Systemic Complexity In Communication During Crisis Management

Peabody College at Vanderbilt University

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Dedication

To my partner, Cameron Browne, you are the reason I am still here today. You caught me falling and helped me rise every single time. Thank you for sharing your friendship and life with me.

To Matt Campbell, the best advisor anyone could ask for! We could not have completed this journey without you.

To Dad, thank you for giving me the foundation I needed to be successful in life. I will never forget working with you at such a young age and helping you to build all your companies. I will always hold dear all the values you instill in me and, most importantly, how to navigate through life in any situation and WIN! Thank you for teaching me how to be a leader in this world, I love you.

To Mom, my best friend, biggest hype person, and my partner in crime. You're the reason I live and breathe. You are the heart and soul of my existence. You taught me that life is about smiles and joy, laughter is a gift not often done, and adversity is just temporary. You gave me the light in every dark moment, ample support, and bought me back every time I was down.
I dedicate this degree to you.

To Zohra, my creative soul sister, a great mom, and someone who has taught me never to give up. You have given me the gift of endless support from the start of my career and guidance on how to be successful despite so many challenges. I could not be where I am today if it wasn't.

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To Wasik, my hookah and dirty martini partner! Watching you grow into the person you are today has been a privilege. I love and aspire to be just a little bit of who you are, and then I know I have made it successfully in life.

Dedication

To Kayden, the leader of our pack - don't ever change. Thank you for giving Khala the gift of fun and laughter. Your jokes will always make me laugh!

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To Elin, thank you for never giving up on our friendship. Thanks for being the one I can always rely on. You have made my life so much better because of our friendship. Thank you, my heart is overwhelmed with gratitude.

Dedication

To Bhumi Patel, the glue of our team. Cameron and I could not have done this without you! We will always remember your smile when you come on our zoom calls and pushing us to think better and write better. I can't wait to be your friend for life.

Momma G, Aunty G, thank you for picking up all my FaceTime calls. You have given me the gift of calm, sophistication, laughter, staying focused, and….most importantly, your wonderful son.

And the best for last, to Ashis Gupta (Ash G), my savior. I finally (and forever) get to etch words of my admiration for you. You have been my rock in supporting me while I completed this degree. We met so long ago, and I thank the universe for bringing you back to me every day. I could not have done this without your late-night calls, all the memes, shenanigans, your music that pumped me up every day, your patience with me having no life, and most importantly, the embrace you gave me so many times when I wanted to quit. I am so proud to be with you. Your smile, energy, and love will be marked in my heart forever. Something sweet, olive juice, I love you.

Dedication

This project was a dream collaboration. **To my partner Julie Mogul**, I am grateful to you for so many reasons, but most especially for the generosity of your friendship. Amidst uncertainty, doubt, or whatever complexity we may have encountered, I knew that in you I had a trusted and capable friend and colleague, and that together we could brave a strong storm. And this is only the beginning. Thank you.

To my lovely wife Ana, darling…what I could possibly say to you besides "thank you"? You're so special to me I struggle to find the words. But suffice to say, thank you for being the best wife a man could ever ask for. And being your husband is a proper pleasure.

I want to profoundly thank my **mom (Dianne), brothers (Justin, Brandon, and Addison), and sisters (Courtney and Ivana)** for their steadfast support. Without you, none of this would be possible. I am incredibly fortunate to call you family, and I cherish our time together. **To Madison and Brandon Jr.**, a time will come when we will talk about all of this, but I want you to know you are thought of (my dear niece and nephew) even at this moment.

To Dr. Campbell, Julie and I were eager to work with you, and if we had to do it over again…our excitement would only increase. Much obliged Sir.

To my friends, you know who you are…and I salute you.

And lastly, to Howard March, Nicholas Rapavi, Stephen Johnson, Bradford Payne, John Hale, Brent Muehle, Trevor Yurista, Almar Fitzgerald, Travis Manion, and Jack…we did it brothers. Thank you for your service. Sleep well. **Semper Fi.**

Executive Summary

Problem of Practice

For our capstone project, we are partnering with Imagine Unlimited in Grapevine Texas which is part of the Scientific and Technical Services Construction Industry. Imagine Unlimited, LLC ensures timely completion of medical construction projects with minimal disruption to the staff and servicing of patients, making it a "stand-out" in the industry. One of the key challenges in this organization is balancing expansion without disruption. Lack of internal communication processes in the organization is what the leadership of this company describes as an ongoing issue.

Imagine Unlimited's goal was to minimize the possibility of errors or disruptions in quality that may occur because of ineffective internal processes and navigational acumen in new and emerging markets, regional or otherwise. The problem/area of inquiry led to examining the existing internal communication at Imagine Unlimited. At the time of the study, the company was experiencing issues with their internal communication, which impacted their productivity and ability to deliver timely services to customers.

Additionally, poor internal communication had been harming the growth of the company. As a result of the poor internal communication, the company was unable to accept all of the requests for services they were offered.
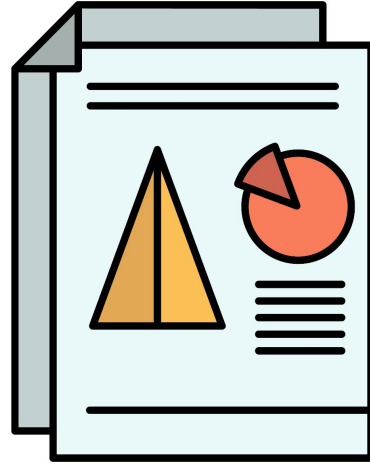
Project Questions & Findings

Project Question 1:

How do education and industry experience impact communication on the part of the leadership team?

Finding 1:

Education and industry experience informed their philosophy of action and models of excellence (i.e. exemplars). This dynamic in turn impacted goal setting, company culture, and leadership values which were lacking as low ranking employees were left out of decision-making and organizational updates.

Finding 2:

The tone and volume of an employee's voice can emphasize a particular concept to team members. Education and industry experience also informs style and the use of analogies when articulating thoughts, as well as frames the leader's operational tendencies. The leadership team spoke in harsher tones, kept meetings short, and did not offer opportunities for a Q&A for employees who did not understand key decisions/outcomes of the meetings.

Finding 3:

Our interviews revealed the absence of onboarding for newly assumed positions when internal staff transferred them into new departments and units. Lacking a process for onboarding created a culture of imposter syndrome.

Project Question 2:

In what ways do employees communicate within and across teams during crisis management in multi-tier organizations?

Finding 1:

The data shows that Imagine Unlimited has a process for general communication but there needs to be a specific process for internal communication set up for crisis management situations.

Finding 2:

At Imagine Unlimited, leadership style is a factor that impacts all aspects of communication, particularly during a time of crisis. It is clear from our interviews that employees desired a more direct and communicative role from their leadership team during crisis management.

Project Question 3:

How does systemic complexity impact communication between, among, and across teams?

Finding 1:

At Imagine Unlimited, the organizational chart is not accessible to employees and is not updated to reflect organizational structural changes. Personnel could not consistently or fluidly explain how departments were connected or describe protocols for interacting with an adjacent team.

Finding 2:

At Imagine Unlimited, employees feel isolated within their own departments and need help seeing the organizational system as a whole. The lack of cohesion and overarching organizational culture causes the organization to feel more cohesive.

Recommendations

1. Establish clear communication lines by identifying key stakeholders and determining the most effective ways to reach them.
2. Utilizing a communication platform to create a centralized information hub that can serve as a systemized method for communication.
3. Develop a bid management system to develop a communication plan for each project bid.
4. Conduct employee training programs to improve employees' leadership and communication skills.
5. Implement a performance review protocol within the organization which will encourage a two-way communication feedback.

Introduction
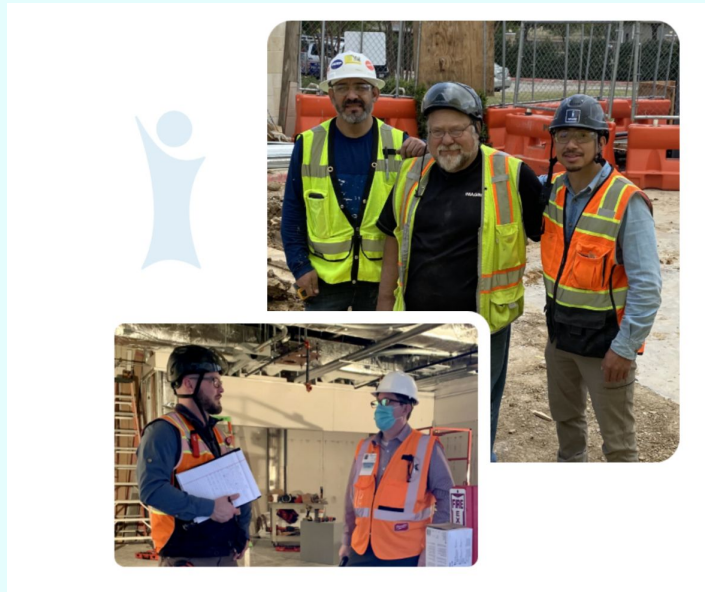
Imagine Unlimited is a company located in Grapevine, Texas, and was started by John Esskandanian. The company has been part of the scientific and technical services construction industry since 2011. This industry comprises establishments that serve professional, scientific, and technical activities for construction businesses. These activities require a high degree of expertise and training. The establishments in this sector specialize in providing affordable medical construction services (i.e., emergency room construction) and provide these services to various medical industries. Imagine Unlimited ensures the timely completion of medical construction projects with minimal disruption to the staff and servicing of patients, making it a stand-out organization in the industry.

One of the key challenges in the medical construction field is balancing expansion with disruption. Imagine Unlimited's solutions-based approach to every project has earned them a reputation for providing technical expertise due to timely delivery and using state-of-the-art machinery to create architectural designs for medical facilities. The company has 20 full-time staff members and 150 contractors, serves the Dallas-Fort Worth area and is expanding into new regional territories (i.e., Temple, Houston, San Angelo, and El Paso). Imagine Unlimited has a flat organizational structure, meaning the organizational model has relatively few or no levels of middle management between executives and frontline employees. It is a small-sized business that successfully competes for bids with the state's largest construction companies.

MEDICAL GRADE SOLUTIONS
IMAGINE UNLIMITED, LLC

Area of Inquiry

In the medical construction industry, there must be clear, internal communication about various issues such as local laws, bidding processes, competitors, freelance and contractor opportunities, client demographics, insurance and company - related issues, due to divergent regional dynamics, and associated fees for work conducted. The consequences of poor internal communication would be catastrophic to the company's growth, development, and profitability if the company cannot effectively enter into new markets. The Imagine Unlimited leadership team was excited about their prospects and believed they could successfully navigate through this growth phase with proper planning.

Comfort and familiarity with the current operational terrain has been the status quo at Imagine Unlimited; however, as with any company, their growth has resulted in some challenges with productivity and communication. Texas is a geographically expansive state where the geography, bid estimates, local construction laws, permits, and regulations change, necessitating restructure to ensure successful growth. The current structure of this company has been incapable of dealing with its organizational complexity due to the flat organizational structure, which has also resulted in poor internal communication.

Imagine Unlimited has been facing the problem of growth without having a system setup to help scale as the company grows. The organization has been expanding into four new regional markets and adding a new product line. As a result, the pace of growth has been causing organizational disjointedness and has created productivity and quality issues. The leadership team believes that Imagine Unlimited's culture has been pressure-tested through managing multiple projects. Employees at Imagine Unlimited may not robustly understand the organization's protocols and systemic complexities which could affect communication leading to financial loss. For example, bids come in and do not get processed quickly with the sales, legal, and operations department.

Shortly after we conducted this study, Imagine Unlimited hired a director of operations with a goal to bring in expertise to help develop internal operations for sustainable growth. The director of operations is also responsible for directing actions across the organization and directing managers to improve efficiency and reduce costs as needed. The goal(s) for this company is to work with the director of operations to improve its internal

and external communication (i.e., dispersion of information in a timely and collective manner) to support the company's growth but not detract from market success in other places.

The leadership team members at Imagine Unlimited are aware of their challenges with internal communication. The director of operations has been in their current position since 2020 and has raised a red flag about the issue of communication, effectively halting the organization's growth strategy due to concerns about the quality of the process. For example, the director of operations during an interview said that an internal conversation with leaders from different functions (e.g., structural steel, concrete, electrical services) revealed team members thought it was difficult to collaborate on projects in separate regions. There may have been assumptions among the leadership team that existing internal communication issues are an inherent part of the company's growth. However, although expansion can be complex, it does not have to be complex if the complexity of the work is thoughtfully managed, properly acknowledged, and accounted for correctly.

Problem of Practice

The stakeholders for the project were both internal and external to Imagine Unlimited. The internal stakeholders were the Steel Structural Support Team, who were in charge of executing the construction of the medical facility; the director of operations; and a business strategist, who was in charge of developing and implementing client strategy. External stakeholders were former, current, and future clients, including Methodist Dallas Medical Center, Kindred Hospital Tarrant County, and Memorial Hermann Southwest Hospital. The problem/area of inquiry led us as researchers to examine the existing internal communication at Imagine Unlimited. At the time of the study, the company was experiencing issues with their internal communication, which was impacting their productivity and ability to deliver timely services to customers. Additionally, poor internal communication had been harming the growth of the company.

As a result of the poor internal communication, the company was unable to accept all of the requests for services they were offered. With better internal communication and organizational restructuring, the company may be able to accept more of the requests for services they are offered.

Imagine Unlimited's goal was to minimize the possibility of errors or disruptions in quality that may occur because of ineffective internal processes and navigational acumen in new and emerging markets, regional or otherwise. This goal was important because long-term success and business survival will depend not only on growth, but also on reliable internal communication. The company recognized some of the issues they have had due to their growth and were open to the possibility of restructuring the organizational structure if shown that would improve scalability.

Purpose of Capstone

This capstone examines internal communication and organizational structure in Imagine Unlimited. More specifically, this project examined the company's ability to identify and assign resources and personnel to projects in real-time. At the time of this study, each employee was working on specific projects in the organization. However, when employees need to contact someone in another department, they have been unable to identify whom they should be contacting. This communication barrier has led to confusion for many employees. Although a communication system was already in place, it was not helpful to employees because it was not regularly updated. The existing communication system required manual entry, necessitating an individual or team of individuals go into the software and manually update the tracking system to reflect real-time dynamics for optimal accuracy, which was difficult for employees to do.

The purpose of this capstone was to further investigate the internal communication and productivity issues across departments at Imagine Unlimited to provide them recommendations that may bridge gaps in communication and productivity. As researchers, we aimed to approach the capstone project by identifying the problem and using quantitative methods (i.e., employee surveys), qualitative methods (e.g., interviews), and a literature review to inform stakeholders of the strengths and weaknesses of internal communication at the company. This capstone aimed to understand the company's internal communication and provide recommendations that the company could utilize to make improvements.

Literature Review

The following section includes concepts and their corresponding definitions, including their connection to the literature review and theory

Systemic Complexity

According to Herbert (2006), system complexity consists of "a large number of mutually interacting and interwoven elements, parts or agents defined by the structure of the system, the types of interactions between system elements, and the dynamics and patterns of the system that emerge from these interactions" (p. 24).

We used both cognitive and emotional intelligence with systems to understand complexities in internal communication. Systemic complexities do not only happen in technical systems (i.e., software), but also in soft-skill systems such as interpersonal/interdepartmental communication. This communication is influenced by organizational structures, which influence culture. By focusing on information and intricacies from a human-science point of view, the researchers aimed to uncover how communication failures can lead to systemic complexities.
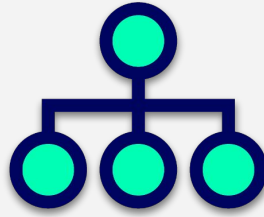
# Organizational Chart in Organizations

An organizational chart is defined as a diagram that visually conveys a company's internal structure by detailing the roles, responsibilities, and relationships between individuals in an entity. Given the focus on communication and its impact on performance, the organizational chart tied into the capstone concepts given that it illuminated Imagine Unlimited's understanding and organization of itself, and helped to partially explain its outcomes.

Drawing from the principles of improvement science, which state that every organization is set up to render the results that it does, the researchers leveraged the organizational chart as a means to unpack what was happening at the systems level.


Imagine Unlimited, LLC
Organization
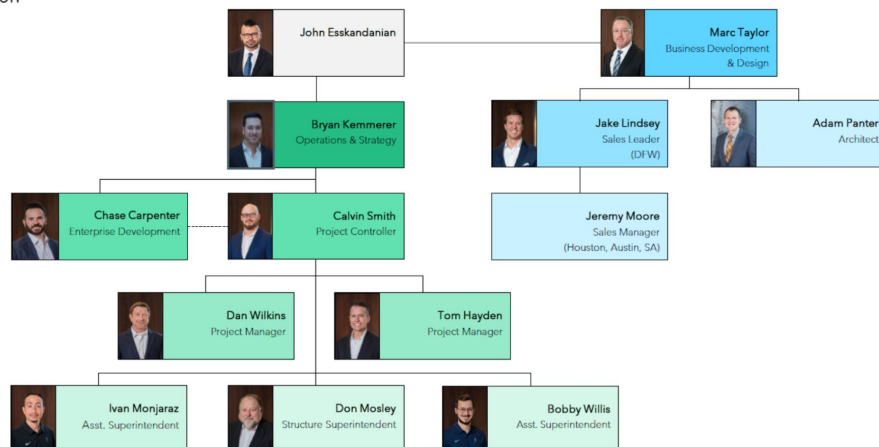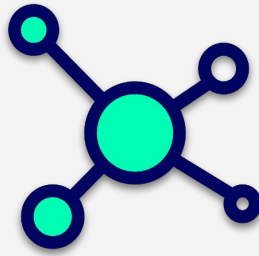
Communication During Crisis Management

Interrelationship theory involves the way goals are structured in determining how individuals interact, which creates outcomes (Johnson, 2003). Crisis management includes strategies designed to help organizations deal with sudden and significant negative events. An example of a crisis would be customers calling to let a company know a product is not working in their systems.

The sudden reaction to quickly solve this problem would be to align the account representative, legal and finance representation, and the president or chief operating officer to come up with a rapid solution.

Unfortunately, with a lack of information about who the account representative is and which legal team person represents the account, such a process can take hours to locate and triage at Imagine Unlimited.
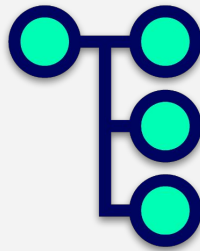
Communication and Productivity

Productivity is defined as employees or teams meeting their goals and fulfilling their responsibilities in an organization (Bryk, 2017).

The six core principles of improvement science (Bryk et al., 2015) provide insights into improving productivity. Improvement science deploys rapid tests of change to guide the development, revision, and continued fine-tuning of new tools, processes, work roles, and relationships, which stipulate:

- (a) making the work problem-specific and user-centered
- (b) variation in performance as the core problem to address
- (c) seeing the system that produces the current outcomes
- (d) not improving at scale what cannot be measured
- (e) anchoring practice improvement in disciplined inquiry
- (f) accelerating improvements through network communities

Although all of the Improvement science principles were relevant to this study, (b) was the most relevant to Imagine Unlimited. The director of operations indicated that communication has been an issue within the company. Perhaps, addressing communication as the lead focus for core problems of the organization which in this case would be setting up processes for successful performance.
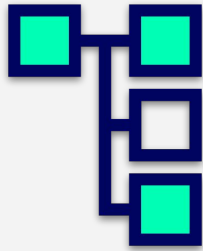
Communication and Organizational Culture

At Imagine Unlimited, there is an interesting relationship between patterns, organizational cultural paradigms, and how that might inform communication within the organization's culture.

According to Lave and Wenger (2011), community of practice (CoP) is a group that shares a common interest and desire to learn from and contribute to organization with their variety of experiences.

Imagine Unlimited has not developed a way to examine the learning that is happening within their teams to create a social environment that fosters growth. According to Probst and Borzillo (2008), a strong CoP is considered to be a vital part of organizations' success.

Therefore, it is important to understand Imagine Unlimited's organizational culture and how it relates to current communication practices among employees.

Conceptual Framework and
Project Questions

Project Question 1:

How does background education and industry experience impact communication on the part of the leadership team?

Imagine Unlimited consists of employees working in different departments and specializations. Often, it is important for employees to communicate both in and across departments.

Employee backgrounds could impact how they are able to communicate. For instance, someone with 10+ years of work experience where they were required to communicate to teams outside of their specialization may be better able to communicate the technical aspects of their job to others.

Therefore, the researchers were interested in examining how previous education and industry experience impacted the effectiveness of employee communication. Learning more about employees was helpful in providing additional insights for how the company could improve communication.

Project Question 2:

In what ways do employees communicate within and across teams during crisis management in multi-tier organizations?

During regular communication, employees in Imagine Unlimited have used one-on-one meetings, group meetings, emails, and an internal chat to interface business needs. Goals collaborated via a SharePoint site, and cell phones were used in lieu of landlines.

Most of the company's employees were mobile and offsite; thus, having chat and email on their phone was critical. There were no organizational charts at the time of the study that could give employees insights into what other employees were working on. Therefore, the researchers sought to understand how employees navigated communicating with other employees during crisis management situations.

During crisis management, the company has sometimes been immobilized because employees do not know whom they should contact during a crisis.

Project Question 3:

How does systemic complexity impact communication between, among, and across teams?

Imagine Unlimited has been experiencing issues with their internal communication, which has impacted their productivity and ability to deliver timely services to customers.

Due to poor internal communication, the growth of the company was in jeopardy. These project questions helped uncover weaknesses in the company.

With better internal communication and organizational restructuring, the company may be able to accept more of the requests for services they are offered.

Methods

Methods
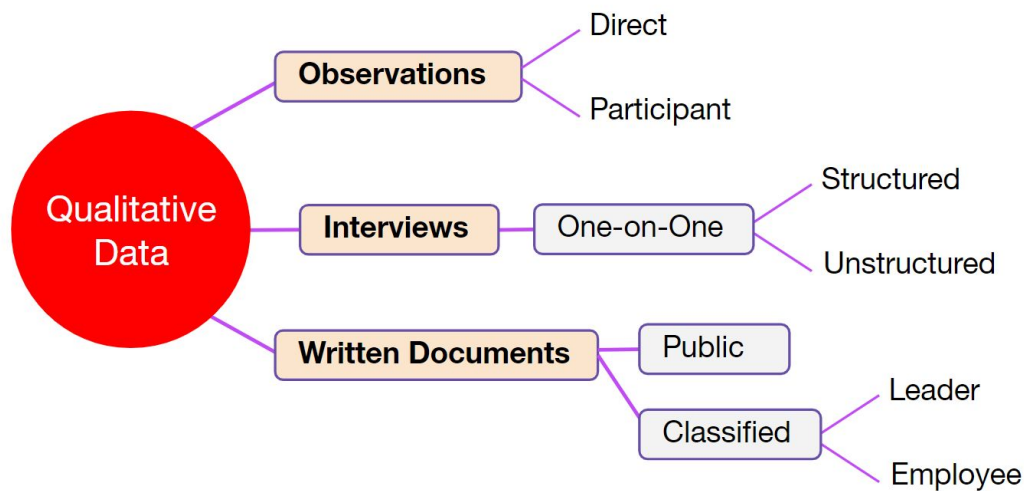
For the current study the researchers choose to focus on collecting qualitative data because it addresses the "how" and "why" of the research questions and affords a more profound understanding of experiences and context. Originally, the researchers planned to have employees complete an online survey to collect quantitative data; however, there were several key factors that made qualitative data necessary and optimal as a single data collection strategy. Choosing to only focus on qualitative data still enabled us to answer the original research question.

The company had only a small team of full-time employees. They were heavily reliant on contractors and subcontractors who were assigned by third-party companies. Thus, personnel were inherited by market conditions (e.g., availability of skilled welders). Procuring the input of subcontractors, if we had access to them, would have generated a larger and more robust sample size of quantitative data. However, given we only had access to a limited number of Imagine Unlimited employees, using qualitative data enabled us to examine trends and meanings of natural action to gain deeper insight we would not have been able to capture with quantitative data.

Data collection occurred in Dallas, Texas on December 4–6, 2022. The researchers interviewed seven employees, conducted two site construction visits, and observed one meeting. Imagine unlimited's Director of Operation, Bryan Kemmerer, set up all the meetings for us and gave us a confirmed schedule VIA email (Appendix B). Participants were recruited from Imagine Unlimited. Participants were told their participation was voluntary and they would not receive any compensation for participating. If they decided to participate in this study, their responses did not have any impact on their employment.

We created a list of questions we asked participants prior to meeting with participants for the interview. We individually interviewed seven employees with varying levels of responsibility across the company. During the interviews, we used the iRecord application to record all the interviews, which also helped to transcribe the interviews. We gained participants' permission prior to recording, and also provided them with assurance of confidentiality. Each interview was 30 minutes long. After the visit, both researchers read through the transcripts and listened to the recordings to make sure the transcripts were accurate and to make any edits to the transcripts when necessary.

The site visits took about 1 hour per construction site, and the daily call meeting observation was about 15 minutes long. During the two site visits, an initial orientation of the work site was provided by the assistant superintendent of the project. This orientation preceded our entry into construction areas, affording us a more coherent perspective and experience upon entry. The first site visit was a surgery room. Once inside the construction site, we were shown a three-dimensional rendering of the uncomplete surgery room, and access to the physical construction site where we could track the site's progress to date. The same protocol was true of our second site visit, which was a medical emergency room for an intensive care unit.

Once inside the construction site, the superintendent—who oversaw both project management and the relationship with the hospital—arrived to give us a more thorough overview and examination of the remaining work to drive toward completion, who will conduct it, and special considerations for completion. Throughout the site visit, we used our phones as our note-taking and recording instrument and leveraged the experience of on-site construction team members and hospital personnel as a means to catalog data and make sense of what we saw.

Data Analysis Plan
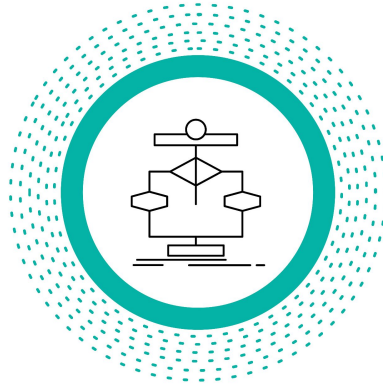
Based on the literature, the researchers identified five key themes:
- (a) System Complexity
- (b) Organizational Charts in Organizations
- (c) Communication During Crisis Management
- (d) Communication and Productivity
- (e) Communication and Organizational Culture

We made sure to include questions related to each of these themes in our interview guide. To analyze the data, we planned on also using inductive coding to be developed based on the data we collected. We opted to use a combination of inductive coding and deductive coding because of the benefits of a blended approach in allowing for flexibility with analysis, leading to meaningful insights (Xu & Zammit, 2020).

Blending of an inductive and deductive technique enabled us to discover emerging themes via a bottom-up strategy that could have been lost if only a strict deductive technique had been applied. We wanted to be sure we were considering the employees' experiences, and using inductive reasoning allowed us to observe patterns that emerged in real time. To organize these themes and patterns, we analyzed interviews, site visits, and meeting observations and structured them into themes and patterns for analysis.

The researchers did not deviate from our original plan except to not collect quantitative data. We drew from the work of Ravitch and Carl's (2021) study, which informed us that qualitative research gives a deeper understanding of experiences, phenomena, and context. From this approach, we were immediately reminded that qualitative research is not a linear process; rather, it begins with an interest, problem, or question. By sticking to our original research questions while remaining—to the best of our human ability—suspicious of what we thought we were certain of, we made our original plan more robust, efficient, and targeted in principle and practice.

One challenge related to the data was the role trust played in the information shared. Given that the researchers spent a short amount of time with the participants, we did not get to establish rapport with interviewees prior to interviewing them. We attempted our best to build rapport by assuring our interviewees that anything they said during the interview would remain confidential. Additionally, the chief executive officer set us up for success by informing the team they could trust us, assuring them that whatever was shared was meaningful, necessary, and imperative for the company's future growth. Although trust was an issue, we believed we were able to build a certain level of trust that enabled candid sharing.

There was also a **challenge of the unknown condition** of how people showed up to work on that particular day (e.g., if they were optimistic, in a bad mood). All things considered, we do not believe we faced challenges that impacted the validity of findings, mostly due to the trust we were able to build with the chief executive officer and chief operating officer in advance of meeting with their team. We had a very high level of leadership and organizational buy-in, and assurances to employees from leadership that their voices and whatever they shared were of value and worth sharing.

There were **challenges related to the analysis** that could have impacted the validity of the findings. One challenge was selection bias because the director of operation was picked to be interviewed in such a way that it was not proper randomization. Another challenge was that we considered how our positionality may have impacted how we perceived the data as researchers. Ravitch and Carl's (2021) interpretation of how researchers interpret themselves and participants, gives insights into how researchers could feel to be polarized, such as having *"insider and outsider positionalities"'* (p. 53). Our connection to this study was tied to a real-life situation giving us "insider positionalities" as we were facing issues with coworkers who were unable to work efficiently due to issues with communication across different departments. Alongside this we also have outsider positionality because we do not have experience working at Imagine Unlimited and only have secondhand information that we gained through interviews and observations which were done in a short time.

Findings

Project Question 1:

How do education and industry experience impact communication on the part of the leadership team?

Background education and industry experience impact communication on the part of the leadership team in the following ways:

#1:

It informs style, volume, tone, and the use of analogies when articulating thoughts, as well as frames their operational tendencies. Example: Bryan (COO) is a former oil and gas professional. When in conversation about Imagine Unlimited and its conduct of operations, he often references his affinity and use of operational protocols and checklists adapted or taken directly from his time as an oil and gas professional. Similarly, John (CEO) is a former medical sales rep who built the company sales strategy based on KPIs (Key Performance Indicators) he adapted or took from his medical sales role.

Education and industry experience inform what type of exemplars, models of excellence to emulate people's values and practices. The exemplars will impact goal setting, company culture, and leadership values.

#2:

Previous onboarding experiences on the part of the leadership team influence their perception, understanding, and practical application of onboarding for Imagine Unlimited. Onboarding is viewed as a worthy endeavor for new hires and an important practice for lateral or cross-corporation changes. Our interviews revealed no onboarding for new roles when internal staff transferred into new departments and units, particularly at the leadership level. Lacking a process for onboarding created a culture of imposter syndrome, exacerbating the "fake it until you make it" culture in each department. Imagine Unlimited staff indicated that the inconsistency and absence of job onboarding were what correlated most associated with "imposter syndrome" that stifles effective and efficient org-wide communication.

Project Question 2:

In what ways do employees communicate within and across teams during crisis management in multi-tier organizations?

Imagine Unlimited deals with many crisis management situations. For example, a crisis management situation occurred during a site visit to a hospital construction site visit. Imagine Unlimited employees did not follow sanitary protocols when doing a construction project at a hospital. This situation is considered a crisis because it directly affects the hospital protocol of cleanliness since patients are nearby the construction site.

Unsanitary hospital areas can harbor germs that can cause serious infections, especially for elderly patients, those with weakened immune systems, and those who have undergone surgery. When the hospital leadership team contacted Imagine Unlimited with this problem, employees at Imagine Unlimited were still determining whom they should contact to help resolve this issue. The lack of direction indicates that Imagine Unlimited has internal communication issues when dealing with crisis management.

#1:

The data shows that Imagine Unlimited has a process for internal communication. However, there needs to be a process for internal communication set up for crisis management situations. During non-crisis management situations, employees communicate primarily within their teams, usually speaking first with the person they trust most and scaffolding from there. For urgent matters, as in the case of crisis management, employees go up their chain of command in most instances. It is significant to note that how employees say they communicate during crisis management and how general organizational communication is perceived are two very different narratives; no process and lack of communication.

Project Question 2:

For example, Dan Wilkins, a Project Manager and part of the Imagine Unlimited leadership team, explained that, at present, there needs to be a current consistent process for dealing with crisis management for any project. Yet another employee who is a subordinate, Bobby Willis, indicated that he did not receive any communication about how to deal with a crisis. When asked about a process for crisis management Bobby Willis stated, "if there was, it's not shared top-down but shared at the leadership level only." Additionally, most interviewees felt they did not know whom to contact in an emergency.

#2:

At Imagine Unlimited, leadership style is a factor that impacts all aspects of communication, particularly during a time of crisis. It is clear from our interviews that there is a leader and a leadership style that the organization's members value. The interviews revealed when direct reports did not understand something, leadership should step in and communicate to address the concern. Interview data indicate that interpersonal trust is the most significant factor when deciding what to communicate to a colleague, which means that employees were not calling the right person to triage the problem and manage meaningful relationships with the hospital leadership team, but instead contacting the person with whom they have the most trust, which could either be the person they work with daily (could be from another department) or their manager.

Project Question 3:

How does systemic complexity impact communication between, among, and across teams?

Systemic complexity impacts communication by disrupting universal awareness of a given issue or crisis. If used effectively and efficiently under conditions that have enabled the collective to both make and share meaning, communication can serve as a vehicle or transmitter of awareness. However, absent this awareness, systemic complexity creates deeper communicative silos on a departmental level (in the case of Imagine Unlimited) that can cause the organization to feel fractured.

From internal processes to external market-driven demands, staff at Imagine Unlimited encounter systems complexity in their work and are unable to demonstrate a view of the system and explain the protocols, processes, and procedures that detail how internal departments and external third-party affiliates collaborate at work sites during the conduct of essential job functions.

#1:

At Imagine Unlimited, the organizational chart is not accessible to employees and is not updated to reflect organizational structure changes. Interviewees could not consistently or fluidly explain how departments were connected or describe protocols for interacting with an adjacent team or third-party members on-site or in the planning process, making cohesion a wish instead of a plan. For example, during an interview, Chase Carpenter, Enterprise Solutions manager, said, *"I have seen the organization chart at a glance, but the document is not readily available for us to reference back to online or even a soft copy,"* and Jake Lindsey, Sales Director said, *"The document is not available to us to view, and when changes are made in the chart, we do not get an updated chart that shows us what the changes are and why they are made."*

Project Question 3:

Additionally, Tom Hayden, Project Manager, did not understand why constant changes were made to the organizational chart and not communicated down to the team, making it hard to know who to contact for various business needs.

#2:

At Imagine Unlimited, employees feel isolated within their own departments and need help seeing the organizational system as a whole. The lack of cohesion and overarching organizational culture causes the organization to feel more cohesive, resulting in better cross-departmental communication. The need for solid communication networks across departments is reducing the speed at which employees are able to do their job.

For example, it is customary for Imagine Unlimited to receive bids from customers. The bidding process is a method to select the most suitable service provider or supplier by comparing proposals.

Product owners, clients, or project teams sometimes need to outsource services or purchase goods to fulfill project deliverables and, most often, customize them. At Imagine Unlimited, and particularly when engaging in the competitive bidding process, employees need help quickly locating and contacting the proper personnel member for bid adjustments and other customizations that may be required while securing a bid.

Recommendations

For Imagine Unlimited, effective communication is crucial to coordinate response efforts and keep stakeholders informed of organizational dynamics (particularly during times of crisis). Recommendations for managing systemic complexity in communication during crisis management include:

#1

Establish clear communication lines by identifying key stakeholders and determining the most effective ways to reach them (e.g., email, phone, text); for example, making an organization chart available to all employees on a SharePoint site and having a meeting when there are changes in the structure. Nowak's (2020) study showed a positive effect of employee understanding on the organization's strategic objectives and goals. Employee understanding of the organization's systems can become instrumental in implementing the organization's strategic objectives.

#2

Utilizing a communication platform to create a centralized information hub that can serve as a systemized method for communication. The platform can provide regular updates and a point of contact for stakeholders, as well as serve as a central platform for continuous information flow for employees. Previous work has found that internal communication systems improve employee engagement (Neill et al., 2019). At Imagine Unlimited, employees often need clarification or are apprehensive about calling their direct manager instead of a trusted colleague. The lack of clarification causes massive delays in triaging a crisis management situation. When aligning clear communication with backing from leadership, Neill and colleagues (2019) state that it can foster a positive culture.

#3

Develop a bid management system to develop a communication plan for each project bid. The bid management system outlines the information employees need to analyze the bid and calculate the cost. According to Hinds & Bailey (2003), distributed teams experience high conflict levels, and technology can close the communication gap. It is beneficial as Imagine Unlimited Teams are spread across Texas in different cities.

#4

Cohrs and colleagues (2019) found that employee training programs improved employees' leadership and communication skills. The workshop could be divided into three sections: communication skills, leadership development, and Imagine Unlimited SOPs (Standard Operating Procedures). Training employees will ensure that everyone in the organization understands their roles/protocols/expectations.
foster a positive culture.

#5

Implement a Performance review protocol within the organization which will encourage a two-way communication feedback loop that aims to generate trust through cohesion and shared vulnerability, an opportunity for deeper understanding between and among stakeholders through relational development. A performance review protocol can improve employee response through more robust communication and positive culture. Olanrewaju and colleagues (2017) surveyed employees and found that 90% of their respondents indicated that they wanted their company to have a feedback system between employees and the leadership team because they felt it would improve communication within the organization.
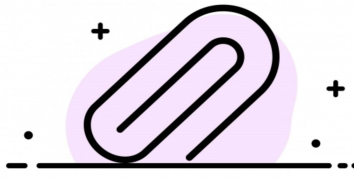
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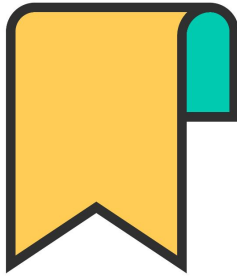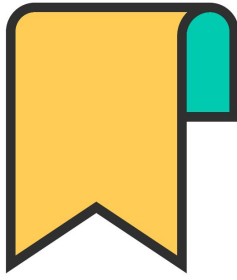
Appendix

Appendix A

People Interviewed:

- John Esskandanian (CEO)
- Bryan Kemmerer, Director of Operations
- Jake Lindsey, Sales Director
- Bobby Willis (Asst. Super)
- Chase Carpenter (Enterprise Solutions)
- Dan Wilkins (Project Manager)
- Tom Hayden (Project Manager)
- Calvin Smith (Project Coordinator)

Site Visits:

Site Walk of Special Procedure Room Project (SPR)
Post Partem Nurse Station Project

Meeting Observation:

Daily team meeting for 20 minutes

Appendix A

Project question	Interview question(s)	Thematic code
• This study investigates how organizational charts could be an insufficient means of communication during crisis management in multitier organizations by analyzing communication channels between, among, and across teams to understand how (or if) organization structure/systemic complexity impacts communication.	1.) Does your job title and position location on the organizational chart accurately reflect the conduct of your work and who you interface with? 2.) How familiar are you with the organizational chart? 3.) Can you describe what your organization does across all departments?	5 2 1
• How do employees communicate between, among, and across teams during crisis management in multitier organizations?	1.) When a crisis occurs, do you know who to contact first? 2.) When you typically experience a crisis, is it resolved in time?	3 3
• How does systemic complexity impact communication between, among, and across teams?	1.) What medium of communication (i.e., email, phone, zoom, face-to-face) do you most frequently use to contact your supervisor/colleague/client? 2.) On a scale of 1–10, with 10 being the optimal levels of communication, how would you rate communication in your organization/department? 3.) When you are performing your work duties, are you typically aware of the tasks being simultaneously conducted by other team members in your department/across departments?	4 4 4
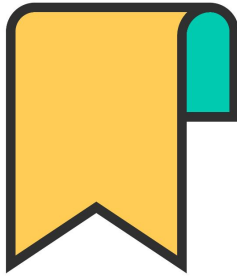
Email With Director of Operations Outlining Schedule For Visit

Imagine / LMX – Dec 6, 2022 Schedule   Inbox ×

Bryan Kemmerer <bryankemmerer@igoimagine.com>   Mon, Dec 5, 2022, 2:39 PM
to Cameron, me, Calvin, John

Cam, Julie,

It was fantastic to meet with you today and get our foundational bases covered (insert baseball analogy here) to ensure both of you get the necessary information from the Imagine Team to execute on your LMX deliverables. I've put together this wireframe schedule I believe will work well tomorrow to accomplish the goals we talked about today:

8:30 – 9:00: Phone Interview with Jake Lindsey (Sales Leader based in DFW, will send meeting notice with contact information, etc).

9:15 – 10:00: Bryan will pick up Cam & Julie for drive to Medical City Frisco or Cam & Julie can drive separately to allow for easy egress to DFW and San Antonio after the workday is complete.

10:00 – 10:30: Site Walk of Special Procedure Room Project (SPR) as well as Post Partem Nurse Station Project

10:30 – 11:30: Interviews with Bobby Willis (Asst. Super) & Chase Carpenter (Enterprise Solutions)

11:30 – 13:00: Lunch & Drive to Medical City Plano

13:00 – 14:00: Interviews with Dan Wilkins (PM) & Tom Hayden (PM)

14:00 – 14:30: Imagine Daily Update Call

14:30 – 15:15: Site Walk of Women's Refresh Project & Calvin Smith (PC) Interview

15:15 – 17:30: John Esskandanian Interview, flesh out remaining questions and discussions at Plano War Room, and/or head toward Happy Hour near airport for easy Julie drop-off for flight & John/Bryan leadership conversation about next steps.
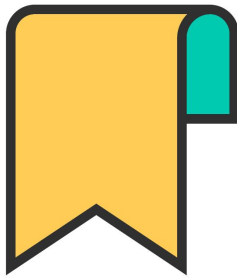
I've copied Calvin and John on this email as they will be supporting me throughout the day to help ensure you guys get the time and support you need. Please let me know if this looks good to you or if you have any questions or concerns.

Cheers,

Bryan Kemmerer
Operations & Strategy, Imagine Unlimited, LLC

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Appendix C

Organizational Chart