholders must come together to establish the requirements of how they will consume and distribute information, access various knowledge, and utilize communication methods (Bughin et al., 2012). Organizations where stakeholders are involved, and approach decisions unselfishly, provide an environment that allows for custom solutions with advanced technologies enables the

dissemination of information across departments (Malhotra, 2005). This agile style of decision making can enable a greater impact of technology and use of technology platforms. Ponte et al (2015) discovered that social communication platforms caused an increase in information distribution and participation by stakeholders directly using and contributing to knowledge sharing and collaborating with others within the organization.

The use of social collaboration platforms is a newer concept and can be easily confused with social media and similar platforms, though they are more closely aligned with the type of technology used within cross-departmental communications. The mentality of adopting new technology, particularly around an internal strategy for cross-departmental communications is not where organizations place their focus as it requires financial backing in addition to a collection of resources for success (Parris et al., 2016). This element coupled with stakeholder's inability to change their approach towards new technology purchases and implementations, forces organizations to lag behind competitively (Rogers, 2006). Hughes and Chapel (2013) found that corrective change management was utilized to recognize different organizational competences, instead of only focusing on the technology platform. With the insertion of change management for cross-departmental communications, the available communication methods are key to a successful acquisition and deployment of technology platforms (Proctor & Doukakis, 2003).

Summary and Conclusions

This chapter presented literature that supported the establishment of associating the value of technology coupled with collaboration and communication within an

organization. It started with the introduction of systems theory, examined both knowledge management and BPR, and provided the ability to view the organization at the macro level while establishing communications and knowledge sharing as an asset. Knowledge management enables employees to better communicate in a meaningful and more collaborative way. Eliminating departmental silos ultimately provides organizational success and fosters innovation and incremental improvements in current processes. BPR further assists in increasing the value of knowledge management by emphasizing on teams, change communications, and organizational transformations.

Organizational theory was also reviewed; it addressed communications and employee behavior. Cross-departmental interactions require constant and efficient communications, ultimately creating a better culture for employees. Although rare, face-to-face communications are still important despite their slow replacement by electronic communications methods from various technologies, including the introduction of complex adaptive systems. Based on these new technologies, managers are required to lead differently and help employees to change their behavior and focus on alignment to organizational goals.

The final set of literature reviewed was centered on stakeholder theory and the various types of communication methods. The ability to circulate information across the organization in a way that employees are able to easily digest is important for organizational success. For timely communications, the use of multiple methods for communications is required to enable knowledge sharing and collaboration. Though the typical methods of communication are prevalent, additional methods such as social

collaboration, CRM, ERP, and automated data delivery were discussed. With types of communication and distribution, stakeholder influence plays a key role in communications as decisions can be influenced by the way information is presented and how it is communicated, both in a negative and positive narrative.

In Chapter 3, we shall outline the methods used to bridge the gaps within this study by collecting data from managers from organizations and industries with 250 to 500 employees. The use of technology internal communications by the Manager becomes the data points of this study to further explore his perspective on the effectiveness of technology and interdepartmental communications. The next chapter will also review the methods, rationale, researcher role, participant selection, methodology, data procedures and several other methodology topics that align with the purpose of this study.

Chapter 3: Research Method

Introduction

In this chapter, detailed information is provided about the research design used in this study. The purpose of this qualitative case study was to explore the impact of technology on cross-departmental communications. The participants included managers across midsized organizations with between 250 and 500 employees who used technology within their respective organizations for the purpose of internal communications. My role as the researcher is described in this chapter, along with the methodology used, including participant selection, instrumentation, data collection, and data analysis. Issues surrounding trustworthiness are also addressed.

Research Design and Rationale

In this qualitative case study, I explored the impact of technology on cross-departmental communications. I used a single overarching research question to address the research problem: What impact does technology have on cross-departmental communications within midsized business with between 250 and 500 employees?

Value, consumption, and dissemination of the communication in relation to technology were the principal concepts that grounded this case study. Based on the concepts, the design suitable for this work was a case study due to the comprehensiveness of communications and technology, requiring flexibility within a real-life context (Yin, 2014). The methods utilized for data collection were interviews and electronic online surveys with managers from midsized organizations that had between 250 and 500 employees. Furthermore, a case study design allowed the ability to understand and

acquire information to better explain how technology use impacted cross-departmental communications (Durdella, 2017).

In comparison with other research methodologies, a case study approach provides the ability to gain a sufficient environmental understanding from participants (Yin, 2014). With this ability, the method allows for more of a discreet observation point of view for the researcher, while still providing information for gap analysis and better comprehension (Merriam & Tisdell, 2016). The validity of these findings, in combination with multiple sources of data, allows for triangulation (Keen & Packwood, 1995).

An ethnographic study was not chosen due to the focus on the regular behaviors of participants to ascertain cultural patterns (Leedy & Ormrod, 2010). With emphasis on behaviors and cultural patterns, the researcher interacts with participants in their everyday environment (Merriam & Tisdell, 2016). The purpose of this close observation of activities is to better understand issues, including the contextual nature of the phenomenon of interest (Marshall & Rossman, 2016). Given the intense and close relationship and observation required for this method to be successful, ethnographic studies concentrate on complex issues (Orcher, 2016).

A grounded theory study was not chosen because such a study focuses on constructing a theory from data (Leedy & Ormrod, 2010). With a grounded study theory, the tradition requires significant amounts of data to be cultivated from the research (Charmaz, 2014). The data are then applied and perpetually evaluated against emerging classes of groups (Yin, 2014). In the end, the goal of grounded theory is to identify

patterns of behavior with several different dimensions of data and environments related to the phenomenon (Merriam & Tisdell, 2016).

A phenomenological study was not chosen due to the required focus on a specific situation or phenomenon (Yin, 2014). This study involved evaluating a broader situation, where specific experiences were not emphasized, requiring the influence of social and cultural patterns within an organization (Leedy & Ormrod, 2010). Furthermore, watching employees within an organization to better understand the effects of communication in relation to technology could have altered the outcome of data analysis, as humans have the ability to change their everyday activities due to being observed (Merriam & Tisdell, 2016).

Role of the Researcher

In this study, my role was to perform as an observer, discerning the participants' environment and implementing interviews as an additional method to collect data and information. During the phase of selection and recruitment, I contacted potential participants who were willing and able to participate within the study. To ensure that there was no conflict of interest between me as the researcher and the participants, my indirect or direct family members, friends, current coworkers, and direct social network friends were not allowed to participate in the study. Among my previous coworkers, only those who were not my direct reports were allowed to participate, removing any further bias or power relationships. Utilizing electronic online surveys as an additional data collection method allows for a wider net of identified participants where in-person interviews are not possible.

From all sources within data collection, it is possible that I could have been influenced by self-generated biases when analyzing the data, such as information or selection biases (Merriam & Tisdell, 2016). As the researcher, I deployed every method and resource that I had available to minimize biases. Information bias can influence a sample if the researcher misclassifies information or misinterprets responses from participants. Selection bias may also influence a sample as participants may not be randomly selected, which could skew the results of a study to present false data or support the researcher's preconceived notions. As a precaution, to assist with removing bias, all questions were asked with the exact same format and verbiage, and all data sources were triangulated.

Methodology

Participant Selection Logic

The target population of this study consisted of managers within medium-sized organizations, defined as having between 250 and 500 employees (Eastman, 2010; Gartner, 2018). An electronic online survey was conducted as an additional data collection source. Level of technology use, specific management role within the organization, and type of organization were not determining factors in participants being qualified for the study.

The justification for using managers within medium-sized businesses for this study was that they might be more engaged in the use of technology and communication tools due to the smaller size of their organization in comparison to enterprise organizations with more employees (Turner et al., 2012). By targeting managers, I sought

to gain a holistic view within the organization or department as nonmanagement employees would most likely not be subject to. This included meetings, budgetary conversations, budget responsibility, organizational strategy sessions, and potential HR-related issues. Furthermore, midsized businesses were defined as having more than 250 employees, which was ideal for the study's sampling strategy, removing the need for more intimacy related to communications within small businesses due to fewer employees in a smaller, more confined space (Taneja et al., 2016). Additional justification for the sampling strategy related to the need for increased collaboration allowing organizations to be agile and competitive. Due to this requirement, technology is typically needed to effectively collaborate and communicate successfully cross-departmentally (Al-Hakim & Lu, 2017; Pradabwong et al., 2017).

In relation to participant selection, several criteria were used to identify qualified participants. For the recruitment of participants, I used my social media circles. If potential participants had been identified from past organizations where I had been employed, anyone with whom I had a direct working relationship would have been disqualified from participating in order to reduce my bias as the researcher. With this criterion, no more than one manager from the same organization was interviewed or surveyed to ensure a wide range of sample data. Potential interview participants were contacted via phone, electronically via email, or via social media direct messages. For electronic surveys, I posted a survey link and description of the study to my social media outlets; however, a qualifying set of criteria was presented to ensure that potential participants met the qualifications.

To further elaborate, to ensure that participants were suitable for the study, specific criteria were used to verify their eligibility. These criteria included organizational size, working with other departments as part of their role or duties, the use of technology to communicate cross-departmentally, not having a history of reporting to me (in the case of past coworkers), and not being related to me. The final number of participants was 40. To ensure variety in the sample, all participants were from different organizations. Seventeen participants took part in interviews, and 23 participants responded to a survey. The number of participants within different organizations should be sufficient, as I was more concerned with the details of the case and less concerned with the total sample size (Yin, 2014). Furthermore, with the use of 40 participants, saturation should not have been an issue within this a case study design of this size (Mason, 2010).

Instrumentation

The data collection instruments and sources that were used for this study are represented in Appendix C and Appendix D and were comprised of semistructured interviews and an electronic online survey. I conducted the questionnaires with managers within medium-sized organizations with between 250 and 500 employees. No additional instruments were used.

As the main data collection instrument, the semistructured interviews with selected participants provided critical information for data analysis. By extending a single opportunity to interview a participant, this type of interview was key for the in-person portion of data collection (Bernard, 2013). A guide was constructed with predetermined, open-ended questions that supported the research question (Galletta & Cross, 2013). With

this interview protocol, a structured and agile format allowed me to probe the interviewees and obtain comprehensive information surrounding the topic or question (Given, 2008).

As a secondary data collection instrument, a structured electronic online survey provided important responses for additional data analysis from the same sample strategy and location. The purpose of this secondary data collection source was to ensure the removal of any bias and allow for participant responses that might differ due to the unwillingness or inability of participants in the semistructured interviews to provide information (Jackson, 2015). A questionnaire was created based on the questions from the semistructured guide with a close-ended purpose while continuing to support the research question from this study (Galletta & Cross, 2013). Furthermore, the electronic online survey offered a limited set of responses for the participant to choose from to ensure consistency (Brinkmann & Kvale, 2015). Additionally, the data collected were used for triangulation, allowing for a deeper understanding of the study's phenomenon (Yin, 2014).

Pilot Study

From this study's qualitative nature, a pilot study was completed with a few participants in order to assess the questionnaires. The pilot study participants were used for both data collection methods, ensuring alignment to the qualifications and feasibility for this study (Kim, 2010). I recruited the participants by asking for three volunteers within my social media network, again following the same criterion used within the participant selection for the study. Each data collection protocol was used in a simulated

process, after which I requested feedback on the understanding, straightforwardness, or potential issues with the interview. An additional postsurvey was sent to gather responses from participants within the pilot study for electronic online surveys.

The following questions were queried to both sets of pilot study participants postinterview:

- Is the set of questions from the interview easy to understand and answer?
- Do any of the questions need modification for further clarity?
- Should additional questions be introduced to further align to the research question?
- Did any of the questions make you feel uncomfortable or induce any types of fear, including fear of retaliation from your organization?

Any feedback provided by pilot study participants from these questions was incorporated and leveraged for the data collection protocols in the study. Furthermore, to ensure the ability to provide consistent scores for the target population, the introduction of test-retest reliability was necessary (Lohr, 2002).

Procedures for Recruitment, Participation, and Data Collection

To begin recruiting for this study, I obtained authorization and approval from the Institutional Review Board (IRB) for managers within medium-sized organizations with between 250 and 500 employees. Once I received authorization and approval from the IRB via approval number 03-23-20-0262725, recruitment began with obtaining potential participants for the semistructured interviews. Shortly afterward, the recruiting efforts for the electronic online surveys commenced. Each set of recruits received a simple overview

of the study consisting of the study's purpose, the criteria for eligibility, and the benefits that the study could provide (Given, 2008). Additionally, I asked whether the participant, if selected, was authorized and approved to participate in this study by their organization (Yin, 2014).

Once the participants were identified and selected, a consent form was provided. Within this consent form, the U.S. Department of Health and Human Services (2018) outlined key elements that equate to informed consent for a participant. These elements included the description of the study, with emphasis on the research, potential risks or discomforts, a statement of benefits, alternatives to the procedures, confidentiality, any potential compensation, contact information for the researcher, and reinforcement that participation was voluntary.

Both sets of interview participants were provided a digital copy of the informed consent to read and sign, providing consent electronically prior to filling out any questionnaires. Once participants provided consent, a date and time was established for the interview to begin, and electronic online participants were directed to fill out the survey.

For data collection of the semistructured interviews, data was recorded using pencil and paper and if permitted, an audio recorder would be introduced for a recording of the interview, providing further clarity and validation for data analysis. These interviews were targeted to last for approximately 30-90 minutes, with the actual minutes of each interview concluding at an average of 76 minutes. Unless the participants

preferred otherwise, the interviews ideally would have taken place at the participant's organization for convenience.

Once an interview was complete, the participant followed a debriefing procedure before being excused to exit the study. During this time, the participant was provided with a short review of the study's goals, purpose, and potential outcomes. For debriefing purposes, an instructive justification for the design of the study and methods used was provided. The participants were also able to ask any questions they had relating to the study, allowing for further clarification, justification, or general feedback concerning the interview and process.

For data collection through the structured electronic online surveys, a survey was distributed via Google Forms, an online cloud-based survey tool. Results from the surveys were extracted and used for data analysis. The time to complete the survey was originally estimated at approximately 15-30 minutes. The participant was asked to complete the survey in its entirety once it was started to ensure context and speed of completion.

Once the survey was complete, the participant also followed a debriefing procedure before submitting the results for the study. Within the survey, the participant was presented with a short review of the study's goals, purpose, and potential outcomes. For debriefing purposes, a postcompletion survey from Survey Monkey provided instructive justification for the design of the study and methods used. The participants were also prompted to provide any questions or feedback they had relating to the study, allowing for further clarification and justification of the survey and process.

Data Analysis Plan

To analyze the data collected, I utilized a multistep thematic theme process within the data analysis phase to clarify, comprehend, code, and decipher the data (Yin, 2014). These steps included data preparation, data evaluation, data categorization, identifications of patterns and themes, data interpretation, and providing reports on the implications and findings (O'Connor & Gibson, 2003). In addition to these steps, both the interview questions and electronic survey questionnaire were aligned and applicable to the research question. Overall, this alignment allowed for the use of a thematic analysis procedure, enhancing my ability to pinpoint, analyze, and locate themes or patterns within the data (Saldaña, 2016).

For step one of the process, I reviewed the data collected from each interview individually and begin notating potential data points that could support various concepts and themes that may align to my research question. The initial use of Excel was helpful during this step to lay out and visualize information within the data easily (O'Connor & Gibson, 2003). For data evaluation in step two, I identified and organized the different impressions and ideas. In this phase I considered numerous phrases and ideas that are both frequent across responses and possible items where it may be unexpected or different from other responses.

For the third step of data categorization, I begin coding and indexing data based on the different impressions and ideas identified previously. The use of simple, concise, and easy to understand codes will be used to ensure the data can be properly analyzed (Elliott, 2018). In step four, the identification of patterns and themes developed while

evaluating the possibility of any similar relationships (Braun & Clarke, 2006). I also looked for rationalizations and validated my findings within the collected and coded data.

In the next step of the process, interpreting the data is important since all data should be coded and organized accordingly (Braun & Clarke, 2006). Specifically, I be looked for the significance from the data collected, telling a story from the data and analysis (Elliott, 2018). For the final step, providing reports on the implications and findings of the data was an important piece to the data analysis puzzle as it defines the validity and merit of the analysis, while providing additional clarity on the themes and codes produced for data analysis (Saldaña, 2016). For the purpose of data analysis, the only software used was Microsoft Excel, aiding in the ability to organize, categorize, and triangulate the data (Bree & Gallagher, 2016).

Issues of Trustworthiness

Despite the argument of validity and reliability within qualitative studies, this study had significant focus on data trustworthiness (Noble & Smith, 2015). Specifically, the study utilized creditability, transferability, dependability, and confirmability. Additionally, all ethical procedures adhered to the IRB's and Walden University's rigorous research study policies.

Credibility

For credibility within this study, the use of triangulation was implemented due to the use of two sets of data collected. By utilizing two different data collection types, I was able to induce credibility due to the verification of details that were provided by the different sets of participants and collection methods (Shenton, 2004). Another credibility

strategy that was used for this study were member checks. At the end of the study, participants were provided the data and results and request validation to promote credibility (Birt et al., 2016).

Transferability

Participants were selected based on the set of criteria discussed within participant selection. With this strategy, external validity was introduced and support a variation in the participant selection (Shenton, 2004). Thick descriptions were also provided, creating an additional method of transferability for external validity. By providing a description of the environment and context of the interview, the research setting becomes real allowing the reader to experience the interview (Nowell et al., 2017).

Dependability

To ensure dependability, an audit trail was developed including all data collected, field notes, theme or category tables, summaries, and instrument results. The need for dependability within this study is vital to ensure consistency and repeatability (Lincoln & Guba, 2011). Triangulation is also important in providing a sense of balance for the phenomenon (Yin, 2014).

Confirmability

The strategies that were provided should be significant in establishing confirmability. The developed audit trail provides the details of data collection and interpretation (Nowell et al., 2017). Triangulation assists in removing any bias during data analysis (Shenton, 2004).

Ethical Procedures

This study interacts with human participants and such required approval from the IRB to ensure the rights and welfare for potential participants were not violated. This was a minimal risk study that was to take place at the participant's place of employment for interviews or in the comfort and convenience of online survey participant locations. The participation in the study was purely voluntary, allowing participants to opt-out or decide to cease participation at any time.

Informed consent forms were provided to the participants also requiring that they are approved by their organizations to participate. The consent form addressed all necessary details to ensure approval of participation, including the study description, potential risks, benefit statements, procedure alternatives, confidentiality, my contact information, and reinforced that participation was voluntary. Only signed and approved consent forms were valid for participation.

Data management is important and was adequately addressed for the study, including handling, storage, and archival. Any personal, protected, or identifiable information in an electronic form was either be stored within cloud-based system, utilizing a username, and containing a randomly generated 16-digit alpha-numeric secure password. For physical documents and information, they were stored within folders either at my home office or traveling in a backpack. While unanticipated events could have occurred, several precautions were implemented to ensure security and restricted access.

Summary

For this study, a case study design was chosen, with the purpose of exploring the understanding of how the use of technology impacts cross-departmental communications within midsized organizations that have between 250 and 500 employees. The central concepts of this study are value and the dissemination of communications in relation to technology. The chapter provided clarity into the research method by including the participant selection, instrumentation, data analysis, and trustworthiness. A pilot study was conducted to assess the questions within data collection. Data was collected from two different methods; semistructured interviews and an electronic online survey, allowing for triangulation assisting in trustworthiness.

Chapter 4 will provide an overview of the Pilot Study results while also addressing the setting and demographics of the participants. This chapter is the heart of providing the actual processes of data collection and analysis, safeguarding and providing the strategies for the evidence of trustworthiness. Rounding out Chapter 4 are the results of the study, addressing the study's research question and providing the findings from the interviews and online electronic survey.

Chapter 4: Results

The purpose of this qualitative case study was to explore the impact of technology on cross-departmental communications. The participants included managers across midsized private organizations with between 250 and 500 employees who used technology within their respective organizations for the purpose of internal communications. In this qualitative case study, a single overarching research question was used to address the research problem: What impact does technology have on cross-departmental communications within midsized businesses with between 250 and 500 employees?

In this chapter, I summarize and review the results of the study based on interviews and electronic online surveys. The impact and influence that both the pilot and research setting conditions may have had on the study are reviewed. Demographics, data collection, analysis, and evidence of trustworthiness are presented both visually and in written form. Within the study results, I provide various patterns or themes while presenting data to support each finding and discussing discrepant data points.

Pilot Study

A pilot study was completed with a few participants to assess the questionnaires. The pilot study participants used for both data collection methods ensured alignment to the qualifications and feasibility for this study (Kim, 2010). The participants selected were recruited via my social media network, following the same criteria used for participant selection for the study. Within the data collection protocol, a simulated process was used, where I requested feedback on the understanding, straightforwardness,

and potential issues with each participant. An additional postsurvey was sent to gather responses from participants within the pilot study for electronic online surveys.

The following questions were presented to both sets of pilot study participants postinterview:

- Is the set of questions from the interview easy to understand and answer?
- Do any of the questions need modification for further clarity?
- Should additional questions be introduced to further align to the research question?
- Did any of the questions make you feel uncomfortable or induce any types of fear, including fear of retaliation from your organization?

The feedback provided was minor and taken into consideration for the data collection protocols in the study. There was no impact on the study from the feedback provided in terms of instrumentation or data analysis strategies.

Research Setting

In gathering my research, the unexpected COVID-19 pandemic emerged globally. This uncontrollable event changed several personal and organizational conditions, providing a set of perspectives and outcomes that I would have not obtained if the event had not occurred. This event brought forth unpredicted changes in personnel, communication tools and other IT infrastructure, work environment, and how managers were able to communicate across departments.

The pandemic also introduced the challenge of obtaining participants for the study for both the semistructured interviews and electronic online surveys. For the

semistructured interviews, where people worked and how we interacted in general significantly changed as employees were forced to work from home. This made it difficult to schedule in-person interviews. Electronic online surveys were also impacted as many people focused on their jobs or family and did not have much spare time to spend on completing an online survey.

Demographics

The target population for this study was managers within medium-sized organizations, defined as having between 250 and 500 employees. To ensure privacy, each participant was assigned a random alias identification number. Table 1 summarizes the demographic characteristics of the participants from the semistructured interviews. Table 2 summarizes the demographic characteristics of the participants from the electronic online surveys.

Table 1

Demographic Averages for Semistructured Interview Participants

Mgr level	Org size	Years at org	Direct reports	Yrs of college	Age	% female	% male
Director or higher	350	6	8	4	41	35%	65%

Table 2

Demographic Averages for Online Survey Participants

Mgr level	Org size	Years at org	Direct reports	Yrs of college	Age	% female	% male
Manager or higher	334	4	6	4	38	35%	65%

Data Collection

Based on selection criteria, data were collected from 17 participants via semistructured interviews and from 27 participants via electronic online surveys. The majority of participants were recruited via social media platforms or from referrals after potential participants were not able to take part in the study. Each participant received a consent form prior to initiating data collection for each method. Upon completion, a participant agreed on a time and date to complete the semistructured interview or received a link to the electronic online survey, depending upon their interest.

Semistructured interviews were originally to be conducted in person at the participant's organization location, but due to the COVID-19 pandemic, interviews were accomplished with online video meetings via Zoom. Data collected from the semistructured interviews were still recorded using pencil and paper. This eliminated any keyboard typing noises during the interviews, reducing distractions. Due to the use of a video Zoom meeting, I decided against recording the sessions to ensure that participants were comfortable and as an additional measure of privacy. The duration of all interviews averaged 76 minutes, well within the original estimated interview length.

Once the interview was complete, the participants were provided a debriefing procedure before leaving the video Zoom session. The debriefing procedure provided a review of the study's goals, purpose, and potential outcomes. The participants were then instructed to ask any questions they had relating to the study, allowing for further clarification, justification, and general feedback regarding the interview and process. All

questions asked were related to the study and answered accordingly, and all feedback provided was positive.

Data collection through semistructured interviews took place from April 5, 2020, to December 29, 2020. The only unusual circumstances encountered during data collection were some distractions from participants during the video Zoom calls. These distractions included dogs barking, doorbells ringing, and hearing children in the background. These distractions did not impact data collection; these were normal events that people became accustomed to during the COVID-19 pandemic.

Data collection from electronic online surveys was conducted using a Google form, the original anticipated instrument. Data results from the surveys were then collected and analyzed. While the time to complete the survey was estimated at approximately 15-30 minutes, it was not possible to account for how long each participant took. However, the time to complete the pilot study was tracked, and those results aligned with the anticipated time of completion. The collection of electronic online survey data took place from July 13, 2020, to January 5, 2021.

Upon completion of the survey, the participant was presented with a short review of the study's goals, purpose, and potential outcomes. For debriefing purposes, a postcompletion survey from Survey Monkey provided instructive justification for the design of the study and the methods used. The participants were provided the ability to respond with any questions or feedback relating to the study, allowing for further clarification and justification of the survey and process. Two participants responded with

a request to obtain the study results once complete. No unusual circumstances were encountered during data collection.

Data Analysis

After collecting the data, a thematic analysis was used, as outlined in O'Connor and Gibson (2003), to refine, understand, and interpret the data. These steps included data preparation, data evaluation, data categorization, theme identification, data interpretation, and report generation. These steps were applied to the completed interviews and electronic online survey results for each participant, with the data then coded accordingly to develop themes within the study.

Baseline Data Points

I first took the standard set of participant data questions from both questionnaires and entered headers into a separate column in Microsoft Excel across the top of the sheet. These data included questions related to title/manager level, size of the organization, number of direct reports, years at the organization, number of college years, age, and gender. Each row was first labeled with the participant number, with the corresponding information completed according to the header label at the top. By organizing data in this format, I was able to provide a standard set of data points within both sets of responses. Additionally, I calculated averages for each appropriate column to understand various ranges for each data column.

Emerging Codes

The remaining questions required a more in-depth analysis, categorization, and pattern identification. In order to consume and generalize the large amount of data, I

applied codes to the answered questions where applicable and began to identify emerging codes. These theme-based descriptions allowed the connection of similarities and enabled coding into small categorization components. From this analysis, various concepts and patterns surfaced.

In reviewing both sets of questionnaires, many familiarities were revealed that assisted in establishing patterns. I reviewed each participant's answers and implemented an initial coding process with an analytic lens, applying a word or short phrase based on my first impression. Once the first round of coding was complete, I stepped away from the data for 1 week and revisited the coding process again a second time, validating my first impressions while adjusting accordingly to finalize the emerging codes.

From the initial coded results, I calculated the frequency of each code, identifying emerging codes by performing Excel formulas and calculations. This process assisted in finalizing the following emerging codes: (a) financial impact, (b) cross-department relationship, (c) company support, (d) technology and processes, and (e) COVID-19 impact. In the section below, I examine each emergent code derived from various terms, phrases, and overall responses acquired from the transcripts of the semistructured interviews and electronic online survey submissions.

Financial Impact

This emergent code was chosen as participants responded to various budgetary and corporate investment questions as well as some nonfinancial-centric questions. Participant SS1005, an executive at his company, wanted to devote more of the budget to communication technology but found it difficult to convince the chief financial officer

(CFO) that this was needed. He stated, “The CFO does not believe communication technology is important to the bottom line and feels that people should do their job.” SS1010, also an executive at her company, explained that she had “no issue obtaining budget to improve internal communications and ultimately better serve their customers.” If terms or phrases were related to financial impact but were associated with COVID-19, I coded those in the COVID-19 theme.

Cross-Department Relationship

This emergent code was centric to responses that mentioned relationships, interactions, or overall impact that a participant or their team had with other departments. Participant ES1013 stressed the importance of cross-department interaction, contending that “most client issues require the involvement and communication between multiple departments and people.” SS1003 supported this idea by stating, “collaborating with neighboring departments on projects and customer activities ensures alignment and better customer satisfaction.”

Company Support

This emergent code was applied where participants described the support that their organization provided to their teams related to company communications, encouraging employees to work together, and the dissemination of information. Participant ES1004 described how his organization negatively impacted his team’s effectiveness by holding onto information that could help his team navigate unchartered waters with customers. Specifically, he wrote,

> my company constantly decides to not to send out notifications of issues that we have with our software. Our customers then call in with issues and we spend a lot of time troubleshooting, even though we'll never be able to fix it until it gets fixed from development.

ES1017 described an opposite experience with his organization. He defined his organization as "highly communicative with an extensive effort to provide timely information for everyone."

Technology and Processes

This emergent code materialized in several responses from participants referring to various types of technology or processes in relation to communications. Participant SS1014 emphasized how their communication technology was part of their critical business activities and processes. She stated that "without our technology for communications, we would not be able to service our customers with much success." SS1008 had similar sentiments, emphasizing that their processes drove the technology that they used. He believed that,

> without our technology, the processes we have would be labor intensive and operations would grind to a halt. I have colleagues that tend to purchase technology and then fit them to their current process, instead of letting the tools guide their processes.

COVID-19 Impact

This emergent code was important to leverage due to the pandemic occurring during data collection. While the term appeared throughout various responses, specific

questions were added to each questionnaire to discover whether there was an impact to technology, communications, processes, or anything that might be relevant to this study. Participant ES1014 described the impact of COVID-19 as an event that enabled the organization to better understand the benefits of working from home. She added,

> I have been trying to convince the executive team the benefits of using a hybrid model, splitting work from home and work in the office. They were not a fan of the model, but with Covid hitting, it is now a staple of the business and they are looking to trim down the size of the main office when the lease comes due in two years.

Participant SS1017 described how COVID-19 had impacted her team negatively for the first few months. She described the transition as "chaotic" and "stressful" due to not having the necessary tools in place to work remotely. She explained that,

> everything about the first part of the pandemic was harder than it should have been. We only had a few licenses of WebEx, and the company did not want to spend money for everyone to have their own licenses. Some of my team members would enter someone's meeting due to incorrect scheduling. It took a few clients to complain before the company finally realized they needed licenses for everyone.

Evidence of Trustworthiness

Credibility

During data collection during the semistructured interviews, the decision was made to not record the sessions on video due to privacy concerns. The first participant did

not want to be part of a video recording, and consequently I did not record the video session with the remaining participants. No adjustments were made in terms of triangulation as two separate sets of data collection methods were used.

Transferability

Participants were provided the details of the study, indicating selection criteria, confidentiality, and risk of participating. They also were required to confirm that their organization approved of their participation. Prior to execution of the semistructured interview, participants were provided an additional summary of the study and were provided an explanation as to why it was required to conduct the interview via a Video Zoom session as opposed to a general phone call or also in-person session.

Dependability

There were no modifications to dependability.

Confirmability

There were no modifications to confirmability.

Study Results

The results are organized by theme and the corresponding emerging code. Clarifying key points for each theme are provided in an attempt to answer what impact technology has on cross-departmental communications within midsized businesses between 205 and 500 employees. Based on the five emerging codes, three themes were identified and are discussed within this chapter.

Theme 1: Technology Enables Effective Communications

This theme was first derived from the compilation of responses related to the various technologies and processes mentioned for communications and the effectiveness of these technologies when used by departments or across the organization. All participants provided various technologies used within their respective organizations for communications; email, phone, instant messaging tools, video conferencing, old fashion in-person activities and social or collaboration platforms. Email was the one standard technology mentioned that was used across all organizations except for ES1013, describing that his organization does not use email, at least from the traditional standpoint. He stated,

> we use Slack for all communications, both externally and internally. We do have email addresses, but if an email is sent to one of those addresses it is fed into Slack where we then place it in the correct channel to be addressed.

He later described that the amount of effectiveness in this type of strategy is, "an unsurmountable impact to our business."

Participants SS1005, SS1006, SS1010, ES1010, ES1019, and ES1023 all had similar references to the amount of effectiveness that technology brings to their teams in terms of communications. Specifically, SS1010 stated that, "without our instant messaging and social tools, we would not be able to be present for our customers in their time of need." SS1006 said the words like "empowering" and "servant leadership" multiple times through her interview. "We strongly believe that our employees are the

best asset we have, but without the having our messaging technology we would be blind on what others are doing in the company."

Technology investments or budgetary statements were encompassed, providing a financial aspect to the theme. Participant SS1016 expressed how impressed he was in the investments made at his company over the last several years. He explained,

> when I first got here back in 2013, we just had email. But as the years gone by our IT team has increased what types of tools we have to communicate internally since our teams are distributed in the US and need on demand communications.

Participant ES1001 added that his organization invested in a social collaboration platform tied to their accounting systems. "The ability to use Jam, we can communicate with each other, but also have a place to collaborate on projects, documents, or simply sharing information. It is an extremely effective solution that increases productivity." ES1009 submitted a similar comment to their technology investments, "our newly acquired Office 365 bundle provides a suite of products for our employees to effectively communicate, and at a fraction of the cost. I don't know why we didn't invest in it earlier."

The final puzzle piece to this theme was the impact of COVID-19, specifically the technology investments to accommodate employees working from home enabling communications. Participants SS1006, SS1014, ES1008, and ES1019 all mentioned that they were relieved that their respective organizations finally invested in video conferencing platforms for everyone. SS1014 stated that, "I was tired of sharing licenses for RingCentral. We were stepping on each other, spending a lot of time to schedule meetings. With COVID sending everyone home, we purchased licenses for every

employee and switched to Zoom…life changing." To further evaluate the impact on technology and spend, findings from the study found that 73% of the participants agreed COVID had an impact on technology purchases. Table 3 depicts that analysis, grouped by the manager level of the study participants.

Table 3

Impact on Technology Purchases Due to COVID-19 by Manager Level

Manager level	Yes	No
Manager	35%	15%
Director	23%	8%
Executive	15%	5%

Participant ES1022 expressed the exhaustion in trying to convince her organization to enforce a policy to standardize on an instant messaging platform. "We had four different platforms in use by different departments, it was so chaotic. The pandemic forced our IT department to purchase one tool and remove the shadow IT in place. If anything, good came out of 2020 it was having one IM tool. #lifeisbetternow." SS1001 had a similar experience, stating that, "COVID forced a reduction in budget, which removed a lot of the rogue tools across the company and consolidated the technology we had. In our monthly management meeting, we are constantly talking about how the consolidation of technology has increased our efficiencies. Thank you COVID."

Theme 2: Leadership Impacts Employee Behavior Relating to Cross-Departmental Communications

This theme encompasses the support of an organization or executive leadership team relating to cross-departmental communications, as there is a direct correlation to the

behavior from employees and their use of technology. Participant ES1002 described his company culture as “inclusive” and “supportive”, encouraging employees to communicate and work together to solve problems. He further added that, “we constantly discuss the importance of communicating across all departments, which comes directly from our executives. I usually see at least one of them bringing in small teams made of multiple team members to help on issues we have.”

Participant SS1003 had similar results in their organization, stating that, “we have a top-down approach when it comes to collaboration, communication, and working with other departments. It is a core value that is constantly discussed, including how we hire and fire people.” Conversely, SS1007 stated that his leadership team is not inclusive and has a “me” mentality. “It is always about “me” and “I” instead of “we” or “us”. We have employees that feel they need act the same, holding onto information and placing blame on others.”

Individual verses team performance was a highlight in developing this theme, reinforcing the various behaviors organizations display. Participant SS1009 provided his examination of leadership support by how the company approaches awards to employees. “We provide awards that focus on teamwork to solve problems, not individual work. Each month, we award the team that accomplish something together, highlighting the communication and relationship between departments.” SS1015 had similar sentiments, stating that his company, “focuses on teamwork and internal cross work. We even schedule events with other departments so we can build a better relationship with everyone, and our leadership team attends to show support.”

One participant, ES2022, indicated the exact opposite occurs within her organization as her, executives tend to focus on individual performance or what they call heroes. She stated that,

> at a high level this seems like a great idea, except there are a few who are repeat winners that step on other employees in hopes of being nominated for the award and the cash prize. It is defeating for some and creates the wrong behavior for communicating with each other.

ES1018 had a similar sentiment but only in her department, submitting that her director, "focuses on the belief that it's our department against the world." She continues by stating, "I spent the first 2 years at the company proving to other employees that I want to work together and improve communications despite the lack of support from my boss."

Theme 3: Cross-Departmental Communications Impacts Organizational Success

This final theme was formed by the responses from participants relating to the idea that internal communications are required, allowing for organizations to be successful and even have a competitive advantage over others in their industries. Participants SS1008 and SS1017 have both been at their respective organizations for one year, expressing the positive impact collaboration and cross-departmental communications have made on their team's success. SS1008 specifically stated that, "at my old job, departments fought with each and created unnecessary drama. It always seemed to affect the customers in the end and partly the reason why I left." She continued stating that her current team hits sales goals by leveraging others instead of working against them stating, "it feels good."

Participant ES1021 presented that he has worked in the same industry for almost 20 years and attributes his current organization's success to the extent of their internal communications. He explained that,

> every year we increase our industry rankings, which is unusual, but we continue to offer the best product and services when compared to our competitors. I believe our success is directly tied to our employee's ability to communicate with each other. It's our competitive advantage.

SS1010 explained that her organization also believes that cross-departmental communications is an asset contributing to their overall success. She stated that,

> we use a custom designed issues board where we post support and service tickets for each customer. Before helping a customer, we look at the board to see if there are other issues or if someone is already working with that specific customer and then communicate with that person for a unified response.

Further evaluating the data and responses leveraging various answers, I found that most participants believed the way they communicate was a competitive advantage. Based on the feedback, 65% of the participants believe that cross-departmental communications are a competitive advantage within their organizations. After further evaluating the data, I noticed a divergence in comparing gender against the feeling that communications are a competitive advantage. Table 4 below shows the analysis, which could be the basis for a future research topic.

Table 4

Data Analysis by Gender for Competitive Advantage of Communications

Averages by gender	Yes	No
Female	43%	57%
Male	77%	23%

Summary

In this qualitative case study, I explored the impact of technology on cross-departmental communications. Leveraging the responses and experiences of 17 participants via semistructured interviews and electronic online surveys from 27 participants, I was able to acquire new insights into how the use of technology effects various organizations that have between 250 and 500 employees. For the interviews and responses, I was able to produce three themes that addressed the research question; 1) technology enables effective communications, 2) leadership impacts employee behavior relating to cross-departmental communications, and 3) cross-departmental communications impacts organizational success.

Moving into Chapter 5, I will be reviewing the study as a whole, highlighting the overall impact of technology on cross-departmental communications. The chapter reviews the interpretations of findings, limitations of the study, recommendations, implications, and finishes with a conclusion.

Chapter 5: Discussion, Conclusions, and Recommendations

The purpose of this qualitative case study was to explore the impact of technology on cross-departmental communications. The nature of this study was qualitative, utilizing a case study design. I conducted this study to pursue insights into how the use of technology impacted internal communications within various departments. From this study, organizations can better understand the role of technology in relation to internal communications, leading them to introduce processes and strategies to improve cross-departmental communications.

Based on the participant interviews and submissions, three themes emerged addressing the impact that technology has on cross-departmental communications within midsized businesses with between 250 and 500 employees: (a) technology enables effective communications, (b) leadership impacts employee behavior relating to cross-departmental communications, and (c) cross-departmental communications impact organizational success. This chapter further expresses the interpretations of findings, limitations of the study, recommendations, and implications, with a final take-home conclusion.

Interpretation of Findings

The data obtained from participants confirmed that technology does have an impact on cross-departmental communications, while also extending knowledge within the discipline. This confirms the findings from Apulu and Latham (2011) that technology and communication can expand business processes. Furthermore, the research provided by Cross et al (2010) established that the use of technology highlighted the need to

improve internal communications between employees. From the data obtained and findings within the research, a confirmation on an impact of technology and communications allows the potential development on the discipline and scope.

The participant's responses speak to the enablement for employees when technology enhances the way in which they communicate cross-departmentally. These statements aligned with the sentiments that the use of communication technology underpins process improvement and increases value for organizations (Belvedere et al., 2013). The impact of technology in relation to the augmentation of communication across department lines defines a standard or foundation for overall organizational success. A study by Dimovski and Skerlavaj (2004) reinforced the criticality of leveraging technology to improve change management and internal communications.

This strategy behind using technology to enable effective communications supports the removal of silos between coworkers while facilitating the dissemination of information and data. Several interviews reinforced the elimination of politics and increasing communications between teams and others within the organization. The study from Hearn and Choi (2013) highlighted the need to remove the silo effect by providing an argument that in order to prevent communication issues among teams, organizations will need to reinforce cross-departmental collaboration and the overall process in how they communicate. Some participants had experienced this type of situation within their organization, while others were hoping for the advancement of organizational strategies in order to derive to this conclusion. To realize gains in leveraging technology for

effective communications, organizational leaders need make a conscious strategic decision to change their current course in order to demonstrate success.

The critical factor in reaching that success requires leadership to impact the behaviors of employees, instilling the importance of collaboration and cross-departmental communications. A study from Lavergne and Earl (2006) supported this type of leadership culture, finding that the success of communications rests on the requirements of inclusiveness and information sharing. In the interviews, the majority of leaders indicated that they wanted to communicate more, both horizontally and vertically. Unfortunately, despite effort, the end results may not appear that way or may have a negative impact overall. However, by aligning the behaviors of employees with goals, it is possible to create an environment of motivation and innovation (Chumg et al., 2016).

The correlation of employee behaviors and communicating with coworkers is an important link in setting the correct standards and foundation in recognizing efficiency gains, though it is also challenging. While leadership support is the ultimate key, leveraging training programs and practical small group sessions assists with setting organizational expectations and directs the path for correct use of the technology (Landers et al., 2017). Employees want to collaborate with others to accomplish the goals they have set with their respective teams and achieve success both personally and professionally. However, if the messaging from leadership is not direct and the training is not effective, leveraging technology for communications will lead to inefficient system use and negatively impact the success of organizational initiatives (Liang et al., 2015).

It was confirmed through the data that all technology within an organization was not being utilized in the way it could be, and in many cases, there were pockets of rogue technology, also referred to as "shadow IT." Although information and data can be shared cross-departmentally, if employees feel that there is technology being used outside what the organization has authorized, distrust begins to separate groups and break down the ability to communicate effectively (King et al., 2010). However, if the organization has a solid foundation in creating an open culture, allowing communications to flow freely between departments and leadership, it could prevent conflict when technology disparities are introduced. A study from Gibbert et al (2002) confirmed that leveraging a collaborative strategy to increase matrixed communications not only provides a culture of inclusiveness and trust, but also provides organizational advantages leading to success toward objectives while increasing an organization's competitive advantage within its industry.

Data from the study previewed the need for change and process management specifically around an open culture atmosphere, promoting collaboration and teamwork. The feeling of working all together, as one team heading in the same direction, is a strategic objective that is essential for an organization to successfully communicate change (Stoica et al., 2004). The ability to have open dialogue to resolve conflict, discuss client issues, clarify requirements, or simply connect on a personal level should be integrated into a technology communication platform, while also being extremely valuable for the creation of a high-performing team. The fundamental creation of value through knowledge is conditioned by the knowledge resources deployed and managed

through appropriate processes coherently with an organization's strategy (Cuganesan, 2005).

With the COVID-19 pandemic, organizations that had the ability to communicate electronically and collaborate on documents, or those that had simply deployed an instant messaging platform prior to the event, immediately realized the value of the tools that they were currently using. On the other hand, other organizations were forced to react quickly, usually at a higher cost, or had to settle on a set of communication technologies that might not have been the right fit for them, negatively impacting their business operations. As discovered in both the data and literature, attempting to communicate cross-departmentally when working in remote locations without the use of technology does have a substantial impact on interactions (Hidayanti et al., 2018). Furthermore, a study by Tuček and Hrabal (2014) indicated that agility, customer centricity, and clear leadership objectives were realized by implementing processes and technology that increased competitive advantages for the organization.

Table 5 below provides results from participants when asked if COVID-19 impacted their technology purchases.

Table 5

Participant Percentages Where COVID-19 Impacted Technology Purchases

Yes	No
73%	27%

Limitations of the Study

A main limitation of this study was the possibility of a participant residing in the same organization (subsidiary, parent, partner, etc.). Based on the data provided, it did not appear that any participants resided in the same organization, as each indicated their company name. Before I replaced identifying information with the participant ID number, research was executed to ensure that participants were not related or duplicated and to remove any bias. Additionally, while semistructured data were verified after the interview, researcher bias was a limitation in the study as I was the primary instrument of data collection. All efforts were made to prevent my experiences and opinions from impacting the results of the study.

Recommendations

The purpose of this study was to examine the impact of technology on cross-departmental communications, focusing on the value of communications and interactions with other employees. The study results may contribute to greater understanding and compassion for leaders as they attempt to work with others across a company to ultimately achieve organizational goals. This focus, coupled with the need to navigate client pressure and the internal political landscape, requires mental fortitude. Researchers conducting future studies should evaluate the overall psyche of an organizational leader to determine the short- and long-term effects on health and longevity in relation to their ability to lead and manage people within an organization, coupled with the impact of communications or lack thereof.

The goal of this study was not to focus on one particular technology, either by type or brand. Instead, the focus was authentic communications and ways in which employees leveraged communications and technology, with an interest in discovering the impact that they had on organizations cross-departmentally. With these findings and research, there could be an argument for an additional study producing a needs assessment on how to best evaluate or adopt communication technologies. A few participants mentioned in their semistructured interviews that they struggled to obtain buy-in from executive leadership to invest in communication technologies. Having a method to assist in providing a realization of the importance and efficiency gains would be influential in presenting a business case.

Future researchers could also conduct a different type of study instead of leveraging a case study. For example, researchers could implement an observation method, focusing on real-life events and interactions from various departments. This method could remove bias that might arise from the researcher obtaining data and information directly from participants and instead allow for reliable insights and exchanges through observation. Research could be added for various departments within an organization, or a comparison could be completed between similar departments in different organizations. There are several different ways that this could be approached using various perspectives.

Building on the idea of using different methods for further research, the use of quantitative data instead of qualitative data could provide a greater sample size while expanding on both the credibility and reliability of a study. Taking this another step

further, additional research could apply mixed method data, obtaining results from a wider group of participants. This type of strategy would allow the collection of various perspectives from both qualitative and quantitative data sets; assimilating data within data collection, analysis, and discussion with participants could provide profound results. Connected with different methods is the expansion of a study with a different organization size, either focusing on a small business with fewer than 250 employees or an enterprise-size organization with more than 500 employees.

The findings had some but very little indication around the deployment or implementation of communication technologies. Multiple research studies have addressed software or technology implementations (Belvedere et al., 2013; Hughes & Chapel, 2013; Stoica et al., 2004), though specifying communications and focusing on the complexities of deployment and training could be a worthwhile topic. Furthermore, coupling that research with a 1-year postimplementation follow-up could show how the impact of the technology has been recognized in real time. That type of research study might showcase any hindrances to or negative impact on cross-departmental communications just as much as the positive realization from organizations.

The final recommendation for further research is to consider how the COVID-19 pandemic has affected people, departments, or organizations in terms of communication, collaboration, and technology. The pandemic delivered a different perspective on this study, enhancing cross-departmental communications, which I did not anticipate for data collection; research was not available for this unprecedented event. Due to this event's recent exposure to global communities, researchers would need to refine the topics for

future studies. While there are endless opportunities for further research in this area, topics in relation to the findings of this study could include financial impact, reduction in resources, difficulty of an office working remotely, and parents working from home while caring for their children.

Additionally, in relation to COVID, the overall impact of organizational expenditures and budgetary adjustments could represent a significant and vast topic. The uncertainty, uniqueness, and fluidity of the pandemic affected organizations, employees, and families in different ways. Extending research to discover and potentially compartmentalize or segregate the various impacts in terms of both financial restraints and gains would invite a different perspective for researchers. Potentially, the research uncovered and evaluated could provide lessons for future events as well as impending behaviors involving how organizations and consumers spend money.

Implications

The data collected and discoveries analyzed contribute to the body literature directly related to impacts on the organizational complexity paradigm within cross-departmental communications. The promotion of positive social change is affected at the organizational level, unveiling knowledge sharing and allowing transferability to other contexts or settings. This change will only become prevalent if organizations accept the impactful role that technology can play when tethered to cross-departmental communications. The data within this study provide information on the various benefits and positive impact from this type of relationship, increasing competitive advantage, providing a path to organizational success, and cultivating a next-level culture.

The value in which an organization can realize social implications is critical by considering the significance in how and when employees interact with each other to solve complex business problems. The positive social change of knowledge and information sharing is a small investment for organizations that can provide a massive payoff toward accomplishing both short-term and long-term goals. The study results provide verification that departments were more effective and able to better serve their customers when teams worked together, leveraging technology for cross-departmental communications. The shift from working in an office to working remotely due to COVID-19 has exposed the need to have these important tools in place more than ever.

Additionally, there are implications that could further develop the theoretical foundation used within this study. When considering organizational theory, the behavior around leadership within organizations and their reluctance to expand technology to enhance communications can support positive social change. Organizations with multiple locations or that have distributed employees can benefit from the introduction of methods to communicate effectively, adding a competitive advantage and real value to the bottom line. The dynamic of organizational theory provides leadership to install core values for employees that is desperately needed, while connecting employee behaviors with communications and technology to support and further advance the theory.

There may also be theoretical implications for stakeholder theory in relation to the method used to communicate, dependent upon expectations, requirements, and overall feasibility. The complexity and level of politics derived from leadership positions can be impacted by this study's results by possibly providing an alternative viewpoint in

supporting efficiencies for cross-departmental communications. Representative of this viewpoint could be the foundational position required to deliver organizational value while establishing a fundamental process toward the success of internal communications. Furthermore, leaders within the organization and in their respective communities could collaborate with each other, exchanging information, best practices, and use cases.

The findings have another potential impact of positive social change at the organizational level in relation to the theoretical implications of systems theory, focusing on the practice of business and process improvements. Leveraging these developments could assist leaders when instituting change within their organizations while enhancing strategic value. Specifically, the conclusions provided could enhance the ability to fully implement communication technologies to their full capacity, taking into account all of the interconnected pieces while discovering the overall effectiveness of the systems. This could assist in the development of new ideas and alternative approaches to both system implementation and organizational cohesiveness, allowing for improved processes and recognition of intrinsic value.

Conclusions

For organizations, incorporating technology and internal communications within one cohesive strategy is not an easy undertaking while striving to make an impact on the organizational complexity paradigm within cross-departmental communications. There is a profound necessity for companies to bridge the gap between communications, technology, and people while understanding the value that these efforts can have across the organization. This study helps to fill a gap in research by exploring and understanding

the impact that technology has on cross-departmental communications. Furthermore, unexpected global events such as COVID-19 provided additional insights into how impactful technology can be on employees when working across remote locations, removing the need for a commute and working out of a corporate office.

Using a case study design, I conducted semistructured interviews and electronic online surveys to collect data from managers within organizations with between 250 and 500 employees. In conjunction with the participant data, this study provides a foundation of research built on systems theory, organizational theory, and stakeholder theory, coupled with a conceptional framework leveraging concepts of value and the dissemination of communication in relation to technology. Presenting recommendations for further research, this study helps to identify potential social change implications in relation to knowledge sharing and the adoption of technology to enhance cross-departmental communications.

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Appendix A: Literature Review Publication Scope

Publication source	Literature coverage
ABI/INFORM Complete	ABI/INFORM Complete offers over 2,000 full text resources including peer-reviewed journals, trade publications, business news, reports, and working papers. Topics include all aspects of international business, such as business trends, management practice and theory, corporate strategy and tactics, and the competitive landscape.
Business Source Complete	This database includes nearly 2000 full-text peer-reviewed academic journals in business, management and finance, case studies, company profiles, reports, conference papers, financial data, and SWOT analyses, including many related to public policy and public administration. Thousands of other publications, working papers, and interviews make this database a valuable tool for your business, management, and policy and administration research.
Computers and Applied Sciences Complete	Computers and Applied Sciences Complete contains information in engineering and computing. The database emphasizes computer and systems theory, engineering, new technologies and social contexts.
Emerald Management Journals	Emerald is a leader in publishing management research for both the scholar and the practitioner. Be sure to search within "My subscribed content" to find full-text articles.
ProQuest Central	This database includes a very large selection of scholarly and peer reviewed publications appropriate for all Walden programs of study. ProQuest Central has unique materials as well, including newspapers, dissertations and business information. Walden University students, faculty and staff have access to 1.9 million full-text dissertations from over 1000 schools and universities in the ProQuest Dissertations and Theses database.
ScienceDirect	ScienceDirect contains hundreds of leading peer- reviewed journals in business, management, decision sciences, economics and finance. It provides many unique peer reviewed journals in management, psychology, information technology and health sciences that cannot be found in other Walden databases.

Note. From *Walden Library Academic Guides*. (2018). http://academicguides.waldenu.edu/library/.

Appendix B: Literature Review Search Terms

Key word	Boolean search phrase
Systems Theory	Systems Theory OR General Systems Theory
Knowledge Management	Systems Theory AND Knowledge Management
Business Process Engineering (BPR)	Systems Theory AND Business Process Engineering OR BPR
Technology	Systems Theory AND Technology Technology AND Knowledge Management Technology AND Business Process Engineering OR BPR
Communication	Systems Theory AND Communication Communication AND Knowledge Management Communication AND Business Process Engineering OR BPR Communication AND Technology AND Systems Theory
Organizational Theory	Organizational Theory
Communication	Organizational Theory AND Communication Communication AND Technology AND Organizational Theory
Employee Behavior	Organizational Theory AND Employee Behavior Employee Behavior AND Communication Employee Behavior AND Technology AND Communication
Stakeholder Theory	Stakeholder Theory
Communication Methods	Stakeholder Theory AND Communication Communication Methods AND Company OR Companies Communication Methods AND Organization Communication Methods AND Team OR Department
Technology	Stakeholder Theory AND Technology Technology AND Communication Technology AND Team OR Department

Appendix C: Semistructured Interview Questionnaire

EXPLORING THE VALUE OF TECHNOLOGY WITHIN CROSS-DEPARTMENTAL COMMUNICATIONS

Interview Questionnaire

Participant Info

Particpant ID _____

Title _____

Organziation Size _____

Years at Organization _____

Number of Direct Reports _____

Educational Level _____

Age _____ **Sex** _____

Interview Info

Date _____

Interviewer Name _____

Interview Start Time _____

Interview End Time _____

Total Minutes _____

Questions

1. Does your organization provide technology to communicate with other employees?
2. What technologies are provided?
3. Are these technologies used by your team(s)?
4. What is your opinion of the communication technologies?
5. Do you perceive these technologies to be effective? Why or why not?
6. What would you change to these technologies?
7. In what situations do you usually interact with coworkers in other departments?
8. How do you describe the relationship between you and other coworkers?
9. What kind of impact do you feel communications have with other departments?
10. Can you describe the way you collaborate with other departments on projects, documents, and day-to-day activities?
11. If you had a magic wand, what would your ideal way of communicating with other departments?
    a. How would you go about using technology systems and services? When? Where? How?
12. What are your feelings about your organization?
13. Can you describe what a typical day at work looks like?
14. What positively/ negatively impacts your ability to be effective?
15. What is your opinion on how the organization communicates as a whole?
16. What do you think the primary competitive advantage is for your organization?
17. How do you communicate to customers to achieve that competitive advantage?
18. Who is typically included in the organization when forecasting/ establishing departmental budgets?
19. What is your opinion on how your organization spends money on communication technologies?
20. Has COVID had any impact on the purchase of communication technologies?
21. Did your organization require you to work from at home any anytime due to COVID-19?
22. What comments or questions do you have for me?
    a. Is there anything you would like me to explain?
    b. What would you like to tell me that you've thought about during this interview?

Note: *Additional follow-up questions were asked, as appropriate, with each participant*

Appendix D: Online Electronic Survey Questionnaire

Research Study Consent Form: Exploring the Value of Technology within Cross-Departmental Communications

CONSENT FORM

You are invited to take part in a research study on how technology may impact managers who communicate with other employees cross-departmentally and the value that those communications may provide. The researcher is inviting managers within organizations that have between 250 and 500 employees to be in the study. This form is part of a process called "informed consent", allowing you to understand this study before deciding whether to take part.

This study is being conducted by a researcher named Brian Luckey, who is a doctoral student at Walden University.

The purpose of this study is to explore the impact of technology on cross-departmental communications.

Procedures:
If you agree to be in this study, you will be asked to spend 15-20 minutes, one time, filling out an electronic survey for this research study

Here are some sample questions:
- Organization Size?
- What technologies does your organization provide to communicate with other employees? Please list all technologies by name and type.
- How do you describe the relationship between you and other coworkers? Please be as descriptive as possible
- From that ideal way, how would you go about using technology systems and services?
- What is your opinion on how the organization communicates as a whole?

Voluntary Nature of the Study:
This study is voluntary. You are free to accept or turn down the invitation. No one at any institution or entity will treat you differently if you decide not to participate in the study. If you decide to be in the study now, you can still change your mind later. You may stop at any time.

Risks and Benefits of Being in the Study:
Being in this type of study involves some risk of minor discomforts that can be encountered in daily life, such as fatigue or pressure to complete the survey. Being in this study would not pose risk to your safety or wellbeing.

The study's potential benefit to the community is that organizations can better understand the role of technology in relation to internal communications, leading them to introduce processes to improve, including the methods used to communicate.

Payment:
There are no payment, gifts, or reimbursements when participating in this study.

Privacy:
Reports coming out of this study will not share the identities of individual participants. Details that might identify participants, such as the location of the study, also will not be shared. The researcher will not use your personal information for any purpose outside of this research project. Data will be kept secure by both password and data encryption. Data will be kept for a period of at least 5 years, as required by the university.

Contacts and Questions:
You may ask any questions you have now. Or if you have questions later, you may contact the researcher via email, brian.luckey@waldenu.edu. If you want to talk privately about your rights as a participant, you can call the Research Participant Advocate at my university at (612) 312-1210. Walden University's approval number for this study is 03-23-20-0262725 and it expires on March 22, 2021.

Study Results:
The results will be provided at the conclusion of this study. They will be in a summary format shared via Social Media.

Please print or save this consent form for your records.

Obtaining Your Consent

If you feel you understand the study well enough to make a decision about it, please indicate your consent by clicking "Next" below

* Required

Exploring the Value of Technology within Cross-Departmental Communications

Participant Information

1. Title *

_____

2. Organization Size/ # of Employees *

_____

3. Years at Organization (Whole Number) *

_____

4. Number of Direct Reports

_____

5. Highest Education Level *

Mark only one oval.

- ◯ High School Diploma
- ◯ Some College
- ◯ Associate Degree
- ◯ Bachelor's Degree
- ◯ Master's Degree
- ◯ Doctorate or Similar

6. Age *

_____

7. Sex *

Mark only one oval.

- ◯ Female
- ◯ Male
- ◯ I prefer not to answer

Technologies Utilized

8. What technologies does your organization provide to communicate with other employees? Please list all technologies by name *

_____

_____

_____

_____

_____

9. From these technologies, which ones are utilized by you and/ or your team(s)? *

10. What is your opinion of the communication technologies you or team use? *

11. Do you perceive these technologies to be effective? Why or why not? *

12. What type of changes would you make to these technologies? *

Coworker Interactions

13. In what situations do you usually interact with coworkers in other departments? Please list each one separately and provide specific details. *

14. How do you describe the relationship between you and other coworkers? Please be as descriptive as possible *

15. What kind of impact do you feel communications have with other departments? *

16. Can you describe the way you collaborate with other departments on projects, documents, and day-to-day activities? *

17. If you had a magic wand, what would your ideal way of communicating with other departments? *

18. From that ideal way, how would you go about using technology systems and services? *

Day In The Life

19. Can you describe what a typical day at work looks like? Please be as descriptive as possible. *

20. What positively/ negatively impacts your ability to be effective? Please list both positives and negatives. *

21. What are your feelings about your organization? *

22. What is your opinion on how the organization communicates as a whole? *

23. What do you think the primary competitive advantage is for your organization? *

24. How do you communicate to customers to achieve that competitive advantage? Please list the various ways this occurs and if possible add examples *

Organizational Budgets

25. Who is typically included in the organization when forecasting/ establishing departmental budgets? Specifically what roles, departments, and titles. *

26. What is your opinion on how your organization spends money on communication technologies? *

COVID-19 Impact on Technology

27. Has COVID-19 had any impact on the purchase of communication technologies? *

Mark only one oval.

- Yes
- No
- Not Sure

28. Did your organization require you to work from at home any anytime due to COVID-19? *

Mark only one oval.

- Yes
- No

Summary


The picture can't be displayed.