# ORGANIZATIONAL CULTURE AND COLLABORATION AT A SILICON VALLEY STARTUP

A Project Report

Presented to

The Faculty of the Department of Anthropology

San Jose State University

In Partial Fulfillment

of the Requirements for the Degree

Masters of Arts in

Applied Anthropology

By

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April 2020

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#### **ABSTRACT**

Businesses are complex organizations that face a multitude of issues due to the complexity of intertwining technology systems, information systems, structural organization, and various stakeholders. Organizational culture and human behavior are interwoven into all aspects of the workplace. Understanding the attitudes, motivations, and values of employees gives the leaders of companies' better information to make decisions, especially in a fast growing and changing startup. This project was focused on gaining a deep understanding of how an organization's culture affected the current collaboration practices at a Silicon Valley wearable technology company. The executive team at Robo Tech (pseudonym) wanted to have a better understanding of the current collaboration practices and to uncover what problems, if any, existed with collaboration among teams. Its goal was to link such information to improving the organization's structure and processes. This project consisted of two types of data collection: interviews and observations. In total, 31 employees were interviewed, and observations were conducted for 33 days. Key findings were that the company lacked a clear identity, trust was becoming an issue for employees, the Engineering and Medical teams had conflicting goals and values, and employees expressed the need for more women in the company. This report details the theory and methods utilized in designing the research project. It also includes the insights, rationale, reflections and application of key findings of the project.

#### ACKNOWLEDGEMENTS

I would first like to thank Dr. Roberto Gonzalez, whose guidance and knowledge has been much appreciated. Thank you for your patience, compassion, and flexibility throughout this project. Additionally, I would like to thank Dr. Charlotte Sunseri for her optimism and encouragement. I do not know if it is possible to express in words my gratitude to Dr. Charles Darrah for all of his wisdom, feedback, and guidance. Your insights on how to complete a research project, manage clients, and present data was invaluable. Thank you for challenging me when I needed to be pushed and supporting me when the project became overwhelming. Every time that I had a question or a doubt, you were there to calmly guide me in the right direction. I am so thankful that I had the opportunity to have you as a teacher, an advisor, and a mentor.

Words cannot describe how grateful I am for my family and all their support, love, and encouragement. I would not have been able to complete this project without their support: my children, Max and Maya, thank you for your patience and for tolerating my stress and impatience. Thank you for putting up with having a part-time mother for such a long time! I know that it was difficult sometimes and I greatly appreciate all the help pitching in and most importantly all the hugs. Your bright faces, inquisitive thinking, and enthusiasm were the fuel that kept me going. To my husband Rouhan, for being my rock and always supporting me no matter what crazy adventure I take us on. I am eternally grateful to you for supporting this detour in our lives.

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# Introduction

This report describes an ethnographic project that I completed for the executive team and Sandra Mitchell (pseudonym), the Director of Human Resources, at a Silicon Valley wearable technology company. Robo Tech (pseudonym) is a technology company founded by three Silicon Valley veterans that include a serial technology entrepreneur, a renowned computer scientist, and a prominent PhD electrical engineer. At the time of the project, the company was approximately 4.5 years old, had raised \$80 million in funding, and had approximately 80 employees at three job sites. It was primarily in the research and development stages of creating an innovative and complex product during this research project. The company was racing to develop and produce the first of its kind wearable technology product and doing so in secrecy. Most employees at Robo were industry veterans, with extensive work experience, in either other startups or large and established technology companies in Silicon Valley. Most were experts in their fields with impressive education and work histories. It was typical to hear introductions of employees who designed, patented, built, funded, or developed some of the most famous Silicon Valley products.

Robo was in the final stages of research and development and yet it was enveloped in secrecy since it was in "stealth" mode, a common practice of hiding details of the product a company was developing. The reason for the stealth mode at Robo was twofold. First, Robo wanted to keep its work secret from any competitors. Its leadership believed Robo was the only company working on this product because others felt it was impossible to do. The fear was that if others knew what Robo was working on, they would also try to make the product and create competition. Robo did not want to compete for investors, employees, or customers. Robo wanted to be the first company to market because the executive team believed it would give them a

competitive edge in attracting investors. The second reason for stealth mode was that it would create a marketing moment when Robo launched the product or came out of stealth. This was a marketing strategy designed to produce interest and excitement with hopes of generating more investors to keep the project moving forward.

While I was at Robo, the company produced the first working prototype, but the information about it was only shared with employees because the company's leadership wanted to ensure the product worked before unveiling the product to a wider audience. They also wanted to better understand how its product operated and explore how it could be further developed. This introduction of the prototype became a company-wide event when the CEO demonstrated the product for the first time for employees via video link. Employees were excited and there was a celebration when the CEO confirmed that the prototype worked. This prototype was the compilation of complex engineering and medical technology, and required collaboration from different fields of expertise.

Another layer of complexity was that the prototype needed to gain FDA approval. This involved sequential project work involving collaboration between many teams and departments in the company. The collaboration needed to occur between teams with different goals and purposes. It also required meticulous record-keeping and tracking of raw materials, data, equipment, and components. The approval and success of the prototype also led the company to continue forward with its plans to launch the following month. The launch would mean that Robo could emerge from stealth mode and the level of secrecy would be lifted from the company. The employees all looked forward to the launch and near the end of my research project the company did emerge from stealth at a technology conference. The launch was

considered a success both inside and outside of the company. Needless to say, it was a busy and exciting time at Robo.

With the frantic pace of busyness, there were complaints about how projects were progressing, and some employees were sharing their thoughts and frustrations with the executive team. Employees were aware that any mistakes could lead to setbacks in time and resources. There were hard deadlines to be met if Robo was to launch at a specific conference at a specific time. The executive team wanted to have a better understanding of the current collaboration practices within the organization and to uncover what problems, if any, existed with collaboration among teams at Robo. The executive team could then decide whether these assumptions and values were important to the company and, if so, what actions to take. Sandra also thought the current organizational culture may also be affecting employees and she felt that having a better understanding of their motives and assumptions would better enable her and the executive team to make better decisions for the company.

I came to anthropology circuitously. I first attended university with the goal of becoming a high school teacher and I completed an undergraduate degree in kinesiology, with a focus on the history and socio-cultural aspects of sports. I then completed my second degree in education and immediately began my teaching career. I taught high school Social Studies for more than 15 years in an "at risk" neighborhood in Toronto, Canada. While teaching, I learned quickly that the standard educational model would not work and was not effective with the students I had in my classroom. I decided to take a culturally responsive approach to teaching and challenged myself to learn as much as possible about the students, their cultures, and learning styles so that I could develop a strategy to reach more of the students in a way that connected with them and their experiences. I also experimented with different activities and educational approaches that

acknowledged the different learning styles and cultural attitudes towards education. I now recognize that I took an anthropological view of the situation and changed not only my practices but the practices of other teachers within my department and the rest of the school. In fact, that was my first rudimentary anthropological project. I took what I learned and helped transform how teaching and education was applied at both the local school level as well as through workshops and leadership roles throughout the school district. I was fortunate to be supported by colleagues and management who valued this type of insight and the school saw improvement and success in meeting the traditional educational standards. The changes we made resulted in an increase in both literacy and numeracy scores for the school, and more importantly, it improved the graduation rates of our students.

At the same time, I had a family of my own. My then eight-year-old daughter was diagnosed with a medical condition called cold urticaria. This essentially meant that she had a reaction to anything cold, including being outside in the fall and winter in Toronto. Almost immediately my husband and I realized that living in one of the coldest countries in the world, might not be the best place for her to live. After much thought and consideration, we decided that we needed to move to a more temperate climate but socially similar to Canada. We also wanted to be in a place where there was industry, employment, and educational opportunities. We decided that Silicon Valley was the best choice for our family.

The family move to Silicon Valley left me questioning the next part of my working life. As much as I loved teaching, I wondered if I could use my skills in a different way and so I took courses in a variety of subjects at a local community college. I took courses in anthropology, computer science, business, and history. I immediately connected with anthropology and I was beginning to see the world from an anthropological view. I also realized that even in an app

development class, I was viewing the world as an anthropologist who asked questions about the users. In fact, the professor for the app development class spoke to me at the end of the course and mentioned that I seemed to have to work very hard at the coding, but seeing the user or people interacting with the app came natural to me. He suggested that I investigate fields that would utilize my natural abilities. I decided that anthropology was my future and a quick internet search pointed me in the direction of the graduate program at San Jose State. Applied anthropology instantly resonated with what I wanted to do in my second career and how I viewed projects. There were so many ideas and directions racing through my mind that I could see myself completing work in educational anthropology, business anthropology, or even medical anthropology. I decided that I would apply to the program and continue to be open to different types of anthropology.

Once being accepted to the graduate program, I immediately recognized that I might not be able to complete the program in a typical fashion. Due to parenting responsibilities and a husband that traveled for work most weeks, I knew that my program path would be a bit unconventional and I would need to take courses and work on my project a bit differently.

Early in the graduate program, I found my lack of foundational anthropology was particularly challenging, especially in developing my graduate project. I still had so many interests and I could see so many different projects that I could complete. I was overwhelmed with possibilities. I also found the idea of finding a project partner daunting. I knew that I wanted to focus on an area that had the potential for a career or employment opportunity after graduation; I decided that business anthropology was a viable option that could prepare me for work in Silicon Valley. My project would be an applied project with a local company, but I had few connections to companies or businesses.

My goal was to work with a for profit company and ideally, I wanted to work with a startup or a technology company. I was fascinated with the area and what made it unique. I talked often, with as many people as possible about my graduate work and looked for people or companies to partner with. Eventually, I was introduced to James (pseudonym), who had started a financial technology company in San Francisco. He, being a fellow Canadian and a recent graduate from Stanford, empathized with my predicament and agreed to meet with me and eventually to become my project partner. As the CEO of a startup, he was open to any project that could potentially benefit his company. We talked by phone and after some negotiations about when he would have time to meet with me, we met in San Francisco. He showed me the company's new office, described how the company was growing and changing quickly, and he lamented about the difficulty of being a startup and the busyness. We developed a plan for addressing his company's needs. His first thought was for something starting immediately and suggested several project ideas specifically around customers. I then had to explain that I needed approval first from the department and the university, which could take anywhere from six months to a year. He explained that it would be difficult to develop such a project because even in the last two months his company had changed drastically. He pointed out that he rarely had time to think about the future. We brainstormed some project ideas based on projects he wished he had time and money to address, and developed a project proposal and plan. Immediately after the proposal was submitted to the anthropology department, I noticed that James was not responsive to emails. Sometimes it would take weeks to hear back from him at all. He apologized and explained that he had become very busy opening new offices in other cities and states. As it came closer to starting the project, communication seemed to disappear. I was not even getting a response to email inquiries. I began to question the project and wondered how I could complete

the project if my partner was no longer interested. In all fairness, it had been a year and a half since the first meeting, and I think that the time delay did more damage than I had anticipated. I began to realize that James was too busy, and the project was no longer relevant or a top priority for him. This was a brutal lesson about the world of startups. I did not read the situation correctly: a startup cannot be too interested in the distant future when they need to worry about surviving another month. I now understand that this is a common concern and prevailing theme in all startups.

While speaking with another parent at my children's school function, I described my project and it was met with enthusiasm and excitement. Sandra immediately told me that she wished I were working with her and her employer. I walked away feeling excited and optimistic about the value of the work I was proposing and after many unanswered emails to James I began to acknowledge the need to switch projects. I felt like a nuisance to James, but I could actually help the company Sandra worked for. She seemed motivated and was affirming the value of my work.

I contacted my graduate advisor who validated my concerns and encouraged me to investigate a new project with Sandra. I approached her and proposed completing an applied project with her company. I was met with enthusiasm and instantly the project was moving. I realized quite quickly that having a partner who saw real value in the project was critical.

I then explained to James that the project timing was not working for him and that I would be happy to work with him in the future, if he had a specific project or idea he wanted me to work on. He seemed relieved and expressed regret about his lack of time. He admitted that he did not have the time and was feeling overwhelmed.

I set up a meeting with Sandra and we talked about what she wanted from a project and what would be useful to the company. She explained that she would have to speak cautiously because the company was still in "stealth mode" and that until I signed a non-disclosure agreement (NDA), she could not speak openly. I immediately wondered how I could design a project without knowing what work they were doing but I knew that this type of stealth mode was common for startups. I decided that I could still talk to Sandra about the organization and the type of project she wanted without knowing the details of the company. It was an opportunity and I needed to be flexible. I suggested that I could sign the NDA as soon as possible but, in the meantime, I wanted to ensure that I had a clear idea of her goals and what would be most helpful to her and the company. She explained that the company needed to know more about its culture and specifically cited issues with collaboration in the company. She described problems between teams and employee conflict that she felt kept resurfacing. She wanted me to assess what was happening in the company and provide her and the executive team with some strategies or ideas to improve some of the organizational issues. Sandra explained that she wanted approval from the university first, before having me sign an NDA and disclosing more about the company. She hoped that she could describe the company and the project without divulging the nature of the work. I agreed that I could be flexible and that I could develop a project plan without those details.

This project excited me because I had a partner with a clear need that I could address.

This was a complete reversal of my experience with James. With him, I was trying to sell a project without a clear sense of his needs because they changed in that startup world. But Sandra easily identified well defined and important company needs that meant I had a genuine client whose needs I could address.

I was prepared to take on this project because I had completed many readings in business anthropology and knowledge management in preparation for my first project. I had read books and articles such as "The Anthropology of Work in the Fortune 1000: A Critical Retrospective" (Baba 1998), "Transforming Culture: Creating and Sustaining Effective Organizations" (Briody, Trotter, and Meerwarth 2010), "Business Anthropology" (Jordan 2013) and "Designing & Conducting ethnographic Research" (LeCompte and Schensul 2010). This knowledge would be extremely helpful in developing my project plan quickly.

The goal of the project was to gain a deep understanding of the current collaboration practices at Robo Vision and to identify how the current organizational culture may affect employee behavior. The executive team wanted the company to be more effective in projects where teams worked collaboratively, and they wanted more information that could aid them in their decisions. This information was important to them and their decisions because they were quickly growing and changing. They felt that they needed a better understanding of the motivations, assumptions, and beliefs of the employees at Robo Tech.

Due to the urgency of the company's needs and my experience with my last project partner, I quickly developed my research questions and design in October 2019. I developed this with an awareness that the plan and design would change as I learned more about the company. I set up a meeting with Sandra at the company headquarters and met with her and another member of the executive team, and they immediately had me sign an NDA. As soon as I signed the document, the mood in the office shifted from one of business and seriousness to one of excitement. Sandra flashed a big smile and asked me if I was ready to see what Robo did. She proceeded to show me a five-minute video that was used as a marketing tool for attracting investors that explained what the product was and their vision of how product could be used. I

began to wonder if the type of work at the company or product itself might change my project or direction but concluded that it would not do so: Robo had articulated a stable problem and commitment to addressing it.

One of my first steps after this meeting with Sandra was to speak to one of my advisors to get some advice on the project. I was a bit overwhelmed with all the information I was being given and the quick pace that Robo was operating at. My advisor's first suggestion was that I should ask Sandra about how I would go about getting feedback and advice from members of my committee, given Robo's emphasis on the NDA. Ultimately, I had one of my advisors sign an NDA, so I was able to share specific project information and obtain guidance as needed.

I had many questions and concerns and wondered if the direction I was going in was the best way for this project. I looked to one of my committee members because of their experience with numerous ethnographic projects with companies in Silicon Valley. I had many doubts about how to organize my project and the complexity of balancing the needs and interests of the different stakeholders. I felt like I was constantly looking things up in anthropology methods books and business ethnographies. There did not seem to be a formula as to how to design and implement a project. Eventually, I realized the benefits of this but in the beginning, it was a struggle. Once speaking to my committee members about the project design and methods, I felt comfortable and confident in my design and approach. I then commenced the interviews and data collection. This research and data collection continued until early January 2020. I analyzed the data and presented it as a PowerPoint deliverable to the Executive Team in late January 2020. Round table discussions followed the next few weeks and a summary report of the PowerPoint was delivered to Sandra, who in turn shared it with the executive team.

#### **Problem Statement and Approach**

As discussed in the previous section, Sandra wanted me to find out what the current state of collaboration was at Robo. She had been hearing complaints from employees and other executive team members that the lack of effective collaboration was causing delays and mistakes in product development. These delays and mistakes were costing the company time and money. For example, she had heard that one project had gone forward without full company input and now that project was delayed several months because the quality team had to re-do work to ensure it was Food and Drug Administration (FDA) compliant. Sandra was also seeing a stream of employee disagreements that seemed to be repeating issues, requiring her attention and mediation. She felt that a lot of the disagreements were coming from cross-functional team meetings and she wanted to know if there was a broader issue or theme causing these disagreements. Sandra also wondered whether the organizational culture was affecting collaboration practices and she wanted to have a better and more complete understanding of the situation so she and other members of the executive could make better and more informed decisions about how to move forward. Sandra also wanted me to help develop strategies to align the organization's culture with effective collaboration practices at Robo. Her goal was to build and improve Robo's organization and make it more effective.

Robo Tech was formed four years ago and at the beginning of the fieldwork it was in "stealth" mode, meaning that no one could talk about what Robo was working on with anyone outside of the company. All employees and visitors to Robo signed NDAs. However, Robo's main purpose was to develop a new product that would ultimately be widely used. This product would be the first of its kind in the world and therefore, it required expert knowledge. This product also involved a combination of disciplines and disciplines that often did not work

together. In order to produce a viable product, teams needed to work collaboratively and due to constraints of space and time, make concessions and innovate. The teams working on the product had to find new ways to do things, experiment with new ideas, or sometimes negotiate with each other. This required very clear communication around what was needed, what was possible, how to problem solve for solutions, and time management. The successful collaboration of teams and knowledge transfer was critical to the product's success. The complex nature of the product and the knowledge required to create the product resulted in teams working interdependently together, sometimes with unanticipated results.

Knowledge flow and sharing were concepts I needed to better understand. Although I was comfortable with the concepts of learning and knowledge, work knowledge and product development were new. I decided to delve deeper into business anthropology and the field of organizational culture. I started by looking at the work produced by anthropologists such as "Dangerous Liaisons: Trust, Distrust, and Information Technology in American Work Organizations" (Baba 1999), "Negations and Ambiguities in the Cultures of Organization" (Batteau 2000), and "Transforming Culture: Creating and Sustaining Effective Organizations" (Briody, Trotter, and Meerworth 2010).

Knowledge sharing is defined as managing the knowledge that exists and is created within a company, and ensuring that it gets to the right people at the right time; it includes knowledge sharing between employees (Argote et al. 2000). Knowledge sharing and management of knowledge is particularly important to Robo due to the project nature of the work, age of the company, the projected growth, the location of the company in Silicon Valley, and the fluctuation of the number and type of employees.

Robo's executive team believed that there were deficiencies and problems with collaboration in the company that were leading to knowledge not being shared or not being shared at the right times. The complex nature of collaboration and knowledge sharing creates knowledge management issues and human resource incidents for many corporations, especially as they grow in the number and types of employees. Knowledge flow and knowledge sharing are also affected by the employee turnover rate, the number of transitional employees such as interns and contractors, and structural changes within the organization. Anthropology has examined barriers to knowledge flow (Baba 1999; Briody and Baba 1991; Boje 1991) and it has also been utilized to demonstrate effective ways of collaboration (Baba 2003; Collins 2009; Darrah 1995; Klitmøller et al. 2013; Lauer and Aswani 2007).

Robo is based in Silicon Valley in the South San Francisco Bay Area. It is located in a highly competitive, technology-focused corporate environment. This area is ideal for innovative business ideas with high concentrations of investors and venture capital firms, but it is also characterized by a low unemployment rate and a constant battle for recruiting and obtaining employees. It is also located in an area where employees face high housing costs, long commutes, and poaching by other companies. These factors all lead to a high employee turnover rate. So far, Robo has not had a high employee turnover rate but Sandra was worried that that was about to change. Sandra was also concerned that Robo requires such specialized knowledge and skills that the company cannot afford to lose employees. Sandra believed that there were issues with the organization's culture and specifically, collaboration between teams, and that valuable employees would seek employment in other companies with less tension and conflict.

As the VP of Human Resources, she started to hear complaints about the organization, and she

wanted to be proactive and make changes to prevent the company from losing essential employees.

At the same time, Robo was concerned with its adaptability because it was a rapidly growing company whose organization, structure, systems, and practices were changing as the company expanded. The company was concerned that structures and practices that were initially put in place at the inception of the company, need to adapt and change as the company grows. Originally, the company envisioned a flat organizational structure, whereby there were few levels of management and thus power was distributed fairly evenly throughout the organization. The founders decided to use this organizational structure so that employees had easy and open access to the leadership team and its empowered employees to be part of decisions. Decisions were made together, with most employees contributing and the rationale for ultimate decisions were discussed openly.

Sandra and the executive team recognized that some aspects of the structure of the organization have already changed, as the company has grown. They were also aware that some aspects were not working well as the company doubled in size over the previous year. The small and collaborative meetings changed to include more people and there was less time for input from all employees. Sandra expressed concern as to how this had affected collaboration within the organization. The executive team at Robo wanted to know if there were issues or barriers to knowledge flow and collaboration that existed in the company so that they could be addressed and changed to enable better flow and retention of knowledge. The executive team also wanted a better understanding of the organization's culture and practices that promote collaboration so that those practices that were working would not be lost in future organizational changes.

This project scope meant that I would need to examine the organization systematically, and assess the collaboration culture. I utilized Michael Harrison's *Diagnosing Organizations* (2005) to guide my thinking about the impact of both individuals and groups on the company's effectiveness. I examined individual factors such as employee motivation, education, and individual attitudes. Group factors were also important, so I probed concepts such as group composition, group communication processes, decision making, trust, and conflict. I also looked more broadly at organizational culture and examined ideas such as the informal patterns within the organization, corporate values and identity, organizational structure and hierarchy.

I wanted to understand the insider, the employee that worked at Robo Tech. What was it like to work at and be part of Robo? I observed many aspects of work at Robo and participated as much as possible in the workplace. I attended meetings, participating in some, and I asked lots of questions. I asked questions of as many employees as possible and often had conversations by the coffee and water machines. I walked the office and asked employees about the work they did in their cubicles, labs, and workspaces. I asked employees what was working and what was not working at Robo. I wanted to hear from them what they valued in the company, what motivated them and also what, if anything, was causing problems or conflict in teams and broader crossfunctional groups. I probed the level of trust at Robo, between employees and also within management. I also examined whether the organizational culture was relevant to the issues of collaboration at Robo.

The final deliverable consisted of three parts. Part one was a PowerPoint presentation that grouped the data from both interviews and observations into themes that characterized both the organization's culture and collaboration practices. The PowerPoint focused on the key points learned from the employees and questions or prompts for the executive team to think about. It

was used as a discussion starter in a series of round table meetings with the executive team. Part two included a series of three round table conversations with the executive team. The first round table discussion was centered around the theme of company identity, the second round table was focused on the theme of collaboration. I presented the data in a way that allowed the executive to make key decisions around the direction of the company without telling them what to do. I also provided them with input as to how to continue to move forward with changes. Finally, in the third part, I delivered a summary report to Sandra that detailed the findings for the presentation and the round table discussions. The deliverables for this project, a PowerPoint presentation, round table discussions with the executive team, and a summary report were delivered to Robo. The main goal of the ethnographic project was to provide the executive team with a deep and useful understanding of the culture and collaborative practices at Robo.

#### Format of this Report

This report consists of five sections that describe in detail the project I completed for Robo Tech. The first section focuses on the context in which this project was conducted and includes background information that describes the theoretical significance of the project. The concepts examined in this section include the history of business anthropology, the study of organizational culture, Silicon Valley as a distinct place, and startups. This information is critical to understanding the context of the project, the people, the work, and the organization.

The second section (Research Design and Methods) chronicles how I designed and completed my project. It includes the processes around designing the project and the details as to how the project was implemented. The third section focuses on the analysis within the project. It includes how I thought about the themes that emerged from the research and how I communicated them to the project partner.

In the fourth section, I summarize the deliverable for Sandra and the executive team at Robo and I discuss the decisions I had to make in regard to how I would present my research to a business organization. In this section, I also explain the outcomes produced by my project and reflect on the reception of my work by the executive team at Robo, Sandra, and the employees. In the "Reflections" section, I analyze and reflect upon the project itself. In this section, I discuss many issues and thoughts I had in relation to the completion of this applied research project. I also describe how and why I think that my perspective as an applied anthropologist adds value and a useful perspective to a very complex topic of collaboration in a business organization. The goal of this section is to not only learn from the experience but hopefully to provide other applied anthropologists with insights into this topic. Finally, I complete the report with appendices that include (a) the email sent to employees for recruitment, (b) the project consent form, (c) the interview protocol, (d) a letter from Sandra stating that she received the deliverable and it's use to the company.

#### **SECTION ONE: Contextual Information**

### **Business Anthropology and Organizational Culture**

Anthropologists have had a long but sporadic history of researching and studying work in corporate America. Factory work was first studied by the anthropologist W. Lloyd Warner in the 1930s (Baba 1998). He was part of what is considered one of the most important human relations and work studies in North America which took place at Western Electric's Hawthorne Works. This study was a multidisciplinary one that looked at the informal organization in a work setting. Warner utilized anthropological methods and theories to uncover that understanding human relations was critical to understanding organizations and how employees worked (Jordan 2013). This focus on the informal patterns and structure in an organization is still a key understanding used today when studying organizational culture. Warner has had a far-reaching influence in anthropology as others were inspired to study both businesses and work. This type of work began to be thought of as applied anthropology and the first professional association, the Society for Applied Anthropology (SfAA), was established in 1941, by former students of Warner (Jordan 2013).

Another important concept that pertains to businesses and work was that of communication and "The Silent Language" (Hall 1973). Hall interwove the concepts of culture and communication together and noted that nonverbal communication needed to be understood in order to understand work culture. Although there was a focus on the cross-cultural nature within international businesses, non-verbal communication is still an important concept to be studied in all organizations.

Knowledge flows through an organization, the sharing of knowledge, and specifically, communities of practice became the focus in the 1990s. This deep understanding from the employees is critical to understanding how work is done or not done in a business. There was a shift to understanding knowledge, from the perspective of what was inside employees' heads and what was shared with coworkers (Nanako 1994; Baba 1998). Anthropologists argue that ethnographic methods need to be utilized in order to examine the dynamics of knowledge flow and sharing within organizations, with the focus on employees, their actions and thoughts (Baba 2003; Collins 2009; Lauer and Aswani 2009). These ethnographies of organizations revealed the complexity of industrial and post-industrial work.

In the 1980's there was a shift in business anthropology toward the concept of culture. There was mainstream North American popularity through books such as *Theory Z* (Ouchi 1981), *The Art of Japanese Management* (Pascale and Athos 1981), *Corporate Cultures* (Deal and Kennedy 1982) and *In Search of Excellence* (Peters and Waterman 1982). These books written by business experts, expropriated the concept of culture and merged it with business and managerial perspectives. A strong organizational culture was linked to successful businesses and the popularity of these books forced businesses and organizations to examine their corporate cultures. Business schools and academics typically see organizational culture as management focused. It is seen as uniform and is dictated and managed by people in power. This spotlight on organizational culture created opportunities for anthropology to add insights into corporate organizations. Anthropologists such Lucy Suchman, Elizabeth Briody, Melissa Cefkin and Genevieve Bell have been employed by large corporations such as General Motors, Xerox, Nissan, and Intel to utilize their ethnography skills to help the corporations solve business problems and issues.

A business organization is made up of groups of people and every group of people generates a culture by sharing practices and narratives (Jordan 2013). Culture is the integrated system of shared knowledge (thoughts, ideals, attitudes), behaviors (actions), and artifacts that characterize a group (Heibert 1976). An organization's culture is based on the values that influence all aspects of an organization. Organizational culture reflects the theories and beliefs of the organization's founders and what the group learns through its own experiences interacting in a dynamic environment (Batteau 2008).

Anthropologists studying an organization's culture are examining human behavior within the organization and this is complex, linked, and hierarchical (Jordan 2013). Anthropologists look to the way that cultural groupings interact. In organizations that can include shared characteristics such a Miriam Kaprow's study of New York firefighters (Kaprow 1999), learned characteristics (Mulhare 1999), symbolic characteristics like company greetings (Baker 1995), and cultural groupings such as the "safety culture" in the aviation industry (Batteau 2010). Anthropologists have emphasized organizations as sites where various cultures intersect and are a web of interacting cultures. Not only does the organization have a culture but departments or divisions can have its own cultural components (Jordan 2013).

It is important to remember that organizations are also in a particular place and at a particular time. Context is critical to understanding an organization's culture and knowledge flow and knowledge sharing are influenced by elements of the culture (Baba 2003). Baba (2003) demonstrates that knowledge sharing is not enough to increase performance or create efficiencies within a corporate organization. She concludes that it is essential to comprehend the organizational context of how employees share and integrate knowledge into their work (Baba 2003). Power is another dynamic that needs to be examined when looking at corporate culture

and it is mentioned throughout the ethnographies of corporate organizations (Baba 1999; Cefkin 2010; Darrah 1995; Scribner 1985).

Trust and mistrust are an important concept that is linked to the idea of power in an organization. It is also a key theme to consider when examining the flow of knowledge and knowledge sharing in an organization. Baba (1999) demonstrated the trust concept in her work with automotive and aerospace firms. She argues that changes in ways that information is shared need to take into account the social dynamic of the organization itself. If changes threaten the security of the information needed by those less powerful in the organization, there will be resistance to sharing information (Baba 1999). Trust and mistrust within an organization becomes important considerations and specifically between levels of management and employees. Mistrust within an organization can be a barrier to the sharing of information.

Employees can guard information and not share important details or knowledge because of a lack of trust. Actions of people within the organization will demonstrate either trust or mistrust. These actions are important to note during observations and employees' perceptions are valuable signals to the level of trust between people at the company. It was important to examine actions, literature, and interactions that contribute to the level of trust within my partner organization.

The complex nature of knowledge flow and knowledge sharing creates knowledge management issues for many corporations, especially as they grow in the number and types of employees. Knowledge flow and knowledge sharing are also affected by the employee turnover rate, the number of transitional employees such as interns, and structural changes within the organization. Anthropology has examined barriers to knowledge flow (Baba 1999; Briody and Baba 1991; Boje, 1991) and it has also been utilized to demonstrate effective ways of sharing

knowledge (Baba 2003; Collins 2009; Darrah 1995; Klitmøller et al. 2013; Lauer and Aswani 2007).

The complexity of interactions and people within organizations require a thorough examination of factors such as the formal and informal organization, verbal and nonverbal communications, values, corporate identity, knowledge flow, context, power, and trust to better understand what actions are happening and why within the company.

#### **Silicon Valley Startups**

Silicon Valley is an area in Northern California that has a history of technology driven innovation. It is home to technology and social media giants such as Apple, Facebook, Netflix, and Google that were both started and are headquartered in the area. The name "Silicon Valley" is derived from the physical material that is used to make computer chips. This name emerged in the 1970's and it is based on an idea. However, most employment in the region is not high-tech and it has evolved to not just represent hardware companies, as the nickname refers to, but any technology company or related services. It has become a magnet for innovation and technology minded people. Technology is central to all parts of daily life, the economy, and even the language in Silicon Valley (English-Lueck 2017).

Silicon Valley is composed of Santa Clara County and San Mateo County in northern California. However, locals have expanded this definition to include the entire Bay area as Silicon Valley (English-Lueck 2017). The cost of housing, the low employment rate, and the lack of physical space has spurred this expansion to include many counties and cities in the Bay Area. Employees are commuting long distances in order to find affordable housing and some technology companies are relocating to the outer fringes of the Bay Area in order to find office space and to attract employees.

Silicon Valley is not only a place to innovate but also a place to invest. Past successes attract attention to the area and the concentration of high skilled workers, customers, supporting industries, educational institutions, and investors make it a hot spot for startups. A startup cannot survive without funding while in the research and development stage and therefore, seed investors, venture capitalists, and private donors become critical to a startup. This type of investing is very risky, the companies and the people who make these types of investments want to be close to their investments so they can keep tabs on their progress. The startups typically want to be close to the investors as well because then they can utilize the investors' expertise and help.

Another characteristic of startups is one of secrecy. One of the reasons a company may choose to keep their company's purpose a secret is so that the focus of the company remains on developing the product or service. This provides anonymity and means that the company can focus its resources on development rather than on marketing and branding (Villano 2013).

Another reason for "stealth" mode is that it protects intellectual property. Some startups are afraid that another company will steal their idea and the people to make the idea work. This secrecy is tied to the goal of being the first out of the gate. The concept is that the first company to do or create something, even if it is not perfect, is more successful (Villano 2013).

"Stealth" is a term that is used to describe a company that is in the research and development stages and no one in the company is allowed to divulge the nature of their work. Companies often require employees and anyone entering the corporate property to sign a non-disclosure agreement. Sometimes the secrecy is motivated by a marketing strategy to both build anticipation and sometimes it is in place to protect the product. It is meant to be a way to create intrigue and is often done in the early stages of a company and financing. This is done to keep

what the company is doing secret so that they hide information from their competitors and is a marketing strategy to create intrigue and interest in the media when they announce their product or service. Therefore, there is a tension between secrecy, financing, and product development.

Startups typically originate from an idea, around which the founder typically attracts interest from people who either have the resources to finance the startup or the technical skills to take the idea and make it into a product or service. As the venture grows, founders typically look for seed money. "Seed money" is usually smaller amounts of money invested by individuals in the early rounds of funding who are called angel investors (Tauli 2008). These early rounds are called the "seed round" or "Pre-Series A round" and are usually composed of funds from the family, friends, incubators, venture capitalists, and the founders' own resources. As the business matures and moves through the research and development stages, a series of fundraising rounds can provide additional money to continue to develop and grow the business. Each round starts with a financial valuation of the business. This valuation considers the business plan and strategy, the reception of the idea by users, and the way the company plans on making profit. If a company has reached the "Series A" round of fundraising, it implies that the company has received at least one venture capital investment of approximately \$3,000,000 (Horrowitz 2010). As the company moves through the different series of funding, a business must continually provide evidence of maturation and profitability. This process of funding rounds and valuations continues until the company is acquired or the company reaches an initial public offering (IPO). This can create tension, pressure, and gamesmanship within the startup (Newton 2001). The challenges Robo was encountering during my project played out against this background of product and company development linked to further funding.

# **SECTION TWO: Research Design and Methods**

I realized when I started planning the research design and the methods for this project, that I knew very little about the company I was going to be working with. The company was still in "stealth mode" which meant that very little had been shared with the public. In fact, Sandra kept describing the organizational issues she wanted me to examine but would not say what the company actually produced. The first day I started the project, I drove up to a one-story office complex in Saratoga and had to weave my way through the complex and find the building with a #3 on the far-right corner. There was no signage and it did not feel like what I envisioned a startup to look like. I had expected to see a modern and flashy building, but this was dull, rather nondescript, and quiet. I texted Sandra, and she came and met me at the door. She then took me back to her office and very formally told me that in order to complete this work or for her to tell me anything, I would have to sign an NDA agreement. I signed the agreement and immediately she relaxed and smiled. She probed if I wanted to know what the company was working on and laughed. Immediately the flood doors opened, and I was shown a video describing what the company was creating. Then, very quickly, I was asked if I wanted access to their electronic management system, granted contract staff status, and given a company email so that I could book conference rooms for interviews. I was then given a tour of the two office buildings on the main campus, told about the other two locations, and then directed to a cubicle that I could utilize as a home base. Immediately, I felt a bit overwhelmed. There was so much information to process and all my plans seemed a little off. I decided that I really needed to reevaluate my research design but first, I needed to learn as much as I could about the organization so I could make a better-informed plan. The first two days, I examined all the corporate publications, both

formal and informal. I reviewed corporate policies, the published organizational structure, and emulated a new hire by going through the online training. I also introduced myself to as many employees as possible and reviewed the company's organizational chart (which I was told needed to be updated) to familiarize myself with the departments, leaders and employees.

Once I was comfortable with my surroundings, I decided to revisit my research design. The first thing I decided was that this was going to have to be settled rapidly. This startup was moving quickly, and the executive team made decisions on the fly. The VP of Operations stopped by and told me that although I was already approved, the executive team wanted a one-page proposal, preferably by the end of the week; it was Thursday. I was told that the executive team had a meeting on Monday when it would be discussed. She suggested that I be in the office on Monday in case the executive team had any questions.

I immediately reread my much more formal and lengthy proposal for the anthropology department. I knew that that was not the type of proposal Robo executives wanted. It was going to have to be direct and concise. I quickly noticed that most of the published anthropology work consisted of case studies and guidelines. Although helpful, this did not give me a clear set of instructions. I was going to have to balance qualitative methods with the company's objectives but complete the work quickly. I was also going to have to think about the value I was generating for the company.

I was examining collaboration throughout the organization, so I knew I wanted to see it in practice. Participant observation was the ideal method to see actions, but I thought that it would be awkward to start there, and it would likely change employee behavior if an outsider suddenly showed up to meetings. I needed to find ways to continuously build and maintain rapport with employees so that the data I collected would be authentic (LeCompte and Schensul 2010). I

wanted to uncover what employees thought about collaboration at the company and I decided that the best way to become familiar with the employees and build trust was to start with the semi-structured interviews. I would be able to sit with employees, one on one, and elicit their perspectives. Due to the rapid nature and the lack of time to re-interview employees, semi-structured interviews are considered the best type of interview to use (Bernard 2011). Semi-structured interviews would also provide me with both structure and flexibility. The structure of utilizing an interview guide would ensure that I covered all topics with all interviewees but also provide me with the flexibility to delve deeper into themes or topics that might arise in an interview. It would also allow for a more conversation-like interview and help build rapport with the interviewees. This would also be helpful in gaining access to meetings in the later part of the research project.

I was examining the organization as a whole and decided that instead of just interviewing 12-15 employees, that I would open it up to all the employees. This holistic perspective was important because I worried that I would end up with all 80 employees agreeing to interviews but I realized that was a risk I was willing to take in order to get a more holistic picture of the company. I also thought about representation and decided that I would need to look carefully at which employees agreed to be interviewed and address any issues of under- or over-representation if it became a problem. I hoped that I would get volunteers from across the organization and from every department and team.

I also had to think about how I would request the interviews. This led me to contemplate questions around research and ethics. I immediately thought that although this was a project being conducted in conjunction with the company, I had an ethical duty to protect my informants. I did not want my research to negatively harm any of the employees. I was aware

that this was their work and that the work and their jobs were important to them personally, to their families, financially, and it was their livelihoods. This led me to question almost all aspects of my research design. With this in mind, I decided that the invitation to participate in interviews needed to be communicated as voluntary. I was also going to have to be transparent about working with the executive team and not promise anonymity. It was also imperative that I reiterate the volunteer nature of the interviews to Sandra and the rest of the executive team. The company had around 74 employees at the start of the project, and it would be easy for the executive team to identify interviewees from smaller departments or those with a distinctive voice. I decided that in order to address some of these concerns, I would send the Participation in Research form to participants the day before the scheduled interview. Although this would add another item for me to manage, it was worthwhile in order to give participants time to think about and make an informed choice to participate.

In order to recruit employees, I sat down with Sandra and together we crafted an email of introduction. I thought that an introduction from her would signal support of both the Human Resources Department as well as the executive team. She then sent it to the other members of the executive team and after a few edits, the email was sent to all employees. I then crafted my own email response, describing the project in a bit more detail and inviting employees to schedule an interview time with me at their convenience.

Even in scheduling interviews, I had to think about ethics. The company had a calendar and meeting scheduler, but it was open and visible to all employees. I worried that employees might be hesitant to sign up if everyone in the company could see if and when they were being interviewed. I decided to utilize an online scheduling program that allowed employees to sign up anonymously and the flexibility to choose their interview time. I researched a few different

online calendar schedulers and ultimately chose to use the website Calendly because it was an easy service to use where interviewees could click on a link which gave them choices of available days and times.

Within minutes of sending my email with the scheduler link, employees were signing up. In total, 31 employees chose to be interviewed. This sample size meant that I exceeded the quality standards as given by Bernard of 12-14 interviewees (Bernard 2011). I also examined who was signing up. I wanted to ensure that I was getting an appropriate sample. Right away, I noticed that the genders were represented, that employees from all levels of power had signed up, and at least one member of each team in the company volunteered for the interviews. This gave me confidence that I was going to get a more holistic perspective of the company. Once I realized how many interviews I was going to conduct, I knew that transcribing them in a timely manner would be impossible. I had anticipated that this might happen, and I had already weighed the benefits of interviewing more people, without transcription, over fewer employees with transcription. The goal was to get a bigger picture of the organization and not a very deep analysis of just a few people. I decided immediately that I would write detailed notes during my interviews and record the interviews if given permission and not transcribe the interviews.

Observations were also going to be a large part of this research project. I knew that I was going to have to keep detailed notes so one of the first things I did was purchase some notebooks. I decided to keep one notebook for daily observations, one notebook for interviews, and another separate notebook for observations of meetings. Observations started the first day of the project and continued until the end of the project. Keeping notes and reflections of the project required time. I took notes throughout the day, but I also learned to carve out time at the end of

each day to write and record my thoughts. This was especially important on busy days where I had many meetings or extra interviews.

#### **Semi-Structured Interviews and Informed Consent**

Interviews were conducted at the company office in a closed conference room. I chose to complete the interviews on site because I wanted participants to be reminded that this research project was being done in conjunction with Robo, that it was approved by the executive team, and that I would be reporting back to the executive team. This approach was also chosen because I could not guarantee anonymity due to the size of the company and specific teams and departments.

The day before an interview, I sent an email to participants with an overview of the project and a copy of the informed consent page. This served two purposes, the first to remind participants of the interview time and secondly, to give the participants time to think about their participation in the interview. Working with a company has inherent ethical concerns and I really wanted to ensure that participants had as much time and information to make an informed choice to participate in the interviews.

Once participants arrived for the interview, I started by asking if they had received my email containing the overview of the project and a copy of the informed consent page. If they had not received the email, I showed them a copy and gave them time to read it. If they had received my email, I asked them if they had any other questions or concerns. I simultaneously showed them a printed copy of the informed consent form in case they wanted to review the document further. I also took the added measure of reminding the participants that although we were in a conference room with some privacy, conversations might be overheard and that they should treat the interview as if they were in a meeting. I also spoke to them about confidentiality

and stated that I would not use their name or any identifiers in my report back to the executive team. Interviews lasted from 30 minutes to 60 minutes and all participants granted their informed consent (Appendix B).

I used an interview guide (Appendix C) consisting of a list of questions and topics relevant to understanding more about the employee's experiences in the organizational culture and the collaboration practices in the organization. Semi-structured interviews are best suited for high-level employees and in businesses where time is a critical resource, yet will allow for flexibility to probe areas or topics that arise during the interview (Bernard 2011). This method allowed me to obtain insider knowledge. By completing the interviews privately, it also allowed the employees the opportunity to voice their opinions without fear of repercussions. I initially asked the interviewees if I could record the sessions but after the first three interviewees declined and I noted a change in comfort level by the participants, I realized that in order to get open and honest responses, the employees did not want to be recorded. Even asking for permission seemed to affect their comfort with me. They made it clear that recording the interview would change what they would say, and I noticed that even suggesting the recording, made it difficult for me to build rapport. After the third interview, I made the decision to abandon the idea of recording the interviews and instead kept detailed manual notes. I had made a template for interview notes that had topics and headings so that I could focus my time on taking detailed notes of what the employees said. After each interview, I ensured that I allotted time to add in my own notes and ideas from the interviews. Sometimes, these were questions to think about or ideas to continue to investigate.

After I completed all of the interviews, I reviewed my notes and coded and analyzed the data. I labeled words, phrases, and sentences that emerged as themes as I reread the transcripts. I

then looked for items that were repeated, unique or surprising comments, ideas that related to broader categories, and ideas that were important to the interviewee. Next, I put the data into a chart listing the data that was told to me by the employees. By separating the data into themes, I was able to see patterns that emerged. I also looked at groups of employees by departments, gender, and power in order to see any themes that might be group specific.

# **Participant Observation**

The next step of the research involved observation skills. These observations started the moment I walked into the company and continued throughout my time in the organization.

I decided a keyway to understand how the teams were functioning both within departments and between departments and teams was to sit in on meetings and observe collaboration in progress. I talked to the executive team members and key team leaders and they decided that any meeting at Robo would be open for me to observe. The free and open access was important in order to gain a bigger picture and the executive team acknowledged and granted me full access.

Much of the work at Robo is project based, so I decided that one of the best ways to gain a broad perspective was to follow the current priority project that the company was focused on. I talked to the project manager and created a list of all of the teams contributing to the project and made arrangements to observe meetings related to the project in the three-week time period I had allocated for observations. I observed a total of 32 company meetings consisting of team meetings, cross-functional team meetings, whole company meetings, and an on-boarding meeting of a new employee.

This method of observation allowed me to see what was actually happening when groups of employees, from different teams, were working together on a project. It also allowed me to

contrast that with team meetings. This research method reduces the chances of reactivity and of participants changing their behavior because they are being studied (Bernard 2011). By observing so many meetings I hoped that meetings would be close to what would happen even if I were not there. I wanted the employees to react and behave as if I were not there.

I also decided to be present and visible in the company. I went into work daily, was given a cubicle to work from, I ate lunch with employees, and I participated in all organizational social activities such as the Launch Party, employee walks, coffee runs, and company lunches. This type of observation method facilitated my understanding of the meaning of my observations and provided both internal and external validity.

I immersed myself in the corporate organization to obtain a better understanding of the behaviors, the rules and norms, and the cognitive elements involved in the corporate organization. I ate lunch with employees, often rotating who I sat at lunch. The company provided catered lunches, approximately 6-8 times a month and I made sure to participate as often as possible. These lunches were well attended by employees and I tried to sit down with a variety of employees, from different social groups, hoping to build rapport and hear insights from all employees, even those who had not sat for interviews. On other days when there was not catered lunch, there were fewer employees in the lunchroom and the time employees went for lunch varied. So, I chose to vary my lunch so that I could sit with different social groups over time. Once again, this was all designed to obtain a wide variety of insights and to capture a broader picture of the organization.

## **SECTION THREE: Analysis**

I used content analysis to examine the themes and issues that emerged in my research. Content analysis is defined as the "careful, detailed, systematic examination and interpretation of a particular body of material in an effort to identify patterns, themes, biases, and meanings" (Berg 338). This research method is commonly used in qualitative research by prominent experts such as Glaser and Strauss (1967), Downe-Wamboldt (1992), Babbie (2006), and many others. I chose to use content analysis because it is particularly useful for analyzing large amounts of verbal data and it provided flexibility for categories and themes to emerge from the data. This flexibility also included using both inductive and deductive coding processes (Berg 2011) so that I had a framework to begin with, but I also had the freedom and flexibility to include unforeseen themes or patterns.

I followed an interview guide so that I could compare answers between employees. From the very first interviews, a difference immediately appeared. One question, "How would you describe the company?" elicited contrasting answers from interviewees. Some employees described the company as primarily a technology company, while others described it as a medical technology company, and most employees viewed the company as some sort of hybrid between the two. Often employees found the question difficult and needed to think before answering. These differences led me to think about how the very definition or purpose of a company could create conflict. I noticed that those who defined the company as a technology company valued innovation most. The employees who described the company as a medical technology company described the value of safety as the most critical component of the company. These categories of answers led me to deduce that the theme of company identity may

be a key driving force of the conflict within the company. These answers also confirmed that organizations are not homogenous. In this company, professional and occupational values and assumptions were playing a role in the conflict. The two departments that had to collaborate did not have a long history of collaborating. Many employees in both engineering and on the quality and medical team explained that they did not have prior experience working with the other profession. Therefore, the conflict was troublesome but not pathological. It was normal, but with consequences.

In many ways the employees were often in conflict as to which value was most important, innovation or safety. During my observations, this theme was reinforced in crossfunctional team meetings. Often the conflict or disagreements between teams or individuals revolved around issues of processes related to safety and speed. The medical and quality team had the task of ensuring that projects were following medical, safety, and FDA regulations and often conflict stemmed from other employees disagreeing with having to take the approach that the medical and quality team suggested. Intervention by the quality team often meant adding time or constraints to the project. This often took the form of added experiments or completing another set of experiments or analysis in a different way. These processes were often viewed by engineering teams as cumbersome and redundant. Engineers often described past work experiences in other companies where they did not have to deal with a medical and quality team. They explained that the innovation and speed of work was better when they did not have to worry about the FDA. In many ways, some engineers had not come to terms with the fact that the product did fall under FDA jurisdiction. Questions raised of safety or medical concerns were often met with negative attitudes and body language such as eyes rolling, sighing, or shared glances between many of the engineers who were more often focused on innovation and

completing tasks quickly. Engineers often felt that the quality team was adding extra time and work to the engineering schedules. They also felt that the quality teams were unnecessarily exerting power. One engineer stated, "Quality is a barrier and acts like a gatekeeper." Some were aware of the differences and goals and said "We have different goals and that adds to the conflict" or "Engineering and Medical have different outcomes, therefore it should not be personal" and "Engineering is not long-term goal focused but this needs to be approved by the FDA." This not only highlights the tensions between the two teams but also that many engineers are aware of some of the potential root causes of the conflict.

I did not use any formal quantitative analysis in this project due to the small sample size, although I did consider the frequency in which respondents articulated a theme. I also wanted to be able to include individual insights that might be important to the executive team at Robo as it planned for the future. Utilizing the interview guide was extremely helpful in gathering data that could be compared amongst interviewees, but the themes were useful in understanding the assumptions and motives of employees.

I examined both the manifest and latent content during the interviews and participant observations. Bernard (2011) describes latent content as the literal or explicit meaning of the responses of the interviewees and the latent content as expressions, tone of voice, and body language. This was especially important during observations of cross-functional team meetings. Even if a person did not speak in the meeting, their body language and expressions were communicating to all in the meetings. Often this was done as a way to disagree with another team without being verbally hostile. Members of the quality and medical team expressed their frustrations with the non-verbal communication because they often felt that it was used as a way to undermine their authority in cross-functional meetings.

I purposely and directly communicated to my client that the data I was sharing centered around the viewpoints of the employees. I explained in a variety of ways and repeatedly that it was not important to figure out if these employee assumptions and views were in fact correct or true but rather to recognize that they existed and these employee views were driving employee behavior. I highlighted that in order to understand the behavior, we needed to understand what employees were thinking. If we understood the behavior, then changes could be implemented to improve or change the current situation.

## **Actionable Findings**

The insights and findings from this project are not meant to be generalizable to the study of organizations but are specific to Robo Tech and its organization. The findings were intended to provide the client with a deeper and fuller understanding of its own organizational culture and collaboration practices. The goal was to provide the executive team with more information so that they could then draw on and utilize this information in organizational decisions and for future projects. The insights were utilized to help the company develop a clear and concise company identity and to develop a strategy to implement this identity across the organization.

The first theme that emerged from both the interviews and participant observations was centered around rewards. Employees often spoke about enjoying working at Robo and specifically mentioned the autonomy, the transparency of the executive team, and the innovative nature of the work at Robo, to be rewarding. This insight became important as I realized how rapidly the company was growing. Not only was the overall headcount growing but most of the teams were growing and changing in composition. At the start of the fieldwork there were 74 employees working at Robo. During the project, there was a continuous cycle of interviews of potential employees, hiring, and onboard training. By the completion of the fieldwork the

company grew to 87 employees and with an increase in funding, Sandra was given permission to recruit even more employees. The company was also starting to add management levels into the organization. This hierarchy was newer to Robo and it was changing the dynamic between the executive team and the employees. Robo was also at the very beginning stages of changing from a research and development company to a production company. Members of the executive team often spoke about the change that was coming and many expressed an interest in understanding how to retain current employees and how to attract new employees. Employees also hinted at the change by noting the difference in size of the organization from when they started. During the interviews, many stated what number employee they were, or they spoke about the changes happening in regard to access to the executive team's time.

With the changing organization in mind, I identified some key questions for Robo to think about such as: Does Robo want to continue to value autonomy, transparency, and innovation as the organization grows and changes? If so, how? What strategy, programs, and activities will Robo implement to encourage autonomy, transparency, and innovation as Robo grows? Are there other values that Robo wanted to include? My main point was that although these are the rewards employees have now, if these were to continue into the future, Robo would have to actively plan to implement programs and strategies to reinforce these values. Many of the current rewards are rewards of a small and flat organization. Robo was quickly growing and the small and flat organization was going to cease to exist and was already starting to disappear. I encouraged my client to actively decide and plan what the company wanted to value as an organization and then implement a strategy to create these values. This then led to an active round table discussion about what values the executive team wanted to encourage within the organization and which values the employees prioritized. I emphasized that choosing one set of

values over another was not necessarily the goal. The goal was to actively think about the values from multiple groups within Robo and find ways to include them at Robo. I encouraged the executive team to simultaneously incorporate values from both professional cultures that were in conflict with each other. Choosing one over another would only add to the conflict but they could forge a new cultural identity that was unique to Robo and included both groups. Values were identified that the executive team wanted to encourage and strategies to implement were discussed.

The second theme that emerged was that of company identity. Who was Robo as a company and what type of company was it? When I originally asked employees to describe Robo, the question was meant as a way to build rapport with the interviewees. During interviews it became clear quickly that there was identity confusion throughout the organization. Some employees defined the company as a technology company, some described it as a medical company, and others characterized it as a hybrid. An underlying factor was that the company was in stealth mode and employees were not accustomed to talking about Robo because they were not able to discuss this concept outside of the company. Within the company, if they did speak about the company's identity, it was most often within their own teams, with people like themselves confirming their assumptions.

Most interviewees had clear reasons and rationale for why they labeled the company the way that they did and had strong opinions as to why it was not part of another category. This divide extended to the executive team themselves. Although most of the executive team said the "right words" or used the official definition, when pressed most had a clear opinion as to what the company's identity should be and it was divided into the same categories as the employees.

This issue appeared to be divisive and was a factor in influencing the behavior of individual employees.

Employees were well aware of the differences in the organization and openly joked about the confusion during meetings, lunch or social events. They expressed that the company was divided in both goals and vision. One employee joked at lunch "We are a medical tech company, but we have ants in the lunchroom." Another employee responded with "But are we really a medical technology company? There's a rumor that we are but are we really?" It was almost like there were three different companies within Robo. This led me to think about what that meant to the employees and teams and what issues or problems could arise from this confusion. This had wider implications as each of these types of companies have different values, goals, and priorities. An unclear company identity means that employees do not have a united direction as to the purpose of the company. Although many companies do have complex identities, there are consequences. In many ways, the lack of clarity leaves the decision of the company's identity up to the individual employee and thus employees could have conflicting ideas. These conflicting values, goals, and priorities appeared to fuel the conflict or lack of collaboration between employees. Cross-functional teams were often in conflict and it was the same conflict, over and over again. The employees and even the executive team did not understand that it was not a project conflict but a broader topic of values, goals, and priorities. What were the priorities of Robo? Addressing this issue as a company would free up more time in meetings, and give direction to the employees as to how to format their work. If employees knew that safety was the top priority of the company, there would be less friction when issues of safety were raised. The main question for the executive team at Robo becomes, is having a clear and defined identity important to Robo? If so, what is Robo and how does Robo both communicate and promote this

identity to the rest of the organization? I suggested to my client that the executive team should create a committee of executive team leaders and employees to workshop the company's identity and then create a strategy to implement this identity throughout the organization. The executive team at Robo had the opportunity to address these issues by engaging the employees in the solution. With employee engagement, there was a better chance that employees would embrace the strategies and promote them throughout the company. A key component of this strategy would be communicating both Robo's identity and an explanation as to why it was important to the entire company. The executive team made it clear that part of the identity had to include that the product was a medical device and that safety would have to be a key value moving forward. The FDA had deemed it a medical device and they had to comply with their ruling. The executive team was concerned that if the medical device components were not embraced by employees, the company would suffer financially due to failing to receive FDA approval. If there was not a product, there was not a company.

Another finding that was highlighted both in the interviews and through observations was one of trust. Initially, no employee described trust as an issue. Then a veteran employee was terminated. The termination included a public announcement of the termination. The VP of Engineering announced the termination at a companywide meeting and described the termination as necessary, that the company was changing, and the employee's skills were no longer needed. This was a very public announcement that the company was changing and not everyone would be needed in the future. Every employee I interviewed after the termination discussed issues trusting Robo. Employees described the termination as unfair. They discussed having anxiety and fear over the termination and questioned their own value and the company's direction. This included employees that knew the terminated employee, veteran employees, new hires, and from

all teams. It was a common topic in employee conversations in hallways, cubicles, and in the lunchroom. Many employees came to speak to me after the termination who had already been interviewed and wanted to add to their interview. They also described a change in trust within the company. They were concerned, anxious, and also wondered if they too, could be suddenly terminated. The employees stressed that this termination demonstrated that Robo's message of unity was not quite true. They had doubts as to whether they will all see the company through to launch and to the employees, this was new. This issue of trust raised some questions for Robo. I reminded the executive team that the issue was not whether the termination was fair or just but rather that this was how employees were viewing it and that it was having an effect on their behavior, attitudes, and motivations. The real question was whether this was the intention of the termination and announcement and if not, how it could be done differently in the future? Other questions for Robo included: Is trust a core value that you want employees to have at Robo? How can Robo build trust with employees? In the future, how will Robo deal with terminations?

Another theme that emerged was that of Engineering vs Medical/Quality. Employees from all areas of the company described clear tensions between the two departments. Employees described this conflict as uncomfortable, that it created inefficiencies within the company, and it led to mistakes being made, costing the company time and money, due to the exclusion of one team from meetings. They described conflicting goals and values between the two departments. For example, engineers often valued innovation which was a significant part of their job and role, but they also had a very negative view of the role of the Quality department. A large function of the Quality department was to ensure the safety of the product being developed. This has the added complexity of also ensuring the company follows FDA guidelines. Both the engineers and the quality team members found these guidelines inefficient and archaic, but the

Quality team had accepted the power and authority of the FDA. Some engineers openly viewed safety as a "barrier to innovation", and commented that: "Safety is not really part of my job. That is someone else's job." This was inherently in conflict with the goals and values of the Medical and Quality team whose role is centered around safety. The Medical and Quality team often were cautious and were slower in decision making and giving approval.

Although these departments have some inherent and positive tension, many employees described the current conflict as excessive, uncomfortable, and problematic to outcomes. Many employees explained that having Quality as a check on the engineering team was a good balance. It meant that a team was actively thinking about the safety of the end user. However, the conflict had become so entrenched in the organization that some engineers spoke openly about choosing not to speak up in meetings stating that "I won't say anything in a meeting with both teams. I don't want to add to the issues" or "I avoid meetings, if I can, when both groups are present" and "I don't want to raise any more issues or even take a side. I just go have private conversations." Meetings are a waste of time." Even if some engineers agreed with the Medical and Quality team they would not agree in an open meeting because of repercussions from other engineers or their own teams. They described frustrations with the current process of having to utilize workarounds and social engineering key aspects of projects. They found this process to be time consuming and inefficient in a company where time was limited. Employees made statements such as "I have to be proactive and work hard to get things passed," "I need to do work arounds," and "I need to utilize workarounds" (to avoid big personalities), as examples of how they address issues or problems raised in project work.

Many employees described "big personalities," "gatekeepers," "captains," and "godlike" employees who dominate meetings. Many employees spoke about needing to remain silent for

fear of personal attacks by the "big personalities" who were perceived to be allowed to "misbehave" because they were valued for their intelligence or are "liked" by management.

These "big personalities" were often the ones in conflict with the medical and quality team. They appeared to be frustrated with the speed of the projects and placed a higher value on innovation.

These "big personalities" had very loud and strong opinions and were often some of the longest serving employees from the engineering team.

This did not mean all engineers felt the same way. Many engineers described and were observed secretly going to the medical and quality team to tell them about issues or meetings they were excluded from. Many felt that they could not raise safety issues or concerns in their own teams or meetings, so they often approached the medical and quality team on their own and privately.

Social engineering was a term used to describe a mechanism or strategy utilized by employees to get safety issues passed by both engineers and the medical and quality employees. In one engineering team meeting, it was openly discussed as the method, utilized by a team member, to get a safety issue addressed by another engineering team. The engineer in question, admitted to asking another engineer to address the issue with their friend, the lead of another engineering team rather than address the issue in a cross-functional team meeting. The first engineer was clear that if the issue were raised in the cross-functional team meeting, the lead engineer would dismiss the concern because it was aligned with the medical and quality team. This was met with laughter from the rest of the team because it was considered a straightforward issue that should not require social engineering.

These insights around the conflict and current collaboration between the engineering teams and the medical and quality team lead to some questions for the organization such as: Is it

important for Engineering and Medical/Quality to collaborate? If so, what systems are in place to encourage collaboration? What happens when that collaboration breaks down? How does Robo deal with it? Does Robo want "big personalities" to take over meetings and decisions? If not, what can be done to change the power dynamic in meetings? What does collaboration look like in the future?

The final theme that emerged from the research was that of gender. This theme emerged slowly and was most often spoken about at the end of interviews. Female employees raised the issue of the low number of female employees at the end of interviews when they were asked if they had any additional insights or thoughts that they wanted to share. All of the women interviewed emphasized that they felt that Robo was a great organization but that they wanted more gender balance. The female employees made it clear that there were not any major issues of discrimination or harassment at the company. When I asked them to expand on this topic, they often described past work experiences that were much worse. One female employee described a workplace where she was told that she had no value to add because she was a woman. Another was told to leave meetings because she was a woman and had no business being present, while still another stated that in a past workplace male employees had posted naked female pin-ups on the walls. This type of behavior was not present at Robo but they did describe issues of feeling isolated in their work, experiencing stress and pressure being the only woman in a work unit, or feeling like an outsider; working on the teams could be difficult. They also said that there were fewer female engineers at Robo than at other companies they had worked for. I also observed this and experienced this myself in many meetings where I was often the only woman present. It felt awkward and made me aware of my gender. If there was another woman in attendance, she

was most often the project manager responsible for the flow of the meetings rather than providing subject matter expertise.

As I looked at gender, I began to notice a difference between the men and women I interviewed. Gender also appeared to play different roles in motivations for working at Robo. Female employees described their motivation for their work as helping and improving people's lived experiences whereas the male employees described their motivation for work as being an innovator or the challenge of doing something really difficult. These insights led me to think about gender as a complex issue. The decision to hire more or fewer women (or men) is simultaneously a decision about the identity of the company and whether innovation or safety are paramount. If Robo decides to hire more women are they making a decision about whether the place is a tech or medical company?

Robo is a company that is filled with industry veterans. They have networks that are grounded in past workplaces and educational institutions. For Silicon Valley and technology companies that means mostly men. At Robo, recruiting was often done through these networks, especially in the early stages of a startup. Men may have been part of a social organization, a network, that is characterized by values and assumptions that get socially validated whereas the women may be entering Robo as lone agents without membership in either the guy's network or in any network. This means that the women can sort of be picked off one by one, whereas the guys can draw on relationships that have been nurtured for years. This can also explain the exhaustion women felt. They have to work much harder to break into the already established networks and find ways to demonstrate their value. They have to spend time building networks which puts them at a disadvantage when time is limited.

There are many questions about gender for Robo to discuss with multiple layers of complexity. Did they want to hire more women to work at Robo? If they do choose to hire more women, are they making a statement about innovation and safety? Which departments or teams need more women? How can Robo use these insights in their recruiting and hiring practices?

### **SECTION FOUR: Deliverables**

During my first meetings with Sandra there was some discussion about deliverables, but we were a bit unsure of what they would look like because there was uncertainty around what I would uncover in my research project. We initially agreed on a summary report, a potential set of workshops with employees around the concept of collaboration, and a debrief related to the workshop. Although I mentioned both methods and theory, she made it clear that data and strategies or solutions were of the utmost importance and that the executive team would concentrate their attention on those concepts. I was not surprised by this request due to my past work experience, but it was a great reminder that my audience was the client and that I needed to concentrate my efforts on helping the organization move forward.

As the project evolved, I soon realized that my deliverables would change. The very nature of the organization was one that involved team meetings and discussions. As I was finishing up my interviews, two of the executive team members approached me to ask if the executive team could get a sneak peek at my data. This demonstrated to me that there was a desire to get the information quickly and that the executive team had an urgency to get as much information as possible. Anything and everything can affect a startups valuation and narrative and Robo executives were hunting down information. The company was about to move out of stealth and officially launch and the executive team was feeling pressure to get things in order. I discussed this with Sandra, and we decided that I should present my data to the executive team as soon as possible and that a PowerPoint would be most appreciated so that the executive team could have a visual. She also discussed her concern that if I just spoke with the executive team casually, without a PowerPoint, that some members of the executive team would not take the

project or the data seriously. Sandra also expressed that she wanted the data in a concrete form so that the executive team would have to face the issues and therefore could not easily dismiss it. I agreed to create a PowerPoint.

I divided the data into the main themes and created a PowerPoint that examined each of the key themes. The first version of the PowerPoint was about 30 slides long. I knew immediately that it was too long, but I wrestled with how to cut out parts or sections because I valued each theme. I reached out to my advisor and he gave me some advice on how to group the themes together, present the data, and simplify the PowerPoint. Based on his advice, I decided to present the data as quotes and observations. I focused more on the data and included questions for Robo to think about under each theme.

I decided to meet with Sandra and review the findings in a casual morning meeting before presenting to the rest of the executive team. I wanted her feedback because she knew the team and would be open to giving me feedback. It was also an opportunity to practice the presentation before the more formal meeting. I warned her that I had too much information and explained that I was having difficulty deciding what to share with the executive team because I had so much. I was looking for her advice on what would be most important to the executive team. She enthusiastically agreed and asked that I share it all with her, even the parts I was thinking of excluding due to time constraints. We sat and went through all of the data and themes I had collected. She was very eager and really wanted to hear more but as time went on, I could see that her attention was fading. I suggested that we meet again the next day to go over more of the material. She insisted that we get through it all in one meeting. I decided to plow through another them, but it was too much information. I left her with access to my PowerPoint and mentioned that we could revisit it the next day to decide on the important themes.

During the next meeting, we discussed which themes to include and we decided on five main themes, but she also voiced her concerns with leaving some of the data and themes out. She found all of the information valuable and knew that it could help direct decisions that the executive members were making. I had to advocate that the goal of the research was to help the organization and if I overwhelmed the executive team with too much information, much of the data would be lost.

The executive meeting had been scheduled for two days before the company launched and I knew that the meeting would likely be canceled or postponed. The entire executive team was busy, and a high level of tension could be felt across the organization. I suggested that we move the meeting, but it was decided to leave it on the calendar until if and when the CEO decided to move it. He reached out the day before the scheduled time and the meeting was moved to two weeks later. In the meantime, the company had the launch party and came out of stealth. There was considerable media attention and new investors were guided through the office daily. I began to wonder if the meeting would ever happen and if the timing would hinder the project. The meeting did happen two weeks later. On the day of the meeting we decided to meet in one of the larger and more secluded conference rooms. The executive team wanted to talk openly and freely. It did start late, as the CEO and one of the founders were in back-to-back meetings and wanted time to gather themselves before starting. This constant stress on time and attention was common in the company and especially for the CEO and the VP of Engineering. This was a consistent theme at the startup: There was never enough time for the executive team. They were always busy and often were double or even triple booked for meetings. The fact that they were taking the time to look at the data and discuss the meanings to the company and their decisions indicated the value they had for the information.

Although this was a PowerPoint presentation, it was casual. We all sat around a table with the presentation slides up. I spoke about a theme and ended with questions for the executive team to think about moving forward, which then created a discussion. Executive team members commented on the data, asked me questions, and discussed what this data meant for the company. This meeting had originally been scheduled for an hour but as the hour finished, the team decided to continue. When we got to the end of the five themes that Sandra and I had agreed to present, she mentioned that there were more themes that I had identified and she asked me to pull up the theme of gender. Although the theme of gender did not directly relate to collaboration at the company, Sandra felt it was an important issue to discuss with the rest of the executive team. The female engineers that I spoke to had spoken clearly and directly about wanting more women on staff. As I talked about this data and the viewpoints of the women, Sandra pulled up statistics of the number of women in the company. She calculated that 19% of Robo employees were women and then commented that only three were engineers. This was an important point because the vast majority of employees at Robo were engineers. The team quickly identified and agreed that they needed to hire more female engineers and product designers.

At the conclusion of the meeting, the CEO took a few minutes to summarize the data and create a list of action items based on our discussions. He swiftly and authoritatively decided that the company needed to clearly define its identity, that there were big personalities in the company that could use some coaching and directed Sandra to find it, and that the teams of engineering and medical needed to work on ways to communicate better. Sandra thanked me for sharing my work with them and the meeting was over.

After this meeting, several of the executive team members asked for private meetings to discuss the project. Many wanted to know more details and to discuss the meaning of the data. Most wanted to understand and then use the information in their decisions with their own teams. For example, the human resources team was using the insights around gender to create a strategy to find and recruit more female engineers. One example was that they generated new job postings that described the company's goal to help a particular vulnerable population and they also highlighted the flexible work hours. The idea was that by changing the way a job was described, the posting might attract more female applicants.

I was also brought in on a round table meeting concerning company identity. I was asked not only to provide data but also for my opinion on the identity of the company. I was asked for input not just on how the company identity would translate to employees, but I was also asked to think about potential users. This was a great opportunity to use my anthropological insights in guiding the discussion around the company identity. At this meeting we also discussed continuing to think about strategies for implementing the company identity, values, and mission. It was suggested that the company continue to monitor employee values and suggested that this be completed through a quarterly employee survey. It was left as something that I could assist with in the future, as an independent contractor.

In another follow-up meeting with Sandra, she expressed her gratitude for the work I had already completed for the company and emphasized how important and helpful the data and analysis were. Sandra explained that the information was so valuable because it clarified issues for her and the executive team and forced them to think about some topics that they had been avoiding. She also mentioned that this type of work would be extremely helpful to many organizations and that she would gladly write a letter of recommendation for me and reach out to

her contacts in Silicon Valley to see if other organizations could use my help. We also discussed how I could continue to help Robo in the future. I have included a letter from Sandra providing the purpose and value of the deliverable for the company as Appendix D.

# SECTION FIVE: Reflections: From Student to an Ethnographer

During this research project I have grown considerably as a researcher, as an advocate for myself, and as an ethnographer. This project really fostered reflection both of myself and of the work. Personally, I developed a better understanding of my relationship with project participants, and learned how to keep focused on the purpose of the research. My research skills became broader and more developed, and I learned the importance of confidence in approaching the tasks of such a project. I had to learn and address my own biases. More substantively, I also began to reflect on startups and the importance of the anthropological perspective in both work and corporations.

One of the first things I noticed was how hard it was to keep a healthy detachment but still at the same time build rapport with the participants. It felt like a tug of war some days and balancing these relationships was tricky. Many employees shared personal stories, visited me often, and wanted to build a personal relationship with me. I worked hard at getting people to open up and to tell me about their work, the problems, and the issues they were having at work. For a lot of people, that takes effort and comfort. Often, the lines of comfort can become blurred and the interviewees wanted more from me than just an impartial researcher; they wanted to be friends. Some even began to think of me as a fellow employee and treated me accordingly. I was sometimes introduced to investors who were on tours as an employee by the executive team. I wanted the rapport but managing the relationships also required time and energy. At times I did feel guilty about what I was getting from them. I had to remind myself that part of the goal of the project was to make improvements at their workplace and make it a better environment for them. I learned that I had to stay slightly detached in these relationships in order to maintain a broader

perspective. I had to remind myself of this and made a conscientious effort to keep this broad perspective by not becoming too attached to the employees.

It was also difficult to not feel like part of the company, especially because the company was working on bringing the employees together as one team, with a common goal. Robo was small enough that most people knew each other and there was a common bond of being in this startup and making it work. There was a feeling of team unity that the company was fostering. This was particularly difficult because the company was also experiencing several triumphs and milestones while I was there. I witnessed the first working product and human test. This was a stressful and exciting time for all employees, and it was met with celebration when the product worked. It was hard not to get excited about a new invention working for the first time. A few weeks later, the company came out of stealth and announced to the world what they were working on. This too was a success and it resulted in media attention and there were lists of media articles and references made by celebrities being posted and announced within the company. Employees were allowed to tell people, for the first time in up to four years, where and what they were working on. This celebratory mood was exciting and the launch party itself was an elaborate party with employees, their spouses, and investors. It was a true celebration with food, music, dancing, and lots of celebratory hugs. There was excitement and a feeling of success that was hard to not feel part of. The emotional distance was difficult to keep, and I did have to remind myself often that it was an important balance that I needed to maintain.

Another important way that I grew was in the research itself. At first, I was worried and stressed that because of the complex nature of the content of meetings, I would miss things and might not be able to make meaningful observations. I discovered that it was actually better that I did not understand the content of most meetings because it allowed me to focus on my research

and not be distracted by the subject being discussed. I had a much more difficult time focusing myself while I was in a design meeting versus engineering meetings. I wanted to participate in the design meeting and add my anthropologic input and had to resist the urge to participate.

I also found it difficult to avoid making judgments and advising the company what to do. The company, despite being a startup, consisted of many veteran experts. Once I realized who I was actually partnering with, I knew that I had to complete the project at an extremely high standard. I was immediately aware that the executive team would not only want to discuss the data but that they would question the data and scrutinize all aspects of the project. This did make me nervous, but the awareness allowed me to prepare myself. I had to be confident and know the material and why I utilized the methods I did in order to maintain credibility and have the research accepted as valuable by the executive team. I had to seek advice from Dr. Darrah often to ensure that I was not only completing the research in a manner consistent with anthropology but also that I was doing my best work. Being able to discuss the work and data with someone with so much experience helped me grow as an ethnographer. I felt a lot of pressure, representing anthropology and SJSU in the corporate environment. I really wanted to complete the best work possible and to provide a good representation of the type of work and value that anthropology could have to a company or organization.

This in turn led me to think about Silicon Valley and startups. This startup did not feel like the media stereotype of a startup. I had lived here in Silicon Valley for the past five years, and had visited some of the campuses of big technology companies such as Google, Apple, and Facebook. I had also visited other startups and watched as new office complexes popped up all over the valley. They often had a cool and modern design, were flashy, and hired lots of younger people as employees. Robo was different. The first day, I noticed that most of the employees

were older than me. They were Silicon Valley veterans and were extremely well educated. Most had graduate degrees from some of the world's best educational institutions. They were also very inquisitive and contemplative. I was questioned often about why anthropology and why did I design the research the way I did. Many wanted to know why I was not producing quantifiable data and they really pressed me as to my value. How could anthropology, which was the study of other cultures, help a technology company? This was cognitively exhausting. It really made me reflect on working in Silicon Valley. If I were being questioned this often and to this degree, how would employees feel about working in this type of environment daily? Although, I think I gave adequate answers to many of the questions, I learned how to give answers that were better at appeasing the employees. I had to strategically think about with whom and when I would fully engage in these conversations. Mostly, I decided that I needed to be open to explaining the project but not in too much detail. Too much detail led to academic conversations about the merit of anthropology. It needed to be informative for this project and their participation but not at a theoretical level. I learned early on that I could not spend excessive time teaching anthropological concepts and directed those who were really interested or very aggressive, to the published literature by the leading Silicon Valley business anthropologists such as Melissa Cefkin, Jan English-Lueck, and Chuck Darrah.

This project also made me think and reflect on the importance of completing this work from an anthropological perspective. This project benefited greatly from the deep dive into Robo's culture and collaborative practices. A survey of employees would not have gathered the insights I gained. The anthropological insights were focused on Robo specifically and at a specific time and place. In designing my research questions, I did not know to ask about the company's identity. That theme emerged from a question asked in interviews to build rapport

with interviewees. The fact that themes can emerge, and the research can change as the project is ongoing is key. I did not go into the project with a set idea but rather let it change and evolve.

I also would not have seen the change in trust. Change can only be documented through qualitative methods. The change in trust happened in the middle of the project and could only be documented through interviews and observations. That was important for the executive team so that they had the information to document the change and the analysis to understand why the change occurred. It gave the executive team clearer and more concrete answers than other research methods would have and provided them with guidance on how to manage terminations in the future.

Completing this project, with the focus on employees was also distinct. It gave employees a voice, especially ones who often do not have the opportunity to speak or to be heard. Sometimes, the loudest or most powerful employees get heard the most by executive teams and this provided an opportunity for all employees to be heard. It also demonstrated to the executive team at Robo the value in seeing issues from different perspectives. Executive teams at startups are pressed for time and resources and they are often making decisions on the go. They do not often have time to think about the future because they are concentrating on the here and now. This also means that the executive team is not always taking the time to see issues from different viewpoints. The very awareness that an issue or problem has multiple viewpoints was valuable and, in this project, helped in other areas of the company as well. For example, the VP of Design, reported that although my project had little to do with his team, it was making his work easier in explaining the importance of the end user. He explained that before this project, the executive team was not enthusiastic about the viewpoint of the end user and after our round table discussions, he was having less friction in getting his ideas accepted by other teams. This

added dimension of viewpoints at the executive level will hopefully enable more informed decisions. This project gave the executive team valuable information that helped them in their decision making and ultimately improved the workplace for many of the employees.

This focus on those with less power in a company is the result of my anthropological training. Social awareness is a theme that runs through the many courses I took at San Jose State, the anthropological conferences, the anthropological books, and the articles I read. This awareness is something that I want to continue to bring to companies and organizations in Silicon Valley. I hope to demonstrate that employees as a group have a lot of power and influence over companies and that understanding their assumptions, values, and beliefs creates stronger and better companies.

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# **Appendix A: Email to Employees**

Recruitment Material
Email to all Employees.
Dear [subject's name] I am writing to ask if you would agree to be interviewed, in person, for a research project entitled "Culture and Collaboration". This research aims to gain a deep understanding of the current collaboration practices at and to identify how the current organizational culture may affect employee behavior. This project will provide with a better understanding of the perspectives of the employees at I hope you will be willing to help me with the study. If you agree to participate, I will interview you for approximately 30 minutes. During the interview, I will ask questions about collaboration, teamwork and knowledge sharing at At the end of this email is a further explanation of your rights as a subject of research conducted through San José State University. Please read the material carefully. By agreeing to participate in the study, it is implied that you have read and understand your rights.  I will contact you shortly to ask if we may schedule a time to interview you. In the meantime, if you have any questions, feel free to call or email me. Sincerely,

Andrea Vinke

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# **Appendix B: Consent**

# Additional Information for Research Participants in the Study "Culture and Collaboration"

(Responsible Investigator: Andrea Vinke SJSU graduate student)

Please read carefully the following information, which explains your rights as a research participant. By agreeing to participate in the study, it is implied that you have read and understand them.

understand them.
1. You have been asked to participate in a research project that examines the organizational
culture and collaboration at
change and that employees will have valuable insights.
2. You will be asked to participate in a 30 minute interview during which you will be asked
questions about the current collaboration practices at and to identify any problems
or barriers to knowledge sharing within the company.
3. There is no anticipated risk to you from participating in this project.
4. You may benefit from the knowledge gained from the research after it is completed. The
knowledge gained may be used to implement strategies to remove barriers to knowledge sharing
and to implement strategies to improve corporate collaboration at
5. Although the results of this study may be published, no information that could identify you
will be included. Your responses will be coded and kept in a password protected computer and
then destroyed at the end of the project.
6. Questions about this research may be addressed to Andrea Vinke at andreavinke@gmail.com.
Complaints about the research may be presented to Roberto Gonzalez, Chair, Department of
Anthropology, at 408-924-5710.
7. No service of any kind, to which you are otherwise entitled, will be lost or jeopardized if you
choose to "not participate" in the study. The refusals will not be recorded in any way.
8. Your consent is being given voluntarily. You may refuse to participate in the interview. You
have the right to not answer questions you do not wish to answer. If you decide to participate in
the study, you are free to withdraw at any time without any negative effect on your relations with
San José State University or with
Please keep a copy of this email for your own records.

### **Appendix C: Interview Guide**

### **Interview Guide**

## **Background**

- What is your job title?
- How long have you worked at the company?
- What is your educational background?
- Have you worked at other technology companies or startups before working here?

#### Work

- How would you describe the company?
- In your opinion, what type of company is
- How do you view your role in the company?
- Do you work independently, or do you work with a team?
- Describe how your team works.
- How often does the completion of your job or work depend on other people completing something? Or do other people depend on you to complete a task more often... How is that process?

### Collaboration

- Does the company provide time, programs, or incentives for you to share or collaborate with other employees? If so, which ones work best? Any not work?
- Describe a time when you were part of a successful collaboration at work.
- Currently, how is collaboration between teams within the company?
- Should there be more or less collaboration at ? Why or why not?
- When there is a conflict, or two people have different ideas of how to move forward, how is it resolved?
- Are there times when collaboration did not occur in the company and it caused problems? Describe.
- Are there barriers or obstacles that prevent collaboration between departments or teams within the company?
- What do you think would improve collaboration within the company?
- Do other employees have information or knowledge that you think should be shared with you but is not? Explain.
- Describe a teamwork success you have either experienced yourself or you heard from another employee about a work success here at the company.
- Describe a teamwork failure you have experienced here at

# Other

- Have you seen or heard of any other ways that companies or organizations get teams to work together that you think would benefit this company?
- Are there any additional items or insights you like to share?

# Appendix D: Letter from Sandra

