

## ABSTRACT

NANDURKAR, BHOOPALI KESHAV. Communication and Information Technology Uses in an Indian Software Development Setting (Under the direction of Dr. William. J. Kinsella).

The existing studies about the uses of Information and Communication Technologies (ICTs) in organizations are largely focused on efficiency, productivity, managerial decision-making, and causal relationships between variables. Additionally, most studies based on the Indian corporate scenario are quantitative analyses, with limited attention to ethnographic studies. This research contributes to the conversation pioneered by Gideon Kunda in his 1992 ethnographic study of a high-tech corporation. Using a critical/interpretive approach inspired by Kunda, this study adds a unique dimension by investigating the underlying meanings, values, practices, rituals, attitudes, and narratives surrounding communication technologies and how they contribute to power dynamics and employee relationships in an Indian software organization, CapiTech (a pseudonym used to help provide confidentiality). This study employed a qualitative methodology. Twenty-four semi-structured interviews were conducted in three languages: English, Hindi, and Marathi. Additionally, 200 hours of participant-observations were conducted to study the day-to-day activities at the organization. An open coding approach was applied to the data, followed by further analysis using established theoretical frameworks. Concepts including organizational discipline, institutionalization, control, identity regulation, power, sensemaking, and structuration were used to examine organizational processes mediated by communication technologies. Five technologies were identified as primary communication channels in this organization: handwritten notebooks, email, Jira (a project-tracking tool), conference calls, and instant messenger. The first round of analysis revealed practices and motivations surrounding the uses of a seemingly antiquated communication tool, handwritten notebooks. These company-issued notebooks are valued as intellectual property of the firm and

are extensively used for notetaking, recording agendas, instructions, and conversations, and for maintaining evidence. Preliminary analysis showed how the notebooks served as instruments for inducing organizational discipline and order. The notebooks also had ritual value in promoting shared understanding of membership. Further research examined how technologies such as email, instant messengers, and Jira functioned as mechanisms for disciplinary control and surveillance in the workplace. Concepts of structuration were employed to investigate relationships between technology and organizational structures.

*Keywords:* organizational communication, communication technology, ethnography, critical/interpretive, Indian software company

© Copyright 2019 by Bhoopali Keshav Nandurkar

All Rights Reserved

Communication and Information Technology Uses in an Indian Software Development Setting

by  
Bhoopali Keshav Nandurkar

A thesis submitted to the Graduate Faculty of  
North Carolina State University  
in partial fulfillment of the  
requirements for the degree of  
Master of Science

Communication

Raleigh, North Carolina  
2019

APPROVED BY:

---

Dr. Stephen B. Crofts Wiley

---

Dr. Nicholas Taylor

---

Dr. William. J. Kinsella  
Committee Chair

## **DEDICATION**

I dedicate this work to my parents, Dr. Keshav Nandurkar and Mrs. Archana Nandurkar and to all my teachers from kindergarten, school, college, university. Your support and encouragement throughout my academic life has been pivotal in helping me achieve this goal.

## BIOGRAPHY

Bhoopali Nandurkar was born on 20<sup>th</sup> April 1995 in Walchandnagar, Maharashtra, India. She completed her schooling from St. Xavier's High School, Nashik, India. After completing two years of junior college, she received her Higher Secondary School certificate in the field of Science. Bhoopali joined Pandit Deendayal Petroleum University (PDPU), Gandhinagar, India in 2013 for her undergraduate studies. In 2014, Bhoopali received a fully-funded, one-year scholarship from the U.S. Department of State's Bureau of Educational and Cultural Affairs to visit the US for an exchange program in Arizona. There she studied mass communication at Scottsdale Community College. After returning to India, she completed her undergraduate studies at PDPU and received Bachelor of Arts (Hons.) in English Literature and Diploma in Liberal Arts. In Fall 2017, Bhoopali received admission to the master's program in the Department of Communication at North Carolina State University, Raleigh. Bhoopali also worked as an instructor in the Communication department and taught two sections of the first-year undergraduate public speaking course.

Her research interests include organizational communication, critical/interpretive approaches, and interpersonal communication. In her free time, Bhoopali enjoys watching soccer and supports the Spanish Club FC Barcelona.

## ACKNOWLEDGMENTS

I wish to express my sincere gratitude to Dr. William Kinsella, my advisor and committee chair for his consistent support. Dr. Kinsella, your mentorship and guidance at every stage has played a crucial role in helping me complete this project successfully. Thank you for believing in me and giving me the opportunity to conduct this research study. I wish to extend my gratitude to Dr. Wiley and Dr. Taylor for providing extensive feedback on this project. I will bear in mind the valuable advice you both have provided for future research projects. I want to thank the management and employees of CapiTech company for providing me the research space and agency to conduct this study. CapiTech organization being the focus of the present study, their assistance was crucial for facilitating the process. I want to thank the faculty and my cohort in the Communication Department at NC State. Thank you for fostering an environment conducive to learning and growth. You all have been very encouraging and supportive of my progress. Additionally, I wish to acknowledge the NC State Libraries. Without their collection of journal databases and other resources, this project would not have achieved an academic standard. I thank my aunt Mrs. Aparna Deshpande and uncle Mr. Nikhil Deshpande for lending a helping hand to this project by accommodating me into their day-to-day life during the data collection process. You've been cheering for me since the day I embarked upon this adventure, thank you! I wish to convey my deepest regards to my parents and family for inspiring me to achieve my goals. Aai (mom) and Baba (dad), your blessings are my strength. Finally, it is by God's grace that I have been able to achieve yet another milestone in my life.

## TABLE OF CONTENTS

<b>LIST OF FIGURES.....</b>	<b>vii</b>
<b>Chapter 1: Introduction .....</b>	<b>1</b>
The Study .....	5
Research Goals.....	5
The Setting .....	5
The Development Office.....	7
Division of the Thesis .....	11
<b>Chapter 2: Research Methods .....</b>	<b>13</b>
Participants.....	14
Data Collection .....	15
Interviews.....	15
Observations .....	18
Analysis.....	21
Categories .....	21
Codes.....	22
Grounded theory .....	23
Conceptualization and Interpretation .....	24
Standards of Rigor and Applicability .....	26
<b>Chapter 3: Theoretical Framework .....</b>	<b>28</b>
Critical-Interpretive Approach.....	28
Theoretical Foundations.....	32
Forms of Control.....	32
Normative Control .....	33
Disciplinary Control.....	35
Panopticism.....	36
Identity Regulation.....	37
Discursive Nature of Organizations.....	39
Institutional Logics and Institutional Messages.....	40
Structuration Theory .....	42
Sensemaking in Organizations.....	44
Technology and Structuration.....	46
<b>Chapter 4: The Significance of Paper Notebooks .....</b>	<b>48</b>
Affordances and Constraints of the Notebooks .....	50
Notebooks as an Institutionalized Tool.....	54
Notebooks as Instruments of Normative Control .....	62
Notebooks as Instruments of Disciplinary Control.....	69
Panoptic Effects of the Notebooks.....	75
Conclusion .....	80



<b>Chapter 5: Email and Related Electronic Technologies at CapiTech</b> .....	82
Email as a Form of discourse.....	85
Email as a Socialization Tool .....	90
Email as Mechanism of Organizational Control.....	94
Disciplinary Control.....	94
Identity Regulation .....	101
Surplus Value and Surplus Labor .....	107
Conclusion .....	113
<b>Chapter 6: The Duality of Technology: Organizational Structuration at CapiTech</b> .....	115
Principles of Structuration .....	115
Structuration and Technology.....	117
Influence I: Technology is the Product of Human Action .....	120
Influence II: Technology is the Medium of Human Action.....	124
Influence III: Conditions of Technology Interactions .....	130
Influence IV: Consequences of Information Technology Interaction.....	133
Conclusion .....	138
<b>Chapter 7: Discussion and Conclusion</b> .....	140
Review of the Chapters.....	140
Connecting the Chapters .....	144
Implications.....	147
Reflections and Suggestions for Future Research .....	148
<b>References</b> .....	151
<b>APPENDIX</b> .....	162
Appendix A: Recruitment Message.....	163

**LIST OF FIGURES**

Figure 1. Structuration Model of Technology ..... 119

## **Chapter 1: My Ethnographic Adventures at CapiTech**

### **Introduction**

Welcome, reader! Thank you for joining me on this academic adventure. This venture is an attempt to provide an in-depth and detailed sketch of cultural practices at a software company headquartered in India. The study focusses an ethnographic microscope to examine day-to-day life and practices at CapiTech company (a pseudonym to provide confidentiality) to understand, translate, and conceptually explain how the organizational culture unfolds and creates a “map of meanings” for the people in the company (Atkinson, 2016, p. 49-50). To illustrate some of the concepts to be considered, the following observations are drawn from my fieldnotes at CapiTech company (throughout this study, fieldnote and interview excerpts are designated only as “Fieldnotes” and “Interview” to help preserve the anonymity of organizational members):

Every morning around 9 am, the lobby of a large commercial building in a metropolitan Indian city turns into a buzzing hub of activity. Employees of various companies impatiently wait for the elevator to take them to their respective office floors. The sixth floor of the building houses the main offices of CapiTech company. For the past six weeks, I have been a witness to the hustle and bustle at the software company. Like everyone else, first thing, I head straight to the facial recognition clock-in system to record my in-time. The clock hits 9:15 am, and the office space is infused with highly strung energy as employees prep for the day. Before hitting the workstations, we all head to the terrace to enjoy a hot breakfast and tea, made better with lovely monsoon weather. The voice decibels are low during this time, as employees are “getting in the mode” to deal with pending work and the scheduled tasks. One shot of hot tea does the trick for everyone.

After breakfast, employees head to their respective offices; I return to my temporary desk set up in the large visitor's lounge. I find this lounge a perfect spot for observations, first because it smells of strong coffee. There's an espresso machine installed that has become a beloved feature amongst the employees. Every 15 minutes someone walks in to get coffee. It's been three weeks since it has been installed and the way this lounge is being utilized now versus when I had started my observations is entirely different. I feel like it has given the employees an excuse to roam around and have coffee just because the machine exists. I see some employees coming in more than two or three times to get coffee; they simply sit around on the sofa, chat for 15-20 minutes and then leave. Sometimes employees gossip about their team members or complain about each other and the bucket load of work they have been assigned.

Every day after breakfast, three members of the management team come together in the lounge. I notice that they write notes and record tasks of the day in their respective notebooks. First, they all silently write down their own agenda and then discuss. Then they take a picture of their notes and send it to someone (I am guessing their boss). Sometimes I see them engrossed in a call and writing notes at the same time. In this case, they might be getting instructions from some other senior person located in another foreign office or even a client. In fact, I see everyone in this company has a notebook with the company's logo (note: should investigate more about these notebooks!).

The following excerpt takes the reader back in time to the first week of my field observations at CapiTech. During the first week, I got a chance to visit the offices:

It's my second day at the company; it's around 11 am, and one of the managers says, "do you want to see our offices? I can show you around. We are renovating the

offices and so it's a bit 'watertight' around here. Everyone is sharing desks so it's somewhat crowded." Gladly accepting the offer, I find myself in a large, artificially lit but high-tech office. Overall, the employees there seem unperturbed, unlike the days when they are getting ready to deploy software, when the entire office is charged with chaotic energy. In this office, I can see a group of newcomers huddled in one corner. There's one screen and a group of ten people crammed together, some on tiptoes trying to get a better look at the software. One of the experienced employees is briefing the new recruits about the company's products, how to use the software, some essential features, and terminologies. In another corner, I can hear some music being played. Although it is not too loud, the entire office can hear it because the space is pretty small. No one seems to have any objection over the music...it's like this one guy has taken up the responsibility to be the undeclared DJ of this area. Simultaneously, some other employees are occupied on conference calls with people from other company branches and clients. Every room has a large television screen on which business, news, and sports channels are displayed. People around here are interacting with each other in a very informal/friendly way. There is not much decorum or reservation in the interactions. I see the employees working in a relaxed but steady manner.

With this, the tour ends, and I return to the lounge to transcribe all that I observed. The close-knit office spaces allow informal talk as the entire office is not one uniformly spread out area; it is broken down into multiple small offices. Each of the office areas has its own little "ecosystem." Most often the top management people are not around in the office areas for a prolonged period. Only the boss moves around and visits each of the offices at some point of the day, but that time is not fixed. So, for the most part, the office areas are like a playground where

employees can do whatever they want as long as they complete their work within the deadlines, much like “when the cat's away, the mice will play.” On another day at the office:

It's a Monday morning at the office, and the entire office space has been turned upside down. The new recruits who were in training for the past couple of weeks have now been integrated into the office space. As a result, almost everyone has experienced a shuffle in the sitting areas. The machines are relocated from one office to another, and many other employees have been assigned a new desk, and some have also been relocated to other floors. The entire office is in a state of restlessness as everyone is figuring out where they are supposed to sit. The newcomers seem pretty lost, like children at a fair and entirely out of place. The housekeeping staff is busy reinstalling and setting up the machines at their new desks. This change is evident because almost 50-60 new employees have been added to the workforce. Geez, I have changed my desk at least thrice in two hours this morning, I've been hopping around like a grasshopper!

It's been a week since these new recruits have joined; employees in this office space are gathered around to tell each other “PJs” as we Indians call “Poor Jokes,” which are very lame. Here is a PJ: “how do the Emirati babies cry? Answer: “uae...uae.” Even I burst out laughing at this silly joke. It's interesting to see how while working on their tasks they all are chatting and “laughing out loud.” Some of the seniors in this office are asking these lame joke/riddle questions to the new recruits, and everyone is sharing a good laugh. I like how this exercise is helping the process of bonding and involving the newcomers in the inside jokes and humor of the office space. The seniors are taking special efforts to talk to the juniors, explain to them the work and solve their queries and involve them in interesting talks [Fieldnotes].

These excerpts are extracted from the field notes I created during my ethnographic journey at CapiTech company. I set out on this journey with a goal in mind—to understand the peculiar and unexplored ways of life in one organization within the corporate landscape of India through immersive observations.

### **The Study**

Now that these observations have established a sense of the ethnographic setting, this section describes the goals of this research and provides detailed accounts of the site or field of study.

#### **Research Goals**

This research is conceptualized as an ethnographic study of rituals, norms, practices, meanings, attitudes, and beliefs surrounding the use of communication and information technologies in a software organization. The primary communication and information technologies utilized at CapiTech company are emails, WhatsApp (instant messenger application), Google Hangouts, Jira (a project tracking tool), conference calls, and WebEx (a screen sharing application). In addition, a company-issued paper notebook, a seemingly old-fashioned non-electronic tool, is an integral component of the organizing process at CapiTech company. Practices, roles, and norms surrounding these electronic and non-electronic tools were scrutinized using ethnographic methods that sought to uncover deep meanings, values, and beliefs associated with technology use at CapiTech company.

#### **The Setting**

The field of investigation was a mid-sized, software products firm based in India. This organization has multiple branches across six countries. Of these, two branches in India were chosen as primary sites for data collection. One was located in a large metropolitan city, while

the other was situated a relatively smaller city. Field observations and interviews were conducted at these two locations over seven weeks. The first week of observation took place in the small office that housed the software testing team, consisting of approximately 50 employees. The remaining six weeks were dedicated to the metro-city office which was the main development center, accommodating about 150-200 employees. Before commencing the fieldwork, I obtained approval from the Institutional Review Board (IRB) at my university. I met with the company's top management and a couple of project managers. The purpose of this meeting was to explicate the research process to the administration, negotiate the terms of access to organizational resources, and obtain mutual consensus regarding preserving the confidentiality of the firm and its employees. Rules were formulated and agreed upon to allow me to conduct interviews and act as an unobtrusive participant-observer in the organizational premises. The management and researcher agreed upon providing the participants with a verbal informed consent procedure before initiating the interviews, and this arrangement was approved by the IRB. I was assigned two project management interns as "buddies" to facilitate my integration into the organization. These buddies helped me navigate through the offices, directed me towards necessary resources and personnel, and provided a guided tour of the company. I was permitted to "hang out" full-time during standard office hours (9 am to 5 pm) to conduct observations and interviews.

Employees of this company describe the organizational structure as being somewhat "flat hierarchical." There are only a handful of executive or top management officials at CapiTech company. They directly interact with employees at all levels and also function as mentors. This structure has very few levels of middle management between the staff and top leadership. The culture of this organization promotes "on the go learning" and provides new employees with plenty of hands-on opportunities to learn the tricks of the trade. Additionally, communication



across the company is very fluid as there are no formal hierarchical barriers. Employees do not have to pass through multiple gatekeepers to interact with top management. Often, top officials such as the CEO of the organization directly assign tasks to subordinate employees such as interns and new recruits. Most employees described the culture of CapiTech company as being “family-like” or “newcomer-friendly.” As described in the excerpts above, non-work hours like break time, lunch and breakfast time are considered as valuable opportunities to mingle, form friendships and connections, and engage in informal conversations. Since this study focuses upon communication technology use at CapiTech company, it is important to note that multiple technologies mentioned earlier are simultaneously employed to accomplish organizational tasks. Employees have developed practices, norms, and shared meanings about the appropriate uses of a particular technology based on the circumstances. These collective understandings are detailed in the analytical chapters that follow. The next section provides a brief description of the larger office located in the metropolitan city.

**The development office.** The development office is a buzzing center of activity that has office spaces on multiple floors of a large commercial building. Several rooms and cubicles on each of the company-occupied floors were designed to contain various teams broadly based on projects, products/services, and management-related activities. A typical day at the development office starts with breakfast on a terrace at around 9 am. After that, employees head to their respective office rooms scattered across different floors. Employees usually commence their daily tasks with what is known as a scrum meeting. Scrum is an “agile framework for managing knowledge work, with an emphasis on software development.” It is designed for small teams who break their work into sprints of action to be completed in a few weeks. Then they track progress and re-plan the course of action in 15-minute stand-up meetings called daily scrums

(Schwaber, 2004). At CapiTech, a scrum meeting involves all the members of a particular project team, who typically share information about their daily “to do” tasks and responsibilities with their team. Individual and team progress is discussed, and strategies are sketched out to accomplish a task. Throughout the day, employees are occupied in various stages of product development. The small office spaces are allocated to teams and groups based on their roles and expertise; for example, all developers are situated together or all testers are located in the same office space.

Regardless of such spatial divisions, one can observe consistent, ongoing, and overlapping interaction between the various departments. Employees perform various roles based on their educational status, prior work experiences, and vocational expertise. For example, most employees belonging to the management group are referred to as the “MBA people.” These are the employees with a master’s degree in Business Administration. In India, the Indian Institute of Management (IIM) is the most prestigious management school. The admission process is arduous, and therefore a person who graduated from an IIM program is a valuable asset for an organization and enjoys particular prestige. At CapiTech organization, employees from an IIM educational background hold an elite status. These managerial employees generally answer the Jira queries uploaded by employees as well as by clients and provide comments and feedback related to Jira issues assigned to particular employees. Their degree provides them particular training for engineering project management tasks.

A typical office room at CapiTech company is furnished with work stations without any dividing panels. At each station are two computer screens, pinup boards, power sockets, internet cables, and other accessories. Employees are not separated or isolated within cubicles, allowing for constant mobility around the office space and unhindered face-to-face communication.

Employees are not allowed to carry personal laptops and storage devices inside the office premises for data security reasons. Instead, employees are provided with company-issued laptops and desktops with in-built product software which they are not allowed to take home.

The majority of the employees working in this particular branch of CapiTech company are fluent in at least two of the three languages—English, Hindi, and Marathi. Hindi and Marathi are two of many designated national languages of India, while English is the default administrative/business language. Employees speak in all three languages depending on the context. For example, when interacting with clients from other countries, English is the preferred language. Additionally, all documentation and written texts are communicated in English. However, for internal conversations, Hindi language not only provides a level of comfort for the employees to converse in but also often helps to articulate a point better. There is a certain level of familiarity when people talk in Hindi. Some elements like stories, anecdotes, and examples are communicated better in the local language, Marathi, as it retains valuable subtleties and language intricacies.

This multilingual setting created some unique circumstances and yielded some valuable observations. Interview participants sometimes spoke in one of the three languages entirely, but sometimes (and often unconsciously) switched to another language to deliver certain phrases, sentences, or proverbs from a particular language to answer my questions. In translating some of the interview excerpts, I have sometimes polished certain colloquial statements to render them more clearly for academic readers. At the same time, I have tried where possible to preserve the nuances and flavor of my conversations with employees at CapiTech. For this reason, as colloquial, verbal statements some interview excerpts may appear ungrammatical by academic standards.

Sports of various kinds are another integral part of the company culture. Sports tournaments are held regularly, and CapiTech company's teams compete with teams of other companies. Games including cricket, football, volleyball, tug-of-war, lawn tennis, kabaddi, Kho Kho, marathons, relays/running, and hockey are played. The activity of planning tournaments and forming teams is as serious and deliberate as any university or state level tournament. The company has two coaches to train the employees for various competitions. Besides the sports teams, the employees are divided into ten "Houses" which are named after colors. Members of each House actively participate in creating their own house T-Shirt designs, water bottles, notebook covers with quotes and other "merch." These Houses are significant for group-based activities held during cultural events and festivities. Each House is assigned a task or activity based on an annual theme. All these social and recreational activities are parts of the organizing process in the company and play a vital role in informing collective identities.

This study draws inspiration from the original work of Kunda (1992) and contributes to the dialogue he initiated about the roles of discipline, control, ideology, and identity in "high-tech" corporations. This study adds a unique dimension to the existing studies utilizing mainly a functionalist approach, to study organizing processes and communication patterns through a critical/interpretive lens. Moreover, several studies examining the uses of Information and Communication Technologies (ICTs) focus on efficiency, productivity, managerial decision-making, and causal relationships between variables. This research adds to the dialogue by investigating the underlying meanings, values, practices, attitudes, and narratives around communication technologies and how they contribute to power dynamics and employee relationships. Furthermore, this research study makes a distinct contribution to the Indian organizational communication scenario. Most studies focusing on the Indian corporate scenario

are quantitative analyses, with limited attention to ethnographic studies. Additionally, it provides a foundation for future research into the role of communication technologies involving more complex group dynamics, the relevance of traditional technologies, and intercultural communication in an Indian corporate context. Analysis of the data is guided by the following research questions.

**Research Questions:**

1. What are the attitudes, practices, meanings, beliefs, behaviors, and rituals associated with communication technology uses at CapiTech company?
2. How do underlying institutional assumptions, norms, and rules influence employee interactions with communication technologies?
3. What are the relationships between organizational structure and practices of technology usage at CapiTech?

**Division of the Thesis**

The present chapter introduced this research study with excerpts from my observations at CapiTech company. It provided details about the goal of this study and described the nature and characteristics of the site studied. The succeeding chapters are divided as follows:

*Chapter 2* provides essential details about the methods employed to collect data for this study. This chapter illuminates the process, stages, and components of data collection and analysis that forms the basis for this thesis. *Chapter 3* reviews the main theoretical frameworks situated in the organizational communication discipline that have guided the data analysis process. *Chapter 4* is the first analytical chapter and examines a non-electronic tool—paper notebooks—and their significance at CapiTech company's culture. *Chapter 5* addresses various electronic communication and information technologies utilized at CapiTech company and

provides an understanding of the practices, assumptions, meanings, beliefs, and norms associated with their implementation. The final analytical *Chapter 6* illustrates the dual relationship between technology and organizational structure, drawing on concepts of structuration originated by Anthony Giddens (1984) and developed further by organizational communication scholars (e.g., Orlikowski, 1991; Orlikowski & Robey, 1992). The last *Chapter 7* concludes this research study with a review of the analytical chapters and considers its implications, limitations, and directions for possible future research.

## Chapter 2: Research Methods

This study employs qualitative, ethnographically informed research methods to collect and analyze data. Using participant observations and interviews as primary instruments for gathering data, this study follows an inductive approach to uncover the emic significance of the communication phenomena under investigation; that is, meanings as understood by members of the organizational culture. An emic perspective in a qualitative research is a case specific account of a culture (Denzin & Lincoln, 2011) that seeks answers to the question, “what is meaningful, coherent, and relevant for members of this culture” (Lindlof, 2008, p. 1) A qualitative design articulates “compelling and researchable questions that are salient to one or more audiences” (Lindlof, 1995, p. 63). A qualitative inquirer has high regard for human subjects’ notions and experiences of participation in organizational settings as vital data. In this design, “researchers stand inside, not outside, the research event” (p. 64).

Ethnography (*ethno* meaning people and *graphy* meaning description) is a story told by the researcher that involves a “holistic description of cultural membership” (Lindlof, 1995, p. 20). Therefore, using an ethnographic qualitative approach a researcher seeks to “preserve the form and content of human behavior and to analyze its qualities rather than subject it to mathematical or other formal transformations” (p. 21). The strength of ethnography is in its “concern with detail that seeks to understand the ‘native point of view’ by allowing the human subjects to narrate their experiences” (Kunda, 2006, p. 23).

As a qualitative researcher conducting this study, I seek to examine socially situated human action and artifacts, and subjective interpretational processes as they occur in the natural context. Because this study involves interaction with and investigation of human subjects, I

sought and received approval from my University's Institutional Review Board (IRB) before commencing the data collection process at CapiTech company in India.

The following sections describe the participants in this study and how they were recruited for interviews followed by a section explaining the data collection procedure. Then, I address the process of data analysis and its interpretation.

### **Participants**

All participants in this study were employees of CapiTech company. Over a period of seven weeks, I conducted 24 semi-structured interviews. I recruited participants for interviews using the company's internal G-suite product, the Google Hangout (instant messenger) tool to send a brief message to potential participants. The message is reproduced in Appendix A.

Out of the total of 24 employees who participated, 8 were women and 16 were men. I used a modified chain-referral sampling method in which initial informants referred me to other potential participants within the company. This technique of accumulative sampling allowed me to find persons whose experiences and attributes were closely linked to the study's objectives. To limit biases in the informants' nominations, I asked three different informants to create a list of potential participants. Out of that list, I chose to contact the most frequently mentioned employees and also included employees at various structural levels. Some participants were new employees, while others had been working at CapiTech company for durations ranging from six months to 14 years. Amongst the 24 participants, some were coders/programmers/developers, some were software testers, and some others were MBA or management staff. This variety of job positions and work tenure allowed me to gain diverse perspectives. Thus, recruiting participants based on references helped me "build a sample that represented an active social network" in the CapiTech organization (Lindlof, 1995, p. 127).



## **Data Collection**

Participant observations and semi-structured interviews are commonly used fieldwork techniques to collect emic accounts of a culture (Lindlof & Taylor, 2017). In the following section, I discuss these two main instruments I employed for gathering qualitative data from the site of research.

### **Interviews**

All interviews were conducted face-to-face within the organization's premises in locations that ensured confidentiality of participants. Some interviews were "ethnographic interviews"; according to Patton (1990, p. 281-282), ethnographic interviews are also known as "informal conversation interviews" (as cited in Lindlof, 1995, p. 170). These are spontaneous interviews that do not seem like a formal interview with a participant. In CapiTech company, on-the-go interviews and informal conversations with employees mainly occurred during breakfast, lunch, and tea hours. Employees during their break time often engaged in a casual exchange of questions with me. Such informal conversations were generally related to individuals' experiences as "people often like to talk about themselves, what they do, and their worlds in general" (Van Maanen, 1981, p. 478). In addition to the ethnographic interviews, 24 "informant interviews" were conducted. These were semi-structured to facilitate conversations and allow participants to direct the flow of the dialogue. Informants for this study were employees of CapiTech company who had a combination of qualities such as experience, mobility, access, and representative authority in specific settings and departments. Unlike ethnographic interviews, which are brief, informant interviews took place in longer meetings (Lindlof, 1995). Interviews varied in length from 25 minutes to 50 minutes depending on the time convenience and availability of the participants. With the permission of the participants, these interviews were

audio recorded and transcribed verbatim. The interviews yielded approximately 250 pages of single-spaced transcripts, translated into English when needed.

To build rapport with participants, I responded to and clarified various questions and concerns they had about the study and its purpose, maintaining the confidentiality of the interview and its implications. As an interviewer, I aimed to strike an “accord with the interviewee on communication style and subject matter that could or couldn’t be talked about” (Lindlof, 1995, p. 180). To achieve this rapport, I adapted my style and choice of language to prioritize the comfort of the participant. As mentioned earlier, most employees were fluent in three languages, namely English, Hindi, and Marathi. Before beginning an interview, I assured participants that they had the liberty to speak in any of the three languages. Furthermore, participants were advised that there are “no right or wrong answers” and that they could “skip a question, choose not to answer, and pause or end the interview at any point.” I emphasized that unlike formal styles of interviewing, this experience was intended to be an informal conversation. I encouraged participants to describe their work experiences in their own words by providing anecdotes, hypothetical scenarios, and examples. To help a participant feel comfortable talking about personal examples, I too engaged in self-disclosure about my graduate student life in the US and other stories to break the ice. Finally, active listening proved to be a crucial attribute for building rapport with participants. By nurturing an empathic and emotive attitude throughout an interview, I communicated to participants that I was “paying attention” and considered their inputs as interesting and valuable. To display my engagement while also pursuing noteworthy topics, I asked follow-up questions and requested participants to elaborate on interesting thoughts. Active listening enabled me to capture “emotive accents of language, the figures of speech, the inconsistencies, the buried connection, the obscure references, the startling

insights, the repetition” (Lindlof, 1995, p. 183) and to notice subtle non-verbal cues such as chuckles, smirks, small laughs, eye-rolls, nervous fidgeting, head-nods, genuine amusement, sarcastic tones, and gestures of respect. All these elements allowed me to process the multiple and deep meanings behind an interviewee’s words.

**Interview questions.** An *interview guide* is the main instrument for most qualitative interviews. An interview guide as conceptualized here consists of a broad menu of the topics to be covered, and their order and articulation are determined by the interviewer in the field. As the interviewer, I had the liberty to employ optional questions, pass on other questions, and sometimes deviate briefly to an unanticipated conversational lane. Lindlof (1995) suggests that “[q]ualitative interviews are meant to elicit an interviewee’s experience in the words that are natural to that person” (p. 185). The goal of the questions is to help the interviewee reflect and introspect about communication practices. Usually, I started the interviews by asking nondirective and general questions like “what does a typical day look like in the office?” or “how are tasks assigned to employees every day?” These are called *grand-tour questions* that seek to unveil participants’ understandings about routine activities, rituals, duties, and organizational events. Additionally, I asked *questions of a temporal nature* which allowed participants to reflect upon experiences from the past to the present situation, for example, “did you notice any change in the way communication technology is used today as compared to how it was when you joined?” Such questions were appropriate for employees who had been working at CapiTech company for over 3 to 4 years. Some *questions were targeted to elicit the native language and specialized terms* of their routine life, for example, “could you me walk me through the process of how an issue is assigned to a person on Jira?” *Example or experience questions* enabled participants to share anecdotes and memorable organizational experiences, such as “could you

give an example of a situation when communication and information technologies enabled you to accomplish a goal?” Additionally, *why questions* made it possible for me to unravel motivations, intentions, justifications, or the rationales behind practices occurring at CapiTech company, for example, “why do you think everyone here uses email as a primary communication tool?” On the other hand, *structural questions* prompted participants to think in comparative terms about a topic, such as, “how is communication on email different from that on WhatsApp”?

At times I also asked *devil’s advocate questions* that offered unpopular or counter-arguments, for example, “you said Jira is an information tool and not a communication tool but doesn’t it have a chat box where people talk to each other?” Sometimes I also asked *probing questions* such as “could you elaborate on that a bit more?” to get clarifications about a topic. Finally, there were some *loose-end questions* like “would you like add any comments about anything I might not have asked?” (Lindlof, 1995, 2008). By asking informants similar types of questions, I was able to develop a pattern of meanings behind the actions. Overall, the objective of these questions was to provide a participant with an opportunity to explain his/her organizational experience as exhaustively as possible.

## **Observations**

As noted by Goffman (1989), getting data by participant observation means “subjecting yourself, your own body and your personality and your own social situation to the contingencies that play upon a set of individuals...and you try to subject yourself to their circumstances” (p. 125). Therefore, participant observations are preferred means of experiencing and recording events in social settings (Lindlof, 1995). While interviews are of prime importance for this study, field observations are, as Van Maanen (1988, p. 123) stated, “gnomic, shorthand reconstructions

of events, observations, and conversations that took place in the field” (as cited in Lindlof, 1995, p. 201). I recorded short summaries and commentaries of the phenomena I observed while at CapiTech company in my private notebook (separate from the company-issued notebook) and later on the same day I transcribed the notes in a password protected Google document.

As mentioned earlier, I visited the CapiTech offices for seven weeks (5 days a week) from 9am to 5pm. During this time, apart from the time spent conducting participant interviews, I undertook the task of observing life at CapiTech company unfold and seeing how the social actors made sense of their experiences. Observations began the moment I stepped into the lobby of the office. I asked myself questions like “what is going on here?”, “what are the organizational roles of these people?”, “What is this activity/event?”, “How, when, and where do people interact with each other?”, “what are these objects/artifacts/technologies used for?”, and “How are the employees responding to events happening around them?”

Every action right from clocking in via the facial recognition database in the morning to clocking out in the evening was considered as a text to be read and interpreted. Other significant events and sources of observational text consisted of interactions between employees during breakfast, lunch, and tea-time. I also observed some team/group meets, scrum/daily agenda meetings, and presentations during work hours. Moreover, I spent considerable time in the main office spaces that housed the employee work stations and therefore were the center of activity. As an unobtrusive observer in these workspaces, I made extensive notes of employee interactions, their uses of technology, and how they behaved around managers and people of authority. My positionality as a researcher and graduate student at a university in the US allowed me to gain trust and respect among the employees of CapiTech. Moreover, my specialized knowledge of qualitative methodology and ethnographic approaches to data collection helped me

to address questions of curiosity about the nature of this study for the people in the organization. Since qualitative methods are relatively uncommon in Indian research scenarios, I was able to create a unique position for myself at CapiTech. My knowledge and background in qualitative methods of research and my constant effort to prioritize participants' comfort gained me a reputation of "she knows what she is doing." Finally, I reassured the management of my study's focus on communication technologies instead of the company's confidential software products. Such reassurances on my part allowed me to interview employees and observe their office spaces (not the softwares on the computers) unhindered and without any resistance.

Additionally, I noted the structural and aesthetic properties of the offices, the ambiance, lighting, functionality of the office space, décor, amenities, and the characteristic qualities that differed with each office space. During the lunch and tea-hours, I interacted with employees by asking ethnographic or "on-the-go" questions such as "how's your day been so far, did anything interesting happen?", or "I remember you said in the morning that you had a call scheduled, how did it go?" Sometimes I simply chimed into conversations regarding sports, politics, education, and other mundane topics. By attending to such informal conversations, inspecting routine practices, noticing patterns of behaviors, and being on a lookout for extraordinary phenomena I was able to gather rich descriptions of the day-to-day life of an employee at CapiTech company while experiencing much of that myself. Additionally, I reflected upon my own experiences, frustrations, and assessments of the organizational happenings and recorded details about situations and how they made me feel. At the end of each day, I spent time reflecting upon the events of the day and wrote commentaries summarizing the experiences. After a point when I had gathered significant observational notes and interview transcripts, I began to recognize that certain units of data like phrases, terms, references, examples, and social incidents appeared to fit

together in common groups or themes. This signaled the process of creating categories based on common organizing principles and the development of a coding scheme. Next, I explain the key components of the analysis phase.

### **Analysis**

Lindlof (1995) notes that “[a]nalyzing qualitative data is best thought of as a process that is continuous throughout the entire study” (p. 215). It is a cyclic process involving fieldwork, data to text translation, coding, and conceptualizing going on in parallel. Since this study emphasizes an emic approach to investigating the CapiTech organization, the researcher and the communication phenomena being studied are interdependent.

Data analysis begins informally the moment fieldnotes, interview transcripts, memos, and journals are created. However, a system of categorizing, sorting and coding the qualitative data after leaving the field is the vital step for commencing the interpretive process. The process begins with a multiple preliminary reading of the texts, which then progresses to systematic analytical work. This initial immersion into the data helped me to view the entire fieldwork in totality. Further readings of the data-text were more purposeful I as began to identify concepts, compelling incidents, series of behaviors, repetitive actions, and other patterns in the details that informed the coding process. I used the free version of the QDA Miner qualitative data analysis tool, QDA Miner Lite, to develop categories and codes. This analytical tool allowed for generating and color-coding categories and their associated codes.

**Categories.** Categories cover an array of general phenomena such as types, constructs, concepts, and themes based on common properties (Lindlof & Taylor, 2017). Some of the low-inference categories in the data were demographics (such as age group, gender, level of education of participants), role or job position at CapiTech company, experience level,

managerial position, and type of technology used. Some topic-based categories included routine events like breakfasts, scrum meetings, and other easily recognizable organizational events. Furthermore, data from interview questions consisted of not only answers to the questions, but also elaborate stories and tangents/deviant conversations which showed implicit properties. The high-inference categories call for more complex coding decisions (Lindlof & Taylor, 2017) regarding common themes or principles that are not explicitly stated but instead are embedded in expressions of knowledge, emotions, and beliefs (p. 316). Some examples of high-inference categories that were developed in the process are “email etiquettes,” “norms for WhatsApp use,” and “group culture.”

**Codes.** Coding involves “taking raw data and raising it to a conceptual level. Coding is the verb and codes are the names given to the concepts derived through coding” (Corbin & Strauss, 2008, p. 2). According to Charmaz, “coding is the pivotal first analytical step that moves the researcher from description towards the conceptualization of that description” (Charmaz & Belgrave, 2012, p. 319). Charmaz (1983, p.111) adds that codes serve as “shorthand devices to label, separate, compile and organize data” (as cited in Lindlof & Taylor, 2017, p. 317). In short, the code references a specific element of the category. Examples of codes developed during the analysis of fieldwork at CapiTech company include particular behaviors, strategic practices, meaningful rituals, consequences of actions, social interactions, relationships, and organizational circumstances. As a part of the data reduction process of sorting, categorizing, prioritizing, and interrelating data according to emerging schemes of analysis (Lindlof, 1995), the coding process helped to focus on relevant data from the mass of raw and uncoded data. I started the coding process by identifying a conversation or segment of talk based on general topics and then addressed speech that had multiple constructs of meanings. I asked myself questions like: what is



being said? And how? What is the context? What is the role of the speaker? Such probing questions were especially beneficial to draw attention to data involving “rich points” such as jargon, common phrases, slang, native terms and “turning points” such as critical organizational life experiences of members (Lindlof & Taylor, 2017, p. 320). I provide a few examples illustrating the codes throughout the analytical chapters that follow.

**Grounded Theory.** One of the most popular methods of analyzing qualitative data is the *grounded theory* approach. Proposed by Glaser and Strauss (1967), grounded theory seeks to generate emerging conceptualizations that are relevant and work to build a theoretical understanding. This process begins with *open coding* that involves “coding all the data in every possible way. The consequence of this open coding is a multitude of descriptions for possible concepts that often do not fit in the emerging theory” (p. 108). This approach entails the inductive process of building a theory from the “ground-up” (Lindlof & Taylor, 2017). This initial stage of open coding was an inductive process and grounded in the data itself as I did not collect the data with a particular theoretical frame in mind. The process of open coding provided me with a sense of direction to take this research forward by becoming selective and focusing conceptually on particular social problems. To do so, I used an iterative process of coding and conceptualizing, the *constant comparative method*, which proceeds by “comparing data with data, data with code, and code with code, to find similarities and differences” (Thornberg & Charmaz, 2014 p. 158). After open coding and constant comparative practices, data are sorted and clustered. However, these codes are not always static. The process involves revising codes as well as constructions of new, more elaborated codes by merging or combining identical or similar initial codes (p. 158). To refine and focus categories, I compared the codes based on

observed phenomena, incidents, behaviors, beliefs, accounts, and experiences of people, and compared categories with other categories.

According to Glaser (1978), a next step is to advance to *theoretical codes* reflecting emerging analytical constructs: “when employing theoretical coding researchers analyze how categories and codes constructed from data might relate to each other as hypotheses to be integrated into a theory” (as cited in Thornberg & Charmaz, 2014, p. 159). The challenge is to be open to noticing their emergence instead of having preconceived frameworks. In this process, I identified and used appropriate theoretical codes to achieve an overall integration. Later in my analysis, my theoretical codes were further informed by “ideas and perspectives that I imported into the research process as analytic tools and lenses from outside, from a range of theories. Theoretical codes refer to underlying logics that could be found in pre-existing theories” (Thornberg & Charmaz, 2014, p. 159). However, it is important that the theoretical codes be relevant, and fit the data and the generated and refined categories. Based on my existing knowledge of theoretical codes, grounded in part in organizational scholarship reviewed in the next chapter, I compared them to my data and constructed more codes and categories. Eventually, I stopped the coding process when a category became “theoretically saturated,” and new data added minimal value to the codes and concepts.

### **Conceptualization and Interpretation**

Interpretation is an integral step towards making sense of the coded data. Geertz (1973) writes about the “thick descriptions” of knowledge that ethnographic studies produce. *First-order* concepts as described by Van Maanen (1979, p. 540) are “the situationally, historically, and biographically mediated interpretations used by members of the organizations to account for a given descriptive property” (as cited in Lindlof, 1995, p. 217). These concepts are ways of

explaining the features and characteristics of a culture. On the other hand, *second-order* concepts are the notions used to “explain the patterning of first-order data” (p. 217). Since this was an inductive process, I did not enter the site of observations with a particular theoretical framework in mind. Only after leaving the field and beginning the analytical process did I incorporate various theoretical frameworks to make sense of the data (see chapter 3). While choosing appropriate theoretical frameworks, my primary goal was not to generate a new theory or revise an existing theory. Rather, the broader interpretive goal of this study was to “understand the diversity of human experience” (Lindlof & Taylor, 2017, p. 346) in the organizational setting I studied.

One of the conceptual devices that I have used to draw parallels across various domains are “exemplars,” also called incidents, episodes, and strips (Lindlof & Taylor, 2017, p. 349). These are selected segments of data used to demonstrate and advance an argument. Additionally, these are used to describe the unique qualities of a communication event by evoking its significance. These excerpts drawn from interview transcripts or fieldnotes are defined by Lofland (1974) as “concrete interactional events, incidents, occurrences, episodes, anecdotes, scenes and happenings somewhere in the real world” (as cited in Lindlof, 1995, p. 229). In this study, exemplars are also used to illustrate the first-order constructs appearing in narratives. Throughout the analytical chapters that follow, I cite excerpts derived from participant interviews as [Interviews] and examples from observations as [Fieldnotes]. The indicators used during constant-comparative coding techniques of data-texts define and develop the properties of a concept. These indicators eventually inform and organize exemplars exhibiting common themes and are then used as the second-order constructs for analysis.

## **Standards of Rigor and Applicability**

Achieving reliability or consistency in the data is an integral concern in traditional social scientific studies. Reliability of data in those studies depends on the research instrument and its ability to produce similar results every time it is utilized. In the social sciences, a low reliability factor may suggest inaccuracies within the data sets. However, reliability is not as central a concern for ethnographic approaches for the following reasons. First, in a qualitative design, most activities are such that they occur only once and would not be replicated in an identical fashion at a different time. For example, during participant interviews, a set of questions is asked to an informant only once with a unique response. Even if the same question is asked to the same participant some other day, the response might not be similar. Another reason is the inherent interpretivist influence in qualitative research (see Chapter 3 for details on interpretivism). The interpretive principles are based on the notion of “centrality of meaning in social actions and aim to explicate and in some cases, critique the subjective and consensual meanings that constitute social reality” (Putnam & Pacanowsky, 1983, p. 32). Thus, based on the assumption that the meanings constituting our social realities are diverse and continuously changing along with our understandings, “replicating our results through some means of independent assessment is neither practical nor possible” (Lindlof & Taylor, 2017, p. 353).

Qualitative research studies such as this study are culturally specific and highlight the unique properties of local and situated realities. Qualitative studies refrain from generalizing about similar circumstances on a large scale. Instead, qualitative findings are primarily generalizable to intermediate social and cultural practices. However, this does not suggest that qualitative results are not applicable or valuable outside the site of research. This approach is known for producing rich descriptions and a multitude of interpretive associations for readers to

relate to the findings (p. 355). Therefore, I encourage the reader to think about how some of the claims and ideas presented in this study might be transferred and applied to their own experiences and to other settings.

The next chapter reviews the theoretical framework that informed the later stages of the analysis process. The chapter focuses on some key principles drawn from theories situated in the organizational communication discipline.

### **Chapter 3: Theoretical Framework**

In this chapter, I first explain how this ethnographic study applies a critical-interpretive theoretical perspective to explore the practices, meanings, attitudes, and rituals surrounding the uses of communication and information technologies at CapiTech company. This is followed by a synthesis of approaches situated within the critical-interpretive paradigm that serve as analytical frames to examine communication phenomenon at CapiTech company.

To begin, Charles Redding is often regarded as responsible for establishing organizational communication as a discipline and field of study (Mumby, 2012). According to Keyton (2017), the history of organizational communication scholarship dates back to the 1940s with a focus on organizing workplaces more efficiently. The period between 1950-1970 was dedicated to improving the organizational lives of members and increasing production (Keyton, 2017). By the end of the 1970s, the research and theory of organizational communication had replicated and adapted perspectives from other disciplines with which it had developed strong links: organizational behavior, organizational theory, and social psychology (Conrad & Sollitto, 2017). In the 1980s the discipline began to explore the constitutive role of communication in organizing. This shift was initiated by scholarship promoting interpretive approaches to studying organizational communication. Until around 1983, most organizational communication scholars preferred quantitative methods. Later, qualitative research methods based on interpretive approaches were incorporated to describe and examine socially constructed knowledge based on the perspectives of participants within organizations (Putnam & Pacanowsky, 1983).

#### **Critical-Interpretive Approaches**

Critical-interpretive organizational research is informed in part by the principles of ethnographic methods. What is an ethnography and how does it inform this study? According to

Cunliffe (2010, p. 227), ethnography is a study of human experience through events, rituals, institutions, behaviors, artifacts, and interactions. Deetz (2001) observed that “ethnographic researchers rarely study a topic; they study a particular site” (Deetz, 2001). Additionally, ethnographers immerse themselves in the environments they are studying by interacting with members, building relations, observing, and participating in organizational life (Cunliffe, 2010, p. 228). Brewer (2000) defines “ethnography as a fieldwork” involving methods that capture “social meanings and ordinary activities in natural settings” (p. 10).

During the 1980s a new movement emerged, called the interpretive paradigm. This approach focused on understanding organizational cultures and the meanings behind life in workplaces (Conrad & Sollitto, 2017). The tenets of the interpretive paradigm suggest that communication phenomena should be studied in their natural settings using qualitative methods such as participant observation and interviewing. The interpretive paradigm seeks to investigate the social realities of communication that is prolific, unique, and emerging out of symbolic human interactions (Lindlof & Taylor, 2017, p. 11). Informed by “a concern to understand the world as it is, to understand the fundamental nature of the social world at the level of subjective experience,” the interpretive paradigm uses the frame of reference of the participant to explain individual consciousness (Burrell & Morgan, 1979, p. 28). Additionally, interpretive researchers study cultural symbols and how they are used in human interaction to create shared meaning. This approach uses “thick” descriptions of cultures (Mumby, 2012, p. 142) and seeks to achieve a deep understanding of human actions and motives. Lindlof (2008) discusses the concepts of *emic* and *etic* approaches used to study cultural communication events. Emic research often focuses on a single culture or individual case, like this research study at the CapiTech organization in which the researcher and subjects are engaged in constant interaction (Lindlof,

2008). An emic focus allows members' own understanding of organizational life to come forth instead of predetermining the nature of attitudes and behaviors (Mumby, 2012, p. 20).

This study combines an interpretive perspective with the critical paradigm. The critical tradition, like interpretivism, views reality as an outcome of collective communication practices of social actors. However, critical perspectives focus on the roles of power, knowledge, control, and discourse in the construction of reality (Lindlof and Taylor, 2017; Mumby, 2012). In addition to adopting an interpretive perspective, critical scholars argue that meaning-making process in organizations can be understood by examining organizations as “political structures where power plays a central role” (Mumby, 2012, p. 21). In the 1990s, critical theories were used as a lens to study the ideas of power, control, oppression, and emancipation in organizations (Keyton, 2017). Critical approaches are informed by sources including Marxian, feminist, and cultural studies scholarship.

Marx's original ideas on capitalism have significantly influenced contemporary social thought. Marxian studies are characterized by attention to “relations of production and the resulting class structure constituting the primary axis of social differentiation, determining the broad pattern of economic opportunity, education and health condition, and political orientation” (Adler, 2008, p. 65). Marx is known for his critique of capitalism as an “economic and political system of domination and exploitation” (Mumby, 2012, p. 31). To counter capitalism, Marx proposed an alternative system, associated with concepts of socialism, based on the belief in an “enlightenment principle of emancipation and freedom for all regardless of their social and economic status” (p. 31). Despite the skepticism and concerns over their relevance to changing social conditions, contemporary scholars have preserved traditional Marxian insights to develop theories that help explain the destructive effects of capitalism in the 21<sup>st</sup> century. The “Frankfurt



School” of thought proposed a dialectical theory, now known as “critical theory,” to view “society as the product of the interrelationships among its cultural, ideological, and economic aspects” (Mumby, 2012, p. 37). Based on this viewpoint, scholars posit that modern organizations have become adroit at shaping our perceptions, identities, and experiences. Marxist ideas have made significant contributions to the field of critical organizational communication. Primarily, Marxist research on organizational communication focuses upon conflicts between and among employee relations, ramifications of structure, exploitation, and control (Adler, 2008).

According to Deetz (2005), critical researchers consider organizational structures and practices as political sites characterized by dominant values, unequal power relations, skewed decision-making, inefficiency, distorted communication, and asymmetry. However, organizations can also act as positive forums to articulate and resolve group conflicts, promote the production of desirable goods, and develop favorable individual and societal qualities (Deetz, 2005, p. 94). The critical approach mostly addresses concerns related to the exercise of power and various forms of control in organizations, some of which are subtle or “unobtrusive” processes (Cheney & Tompkins, 1987). Often, members actively adopt and internalize organizational norms or values. Power is also exercised when members engage in strong identification with their organization (Barker, 1993). Thus, organizations as political sites comprise varying interests which can shape organizational reality and consequences for various stakeholders (Mumby, 2012).

Communication is crucial for constitutive practices of establishing subtle power relations, associated with ideas of the world and self. Critical researchers focus their concern on these power relations arising out of social/cultural practices, languages, production of identities, and

social knowledge. They ask questions about how meaning systems are created through communicative and symbolic practices and how these meanings maintain or resist organizational power relations (Deetz & Mumby, 1990; May & Mumby, 2005). Lastly, the most important role of the critical perspective is to highlight ideas of progress and emancipation (Mumby 2012, p. 21). Critical studies promote exploration of alternative communication practices to incorporate a greater degree of democracy and cooperation amongst various components of an organization (Deetz, 2005).

In conclusion, this section provided an overview of the critical and interpretive paradigms that provide a framework for situating this study within a large body of existing scholarship. The following sections address more specific theoretical concepts drawn from the organizational communication discipline that were used to analyze the data gathered through participant observations and interviews.

### **Theoretical Foundations**

This section delineates the main theoretical approaches that serve as additional frames for studying organizational communication at CapiTech company, following the initial data-driven categories. The six analytical frames presented in this section are: forms of control, the discursive nature of the organization, institutional logics and institutional messages, structuration theory, sensemaking in organizations, and technology and structure. Using key principles drawn from these theories, I analyzed and interpreted the data gathered from the field observations.

First, I review some of the main concepts of various forms of organizational control.

#### **Forms of Control**

The first analytical frame describes four types of control prevalent at CapiTech company. These are normative control, disciplinary control, panopticism, and identity regulation.

**Normative control.** This ethnographic project draws inspiration from Gideon Kunda's study, originally published in 1992, titled *Engineering Culture: Control and Commitment in a High-Tech Corporation*. Kunda (1992, p. vii) calls it an "ethnographic voyage—an effort to understand a distant and esoteric way of life through extended immersion and close observation." In this ethnographic study, Kunda examined the organizational culture of a technology corporation focusing attention on the mundane details of organizational life. Kunda justifies ethnography as an appropriate method to study an organization's culture by stating, "the strength of ethnography is its concern with detail: ethnographers focus on limited settings, routines, everyday life, and strive to understand the native point of view" (Kunda, 2006, p. 23) instead of making generalizations.

While on this journey, Kunda investigated the ideas that are formed and diffused throughout the organization and how they promote different versions of reality. He considered how work experiences are shaped and designed and what implications they have on the organizational life of the employees (Kunda, 2006, p. viii). An idea that Kunda sheds light upon is "normative control" in organizations. Referring to the framework given by Etzioni (1961), which classifies organizations based on the type of power management techniques exerted on members and by the type of member involvement, Kunda expounds upon the function of normative control over members.

Normative control is "the attempt to elicit and direct the required efforts of members by controlling the underlying experiences, thoughts, and feelings that guide their actions" (Kunda, 2006, p. 11). Under this form of control, members are internally driven to act in the best interest of the company instead of being physically coerced. Besides economic and instrumental rewards, members seek experiential or symbolic rewards in exchange for moral alignment with the

organization. Members influenced by normative control display strong identification with company goals and practices. Additionally, Kunda addresses the consequences of normative control in an organizational setting. As a result of the twentieth-century bureaucratization of workplaces and the rise of dominant business corporations, normative control has become a prominent form of managerial control (p. 12). Internalization of and identification with company rules is enforced in this blend of bureaucratic and normative control. The existing literature points to two distinct views regarding the consequences of normative control. Supporters of normative control view it as an appeal to the potential within members. Additionally, through normative control conflicts of interest between individual and company goals can potentially be transformed into a cooperative exercise benefitting both members and company. The manner in which normative control is exercised and framed can influence development, growth, and maturity in the workplace along with a reduction in conflict and alienation (p. 14). On the contrary, critics of normative control equate it with subtle tyranny and manipulation in the workplace. Kunda cites Whyte (1956/2013) who considers normative control a hindrance to freedom and privacy. Moreover, the adverse effects of normative control result in the embodiment of the “bureaucratic personality” in which identification with company overrules everything else (cf. Marcuse, 1964).

Kunda explores the assumptions surrounding “strong corporate cultures.” He examines claims such as that normative control provides autonomy rather than tyranny, individualism instead of groupthink, and promotes creativity rather than conformity for achieving authenticity (Kunda, 2006, p. 16). However, the realities of workplaces are not as clearly defined. Kunda’s investigations at “Tech” (a pseudonym for a leading technological corporation located in the United States) lead him to an understanding that strong corporate cultures are based on

ambivalence. Ambiguity in organizations influences work experience, affiliation, restrictions on membership, promises, and threats (p. 21). Despite being subjected to normative demands of ideology and role impositions, the members are active participants who react and respond to the forms of control. They may accept, deny, reshape, rethink, rebel, conform, define and redefine demands. Acceptance of and conformity to corporate rules are exhibited with a degree of caution and cynicism. Members are wary of organizational expectations, recognize potentially confusing situations, and often contemplate the cost of non-conformity and failure. Thus, normative control addresses not only the actions of authority but also the responses of members and their experiences.

**Disciplinary Control.** Extending the idea of exerting subtle control over members leads us to the concept of disciplinary power in the workplace. Barker and Cheney (1994), explore the nature of discipline and how it is perpetuated in contemporary organizations. They achieve this by expanding Foucauldian concepts of traditional “discipline,” involving elements of social relations that govern and normalize individual and collective behavior.

Barker and Cheney (1994) posit four main features of discipline in contemporary organizations that manifest through social interactions, consequently shaping members’ activities. These concepts of discipline help us to examine the nature of power and knowledge existing in the intricate fabrics of organizational structures. The first is how *discipline entails unobtrusive methods of gaining willful individual subjectification to the organization’s power relationships*. In order to gain and benefit from organizational membership, members are expected to individually and willingly become subjects of the rules, habits, and values of the organizations (Barker & Cheney, 1994, p. 28). Power is not a mere coercive force in organizations; instead, it is a structured and relational characteristic capable of shaping identities

and disciplining organizational members (Mumby & Stohl, 1991). Second, *discipline is collaboratively generated and reinforced*. Instead of direct subjugation or one-to-one supervision, organizational control has become more diffused, less personal, and a product of collective and concerted action. Contemporary discipline arises from collaborative interactions of members in an organization influencing routines and standards of application. Third, *discipline is embedded in the social relations of the organization and its actors*. Discipline in organizational interactions has qualities of both “enabling” and “constraining” natures that allow constructions of reality in conjunction with others while simultaneously retraining behaviors appropriate for organizational functioning. Fourth, *disciplinary mechanisms are most potent when they are associated with highly motivating values appealing to organizational actors*. Individual behavior in organizations is often classified as supportive or non-supportive, good or bad (Mumby & Stohl, 1991). Besides specifying behavior, contemporary organizations also dictate attitudes, values, and beliefs. Lastly, core beliefs or value-oriented statements guide individual and collective actions, decision-making, control of action and thought in organizations (Barker & Cheney, 1994, p. 30).

**Panopticism.** According to Foucault, knowledge is a form of power: “it assumes the authority of ‘the truth’ but has the power to make itself true. All knowledge once applied in the real world, has effects, and in that sense at least, 'becomes true.' Knowledge, once used to regulate the conduct of others, entails constraint, regulation and the disciplining of practice” (Foucault, 1975/1995, p. 27). Foucault suggests that power is present everywhere. Power influences relations amongst people; its nature is strategic, and it has the ability to shape behaviors. According to Foucault, power is not necessarily always evil; instead, it is a producer of reality. One of the mechanisms of power that Foucault talks about is the “panopticon.”

Inspired by Bentham's architectural design of prisons in the 19<sup>th</sup> century, this structure allowed the supervisors to see inside each of the prison cells from their central vantage point, while unseen by the prisoners. Such an arrangement served as a mechanism of control and discipline as the inmates would be "conscious of the surveillance and permanent visibility" (Foucault, 1995, p. 201). As Foucault describes it, "he is seen, but he does not see; he is the object of information, never a subject in communication" (p. 200). Thus, this constant observation or presumed observation, gives rise to a disciplinary power as all movements are surveyed and all events are recorded. A normalization stemming from disciplinary control occurs when the subjects accept the rules and render themselves docile. This kind of panoptic discipline is imposed to achieve proper behavior. Additionally, Foucault notes that the effects of panopticism have extended beyond prison systems to encompass social institutions like organizations, schools, healthcare, and social structures wherein individuals are "carefully fabricated" (p. 217).

**Identity regulation as a form of organizational control.** Alvesson and Willmott (2002) have explored the role of identity as a dimension of organizational control. Their study investigates "how organizational control is accomplished through the self-positioning of employees within managerially inspired discourses about work and organization with which they may become more or less identified and committed" (p. 620). Identity is not only crucial to know what one values and thinks in social domains like organizations but also is "problematic" and complex to unfold (Brown, 2014). Tompkins and Cheney (1983) direct our attention to the intricate processes of organizational identification. They state that "from the managerial perspective, member identification is beneficial in that it guarantees that decisions will be consistent with organizational objectives" (Tompkins & Cheney, 1983, p.125). Individuals approach work-related decisions with organizational perspectives; in short, they assume the role

of the organization and acquire an “organizational personality” (p. 125). Identification allows members to cope with demands by accepting the values and goals of the organization (Barker & Tompkins, 1994). Alvesson and Willmott focus on how the mechanisms of control like rewards, leadership, division of labor, hierarchies, and management interact and get fused with members’ identities. They call this process “identity work,” which is a medium and outcome of organizational control. Identity work “describes the ongoing mental activity that individual undertakes in constructing an understanding of self that is coherent, distinct and positively valued” (Alvesson, Ashcraft, & Thomas, 2008, p. 15).

Consequently, identity work informs “identity regulation” which involves discursive practices that influence identity construction and reconstruction. The processes of induction, training, and corporate education promote corporate identity which eventually informs an individual’s self-identity. This kind of identity control is in line with “concertive” control (Barker, 1993). Thus, the management of identity work becomes more salient and critical to employment relationships (Alvesson & Willmott, 2002, p. 623). Moreover, managerial interest is concerned with exerting organizational control by self-positioning employees within the managerial discourses that appeal to self-image, feelings, values, and identifications of employees (p. 16; Deetz, 1995). New forms of control are characterized by a “language of liberation and self-actualization” engineered to gain commitment and consent to corporate goals (p. 624). Increased flexibility, promotion of subjectivity, multitasking, adaptability, and removal of constraints over the exercise of initiative are some mechanisms of “micro-emancipation” through which identity is regulated in workplaces. People are constantly engaged in forming, repairing, maintaining, strengthening, and revising their corporate identity (p. 626). In sum, an



employee is a “managed identity worker” who is encouraged to incorporate managerial discourses into their own narratives of identity (Alvesson et al., 2008).

### **Discursive Nature of Organizations**

Alvesson and Willmott (2002) emphasized the role of discourse in processes of identity formation, maintenance, and transformation. Individuals address and implement discourses to identify themselves as independent entities; and by engaging in other discourses, they repair and revise their sense of identity as a coherent narrative (p. 627). Thus, through corporate discourses, managerial forces can facilitate domination and control. Fairhurst and Putnam (2004) examine the relationships between discourse and organization. They state that “organizations are discursive constructions because discourse is the very foundation on which organizational life is built” (Fairhurst & Putnam, 2004, p. 5). The authors provide distinctions between what they call *Discourse* and *discourse*. According to Foucault, “Discourses are the general and enduring systems of thought for the formation and articulation of ideas in a historically situated time” (Foucault, 1980). The power/knowledge relations are formulated through culturally standardized Discourses. These Discourses are a collection of talk, logics, ideas, and assumptions that impose order and naturalize the world in specific ways (Fairhurst & Putnam, 2004, p. 8).

On the other hand, discourses are the texts, messages, talk, and conversations in social interactions. The study of discourse focuses on language use, local texts, the interaction process, and the messages. The text is the material record of the discourse in both spoken or written, and now digital forms. Written documents like emails, reports, presentations, websites or memos are organizational texts. Even verbal routines like feedback or appraisals and job interviews can be considered as text. Fairhurst and Putnam are primarily concerned with addressing the relationships among what they call *object*, *becoming*, and *grounded-in-action* orientations toward

organizations. First, the object orientation assumes that an organization is an already formed object or an entity comprising discursive features and outcomes (p. 9). In this view, organizations appear to be objective and independent of their creators. Here, discourse is viewed as an artifact that reifies organizations. Second, the becoming orientation highlights the dynamic process of organizing. This view suggests that language and interactions produce organizing and that discourse exists before organizations come into being. Additionally, Discourses of power and knowledge systems in the “becoming” orientation consist of organizational forms and shape the context of emergence (p. 13). Lastly, the grounded-in-action orientation posits that structure is organized from within action and is continually reproduced through social systems (p. 16). This orientation employs Anthony Giddens’s structuration theory (1984) to illustrate “a duality of structure” in which structure is both the medium and outcome of human agency. In short, organizations emerge in associations between humans and objects. The authors express that the three orientations can complement each other to reveal different aspects of the communication-organization relationship (Fairhurst & Putnam, 2004, 2015).

### **Institutional Logics and Institutional Messages**

As described in the earlier sections, forms of discipline and mechanisms of control are embedded in organizational structures and are perpetuated through the social interactions that occur at various levels in an organization. Another mechanism lodged into organizational processes involves “institutional logics” or a “set of material practices and symbolic constructions which constitute...organizing principles” (Friedland & Alford, 1991, p. 248). Institutions control not only behaviors but also the means by which those behaviors are accomplished. Individuals are provided with a set of motives for which rules are calibrated and distributed. Thornton and Ocasio (2008) establish that agency is embedded in institutions,

“through their underlying logics of action [that] shape heterogeneity, stability, and change in individuals and organizations” (Lammers, 2011; Thornton & Ocasio, 2008, p.103). They add that interests, identities, values, and assumptions are implanted in the logics of the institution.

Lammers (2011) posits that institutional logics are communicated and transmitted through “institutional messages.” Institutional messages perform various functions such as facilitating institutional interactions and propagating organizational policies. These also serve to align organizational messages and corresponding activities and are used to promote an organization’s core principles to its internal and external audiences (Lammers, 2011, p. 167).

Moreover, institutional messages are generated during inter-organizational communication events and serve to transmit an organization’s attitude or orientation. Institutional messages also link organizations to policy-making scenarios and have lasting implications upon their enactment. It is thus evident that institutional messages operate on multiple levels, mainly interactional, organizational, and institutional (p. 170). Lammers suggests that institutional messages are independent and self-sustaining. Additionally, these messages, to some degrees, reflect the existing social power in an organization. Institutional messages are exchanged with varying degrees of intentionality and scope. Lastly, these may also have a restraining effect on recipients (p. 170-171). In summation, institutional messages form connections between micro-level organizational communication and the macrostructures of institutions. The endurance and reach of institutional logics depend upon institutional messages and how they are interpreted (p.175). These concepts are discussed in more detail and applied to the CapiTech organization in the following chapters.

## Structuration Theory

The idea proposed by Thornton and Ocasio (2008), that agency is embedded in institutional logics, can be linked to Anthony Giddens' theory of structuration (1984). Structuration theory is concerned with the production, reproduction, and transformation of social institutions that are shaped by human actions and the enactment of rules (Yates & Orlikowski, 1992). Giddens examines "the structuration of social relations across time and space, in virtue of duality of structure" (Giddens, 1984, p. 376). A central principle of structuration theory is that human agents reproduce knowledge and material resources in a spatiotemporal context.

*Agency* refers to the actions taken by individuals in a social setting, occurring in a continuous flow. Agency intervenes and modifies the course of events (Macintosh & Scapens, 1990; McPhee, 2015). As explained by Giddens, the constitution of agents and structures are not independent phenomena. Instead, they "represent a duality in which the structural properties of social systems are both medium and outcome of the practices they recursively organize" (Giddens, 1984, p. 25). Here, Giddens emphasizes that structure is not necessarily constraining; it can also be enabling.

Giddens makes an essential distinction between social systems and structures. *Systems* comprise social practices that are reproduced through human interactions and *structures* refer to the rules and resources which bind and organize the social practices into systems (Giddens, 1984; Macintosh & Scapens, 1990). Giddens states that agents are knowledgeable and reflexive; they are capable of rationalizing motivations for social actions and are guided by norms and facilities available to them. Actors gather knowledge based on past experiences and use it based on two levels of consciousness: discursive and practical (Loureiro-Koechlin, 2008). At the discursive level, agents use their linguistic skills to purposefully articulate actions and

motivations. At the practical consciousness level, actors monitor their own as well as others' actions based on personal knowledge but are often unable to elaborate on them discursively (Giddens, 1984). The theory of structuration combines the action-structure relation: "action is enabled and constrained by structures, and structures owe their long-term existence to interaction systems" (Poole & DeSanctis, 1992, p. 6). Thus, through structuration, we see a dynamic organizing process based on communicative interaction and a dialectic relationship between structure and individual agency wherein each produces the other.

Adaptive structuration theory (AST) extends the structuration theory model to include mutual influences between technology and social processes. AST uses a "grounded in action" orientation (Fairhurst & Putnam, 2004) by addressing the relationship between inherent structures of technologies, the mediating social processes, and the outcomes that shape new forms of social interaction and technology (p. 17; DeSanctis & Poole, 1994). This view contends that organizational discourse is grounded in language use, is influenced by organizational rules, and then simultaneously shapes structures and technology. Technology presents a wide variety of social structures used in interpersonal interactions. Thus, there are structures in technology, and structures in action; these are intertwined and form a recursive relationship in which each shapes the other (p. 125). Finally, AST argues that over time, technologies can trigger changes in the rules and resources used in social interactions (p. 143).

**Communicative constitution of organizations (CCO).** A scholarly movement called the *communicative constitution of organizations* (CCO) approach examines the formative role of communication in the constitution of organizational processes and outcomes (Schoeneborn & Vasquez, 2017, p.1). Supporters of CCO posit that communication is "the means by which organizations are established, designed, composed, and sustained" (Ashcraft, Kuhn, & Cooren,

2009; McPhee & Zaug, 2009). In other words, organizations are not limited to mere physical structures. Rather, they are complex systems of meaning that exist because people communicate (Mumby, 2012). Understanding communication as the “key process for emergence, perpetuation, and transformation of organizations forms the basis of this CCO movement” (Schoeneborn & Vasquez, 2017, p.1). Inspired by Gidden’s structuration theory, McPhee and Zaug (2009) used a CCO approach to present a four “communication flows” model consisting of membership negotiation, self-structuring, activity coordination, and institutional positioning (McPhee & Zaug, 2009). Additionally, the three orientations of organizations, namely, object, becoming, and grounded-in-action work in parallel with the CCO concept. CCO provided scholars a way to move from understanding organizations as enacted through communication to organizations grounded in discursive forms (Fairhurst & Putnam, 2004, 2015). Thus, this movement is concerned with how systems of meaning are collectively created by social actors in the communicative construction of reality (Mumby, 2012). Organizational sensemaking is achieved communicatively and displayed communicatively (Pacanowsky & O'Donnell-Trujillo, 1982 p. 123).

### **Sensemaking in Organizations**

According to Geertz, culture can be studied “as sensemaking, as a reality constructed and displayed by those whose existence is embedded in a particular set of webs” (Pacanowsky & O'Donnell-Trujillo, 1982, p. 123). When people communicate to construe the world around them, they engage in processes of sensemaking. Organizational members display a sensemaking process through relevant constructs, facts, practices, vocabulary, metaphor, stories, rites and rituals occurring in the workplace (Pacanowsky & O'Donnell-Trujillo, 1982). As a consequence of these communicative activities, cultures are constructed. The structures of these cultures are

descriptions of reality that are drawn upon to explain or make sense of new experiences (p.123). According to Karl Weick (1995), sensemaking should be understood literally, as “making something sensible” (p. 16). Weick (2001) describes organizations as “collections of people trying to make sense of what is happening around them” (p. 5). A sense maker attempts to convert a world of experience into an intelligible world (p. 9). The process of sensemaking, as described by Weick (1995) involves seven characteristics: (a) the sensemaking process is grounded in identity construction; (b) sensemaking is retrospective; (c) it enacts sensible environments; (d) is it a social process; (e) it is an ongoing accomplishment; (f) it is focused on extracted cues, and (g) it is driven by plausibility rather than accuracy (Weick, 1995, p. 17). Additionally, Weick distinguishes sensemaking from interpretation. Interpretation suggests that “there is already something in the world waiting to be discovered, whereas, sensemaking refers to processes by which people generate what they interpret” (Weick, 1995, p. 13).

When addressing organizational life, Weick talks about equivocality as being a significant problem faced by individuals. In order to make sense of the occurrences in their environment, individuals extract and interpret cues to handle experiences of equivocality (Brown, Colville, & Pye, 2014). Thus, the process of sensemaking involves production of meaning and “active authoring” of the situations in which the actors are located and are attempting to understand. People engage in constructing identity and then in retrospection wherein they look back at the primary source of meaning to make sense of their social worlds. Furthermore, Weick proposes that it is beneficial to examine organizing “as” sensemaking, organizing “through” sensemaking, or organizing “for” sensemaking (Weick, 2001, p 95). In sum, this perspective views sensemaking as a process through which organizations emerge (Brown et al., 2014; Tsoukas & Chia, 2002).

## **Technology and Structuration**

Referring to Giddens' structuration theory, Larson and Pepper (2011), have considered the relationships between human interaction and technologies. The authors explored the mutual influence of human interaction on technologies and vice versa. Using the structuration theory framework, Larson and Pepper consider how "communication technologies are symbolically created and used and at the same time, technology use influences identification" (Larson & Pepper, 2011, p. 1). Scholars who have studied the influential relationship between technology and human interaction using structuration theory assert that it is not enough to study how technology shapes identification; rather, it is equally important to investigate how identifications impact the ways in which technologies are used (Larson & Pepper, 2011; Orlikowski, 2000, Poole & DeSanctis, 1990). Using participant interviews and focus groups, Larson and Pepper discovered that the use of technology sent important symbolic messages and meanings and at the same time reinforced them. During the time of acquisition of the company they studied, technology became a symbol of distrust and suspicion for the employees. The form and the channel through which the message was delivered became more important than the content of the message itself (cf. McLuhan, 1964). Lastly, the authors note that "symbolic shaping of technology is a key factor that may influence the success and failures of information technologies in fostering identification" (Larson & Pepper, 2011, p. 7).

Other scholars have proposed that technology has both "material and social properties that are constructed by subjective human action, while also objectified and reified through institutionalization" (Orlikowski & Robey, 1991, p. 164). Structuration theory, according to some scholars, proved to be well suited to study information technologies in organizations as it is an emergent process theory that accommodates multiple analytical layers, is contextually



applicable, and overcomes limitations of prior one-dimensional perspectives (Orlikowski, 1992, 2000; Orlikowski & Robey, 1991).

In conclusion, this chapter reviewed the theoretical approaches in which this study is anchored. First, I described the principles of the critical and the interpretive paradigm and the associated rationale for using an ethnographic methodology for this research study. Then, I reviewed the prominent concepts and theories starting with organizational forms of control. This section addressed various forms of control pervasive in organizations, namely, normative and disciplinary control, panopticism, and identity regulation. Furthermore, concepts of institutional messages and institutional logics were discussed to demonstrate the role of communication in organizing processes. The chapter then covered the main ideas of structuration theory and reviewed some studies that implemented this theory to examine the relationship between technology and human agency. This chapter addressed the ideas of organizational sensemaking to understand how individuals comprehend their workplace experiences. The present research adds to the current dialogue in the organizational communication discipline by investigating the underlying meanings, values, practices, attitudes, and narratives around communication technologies and how they contribute to power dynamics and employee relationships. In the succeeding chapters, I analyze the significance of handwritten notebooks at CapiTech company, followed by an analysis of the practices, rituals, meanings, and attitudes surrounding the use of communication technologies including email, instant messengers, project tracking tools, and conference calls.

## Chapter 4: The Significance of Paper Notebooks

Traditional, paper notebooks are considered a crucial organizing tool at CapiTech organization. Handwritten notes in a spiral bound, company-issued notebook are a required ritual and a necessary task for all employees. This chapter provides an account of how a seemingly old-fashioned communication medium serves as a vehicle for inducing discipline in the organization.

The handwritten notebooks can be considered as an important cultural artifact of this company and notetaking as a vital skill. The employees record a wide range of content in the notebooks. The notebooks include records of meeting minutes and elaborate descriptions of assigned tasks. Employees use the notebooks as a sketchpad for drawing diagrams of products and programs, charts and tables of statistics, mathematical equations, and calculations. The notebook also serves the purpose of “sticky notes”—to note questions/doubts/problems/issues related to tasks, mark dates, record reminders, and write down instructions from team leaders. Daily agendas or “to do” lists and scrum meeting points are also transcribed in the notebook. Notebooks are essential for notetaking, especially during conference calls, to record product requirements and specifications requested by clients. On the first day of my field observations, I noticed employees carrying their notebooks around the offices. The notebooks are easily recognizable because their cover displays the company’s logo. Some employees put stickers or name tags on the notebook to give it a personal touch. At the end of the day, employees usually leave the notebook at their desk. Even though a notebook is for personal notetaking, employees often use it to explain or share the content written in the notebook with other team members.

Rules or guidelines are prescribed for writing notes in the books. These are addressed later in the chapter. The written material in the notebook helps to “recreate the scene” when it

was written. This is important in situations of conflict. Records in the notebook aid in establishing the context of the conflict, people involved in it, and evidence of agreement or disagreement. Therefore, the notebooks are considered as vital organizational components in terms of documentation, record keeping and tracking conversations and work-related data. In situations of conflict or confusion, these notebooks play a significant role—by revisiting the scene in question and by comparing notes, the employees are able to compile all of their individual notes on the matter and decide a course of action. Sometimes when there is conflict, the documented statements and comments in the notebook prove to be a deciding factor to gauge the accuracy of the information. Employees in this company are taught to trust the writings in the notebooks as they are very humanized and personalized. Most employees believe that the exercise of notetaking improves their attention span and grasping capacity—the act of manually writing down instructions and notes aids in better memorization of the content. Notetaking in a notebook is a required skill and job applicants have to go through an intensive essay writing examination during the recruitment process. The notebooks used by employees are considered as intellectual property of the company, and an employee has to return the notebook(s) to the company if he/she leaves. Because I was a temporary researcher at CapiTech, I was not provided with the company-issued notebook. If I were to use a company-issued notebook to record fieldnotes, it would be open to inspection by managers. In that situation, as a researcher, I would have to take extra precautions to maintain confidentiality in the way I documented experiences, participants' insights, and my observations of life at the company.

This chapter examines the significance of the written notebook at CapiTech company through the theoretical lenses of affordances and constraints, institutional logics and institutional

messages, and organizational discipline and power, and considers the notebook as an instrument of normative control in the company.

### **Affordances and Constraints of Notebooks**

First, let us look at some of the affordances that the notebook provides to employees and what parts it plays in the daily functioning of the company. Gibson (1979) explains the concept of affordances based on “how people orient to the objects in their world in terms of the possibilities the objects afford for action” (as cited in Zammuto et al., 2007, p. 752).

Additionally, the idea of affordances entails “how the materiality of an object favors, shapes, or invites, and at the same time constrains, a set of specific uses” (p. 752).

Categories such as “uses of the notebook” and “types of content in the notebook” were developed during the initial coding process. Here, excerpts from interviews illustrate some key observations in terms of the affordances provided by the notebooks. One recurring theme is the flexibility of the notebooks and their adaptability to individual employees’ cognitive styles. As one employee remarked:

I've seen some people during conference calls—when they forget their notebooks, they type the call details on their phone. I can never do that, I tried it once, and I pathetically messed it up. I prefer writing... when you are typing, I don't think you can make tables quickly. When I write [in my notebook], I make diagrammatic representations of everything, which helps the memory ultimately. I can't have only text, that is boring [Interview].

This employee observed that other organizational members made similar uses of their notebooks not only for personal use but also for facilitating the elucidation process:

Yeah, I mean, if you check anyone's book, it is not just writing, there will be graphs, drawings. Easy when you do it with a pen. Anything scribbled but easy to understand diagrams. And it's not just for me; if I get my book and I have to explain you something, I just draw the figures or numbers to explain, that's okay, this is the value you take or some algorithm you draw, etc. It is easy for me to write in the notebook to explain something to someone [Interview].

For some participants, writing in the notebook instead of using digital technology like Google Doc or MS Word aids their visual memory. One employee viewed the notetaking process as linked to formative experiences of learning and recollection:

Since childhood you are inculcated to write, that's how your mind stored that format, and you know what, um, some people have photogenic memory, but that photogenic memory only works with the written text, it doesn't work with the typed text, and I do believe it, like sometimes when I write something, I may forget what I have written, but I have the picture of the page in my mind, that helps me to remember [Interview].

Similar to this participant, when discussing the notebook other participants reflected upon their school days. Most participants said that the notetaking activity is not an atypical behavior because they have had rigorous writing experiences in school. Such a retrospection, according to Weick (1995), is a part of the sensemaking process which involves assigning a new meaning to a lived experience that has occurred in the past. According to Weick, "specific meanings arise retrospectively" when individuals reflect upon a particular past by shedding light on the present. This process modifies the lived experience based on the kind of new attention it is given. In short, "the meaning is in the kind of attention that is directed to this experience" (p. 26). In the case of the notebooks, participants retrospect upon the present action of writing notes of

organizational importance in paper notebooks through the lived experience of childhood or school days when they did their homework in notebooks. Therefore, for some employees of CapiTech company, the meaning of writing notes in the company-issued notebooks is “attached to” their childhood experience. One employee remarked that, “you don’t have to learn to write [in a notebook], we’ve done that for so long when we were in school. This [notetaking] is one skill that we’ve always had as a student. Remember, we used to write so much.” The disciplinary behavior of notetaking in school has permeated the workplace at CapiTech organization.

Returning to the “affordances” perspective, the notebooks and manual notetaking skills also come in handy when there is very little time and employees have to note several instructions. As one participant mentioned:

I think Word has many features, tables, shapes, pie charts to use when you have time. It's better to write in the book when you don't have time, which you generally don't. I think writing is the best manner to refer to anything.... See, you cannot draw anything over there on those online technologies, it takes time. So, I prefer notebooks so that you can draw it quickly [Interview].

Another employee emphasized this affordance, commenting that “this [notebook] is different from Google Docs and other tools, yes. But, you can’t draw diagrams on a tool as quickly as you can in the notebook when your mentor is teaching you stuff” [Interview].

For some employees, notebooks are convenient to carry around instead of a laptop. Since personal tablets and laptops are not permitted in the office premises, employees use company-issued laptops. These laptops are not always lean and handy, and if the laptop gets damaged, it is an additional cost to the company:

I used that [smart tablet to write notes], but I don't think there is a better option than the notebook. Because in notebooks it is very easy to write. You don't have to charge it and you don't have to bother about display errors [Interview].

As one participant explained, notebooks are useful tools for recording impromptu task assignments. Since not all tasks are necessarily assigned via email, it becomes important to carry the notebook to meetings:

I always carry my notebook when I roam around. Here it's not like you always get an email, that you do this, this and this. I'll just tell you that okay you need to do this thing, so it's better you note it down somewhere. You won't have access to the computer every time. Sometimes tasks are assigned via verbal communication and it can happen anywhere, you might be called to another office. So, then a person comes with his notebook. If he remembers it, well and good, but if not, then there will be the communication gap. So, it's better to sit down and write, notes are easy [Interview].

Content in the notebook is very beneficial for tracking and recording the progress of work. The documentation of the work proves to be evidence of the work accomplished, as one participant said, “keeping a record [of instructions] is the most important thing. So, for me, my written notebook is the best evidence I can give to anyone.”

Adding to the previous comment, this participant explains that when a task is assigned during an in-person meeting, the notebooks eliminate the need to send a separate email reiterating the task details. Moreover, a summary of the conversation is recorded in the notebook to avoid conflicts later:

If someone says to me that no we didn't talk about a particular issue, or if I have talked to a person face to face, then I don't send an email after that as it is assumed that it is

[written] in the notebook. If the task is discussed on email, then it's fine. But during a face to face conversation, I record it in the notebook as a proof to show that the conversation happened [Interview].

Next, we see some restrictions that come along with the use of the notebook and how employees cope with those constraints. The data category "notebook versus technology" was used to document this concept. As one participant mentioned, it is difficult to search particular words/issues or points in a hand-written notebook. This is one of the constraints of the notebook that technologies such as Google Docs and MS Word can easily address:

When it comes to finding a record, I think technology is immensely helpful. You can just type in the search box and find, and it comes in front of you. But in a notebook, you have to flip through pages [Interview].

This participant preferred online/digital notes over the hand-written notebooks and highlighted the limitation of the "search function" in the manual notebooks:

So personally, I take notes on a laptop because it is easier to find. So even if I have a book filled with notes, I wouldn't know how to find stuff in it. That's why my notebook is like, almost empty [Interview].

It can be said the in the view of most employees of CapiTech company, the notebook offers more affordances than constraints. There is an overall positive outlook towards the notebooks, and the employees use the notebook in varying degrees to manage their daily work. Nevertheless, one might ask whether there are other features that make the notebook an integral part of the company's culture, beyond these practical benefits. Is there a deeper significance of these notebooks than just a simple notetaking tool? To address these questions, let us look at the concepts of institutionalization and institutional logics.



### **The Notebook as an Institutionalized Tool**

The significance of the notebook in the organization's culture can be studied using concepts of institutionalization. Goodman and Dean (1981) suggest that "an institutionalized act is defined as a behavior that is performed by two or more individuals, persists over time, and exists as a part of the daily functioning of the organization" (p. 3). The action or behavior may vary in terms of degree of persistence, or the number of people performing the act in the organization. Here, the notebook is an institutionalized artifact of the organization, and the specific act or behavior is the notetaking. The task of notetaking in the company-prescribed notebook is undertaken regularly by almost all employees. This practice has been followed in the company for many years and is an integral part of every employee's day-to-day functioning.

Goodman and Dean (1981) have suggested five criteria by which the degree of institutionalization of a behavior can be measured. First, *knowledge of the behaviors* pertains to how many people in the organization are aware of the behaviors and how much they know about them, their purposes, and how to perform them (p. 3). It is evident from the participant interviews and the field observations that almost all the employees of CapiTech organization share a common awareness of the notebooks, the task of manual notetaking, its overall purpose, and how it is useful in managing and organizing tasks. This section and the following analytical sections were developed from the initial broad category labelled as "significance of the notebook." This category was later broken into subcategories such as "rules about writing in the notebook," "ritual of notetaking," "surveillance using notebook," and "thought process behind the notebook." I later interpreted these subcategories using existing organizational communication literature. Interview responses of newly joined employees, interns, and long-term

employees revealed that the interns and new recruits were informed about this behavior of notetaking and the importance of notebooks during their orientation programs.

One newly-joined employee explained the use of the notebook as presented during the company's orientation program. During the training process, newcomers were supposed to study and become acquainted with some company-specific and task-specific terminologies. The notebook was used in the following way to accomplish this task:

So, the notebooks are like a daily task for whatever we do. Suppose if I am just randomly selecting terms [product-related jargon] and I am researching it on the internet and then finding what it is all about, related to the work of this company. So, we note down all those terms every day just to know that yes, we are progressing; yes, we have a proper record of what we are doing, and we can also tell our mentor that yes, we know these concepts [Interview].

A second indicator of institutionalization is *performance*. This criterion considers the number of people performing the behavior and how often is it performed (p. 4). Some behaviors are supposed to be performed more often than others, such as the daily scrum meetings. In the case of the notebook, the behavior of recording notes in the notebook is pervasive at CapiTech company. Just as the scrum meetings are embedded in the daily functioning of the company, so is the usage of notebook.

Third, the criterion of *preferences for the behavior* pertains to how much the organizational members like or dislike performing the behavior (p. 4). Based on the interview responses almost all of the participants acknowledged the benefits of the notebook and behavior of notetaking. However, there were a few mixed responses regarding the expectation of writing hand-written notes in the notebooks. As one participant expressed a low preference for taking

notes, “hmm, I write notes, but I am not very diligent [like other people] about it because I simply can’t, I don’t feel like it” [Interview].

The fourth criterion, *normative consensus*, measures two aspects of institutionalization: (a) how aware individuals are that other people in the organization are performing the behaviors and (b) how aware people are that other people feel they should perform the behaviors. The assumption because an individual is performing a certain behavior because he/she wants to may not always be true (Goodman & Dean, 1981 p. 4-5). There is a possibility that not every employee considers the notebook as an intrinsically beneficial tool. However, because notetaking is an organizational expectation and a norm, it is a behavior that the employees conform to regardless of whether or not they see value in it. Most employees have inculcated the norm of handwritten notebooks because of its company-wide awareness. As a participant remarked:

Yeah, I find it a little bit strange...but it's something that everyone does here. It's according to some policies which you don't understand why it is to be done. Someone senior understands the importance of it, right? So, you follow their advice [Interview].

The final criterion, *value*, measures institutionalization as the extent to which people have developed values concerning the behavior. Values are general ideas about how people ought to behave, and the more people have developed these values, and the more aware they are about others who have developed the values, the greater is the degree of institutionalization of the behaviors. The notebook as an institutionalized tool at CapiTech company symbolizes the more fundamental values of notetaking, tracking and recording progress, remembering the assigned tasks without missing out on details, and organization of daily work. One participant explains how the notebooks are valuable in organizing work:

The thought process [behind the notetaking exercise] I really feel which helps is, suppose I am doing some work today, and I am very busy today, handling two three tasks together; ten days down the line, I won't remember the exact changes I made to the small technical issues, which take a lot of time to figure out. So, when I go back, I can look at those points from my notebook, oh, this was the issue and save time [Interview].

Another participant explained that notetaking behavior is especially valued during meetings and calls:

During a conference call, especially when product requirements are being informed, the employees are expected to note all the important instructions and details about the requirements. In such situations, the notebook allows employees to make extensive and personalized notes about the specific instructions without missing out on details. So, it becomes important for the employees to carry their notebooks when they attend conference calls or meetings [Interview].

According to Goodman and Dean (1981), these five characteristics usually occur in the order presented here. First, people develop beliefs based on the knowledge about the behavior, in this case, the notebook and notetaking. Then, they begin to perform them as they integrate into the organization. Then, people begin developing certain feelings about the behavior; for example, some employees enjoy writing in the notebook while some feel it is more like a “task.” Finally, a value starts to develop about the behavior (Goodman and Dean, 1981). However, I believe this process can also occur in a more recursive way, as employees’ organizational experiences are diverse and evolving.

Now that we have established the institutionalized nature of the notebook let us look at the institutional logics or messages that are communicated through the practice of notetaking in the paper notebook.

**Institutional messages.** According to Lammers (2011), specific institutional logics are constituted through communication. These institutional messages serve as connections to the broader idea of institutional logics. Thornton and Ocasio (1999) define institutional logics as “the socially constructed, historical patterns of material practices, assumptions, values, beliefs, and rules by which individuals produce and reproduce their material subsistence, organize time and space, and provide meaning to their social reality” (p. 804). The underlying idea of the institutional logic approach is that institutional logics involve and connect the interests, values, identities, and assumptions of both individuals and organizations.

Lammers (2011) suggests that “messages are collations of thought transmitted under a variety of motivational circumstances” (p. 162) and are understood through a variety of media. The idea of “institutional messages” refers to the efforts of the organizations to align their practices with their internal and external images and to the establishment of guiding principles and rules.

Let us consider the notebook as an “institutional message” specific for the internal audiences at the CapiTech company. In that sense, the notebook as an institutional message carries core values or rules that apply to everyone, at least nominally. Just like verbal messages, institutional messages spread intentionally or unintentionally via multiple channels. The notebook is an institutional message that is communicated to the employees as soon as they join CapiTech company. The institutional significance of the notebook is conveyed during the

orientation and training programs conducted to integrate newly recruited employees into the company.

Lammers describes four features of the institutionality of messages: establishment, reach, encumbency, and intentionality. *Established* messages are unequivocal, frequently exchanged and sent, and thus enduring. The notebook is an established institutional message because not only is it constantly reinforced and encouraged, but it is also monitored by the higher authorities of the company. The reach of the message refers to the scope of the audience. Every employee of the organization is provided with the notebook at the beginning of their tenure and are provided with new notebooks as soon as the previous ones are filled up. Regardless of how well each employee maintains the notebook, every employee receives it. Except for the housekeeping staff, employees at all levels such as interns, new recruits, senior management, team leaders, and project managers use the notebook. Hence, as an institutional message, the notebook has a broad reach across the company.

*Encumbency* refers to the duty implicated in the message, to respond to and comply with it. As mentioned earlier, writing notes in the notebook is a required task. For some employees, it is an encumbrance, while for some it is an enjoyable, creative, and highly beneficial practice. As this employee explains, the practice of writing in the notebook is beneficial to save time and offers creative space to help accomplish organizational tasks:

I prefer writing over typing as I won't remember it. Also, when you are typing, I don't think you can make tables or schedules easily. When I write, I can just make diagrammatic representations, which helps the memory ultimately [Interview].

On the contrary, for another employee, notebooks are an encumbrance as they find it difficult to locate and find information written in the notebook which one can easily find using

the search option either in MS Word or Google Docs. In a previously mentioned excerpt on page 54, the employee explained the “searchability” constraint of the notebook. In order to find a specific detail in the notebook, an employee would have to turn through multiple pages to locate that point. Therefore, some employees were forthright in reporting the drawbacks and inconveniences of the notebook.

Lastly, the concept of *intentionality* of messages suggests that they may or may not be congruent with the conscious, stated purposes of the members. The intentionality of the notebook as an institutional message is that it helps employees to record and manage daily tasks, document instructions, and track progress. The following quote demonstrates a discrepancy between the intended purpose of the notebook which is not just to record daily agendas, but also to create meeting notes and refer to previously written points and notes as evidence of the conversation and the notebook’s actual use. For this employee, however, the only purpose of the notebook is to make a “to do” list of the daily tasks and nothing else:

Notes, it’s more like a rough work. Suppose I have an agenda for the next two days so that I might forget some of it. I will write it down in the notebook and the end of the two days, I will verify it, and never look back. So, notes as in, for me it’s not like a classroom notes, where you have a question, you refer back. So, I personally use notebooks only for agendas or tasks that I need to do [Interview].

On the other hand, some employees have described and internalized the intentions of the management regarding the purpose and use of notebook quite accurately:

There are two important things about the notebook. First, the task that is assigned to you, you need to remember it and complete it. Second, it is used as a “revision history.” If someone says to me that no we didn’t talk about a particular issue, or if I have talked to a

person face to face, then I don't send an email after that as it is assumed that it is [written] in the notebook. If the task is discussed on email, then it's fine. But during a face to face conversation I record it in the notebook as a proof to show that the conversation happened [Interview].

In summation, institutional logics are patterns of beliefs and rules. Thus, the behavior of writing notes in the notebook is part of the institutional logic of CapiTech company that is communicated across the company with the help of the institutional message of the "notebook." This message is intentional, enduring, has a company-wide reach, and encumbers the participants to engage in behaviors of notetaking. The following analytical sections incline towards a more critical-interpretive perspective (see chapter 3) to evaluate the role of notebooks as a means of organizational control and discipline.

### **Notebooks as Instruments of Normative control**

Part of the process of institutionalization of corporate behavior is gaining normative consensus and acceptance of that behavior by the members. Kunda calls this "normative control," which is "an attempt to elicit and direct required efforts of members by controlling the underlying experiences, thoughts, and feelings that guide their actions" (Kunda, 2006 p. 11). In such types of control, members are internally driven to conform and identify with company goals, behaviors, activities, and values. Under normative control, membership is based on economic and behavioral transactions and symbolic rewards. Since the notebook is an institutionalized artifact of CapiTech company, employees have internalized the behavior of notetaking as an essential part of work activities.

Kunda (2006) considers the techniques used by managers and administrators to establish a strong corporate culture. Some of these techniques include overt uses of rituals, management of



symbols, participative decision making, and formulation of corporate philosophy. In CapiTech company, the notebook is an example of the “corporate philosophy.” As one participant noted:

Yeah, this culture [the notebook] is started by our top management.....they want to know what every employee is doing. Pointwise/bullet points in the notebooks that is an easy way to track people [laughter] if they are doing something or not [Interview].

Another participant exclaimed, “so when there is too much work, people tend to forget some of it. That’s why it is better to have it in the notebooks. Some people feel they ask us to write [in notebooks] as if it’s a school [chuckles].”

Here, I would like to draw the reader’s attention to the nonverbal elements of these comments—laughter and chuckle. I noted these articulations during the interviews and transcribed them in my notes. In the tone of these comments, I observed hints of suppressed mockery or coy expressions of “encumbrance” about the notetaking behavior. These comments also suggest the authoritative role of the management in inducing the employees to follow the organizational demands. Notice how these norms in the forms of rituals are introduced as a subtle way for keeping a check on employees.

Furthermore, well-maintained notebooks provide employees with an opportunity to earn monetary rewards. One top manager remarked, “the more the number of points in the notebook and depending on how well-maintained it is, higher is the bonus [Fieldnotes].” The perks and bonuses are offered after considering the condition of the notebook’s contents. This form of economic transaction is a part of the normative control mechanism exerted by the notebooks. What roles does the practice of notetaking play in the culture of CapiTech company?

Kunda cites Lukes (1975) to describe a ritual as: “a rule-governed activity of a symbolic character which draws attention of participants to objects of thoughts and feeling which they

hold to be of special significance” (as cited in Kunda, 2006, p. 93). At CapiTech company, members regularly participate in a variety of structured events such as meetings, conference calls, product demo sessions, training workshops, and intercultural events. During each of these occasions, members of the organization engage in dialogues with various entities such as clients, interdepartmental teams and what members call “offshore/on-shore” teams. While representing the best corporate interest and accomplishing the goal of the interaction, the notebooks serve as a familiar device for recording, documenting, illustrating, and articulating the intricacies of the conversations.

Employees subjected to normative control are driven by “internal commitment” and strong identification with the company. Based on symbolic transactions, “a member role is fashioned and imposed that includes not only behavioral rules but articulated guidelines for experience,” implying that an employee’s “self” or source of subjective experience comes under regulation (Kunda, 2006, p. 11). Extending this idea to incorporate identity regulation in organizations, let us consider the “employee as identity worker” (Alvesson & Wilmott, 2002, p. 622). At CapiTech company, as described earlier, the notetaking behavior is introduced right from the orientation period before the new recruits are integrated into the workforce. This is one form of organizational control, which is accomplished through “the self-positioning of employees within managerially inspired discourses about work and organization with which they may become more or less identified and committed” (p. 620). As this newly joined participant illustrated:

So, the notebook is a daily task for whatever we do. Suppose, if I am selecting terms and I am researching it on the internet and then finding what it is all about, related to the work

of this company. So, we note down all those terms every day...until we know these concepts [Interview].

Another participant reiterated how the notebooks and the normative behavior of notetaking function as tools to shape the identities of new employees. The notebook is a “text” both in a literal sense and as a material manifestation of the organizational discourse that regulates identities encompassing “more or less intentional effects of social practices on identity construction and reconstruction” (Alvesson & Wilmott, 2002, p. 625; Fairhurst & Putnam, 2004, p. 7). Usually identity is shaped and directed through procedures such as training, induction, and promotion. As this participant explained, employees with identification based on expertise such as “software developer” are first trained at CapiTech company’s trade to align their traits, skills, knowledge, and attributes for the tasks. In this process, the notebooks operate as an instrument that facilitates the identity formation of employees:

So, when you have to remember something from earlier, the notebook is useful. For example, when a project begins, developers or programmers who are from an IT background don’t have discipline-specific knowledge about the company’s products. First, all those terms are taught to [the new members] by senior staff. These terms/jargons used in everyday work are written down in the notebook and then you can revisit it anytime [Interview].

Through the constructions of knowledge and skills and internalization of rules, identity is regulated in the corporate context.

Next, I draw parallels with Kunda’s observations on “presentation rituals” in his ethnographic study of a corporate firm. Let us consider the notetaking behavior as a ritual, a pervasive and deeply ingrained activity that occurs during every conference call, meeting, and

presentation. For an insider, the notebooks are ubiquitous artifacts, as commonly used as computers and laptops. So mundane and easily recognizable are the notebooks that they can be seen at every desk and in every employee's hands. However, to an outsider, the notebooks reveal a distinct characteristic of CapiTech company's culture. During the first week of the field observations, I was surprised by this ritual and I noted that "I can see a notebook on everyone's desk. They are expected to write down any conversation related to work, who was involved, the context of the situation, the problem, agendas, and everything task-related."

Rituals like these form a crucial link between organizational ideologies that provides a structure for collective and individual experiences. Notetaking in the handwritten notebooks is one such seemingly inconsequential routine of everyday social interaction at CapiTech company that is collectively produced, structured, and reinforced. These create a "frame" or shared understanding within which members are expected to express and conform to appropriate behaviors (Kunda, 2006, p. 93). According to James Carey, "the ritual view" of communication is associated with terms such as "sharing, participation, association, and fellowship" (Carey, 1989, p. 5). The ritual view of communication contends that messages represent shared beliefs that draw people together in commonality and ceremony. This view considers communication as a "construction and maintenance of an ordered, meaningful cultural world that can serve as a control and container for human action" (p. 5). Based on this perspective, notetaking is a ritualistic form of communication that is a shared and common activity bringing employees of CapiTech together. This activity operates to provide "confirmation" of an underlying order of things and to manifest ongoing social processes (Carey, 1989, p. 5).

Rituals can be seen as mechanisms of normative control. Historically, rituals have symbolized authority, and have served as tools to reinforce ideologies and generate solidarity and

gain legitimacy of the ruling actors (Kertzer, 1988). To address rituals in organizational settings, Van Maanen and Kunda (1989) contend that “rituals offer... managers a mode of exercising power along the cognitive and affective planes” (p. 49). Rituals influence organizational members on various levels (Van Maanen & Kunda, 1989). The ritual of notetaking in the company-issued notebook reflects an employee’s disposition—the way in which the notebook is organized, the degree to which it is maintained, updated, and well kept, and how accurately and with dedication the employee has followed the management’s prescription. In short, the notebooks serve to gauge the persona of the employee. This is especially important to gain a nomination for monetary bonuses. This is reflected in the comment by a senior manager, “I can tell from an employee’s notebook whether or not he/she will be successful and receive a bonus” [Fieldnotes].

This company-wide implementation and recurring participation in the ritual of notetaking aids in the process of internalization of the company’s ideology of “not trusting computers.” A top manager was observed mentoring an intern about the ritual. The interaction revealed how culture is enacted through routine rituals and how it infuses members with the right mindset (Kunda, 2006, p. 93):

Write important points the notebook, take notes of everything; it is like writing “short stories.” The work environment is like a “shop floor—don’t work individually, it’s like one person’s work is carried forward by another,” work through case studies to get the hang of the task. Don’t trust computers – files get corrupt or computers crash. Make friends besides your mentors, network with other people [Fieldnotes].

What does the ritual of using manual notebooks for notetaking accomplish? First, it has a framing effect on the employees at CapiTech company, encouraging them to adhere and function

within the given settings. Second, the ritual of notetaking can be considered a mechanism for “transforming the abstract formulations of the company’s organizational ideology into the lived experience of the members” (Kunda, 2006, p. 94). Although rituals like notetaking have multiple layers of meaning that are often ambiguous and complex, these are integral and ongoing features of members’ work lives. Keeping the corporate interest in mind, members act as agents to establish a shared or common definition of the organizational functions. Lastly, this ritual is a vehicle for the exertion of symbolic power. Kunda cites Pierre Bourdieu (1977) to expound upon the features of symbolic power vested in the hands of formal authority, in the case of CapiTech company the top management officials. This symbolic power seeps down to team leaders and project managers who oversee the progress of individual employees. Power is enacted on various levels with the use of the notebooks and their content as a way of keeping a track record of employees. From the point of view of individual members, agents of this symbolic power are everywhere. Because all members are expected to follow this ritual, members (including oneself) act as enforcers of the corporate philosophy.

Response to this symbolic power is seen in the form of “role embracement” in which members express their acceptance of the role, including the prescribed behaviors, values, and beliefs (Kunda, 2006, p. 156). This phenomenon occurs to different extents while performing an organizational ritual. In the case of the notetaking ritual I observed, while in the presence of the top management, that the behavior of the members was whole-hearted, deliberate, and substantial. During team or group meetings, the notetaking behavior was more pragmatic, tentative, and focused on the most germane points. Despite the subtle and occasional overt pressures to conform with the ritual, many members claimed sincere acceptance and comprehension of the prescribed benefits of the notetaking ritual. As one participant explained:

I've seen people who write diligent notes; it's very helpful because when someone asks what the task was, then you have it in writing. You have the older content written in the notebook [that you can refer] later so you can explain it to someone. So, it's nice [this notetaking practice]. Although it is enforced, it's for the good [Interview].

There are some limitations to the power of ritual to elicit complete role embracement. Some members choose to minimize participation in the ritual or act as “secondary audiences,” demonstrating or indicating a lack of interest, passivity, or in some cases, marginality (Kunda, 2006, p. 157). As one participant of CapiTech company mentioned (recall the earlier excerpt on page 54), notetaking in the paper notebook has a few constraints because of which some employees diverge from embracing the ritual. Another participant expressed a basic lack of interest in conforming with the ritual: “I write notes, but not like others who are very diligent. Because I don't like to write [suggesting lack of motivation].”

In summation, rituals in organizational culture are agencies for enacting and enforcing the member role approved by the management. These rituals are mechanisms for subjecting members to normative control and organizational demands that reinforce the corporate philosophy. In the following section, I address the disciplinary role of the handwritten notebooks at CapiTech company.

### **Notebooks as Instruments of Disciplinary Control**

Barker and Cheney (1994) have expanded Foucault's concepts of discipline and power to address how discipline operates in contemporary organizations. Analyzing case studies, the authors expound upon the “micro-techniques of disciplinary power that governs and normalizes individual and collective action in organizations.” They specifically consider how discipline

becomes internalized by members and eventually takes on forms of standard procedures of day-to-day functioning.

The notebooks are a pervasive form of disciplinary routine at CapiTech company. For the employees, the notebooks are a useful tool for organizing tasks. On the other hand, the notebooks can be considered as instruments for inducing organizational discipline. This covert and unobtrusive force that embodies discipline also serves to exert control over organizational activities. In order to maintain institutional stability and predictability discipline is normalized. This normalized discipline manifests through behaviors of notetaking in the paper notebook. As mentioned earlier, an employee of CapiTech company is introduced to the notebook from day one, aligning with Barker and Cheney's findings that new recruits identify and conform readily to the expectations of the organization.

According to Barker and Cheney (1994), discipline in contemporary organizations has four characteristics that influence discourses and activities. First, *discipline often entails unobtrusive methods of gaining willful subjectification to the organization's power relationships* (Barker & Cheney, 1994, p. 28). Discipline is manifested through regularities that govern interactions in an organization. The behaviors of notetaking in the handwritten notebooks are a form of discipline that members yield to when they join the CapiTech company. Notetaking becomes one of the regular tasks embedded in the daily functioning of the company. This form of discipline applies to supervisors along with subordinates. Barker and Cheney cite Burrell (1988) in their discussion of power arising from this discipline, noting that "power for the organizational members should be seen in a positive sense...as something useful and docile." During my field observations and interactions with participants, I noted a general acceptance of



the notebooks among the organizational members. Members displayed a comprehension of the advantages and benefits of the handwritten notebooks for their tasks. As one participant said:

Another thing with the notebooks is that it reinforces the culture of “writing” and “notetaking,” [because of the notebooks] we write at least five sentences every day. Nowadays we use mobile for everything, because of which we have lost practice of writing, so the notebooks help us to maintain that habit of writing. This book culture is necessary; it has a lot of positive points [Interviews].

This comment demonstrates that organizational members have not only yielded to the disciplinary behavior but also have learned to focus on the positive aspects of the behavior. Eventually, the behavior is willingly internalized and accepted. For this participant, the notebook becomes a tool of self-discipline. Writing daily agendas in the notebook serve as a motivation to accomplish a task:

I'll just tell you about myself, uh, it would just help me to remember because there are a lot of things happening in a single day, so it is just helpful to jot down the things. I might forget some things. Seeing it as a task on my page it would actually make me want to finish the task today or tomorrow. I just want to or will want to finish it [Interview].

This type of subjectification of members to discipline also acts as an assertion of “who we are.” The handwritten notebook, although a traditional form of documentation, is an idiosyncratic characteristic of this company. Additionally, the power relations between the members and the organization are both enabling and constraining. The notebooks enable the members to accomplish their goals and assignments successfully. Moreover, using the notebooks to their advantage, members are able to document individual progress and earn bonuses. At the same time, these notebooks become constraining for those members who are not habituated to

notetaking or prefer digital technology for documentation. Nonetheless, the management expects its members to become subject to this ritual and habit of handwritten notes in order to reap the benefits of organizational membership.

Second, *discipline is collaboratively generated and reinforced* (Barker & Cheney, 1994, p. 29). The traditional view of discipline is oriented more towards the subjugation of bodies, direct punishment and control, and one-to-one supervision of members. On the contrary, Barker and Cheney primarily focus on contemporary forms of power that operate in an unobtrusive or subtle manner. Their findings provide an extension to the systems of discipline associated with Foucault. At CapiTech company the handwritten notebooks represent traditional discipline to some degree. The “point count” in the notebooks is a serially numbered list that an employee makes while writing daily goals or notetaking. One rule associated with notetaking in the notebook is that the numbered points should be carried forward each day instead of starting a new list. For example, if the last point on Monday was numbered 20, then Tuesday’s first point is numbered as 21. As this participant explained:

Yeah, uh, this culture is started by our top management.....they want to know what the employees are doing. Pointwise [serial numbers/bullet points of tasks in the notebook], means, and that is easy way to track people [laughter] if he is doing work or not, see if an employee’s point count on Monday is 100 and count on Friday evening is 101, then actually, this person is not doing anything, this indicates, the person is, uh, chilling [Interview].

As this comment suggests, there exists a direct form of control over the members through the notebooks. However, this direct control stemming from the top management also diffuses to lower levels such as team leaders and project managers, although it manifests in a more subtle

manner at those levels. Through collaborative interactions among team members and their “team leads,” the discipline of handwritten notes is generated and reinforced. Members work together to create their own ways of understanding and dealing with tasks. One participant explained that tasks assigned during the in-person meeting are supposed to be recorded in one’s personal notebook. It is “understood” among the employees that email may or may not be sent confirming the task. It is an individual responsibility to record it in the notebook. This common knowledge serves to structure and discipline behavior:

If someone says to me that no we didn’t talk about a particular issue, or if I have talked to a person face to face, then I don’t send an email after that as it is assumed that it is [written] in the notebook. If the task is discussed on email, then it’s fine. But during a face to face conversation, I record it in the notebook as a proof to show that the conversation happened [Interview].

A third facet addresses how *these disciplinary norms and practices are embedded in the social relations* of CapiTech company (Barker & Cheney, 1994, p. 30). These norms and practices define and mandate appropriate and functional behavior; for example, as one participant explained the importance of handwritten notetaking, “during long one-hour conference calls, product requirements are told to us, it is impossible to remember all that without writing it in the notebook” [Interview]. Every employee in a team is required to maintain a task list that demonstrates not only individual work progress but also how it fits and follows with other members. One participant commented that “if you want to explain it [a task] to someone, you will find it in the notebook, like what was the theory behind this and what was the sequence of it and when changes were made” [Interview].

In my field observations, I noted a scenario demonstrating how the disciplinary behavior of notetaking is influenced by and also influences social interactions at CapiTech company.

Well-maintained notebooks serve as reference points in crucial situations:

Some sort of misunderstanding happened over emails regarding initiating a certain task.

In this situation of conflict, the employees revisited the scene in question by comparing individual notes on the matter to decide a course of action. The documented statements and comments in the notebook proved to be a deciding factor and to check the accuracy of the information. The employees here are taught to trust the writings in the notebook as it is very humanized and personalized. Documentation or recording on a computer or online doesn't provide the nonverbal context of the situation that the notebook is able to provide [Fieldnotes].

The notebooks, although meant for individual purposes, also play an essential role in situations involving multiple members. Because documentation in the notebook is considered valuable, the employees engage in the disciplinary behavior of diligent notetaking.

Lastly, *disciplinary mechanisms are most potent when they are associated with or grounded in highly motivating values that appeal to the organization's actors* (Barker & Cheney, 1994, p. 30) Besides specifying appropriate behavior, contemporary organizations like CapiTech company define values, attitudes, and beliefs. The paper notebooks are considered valuable on multiple levels. First, the notebooks are "intellectual property" of the company. The content documented in the notebooks is usually related to the software and products that are developed by the company. Accordingly, the contents of the notebooks are treated as sensitive information. When exiting the company, an ex-employee has to submit all the notebooks that he/she may have utilized during the employment period. Second, value-oriented statements regarding the

notebooks are constantly reinforced by the top management, through statements such as “the best-kept or well-maintained notebooks (with appropriate serial numbers/bullet points) will receive monetary rewards and bonuses.” The more the number of points in the notebook, the higher the bonus. Additionally, statements like “take notes of everything like you write short stories” are reiterated. One top manager noted, “the notebooks reflect the personality of the employee and how the notes are written reveals the dedication/passion and depth of the person.” Here, the notebook is used to gauge attributes and work ethics of an employee. Such value-based appeals lead to rationalization of the disciplinary behavior as being profitable and beneficial.

Individual and collective behaviors are subjected to discipline with such value-ridden messages. Another motivating value attached to the notebooks involves their “evidential” significance. Employees are encouraged to maintain a record of conversations, time-stamps, and dates in the notebook that may serve as proof in case a situation of conflict arises. As a participant said, “the notebooks are very important for us as it can be used as a proof to show that this change was done at this time based on the instruction given [by a senior].” Such value-based mechanisms are simultaneously and flexibly “loose” or “tight” and display enabling and constraining qualities, although subtle, associated with highly motivating values (Barker & Cheney, 1994, p. 30).

In sum, this section addressed discipline as a social force circulating in the form of paper notebooks at CapiTech company. The four aspects of contemporary discipline demonstrated the normalized behaviors and power relationships associated with notetaking behavior. Using both traditional and contemporary concepts of discipline, this section examined the role of notebooks as a mechanism of control and an instrument for organizing and structuring processes. The

chapter's final section expands the concepts of disciplinary power to encompass the notion of panoptic, disciplinary gaze.

### **Panoptic Effects of the Notebooks**

In this section, I draw upon Michel Foucault's ideas on panopticism and the disciplinary power it embodies. These ideas illustrate the panoptic effects of the handwritten notebooks at CapiTech company.

In *Discipline and Punish* (1975/1995), Foucault elucidates the idea of an all-seeing panopticon. Originally, the panopticon was an architectural structure of prison systems built for constant surveillance and visibility of inmates. The arrangement in a panopticon is such that a central tower is surrounded by annular cells housing the inmates. A supervisor perched in the central tower is able to see through every cell. An inmate is unable to know whether or not he/she is the object of surveillance at any time. The effect of the panopticon is to "induce a constant state of conscious and permanent visibility that assures the automatic functioning of power" (Foucault, 1995, p. 201).

Although the original panopticon is associated with a specific institution, according to Foucault, it can be a "generalizable model of functioning and defining power relations in terms of the everyday life of men" (p. 205). Foucault proposes that a panopticon has multiple applications in various social institutions: prison reforms, medical care, education systems, organizational and worker supervision. It is a distribution of individuals in relation to one another, of hierarchical organizations, channels, and modes of power that can be seen in our day-to-day structures. A panoptic scheme is implemented when there is a motive to impose a behavior on a group of people.

How does this panoptic principle function through the notebooks at CapiTech company? As established earlier, the notebooks are a mode of inducing discipline in the organization. The behavior of notetaking in the paper notebooks is a form of employee supervision. The subject matter of individual notebooks is a way of tracking work-related progress and a mechanism to ensure consistent documentation of intellectual and creative content. Similar to a traditional panopticon, employees are aware that they are supervised and observed inside the office premises. Being subjected to the normative control of the culture, employees have internalized the corporate philosophy of “notetaking.” During calls and meetings, writing notes is considered as a routine and normalized activity. Any deviation from it is instantly noticed and apprehended. On a particular day at the office, I witnessed this scene unfold revealing a panoptic effect of the notebooks:

Today one of the senior managers asked an employee to show his notebook. The senior manager wanted to demonstrate the importance of the notebook and show an example of it to me. Unfortunately for that employee, his book was not well maintained or well recorded. The points weren't in serial order, and it looked incomplete. The manager was furious at the sight of the book and admonished him. He even scolded the person who was in charge of making sure everyone's notebooks are complete. An immediate audit was ordered to check everyone's notebooks and assign them points based on the condition of their notebook. Points were deducted if the notebook was incomplete or if an employee used any other non-company-issued notebook [Fieldnotes].

Employees are aware that their notebooks might be inspected. However, they are unaware of when an audit might be issued. This system causes employees to engage in self-disciplinary behavior. Consequently, such panoptic schemes help top-level managers to exercise power. This

power is exercised by a very limited number of people in the company, but the number of those on whom it is exercised keeps increasing with every new recruitment. It has the characteristics of spontaneity, and it acts directly on the individuals. Another observation illustrates the disciplinary nature of this power:

Today a manager showed me a picture of a page of a notebook. It was a list of daily tasks one of the employees had written down in the notebook. Employees often send a picture of such daily tasks recorded in notebooks to their manager/team leader directly on their WhatsApp (instant messenger app). This is how they keep track of what people are doing [Fieldnotes].

The numbering of the list is not restarted for each new day. Instead, the series is continued and carried forward. I saw a few notebooks that had over 300 listed points. One participant revealed they had used almost six notebooks in a year. In a previously mentioned excerpt on page 72, one participant explained how the number of serial points in the notebook are important to follow project statuses and individual progress. Team leaders and top managers keep a watch on the number of points an employee has added to the list. If throughout the week, an employee has managed to add only one point to the previous count, it indicates that the employee has not maintained a record of the daily agenda or completed scheduled tasks. This is a risk because employees cannot always predict when a top manager might ask for their notebooks.

The following quote explains how the notebooks infuse the effect of panoptic surveillance over employees. Employees often deal with the possibility of being questioned about a particular conference call or asked to explain details of it at any given moment, long after



the call. During such extemporaneous situations, if the required content is not updated in the notebooks, it may lead to disciplinary action:

I have a habit of taking notes, even before coming here. But here, the people who do not take notes [or are not used to it] have to take notes because the management says so. If you are in a conference call, and your manager is also present there, and even if you are just observing the call [to learn the process], you have to take notes. Because if you don't write down anything, the manager might ask you, "will you remember all these things?" You can say yes at that point, but then the manager will get back to you after, say, seven days and ask you what happened in that call. So, because you may get asked such questions after a week, people write notes which are worth remembering. I personally find it good, as I can't remember well [Interview].

This comment demonstrates how an individual subjected to the panoptic gaze, or as Foucault calls it, "field of visibility," assumes the responsibility for the constraints imposed by its power (Foucault, 1995, p. 202). The individual becomes a part of the power relation and an agent of his/her own subjection. The notebooks represent this panoptic discipline to a certain degree. Through these notebooks, employees are kept under observation by the ever-watchful management.

With this, I conclude the analytical portion of this chapter. The following section is a summation of the major concepts and theoretical frameworks I implemented to deconstruct the assumptions, practices, beliefs, meanings, and attitudes surrounding the notebooks at CapiTech company.

## Conclusion

This chapter examined the significance of paper notebooks and the behavior of manual notetaking at CapiTech company. Analyzing the data acquired from participant interviews and field observations, I was able to formulate five major themes: (a) affordances and constraints of notebooks; (b) notebooks as an institutionalized tool; (c) notebooks as instruments of normative control; (d) notebooks as instruments of disciplinary control; (e) panoptic effects of notebooks.

The first and second analytical themes incline towards a functionalist perspective to examine the activities and behaviors enabled and restrained by the use of notebooks at the CapiTech company. The second theme begins with the five criteria proposed by Goodman and Dean (1981) to illustrate the process of institutionalization of the notetaking behavior at CapiTech company. Furthermore, this section employs concepts of institutional logic and institutional messages (Lammers, 2011) to solidify the argument that the handwritten notebooks embody institutionalized rules and belief systems. Moreover, it establishes the very medium of notebooks as an “institutional message” that is intentional, pervasive, and enduring.

The analytical sections then advance to a more “critical” approach. Drawing from concepts posed by Kunda (2006) in his ethnographic study of a high-tech firm, this section investigates how the notebooks act as instruments of normative control at CapiTech company. Through this section, we are able to understand the nature of normative control and how it operates in the organization. Here, the notetaking activity is internalized by members as a standard and appropriate behavior essential to gain membership and conformity in the organizational culture. Additionally, this section examines the notetaking behavior as a ritual that is ubiquitous and aids in reinforcing corporate philosophy.

The next analytical section evaluated how discipline is perpetuated through the implementation of notetaking behavior in the company. Barker and Cheney (1994) expand Foucault's ideas of traditional forms of discipline to incorporate subtle and contemporary forms of discipline. Using these as guiding frameworks, this section considered the notebook as a disciplinary mechanism embedded in the social makeup of the organization. Additionally, it explored motivations and values associated with the notebook that affect individual and collective behaviors of members at CapiTech organization. Thus, the notebooks are significant tools used to discipline, organize, and structure the day-to-day functions in the company.

The final analytical section studied the panoptic effects of the notetaking behavior and how the notebook serves to keep members of the CapiTech organization under the constant disciplinary gaze of the management. Implementing Foucauldian concepts of panopticism, I found that members engage in self-disciplinary behaviors and supervise their own actions such as maintaining and updating the notebook regularly to avoid apprehension by the management. Moreover, the panoptic effects of the notebook give rise to power relations within the company, allowing individuals in those power positions to exercise discipline and control over organizational members. Shifting the analysis from this traditional paper medium of notebooks, the following chapter identifies and examines the practices, beliefs, norms, and attitudes surrounding electronic communication at CapiTech company through various critical-interpretive frameworks.

## **Chapter 5: Email and Related Electronic Technologies at CapiTech**

Internal communication at CapiTech company occurs through multiple channels. Besides communicating in person, employees utilize various communication technologies to interact with each other. Prominently used communication technologies include emails, instant messengers, and conference calls (audio and video). Additionally, a project tracking tool called Jira is also widely used in this organization. The two specific email tools commonly used at CapiTech company are Gmail and Outlook. A business email address (for example, yourname@CapiTechorg.com) is created for every employee on the first day of employment. Accordingly, I was provided access to this company's internal G-suite or Google application products on the first day of field observations. With access to this internal email account, I was able to connect with all employees of the company using Google Hangouts (an instant messenger application). One important feature of such business email accounts is the "searchability" of contacts. With the help of Hangouts and Gmail, I was able to search names and email addresses of all employees in the common "contacts database." This feature of the email technology helped me to recruit participants for conducting interviews.

In this chapter, I address some functions of email as it is the most common and essential communication technology used at CapiTech organization. Additionally, I discuss attitudes and practices associated with email usage and how this technology contributes to the organizing process at CapiTech. I also consider connections between email and some of the other electronic communication tools utilized at CapiTech. In this chapter, I attempt to study email and related electronic technology usage using frameworks including organizational discourse, discipline and control, identity regulation, and surplus value.

## Overview

Organizational constructs provide significant insights into the role of technology in organizations. Existing studies have considered technology both as a process and as a product of the process. The constantly changing, evolving, and interactive nature of technologies and organizations makes it imperative to consider the relational constructs that influence organizing processes. This perspective is distinct from the conventional approach that usually studies the impact of technologies on productivity and efficiency. Additionally, “technology has taken a form of structuration process by which tasks and people in organizations change in response to demands” (Roberts & Grabowski, 1999, p. 409).

Scholars have provided us with multiple definitions of technology, some of which involve overlapping common elements, while others emphasize contrasting elements. According to Weick (2001), “the central idea is captured by the phrase technology as equivoque. An equivoque is something that admits of several possible or plausible interpretations and therefore can be esoteric, subject to misunderstandings, uncertain, complex, and recondite” (p. 148). This definition suggests that technology has multiple meanings and the dense interactions that occur through these technologies can be modeled in multiple ways. Hulin and Roznowski (1985) propose that “we define technology as the physical combined with the intellectual or knowledge processes by which materials in some form are transformed into outputs used by another organization or subsystem within the same organization” (as cited in Clegg, Hardy, & Nord, 1998). This definition includes the possibility of using multiple and diverse technologies in the same organization. Here, the emphasis is that technology is like a process; it changes over time and space. Additionally, previous studies have shown that communication technologies are selected on the basis of the attributes of the medium. Media richness theory (Daft and Lengel,

1986) proposes that media can be arranged on a spectrum of attributes ranging from lean to rich depending on the speed of feedback, variety, personal or impersonal nature of the source, and the language used. Based on these qualities, effective communication occurs when there is an alignment between the complexity of the task and the richness of a medium (Daft & Lengel, 1986; Flanagin & Waldeck, 2004). However, because this theory emphasizes a functionalist stance, it does not provide a primary framework for this research study.

Early studies state that “emails use computer text-processing and communication tools to provide a high-speed information exchange service” (Sproull & Kiesler, 1986, p. 1493). Evidence showed that electronic mails reduced social context cues and provided information that was self-focused, undifferentiated by indicators of organizational status (p. 1509). More recent studies investigating the role of advanced communication and information technologies (ACITs) in organizations classify emails, webpages, online or instant chat messengers, voicemails, cellular mobile services, video conferencing, online databases, and intranet services as contemporary technologies with distinctively “advanced” characteristics compared to traditional media (Waldeck, Seibold & Flanagin, 2004). ACITs are “interactive, computer-mediated technologies that facilitate two-way interpersonal communication among several individuals” using “written text, recorded or synthesized voice messages, a graphical representation of communicators and/or data, or moving images of the communicators and/or message content” (Culnan & Markus, 1987, p. 422). Users of these technologies may have varied geographic locations and may communicate asynchronously or synchronously.

### **Theoretical Framework**

The succeeding sections investigate the practices, attitudes, and meanings surrounding email and related technologies at CapiTech company. The data gathered from participant

observations and interviews are analyzed using concepts of overarching organizational Discourse and ongoing internal discourse (see chapter 3 regarding the analytical Discourse/discourse distinction), how disciplinary control is perpetuated through the norms and practices associated with email communication, and what roles email and related technologies play in regulating collective and individual identity at CapiTech organization. Before implementing the following theoretical framework for interpretation, I generated initial categories such as “email habits,” “uses of email communication,” “emails as official means of communication,” “communication groups,” “scrum reporting,” “data protection,” and “managing emails.” Categories such as “email etiquettes” were developed further into a subcategory “rules about writing emails.”

### **Email as an Organizational “Text” or Form of discourse**

Scholars of discourse analysis assert that organizations are made of discursive structures and that discourse forms a basis of all organizational life (Fairhurst & Putnam, 2004). Similar to other social settings, people talk and interact with each other in organizations. While performing their responsibilities, members often engage in conversations with their colleagues, bosses, supervisors, customers, and subordinates. Additionally, organizational conversations include documents or “text”-like reports, websites, memos, policies/contracts, manuals, press releases, and instructions. Texts and performed discourses are enduring symbolic realities that become organizational memories for employees. Some characteristics of organizational text include material contextual features, accessibility, ability to be conserved in a legitimate format, and flexible usage (McPhee, 2004). A prominent approach to studying discourses is based on the linguistic or language use properties of texts. Scholars conduct discourse analysis to emphasize the communicative nature of interactions, to capture important aspects of dominant organizational activities, and because it allows for a critical-performative approach to examine

interactions (Alvesson & Kärreman, 2000a, 2011, p. 1123-1124). However, discourse analysis is not limited to linguistic forms; it also considers network analysis, message flow, and information processing.

Before we look at emails as an organizational discourse, it is useful to review the analytical distinction between *Discourse* and *discourse* introduced by James Paul Gee (1999). Small “d” discourse involves social interactions or “verbal interchange of ideas” in an organization (as cited in Cooren, 2015, p. 25). It is considered a medium for facilitating social practices through language and the processes of sending and receiving messages. “It is ‘the doing’ of organizational discourse, whereas the text is ‘the done’ or a material representation of discourse in the spoken or documented form” (Fairhurst & Putnam, 2004, p. 7). In this case, I have considered email communication technology as part of the organizational text of CapiTech company and the process of communication using emails as the organizational discourse.

In contrast, upper-case “D” Discourse refers to “a general and enduring system of thought and ideas in a historically situated time” (Fairhurst & Putnam, 2004, p. 7-8). According to James Paul Gee, Discourses can be recognized through “language, action, interaction, values, beliefs, symbols, objects, tools and places together in such a way that others recognize you as a particular type of who (identity) engaged in a particular kind of what (activity) here and now” (as quoted in Cooren, 2015, p. 23). Thus, Discourses are more aligned with ideology and fundamental understandings. Scholars interested in a Discourse perspective consider how “Discourses materialize and how the economic, ideological, institutional, political etc. material shapes everyday discursive practices” (Mumby, 2011, p. 1154).

Now that I have established the discursive nature of organizations let us address the ideas put forth by Fairhurst and Putnam (2004) to examine the relationships between discourse and



organizations. The authors elucidate these relationships by highlighting three orientations, namely, the *object*, *becoming*, and *grounded-in-action* orientations. In short, I investigate what “we are able to see, think, and talk about” when we look at the discourse at CapiTech organization through the textual emails situated in each of these three orientations (Fairhurst & Putnam, 2004, p. 8).

To begin with, the *object orientation* considers an organization as a pre-existing entity with discursive features and outcomes. The organization is formed prior to discourse, is stable over time, and has particular features or elements that shape language use. Human actors align themselves to the organization with language use and consider discourse as an artifact that stands independently. This view considers the organization as an object like a “container” with specific dimensions and constraints. In this object view of the organization, a few key components produce the discourse. Additionally, there is a clear distinction between human agency and structure in this approach. In the case of CapiTech organization, a “professional” tone and use of formal language influence the discourse that occurs via emails. The organization, if considered as an independent “object” or pre-existing entity, is a professional business firm that believes in maintaining formal relationships with its clients. The employees, therefore, orient their language when interacting with clients or top management officials. This participant explains how employees maintain consciousness about a formal tone in an official email:

For professional communication, you cannot use “u” for “you” and for “are” as only “r.” One should differentiate the tone—informal and formal. That's how you should differentiate your method of communication. Along with tone, you should also differentiate your writing as well. There is no need to put up a guideline or instruction for this because everyone should be aware of the fact that they are working in an

organization, what they are communicating is not their personal or “friend zoned” conversation. It's rather something very professional, and they should stick to the professional protocol [Interview].

The micro level discourse that occurs via emails and the macro level organizations are independent, yet interactive (Fairhurst & Putnam, 2004, p. 12). Human agency in this approach is theorized around significant organizational constraints and linguistic boundaries.

Understanding CapiTech organization as a “complex entity with formal properties is central when studying the speech communities” (p. 12). Here discourse is not formative but rather is reflective of the boundaries of language use. Another participant explains how emails are considered as formal channels of communication that reflect on the image of the organization, making language crucial to the discourse:

In case if you are dealing with clients, you cannot actually go ahead and type something wrong because you are speaking on behalf of the company. So I think, client communication, for people in client-facing roles, would be more strict in terms of requirements. At least initially you would have to get your emails checked by someone who has already been here for some time [Interview].

Additionally, this participant pointed out the importance of email etiquettes and language skills that might play a key role in shaping internal and external interactions:

I think it is very important to have good email writing skills. When you get professional emails from a place, you build an image of that place in your mind that these are the kind of people you are going to meet there [Interview].

Thus, the object orientation ignores the idea that micro-level discourse has any formative influence over the organization. In CapiTech organization, the big “D” Discourse of

professionalism with clients is upheld through the micro-level discourses of formal email interactions.

Second is the *becoming orientation*, which considers discourse as a formative aspect of organizing that emerges as a language in use, in interaction processes, and through systems of power and knowledge (p. 10). Organizing in this orientation emerges from linguistic forms addressing relational differences. Examples include commands/instructions versus requests, high versus low-status categorization of members, affirmation versus rejection, the power associated with speech, forms of address, hierarchy, and domination (p. 13). The becoming orientation rejects the idea that language is a mere artifact. To illustrate this, scholars have investigated discourse from performative, storytelling, symbolic interaction, rhetorical, and literary standpoints. This participant illustrates that linguistic discourse via emails at CapiTech organization demonstrates ranking and status of management:

People have their own style of answering emails; be it a fresher or be it a CEO with 20 years of experience, all have their style. I have put in a signature in my email, some people like the CEO or top management people they don't use the signatures. Their email [address] is so known that they don't need to explain. So, they just write regards and the first name. They don't even write the last name, but of course, some people do. They feel that internally they are so well known, they don't need to actually give their introduction. With the client they give their full name thinking that client is supposed to remember [Interview].

This comment suggests that discourse gives rise to relational distinctions in organizations. Emails, in this case, become the “text” for facilitating discourse pertaining to assigning tasks, instructions, conveying approval or disapproval, and for “bringing everyone on the same page.”

Finally, micro-level discourse consisting of social information in the form of overt statements and claims, interpretations, salient communication events, and norms prescribing appropriate behaviors can “influence perceived media characteristics, perceived communication task requirements, attitudes toward communication media, and media use behavior” (Fulk, 1993, p. 924) to create a “similar pattern of media attitudes and use behaviors within groups, across tasks with different communication requirements” and across different groups (p. 924). The intention behind this is to impel members to accept the underlying rules and values.

Finally, the third orientation is the *grounded-in-action* perspective that treats action and structure as mutually constitutive. Giddens’s structuration theory informs this orientation, and I have dedicated the chapter following this one to discussing the principles of structuration and their relationship to the grounded-in-action approach.

### **Email as a Socialization Tool**

Now that I have established email as an integral channel of communication and an organizational discourse for the employees at CapiTech company, let us address some properties of emails. At CapiTech organization, a newcomer’s first formal socialization with the company’s culture occurs with his/her assimilation into the company’s internal network and access to the G-Suite applications. Jablin (1982, p. 256) defines organizational socialization as “the process by which organizational members become a part of or absorbed into, the culture of an organization” (as quoted in Waldeck et al., 2004). Creation of an employee email address marks the beginning of this socialization process. Additionally, emails play a pivotal role in what Van Maanen (1978) calls “the process by which a person learns the values, norms, and required behaviors which permit him or her to participate as a member of the organization” (as quoted in Flanagin &

Waldeck, 2004, p.139). Socialization may take other forms like assimilation, fitting-in, sensemaking, adaptation, and accommodation.

To illustrate this point, a participant explains how employees become part of “email groups” based on their teams, projects, and even social group affiliations within the organization. Employees at CapiTech company are divided into ten “Houses” or artificially created cultural groups. Based on these “Houses,” members host social events like festivals and cultural gatherings. To facilitate communication within the members, each House has an official email address. All official information pertaining to such activities is communicated using the designated email address. Thus, emails play an important role in networking, formulating relationships, and performing organizational activities. These features not only contribute to the assimilation process of new employees but also promote team-building:

Yeah, these technologies are collaborative. We have “Houses” in our organization, and they have various email groups. So, whatever you want to communicate, we do that on emails. And, we have a Company (CapiTech India) group on email, as an organizational group. So, whenever we have some good news, or we have some sessions, seminars, group activities, we go for posting on CapiTech India email group. Usually, the CEO drops the email. Even when we have sports tournaments, that news are conveyed through the organizational email group. If somebody is having a farewell or welcoming, then it's conveyed there [Interview].

Additionally, these company-wide email groups provide new employees a channel to initiate tasks, understand roles, seek access to resources, and comprehend what organizational life is like. With the help of information-disseminating technologies like emails, new members gain more opportunities to communicate with their colleagues and learn about their workplace. As

one newly joined employee explained, emails played an important role during their orientation sessions to get a head start with responsibilities:

Um, yeah, email, I'll have it even on my phone. So, I was in the training session yesterday with no laptop access, and I got an email that we have this task to be done. Good thing I had it open on my phone too. So today I came to the main office to work on the task...so yeah [for training sessions] we are informed in advance about the activities of the organization through emails [Interview].

Information exchange about company policies and practices, notices about meetings and events, and using equipment and resources are some ways in which interpersonal communication is facilitated via emails (Flanagin & Waldeck, 2004). Therefore, one way to look at emails in workplaces is through the lens of "affordances." This perspective explained on page 50 states that affordances are useful for the process of organizing, especially in the form of information and communication technologies. For new recruits in an organization, communication technologies like emails and instant messengers serve the affordance of socialization and integration. Studies have shown the internet-based tools like emails, telephones, and online chats are heavily used for social bonding (Flanagin & Waldeck, 2004). This excerpt from a new employee sheds light upon the socialization affordances of email and WhatsApp groups:

Socially, yeah, these communication technologies are very helpful. We have an online group of new joiners where we usually converse. Let's say, you meet some employee during tea time, then you can easily find them on the Google Contacts and send them a message on Hangouts, that way you can make connections and friendships. So, emails and Google Hangouts are very user-friendly for finding individuals [Interview].

Moreover, technology use is also associated with in-group norms (Fulk et al., 1990).

Organizational members, especially managers, can influence patterns of usage, effectiveness, perceptions, and attitudes surrounding technology uses that might play a role in the assimilation of newcomers (Markus, 1994; Waldeck et al., 2004). This participant at CapiTech company notes how managerial habits can shape technology usage in the workplace:

Some people here write the entire email, especially if it is not too long, in the subject line itself, I mean the whole message. I noticed that some individuals have picked up this habit from some of our managers. When it's coming from the management, it says a lot about the image of the place [Interview].

From this comment, we can gather that members form a perception or image of what counts as appropriate behavior. Although this example might be unique to a few managers in the company, it is essential to acknowledge the power of such discourse. For effective assimilation into the organization, new recruits often comply or engage in "appropriate behavior," consistent with that of their colleagues in terms of technology use (Waldeck et al., 2004, p. 169). Through information seeking, social interactions, and sensemaking, members send and receive messages about the acceptable communication channels within workgroups (p. 169). For example, when one participant was asked what advice they would give to a new employee to behave appropriately while using email technology, this was the response:

So, I would say, being too informal on emails is something you should avoid, because, things like that may be ignored [at that point] but people, like supervisors, they make a mental or psychological note of that. With emails, I think it's better if you keep the whole team in the loop most of the time. That would help another person that might be working

on it to keep track of where and what issue has been fixed. And so that he/she won't do that work again. So, little things like these are important [Interview].

Therefore, such norms reflect and govern beliefs, attitudes, and behaviors pertaining to appropriate technology use. These norms are part of the “shared cultural norms” that are well-established and are institutionalized elements of the workplace affecting newcomers’ experiences (Flanagin & Waldeck, 2004). Consequently, the new members accept and incorporate the group messages, group meanings, and attitudes into their own constructions of reality. This process of internalization “produces a convergence of interpretations, attitudes, and meanings between an individual and a group” (Fulk, 1993, p. 924).

### **Emails as Mechanisms of Organizational Control**

The issue of control is central to critical organizational communication studies. Organizations as arrangements of social interactions involve controlling mechanisms that provide order to structures, shape behaviors, and govern individual actions. However, it is important to note that members of an organization are not passive recipients of control. Employees resist and creatively respond to organizational control, making it a dialectical process (Mumby, 2012). In the following sections, I examine how email communication technologies at CapiTech company serve as instruments for exerting control in the workplace.

**Disciplinary control.** Disciplinary forms of control “are usually ‘bottom-up’ control mechanisms that emerge from employees’ own production of a particular sense of self and work identity” (Mumby, 2012, p. 12). An individual under disciplinary control is an autonomous subject capable of taking his or her own decisions and is simultaneously the object or target of self-discipline, informed by corporate and institutional influences that regulate identity (p. 13). Barker and Cheney (1994) argue that discipline reflects a “way of being” in organizations that is



internalized and reinforced (Barker & Cheney, 1994). Drawing from Foucauldian ideas, they contend that discipline is embedded in social relations that control, govern, and normalize individual and collective behavior (p. 20).

Let us consider how this disciplinary control framework applies to email usage at CapiTech company. According to Foucault, disciplinary elements are “discursive formations” that shape day-to-day activities, provide context for organizational interactions, and differentiate appropriate behaviors from unfavorable ones (p. 26). This participant explains how the discursive aspects of email writing promote self-disciplinary behavior:

The emails which require some action or review from my side, I respond with “noted,” then, I write it down in my notebook as a pointer. Other emails that don’t require a spontaneous reply, I reply to them later. The ones that require an immediate reply, I give them an “acknowledgment.” It is very important to acknowledge emails, I have learned that in this organization, it is very important to acknowledge emails with “got your email, working on it” [Interview].

This kind of discourse-based discipline is considered a desirable behavior amongst employees because response of “email received or acknowledged” provides an assurance that the task is being addressed. Employees prefer that even if the person (to whom the email is sent) is busy with another task, he or she should at least respond with an acknowledgment via email or call. According to this participant, it is understood amongst employees that “if it’s a very ‘critical’ email, then one must reply with ‘yes, I am checking it immediately, I will respond asap.’ But if it’s not an urgent thing, even then you should say ‘I’ll reply later’ to the email.” One prominent reason behind this norm is that if the emails are not acknowledged, the sender will be unaware of whether the recipient has seen it and will have to send multiple “reminder” emails, call, or even

walk over to the desk to get a confirmation. Such self-disciplinary techniques of monitoring and reporting are normalized and govern large formal communication systems in an organization (Barker & Cheney, 1994, p. 26). Mechanisms such as these influence the attitudes and behaviors of individuals as they convey information to employees by calling attention to the prescribed behaviors and interpretation of events. Information and cues like the “acknowledgment of emails” are standard provisions for delineating appropriate behaviors, for rationalizing workplace activities (Fulk, 1993, p. 924) and for inducing collective discipline.

Discipline in modern organizations “embodies an unobtrusive or non-overt control on organizational activity” (Barker & Cheney, 1994, p. 27). This type of control doesn’t occur from outside or external forces; rather, employees seek to bring themselves under this control. Such exercises of power are usually subtle and remain unnoticed. They serve to maintain order, promote predictability, and normalize behaviors in the work environment. This is especially true for new recruits who readily conform and identify with organizational expectations. For the employees of CapiTech company, checking and prioritizing emails is a part of the job that has some disciplinary qualities. Even though there are no set times or rules about addressing emails, almost all employees begin their day with checking emails. Most of them have their emails logged in on computer screens at all times to avoid response delays. This participant comments on how it is necessary to update one’s inbox constantly:

My email is always logged in on my Mozilla, so I have two screens. Mostly, one screen is popped up with emails. If I am working on Excel or SQL servers, it pops up on both screens if multiple screens are open. So once in a while, I get an email notification. It refreshes automatically, and I keep checking them [Interview].

Similar to this participant, another employee said, “first thing in the morning is checking emails, even if I have a call and it is scheduled in another 15 minutes, I would use that time to check my emails. Also, I make sure all my emails are replied to before leaving office premises.” This is a type of disciplinary habit which the employees have inculcated or “willfully subjected” themselves to. Such power relationships between the organization and its members are both enabling and constraining. Individuals are able to accomplish their tasks and goals, and the same time, the consistent requirement to check and prioritize emails and respond to them in a timely manner has restrictive elements (Barker & Cheney, 1994, p. 28).

Moreover, this unobtrusive discipline is collaboratively generated and reinforced (p. 29). Instead of direct methods of control or one-to-one supervision, concerted disciplinary mechanisms are internalized by members to meet the institutional demands. Such disciplinary forms also arise from the collective interaction of people in the organization who, along with other actors, create their own ways of knowing and doing things. Over time such collective behaviors become routine, regular, predictable, and natural. The application of these standards contributes to disciplining behaviors favorable to the organization. To illustrate this, a participant talks about how it is important to “cc” (tag) your teammates and supervisors in emails:

Even if I am on leave, it's not just that I am emailing my manager that I am taking a leave. It's the whole team who is receiving that message that I'm taking leave. So everyone knows that someone is not in the office today. So, this thing everyone follows. If you have any concerns you have to keep certain people in “cc” and even if you want to take any leave you will inform everyone, even the HR [Interview].

This comment suggests disciplinary behavior associated with email technology that is collectively enforced and routinized. An employee's absence must be reported to the entire team as daily task assignments are affected, so almost everyone follows this standard procedure.

Another example of this collective discipline is being on board with what all other team members are working on. Employees are encouraged to share and "cc" their daily tasks and "to do" lists with all their immediate group members. This comment from a participant illustrates how disciplinary control manifests through collaborative actions:

If any work is being shared to the manager, even he will "cc" all of us that, because he wants that everyone should know what he is working on. This is just to keep a tab on who was working on what. That's why we even have a scrum report that we usually find too [small laugh] tiring to update every day. But the main reason you do that is, so you know what another person in your department is doing which, I think, is very important. You should not be unaware of that since it is a team project [Interview].

Therefore, even if it is an added task, employees engage in disciplining each other's behaviors based on the norms explicated by the organization. Emailing daily tasks and scrum reports (see chapter 1 for an explanation of scrum) to the entire team along with the manager is a form of collective disciplinary control. In this form of concertive control, workers collaborate to develop the means of their own control. Concertive control reflects a negotiated "consensus that creates and recreates value-based discourse that workers use to infer 'proper' behavioral premises: ideas, norms, or rules that enable them to act in ways functional for the organization" (Barker, 1993, p. 412).

The following excerpt from a participant interview points to the routine of documenting conference call conversations on emails. Employees of CapiTech company are actively engaged

in the notetaking behavior that was addressed in the previous chapter. This handwritten notetaking activity in the paper notebooks is replicated using email technologies. During a conference call with clients or offshore teams, employees take notes of important points in the notebook. Later, after the phone/conference call is over, those notes are polished and filtered for key/relevant items. All these key points are then sent over email to the other party involved in the call. This participant explained the purpose of the procedure:

After a call, I give them [clients/teams] the entire summary of the conversation [the participant showed an example of a call summary on his mobile phone] ... Yes, everyone does this. We weren't told to it, but we just figured it would help. This is just to get a confirmation that we haven't missed anything from their side. This man is the client, we are the vendor, and we have sent it all. I noted it down on my notebook point by point. And then I send the email [Interview].

This example demonstrates how employees collaborate and control their interactions, not only within the company but also with clients. The same participant went on to add:

I "cc" everyone in the email. So that every person knows what is to be done. See, these points [in the summary email] are not limited to just one person. The other person's team is also involved. These points will not be sorted by just one person; it is shared with everyone. Then we have a meeting regarding the status of the work, solve doubts, after that, the work is distributed to everyone [Interview].

Once again, this comment suggests a collective requirement and dependency on sharing call updates via email with every member of the team. The daily implementation of these "standards can structure and discipline behavior and thought by substituting for ad hoc communication"

(Barker & Cheney, 1994, p. 30). Such regularities in the structure guide the employees' understanding of what to do in that moment.

Finally, these disciplinary mechanisms are associated with highly motivating values that appeal to the organizational actors (Barker & Cheney, 1994, p. 30). Contemporary organizations not only specify appropriate behaviors but also define attitudes, beliefs, and values that guide individual and collective actions. In CapiTech company, value-based appeals are associated with safeguarding an employee's position in the organization from miscommunication. Employees at CapiTech company are consistently encouraged to use emails for all formal communication and to document work progress, conversations, meeting minutes, client requirements, and similar work-related information. As mentioned in the previous chapter, handwritten notebooks are used for recording purposes on an internal organizational level. However, emails have an additional value as a record for both internal and external communication. Documentation and records of client-employee and employee-employee interaction on emails are considered as a "legal" form of proof that can become decisive during conflict situations. As this participant explained, emails serve as evidence:

I prefer to use email because everything is "black and white" on it, you can say that is true for office politics also. On emails, it's like I have the evidence of each and every thing [Interview].

This comment suggests that there is a "formal" or "official" value attached to the content sent over emails. Another participant emphasizes the evidencing aspect of emails that the management promotes:

Emails are used as proof that you asked this person to do a certain task, like evidence. Email is about saving your a\*\*, to show that you did your job. I asked my boss, "I can

just call to discuss the task, so why send an email?” He said to me, “but what if that person forgets to do the task? Then the work will get delayed. So, this can happen on email too, I mean the person can still forget to complete the task. On that he said, but you will be safe in that case because you will have the email to show that you did your part of the work” [Interview].

Another employee explained the need for emails as they are valuable for the record:

With emails it’s like, it’s written somewhere. For reference purposes, you can always use it or revisit it. So, I think for formal conversations, email is the only thing I prefer.

Because during calls, I may write things, but then that won’t hold as an official record of what the conversation was [Interview].

The organization employs such disciplinary mechanisms that can sometimes be enabling and serve the best interests of employees but also have constraining or “tight” properties that expect employees to function within a range of behaviors tied to implicit values (Barker & Cheney, 1994, p. 30). It is thus clear that CapiTech organization exerts a subtle form of disciplinary control over the employees through the use of email technology by associating it with values like “official,” “formal,” and “evidential.” The next section discusses identity regulation as a form of control in organizations and examines communication technologies such as email to study identity formation at CapiTech organization.

### **Individual and Collective Identity Regulation**

In a previous section, I addressed the question of how email communication technology facilitated newcomer socialization at CapiTech organization. When a new employee joins an organization, identity negotiation comes into the picture. Member identification is an effective and unobtrusive form of control that persists in organizations. New employees are encouraged to

identify with and affirm strong corporate cultures to gain membership and acceptance. In this section I ask the question, what role does communication technology play in identity formation and regulation in an organization? To answer this question, I examine the narratives around email technology at CapiTech and their effects on members' identities.

Identity regulation as a “form of organizational control is achieved through self-positioning of employees within managerial inspired discourses about work and organization with which they may become more or less identified and committed” (Alvesson & Wilmott, 2002, p. 620). Earlier in this chapter, I discussed the discursive nature of organizations to demonstrate how email operates as a “text” and a medium of discourse at CapiTech organization. The “formal,” “official,” “professional” discourse surrounding the use of emails at CapiTech acts a form of control that regulates employee identities. An employee becomes “an identity worker” who is encouraged to “incorporate the managerial discourses into narratives of self-identity” (p. 622).

Let us consider in the following excerpt, for example, how one common managerial discourse prevalent at CapiTech organization involves checking and responding to emails frequently. As a manager explained:

Everyone should keep reading their emails on a regular basis; it should not happen that you are reading your emails only at the end of the day or after two or three hours. People should develop the habit of reading them frequently; it will help them to go through each and every email in detail [Interview].

When I asked another manager about how they guide new employees to follow organizational norms, this was the response:

Interviewer: What advice you would give to newcomers about...



Interviewee: [Immediate response] check your emails [laughter]

Interviewer: [laughter] you didn't even let me complete the question, because you knew what was coming...okay, okay why would you say that?

Interviewee: [laughter] I face that. For many people every email is not important. So, they tend to ignore it. The person who sent the email might think that you are not putting it on priority or think it's not important or it's not my cup of tea. Don't do that. Always check and respond either with “noted” or call the person [Interview].

Therefore, the established ideas about the standard or “natural” way of doing things in a particular situation requires adopting a sense of self-understanding. Newcomers are told that emails that carry messages of task-dependency, meaning a chain of workers is reliant on preceding tasks to complete succeeding tasks, need to be addressed first. Such guidelines and networks of meanings in social settings help the new employees to understand what is necessary and natural for the corporate functions.

This manager also added that as an employee of this company, “this is how we do things around here”; being responsive to emails is a crucial element of everyone’s job. In this concertive form of control, employees are prompted to engineer their daily work habits and decisions according to organizational values and goals. The manager continued to emphasize how important it is for employees to inculcate the habit of acknowledging emails which in turn functions to inform members’ identity as an employee of CapiTech company:

Many times what we do is we send emails, and we make phone calls as reminders, “I have sent this email, please check” [laughter]...if people keep reading their emails frequently then no need to make a phone call...One more thing, many times, whenever people receive emails, they immediately start working on it, but they don't acknowledge

that “yes I have received mail, and I have started working on that.” The person who has sent the email might think that no one is working over the email, causing confusion. So, if everyone keeps the habit of acknowledging email, that will be better [Interview].

This type of discourse permeates the organization and functions to gain consent and commitment to corporate goals. Additionally, discourses are linked to the process of self-identity formation and reproduction. Such discursive practices prompt “identity work” which is an “interpretive activity involved in reproducing and transforming self-identity” (Alvesson & Wilmott, 2002, p. 627). Employees reflect upon the structured narrations prevalent in the organization related to a certain behavior, as in this case, usage of email technology, and adopt practices and discourses that are intentionally targeted for inside members (p. 627). To illustrate this, one participant said, “how I used to write emails when I joined this organization and how I write the emails today is drastically different. I guess I adapted my style to the ways of the organization.”

Additionally, a new employee noted that an important part of identity formation is access to specific email work/project groups and becoming a member of the more informal or social WhatsApp groups and Hangout groups. Individuals experience self-identity work when they begin to associate and identify with the perceived characteristics of the organization. A new recruit at CapiTech company explained, “I haven’t been assigned to a specific project yet. Once that happens, I will be added to the respective email and WhatsApp groups.” Here, technology plays a pivotal role in answering the question “Who am I (in this organization)?” The answer can be found in occupational or professional affiliations that are facilitated by communication technologies (Alvesson & Willmott, 2002, p. 625). These social categories on electronic platforms to which individuals are subscribed create and sustain social distinctions. Feelings of community and membership are fostered when individuals become part of virtual groups on

emails, WhatsApp, and Hangouts. Being added to WhatsApp groups places an individual in a discursive space that not only increases interaction with the group members but also demarcates boundaries between “us” and “them.” A participant mentioned, “you don’t want certain people in certain [WhatsApp] groups, especially people who are close to the management” [Interview]. Gaining membership to electronic communication groups or being left out of a group is influenced by an individual’s job status, affiliation with the managerial staff, and educational background.

As mentioned earlier, at CapiTech company employees are divided into “Houses.” Each of these “Houses” has its own email and Hangout groups, access to which is limited only to the members. Even though the “Houses” fragment the entire employee population into smaller communities, they also encourage close-knit “workplace family” values. As one participant said, “the culture at CapiTech company is very homely [friendly].” Social categories to which individual members subscribe generate a world of “us” that engenders feelings of belonging and community (Alvesson & Willmott, 2002, p. 630).

Other than the “House” groups, each department and sports team of the company has groups on emails, WhatsApp, and Hangouts. This participant explains the benefit of having electronic groups:

In this company, for example, we have a WhatsApp group, it is for our department only.

In that, there are developers and testers, so if we need something, we just try to ping each other. It is a group, so if someone is not reachable, someone else will communicate it to that person. It's very easy that way [Interview].

Note here that such devices of teamwork manifest a corporate effort to provide convenience at work. Being a “team member and/or a member of a wider corporate family may then become a

significant source of one's self-understanding, self-monitoring, and presentation to others" (p. 630). For example, one manager said, "we have our House Hangout groups and WhatsApp groups. Also we have project groups, so yes, everyone is informed about a particular situation. So, everyone works together in the process." In such group/team associations, employees monitor each other's work progress and are conscious of how they present information. This kind of identity regulation operates through social events and shared tasks that are planned and executed using these virtual groups.

Identity regulation in the form of bureaucratic and concertive control gives meaning and legitimacy to certain behaviors. In the context of CapiTech organization, "the language of liberation and self-actualization" may function as "means of engineering consent and commitment to corporate goals" (Alvesson & Wilmott, 2002, p. 624). Such new forms of control are exerted to control elements of identity. Characteristics like adaptability, multitasking, flexibility, and multiskilling are encouraged. Member identity is regulated through the removal of constraints over the exercise of initiative and responsibility. To illustrate this, one participant described how:

Yes, I use emails for formal stuff. But we can use WhatsApp to directly contact the client if the client wants to connect on WhatsApp. This organization has given us that kind of independence to deal with our own clients. "It's your client; you deal with them the way you want." If there is some issue, you put it on Jira, but if your client is not agreeable to that and wants to use some other system, it's between you and the client. It's how you mutually do your things [Interview].

Although employees are encouraged and disciplined to use emails as official and formal means of communication with clients, sometimes if clients offer to converse on WhatsApp,

employees are allowed to do so as long as some official record of the interaction is maintained either on emails, or Excel, or a project tracking tool. This is an example of a “micro-emancipation” mechanism that may render employees vulnerable to the appeal of corporate identification and encourages them “to do whatever it takes to get the job done” (Alvesson & Willmott, 2002, p. 624).

To conclude, the intentional effects of social practices on processes of identity (re)construction inform identity regulation. Members of CapiTech organization participate in training and induction programs at the beginning of their job and throughout their tenure, and email technology plays a pivotal role in disseminating promotional messages that shape corporate identities of members. Lastly, members of CapiTech organization engage in identity work by assimilating organizational discourses and practices, producing identity regulation. The next section argues that employees at CapiTech company become unwitting producers of surplus labor, tying together the main frameworks discussed throughout this chapter.

### **Surplus Value and Surplus Labor**

Karl Marx’s body of work has had a profound influence on our understanding of how society functions culturally, economically, and politically (Mumby, 2012). Marx’s ideas have been a “key reference point for sociology in general and for organizational studies in particular” (Adler, 2008, p. 62). Marx’s critique of capitalism as a system of domination and exploitation and Marxian ideas on an alternative political and economic system called socialism are central to critical research. Marxist commentary on political economy is mainly concerned with economic structures of capitalist society (Heinrich, 2012). Some of Marx’s key ideas include “mode of production,” “means of production,” “class struggle,” “division of labor,” “ownership,” “commodity production,” “labor-value,” “exploitation,” and “surplus-value.”

In this section, I investigate the production of surplus value at CapiTech and how the employees of this company generate surplus labor while interacting through communication and information technologies. The goal of this section is to address concerns of data confidentiality and privacy in the organization through the lens of surplus value. First, I review some relevant Marxian concepts which then inform the analyses specific to CapiTech company.

In Marxian terms, under capitalism, workers do not have control over their own means of production and have to satisfy their economic needs by selling their labor power to the dominant capitalist groups (Mumby, 2012). Capitalism is the “system of economic production in which the very foundation of the system is not to make goods in order to produce more goods, but rather to turn money into more money” (p. 32). In this sense, the commodity’s “exchange value” or the capacity to command other products and money in exchange becomes more important than its “use value.” Thus, through capitalism, “labor becomes a commodity and forces workers to exchange their capacity to work for a wage as if this creative capacity too were a commodity” (Adler, 2008, p. 65). This suggests that when a capitalist extracts more work than that was purchased via salary, a worker produces more value in the necessary labor-time. Marx introduced the concepts of “surplus labor” and “surplus value” to describe these economic arrangements. In other words, surplus value is the difference between the actual value produced by the worker and the original value of labor power (Mumby, 2012, p. 33). This surplus value remains hidden, and workers have no control over the use of that surplus. Marx identifies a strategy called “relative surplus value” that employers use to tackle market competition with innovations and technological advancement that reduces necessary labor time (Adler, 2008, p. 66). External laws and regulations pressure firms to “accelerate technological innovations and consequently, the relative surplus value becomes progressively more important” (p. 66). The

labor process in such cases gets reshaped and then emerges the real subordination of labor to capital. Marx expounds upon “socialization of the forces of production” in large complex organizations. An individual worker under the socialization force is productive only as a “collective worker” in an organization characterized by bureaucracy, scientific management or lean production (p. 67). In this case, workers’ identities are transformed, or they get re-socialized into technically sophisticated workers with internalized knowledge and skills. Technology and innovation become socialized in a similar fashion. The processes which were once localized and depended on implicit knowledge become formalized and global (p. 74). In work organizations, technology is a significant factor that can be linked with capitalist societies. Neo-Marxists argue that technology strengthens forces of control and exploitation in a capitalist organization. Moreover, they assert that the implementation of technology and its effects are socially determined, ensuring the sustenance of dominant capitalist choices of technology. Finally, technological design itself has a potential to be shaped by dominant social forces (p. 75).

Now that I have established the central ideas necessary for this analysis, how are they relevant to our site of research? At CapiTech, I observed the manifestation of surplus labor when employees interacted with various communication and information technologies. At CapiTech organization, intellectual capital is a crucial asset encompassing human intellect and vast organizational knowledge comprising experience, the creativity of employees, and resources such as databases, software, computer programs/codes/algorithms, systems, processes, and discipline-specific knowledge (Wee & Chua, 2015). Human capital is associated with employees, their knowledge, skills, competencies, experiences, know-how, and problem-solving abilities, while structural capital includes knowledge embedded in systems, databases, and processes that encourage employees to create new knowledge (p. 39). The capital in the form of

data, information, codes/programs, sensitive organizational knowledge like strategies, policies, product-features, and client information is vulnerable to leakage (Ahmad, Bosua, & Scheepers, 2014).

Leakage of sensitive information may have varied repercussions such as financial losses, reputational damage, and legal costs arising out of breaches of agreements and confidentiality (Ahmad et al., p. 28). Breaches occurring from the inside of the organization are major threats to the security of information and data (Lowry et al., 2015). Breaches and leakages can happen deliberately, by human error, or by poor information management practices. Thus, at CapiTech company, formal and informal measures exist to preserve the confidentiality of information. These include training, risk management, awareness of policies and technical mechanisms like encryptions, passwords, authentication and logging systems, and firewalls (Ahmad et al., p. 28). Moreover, employees are encouraged to consciously take measures to avoid uploading sensitive information on communication technologies like WhatsApp as they might not be well protected as compared to the company's internal communication channels.

Now, how does this relate to surplus labor? When employees engage in the protection and preservation of sensitive knowledge, they are arguably doing additional or surplus work for the organization. To illustrate this connection, let us study some excerpts from the interviews. One participant explains the precarious nature of communication technologies and their vulnerability to information leakage. To address that problem, employees at CapiTech company perform the surplus work of saving all the data on the company's internal servers and take special measures to not send sensitive data to external sources:

See, now you have a method of backing up all the chats and everything, that is protected there. But it's risky to send photographs of sensitive natured documents. If someday, my



phone is stolen, or by mistake, if anything happens, then that is a confidential data of the organization and I am responsible for it. So, sharing through informal means is risky, so in times of urgency, you can't avoid it, so we take extra precaution. This organization is very particular about data confidentiality; after the data privacy acts [in India], you have to be that much aware [Interview].

Another participant explains that by maintaining transparency in communication across various channels, they try to keep everyone on the same page. This process involves multiple steps and additional labor to document relevant information on a variety of channels. The first part of a long interview excerpt tells us how employees collaboratively monitor each other. Here previously discussed concepts of organizational control and discipline are also applicable. This also is a form of surplus work wherein employees surveil and discipline each other:

Yeah, data privacy is the most important thing in the whole process. We were told about this on the very first day of the training session that confidentiality is something which we have to maintain. So, as an employee it's our responsibility to follow the protocols, it's not that only the organization should abide it. We will create this anti-virus software and data protection tool. It actually keeps a watch on you [laughter] or on employees, even from our part, it should be seen [Interview].

Additionally, to maintain transparency, employees take additional measures to document their work and engage in an evidencing process which is another surplus task:

I think every employee definitely maintains that protocol and confidentiality when it comes to any message being sent over any communication channel. So that's why I keep people in the loop, you know, why we keep them in the "cc" and "bcc" is only because they should know what we are actually doing. Even if they are not concerned with the

project, but if they are a very important person whom we should inform about what is going around in the organization, so then you keep them in the loop [Interview].

Another form of surplus labor occurs when employees have to document their daily task reports on multiple tools. This sometimes becomes cumbersome, as explained by this participant:

We have to write a scrum report and that we usually find it too [small laugh] tiring to update every time. The main reason they want us to do that is, so you know what another person in your department is doing. So, we always think that TimeSheet also we fill, scrum report also we fill, like [disapproving grunt] it's too boring [laughter], every time you have to do it. You know, almost like ten minutes are spent into filling these reports [Interview].

Almost all employees at CapiTech company take extra steps to document their work on at least three different forums, as this participant mentioned, “it's not just the notebooks, what we do after that is, we prepare an Excel Sheet, we send it across to the team. Also, we do email each other whatever is written down in the notebook” [Interview].

Another participant was very vocal about this surplus work which they are expected to perform. This excerpt has multiple layers of meanings which reveal how organizational control and surveillance, discipline, and surplus labor are perpetuated in the company:

Yeah, day one, I started with the notes in the notebook. It gets very repetitive like we fill a “TimeSheet” with all our tasks, and then we fill a paper sheet. Any notes you take, you have to write them in numerical points, like 1, 2, 3...and so on. So, you update how many points you have written in the notebook each day. And eventually they will compare it to see how much work you have done and the number of points you have written. I find this

system redundant and not systematic. Second, we fill the same thing in the TimeSheet every day [Interview, part 1].

This participant pointed out the redundancy of the additional workload that serves to supervise the workers constantly:

The third thing, we have scrum meetings, and I can see it is being implemented in some of the departments. So, this is a third way to keep a tab on us as to what we are doing. Fourth is, after the daily scrum you have to fill it in Google Sheet or Excel Sheet. So, to write what we are doing is also a work in itself. In my opinion, it is inefficient and redundant [Interview, part 2].

All these different ways of preserving and safeguarding the company's human capital or intellectual capital might be seen as surplus labor for the employees. Thus, according to Marx, like all other commodities labor power has a use value. Particular forms of surplus value such as in this case, the confidentiality of data, comes from surplus labor. In conclusion, I established connections between Marxian ideas of surplus labor and the activity of protecting human capital and organizational data from security threats.

This chapter investigated the attitudes and practices surrounding the use of email and related communication technologies at CapiTech company. First, the chapter established the discursive nature of email technology. The second framework talked about the newcomer socialization aspect of emails, the third section examined how emails operated as disciplinary forms of control over employees, and the fourth section evaluated how communication technologies are key to studying identity formation and regulation at CapiTech organization. Finally, this chapter dealt with ideas of surplus value rendered by employees' surplus labor in protecting human capital of the organization. Through this chapter, we can now discern the

various ways in which email technology functions in an organization as an instrument of control, discipline, identity regulation, socialization/assimilation, and surplus labor. The following chapter analyzes the dual relationship between organizational structure and technology. Using principles derived from structuration theory, the chapter examines the duality of human agency and technology in processes of organizational structuring.

## **Chapter 6. The Duality of Technology: Organizational Structuration at CapiTech**

Various types of communication and information technologies are an integral part of the daily lives of employees at CapiTech company. The previous chapter focused on the practices and roles of electronic communication technology at CapiTech. The format of this chapter somewhat deviates from the previous two chapters. Instead of focusing on particular communication and information technologies, I examine the interplay between multiple technologies through the lens of one comprehensive framework. Using structuration theory as introduced by Anthony Giddens and developed further by organizational communication scholars (Contractor & Seibold, 1993; McPhee, 2004; Orlikowski, 1992; Poole & DeSanctis, 1992; Poole, Seibold, & McPhee, 1985) I explore how technologies like email, instant messengers (WhatsApp and Hangouts), Jira (the project management platform), conference calls, Timesheet, and WebEx influence human agency and vice versa.

### **Principles of Structuration**

According to Giddens (1984), “All human beings are knowledgeable agents. These actors are discursively able to rationalization their day to day experiences” (p. 281). By studying the day-to-day life of social actors, we are able to analyze how institutional practices come into existence. The routine activities are repetitive and have enabling and constraining properties that spread across time and space. A researcher’s goal is to understand the “connections in terms of interpretation of the social life of actors and system integration” (p. 282). Routines, or “taken for granted” activities, are key elements in the expression of the duality of structure. In work organizations, the amalgamation of human communication and electronic communication technologies has significantly influenced the nature of organizational communication. The ongoing interaction between human agents and institutions is termed *structuration* by Giddens

(1984). Structures are “recursively organized sets of rules and resources” implicated by social interactions (Giddens, 1984, p. 25). Structuration, an emergent process, incorporates the “duality of structures” which evolve spatiotemporally. While analyzing structuration, we “study the modes in which social systems grounded in knowledgeable activities of situated actors who draw upon rules and resources in the diversity of action contexts, are produced and reproduced in interaction” (p. 25). The duality of structure suggests that agents and structure are not independent entities. Instead, the “structure[s] of social systems are both medium and outcome of the practices they recursively organize” (p. 25). Here, structures are understood as abstract forms of social systems and lack material characteristics. Moreover, structures have virtual existence (as in a computer, virtual storage exists only in action rather than a physical form) that depends upon human actors who enact and interpret its dimensions (Orlikowski & Robey, 1991, p. 147). Organizational structures have the power to elicit conformity despite the absence of material structure. These structures inform social practices through contextual norms and resources allowing human actors to make sense and enact their environments (Weick, 1995). Social systems exhibit structural properties that were enacted in the past or by prior human action; these eventually define and shape individuals’ interactions which in turn, recreates the structural properties. This kind of retrospective sensemaking modifies the meaning of lived experience and reproduces the structure (Orlikowski & Robey, 1991, p. 147; Weick, 1995).

According to Giddens, “modalities” of structuration are the links between human action and social structure that “serve to clarify the main dimensions of the duality of structure in interaction, relating the knowledgeable capacities of agents to structural features” (Giddens, 1984, p. 28). The three modalities are *interpretive schemes*, *resources*, and *norms*. Interpretive schemes are the standard and shared stocks of knowledge that actors extract to interpret behavior

and events to achieve meaningful interaction. Resources are means and facilities through which goals are accomplished, power is exercised, and intentions are realized. Norms comprise elements like rules or governing behaviors, rights and obligations, and the expected behaviors or codes of conduct that define the legitimacy of interaction within a setting's moral order (Giddens, 1984; Orlikowski & Robey, 1991, p. 148). These modalities serve as linkages that inform "how institutional properties of social systems mediate deliberate human action and how human action constitutes social structure" (p. 147).

### **Structuration and Technology**

In this section, I employ Orlikowski's (1991, 1992) study as a guiding framework to inform my analyses of the relationship between technology and organization. Orlikowski builds on and implements Giddens' theory of structuration to propose that "technology is a product of human action as well as medium for human action" (Orlikowski & Robey, 1991, p. 144). Using the framework provided by Orlikowski, I investigate the duality of the structures associated with the various communication and information technologies used at CapiTech company.

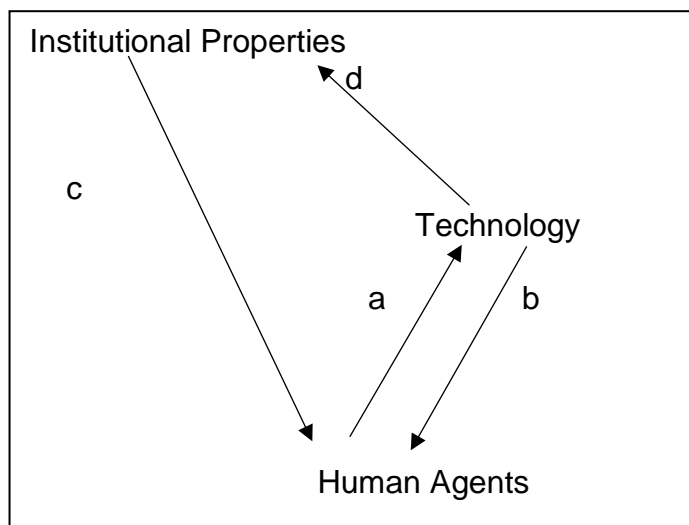
The duality of technology is characterized by its constitutive nature: "technology being the social product of subjective human action within specific contexts and its constitutive role simultaneously being the objective set of norms and resources involved in mediating human action, hence contributing to the creation, and transformation of the contexts" (Orlikowski & Robey, 1991, p.151). Here technology is both "antecedent and a consequence of organizational action" (p. 151). Social actors are "highly 'learned' in respect of the knowledge they possess and apply," which is also to some degree bounded within situated actions (Giddens, 1979, 1984, p. 22). Patterns of interaction are established as a result of human agency. Over time these standardized interactions become institutionalized, creating "structural properties" of

organizations. The structural properties “are drawn on by humans in their ongoing interactions (agency), even as such use, in turn, reinforces the institutional properties” (Orlikowski & Robey, 1991, p. 404).

As with the topics examined in the previous analytical chapters, initial codes that led to this chapter’s analysis were developed inductively and later were interpreted using organizational communication theories. Some examples of categories that were interpreted using structuration theory were “types of communication technologies used at CapiTech,” “protocols of formal communication,” “informal communication,” “WhatsApp etiquettes,” “interaction of the technologies,” “uses of Jira,” and “evolution in the uses of technology.”

Orlikowski presents a structuration model of technology (see Figure 1) involving four main influences that mediate the interaction between technology and organizations. I now discuss each of these four relationships using examples from CapiTech company.





Arrow	Type of Influence	Nature of Influence
a	Technology as a Product of Human Action	Technology is an outcome of such human action as design, development, appropriation, and modification
b	Technology as a Medium of Human Action	Technology facilitates and constrains human action through the provision of interpretive schemes, facilities, and norms
c	Institutional Conditions of Interaction with Technology	Institutional properties influence human actions in their interaction with technology based on available resources, norms, and skills
d	Institutional Consequences of Interaction with Technology	Interaction with technology influences the institutional properties of organization's structures of legitimation, domination, and signification

Figure 1. Structuration Model of Technology (Orlikowski, 1992, p. 410).

### **Influence I: Technology is the Product of Human Action**

First, *technology is the product of human action* (arrow a) suggests that technology's existence, maintenance, and adaptation depend upon the creativity of human agency. After its creation, technology is disseminated in organizations. However, it remains ineffective unless it is manipulated or attached with meaning by individuals. The technology, when appropriated for productive or symbolic tasks, exerts its influence. The adaptability of technology depends on two modes of interaction. In the "design mode" "human agents build into technology certain interpretive schemes like task-specific knowledge, resources/features, and norms or rules that define organizational sanctions." The second is the "use mode" in which individuals appropriate technology by assigning shared meanings to it. This, in turn, influences the ways in which interpretive schemes, norms, and resources are embedded in the technology (Orlikowski, 1992, p. 409-410).

At CapiTech company technologies like email, Jira, WhatsApp, Hangouts, and video/audio conference calls are used. None of these technologies are developed or built by the CapiTech, which limits my scope of analysis at the design mode. Nonetheless, the developers, coders, and testers from the companies that developed these technologies (for example, Google—Gmail, Hangouts, Facebook—WhatsApp, Atlassian—Jira) played a direct or indirect role in its creation. Thus, these technologies are product of human actions and reflect the assumptions and goals of their designers and engineers (Orlikowski & Robey, 1991, p. 153). CapiTech uses various G-Suite products developed by the company Google specifically for businesses. The preliminary affordances served by these products for small to mid-sized businesses are described by Google as "ultra-reliable email servers," "secure cloud storage," "real-time collaboration," "data safety and protection," "easy administrative updates," and

“device compatibilities.” Additionally, G-Suite products are designed with a goal of facilitating company-wide decision making with the help of communication tools like emails, Hangouts, video conferencing, and calendar. Other tools created with an intent to mediate virtual collaboration include Google Docs, Google Slides, Google Sheets, and Google Keep (“Small Business Productivity Tools | G Suite,” n.d.). Another technology used at CapiTech company is the Jira software. The objectives of this tool are planning, distributing, tracking, releasing, and reporting on the progress of various organizational tasks. Google products like the Google search engine and other tools reflect the company’s stated vision and mission, “to organize the world’s information and make it universally accessible and useful” (“How Google Search works | Our mission,” n.d.).

Moreover, Jira is known for its “agile features” that allow a team to “build a roadmap” or connect the dots of a project, communicate with stakeholders, and “gain insights into a team’s performance in real-time (“Jira | Issue & Project Tracking Software,” n.d.).” Jira software is a product of the company Atlassian; their stated mission is “to help unleash the potential of every team through open work” (“Development and Collaboration Software Company | Atlassian,” 2019). These examples of affordances or built-in features demonstrate that “technology is a product of human action used to accomplish some productive task” (Orlikowski & Robey, 1991, p. 153) and reflect the objectives, goals, and assumptions of creators, designers, and organizations. Also, these technologies are maintained and modified by technicians, programmers, and developers. Thus, only when humans act upon or take advantage of technology does it come to play a significant role in the organizing process.

In the use mode, individuals activate and employ these technologies to facilitate substantive organizational action. For example, at CapiTech company the G-Suite products like

Gmail and Hangouts are considered a primary mode of communication. The shared meaning attached to this technology is that emails are “official,” and considered “professional.” The interpretive schemes of mutually shared knowledge about these technologies sustain the process of interaction in the company. The shared or universal knowledge, in this case, is that emails are the formal medium of communication and that is an integral part of the communicative encounter. One participant explains:

Here at [CapiTech], organizational communication takes place via email. We usually also communicate face to face or through phones. Apart from that, if you want to put something in writing and make it official, it will obviously go through emails... it is important to put messages in emails because if you want to refer to them in the future, you can do it [Interview].

Additionally, the interpretive schemes of shared meaning “act as ‘conduit’ for the imposition of structural constraints” that reflect the social rules of the setting (Orlikowski & Robey, 1991, p. 144). An example of such structural constraint is the usage of WhatsApp at CapiTech company.

Employees of CapiTech company also use WhatsApp for internal and external communication. However, WhatsApp is used on an individual level, unlike the G-Suite products that are purchased as company level subscriptions. The WhatsApp application is a freeware messaging tool used to send texts, documents, videos, pictures, and contacts, and consists of audio/video call facilities. It also provides features like group chat, voice messages, and conference calls. At CapiTech, employees often interact with other employees and sometimes with external clients using WhatsApp. An employee of CapiTech organization might be a part of multiple groups tailored according to projects, “Houses,” sports, city branches, etc.

In 2014, WhatsApp joined Facebook but continued to function as a separate application. Their stated mission emphasizes encryption and security of messages: “Our messages and calls are secured with end-to-end encryption, meaning that no third-party including WhatsApp can read or listen to them. Behind every product decision is our desire to let people communicate anywhere in the world without barriers” (“About WhatsApp,” n.d.). From a structuration perspective, one of the interpretive schemes built into the design mode of this technology is that the messages are fully encrypted at both the sender’s and the receiver’s end. At the use mode, human agents at CapiTech company have assigned a shared meaning to WhatsApp technology that has “influenced the appropriation of interpretive schemes, norms, and facilities designed into the technology, thus allowing those elements to influence their task execution” (Orlikowski & Robey, 1991, p. 410).

The shared or interpretive meaning associated with the use of WhatsApp is that it is used for specific work-related tasks only in times of urgency or as a mode of communication supplementary to the more formal technologies like emails. One participant illustrates this shared knowledge about the use of WhatsApp in the organizational setting:

I don't think WhatsApp is very formal. We don't send anything very critical on WhatsApp. If it is something which supposed to be referred to for later purposes, it is supposed to be done on emails or Jira. So yeah, on WhatsApp we don't pass on any messages that are sensitive [Interview].

When probed, this participant explained that “sensitive” messages involve lines of code/program or company-specific features of products. Another participant reiterated:

Here we have queries [in Structured Query Language (SQL)]. So, queries cannot be given over on WhatsApp. We need screenshots; we need to attach Excel sheets, etc. So,

it's not advisable to use WhatsApp for that. WhatsApp is fine when a person is traveling. Then we can message him/her if we are in a hurry. I don't say we don't use WhatsApp, but emails are preferred [Interview].

One participant mentioned that although there are no formal rules or guidelines prescribed by the organization in regards to WhatsApp use, most employees limit its usage to “small things like, 'I'll get this to you asap,' 'Hey, are you there?', 'I am onsite; please call me there, something as to be discussed,' so informal things like that are sent on WhatsApp” [Interview].

Even though employees of CapiTech company are aware that WhatsApp is a highly encrypted application and that the possibility of surveillance or leakage of information from the technology itself is almost negligible, they have created a “stock of shared understanding” and a structural constraint that WhatsApp should not be used for communicating actual data. In this case, the interpretive scheme built into the “design mode” is appropriated and modified in the “use mode.” In-built encryption in the WhatsApp application is its inherent affordance. However, at CapiTech this affordance is often viewed as a constraint.

### **Influence II: Technology is the Medium of Human Action**

Second, *technology is the medium of human action (arrow b)* in the sense that technology mediates the organizational activities of members. It is important to note that technology not only facilitates but also constrains activities. A distinctive feature of this structuration model of technology is that it does not assume that technology determines social practices. Instead, this influence based on Gidden's framework posits that technology “conditions” social practice and has enabling as well as restricting properties. Because technology mediates human action, it can facilitate or constrain the ways in which various tools are used to execute tasks. At CapiTech organization, communication and information technologies like Jira, WhatsApp, Email, and

conference calls have both restrictive and enabling qualities. To illustrate this, consider the example of Jira (the project tracking tool). One participant in a management position (recall that “MBA people” are the employees with an advanced management degree) has the authority to assign tasks to employees:

We [the MBA people] discuss whatever the client requirements are, which happens through emails, and then we assign it to the developers during scrum meetings or on Jira. After it is done, we assign it to the testers; they check the new developments. Then it goes back and forth, and if the testers find some issues, then they are sent back to the developers [Interview].

Here, from a subjective viewpoint, “power enters into human interaction by providing organizational capabilities for humans to accomplish outcomes” (Orlikowski, 1991, p. 149). Power can be understood as the “transformative capacity” of human action (Roberts & Scapens, 1985, p. 449) or the ability to influence the social and material world. The power of accountability enables productive actions in organizations. Organizational resources like Jira mediate this power that mobilizes human interaction. Thus, Jira is both an authoritative (extending over persons) and allocative (extending over objects) resource (Giddens, 1979; Orlikowski, 1991, p. 405). From an institutional perspective, “these resources or media through which power is exercised, constitute the organizational structures of domination” (Orlikowski, 1991, p. 149). Another participant explains this power dynamic from a managerial viewpoint:

It's not that everyone prefers to have issues reported on Jira, it's all from the management perspective. If you look at it as a manager, like if I want to see how many issues are going on, I cannot look at multiple emails. So, it's more of a top-down thing which is being brought into the picture instead of the juniors actually wanting Jira. Right now,

people say to each other, “no, no my Manager will shout at me if I don't use Jira so send me the Jira ID (issue number)” [Interview].

Another participant explained:

Most of the times if it is an issue which has come from a client, people would be tracking the issues themselves. Else if someone has not responded to the problem themselves, then one of the MBAs would assign it to someone and follow up on that [Interview].

The excerpts above demonstrate that for managers, Jira has enabling features of tracking and assigning tasks to subordinate employees. Sometimes employees monitor their own work progress or solve issues added on Jira without being “assigned” to those tasks by managers. Here, disciplinary control embedded in the social fabric of the organization and its actors comes into the picture. Interactions on Jira are disciplinary mechanisms that are “enabling,” allowing employees to solve and track issues, and are simultaneously “constraining” because these disciplines shape behaviors that are beneficial for the organization (Barker & Cheney, 1994, p. 30).

Jira also enables indirect and direct communication between developers and testers to solve bugs and errors in software. This participant illustrated the facilities Jira contributes to the interaction and the multiple meanings associated with Jira:

Suppose a tester has to test a hundred test cases. Then from a hundred test cases, in 30 test cases he/she finds issues, right? That person cannot call 7 to 8 developers personally to tell every single error. Instead, it is simply updated, I mean logged in to Jira. In a way, it is communicated to the developer. So it is communicated, but not to any one specific tester nor developer. Everyone can see what the issue and the root cause was. Then it is a



kind of information tool. But, when it gets assigned to a person by someone, it is direct communication [Interview].

Thus, Jira enables solving issues and also creates various shared meanings depending on who is using the tool. For some people, it is a source of information, while for others Jira is a communication tool.

Individuals engage in sensemaking processed by extracting cues from the familiar structures (Weick, 1995, p. 52). Context plays a vital role in deciding what an extracted cue is and how it gets interpreted. The sensemaking process is more than just noticing or classifying contextual cues; it is the process of interpreting the subtle interdependencies and determining their meaning. When asked about the main criteria taken into consideration while choosing appropriate technology for communication one participant at CapiTech company said:

Um, you have to use your senses for that. If it is urgent work, go for a call, if there is an error at the client's side of the software, don't waste time writing emails, just conduct a WebEx (screen sharing) session to see what the problem is [Interview].

Thus, social context becomes a crucial component for sensemaking. Employees derive cues from the context to inform which technology should mediate their action based on institutional norms. Furthermore, sensemaking based on cues arising out of social context "binds people to action that they then must justify, it affects the saliency of information, and it provides norms and expectations that constrain explanations" (Weick, 1995, p. 53). Eventually, the cues become salient as a consequence of a context and are used as sustained reference points for sensemaking.

Consider the example of WhatsApp as a constraining and facilitating medium at CapiTech. This participant explains how sensemaking process occurs to evaluate the social

context. In this case, when a client or a team member located in a different country needs immediate assistance, WhatsApp plays an enabling role to mediate the interaction:

People might not be at their desks all the time. So, in times of emergency, WhatsApp is useful. People always carry their personal phones so that you can reach them on WhatsApp. Another thing, someone at an onsite or abroad office wants to connect urgently. But because of the time zone difference, people at the onsite office might be two hours ahead of us and facing an emergency. And if I am still at home, I probably won't check my email. That time WhatsApp is a sure way to reach me. A WhatsApp call or WhatsApp group messages can be used to ask, "is anyone in the office, this machine needs to be switched on." Such small things are facilitated. Even if I am not in the office, and someone drops a message on a WhatsApp group, people in that group can immediately convey that urgent message to me if I didn't check it [Interview].

Here the interpretive scheme or shared knowledge of using WhatsApp for emergency contact proves beneficial to accomplishing a task. On the contrary, another participant explains how the shared understanding and norms surrounding the use of WhatsApp have constraining properties:

So, um, WhatsApp is for informal purposes, right, but it might be misused. It's not intentionally but something random. Say, if you send a very friendly text as we text to our friend on WhatsApp group and if there is a higher official in that group, it could be very awkward. You can always delete that after you realize, but these are the little things that do happen. So it is necessary to keep a fine line between official and what is unofficial on WhatsApp [Interview].

This participant added that although there are no formal protocols in place that prohibit or prescribe the use of WhatsApp, it does constrain the extent to which interaction is mediated within the organizational context:

I'll give an example; I think one of my colleagues had written something very informal. And our superiors were added in that group. Even though they took it casually, we others felt awkward. Why would you give that information which is very personal? I think it's a given that you are not supposed to share such info, that's why we limit the use of WhatsApp to something like, "can you bring us this," "can you check this email," "can you reply to this email" [Interview].

According to Weick (1990, p. 22-23) communication technologies "are both a cause and consequence of structure. This dual role of technology occurs because structuring is an on-going process that shapes the meaning of artifacts through scripts, interaction, and tradition and is itself shaped by those meaning" (as quoted in Fulk, 1993, p. 922). In the case of WhatsApp, the sense of "informality" associated with it is constraining its usage. Thus, technology as a medium of social practices can have both containing and enabling implications. Factors such as motives of designers and users, the context of the embedded technology, and capacities of individual users also inform the implications.

### **Influence III: Conditions of Technology Interactions**

The third influence addresses *conditions of technology interactions* (arrow c). The central idea here is that organizational contexts shape the nature of human action. When human agents engage with technologies to design, construct, develop, and modify, they are "influenced by the institutional qualities of the setting" (Orlikowski, 1992, p. 411). Organizational values, beliefs, power, culture, knowledge, and expertise inform how members function and interact with

technologies. Additionally, members “utilize the existing knowledge, resources, and norms that constitute that organization’s structures of signification, domination, and legitimation” (Orlikowski & Robey, 1991, p. 154). The sensemaking process in the workplace is “enactive”; individuals have the ability to act, reflect, interpret, and create meanings and at the same time, action can be inhibited, constrained, checked or redirected. This suggests that there are several ways in which “action can affect meaning other than by producing visible consequence” (Weick, 1995, p. 37). To illustrate how this influence operates at CapiTech, let us consider examples of interpretive schemes or shared meanings, norms and facilities associated with various technologies used at CapiTech organization.

To begin with, Jira and Email are institutionalized tools used at CapiTech company. The idea of institutional logics has been discussed in detail in Chapter 3. The concept of institutional logics suggests that institutions constrain and direct behaviors by providing individuals with a set of rules, motives, and values that shape and calibrate stability and change in organizations and individuals (Lammers, 2011). The principle of institutional logics comprises the underlying “actions, interests, values, and assumptions” that are embedded in the structure of the organizations (Thornton & Ocasio, 2008, p. 103). This suggests that “agency is embedded in institutions” (Lammers, 2011, p. 159) and connects agency with structure. One participant illustrates the significance of Jira: “we use Jira for accounting purpose, the legal purpose of the project, and the actual software development purpose. In short, there’s almost nothing that doesn’t go through Jira.” Additionally, another participant explains the shared meaning or underlying assumption that mediates the use of Jira and Email at CapiTech company:

In our company, communicating clearly is very important. Whatever is there in mind, write it down somewhere. Even if something is being discussed on the phone, it should

be written. The thing is that I prefer to use email because everything is “black and white” on it. To deal with office politics, you can say “I have the evidence of each and everything.” Regarding WhatsApp and Hangouts, I will not go through each and every message in detail but definitely will read all emails. Emails and Jira are primary tools for me. Jira is crucial because we write and report every error and task is assigned through Jira [Interview].

This excerpt reflects the institutional motives of CapiTech organization: to record, document, and maintain evidence of work-related interactions on official communication platforms. Such structural rules and interpretive schemes that enable, inform, and restrain organizational interactions also reinforce the “structure of significance.” Thus, the shared knowledge of institutional properties is an integral part of the communicative process.

The following excerpt draws attention to the organizational conventions of legitimate and appropriate behavior. Orlikowski & Robey (1991) note that “norms play an active role in the shaping of institutional notions of legitimate behavior” (p. 149). At CapiTech company, codes of conduct articulate and sustain established structures of legitimation. Various traditions, rituals, and practices reinforce the normative order in the organization. One participant illustrates how norms associated with technology influence the manner in which employees appropriate and modify technology:

The ideal way is first to write an email of whatever you have done, the second thing is that WhatsApp, calls, and Hangouts are for reminders that we want response from the client's side—onsite people tell us what is the status, whether the client has responded or not, and whether the contact person there has forwarded it to the user or not, then getting response from the users, and once we get the response from the users, they tell us if they

need a WebEx session. The on-site team can set it up on their screens and show the software to the client. Then we will get an email from them summarizing the meeting [Interview].

Another participant explained:

Even some senior employees have faced this—you say to the client, “we did this work.” Then the client asks, “who asked you to do this; we didn't ask you to do this.” So, when someone asked them to do something, and they did it, but the other person is “I didn't say this” happens sometimes. So, people have made it a habit, even within the company that if anything needs to be changed or done, have it written on emails. But you want to address the whole group urgently, then use WhatsApp or Hangout groups. On urgency basis, you can also directly call [Interview]

Therefore, human agents in the organization are influenced by the institutional properties of their setting. The existing stock of knowledge pertaining to Jira and email is that it is an essential tool for recording and documenting work progress. In such situations, institutional properties associated with technological resources induce power as “transformative capacity” in human interaction that enables the achievement of goals. Maintaining evidence or proof of interaction mediated over email or Jira provides a sense of security to employees.

Furthermore, the norm at CapiTech company is that employees are expected to address queries and solve programming issues on Jira:

See, the first thing is that, whenever you are testing code, you need to log it into Jira.

Whatever the results or expected results are, you need to report it, that's the first step. I check the entries and layouts, and I log it into Jira, and then I inform the concerned

person directly that I have entered Jira. I usually ping people on Hangout, so it doesn't get missed [Interview]

In the previous chapter I discussed the use of emails to create a trail of evidence. Thus, institutional interests, values, logics, and culture are mediated through various communication technologies. As mentioned earlier, institutional logics are patterns of rules and beliefs. At CapiTech, protecting sensitive information and simultaneously creating a transparent work ethic are some of the “institutional messages” that carry patterns of beliefs and rules throughout the company. These messages are enduring, wide-reaching and at times encumbering (Lammers, 2011, p. 174). Another participant explains how these messages influence the way technology is appropriated at CapiTech:

I'd say WhatsApp is only for informal communication. Formal emails are very important as we need to keep people in the loop. So, I think I would rate that the first, most priority thing. Also, email is a good way to let other departments also know what our project is all about and who are the members involved. That creates transparency, and because these are internal servers, it's also confidential. And the TimeSheet software is used every day; even that is important because um, the HR's use that tool to know what we are working on. We were told about these in the orientation [Interview].

All these excerpts show how human agency and interaction with technology is implicated with the institutional properties of the organization.

#### **Influence IV: Consequences of Information Technology Interaction**

The final influence in the structuration model consists of *the consequences of information technology interaction (arrow d)*. When humans use technology, they “act upon the institutional structure of an organization” (p. 154). More often, human agency sustains the existing

institutional structures, while in some cases, it transforms the structures. The manner in which technology is conditioned and utilized by an “organization’s structures of signification, domination, and legitimation” suggests a “change or reinforcement of these three structures” (Orlikowski, 1992, p. 411). These effects may be considered as “institutional consequences of interaction with technology” (p. 411). Usually, the users are unaware of their roles in either maintaining or disrupting the institutional structures. At CapiTech company, how employees use the technologies to accomplish tasks sustains the embedded rules. This participant explains how the interpretive schemes or structures of significance are maintained when technology is used for its intended purpose:

For me, the accessibility or usability of the tool is most valuable. If I have to do some calculation, I will use Excel; if I have to report anything to a team, I will use Jira, if I have to communicate for official purposes, I will use email, if it’s something urgent, then I will use WhatsApp. If I have to report or track a bug, then I will use Jira. Hangout might be for communicating with an individual in the office. We usually don't communicate with the client using Hangout [Interview].

This excerpt demonstrates how the structures of significance involving shared meanings and common knowledge pertaining to the appropriate uses of technology at CapiTech company are reinforced. Additionally, the manner in which these technologies are used also reinstates their transformative capacity that allows members to accomplish goals. And finally, structures of legitimation characterized by norms and routine practices associated with technology use are maintained when employees conform to the rules.

On the contrary, when users don’t use the technology as prescribed by the institutional properties, they may “undermine and sometimes transform the embedded rules and resources,



and hence the institutional context and strategic objectives of the technology” (Orlikowski, 1911, p. 412). Consider the example of Jira:

I think, even if you have Jira, people communicate on emails. I'll give you an example: if a Jira has been raised for a particular issue, people should update the status [of that issue] directly on Jira. So, you can communicate on the Jira platform. But instead, people use Gmail to send a message that a Jira [issue] is raised. I think Jira helps in a way that later on if a particular issue arises, it's like a stock or inventory of information that you can revisit. You can't search through multiple emails [to look] for that [Interview].

Another participant explains how users modify the ways Jira is used at CapiTech. Despite having “communicative” features on Jira, employees have transformed patterns of using it to accomplish their tasks. Sometimes instead of directly commenting, informing or adding an issue on the Jira platform, employees send it on email to the concerned person, which deviates from the sanctioned institutional practice:

Ideally, Jira is a communication tool, whenever any issues are reported by testers, they should be reported on Jira, and the developers should be checking Jira regularly, and you are supposed to solve issues as and when they come. But I think, Jira is kind of uh, it's an old tool, but it's come into use more recently in this company. So people have not yet adopted the best practices you can say that every day you check your Jira, you see how many issues are pending, so I think, most of the time it is used as an information tool. So an issue would be reported on email, everyone keeps checking their email throughout the day, and then the email would have the Jira number, and then you go and check the Jira. So, Jira can be much more powerful if used properly, but unfortunately [chuckles] that's not happening [Interview].

As this excerpt suggests, while operating complex technologies users often deal with situations of stress, ambiguity or lack of structure. In such cases, “the negotiated or enacted use of technology is often different from the prescribed, mechanical operation” (Orlikowski, 1991, p. 412). Note here the non-verbal articulation of a “chuckle.” It hints at the manager’s vexation regarding the incomplete use of Jira to keep track of bugs and issues in the company’s software products. Employees sometimes do not use Jira to its full potential, and there is a lack of uniformity across the company concerning Jira. Instead of uploading all issues on Jira, sometimes some employees send information about those issues only on emails. This practice diverges from the institutional norm.

Consider another example of communication technology used at CapiTech that transforms the institutional structure not only on the level of shared knowledge but also transcends institutional norms. This participant explains how the institutional properties of WhatsApp being “informal” or “used only for emergency” are not very rigid and have interpretive flexibility:

If you maintain your professionalism even on WhatsApp, then it’s okay to use it frequently. So when we use WhatsApp, along with being professional, you can also connect on a different level with that person. If you only converse on emails or hangouts with a particular person, then your link or connection with that person is limited to that level of professionalism. But when you eventually shift to WhatsApp, then you do maintain the language of professionalism, but then your relationship with that person changes a bit to an informal level. So can talk more freely, ask for small favors, your tone can be more friendly. So when you shift from emails to WhatsApp, it’s like you’ve become friends. It’s like an addition to being professional. And at times that’s actually

beneficial because you can get things done faster. That way on WhatsApp you don't need to hesitate if I should ask something, like on emails, you have to be careful about the language, tone, and it's strict on it. But on WhatsApp, it's easy and doesn't feel restricted. Like with the client, you have to converse in a certain way because seniors are present in that group. But when the clients themselves contact me on WhatsApp, I am much more personal with them. That's when things move faster with WhatsApp [Interview].

Another participant reiterates that when a new employee joins the company, the institutional rules and norms are more influential on the ways of using technology. However, eventually employees modify the ways in which technologies are used and contribute to the creation of new structures of significance and legitimation:

A newcomer must first go with the formal way, that's most appropriate. Use email or proper Jira which is also official. Also understand that, if the third party with whom you are communicating, even if they trust you and communicate on WhatsApp, rather than on email, you must tell them to put it in writing on email, only then you do the work for them. Eventually when there is better understanding, then slowly and steadily you can change the technology. As you grow, you switch the modes of communication and directly interact with clients or the management on WhatsApp [Interview].

Another participant who is a manager added that in the beginning new employees are encouraged to internalize the institutional codes of appropriate behavior concerning technology uses.

Eventually, when they assimilate into the culture, they experience stronger work relationships that allow them to override some of the structural rules and assign new meanings:

For newcomers who are coming from other organizations, there might be some baggage which may be like "okay we are used to more formal communication like email," so after

every WhatsApp message they send an email. Gradually they learn to accept that after being here for a while, you know people on a personal name basis, then you can use WhatsApp. So if a change is brought about and many people are adopting it, it kind of becomes a habit [Interview].

This excerpt demonstrates how users appropriate the rules, knowledge, and assumptions embedded in the systems giving rise to new structures of meaning that can potentially alter institutionalized practices. Implementation of technology systems involves “continual invention and negotiation of new rules and relationships, not merely the enactment of designed ones. This develops the technology in unanticipated ways as it is normalized” (Wynne, 1988, p. 152). Organizational change occurs incrementally through the use or nonuse of the design features. “Users may decide to modify the way in which they integrate the technology in their work, ignoring some ‘required’ features and manually overriding others” (Orlikowski & Robey, 1991, p. 162). Over time modifications made to the Jira usage themselves become institutionalized and sanctioned.

In conclusion, this chapter explored the relationships between technology and organizational structures. Technology has social and material properties that are constructed through a subjective human agency while being reified and objectified through institutionalization (Orlikowski & Robey, 1991). Drawing on the primary tenets of structuration theory (Giddens, 1979, 1984), the structuration model of technology (Orlikowski, 1992) investigates interactions between technology and organizations through the modalities of interpretive schemes, resources, and norms. Analyses of interview data gathered from CapiTech company revealed the dual nature of technology that is a medium and an outcome of human actions. Technology exhibits both enabling and restricting qualities depending on how it gets

appropriated in an organization. Finally, institutional properties, rules, rituals, norms, and beliefs condition human interaction with technology, which in turn, maintains or modifies the institutional properties.

## **Chapter 7: Discussion and Conclusion**

This interpretive study of an Indian software development company aimed to explore, describe, and evaluate the underlying meanings, attitudes, beliefs, practices, rituals, and assumptions surrounding uses of communication and information technologies. The uses of communication technologies for day-to-day interactions in organizations have become so ingrained and routinized in corporate cultures that members seldom pay close attention to the deep structures and layers of meanings associated with the technologies' uses. Observations and interactions with participants at CapiTech company revealed that despite the fundamental place of technology in the company's culture and its role in mediating communication processes, its overarching implications are usually neglected. Members often described the role and significance of technology from an efficiency and productivity viewpoint. Deviating from the traditional approaches employed to study the uses of technology, this study examined communication technologies and their places in the social fabric of the organization through the lens of a more critical-interpretive approach. Using qualitative methods consisting of interviews and field observations, this study sought to unravel the undertones of discipline, power, control, institutionalization, sensemaking, discourse, identity, and structuration prevalent in the way communication technologies are employed at the CapiTech company.

### **Review of the Chapters**

In this section, I summarize some of the key findings and comprehensive inferences derived from the analysis of data obtained from the ethnographic observations. *Chapter 1* introduced the aim and purpose of this research study. This chapter supplied essential details about CapiTech company through a series of excerpts from field notes. This chapter helped the reader to become acquainted with the setting of this study.

*Chapter 2* informed the reader about the methodological approach used to accomplish this study. The process involving fieldwork and data collection was explained in detail to give the reader a sense of what it was like for me to embark upon this ethnographic journey. Various aspects of the process such as conducting participant interviews and observing in the field, analyzing the data using codes and categories, and the final stage of interpretation and conceptualization were discussed. The data collection part of this study was an inductive process that was not yet informed by particular theoretical frames or predetermined hypotheses. While developing codes and categories during the subsequent analysis process, the theoretical frameworks explicated in chapter 3 were used to conceptualize the data further.

*Chapter 3* covered the main theoretical frameworks that guided the analysis of the qualitative data. These frameworks helped me to explain and narrate the communicative phenomena occurring at CapiTech company. Theories mainly situated in the discipline of organizational communication informed the analytical process of making sense of the data. The primarily used frameworks and their key principles consisted of disciplinary and normative control, institutional messages and institutional logics, the discursive nature of organizations, identity regulation, and the duality of structure. These frameworks are stationed within the critical/interpretive paradigm that deals with questions of power, control, change, knowledge, discourse, emancipation, and repression. Accordingly, as described by Deetz & Kersten (1983), this research through its critical roots aimed to establish “open communication situations in which societal, organizational, and individual interests can be mutually accomplished” (as cited in Putnam, 1983, p. 148).

*Chapter 4* incorporated the analysis of an unanticipated form of communication and information tool widely used at CapiTech company—handwritten notebooks. Although they

cannot be considered as an electronic technology, paper notebooks are regarded as an integral artifact of CapiTech's culture. These notebooks are exclusively reserved for an employee's individual use but also function as a mode of internal communication within the company. The notebooks serve the purposes of documentation of vital work-related information, recording details of meetings and daily agendas, and evidencing project-related conversations. In a literal sense, these notebooks are the organizational "texts" that are informed by macro-level Discourses (see chapter 3 for an explanation of the analytical Discourse/discourse distinction) of effective organizing and proofing intellectual data.

The existence of these notebooks and their company-wide utilization hinted at a general distrust of technologies at CapiTech; hence the rigorous and consistent emphasis on documenting anything and everything directly or indirectly related to the company's intellectual value in the notebook. The company-issued notebooks are part of CapiTech company's institutional logics, and the notetaking behavior is an institutional message that has a wide-reaching scope and authoritative intentionality. Some members find this message encumbering, while others acknowledge its value (Lammers, 2011). The seemingly old-fashioned way of writing notes in a paper notebook in the predominantly techno-savvy company is an idiosyncratic practice at CapiTech, which on the surface level seems like just another dimension of workplace culture. However, analysis of interview data and field observations unveiled a more profound significance of the notebooks. Besides being an institutionalized artifact, these notebooks are mechanisms for exerting an unobtrusive form of disciplinary control over members to gain willful subjectification to the power relationships in the organization. Additionally, notebooks and notetaking behavior govern the regularities of social interaction at CapiTech (Barker & Cheney, 1994). Employees discipline each other by reinforcing the institutional message of



notetaking. Finally, notebooks provide employees with affordances that enable them to organize tasks, accomplish goals, document work-progress, and safeguard their positions in times of conflict.

*Chapter 5* provided an analysis of electronic communication practices at CapiTech company. Communication technologies used at CapiTech comprise email, a project tracking tool called Jira, instant messenger applications like Hangouts and WhatsApp, and information technologies like TimeSheet and WebEx. This chapter focused mostly on the attitudes, uses, practices, assumptions, and implications surrounding the use of email as the primary mode of official communication at CapiTech company. Through participant interviews, I found that email technology played a significant role in identity formation and regulation of organizational members. This role of email technology is especially crucial for new employees as gaining membership in various email, and WhatsApp groups is an integral step in adopting a corporate identity and ways of functioning in the organization. Additionally, email and other electronic technologies shape the ongoing discourse and knowledge creation in the organization. The macro-level Discourse stresses that emails are formal and official means of internal and external communication. All work-related data are transmitted and documented on emails. Thus, such an overarching Discourse informs, shapes, and organizes the day-to-day interactions. Furthermore, disciplinary forces permeate through the use of email technology that distinguishes appropriate from unfavorable behavior. Various disciplinary norms associated with email usage are usually subtle and collaboratively generated. Finally, employees engage in surplus labor stemming from the priority given to the protection of the company's intellectual data

The final analytical *chapter 6* dealt with the duality of technology and structure at CapiTech organization. Guided by the structuration theory originated by Giddens (1979, 1984),

this chapter extended the concept of duality between human agency and structure to studying the relationships among technology, human agency, and structure. Research conducted by organizational communication scholars, and specifically studies by Orlikowski (1991, 1992), informed my analysis of the role of human action based on institutional logics in appropriating technology which in turn, influences, transforms, or sustains those institutional properties. These notions work in tandem with sensemaking processes by which “people produce part of the environment they face” (Weick, 1995, p. 30) and act upon their environments to assign new meanings to them. Thus, this chapter outlined the ways in which technology is both an outcome and medium of human action and how overarching institutional values, norms, power, knowledge, and resources influence the way humans interact with technology which eventually influences its properties. Using exemplars from interview data, I demonstrated how the duality of structure and technology operates at CapiTech company.

### **Connecting the Chapters**

When all the analytical chapters are examined together, common themes and patterns emerge that illuminate the overall communicative phenomena at CapiTech company. First, the overriding theme of this research shed light upon the discursive nature of CapiTech company. Besides the everyday talk that forms the medium for social interactions, larger Discourses including standardized practices, enduring systems of belief, and rituals lay the foundation for organizing processes. Communication and information technologies are part of the ongoing discourse (comprising language in use) and are also informed by overarching organizational Discourses (comprising enduring systems of meaning). As demonstrated in the structuration chapter, human agency in terms of norms, language use, choices of action, availability of

resources, and sanctioned practices influence the appropriation of technology, which in turn influences company-wide Discourses.

Second, all tools work in tandem with each other—for example, during a conference call, the notebooks are used for recording details of product requirements, then those notes are polished and transferred into email(s) and sent as a summary to the client and all members of the relevant project team are “cc” or tagged in that email. Eventually, when a project begins, the Jira tool comes into the picture. Clients and employees interact on Jira in terms of assigning issues to software developers or testers, tracking the progress of the project, and keeping all members updated with the changes. During an ongoing project, team members often interact with each other via WhatsApp, emails, and audio conference calls. While sensitive natured data are shared only on email for official records, employees often use WhatsApp as a supplementary tool when instant communication is required. When a software product is ready and is to be demonstrated to the client, a video conferencing call or a screen sharing call with WebEx is conducted, wherein designated members explain the operation and features of the software. Sometimes when testers are unable to replicate issues or errors in the software, the WebEx platform is used to resolve them remotely. Thus, a typical project involves communication and information technology at every integral stage. Even though each technology has unique features and purposes, they are all complementary to each other.

The norms, practices, and attitudes associated with the use of each technology are parts of the broader institutional Discourse that is both enabling and constraining, leading us into the third connecting theme: the ways in which electronic technologies are appropriated and implemented, and how the norms and sanctioned practices associated with the technology use are influenced by overarching institutional logics that in turn are either reified or modified by human

agency. Whether it is the notebook or email or WhatsApp, there are disciplinary consequences associated with their uses. At CapiTech organization we can see how the company policies and rules regarding technology use are internalized by members that contribute to identification with the company's philosophies and corporate culture. According to Kunda (2006), the underlying experiences and thoughts of members are controlled in ways that are beneficial to their organizations. He terms such a subtle form of control that elicits internal commitment to organizational practices and strong identification with company goals as normative control. We can see the presence of normative control operating through the notebooks, emails, and other electronic technologies.

Finally, sensemaking processes influence how technologies are used by employees to accomplish tasks. The characteristics of the sensemaking process explicated by Weick (1995) suggest that sensemaking is grounded in identity construction, is retrospective, and enactive of the sensible environment. Additionally, it is a social and ongoing process that is influenced by the context. Individuals derive cues from the context to seek explanations and to make sense of the norms and constraints imposed by the setting. These processes guide individual sensemaking to decide which technology is appropriate for a particular context. Individuals also engage in sensemaking process when they reenact their habits, beliefs, and goals to align with those of the company's goals and values. This also involves the use of technology and how it gets appropriated to accomplish organizational goals. Individuals at CapiTech company enact the rules and policies associated with technology and assign new categories, features, and meanings to it. These components of the sensemaking process are a common thread throughout all three analytical chapters.

## **Implications**

The organizational practices and insights uncovered in the analysis can contribute to advancing organizational communication theory and praxis. This research has shown that technology is one of the mechanisms through which power structures are created, reinforced, and transformed in organizations and that technology has become a mode of subtle control that organizations exert upon members, so it benefits the functioning and overall organizing process. Analyses of the qualitative data have been pivotal in explicating how organizational theories manifest in a workplace by bridging the gap between theory and practical application.

This study has unraveled some organizational experiences of employees working at CapiTech company. These descriptions can prove to be beneficial for managers and other people in leadership positions to help decipher the underlying interpretations of employees regarding their work, their social interactions, their responses towards messages of power, and their agency that constitutes the overall communicative phenomena in the company. This interpretive study has helped to address broad interpretive questions such as “how do employees of CapiTech company interact with communication and information technologies to accomplish goals?”, “how do the institutional values and practices inform the ways in which employees utilize technology?”, and “what are the roles of human agency and technology in mediating organizational experiences of employees?” These questions have shed light on the subjective and collective understanding of employees at CapiTech company.

Furthermore, this research has added value to the existing literature of organizational communication situated in the Indian corporate scenario by examining technology through a critical/interpretive lens. Relatively few studies have paid attention to the critical concerns regarding the uses of technology, especially in Indian software companies. By focusing on the

critical theoretical conjectures while scrutinizing the technological dimensions of CapiTech company, this study has opened avenues for researchers to look into the disciplinary characteristics of various communication and information technologies employed in organizations rather than only focusing on their efficiency or productivity aspects.

Lastly, this study has contributed to the dialogue pioneered by Kunda in his ethnographic research at a technology corporation. One of the methodological implications reiterates the advantage of conducting an ethnographic study as it “aspires to inform and teach not only through similarity but also by contrast” (Kunda, 2006, p. 234). In short, although the results of this study are unique to CapiTech company, readers from other countries and belonging to various other organizations might find commonalities in the organizational occurrences, or find theoretical applications illustrated by this study relevant to their own research projects.

### **Reflections and Suggestions for Future Research**

During interviews, some participants asked me about the generalizability and replicability of interpretive analysis and results. As I mentioned in earlier chapters, qualitative approaches are relatively less popular in Indian research scenarios. Thus, some participants were curious about how the present study can be applied to other contexts. Here I address these queries for the participants as well as for other readers: ethnographic approaches are employed when a researcher is interested in obtaining rich descriptions and in-depth understanding of a unique case. Generalizability of the findings is not the primary purpose or aim of such interpretive approaches. Additionally, the validity of interpretive approaches is assessed on whether it generated insightful interpretations and rigorous observations of a particular culture.

Furthermore, interactions between the researcher and the researched in an interpretive study are interdependent, thus the researcher too is an instrument of observation (Lindlof &

Taylor, 2017). Consequently, ethnographic observations conducted by another researcher in the same setting will not address the same questions or yield the same results as this study has found. According to Kunda (2006), one strength of an ethnographic study is that it avoids making sweeping generalizations by shedding light upon the hidden meanings and interpretations that allow for an open dialogue (Kunda, 2006).

Another aspect of ethnographic approaches is that they are influenced by the researcher's positionality grounded in situated experiences. Although regarded as "subjective" because the "researcher attempts to display the viewpoint of those they study, ethnography is as objective as any science" (Thomas, 1993, p.17). Ethnographic data should not be confused with "whatever the researcher thinks," instead it is the researcher's objective reporting on the subjectivity of the subjects being studied (p. 18).

This study focused on a narrow setting which comprised only two office branches of CapiTech located in India. This company has offices in several countries where the communicative processes vary to some degree. The cultural practices might be somewhat different in the international offices of the company where local cultures will come into the picture. Additionally, this was not a long-term ethnographic study. I spent seven weeks in the field, which provided adequate data for a master's thesis. However, to obtain a longitudinal analysis covering significant organizational changes and evolutions, more time should be dedicated to the observations. Future research at CapiTech company can be expanded to incorporate cultural practices in international offices or to specifically address questions and implications of multi-lingual communication in the workplace. Additionally, observing a "full cycle" of some the activities such as product development processes (from the idea, through development, testing, and deployment) or new employee recruitment processes that cover events

from its commencement to closure would add more value to the ethnographic narratives. Another limitation of this study is that I was able to conduct member checks with only a few participants owing to the restriction on time and duration available for the study and the busy organizational lives of the participants. In a long-term study, more thorough member checks and data triangulations can be accomplished to gain interpretive validation.

Moreover, this study focused attention only on the communication technology aspect of the organization's culture. Other communicative phenomena such as formal and informal communication, leadership and employee relationships, group communication, and employee motivations were addressed but not in-depth as compared to the practices and uses of technologies. The scope of future research might involve, for example, a study guided by Orlikowski's (1991) study about the relationship between the company's software products and organizational structuration. Finally, the analysis can prove to be a foundation for future studies at the same organization or other Indian companies but with different methodological approaches.



## REFERENCES

- About WhatsApp. (n.d.). Retrieved from <https://www.whatsapp.com/about/>
- Adler, P. S. (Ed.). (2008). *The Oxford handbook of sociology and organization studies: Classical foundations*. New York: Oxford University Press.
- Ahmad, A., Bosua, R., & Scheepers, R. (2014). Protecting organizational competitive advantage: A knowledge leakage perspective. *Computers & Security, 42*, 27-39.
- Alvesson, M., Lee Ashcraft, K., & Thomas, R. (2008). Identity matters: Reflections on the construction of identity scholarship in organization studies. *Organization, 15*(1), 5-28.
- Alvesson, M., & Kärreman, D. (2000a). Varieties of discourse: On the study of organizations through discourse analysis. *Human Relations, 53*(9), 1125-1149.
- Alvesson, M., & Kärreman, D. (2011). Decolonializing discourse: Critical reflections on organizational discourse analysis. *Human Relations, 64*(9), 1121-1146.
- Alvesson, M., & Willmott, H. (2002). Identity regulation as organizational control: Producing the appropriate individual. *Journal of Management Studies, 39*(5), 619-644.
- Ashcraft, K. L., Kuhn, T. R., & Cooren, F. (2009). 1 Constitutional Amendments: “Materializing” Organizational Communication. *Academy of Management Annals, 3*(1), 1-64.
- Atkinson, M. (2016). Ethnography. In B. Smith & A. C. Sparks (Ed.), *Routledge handbook of qualitative research in sport and exercise* (pp. 1-61). London: Routledge.
- Barker, J. (1993). Tightening the iron cage: Concertive control in self-managing teams. *Administrative Science Quarterly, 38*(3), 408-437. doi:10.2307/2393374
- Barker, J. R., & Cheney, G. (1994). The concept and the practices of discipline in contemporary organizational life. *Communication Monographs, 61*(1), 19-43.

- Barker, J. R., & Tompkins, P.K. (1994). Identification in the self-managing organization characteristics of target and tenure. *Human Communication Research*, 21(2), 223-240.
- Bourdieu, P., & Nice, R. (1977). *Outline of a theory of practice* (Vol. 16). Cambridge: Cambridge University Press.
- Brewer, J. (2000). *Ethnography*. Philadelphia: Open University Press.
- Brown, A. D. (2014). Identities and identity work in organizations. *International Journal of Management Reviews*, 17(1), 20-40.
- Brown, A. D., Colville, I., & Pye, A. (2015). Making sense of sensemaking in organization studies. *Organization Studies*, 36(2), 265-277.
- Burrell, G., Morgan, G. (1979). *Sociological paradigms and organizational analysis*. London: Routledge.
- Carey, J. (1989). *Communication as culture: Essays on media and society*. Boston: Unwin Hyman.
- Charmaz, K. (1983). The grounded theory method: An explication and interpretation. In R. M. Emerson (Ed.), *Contemporary field research* (pp. 109-126). Boston: Little, Brown.
- Charmaz, K. & Belgrave, L. (2012). Qualitative interviewing and grounded theory analysis. In Gubrium, J. F., Holstein, J. A., Marvasti, A. B., & McKinney, K. D. *The Sage handbook of interview research: The complexity of the craft* (pp. 347-366). Thousand Oaks, CA: Sage. doi: 10.4135/9781452218403
- Cheney, G., & Tompkins, P. K. (1987). Coming to terms with organizational identification and commitment. *Communication Studies*, 38(1), 1-15.
- Clegg, S., Hardy, C., & Nord, W. R. (1996). *Handbook of organization studies*. London: Sage.

- Conrad, C. and Sollitto, M. (2017). History of organizational communication. In C. R. Scott, J. R. Barker, T. Kuhn, J. Keyton, P. K. Turner. & L. K. Lewis. *The international encyclopedia of organizational communication* (Eds.). West Sussex, UK: Wiley.
- Contractor, N. S., & Seibold, D. R. (1993). Theoretical frameworks for the study of structuring processes in group decision support systems: Adaptive structuration theory and self-organizing systems theory. *Human Communication Research*, 19(4), 528-563.
- Cooren, F. (2015). *Organizational discourse: Communication and constitution*. Malden, MA: Polity Press.
- Corbin, J. S., & Strauss, A. A. 2008. *Basics of qualitative research: Techniques and procedures for developing grounded theory* (3<sup>rd</sup> ed.). CA: Thousand Oaks.
- Culnan, M. J., & Markus, M. L. (1987). Information technologies. In F.M. Jablin, L.L. Putnam, K.H. Roberts, & L. W. Porter: *Handbook of organizational communication: An interdisciplinary perspective*. Newbury Park, CA: Sage.
- Cunliffe, A. L. (2010). Retelling Tales of the Field: In search of organizational ethnography 20 years on. *Organizational Research Methods*, 13(2), 224–239.  
doi.org/10.1177/1094428109340041
- Daft, R., & Lengel, R. (1986). Organizational information requirements, media richness and structural design. *Management Science*, 32(5), 554-571.
- Deetz, S. (2001). Conceptual foundations. In Jablin, F. M., & Putnam, L. L. *The new handbook of organizational communication* (pp. 4-46). Thousand Oaks, CA: Sage. doi:  
10.4135/9781412986243

- Deetz, S. (2005). Critical theory. In S. May & D. K. Mumby (Eds.), *Engaging organizational communication theory & research: Multiple perspectives* (pp. 85-111). Thousand Oaks, CA: Sage.
- Deetz, S., & Mumby, D. K. (1990). Power, discourse, and the workplace: Reclaiming the critical tradition. *Annals of the International Communication Association*, 13(1), 18-47.
- Denzin, N. K., & Lincoln, Y. S. (Eds.) (2011). *The Sage handbook of qualitative research*. Thousand Oaks, CA: Sage.
- DeSanctis, G., & Poole, M. S. (1994). Capturing the complexity in advanced technology use: Adaptive structuration theory. *Organization Science*, 5(2), 121-147.
- Development and Collaboration Software Company. (n.d.). Retrieved from <https://www.atlassian.com/company>
- Etzioni, A., (1961). *A comparative analysis of complex organizations; on power, involvement, and their correlates*. New York, NY: Free Press of Glencoe.
- Fairhurst, G. T., & Putnam, L. (2004). Organizations as discursive constructions. *Communication Theory*, 14(1), 5-26.
- Flanagin, A. J., & Waldeck, J. H. (2004). Technology use and organizational newcomer socialization. *The Journal of Business Communication*, 41(2), 137-165.
- Foucault, M. (1975/1995). *Discipline and punish: The birth of the prison*. (A. Sheridan, Trans.) New York, NY: Vintage.
- Foucault, M. (1980). *Power/knowledge: Selected interviews and other writings, 1972-1977*. New York: Pantheon Books.
- Friedland, R., & Alford, R. (1991). Bringing society back in: Symbols, practices, and institutional contradictions. In W. W. Powell & P. J. DiMaggio (Eds.), *The new*

- institutionalism in organizational analysis* (pp. 232-266). Chicago: University of Chicago Press.
- Fulk, J. (1993). Social construction of communication technology. *The Academy of Management Journal*, 36(5), 921-950.
- Fulk, J., Schmitz, J. A., & Steinfield, C. W. (1990). A social influence model of technology use. In J. Fulk & C. Steinfield (Eds.), *Organizations and communication technology* (pp. 117-142). Newbury Park, CA: Sage.
- Gee, J. P. (1999). *An introduction to discourse analysis: Theory and method*. New York: Routledge & Kegan Paul.
- Giddens, A., (1984). *The constitution of society: Outline of the theory of structuration*. Berkeley, CA: University of California Press.
- Glaser, B.G. (1978). *Theoretical sensitivity: Advances in the methodology of grounded theory*. CA: Sociology Press
- Glaser, B. G. (2002). Conceptualization: On theory and theorizing using grounded theory. *International Journal of Qualitative Methods*, 1(2), 23-38.
- Goffman, E. (1989). On fieldwork. *Journal of contemporary ethnography*, 18(2), 123-132.
- Goodman, P. S., & Dean Jr, J. W. (1981). *Why productivity efforts fail*. Carnegie-Mellon Univ. Pittsburg, PA: Graduate School of Industrial Administration.
- Heinrich, M. (2012). *An introduction to the three volumes of Karl Marx's Capital*. New York: Monthly Review Press.
- How Google Search Works: Our Mission. (n.d.). Retrieved from <https://www.google.com/search/howsearchworks/mission/>

- Hulin, C.L. and Roznowski, M. (1985) Organizational technologies: Effects on organizations' characteristics and individuals. In L.L. Cummings and B.M. Staw (Eds.), *Research in Organizational Behavior* (pp. 39–86). Greenwich, CT: JAI Press.
- Jablin, F. M. (1982). Organizational communication: An assimilation approach. In M. E. Roloff & C. R. Berger (Eds.), *Social cognition and communication* (pp. 255-286). Beverly Hills, CA: Sage.
- Jira | Issue & Project Tracking Software. (n.d.). Retrieved from <https://www.atlassian.com/software/jira>
- Kertzer, D. I. (1989). *Ritual, politics, and power*. New Haven, CT: Yale University Press.
- Keyton, J. (2017). Communication in organizations. *Annual Review of Organizational Psychology and Organizational Behavior*, 4, 501-526.
- Kunda, G. (2006). *Engineering culture: Control and commitment in a high-tech corporation*. Philadelphia: Temple University Press.
- Lammers, J. C. (2011). How institutions communicate: Institutional messages, institutional logics, and organizational communication. *Management Communication Quarterly*, 25(1), 154-182.
- Larson, G. S., & Pepper, G. L. (2011). Organizational identification and the symbolic shaping of information communication technology. *Qualitative Research Reports in Communication*, 12(1), 1-9.
- Lindlof, T (1995). *Qualitative communication research methods* (3<sup>rd</sup> ed.). Thousand Oaks, CA: Sage.
- Lindlof, T. (2008). Emic vs Etic Research. *The International Encyclopedia of Communication*. doi: 10.1002/9781405186407.wbiece018

- Lindlof, T. R., & Taylor, B. C. (2017). *Qualitative communication research methods*. Newbury Park, CA: Sage.
- Lofland, J. (1974). Styles of reporting qualitative field research. *The American Sociologist*, 9(3), 101-111.
- Loureiro-Koechlin, C. (2008). A theoretical framework for a structuration model of social issues in software development in information systems. *Systems Research and Behavioral Science: The Official Journal of the International Federation for Systems Research*, 25(1), 99-109.
- Lowry, P. B., Posey, C., Bennett, R. B. J., & Roberts, T. L. (2015). Leveraging fairness and reactance theories to deter reactive computer abuse following enhanced organisational information security policies: An empirical study of the influence of counterfactual reasoning and organisational trust. *Information Systems Journal*, 25(3), 193-273.
- Lukes, S. (1975). Political ritual and social integration. *Sociology*, 9(2), 289-308.
- Macintosh, N. B., & Scapens, R. W. (1990). Structuration theory in management accounting. *Accounting, Organizations and Society*, 15(5), 455-477.
- Marcuse, H. (1964). *One-dimensional man: The ideology of advanced industrial society*. Boston, MA: Beacon Press.
- Markus, M. L. (1994). Electronic mail as the medium of managerial choice. *Organization Science*, 5(4), 502-527.
- May, S., & Mumby, D. K. (2005). Engaging the future of organizational communication theory and research. *Engaging organizational communication theory and research: Multiple perspectives* (Ed.). Thousand Oaks, CA: Sage.

- McLuhan, M. (1964). *Understanding media: The extensions of man*. Cambridge, MA: MIT press.
- McPhee, R. D. (2004). Text, agency, and organization in the light of structuration theory. *Organization, 11*(3), 355-371.
- McPhee, R. D. (2015). Agency and the four flows. *Management Communication Quarterly, 29*(3), 487-492.
- McPhee, R. D., & Zaug, P. (2009). The communicative constitution of organizations. *Building theories of organization: The constitutive role of communication, 10*(1-2), 21.
- Mumby, D. K. (2012). *Organizational communication: A critical approach*. Thousand Oaks, CA: Sage.
- Mumby, D. K. (2011). What's cooking in organizational discourse studies? A response to Alvesson and Kärreman. *Human Relations, 64*(9), 1147-1161.
- Mumby, D. K., & Stohl, C. (1991). Power and discourse in organization studies: Absence and the dialectic of control. *Discourse & Society, 2*(3), 313-332.
- Orlikowski, W. J. (1992). The duality of technology: Rethinking the concept of technology in organizations. *Organization Science, 3*(3), 398-427.
- Orlikowski, W. J. (2000). Using technology and constituting structures: A practice lens for studying technology in organizations. *Organization Science, 11*(4), 404-428.
- Orlikowski, W. J., & Robey, D. (1991). Information technology and the structuring of organizations. *Information Systems Research, 2*(2), 143-169.
- Pacanowsky, M. E., & O'Donnell-Trujillo, N. (1982). Communication and organizational cultures. *Western Journal of Communication (includes Communication Reports), 46*(2), 115-130.



- Patton, M. Q. (1990). *Qualitative evaluation and research methods*. Beverly Hills, CA: Sage.
- Poole, M. S., & DeSanctis, G. (1992). Microlevel structuration in computer-supported group decision making. *Human Communication Research*, 19(1), 5-49.
- Poole, M. S. & DeSanctis, G. (1990). Understanding the use of group decision support systems: The theory of adaptive structuration theory. In J. Fulk & C. Steinfeld (Eds.), *Organizations and communication technology* (pp. 173–193). Beverly Hills, CA: Sage.
- Poole, M. S., Seibold, D. R., & McPhee, R. D. (1985). Group decision-making as a structural process. *Quarterly Journal of Speech*, 71(1), 74-102.
- Putnam, L. L., & Fairhurst, G. T. (2015). Revisiting “organizations as discursive constructions”: 10 years later. *Communication Theory*, 25(4), 375-392.
- Putnam, L., & Pacanowsky, M. E. (1983). *Communication and organizations, an interpretive approach* (Vol. 65). CA: Sage.
- Roberts, K. H., & Grabowski, M. (1999). Organizations, technology and structuring. In S. Clegg, C. Hardy, & W.R. Nord (1996). *Handbook of organization studies*. London: Sage.
- Roberts, J., & Scapens, R. (1985). Accounting systems and systems of accountability— understanding accounting practices in their organizational contexts. *Accounting, Organizations and Society*, 10(4), 443-456.
- Schoeneborn, D., & Vásquez, C. (2017). Communicative constitution of organizations. In C. R. Scott, J. R. Barker, T. Kuhn, J. Keyton, P. K. Turner. & L. K. Lewis. *The international encyclopedia of organizational communication*. (Eds.). West Sussex, UK: Wiley.
- Schwaber, K. (2004). *Agile project management with Scrum*. Washington: Microsoft press.
- Small Business Productivity Tools | G Suite. (2019). Retrieved from <https://gsuite.google.com/solutions/small-business/>

- Sproull, L., & Kiesler, S. (1986). Reducing social context cues: Electronic mail in organizational communication. *Management Science*, 32(11), 1492-1512.
- Thomas, J. (1993). *Doing critical ethnography* (Vol. 26). Newbury Park, CA: Sage.
- Thornberg, R. & Charmaz, K. (2014). Grounded theory and theoretical coding. In U. Flick, *The Sage handbook of qualitative data analysis* (pp. 153-169). London: Sage. doi: 10.4135/9781446282243.n11
- Thornton, P. H., & Ocasio, W. (1999). Institutional logics and the historical contingency of power in organizations: Executive succession in the higher education publishing industry, 1958–1990. *American Journal of Sociology*, 105(3), 801-843.
- Thornton, P. H., & Ocasio, W. (2008). Institutional logics. In R. Greenwood, C. Oliver, R. Suddaby, & K. Sahlin-Andersson. (Eds.) *The Sage handbook of organizational institutionalism* (pp. 99-128). Thousand Oaks, CA: Sage.
- Tompkins, P. K., & Cheney, G. (1983). Account analysis of organizations: Decision making and identification. In L. L. Putnam & M. E. Pacanowsky (Eds.), *Communication and organizations: An interpretive approach* (pp. 123-146). Newbury Park, CA: Sage.
- Tsoukas, H., & Chia, R. (2002). On organizational becoming: Rethinking organizational change. *Organization Science*, 13(5), 567-582.
- Van Maanen, J. (1978). People processing: Strategies of organizational socialization. *Organizational Dynamics*, 7(1), 19-36.
- Van Maanen, J. (1979). The fact of fiction in organizational ethnography. *Administrative Science Quarterly*, 24(4), 539-550.
- Van Maanen, J. (1981). The informant game: Selected aspects of ethnographic research in police organizations. *Urban Life*, 9(4), 469-494.

- Van Maanen, J. (1988). *Tales of the field: On writing ethnography*. Chicago: University of Chicago Press.
- Van Maanen, J., & Kunda, G. (1989). Real feelings. Emotional expression and organizational culture. In L.L. Cummings & B.M. Staw (Eds.), *Research in organizational behavior*, vol. 11. Greenwich, Conn.: JAI Press.
- Waldeck, J. H., Seibold, D. R., & Flanagin, A. J. (2004). Organizational assimilation and communication technology use. *Communication Monographs*, 71(2), 161-183.
- Wee, J. C., & Chua, A. Y. (2016). The communication of intellectual capital: the “whys” and “whats.” *Journal of Intellectual Capital*, 17(3), 414-438.
- Weick, K. E. (1995). *Sensemaking in organizations* (Vol. 3). Thousand Oaks, CA: Sage.
- Weick, K. E. (2001). *Making sense of the organization*. Malden, MA: Blackwell publishing.
- Whyte, W. H. (2013). *The organization man*. Philadelphia: University of Pennsylvania Press. (Original work published in 1956)
- Wynne, B. (1988). Unruly technology: practical rules, impractical discourses and public understanding. *Social Studies of Science*, 18(1), 147-167.
- Yates, J., & Orlikowski, W. J. (1992). Genres of organizational communication: A structurational approach to studying communication and media. *Academy of Management Review*, 17(2), 299-326.
- Zammuto, R. F., Griffith, T. L., Majchrzak, A., Dougherty, D. J., & Faraj, S. (2007). Information technology and the changing fabric of organization. *Organization Science*, 18(5), 749-762.

**APPENDIX**

**Appendix A: Recruitment Message**

Hello, I am a master's student at a university in the US. I am conducting a research project on communication technologies (like WhatsApp, emails, hangouts, etc.) and its role in the organizational culture. Would you be so kind as to spare some time to answer a few questions relevant to this topic? I have a small list of questions that involve a very informal/casual conversation for about 25-30 minutes. It would be great if you could provide some insights and help me with this project. I am located in the XYZ office. Kindly let me know what time is convenient for you sometime today or this week. Thank you.