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Employee Soft Skills and Organizational Culture: An Exploratory Case Study

Abstract

Students seek higher education to obtain better employment. While employers value soft skills at least as much as academic knowledge, the soft skills literature is without consensus as to which of the many soft skills or employability skills employers value most, making it challenging for colleges to provide effective soft skills education. To organize employers' many different soft skill preferences, this study explores organizational culture as a conceptual framework. Specifically, the case study explores values and characteristics common to one organization's culture, to the soft skills that its executives and managers prefer their employees to possess, to employee beliefs regarding which soft skills are necessary for successful employment, and to the soft skills that the employees demonstrate. The study examines data from interviews, observations, assessments, documents, and artifacts, through the lens of the competing values framework and theoretical material by Schein. Analysis reveals that the organization's soft skill preferences, demonstrated soft skills, and organizational cultures hold values and characteristics in common, suggesting that organizational culture is a potentially useful conceptual framework for organizing the plethora of soft skill preferences demonstrated by various studies. The study concludes with a review of its limitations and a discussion of the implications for soft skills literature, postsecondary education, and business. The study suggests further research steps and the creation of a soft skills taxonomy based in thematic connections between soft skill sets and sets of organizational culture characteristics.

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Employee Soft Skills and Organizational Culture:
An Exploratory Case Study

By

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of the requirements for the degree
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Dedication

I greatly thank my committee chair, Dr. Kim VanDerLinden, for believing in my idea and for her keen insight, steady guidance, and reassurance. Honest, holding high standards but open to other viewpoints, she made it easy to trust St. John Fisher's well-designed process. I also thank my committee member, Dr. Andrew Turner, for his honesty and strong adherence to logical clarity. When my thought process became unclear I turned to his writing for a reminder of quality academic thinking.

I thank Dr. David Bright of Wright State University for introducing me to the competing values framework (CVF) and for his feedback; Drs. Kim Cameron, Robert Quinn, and John Rohrbaugh for creating CVF; and, Dr. Edgar Schein for his decades of quality research and explication of organizational culture. And I thank Michael Metzgar for introducing me to the potential of soft skills in higher education.

Not least, I thank Shira Harrington, fellow empowerment-through-employment champion and very patient fiancé, for her understanding and encouragement. Finally and from the first, I thank God Almighty, creator of heaven and earth, for being the ground, the road, and the horizon, the spark plug, the fuel, and the primary GPS on this journey.

Beyond thanks, this study is dedicated to my parents. My father, Dr. Robert Latzer, was a curious investigator, careful thinker, and innovative professor. He taught me to see beauty in nuance. My mother, Julia Wohl Latzer, dedicated her life as a teacher to empowering her students with knowledge, self-esteem, and readiness for ethical action. She taught me to empower others, which is the intention of this study.

Biographical Sketch

Eliyahu Lotzar most recently served as Student Success Coordinator at Onondaga Community College. He earned a Bachelor of Arts degree in Political Philosophy from Michigan State University in 1985 and a Master in Social Work Administration from The Hebrew University of Jerusalem in 1995. His life is dedicated to empowering individuals and groups with the understanding and enthusiasm necessary to take their next steps. He worked as a counselor and case worker with governmental and private organizations in Israel and the U.S., helping clients involved in criminal activity and drug addiction. Eliyahu also owned and operated three businesses, and at two community colleges he used his social work and business experience to prepare unemployed and underemployed nontraditional students for successful employment. Under the guidance of his committee chair, Dr. Kim VanDerLinden, and Dr. Andrew Turner, Mr. Lotzar researched connections between employer soft skill preferences and organizational cultures. He received the Ed.D. in 2018.

Abstract

Students seek higher education to obtain better employment. While employers value soft skills at least as much as academic knowledge, the soft skills literature is without consensus as to which of the many soft skills or employability skills employers value most, making it challenging for colleges to provide effective soft skills education. To organize employers' many different soft skill preferences, this study explores organizational culture as a conceptual framework.

Specifically, the case study explores values and characteristics common to one organization's culture, to the soft skills that its executives and managers prefer their employees to possess, to employee beliefs regarding which soft skills are necessary for successful employment, and to the soft skills that the employees demonstrate. The study examines data from interviews, observations, assessments, documents, and artifacts, through the lens of the competing values framework and theoretical material by Schein.

Analysis reveals that the organization's soft skill preferences, demonstrated soft skills, and organizational cultures hold values and characteristics in common, suggesting that organizational culture is a potentially useful conceptual framework for organizing the plethora of soft skill preferences demonstrated by various studies. The study concludes with a review of its limitations and a discussion of the implications for soft skills literature, postsecondary education, and business. The study suggests further research steps and the creation of a soft skills taxonomy based in thematic connections between soft skill sets and sets of organizational culture characteristics.

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Chapter 1: Introduction

Introduction

Most Americans attend college to obtain better employment (Gallup-Lumina, 2014; Hora, 2016; Meier & Institute for Community College Research, 2008). Specifically, Gallup survey data indicate that 80% of students attend college to get a better job, and 70% attend college to make more money (Gallup-Lumina, 2014). It follows that to help students meet their primary goals, institutions of higher education need to do what they can to respond to the student focus on employment. Higher education is beginning to respond. Calderon and Jones (2017) found that 83% of chief academic officers and provosts are increasing their focus on the ability of degree programs to help students get good jobs.

One opportunity for improving graduate employability is increasing the presence and quality of soft skills education in the student experience. Efforts to increase soft skills adoption would include integrating soft skills perspectives into the academic curricula, career center services, residential learning communities, tutoring services, and workforce development programs.

Researchers have found that soft skills are necessary for obtaining and maintaining successful careers (Clarke, 2016; Hogan, Chamorro-Premuzic, & Kaiser, 2013; Ju, Pacha, Moore, & Zhang, 2014; Pellegrino & Hilton, 2012). A study by the St. Louis Community College (SLCC) and Workforce Solutions Group (2013) stated the matter succinctly: “Once again, employers report that soft skills represent a more

significant shortcoming of job applicants than technical skills” (p. 2). Therefore, researchers have been calling on higher education to prepare students with the soft skills necessary to obtain and navigate successful careers (Chamorro-Premuzic, Arteche, Bremner, & Furnham, 2010; Cimatti, 2016; Stewart, Wall, & Marciniac, 2016).

Not only researchers, but also employers, believe that colleges should teach soft skills to better prepare students for employment (Hora et al., 2016; SLCC & Workforce Solutions Group, 2013; Stewart et al., 2016). Not only researchers and employers, but nearly two-thirds of U.S. college students think that their colleges should do more to prepare them with transferable workplace skills, which they can use in various jobs and industries (Hart Research Associates, 2016).

The meaning of the phrase *soft skills* contains more than the general term *people skills*. Echoing Weber, Crawford, and Dennison (2013) and Pellegrino and Hilton (2012), this study defines soft skills as the intrapersonal and interpersonal skills, including emotional, cognitive, and behavioral competencies, needed to apply technical skill and knowledge in the workplace. With rare exception, soft skills researchers do not use the term *skill* to mean only an ability. They include traits, abilities, and behaviors (Matteson, Anderson, & Boyden, 2016). When discussing soft skills, research studies refer to skills, traits, attributes, characteristics, abilities, attitudes, and competencies.

There are two reasons that the interest in improving soft skills appears to be an essential, not ephemeral, part of higher education. First, one of higher education’s central missions has long been to prepare their students for higher socioeconomic status (Cohen & Brawer, 2008; Grendler, 2004; Lauderdale, 1975). Second, workplaces have become increasingly complex, requiring increasingly sophisticated interactivity skills. The

complexity involves trends that have been developing since the beginning of the 20th century. These trends include

- employment opportunities moving from agricultural to industrial-mechanical to service, management, and informational services (Caruso, 2015; U.S. Department of Agriculture, 2014);
- the dominance of large enterprises, defined as those containing 500 or more employees (Caruso, 2015);
- organizational mergers increasing the mixing of organizational cultures (Laughlin, 2012; Oyler & Pryor, 2009);
- the emergence of a large class of companies that operate across national boundaries—multinationals (Dhopte & Sinha, 2017);
- technological sophistication increasing specialization, leading to increased need for teamwork skills and intergroup communication (Autor, 2015; Marks & Scholarios, 2008); and
- the transition in the structure of employer-employee relationships away from standard full-time, pension-oriented employment, increasing the need for employees to adapt to varied work environments (Süß & Becker, 2013).

These workplace trends have increased the importance of soft skills in successfully navigating the workplace. Researchers called for institutions of higher education to help students make their content knowledge efficacious through soft skills education (Cimatti, 2016; Ellis, Kisling, & Hackworth, 2014; Gatta, Boushey, & Appelbaum, 2009; Kyllonen, 2012; Pellegrino & Hilton, 2012). There is therefore an opportunity for the academic soft skills literature to provide guidance to post-secondary

institutions on the inclusion of soft skills education to students. A basic area of guidance regards which of the many soft skills to include in post-secondary education. The soft skills literature focused on this question, asking which soft skills employers most prefer.

Problem Statement

Even though colleges believe that they do well in preparing students for the workplace (Hart Research Associates; SLCC & Workforce Solutions Group, 2013), employers believe that college graduates are not sufficiently prepared for employment (Gallup-Lumina, 2014; Hart Research Associates, 2016). Authors and employers now commonly refer to this gap between employer expectation and their perceptions of the skills students possess upon graduation as *the skills gap* (Cornelius, 2011; Hora et al., 2016). Part of the gap is the *soft skills gap* (Clarke, 2016; Hurrell, 2016; Stewart, 2016; Tulgan, 2016). To address the soft skills gap, provosts and chief academic officers have begun to focus their degree programs on helping students get better jobs (Calderon & Jones, 2017). The academic literature on soft skills has addressed the soft skills gap by exploring the question of which traits, abilities, and behaviors employers most want their employees to possess and/or demonstrate. Answers from academic research can inform educators' attempts to help students to be more employable. However, research findings conflict, and the literature does not provide clear guidance to educators.

Despite using very similar research methods, namely Likert scale surveys, researchers find different soft skills and different categories of soft skills to be most important to employers. There are many opinions about precisely which of the many soft skills employers want and colleges should teach, but a consensus is still elusive. Library-information-sciences researchers Matteson et al. (2016) stated the problem succinctly:

“The literature on soft skills is confusing. The phrase *soft skills* is catchy but ambiguous, and authors use it extensively with little agreement on meaning No formally agreed upon, universal set of soft skills exists” (p. 75). The current state of the literature is insufficiently developed to provide clarity for instructors, administrators, and executive decision makers who seek to implement soft skills education to improve students’ preparation for successful careers. Without understanding which of the many soft skills are most important to teach, chief academic officers, provosts, instructors and administrators may not be well-enough informed to create sufficiently comprehensive and targeted soft skills education. Instructors may continue to prepare their students with whatever soft skills they believe are important, but that does not improve existing employment preparation.

One key reason that explains the inability of the soft skills literature to provide clear conceptual guidance to higher education may be that the literature focuses on a question that is too general to answer usefully. The soft skills literature asks, in general, which soft skills are most important to employers. However, as employment situations are diverse, students need to be prepared for the particular employers with whom they will find employment. The question of which soft skills employers—which means all employers or the average employer—prefer, may not be able to provide that clear guidance as various employers, and perhaps multiple types of employers, value different soft skills differently. Without viewing the question of soft skills valuation through the lens of differences between various employers, the literature may lack a guiding principle that could clarify the variety of soft skills valuations. Understanding why some organizations find some traits and behaviors more important than other organizations

may prove to be the key to better preparing students for the workplace. The current state of soft skills literature does not provide that understanding.

Theoretical Rationale

Adding a theoretical basis from a field related to soft skills can provide an understanding that differentiates between organizations. A theoretical basis facilitates a situationally related examination of soft skills. Soft skills literature has yet to explore the influence of organizational culture on the determination of which soft skills are most important to various employers. To differentiate between various soft skills valuations, researchers could examine the soft skills of different organizations against the background of their organizational culture. If the characteristics or values of particular organizational cultures were reflected in the soft skill preferences of their leaders and in the soft skills that their employees valued, then organizational culture will have provided a useful theoretical explanation of different soft skill preferences.

Soft skills literature examines traits, abilities, and behaviors, and to a lesser extent attitudes, of individual employees. The behaviors exist within organizational cultures. Soft skills are an employee-level phenomenon, while organizational culture is an organizational-level phenomenon. The characteristics and behaviors of organizations are expressions of organizational values (Cameron & Quinn, 2011). This high-level abstraction of a discrete organizational phenomena provides a contextual framework to examine the various soft skills that various employers value as important for their employees. There may be characteristics and values common to employers' soft skill preferences and to the cultures that guide organizational behavior.

Organizational-level values, reflected in such behaviors as decisions regarding capital expenditures, may also inform employee-level behaviors such as frequency of seeking of a supervisor's permission. There may be values and characteristics common both to an organization's tendency toward hierarchical structure and to the preference of its managers for employees who display the soft skill of adhering to company policy. Conversely, even if an organization tended toward a strong hierarchy, there might be a preference for soft skills that oppose, rather than promote, structure, such as, for instance, a preference toward employees being creative and finding novel solutions or disobeying a manager's directive because he or she believes they are doing the right thing. Exploring soft skills against the background of organizational culture could thus reveal whether employer soft skills preferences hold values and characteristics in common with organizational cultures.

The pioneering work of Edgar Schein (2004) is foundational to understanding organizational culture, and it is part of the theoretical foundation for this study. Schein (2004) defined culture as:

The accumulated shared learning of [a] group, as it solves its problems of external adaptation and internal integration, which has worked well enough to be considered valid and therefore to be taught to new members as the correct way to perceive, think, feel, and behave in relation to those problems. This accumulated learning is a pattern or system of beliefs, values, and behavioral norms that come to be taken for granted as basic assumptions and eventually drop out of awareness. (p. 17)

Understanding an organization's pattern of beliefs and values leads to understanding its organizational-level traits and behaviors, that is, its culture. Its culture may share values and characteristics with employee traits and behaviors, that is, with their soft skills. This study viewed soft skills through the lens of organizational culture, revealing a pattern within the large and sometimes conflicting variety of soft skills that employers prefer.

Schein (2004) listed three levels of observation at which to examine organizational culture. He termed the most surface level the *artifact level*. Artifacts include visible and felt structures and processes and observable behaviors. The second level is the organization's espoused values, beliefs, aspirations, ideologies, rationalizations, and norms. The third level, which according to Schein is the most essential, is composed of the unconscious assumptions, beliefs, and values that underlie the espoused values and beliefs, and that explain the existence of the artifacts.

Examining the organizational culture at these three levels, and comparing the values in the organizational culture with the values characteristic of employee soft skills and of employer preferences for employee soft skills may reveal a commonality of characteristics that connect the two levels of phenomena. Such a connection would help explain the plethora of soft skill preferences found by the studies, and it would help institutions of higher education frame their soft skills education.

The competing values framework (CVF) is another approach to understanding organizational culture, and one that provides a more structured view that compliments Schein's (2004) more comprehensive approach. CVF places all organizational cultures within a set of four culture types, each of which is organized by different, sometimes competing, value sets. Researchers have utilized CVF to understand various aspects of

business, and it is a well-vetted tool for assessing organizational cultures. Schein (2017) referred to CVF in the latest edition of his work, which described the framework as a compelling model of organizational culture.

Quinn and Rohrbaugh (1983) and Cameron and Quinn (2006) created CVF by distilling 39 indicators of organizational effectiveness down to two spectra: internal or external locus of focus and centralization or decentralization of power. Placing the two spectra as X and Y axes of a grid creates four quadrants. Each quadrant typifies a particular organizational type. As the quadrants describe organizational values and tendencies, they describe the organizational culture. The culture of one quadrant holds some values in common with those of the other quadrants but some values compete with those of the other quadrants.

Statement of Purpose

The purpose of this study was to help the soft skills literature begin to explore whether using organizational culture as a theoretical framework can help determine which soft skills employees should possess. To fulfill that purpose, this study explored commonalities between the organizational culture and soft skills of one organization. It explored the values and characteristics of an organization's culture, the beliefs held by its leaders and employees about which soft skills employees should demonstrate, and the characteristics of the soft skills that the employees demonstrated.

Research Questions

To explore the parallels between organizational culture and successful soft skills, the study asked five key questions:

1. What is the company's organizational culture?

2. What soft skills do the executives and managers prefer their employees to demonstrate?
3. What soft skills do the employees believe they should demonstrate?
4. What soft skills do the employees demonstrate?
5. What values and characteristics are common to organizational culture and soft skills in the host organization?

Potential Significance of the Study

The goal of this study was to discover if soft skills share characteristics in common with an organizational culture. As this study was a first attempt at linking soft skills and organizational culture, it added a new question to the soft skills literature: *What connections are there between organizational culture and employer soft skills valuations?* The potential significance of this study is in clarifying whether viewing soft skills against the background of organizational culture is an area for further research that would provide a guiding principle with which to view the plethora of soft skills that employers prefer.

Definitions of Terms

Ability – the potentiality for demonstrating specific behaviors at will; skill.

Attitude – an employee’s disposition, outlook, or mindset regarding his or her work circumstances; how he or she views a circumstance. Attitudes are one of a set of personal qualities.

Attribute – (n.) a quality of being that influences or characterizes a person’s typical pattern of action. An attribute is functionally the same as a trait or a characteristic.

Characteristic – (n.) an attribute; a trait.

Employability Skills – abilities necessary to obtaining and maintaining employment.

Employee – a person who works for wages or salary, especially at a nonexecutive level.

Executive (n.) – a senior staff member responsible for overall organizational culture, policy, operations, and results.

Interpersonal Skill – the ability of a person to facilitate interactions between one person and another.

Intrapersonal Skill – the ability of a person to understand oneself intuitively, by verbal analysis, recalling feelings, and connecting these understandings in an abstract manner, to use that knowledge for self-management.

Line Staff – employees whose tasks occur at the point of service or at the point of production, and who have no direct reports.

Manager – those employees who have direct reports and are responsible for the work output of those direct reports.

Organizational Culture – A pattern or system of beliefs, values, and behavioral norms held in common by an organization (Schein, 2004). The patterns are based on assumptions of the organizational members and inherent in organizational structures (Cameron & Quinn, 2011); a general mode of operation that is common to an organization.

Personal Qualities – an individual's tendencies and attitudes demonstrated through their typical behaviors; traits.

Personality – the internal patterns of thinking and feeling that correspond to patterns in an individual’s behaviors.

Skill – demonstrable ability to repeatedly act on knowledge to achieve results (Matteson et al., 2016).

Soft Skills – jobseekers’ or employees’ traits, abilities, and behaviors that influence their ability to utilize their job-specific knowledge in the social context of work.

Trait – a characteristic of a set of recurring behaviors that gives conceptual coherence to those behaviors.

Valuation – the estimation of a soft skill’s worth or utility

Value – (v.) to consider important, to prefer

Value – (n.) 1. the benefit, utility, worth, and/or importance of an object, person, action, or quality; 2. a foundational object of trust around which a person or group builds a belief or beliefs

Chapter Summary

Since the end of the 20th century, workplaces have become more socially and technologically complex. Correspondingly, researchers have called for postsecondary institutions to prepare students with the soft skills necessary to obtain and maintain employment (Chamorro-Premuzic et al., 2010; Stewart et al., 2016). Colleges have an opportunity to help improve their students’ employability by improving their soft skills education (Clarke, 2016). To integrate soft skills into the college structure, programming, and curriculum, colleges can consult the soft skills literature. The soft skills literature primarily examines the question of which soft skills employers value most.

Employability skills studies largely derive their findings by providing and analyzing Likert-scale surveys. However, the results of the different studies are not consistent, and the overall message is unclear (Matteson et al., 2017). The literature is inconclusive when stating which soft skills are most important, overall, to most employers, and there is no consensus on which soft skills categories best organize those soft skills. To help clarify the various employer soft skills valuations, this study examined the question of soft skills preference against the background of organizational culture. To help the literature provide clearer guidance to higher education, this study utilized the theoretical material developed by Edgar Schein (2004, 2017) and the CVF model.

To understand what the literature currently sees as the most important soft skills, the literature review in Chapter 2 reviews the content of soft skills literature, detailing researchers' conclusions regarding which are the most important soft skills to companies, both within and across various industries. It explored in detail the areas of consensus and disagreement in the findings. Chapter 3 describes the study's methodology, including methods for gathering and analyzing data. Chapter 4 explains the data analysis and findings. It provides themes that characterize the connection between organizational culture and preferred soft skills. Chapter 5 explores the implications for institutions of higher education, for students, and for employers, providing also an employee typology. The chapter also describes the limitations of the methods used and provides suggestions for further research and for future use of the findings in higher education.

Chapter 2: Review of the Literature

Introduction and Purpose

This chapter reviews the academic literature on soft skills. The purpose of this chapter is to identify the soft skills that employers have said are most important for employees to demonstrate. First, the chapter presents a detailed definition of soft skills. To provide context for the study described in Chapter 3, Chapter 2 follows that definition with the historical development of soft skills literature. It then reviews the findings of the literature's key studies. The review first examines soft skills preferences by industry then examines pan-industry soft skill studies. In each case it highlights the soft skills that the researchers most consistently found employers to consider important. As the authors defined the soft skills that are important not just by individual skill but also by category, the review finishes with an examination of those categories.

Broadly speaking, there are two approaches within soft skills research that focus on the question of which soft skills employers most want their employees to demonstrate: the industry-specific and the pan-industry approaches. The industry-specific approach examines the question narrowly, focusing on students, instructors, or employers in the individual industries relevant to the researcher or research team. The pan-industry approach examines the soft skills preference using study subjects from more than one industry. The review separates results in the pan-industry approach according to three major competency categories: interpersonal, intrapersonal, and cognitive. Together,

studies from the two approaches reveal the scope of soft skills that employers prefer their employees to possess.

Definition of Soft Skills

Researchers have used the phrase *soft skills* to refer to “people management skills” at work (Matteson, 2016, p. 71). Researchers have also used the phrase *employability skills* to refer to approximately the same phenomenon. Burton, Chavez, and Kokaska (1987), and Süß and Becker (2013) for instance, prefer *employability skills*. Psychological studies, that is studies published in journals of psychology, tend to discuss employability without either using *soft skills* or *employability skills*, as evidenced in An, Boyajian, and O’Brien (2016), Bar-On, Brown, Kirkcaldy, and Thomé (2000), and O’Boyle, Humphrey, Pollack, Hawver, and Story (2011). However, by referring to traits, abilities, and behaviors that improve the chances of a person gaining or maintaining employment, psychological studies examine the same question that employability studies outside the field of psychology do. Some researchers refer to soft skills and transferable skills, using them synonymously, as for instance found in Stewart, Wall, and Marciniac (2016), or to soft skills and employability skills, as is the case with Clokie, and Fourie (2016) or Moore and Morton (2017). The comprehensive Pellegrino and Hilton study (2012) primarily refers to *transferable skills*, though it also refers to 21st century skills. Following Ellis et al. (2014) and Weber et al. (2013), this study refers to *soft skills* as those individual traits, attitudes, abilities, and behaviors that comprise a person’s overall *soft skill ability*. As will be shown in the review of findings, the skill part of soft skills, somewhat counterintuitively, also includes something that seems not to be a skill, that is, *personal qualities*. Even though personal qualities generally refer to something more

inherent and less teachable than skills, as evidenced in U.S. Department of Labor [USDOL] (1991) and Ellis et al. (2014), many researchers consider personal qualities to be part soft skills.

Different studies define soft skills differently. Definitions range from the general “skills needed for employment” (USDOL, 1991, p. 21) to the specific “emotional competence” (Offermann, Bailey, Vasilopoulos, Seal, & Sass, 2004, p. 219). However, there are certain common themes among the definitions. One theme is *workplace skills* that are not dependent on content knowledge, that are not industry-specific, and that are not technical. St. Louis Community College (2013), for instance, saw soft skills as those workplace skills that are not technical skills. Ellis et al. (2014), Harris and Rogers (2008), Marks and Scholarios (2008), McMurray, Dutton, McQuaid, and Richard (2016), and other researchers, also framed soft skills as the skills that are not technical skills.

Some researchers start with the theme that the skills that are not technical, and then they add examples to clarify their definition. Clokie and Fourie (2016), for instance, described soft skills as not being technical skills by adding what they *are* rather than what they *are not*. To these researchers, nontechnical skills are communication skills, transferable skills, and generic skills. Clokie and Fourie emphasized intrapersonal and interpersonal communication as being core to the definition of soft skills. Similarly, Stewart et al. (2016) defined soft skills as “non-technical competencies associated with one’s personality, attitude, and ability to interact effectively with others (i.e., to be optimally employable)” (Stewart et al., 2016, p. 276).

A second theme involves mixing *people skills* or *interpersonal ability* with personal characteristics. Robles (2012) typified this approach when he defined soft skills

as “interpersonal qualities, also known as people skills, and personal attributes that one possesses” (Robles, 2012, p. 453). Gatta et al. (2009) defined soft skills this way: “Many scholars stress the need to move away from rigid and conventional skill notions that focus on technical content, job complexity, and task discretion to include social and soft skills such as communication, flexibility, attitudes, and teamwork” (p. 977). Gatta et al. (2009) mixed technical and human skills into soft skills.

While most researchers have utilized the term *soft skills* when discussing nontechnical factors in obtaining and maintaining a job, another common descriptive phrase is *employability skills*. The word employability highlights a third theme: the skills that allow the employee to utilize his or her technical skills, a sort of meta-skill for job performance. A study of hiring criteria preferred by information technology executives presents a succinct and encompassing definition of soft skills that exemplifies the meta-skill theme: “human factors necessary to achieve . . . success [at work]” (Stevenson & Starkweather, 2010, p. 663). The National Research Council of the National Academies (NRC) uses the phrases, *transferable skills* and *21st century skills* nearly interchangeably to mean “procedural knowledge of how, why, and when to apply knowledge” (Pellegrino & Hilton, 2012, p. 23). Weber et al. (2013) defined soft skills as “the interpersonal, human, people, or the behavioral skills needed to apply technical skills and knowledge in the workplace” (p. 314).

Researchers utilize various terms and definitions to indicate roughly the same type of skill, but a precise agreed-upon definition is elusive. This study synthesizes the meanings to define soft skills as jobseekers’ or employees’ traits, abilities, and behaviors

that influence their ability to utilize their job-specific knowledge in the social context of work. Appendix A shows a complete list of definitions examined for this study.

Beginnings of Soft Skills Literature and Employability

In 1974, the U.S. Army published the first paper using the phrase *soft skills* (Whitmore & Fry, 1974). The survey study attempted to understand which skills guide certain army management functions. The study's purpose was to guide instruction of students at U.S. Continental Army Command schools.

Unrelated to the Army's paper, studies emerged in the mid- to late 1970s surveying employers' opinions on employability skills. They focused almost exclusively on questions of employment for people with medical conditions or disabilities. For instance, Schubert, Elie, and Chlebowy (1977) examined the outcomes of a program to increase employability of patients with three particular mental disorders.

By the mid-1980s, employability studies of people with disabilities moved on to promote the idea of teaching employability skills in secondary and vocational education. Burton, Chavez, and Kokaska (1987) surveyed 133 employers to rank the employers' opinions of which skills schools should teach students with disabilities to best prepare them for employment. As another example of this, Bhaerman and Spill (1988) defined employability skills as *work maturity competencies* that make a young person ready to get and keep a job. They referred to the same skills as *transferable skills*. Their study was informed by a 1986 policy implementation guide for job training providers. Authored by Spill (1994) for the USDOL, it utilized youth employability skills survey data from over 400 private industry councils.

In the mid-1990s, a few articles on colleges and employability skills began appearing. In 1994, Spille (1994) asked and responded to the question of why schools should teach employability skills. He also compared a report by the USDOL with one by the American Society for Training and Development, trying to begin a discussion of which *entry-level generic employability skills* postsecondary schools should teach their students.

By the mid-2000s, articles on employability skills and postsecondary education became more common. In 2006, Cranmer (2006) argued for employer involvement in curriculum and employer-based training experiences to enhance graduate employability (Cranmer). Around this time, employability skills literature also began including more empirical research on which skills colleges should teach (Ferguson, 2010), which skills they do teach (Ellis et al., 2014), and how well they teach those skills (Cranmer).

Personality and emotional intelligence, 1990-present. Authors in the field of psychology have also conducted research that examines the question of what helps a person get and keep a job. Personality has been an academic topic since the 1920s (Digman, 1990). Literature that bridged personality and employment began by focusing on the personality of leaders and managers. This can be seen in Katz' (1951) seminal paper. From the late 1950s through the late 1980s, studies in the field of psychology developed the concept of personality as a tool of predicting outcomes, culminating in the acceptance of the five-factor model of personality (FFM) in the late 1980s (Digman). After coming to the fore as the accepted model for the study of personality, researchers used the FFM to study the relationship of personality and work. In the late 2000s,

researchers still debated the limitations of using personality as an effective predictor of employment success (Morgeson et al., 2007a; Morgeson et al., 2007b).

In 1990, Mayer, DiPaolo, and Salovey and Salovey and Mayer published two articles on emotional intelligence (EI), which generated an area of psychological literature pertaining to soft skills that was distinct from the inquiry into the relationship of personality factors and employability. The concept was later popularized by the book *Emotional Intelligence* (Goleman, 1995). Salovey and Mayer (1990) saw EI in a psychological context, not in an employment context. Goleman (1995) saw EI as part of life success in general, but by 2000, academic research began to examine the EI concept in the context of the workplace. For instance, Bar-On, Brown, Kirkcaldy, and Thomé (2000) used Bar-On's (1996a, 1996b) emotional quotient inventory (EQ-i) to measure how much three different occupations allowed for emotional expressiveness as a tool of employee adaptation to the field. By the end of the decade, studies examined the efficacy of incorporating EI skills into degree coursework to prepare accountants for successful employment (Jones & Abraham, 2009).

Focus on soft skills, 1991-present. Academic dialogue on soft skills began shortly after Salovey and Mayer (1990) published their seminal articles on emotional intelligence. In 1991, the USDOL investigated the question of what skills schools should teach to help their graduates be employable. They intended the results to have implications for all levels of education and to spur interest in further research. The Secretary's Commission on Achieving Necessary Skills (SCANS) (USDOL, 1991) issued a report that slowly became a reference point for some soft skills investigations. Authors now refer to it by its author's acronym, *SCANS*.

Academic interest in soft skills research remained relatively light until 2008, the first full year of the Great Recession. Figure 2.1, a graphical representation of the rate of increase in the number of article titles in St. John Fisher College's Lavery Library collection of 170 databases that contain the phrase *soft skills*, demonstrates the turning point. 2008's 10% unemployment was nearly double that of 1991 (Bureau of Labor Statistics, 2012), and employment was a national concern (Curry, 2016). Academic interest in soft skills education has, therefore, mostly been concentrated in the past 10 years. The newness of the field may be a contributing factor to the limited number of research questions investigated.

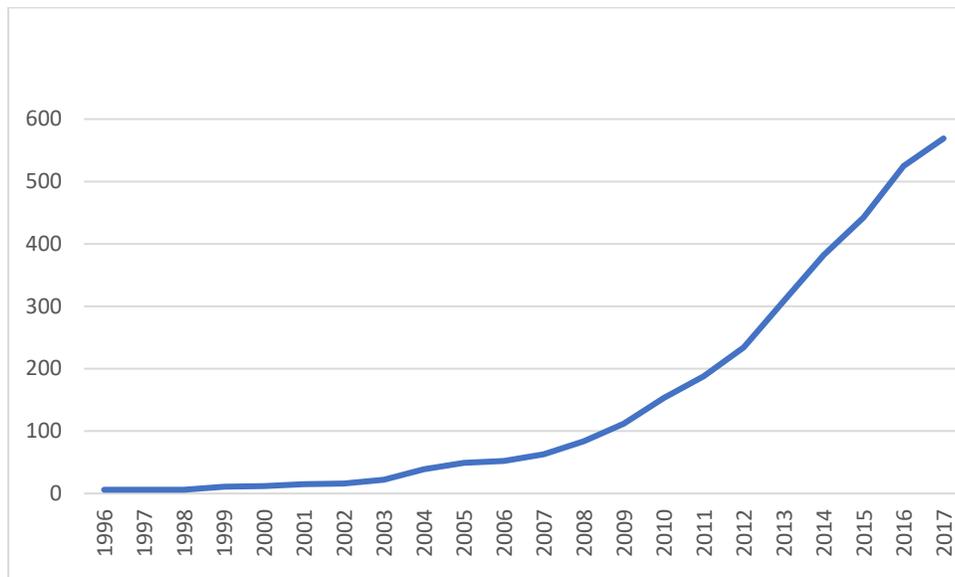


Figure 2.1. Number of articles published in academic journals with *soft skills* in the title.

Review of Soft Skills Literature Findings

Soft skills research primarily addresses one question: *Which soft skills do employers prefer their employees to possess?* This review first examines the findings of industry-specific studies to see if particular industries prefer particular soft skills or soft

skills sets. The review then examines pan-industry studies, dividing their findings according to the tripartite division set out by the NRC. Finally, this review examines the categories of soft skills that the researchers used to group the many preferred soft skills.

Soft skills by industry. Industry-specific studies include science, technology, engineering, and math (STEM) and humanities-related fields. STEM fields represented in the soft skills literature include information technology (IT), engineering, global information systems (GIS), and office technology. Humanities-related soft skills research includes business and frontline service jobs such as hospitality management and retail. In this context, *business* refers to studies that query business students, business instructors, and employers in various business sectors who hired or would like to hire business graduates.

Studies in STEM. Both Marks and Scholarios (2008) and Süß and Becker (2013) studied employers and employees in the IT field. Marks and Scholarios asked if the software industry differentiates between technical and nontechnical skills and if the relative position of these two make any difference to employability. Süß and Becker wanted to find out what competencies freelancers possess. While one focused on standard employees and the other investigated only freelancers, both studies' findings included social networking for business purposes and social interaction among their top competencies. Marks and Scholarios (2008) emphasize communication, especially *speaking customers' language*, while Süß and Becker (2013) emphasize strategic operation. A study of IT project managers by Stevenson and Starkweather (2010) lists six competencies critical to employment success, three of which are communication competencies.

At least one study found *effective interpersonal communication* to be among the most important skills for high school students to learn if they wish to succeed in higher education engineering programs (Harris & Rogers, 2008). Harris and Rogers included four specific communication skills in their list of 16 soft skills that are most important for engineering program success, which lends support to the importance of communication, in general, to the field of engineering.

Given the limited number of studies, the one consistency in the IT field is the need to work together to understand customer needs. The need for soft skills involving working together to understand customer needs is a response to the increased complexity and competition among IT firms and the increase in more geographically diverse work teams (Marks & Scholarios, 2008). The need to work together leads to an emphasis on the value of communication skills. At the summary level, the different skills that comprise *working together* may appear to be very similar, but the findings include different skills and different emphases.

Süß and Becker's (2013) qualitative study on programming freelancers in the IT and media fields is similar to the Marks and Scholarios (2008) software industry multi-site case study. Both were thorough in design and implementation. Both investigated whether soft skills in the IT field are as important as technical skills—and if so, which soft skills are most important. Süß and Becker's study included subjects employed both in IT and in media. Both research groups conducted their studies in northern Europe: Süß and Becker in Germany and Marks and Scholarios in Scotland. However, while Marks and Scholarios (2008) saw communication as central, Süß and Becker (2013) found communication to be one of five skills that comprise *social competencies*. The category

of social competences was, itself, only one of three categories of the employability skills most important to employment success, so even though Süß and Becker saw communication as important, they did not find the skill of communication to be central to successful employability.

Elsewhere in the STEM field, Harris and Rogers (2008) found that instructors of engineering also see communication as important. Marks and Scholarios (2008) however, do not emphasize it as much as do Harris and Rogers, but include other interpersonal skills such as developing networks and successfully interacting with other teams. Harris and Rogers also did not limit their findings of important soft skills to communication. They saw the need to compliment communication skills with thinking skills, such as problem solving, and personal qualities, such as honesty and willingness to learn.

Ellis et al. (2014) took a similar balanced view in their study of office technology employers. Ellis et al. placed communication skills alongside other social skills, giving top ranking to skills such as listening, participating as a team member, taking responsibility, serving clients, and working with diversity. A study on global information systems professionals balanced communication skills with social/team considerations and thinking skills (Wikle & Fagin, 2015).

Studies in the humanities. The studies that explored soft skills in industries that are generally more related to the humanities than to STEM also indicate that employers value a variety of soft skills. While lists of the most important skills in humanities-related employment often include communication, they balance communication primarily with social skills, and they do not emphasize thinking skills.

Within the studies that pertain to the humanities, findings from business studies somewhat emphasize a mixture of personal qualities and interpersonal skills. One study by Jones, Baldi, Phillips, and Waikar (2016) surveyed 51 recruiters from 37 organizations in six industries, finding that they prefer to hire business program graduates who possess not only interpersonal skills but also personal qualities. Their list, using their terminology and in descending order of importance, is:

1. positive attitude;
2. respectful of others;
3. trustworthy, honest, and ethical;
4. takes initiative; takes responsibility;
5. cooperative/team player;
6. good communicator/interpersonal skills;
7. ambitious;
8. self-confident; and
9. critical thinker. (Jones et al., 2016, p. 424)

The recruiters accorded grade point average and work experience to be of relatively little importance compared to the personal qualities and interpersonal abilities. Technical skills and content knowledge were consistently lower in the rankings of the 21 skills recruiters preferred than were soft skills.

McMurray et al. (2016) conducted a study wherein they supplied employees with a questionnaire that contained both Likert-scale and open-ended questions regarding the factors most important when recruiting business graduates. The population of employees surveyed were those who had graduated from a business program 6 months prior, and

who were at the time of the study employed in one of 11 industries. The McMurray et al. study emphasized the importance of personal qualities, and secondarily, interpersonal skills, in the hiring of business school graduates. The particular soft skills that McMurray et al. (2016) found to be important to hiring were somewhat different from the ones that Jones et al. (2016) found to be important, but both included trust and commitment among the more important skills. The McMurray et al. (2016) list of transferable skills, in descending order of importance to the employer, include:

1. trustworthiness,
2. reliability,
3. motivation,
4. communication skills,
5. willingness to learn,
6. commitment,
7. interpersonal skills,
8. adaptability,
9. teamwork,
10. initiative,
11. customer service, and
12. flexibility.

Likewise, the second Weber et al. (2013) study listed *communication / persuasion* as only one of seven overall soft skills categories (Weber et al., 2013).

Other studies emphasize communication skills along with the personal qualities. Mitchell, Skinner, and White (2010) found that 530 randomly selected business educators

in Alabama believed that employers consider communication skills to be three of the top-10 most-important soft skills for employees to possess. A later study headed by Mitchell, which surveyed graduate students about their perceptions of importance of various soft skills to employment, ranked communication skills as the top-three most-important skills (Mitchell, Pritchett, & Skinner, 2013). Communication skills were followed by a mix of personal, interpersonal, and thinking skills. In descending order of importance, they were

1. ethics,
2. diversity,
3. time management/organization,
4. customer service,
5. business etiquette,
6. leadership,
7. problem solving, and
8. teamwork skills. (p. 98)

Like business-related studies, studies of the hospitality and retail industries emphasize a mix of personal qualities and interpersonal skills. The five skills that scored a mean rating of over 4.0 out of 5.0 in one hospitality study included: acts with integrity, acts straightforward, follows through, inspires trust, and acts courteous (Weber et al., 2013). Another study, conducted by the same lead author, emphasized the importance to hospitality employers of helping colleagues: the top most-important skill, with a mean of 4.95 out of 5.00, was “undermines others (reverse scored)” (Weber, Finley, Crawford, & Rivera, 2009, p. 357). In the retail industry, communication is important, but so is

teamwork, work ethic, personality, and appearance and presentation (Nickson, Warhurst, Johanna, Hurrell, & Cullen, 2012).

Reviewing industry-specific studies reveals that the employers' high ranking of communication or of specific communication skills is true regardless of industry. The hospitality and retail industries, and the various industries that hire business students, balance the need for communication with the need for various personal qualities in a social context. Similarly, IT and related industries balance communication skills with other social skills. From the studies that exist, therefore, there appears to be no clear differentiation of most important soft skills by industry. There are some small differences in the soft skills emphasis between industries, while there is a more significant difference between studies, regardless of industry, when considering the specific soft skills that employers prefer.

Between STEM and humanities. As just seen, various studies within the STEM industries and within the industries more related to the humanities reveal various soft skill valuations. Comparing studies between STEM and humanities industries supports the understanding that some studies from different industries agree on some skills, reinforcing that there is no clear differentiation between industries. Findings seem to indicate, for instance, that thinking skills are important to industries in both the STEM and humanities. The literature from both the IT and business fields found that employers consider thinking skills to be some of the most important skills that their employees should possess. Each of the studies that found thinking skills to be among the most important, however, included students, instructors, or educational administrators as the research subjects. These subjects more consistently considered thinking skills to be

important than did the employers. For example, the Ellis et al. (2014) study of textbooks, which were used to teach soft skills to office technology students in the South Carolina Technical College System and in the North Carolina Community College System, revealed that the books most often cited *reasoning* (109 times), *decision making* (109 times), and *problem solving* (94 times) as important skills. While these were the skills most emphasized in the books, out of the 36 skills listed in the SCANS report, 139 South Carolina businesses randomly selected in the study ranked reasoning as only the 12th most important skill, decision making the 17th most important, and problem solving as the 10th most important skill. This emphasis on thinking skills therefore may be more of a reflection of agreement in higher education than agreement between the IT and business fields. However, studies in both IT and business agree that thinking skills are important.

There are other skills agreed upon as important in studies from different industries. For instance, in IT, Stevenson and Starkweather (2010) and in Business, Mitchell et al. (2013) found that employers consider leadership to be among the most important characteristics that their employees can possess, even in entry level positions. In office technology, GIS, hospitality, business, and retail, researchers found that employers highly value the ability to work with others, and building trust, rapport and cooperation (Ellis et al., 2014; Mitchell et al., 2010; Nickson et al., 2012; Weber, 2013; Wikle & Fagin, 2015). Nickson et al. in retail, and Harris and Rogers (2008) in engineering both cite having a good work ethic as a soft skill among employers' top soft skill values. Overall, single-industry studies present some agreement but no clear explanation of the difference in employers' soft skill valuations.

Pan industry soft skills. There are more pan-industry than industry-specific soft skills studies; this section reviews those studies whose participants are engaged in a variety of industries. The NRC's large review of the literature on 21st century education included three categories of competencies necessary for success in work and life: interpersonal, intrapersonal, and cognitive (Pellegrino & Hilton, 2012). This section of the literature review uses that tripartite division to group the skills that researchers, in common, found employers to prefer, regardless of industry. Of all the skills that empirical studies find most useful to employers, authors most often cited the categories of communication and personal qualities. These categories fall within interpersonal and intrapersonal competencies, respectively. Somewhat less cited, but not uncommon, is the category of cognitive skills.

Commonly preferred interpersonal competencies. The most commonly agreed-upon interpersonal skill in pan-industry studies is communication. Various researchers have ranked communication skills as top or close to the top of their lists of soft skills that employers prefer their employees to possess (Jones et al., 2016; McMurray et al., 2016; Robles, 2012; SLCC & Workforce Solutions Group, 2013; Stewart et al., 2016.) Some studies differentiate between listening and/or speaking and reading and/or writing skills (Clokier & Fourie, 2016; Dhopte & Sinha, 2017; Hart Research Associates, 2016; USDOL, 1991). Some authors found that a specific communication skill within the general ability to communicate or within a more general communication skill is more important than other specific communication skills. For instance, the skilled use of voice and accent is the most important verbal communication skill for one researcher (Nickson et

al., 2012), while adjusting a message to an audience is the most important verbal communication skill for another (Weber et al., 2009).

Communication, however, is not the only interpersonal skill that employers prefer their employees to possess. Some studies found that employers consider leadership to be among the most important characteristics that their employees can possess, even in entry level positions (SLCC & Workforce Solutions Group, 2013; USDOL, 1991). Other researchers found that employers more highly value teamwork; or the ability to work with others; or building trust, rapport and cooperation, than they do leading or the ability to communicate well (Clokier & Fourie, 2016; Robles, 2012; Stewart et al., 2016).

Commonly preferred intrapersonal competencies. The soft skills category of intrapersonal competence contains more individual soft skills that are preferred by employers than do the categories of interpersonal or cognitive competences. Within the field of soft skills, psychological studies have contributed knowledge on emotional intelligence (EI), personality factors that affect workplace outcomes, and counterproductive work behaviors. O'Boyle, Humphrey, Pollack, Hawver, and Story (2011) authored a meta-analytic study that examined the question of whether EI is a better measure of job performance than the generalized mental ability or the five-factor personality model (FFM). They found that emotional intelligence, generalized mental ability, and the five personality factors in FFM all influence employability. When they examined tests that included contextual social skills measures, however, they found that increased emotional intelligence predicted job performance over and above generalized mental ability and the FFM of personality, though not strongly.

The literature agrees that of the five factors commonly accepted to be important in personality—extraversion, agreeableness, conscientiousness, neuroticism (or stability), and openness to experience—*conscientiousness* is the factor most important to job outcomes. Akhtar et al. (2015) found conscientiousness to positively correlate with job performance, and, to a lesser degree, so did *openness* and *extraversion*. O’Boyle et al. (2011) found that within FFM, only conscientiousness is a significant predictor of job performance.

An employee’s conscientiousness affects his or her own performance on the job, but it does not affect the performance of her team. Offermann et al. (2004), looking at the effect of conscientiousness on performance of groups, found little correlation with team performance. Still, Sackett and Walmsley (2014) found conscientiousness to be the personality characteristic employers most look for in interviews. There is some connection between the psychological studies’ concern with conscientiousness and the concern of nonpsychological studies with work ethic, given that both include *hard working* in their definition (Robles, 2012; Sackett & Walmsley, 2014).

Apart from finding that emotional intelligence, conscientiousness, and, possibly, openness and extraversion, affect an employee’s ability to secure and perform well in a job, the psychological literature concludes that some soft skills negatively impact employment outcomes. The literature labels those *counterproductive work behaviors* (CWB), and the studies examine what causes CWB. An, Boyajian, and O’Brien (2016), for instance, conducted surveys that included six different accepted inventories to understand the specific mechanisms that connect workplace stressors with CWB. They found that work stressors increase CWB and that when employees perceive themselves to

be victimized by people with more hostile attributional styles, the incidence of CWB increases. In other words, an employee's interpretation of events in the workplace affects the amount and degree to which they engage in CWB. Greenidge, Devonish, and Alleyne (2014) found that job satisfaction has a mediating effect on CWB. Although found in the psychological studies, concern with emotional intelligence and CWB are absent from the findings of nonpsychological soft skills studies.

Some nonpsychological pan-industry studies find integrity and honesty to be important intrapersonal competencies or personal qualities. Some refer to both integrity and honesty as one characteristic or competence called *integrity/honesty* (Ju et al., 2014; Robles, 2012; USDOL, 1991). Other studies find *general ethics* or *ethical judgment* to be what employers want their employees to possess (Hart Research Associates, 2016; Jones et al., 2016; Stewart et al., 2016). Some authors found that *taking responsibility* was one of the personal qualities that employers most prefer their employees to possess and demonstrate (Chamorro-Premuzic et al., 2010; Jones et al., 2016; Robles, 2012). While some studies find that employers most strongly prefer their employees to demonstrate a well-developed sense of sense of ethics or integrity, other studies find that employers equally or more strongly prefer their employees to demonstrate the desire, ability, and/or tendency to learn (Chamorro-Premuzic et al., 2010; McMurray et al., 2016; USDOL, 1991).

Pan-industry studies cited having a good work ethic, sometimes referred to as *working hard*, as a soft skill/characteristic that employers value among their employees (Robles, 2012; Stewart et al., 2016). Other studies also found that employers want their employees to self-manage (Clokie & Fourie, 2016; Ju et al., 2014; USDOL, 1991). Some

found *adaptability* and *flexibility* to be important to employers (McMurray et al., 2016), and others found that it is important to have *social/diversity awareness and sensitivity* (Stewart et al., 2016).

Various nonpsychological pan-industry studies found that employers value particular personal qualities that no, or few, other studies do. Examples include *ability to seek help when needed* (Ju et al., 2014); *ability to connect theory to practice* (Dhopte & Sinha, 2017; Hart Research Associates, 2016), *adaptability* (McMurray et al., 2016), *attitude* (Jones et al., 2016; Robles, 2012), *creativity* (Dhopte & Sinha, 2017), *empathy* (Dhopte & Sinha, 2017), *facility with Microsoft Office* (SLCC & Workforce Solutions Group, 2013), *following directions, instructions, or schedules* (Ju et al., 2014), *self-confidence* (Jones et al., 2016), *reliability* (McMurray et al., 2016), and *resolve* (Dhopte & Sinha, 2017).

Commonly preferred cognitive competencies. In their large review and analysis, the NRC found *cognitive competencies* to be one of three broad categories of transferable skills (Pellegrino & Hilton, 2012). According to the review, “cognitive competencies have been more extensively studied than intrapersonal and interpersonal competencies, showing consistent, positive correlations (of modest size) with desirable educational, career, and health outcomes” (Pellegrino & Hilton, 2012, p. 4). The authors included three sets of cognitive competencies. The first category, *cognitive processes and strategies*, includes critical thinking, problem solving, analysis, reasoning/argumentation, interpretation, decision making, adaptive learning, and executive function. In the second category, *knowledge*, they include information and communications technology literacy,

oral and written communications, and active listening. The third cognitive category, *creativity*, includes creativity and innovation.

Thinking skills, critical thinking, and higher-order thinking skills also appear in empirical pan-industry studies' lists of the soft skills that employers most highly prefer their employees to possess (Chamorro-Premuzic et al., 2010; Hart Research Associates, 2016; Ju et al., 2014; USDOL, 1991). Researchers found the more application-oriented thinking skill of *problem solving* to be important (SLCC & Workforce Solutions Group, 2013).

Topmost-important skill. While examining single-industry and pan-industry studies for an agreed-upon set of most important soft skills yields no clear conclusion, there could perhaps be agreement on the one top most-important soft skills employers prefer. However, the top most-important skill also varies across studies. Out of the 25 empirical studies included in this literature review, six find communication skill, in general, or one of the specific communication skills, at the top of their list of most important soft skills (Harris & Rogers, 2008; Hart Research Associates, 2016; Mitchell et al., 2010; Mitchell et al., 2013; Stevenson & Starkweather, 2010; SLCC & Workforce Solutions Group, 2013; Stewart et al., 2016). Five studies topped their lists with a variety of interpersonal skills: ability to work with others; building trust, rapport, and cooperation; building a network of contacts; social competence; and interpersonal skill. Six studies placed intrapersonal characteristics/personal qualities at the top of their lists. These characteristics include: integrity or integrity/honesty (three studies), positive attitude, trustworthiness, and taking responsibility. The remaining eight studies each rank

a different skill as being the most important soft skill that employers prefer their employees to possess.

Whether regarding the topmost important soft skill or the soft skills found to be most important in single-industry or in pan-industry studies, the literature presents a plethora of characteristics, demonstrating that there is not a clear consensus across the studies. Employers seek employees who communicate well and who manage interpersonal relations well, perhaps by demonstrating emotional intelligence and building trust and cooperation. They are also looking for ethical employees who demonstrate integrity and conscientiousness, who work hard, who take responsibility, and who can manage themselves. Employers prefer employees who maintain a positive attitude as they think critically with complex reasoning to solve problems. Employers want to hire and keep employees who work well in a team while they lead, and, to a lesser extent, follow directions. Also, employers want employees who continually learn and adapt and are sensitive to diversity. Apart from these skills just mentioned, there are other soft skills that various other individual studies found employers to define as most important. To compare the soft skills lists used in this review, see Appendix B.

Soft skills categories. While the literature finds some commonality of preference for communication and intrapersonal skills, it does not form a clear consensus of which specific soft skills employers most prefer their employees to possess. Neither does the literature build a clear taxonomy of soft skills. There is a lack of consistency between studies concerning which individual soft skills belong in which soft skills categories. Communication skills and personal qualities are two examples of taxonomic confusion.

The soft skills category of communication. Typical to soft skills studies, Harris and Rogers (2008) found 16 soft skills to be the most important skills to employment. They divided these skills into two categories: *nontechnical competencies*, and *affective domain attributes*. They considered effective written communication to be the use of proper grammar, and they considered it to be one of a set of *nontechnical competencies*. Ellis et al. (2014) included listening and speaking in the category of *basic skills*, which is one of eight categories presented in the USDOL's (1991) SCANS study that Ellis et al. adopted. The SCANS report *basic skills* category includes, speaking, but rather than listening, it instead includes reading, writing. SCANS neither includes *communication* as a category or a skill, and only refers to communication in the narrow sense of the computer or telephone technology necessary for transferring information. Ju et al. (2014) developed a 36-item survey that included five higher-order soft skills categories and received responses from 168 employers across seven industries. They also subsumed *communication* under their higher-order category of *basic skills*. Written communication for Harris and Rogers was a nontechnical competency, for SCANS was a basic skill, for Ellis et al. and Ju et al. would have been a basic skill but were not included in their most important communication skills.

Other authors did not categorize *communication* as a *nontechnical competency* or a *basic skill*. The NRC, for instance, included written and oral communication as skills in the category of *knowledge*, which they placed as one of three categories that comprise *cognitive competence* (Pellegrino & Hilton, 2012). The NRC also placed communication as a skill in the categories of *leadership* and of *teamwork and collaboration*, under the broad competence category of *interpersonal domain*. *Communication* is a soft skill that is

for the NRC part of various categories, none of which is the *nontechnical competence* or *basic skills* used by other authors.

Some authors did not see communication as a skill that is part of another category, but rather as a top-level soft skill category in itself. Ravenscroft and Luhanga (2014) saw communication as one of three top-level categories of employability skills that include *communication skills*, *critical thinking and problem-solving skills*, and *interpersonal skills*. The Weber studies considered listening, presenting, verbalizing, and communicating nonverbally as skills that comprised the category of *communication*, which itself was one of seven top-level categories of soft skills (Weber et al., 2009; Weber et al., 2013).

The soft skills category of personal qualities. The SCANS report also considers *personal qualities* to be a category of soft skills that educators should use to prepare their students for employment (USDOL, 1991). In SCANS, the personal qualities category consists of individual responsibility, self-esteem, sociability, self-management, and integrity. It is one of three categories, together with basic skills and thinking skills, that form the intellectual and personal foundation on top of which a student can master five competency categories that will prepare him or her for work. The competency categories are: resources, interpersonal, information, systems, and technology.

Contemporary soft skills authors do not generally use the SCANS (USDOL, 1991) soft skills taxonomy in its entirety. Even Ellis et al. (2014) who reproduced the SCANS taxonomy, added *motivation* as a skill in the category of personal qualities. Ju et al. (2014) queried employer preferences using the term “personal attributes,” which, after factor analysis on 36 skills, became the category of *personal traits*. Their category of

personal traits includes three of the same skills that the SCANS report's personal qualities category contains, namely, responsibility, demonstrating confidence in work, and personal integrity/honesty. Ju et al. (2014) added motivation, as Ellis et al. (2014) did, but they removed the self-management and the sociability that SCANS included and the social skills that Ellis et al. included. Instead, Ju et al. placed *social skills* as a separate category that contains five of its own soft skills. The Ju et al. category of personal traits also contains an additional seven skills that SCANS and the Ellis et al. study does not: adaptability, personal interest in work, ability to learn new skills, showing initiative, self-advocacy, self-control, and the ability to work without direct supervision.

Nickson et al. (2012) considered *personality* or *outgoing personality* to be the sixth most-important soft skill for employees in the retail clothing industry. They did not define what personality means, but their study indicated that personality is separate from attitude, when for example, they write that employers looked “to find applicants with the ‘right’ personality, attitude and appearance” (Nickson et al., 2012, p. 77). Quoting Brown and Hesketh (2004), Nickson et al. equate personality with “‘personal capital,’ or the sum of various personal qualities” (Nickson et al., 2012, p. 67). They concluded that there were two overall categories that are important in retail employment: personality and personal appearance.

Perhaps the term *personality*, then, is the overall most complete category of personal qualities, or even of all the intrapersonal competencies. Using the term *outgoing personality* to explain the term *personality*, as Nickson et al. (2012) did, however, indicates a strong similarity to the term *extroversion*, which psychological studies consider to be one of the five factors involved in personality. This placement of

personality as one of five factors within *personality* demonstrates one of the challenges to pursuing a soft skills taxonomy. *Personal qualities*, whose usage began with the SCANS report and continued in various studies, consistently indicates something about the way a person is organized, and they show up in the presence and quality of behaviors. But the literature does not provide consensus on which personal qualities are the most important, or which individual behaviors define which personal qualities.

Other soft skills categories. Apart from communication and personal qualities, the literature presents other primary or top-level soft skills categories. Some of these are: nontechnical skills, customer-facing skills, and transferable skills (Marks & Scholarios, 2008); core competencies, and critical competencies (Stevenson & Starkweather, 2010); skills, attitudes, dispositions, and beliefs (Matteson et al., 2016); performance management, communication/persuasion, leadership/organization, political/cultural, self-management, counterproductive, and interpersonal skills (Weber et al., 2013).

Some researchers seek to standardize the categorical terminology used in the soft skills discussion (Hurrell, Scholarios, & Thompson, 2013; Matteson et al., 2016). They analyze the relationship of different elements, with results aligning with the researchers' fields, whether personal psychology, industrial psychology, management, or library information systems. Some researchers seek the most broadly useful theoretical constructs (Cimatti, 2016; Gibb, 2014). Most researchers, however, use various different categorical terms for what they see as the soft skills that employers most prefer their employees to demonstrate.

Chapter Summary

Soft skills literature took shape in the 1990s and has burgeoned in the past decade, since 2008. The main focus of soft skills studies has been to determine which soft skills employers overall prefer their employees to possess and demonstrate. The main research tool has been Likert-based surveys completed by employers and educators. Researchers consider soft skills to include behaviors, abilities, and personal qualities (*traits* and *attitudes*). To examine the literature's findings of which skills and personal qualities are most important to employers, this chapter reviewed congruity and incongruity in the topmost important soft skills within the specific industries investigated by the soft skills literature. This chapter also reviewed congruity and incongruity in the topmost important soft skills presented by pan-industry studies. The presentation of that set of studies grouped skills and behaviors according to the three broad categories of *soft skills competence* presented by the NRC (Pellegrino & Hilton, 2012). The three broad categories are: interpersonal, intrapersonal, and cognitive competencies.

Of the various soft skills, communication is the one that employers value most consistently when considering whom to hire and whom to value as a good employee. Employers also consider personal qualities, and to a lesser degree, thinking skills, important. Which communication skills and personal qualities employers value most highly, however, remains unclear, as studies provide conflicting answers.

Within the psychological studies, there is agreement that positive employment outcomes are linked to generalized mental ability, to at least one of the personality traits in the five-factor personality model—conscientiousness, and perhaps openness and agreeableness—to emotional intelligence. Emotional intelligence is found to be slightly

more significant than the five-factor personality model for positive employment outcomes. The non-psychological studies include a broader set of soft skills and examine employability more comprehensively than do the psychological studies. However, apart from the general term communication they provide no consistent answers to the question of which soft skills employers prefer their employees to possess.

Industry-specific studies reveal slight differences in emphasis between the two major industry groupings. Comparing industry-specific studies reveals that STEM-related studies emphasize communication and social networking, while humanities-related studies emphasize personal qualities and interpersonal skills. However, even while some major categories such as communication and personal qualities appear to be common to many studies, at a more granular level they often include various soft skills. This variety leaves unclear the consensus about what the most important soft skills are for employees to possess and on which colleges might want to focus. The categorization of soft skills across the various studies is also inconsistent and confusing, with different terminology indicating similar skills and behaviors, and similar terminology indicating different behaviors or remaining undefined by providing no examples of the referent behaviors. Overall, neither single-industry nor pan-industry studies presented a clear picture of which skills employers find to be most important.

While studies consistently utilize Likert surveys, studies have yet to provide a clear answer to the literature's main question: *What are the soft skills that employers most prefer their employees to possess?* As the literature contains no recognized clarifying principle for how to understand or utilize the conflicting employer soft skills valuations, perhaps it is now appropriate to ask a slightly different question. Instead of asking if there

is a single set of soft skills that is most important to “employers,” this study suggests looking for differences between groups of employers, differentiating them in a way that is not related to industry difference. As there was no significant difference found between soft skills when differentiating between employers of like industries, there may be a different grouping that will help researchers understand the various soft skills valuations that employers provide. The next chapter will suggest studying one such grouping of organizations.

Chapter 3: Research Design Methodology

General Perspective

Academic literature has begun to agree that 21st century skills must add soft skills education to traditional academic and technical education (Ju et al., 2014; Kyllonen, 2012; Nagle, 2010; Pellegrino & Hilton, 2012). To understand the connection of soft skills education and employment, the literature has researched the question of which are the most-important soft skills to employers and to educators. Knowing what the most-important soft skills are is important information for colleges, helping them to integrate soft skills education into the student experience through planned utilization of pedagogy and various administrative units that directly influence the student experience.

However, as Chapter 2 indicated, despite the literature predominantly asking a single question and utilizing a single research methodology, there is still a lack of consensus about the answer. Without understanding which soft skills are the most important to teach, and without understanding how students will use soft skills in their future places of employment, instructors and trainers will not be well-enough informed to create sufficiently successful soft skills trainings, and higher education executives may not be sufficiently informed for budgetary decision making regarding soft skills. A new line of inquiry about employers' soft skills preferences can provide the literature with clarity to help colleges and employers make sense of the divergent findings.

Colleges organize education by majors that reflect industry affiliation. A logical approach to examining soft skills literature would therefore be to find which industries

value which soft skills categories and specific soft skills. Colleges could then incorporate those skills and categories into student education by separating soft skills preferences according to major, and each department would focus their education on those particular soft skills. However, soft skills studies do not present significant differentiation of soft skills preferences by industry.

A possibility does exist, however, that soft skills researchers might benefit from shifting the focus of the central research question to one that explains variety in the soft skills preferences of various employers. Research has consistently focused on discovering the soft skills that are most important to employers—as a whole. However, when students graduate, they find employment not with employers as a whole, nor with an average employer, but usually with one particular employer who prefers a particular kind of employee who displays what one of the research participants in this study referred to as *cultural fit*. Cultural fit may help explain why various studies find a plethora of soft skills to be most important to employers.

Researchers such as Schein (2004) and Cameron and Quinn (2011) investigated organizational culture. They note that cultures vary from organization to organization, sometimes from one section of an organization to another (Schein, 2017). Organizational culture pertains to values and assumptions that influence organizational behaviors (Schein, 2004). The influence of culture that exists as a phenomenon at the macro level in organizational behavior may also exist as a phenomenon at the micro level in the behavior of individual employees, and perhaps the two phenomena share commonalities that soft skills educational efforts can utilize for educational purposes. This study therefore explored the characteristics of employee soft skills and organizational culture

together to see if organizational culture might provide a useful framework through which to understand soft skills preferences. The study expected to find a pattern of similar values that connected the two organizational phenomena.

Schein (2004) defined culture as “a pattern of shared basic assumptions that was learned by a group . . . that has worked well enough to . . . be taught to new members as the correct way to perceive, think, and feel in relation to those problems” (p. 17).

Cameron and Quinn (2011) defined culture as “the taken-for-granted values, underlying assumptions, expectations, and definitions that characterize organizations and their members” (p.18), and said that “culture is a socially constructed attribute of organizations that serves as the social glue binding an organization together” (p.18). This study utilized both definitions. As a very general guideline, the study used Cameron and Quinn’s statement that organizational culture “represents ‘how things are around here’” (Cameron and Quinn, 2011, p. 19). More specifically, this study adopted the understanding of culture as the organization’s shared values and assumptions that guide the thoughts, feelings, and expectations of its members.

Therefore, the plan for this study was to explore an organization to see if a pattern of shared values appeared in its organizational culture and in its soft skills. To investigate the possibility of there being such a pattern, this study set out to explore the values and characteristics of four elements of organizational life: (a) the assumptions, beliefs, espoused values, and characteristics of the organizational culture; (b) the traits and behaviors that the leaders preferred their employees possess; (c) the traits and behaviors that the employees believed they should possess; and (d) the traits and behaviors that the

employees demonstrated. To explore the values and characteristics common to these four organizational elements, this study posed five major research questions:

1. What is the company's organizational culture?
2. What soft skills do the executives and managers prefer their employees to possess?
3. What soft skills do the employees believe they should possess?
4. What soft skills do the employees demonstrate?
5. What values and characteristics are common to organizational culture and soft skills in the host organization?

To discover if there was a pattern of common characteristics, determine the themes of that pattern, and to answer the five research questions, this study utilized case study methodology. As stated by Saldaña (2016), “qualitative inquiry provides richer opportunities for gathering and assessing, in language-based meanings, what the participant values, believes, thinks, and feels about social life” (p. 135). An appropriate qualitative method of inquiry to answer research questions collects and analyzes diverse types of data on social life, in this case, organizational culture and soft skills preferences. Case study methodology provided for the collection of such diverse types of data.

A case study is “an empirical inquiry that investigates a contemporary phenomenon (the ‘case’) in depth and within its real-world context, especially when the boundaries between phenomenon and context may not be clearly evident” (Yin, 2014, p. 16). The advantage of the case study methodology for this study was the ability to explore the boundaries of a contemporary phenomenon (soft skills) in a real-world context (organizational culture). As the purpose of this study was to add a new research

direction to the soft skills literature, the study was an exploratory case study, “whose purpose is to identify the research questions or procedures to be used in a subsequent research study” (Yin, 2014, p. 238).

To complete this study within the parameters of the time associated with its completion, the research methodology was a single, rather than a multiple, case study. It was also an embedded case study, which Yin (2014) described as a single study in which “attention is also given to a subunit or subunits” (p. 53). While the study investigated the company’s culture, as a whole, by speaking with its executives, the culture and the soft skills of one of the organization’s locations were also explored. The study therefore was an exploratory, single-case, embedded case study. The St. John Fisher College Institutional Review Board (IRB) approved the research methodology (Appendix C).

As this study was exploratory, it did not predict what themes would connect the values of Wheatstone’s organizational culture and the values of its soft skill preferences. Instead, the study predicted that an overall pattern of characteristics being held in common between organizational culture and espoused and demonstrated soft skill preferences would emerge from the data. The study gathered and analyzed the data to discover if there were such a pattern, and if there were such a pattern, then the study would describe the themes that constituted the pattern.

The analysis used the process of pattern matching outlined by Yin (2004) where a pattern seen in the gathered data is compared to a pattern that was predicted before the gathering and examination of the data. This study predicted that a pattern of characteristics common to the two separate organizational phenomena would reveal values that united them. Specifically, this study expected that the values that

characterized some or all of the soft skills that the executives, managers, and line staff highlighted as preferable would also characterize some or all of the expressions that the executives, managers, and line staff used to describe the organization's culture. The tentative assumption in this expectation was that the same, or a similar, set or sets of values provided the foundation for Wheatstone's soft skill preferences and the characteristics of its organizational culture, and that soft skill preferences and organizational culture characteristics were expressions of those values.

Research Context

This case study explored a dairy production and distribution company in the Central New York State region. For confidentiality, this writing refers to the organization by the fictitious name of Wheatstone Dairy. This organization was chosen for its age and size, both indicating that it was well established. The choice was also based on geographic accessibility.

In their earliest stages, organizations have not yet established a clear culture (Schein, 2004). The study expected Wheatstone Dairy, in operation since the 1930s, to possess a well-established and clearly defined culture that would ease the study's data analysis. Even though the results demonstrated a much more complex organizational culture than was initially expected, the expectation of a single, unified, and clearly defined culture influenced the choice of Wheatstone.

Another consideration for choosing Wheatstone Dairy was its willingness to participate. A key Wheatstone leader expressed interest in exploring the aspects of their culture. Behind this interest were recent staffing changes in management that increased the dairy's desire to understand its own culture from an outsider's perspective. According

to Schein (2017), a researcher seeking to understand an organization's culture is in a better position to obtain reliable data if the organization sees him or her as a "researcher-helper" (p. 267), and this expressed interest signified a likelihood that the participants in this study would see it as in their own best interest to provide accurate data. This interest provided executive support for managerial cooperation and access to the line staff.

The organization maintained a headquarters, four production facilities, and one bottling plant. It was also affiliated with convenience stores. The organization gathered milk from approximately 250 farms. Wheatstone primarily functioned as a white-label producer, shipping milk at least as far as to California. This study took place mostly at its largest production facility.

Research Participants

The study investigated two sets of participants: (a) executives who set broad organizational policy, and (b) employees who did not set organizational policy. Those who set policy are more aligned with overall organizational culture rather than the employees whose purview is more limited and might be more influenced by their workgroup (Schein, 2017). This study included executives at the company headquarters and managers and frontline staff at the production facility that housed 167 employees. The term *leaders* is sometimes used, and it refers to those who set policies: executives and managers. The term *employees* refers to line staff and managers when used relative to executives only, and to line staff when used relative to executives and managers.

The executive team consisted of seven members, including the CEO. They saw themselves as responsible for overall organizational policy, operations, and, in a thoughtfully proactive manner, its culture. The company granted permission to interview

four executives, four managers, and six line staff. To allow for the least disruption to the organization, Wheatstone Dairy's Director of Corporate Learning, the main liaison for this study, determined who most of the interviewees would be. Line staff performed tasks such as operating machines, moving products, and cleaning and repairing equipment.

Interviews included the four executives, four managers, and six line staff members. Executive responsibilities extended to all company sites, while manager and line staff were responsible for work at the single-site organizational subunit. Interviews ranged from 40 minutes to 2 hours. Most interviews were 1 hour. The executive interviews included one female and three males; manager-level interviews included one female and three males; and line-staff level interviews included two females and four males. The ratio approximated the male-female ratio of all employees observed during the visits. The executive interviews took place at the company headquarters in a small town approximately 20 miles from the organizational subunit site. The manager and line staff interviews took place at the subunit site.

At the time of the interviews, the four executive participants had been employed for different lengths of time at Wheatstone. One had been employed for less than 1 month, two for fewer than 2 years, and one for fewer than 10 years. The executive with less than 1 month at Wheatstone had 20 years in human resources and carefully differentiated between what he knew and did not know of Wheatstone. The data included his soft skills preferences because as head of HR, his soft skills opinions were consequential for the organization. The four manager participants had been employed at Wheatstone: less than 1 year, less than 4 years, less than 10 years, and less than 20 years. The six staff members had been employed at Wheatstone between 1 and 7 years.

The executive interviewee titles included Director of Corporate Learning, General Counsel, Human Resource Director, and Vice President of Operations and Chief Operating Officer. The General Counsel was also the head of IT and of procurement. The manager interviewee titles were Plant Manager, Production Manager, Shift Manager, and Training Manager, and the line staff interviewee titles were Filler II, Filler Operator, Floater II, Lab Technician, Maintenance Mechanic Level I, and Processor Level II. The designation “Level I” indicated a role that was narrower in scope than roles with the designations of “II” or “III.”

Instruments Used in the Data Collection

The research questions indicated the need to gather three sets of data, which included data on (a) organizational culture, (b) employee soft skills, and (c) leader and employee views of their soft skills and organizational culture. Soft skills and organizational culture both involve human interactions. To gather sufficient data on human interactions to make meaningful conclusions, Yin (2014) suggested it is best to gather data from a multiplicity of sources.

Yin (2014) listed six sources of evidence that are used to support case studies: (a) interviews, (b) direct observation, (c) participant observation, (d) documentation, (e) archival records, and (e) physical artifacts. This study utilized all of the sources except participant observation. While it was not possible to remove physical artifacts from Wheatstone Dairy, photographs documented the physical artifacts for later examination. This study also utilized two validated assessment instruments: (a) one to test the soft skills of the line staff, and (b) one for the executives to assess Wheatstone’s organizational culture.

Interviews. As the key aspect of the data collection was the opinion of the participants, this study relied primarily on interviews for its data collection. The interviews included a total of 14 executives, managers, and line staff members. The interviews were intended to provide information on the three areas of inquiry in this study. First, interviews provided data on the beliefs and values of the company's organizational culture. Second, the interviews provided information on which soft skills people at each of the three levels believed successful employees should demonstrate. And third, the interviews were intended to provide information on which soft skills the interviewees saw that they themselves and others as demonstrating. However, the interviews provided little data about soft skills participants saw others demonstrate.

The interviews provided evidence of beliefs and values around organizational culture by gathering statements of preference and anecdotal evidence that supported the statements of preference. The preference statements were statements of what a participant valued or believed that the organization valued. Choice or preference reveals beliefs regarding organizational behaviors (Schein, 2017). Preference statements also revealed the values that the interviewees held about employee behaviors. The interviews included information as to where the participants found negative value or problems, and where they found positive value in the elements of soft skills and organizational culture. These individual choices, in sum, revealed Wheatstone's values.

To gather the data on employee opinions, this study relied primarily on semi-structured interviews. Interviews used targeted but open-ended questions to elicit participant viewpoints and anecdotal examples. Appendix D contains the interview protocols. Gathering data from 14 interviews provided different expressions of values

that influenced the company's organizational culture and soft skill preferences. The interviews were between 40 minutes and 2.5 half hours in duration. Interviews were recorded electronically, and a transcription service, GoTranscript, transcribed the recordings. The transcripts were then reviewed for accuracy and corrected as necessary.

Observations. To support or contradict verbal evidence gathered in interviews, this study also utilized direct observation. Observations during the 20 visits included human interaction outside the buildings and within the hallways, offices, cubicles, meeting rooms, break rooms, and, on one occasion, the production spaces. The restricted number of visits to the company and the limited access to the production floor provided insufficient observational evidence of repeated employee behaviors to draw conclusions about which soft skills they demonstrated. Evidence from observations, therefore, only provided information regarding organizational culture and contextual reference for interview material regarding soft skills. Cultural manifestations included phenomena such as level of formality, standard greetings, speech overheard during the course of meetings or when employees moved from one part of the plant to another, amounts and pace of speech used, apparent intentions of speech, types of attire, proxemics, and architectural and other design elements.

Documentation, physical artifacts, and archival information. Documentation also lent a perspective on the information gathered from the interviews. Downloads of 25 pages from the company website provided approximately half of the documentation. Photographs made of the physical artifacts provided the other half of the documentary evidence. Document information pertained mostly to organizational culture and not to

employee soft skills. This study was used to obtain relevant archival data from 11 publicly available articles on Wheatstone Dairy.

Two validated instruments. Apart from data gathered through interviews, observations, documentation, and archival materials, this study was used to gather additional information by deploying two separate validated instruments. One instrument was for soft skills evaluation; the other instrument was for an evaluation of the organizational culture.

Learning Resources Inc. To gather data on the soft skills of the line staff, this study utilized an assessment tool from Learning Resources Inc. (LRI, 2011). The LRI soft skills assessment tool contains a test module for nonmanagerial soft skills competencies. The module assesses behavioral choices that reflect the test taker's beliefs about proper workplace behaviors. The assessment instrument is an online, video-based assessment. It is a situational judgment test, which Pellegrino and Hilton (2012) reported to be the most accurate kind of soft skills test.

The LRI assessment categorizes the employee's behavioral choices into five categories that the SCANS report (USDOL, 1991) created to comprise the soft skills category of personal qualities that it considered foundational to demonstrating successful soft skills. The categories are *integrity*, *responsibility*, *sociability*, *self-management*, and *self-esteem*. LRI defines each of the categories with a list of behavioral choices. For example, LRI defines the category of *self-management* with three behaviors: maintaining awareness of one's own limitations, asking for help when needed, and efforts to improve one's performance.

Behavior choices, grouped together in categories, serve as an indicator of the presence of particular traits. For instance, an employee who consistently chooses the responses on the LRI assessment that match the LRI evaluation of employer preferences for maintaining awareness of one's own limitations, asking for help when needed, and making efforts to improve one's own performance score high on the trait of *self-management*. While the literature contains no widely accepted or cited soft skills taxonomy, positive references to the SCANS report (USDOL, 1991) appear more frequently in the literature than do references to other soft skills taxonomies.

The assessment correlates responses with data that LRI collected from several of their large studies involving over 10,000 employees and the employees' workplace successes, creating a report that scores the viewers' responses on the five soft skills categories. LRI (2011) presented a validating study (Appendix E). LRI administered the test to over 5.5 million employees in many organizations, such as Albertsons Inc., Banco Popular, Coca-Cola, Dow Chemical, Green Mountain Coffee, Hertz, Home Depot, Sprint, and others, and LRI provided access to the assessments that this study required.

LRI's (2011) video-based assessment presents 14 situations commonly encountered in entry-level work. The video introduces each situation with a short statement of the situational background. Actors then role-play the situation, the situation is frozen, and the narrator presents the test taker with four options to resolve the situation. Actors then display each situation, and the test takers choose the best and the worst of the four proposed resolutions. LRI scores the test takers on the number of times their choices match the employer's preferences as determined by LRI's research.

During the interviews, the research participants were able to ponder and rework their statements to reflect thought-out belief systems about soft skills; whereas, during the LRI tests, they had little chance to ponder their soft skills choices. The LRI tests forced the line staff members to respond to each of the 14 situations within 30 seconds. The interviews therefore revealed more about the line staff member's thoughts, opinions, and beliefs, which were appropriate to Research Questions 2 and 3, while the LRI test results revealed what soft skills the line staff demonstrated, which were more appropriate to Research Question 4.

Wheatstone Dairy provided the test takers with the option to receive the LRI feedback report from the study without any Wheatstone Dairy staff acting as an intermediary, and one of the six line staff members availed himself of that option. The first page of a report, which contains the actual score, did not appear on the test taker's version. LRI provided the study both with the participants' overall scores and with the scores for each of the five soft skills categories in the personal qualities module. The one employee who chose to receive a feedback report saw which traits needed no improvement and which traits could be improved upon by engaging in different behavior, along with suggestions for how to improve those traits, but the participant did not see his scores. Wheatstone Dairy provided each of the line staff participants ample time to take the assessment. The participants took the LRI video-based assessment on a laptop with headphones in a separate room without interruption.

CVF and the organizational culture assessment instrument. The analysis used conceptual material from Schein (2004, 2017) to search for data at the three levels of organizational culture: (a) surface level artifacts, (b) espoused values, and (c) underlying

assumptions. It subscribed to Schein's conceptualization of what artifacts are (visible and felt structures and processes, and observable behaviors), and to the importance he placed on an organization's espoused values, beliefs, aspirations, ideologies, rationalizations, and norms. In accordance with Schein, the analysis sought to explain the unconscious assumptions, beliefs, and values that underlie the espoused values and beliefs and that explain the existence of the artifacts.

To structure the data revealed at the three levels described by Schein (2004) around types of organizational culture, the study utilized CVF explicated by Cameron and Quinn (2011). CVF originated in organizational psychology and organizational development when Robert Quinn and John Rohrbaugh consolidated criteria for evaluating organizational effectiveness. Their seminal works, published in 1981 and 1983, were followed by decades of applying the concepts (Cameron & Quinn, 2011; Cameron, Quinn, DeGraff, & Thakor, 2014; Cameron & Whetten, 1981; Quinn & Cameron, 1983; Quinn & Hildebrandt, 1991; Weick & Quinn, 1999). During that time, the studies shifted focus to organizational culture, and the theory became known as *competing values framework*. Other authors continued to utilize CVF to investigate organizational behaviors. For instance, Belasen and Frank (2010) utilized CVF to investigate manager messaging styles in different organizational types. Also, an international team used CVF to develop a conceptual framework of performance appraisal effectiveness (Ikramullah, Van Prooijen, Iqbal, & Ul-Hassan, 2016).

The Ikramullah et al. (2016) study sought additional data regarding the four culture types by asking executive participants to complete CVF's Organizational Culture Assessment Instrument (OCAI). Müller and Nielsen (2013), for instance, used OCAI in a

case study on cultural congruence between the case company's overall cultural profile and its software process-improvement department. There is a large body of empirical studies, including a meta-analytic study by Hartnell, Ou, and Kinicki (2011), that has demonstrated OCAI's ability to reliably measure organizational culture. In 2003, Pearson Education published a review of 46 business models that it considered to be "of great practical value" (ten Have, ten Have, & Stevens, 2003, p. ix). It included CVF. Cameron and Quinn (2011) created the OCAI, and Dr. Cameron agreed to the use of the OCAI for this study (personal communication, February 19, 2018).

After the completion of each interview at the executive level, the participant was handed an OCAI survey, with verbal and written instructions, to complete on their own time within 1 week. The instrument was a 24-item questionnaire that had the participant rank the relative importance of four items on a scale of 100, repeating the four-item comparison in a total of six categories (Appendix F).

Sequence of data collection. This study gathered data in a sequence designed to promote the organization's trust in the study. To increase the likelihood of data provision, this sequence familiarized the organizational members with the researcher during the interview phase prior to the request for archival data. The request, when finally made, yielded no internal documents. Appendix G lists the sequenced steps of data collection.

Documents from Wheatstone Dairy's website provided background for the interviews. Data was collected from 25 web pages downloaded from the company website and 11 articles written about the organization that were published elsewhere on the Internet. With approval of St. John Fisher College's IRB, a pilot interview was then conducted. The pilot interview was with a former president of a Central New York

manufacturing company that was not the host company of this case study. After completing the pilot interview, and according to a schedule developed by the organization that was most convenient to their participants, interviews were conducted with executives, managers, and line staff members at Wheatstone Dairy. After all the interviews were completed, the line staff took the LRI assessments. Observations, 25 memos on those observations, and photographs of physical artifacts were made during each of the 20 visits to Wheatstone.

Procedures for Data Collection and Analysis

Data were collected during three visits to Wheatstone's headquarters and 17 visits to its production facility. Data collection commenced on April 11, 2018 and ended on May 8, 2018. Review and editing of interview transcriptions and some initial coding occurred during the data collection period, with the remainder of transcription review, coding, and analysis taking place thereafter.

Evidence was gathered primarily from interviews and then supplemented by and cross-referenced with the other six data sources. Of the 25 analytic memos, 19 were recorded before leaving the site and transcribed later, and six were written within a maximum of 3 days after the visits. With permission, 51 photographs were taken of outdoor and indoor scenes at the headquarters and the subunit. Four executives received the OCAI survey; two completed and returned the survey. Each of the six line staff participants completed the online soft skills LRI assessment individually and results reports were available to the study via LRI's online portal immediately after each participant completed the assessment.

Structure of the analysis. To explore the possibility that a pattern of similar characteristics with common values existed, data analysis answered the five research questions. The answers were obtained through three separate analyses. To answer Research Question 1, the first analysis examined data pertaining to organizational culture. To answer Research Questions 2, 3, and 4, the second analysis examined the data pertaining to soft skills. To answer Research Question 5, the final analysis compared the findings of Research Question 1 with the findings of Research Questions 2, 3, and 4. The analysis was founded in the coding of data from the 14 interviews conducted and in the aggregation of the codes into groups. Analysis was then completed through triangulation of data from all sources with the coded interview data.

Analytic process. The analysis included three first-cycle code types: (a) in vivo, (b) values, and (c) concept, as outlined by Saldaña (2016). The in vivo coding focused the analysis on the way in which the research participants framed their thoughts, which helped capture participant perspectives and concerns as authentically as possible. In instances where the participants described values concerning soft skills and the organization's culture and their wording was too imprecise or cumbersome to create an in vivo code, values codes were created. Concept coding helped begin to form abstractions from the details presented in the interviews, providing codes for sets of soft skill preferences or sets of characteristics of organizational culture that were more broadly conceptual in nature rather than specifically stated conceptualizations of discrete soft skills or discrete organizational culture characteristics.

Analysis applied each of these codes to the interview transcripts and previously written analytic memos and led to the creation of new analytic memos. The codes were

grouped utilizing NVivo qualitative data analysis software. They were not grouped by type (in vivo, value, and concept), but by similarity of code content. Hierarchies of specificity/abstraction were created within those groupings, providing answers to Research Questions 1 through 4 at a sufficiently abstract level. This section now presents a detailed review of the process of answering each research question.

Research Question 1: What is the company's organizational culture? To answer Research Question 1, the analysis coded the interview statements that provided characteristics of Wheatstone's organizational culture. The analysis utilized in vivo coding and values coding to document 137 different characteristics. The analysis grouped those 137 characteristics into 25 categories of characteristics, necessitating the creation of four concept codes to provide a sufficiently abstract level for four of the 25 categories.

The analysis aggregated similar codes to identify and cluster different references to similar or identical skills, consulting interview transcripts to understand the meaning of the codes in context. Aggregation of codes of organizational culture characteristics (OC) generated 25 top-level ("parent" or "widow") codes containing a total of 71 child codes, 37 grandchild codes, and four great grandchild codes. Each succeeding generation referenced a more-specific aspect of organizational culture.

For example, one parent level OC was a concept code, *OC II communication*. This code included *OC honesty within group*, *OC lack of communication*, and *OC line staff always interacting* children codes. *OC lack of communication* also had a child, *OC people thinking and feeling that other people do not listen to them*, labelled as a grandchild because it was a third-level code. During aggregation, one OC was deleted as

it was revealed to be irrelevant. Three value codes were also created, as, for instance, *OC authenticity*, and four concept codes, as, for instance, *OC employee-leadership relations*.

Analysis then ranked the strength of the participants' organizational culture statements by noting the number of participants who mentioned each coded organizational culture characteristic and by noting the number of times that each participant mentioned the characteristic. This produced a ranked list of coded characteristics that the participants saw as describing Wheatstone's culture.

The analysis then examined the 25 analytic memos that documented the observations made during data collection. The information in the memos provided connections between various participant interview statements that supported the existing codes and groupings but did not generate new codes. The analysis then examined the groups of organizational culture characteristics to see if they matched the characteristics of any of the culture characteristics of the four CVF cultures. By thus integrating the organizational culture characteristics found in the documentation, interviews, and observational data into the four CVF cultures, CVF explained Wheatstone's organizational culture.

To understand the findings for Research Question 1 presented in Chapter 4, this section explains CVF. Using CVF, analysis grouped the disparate data points into three of four culture types. Quinn and Rohrbaugh (1983) and Cameron and Quinn (2006) created the four culture types by integrating 39 indicators of organizational effectiveness into two spectra: (a) internal/external focus, and (b) control/decentralization. Placing the spectra as X and Y axes created four quadrants, each typifying a particular organizational culture. Figure 3.1 contains a more recent version of the four-quadrant grid.

The organizational cultures are: (a) clan, (b) hierarchy, (c) market, and (d) adhocracy. The two left-side quadrants—clan and hierarchy—represent organizational cultures that locate their meaning, purpose, and significance more from inside their organization than outside. They value internal cohesion. Clan cultures value their people, while hierarchies value their processes. Clan cultures emphasize employee experience, social cohesion, group process, shared goals, and communication. They are friendly,

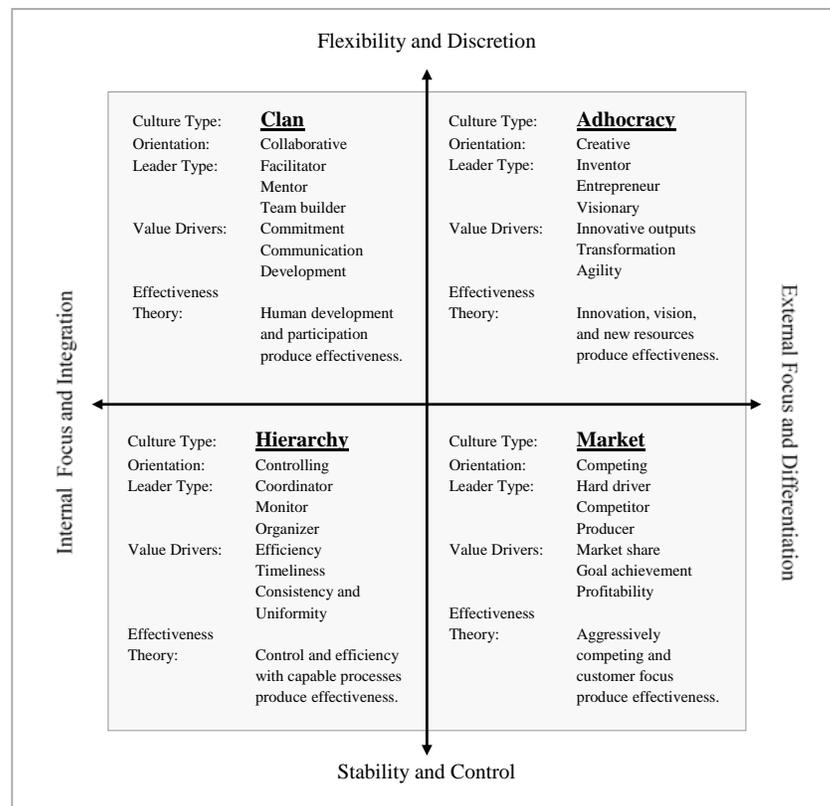


Figure 3.1. The Competing Values Framework. Adapted from *Diagnosing and Changing Organizational Culture* by K. Cameron and R. Quinn, 2011, p. 57. Copyright 2011 by K. Cameron. Adapted with permission.

empowering environments in which leaders utilize mentoring and emphasize teamwork, team rewards, good morale, and professional development.

Hierarchy cultures believe that efficient processes will produce effectiveness. They are top-down, control-oriented cultures that seek consistent results that are efficiently obtained. Hierarchy cultures eschew risk and experimentation in favor of stability. To maintain that stability, they value adherence to established guidelines and procedures. When Quinn and Rohrbaugh (1983) first explicated CVP, they referred to hierarchy culture as an internal process model. “The internal process model . . . would commend an orderly work situation with sufficient coordination and distribution of information to provide organizational participants with a psychological sense of continuity and security,” (Quinn & Rohrbaugh, 1983, p. 371).

The two right-side quadrants—adhocracy and market—represent organizational cultures that locate meaning, purpose, and significance more from outside an organization than within it. Adhocracy cultures emphasize innovation, getting to market quickly, and being first with the newest product or service. They believe that being on the cutting edge will secure them a larger share of the market. Rather than building organizational structures to solidify processes that worked in the past, and rather than building long-term customer relationships, adhocracies regularly dissolve teams, processes, and relationships to adapt to rapid changes in a highly fluid external environment. Adhocracies take risks, engage visionary leaders, and are united by a commitment to innovation.

In market culture, an organization serves as a marketplace by focusing on transactions with external and potential partners. It develops market niches and focuses

on sales, contracts, and exchanges to expand the company's share of the market. Market culture measures success by a continuous increase of the bottom line. It values competitiveness, productivity, expansion, and profit. It places a higher value on customers and fulfillment of mission than on improving the condition of employees. The nature of Wheatstone's organizational culture was thus defined by the characteristics of three of four of the cultures named in CVF.

Research Question 2: What soft skills do the company's executives and managers prefer their employees to possess? To answer Research Question 2, analysis used NVivo software to code relevant statements in the executive and manager interviews. Participants provided the data primarily in response to the questions that asked what traits, characteristics, attitudes, and behaviors they would most want to see their employees possess. In order to carefully translate participant intentions regarding the meaning of the words they used to list their soft skill preferences, the majority of codes were in vivo, as described by Saldaña (2016). As with Research Question 1, when participant statements were too wordy to allow for in vivo coding, value coding was applied.

Aggregation of codes generated a set of 10 soft skill codes (SS) at the parent level with 95 child codes, 47 grandchild codes, 21 great grandchild codes, and six great-great grandchild codes. To create this hierarchy, it was necessary to create six concept codes, as, for instance *SS II interpersonal skills*. Aggregation of the codes that pertained only to managers (MGR SS) created a hierarchy of seven top-level MGR SS codes, 10 child codes, and one grandchild code.

The participants described the valued soft skills in 191 different ways, leading to the creation of 191 SS and MGR SS. These were either soft skills that the executives and managers preferred that their employees possess, or they were soft skills that line staff believed defined a successful employee. The soft skills were first noted through in vivo coding, preserving the phraseology that the participants used to frame their views on desirable soft skills. The soft skills phrases were then grouped using values coding whereby different phrases that represented the same value were grouped together. When there was a question as to what a participant meant when he or she used a particular phrase to describe a soft skill, context provided by the participant statements in the interview transcripts guided the interpretation of meaning to facilitate more accurate grouping.

An example of grouping was the SS *be careful* being grouped with the negative *lack of safety awareness*. Another example was the negative *laziness* being grouped with *can-do attitude* and *good attitude*. Some phrases described soft skills that were particular examples of other more general participant soft skills preferences, as *can-do attitude* was a particular example of *good attitude*. *Good attitude* also included other codes such as *respects time and resources of others*, which a participant gave as an example of a good attitude.

These groupings of in vivo and value codes therefore included multiple levels of specificity. The most developed groups included four levels of specificity. For example, the negative phrase *no drive to be better* was a specific example of the negative phrase *lack of drive*, which was a specific example of *can-do attitude*, which was an example of *good attitude*, mentioned by the same and also a different participant from the one who

mentioned *no drive to do better*. Value coding reduced multiple phrasings of what was essentially the same characteristic to one phrase that could exemplify multiple instances of the same characteristic in one higher level SS.

When a characteristic no longer proved to be a specific example of a more generally phrased group of characteristics nor a more general example that could include other specific examples, the grouping of related characteristics under the most general value code was complete. It was necessary to create concept codes, which “assign meso or macro levels of meaning to data” (Saldaña, 2016, p. 119), for assignation to some top level categories at the top of hierarchies. Completing the SS hierarchy of specificity, six concept codes were created to bring together like groupings under a larger concept that no participant had phrased in that most-general manner.

For instance, the concept code *attitude* was added to the four levels of specificity mentioned, to allow the grouping of participant opinions about attitude that were not included under the previously most-general phrase, *good attitude*. In this manner, analysis grouped participant soft skills preferences into the six great-great grandchild codes, 21 great grandchild, 47 grandchild, 95 second child, and 10 parent codes. Grouping thus provided an initial assessment of which soft skills Wheatstone’s executives and managers preferred.

As with the analysis for Research Question 1, the analysis for Research Question 2 ranked the soft skills preference codes in order of importance by tallying the number of participants who stated favorable opinions about a soft skill, or negative opinions about what they considered to be a negative soft skill, and the number of times each of the participants mentioned the skill. The analysis was based on the belief that the larger the

number of participants whose statements included a code, and the more times a participant made statements with included that code, the more the executives and managers preferred their employees to possess the soft skill indicated by that code. The higher the valuation, the more the code indicated a Wheatstone soft skills preference. The analysis answered Research Questions 2 and 3 by utilizing the same code aggregation, code separation by RP, and reaggregation by employment level with the SS that it used with OC.

Knowing the amount of times executives and managers mentioned particular soft skills, and how many executives and managers did so, provided a general sense of what Wheatstone leaders perceived to be the most important soft skills. Results from this quantitative determination of the relative importance of various soft skills, however, could have been skewed by recent industry events or organizational initiatives. They also could have been skewed by some participants being especially emphatic or unusually minimal in their expression. And they could have been skewed by various participants intending different meanings when using the same word or the same meanings when using different words.

Qualitative analysis at least partially counterbalanced the possible existence of these effects, and provided more information for the findings and conclusions. The analysis examined the interview statements to see if they would provide contextual referents that would provide perspective on the statements of the other participants, either helping reinterpret the meaning of words used by others or by providing information that helped reinforce the initial interpretation. Reviewing interview statements provided contextual meaning to individual words and phrases used to describe soft skills. *Attitude*,

for instance, could be an example of a sense of entitlement, or it could be an example of a trait such as *hard working*. The context of the what was discussed in the interview prior to the asking of the question, other soft skills mentioned, examples given, and word choices that might be particular to Wheatstone provided the explanation of how to code individual soft skills. Utilizing this qualitative analysis caused some statements to be recoded, and some codes to be moved into a code group that more accurately reflected what the participant(s) intended in stating the preference. Integrating context in this way increased internal consistency between soft skill meanings and made the results of the quantitative analysis more reliable.

Research Question 3: What soft skills do the employees believe they should possess? Interviews with line staff members provided the data to answer this research question. To make the interview questions pertaining to the line staff soft skill valuations more relevant to a line staff point of view, the questions did not ask what traits, characteristics, attitudes, and behaviors they would most want to see their employees possess. Rather, the questions asked what characterized a successful employee at Wheatstone. While differently worded to account for the different positionality of staff at each level, the questions to the two leadership levels and to the line-staff level all elicited answers that portrayed the participants' beliefs regarding which soft skills were most important for Wheatstone employees to possess or demonstrate. The process of coding and analysis was the same for Research Question 3 as for Research Question 2. That is, the analysis included in vivo, values, and concept coding, code grouping, tallying the number of participants who mentioned the soft skill and the number of times they

mentioned it, and transcript-referencing to allow context to influence coding and re-grouping of SS.

Research Question 4: What soft skills do the employees demonstrate? To answer this question, this study planned to rely on the observation of employee behaviors, reports of behaviors from other participants, and the LRI assessment feedback report. The goal of Research Question 4 was to see if employees behaved in ways that were consistent with their statements of preference. Consistency would strengthen the statements participants made about Wheatstone soft skills preferences and reinforce the accuracy of the conclusions regarding Wheatstone valuation of soft skills. Inconsistency would indicate a discrepancy between the espoused and enacted beliefs, indicating a multiplicity of values and perhaps conflicting values.

Observational data and participant statements about demonstrated soft skills of other employees were insufficient to include in analysis. The analysis of data for Research Question 4 therefore relied solely on LRI data. The challenge was that LRI measured five broad soft skills categories that would not necessarily be the same categories mentioned by the participants in their interviews. Even when the participants did mention one or more of the five categories, they did not necessarily mean the same thing that LRI meant when using the terms. Examining the soft skills at the more granular level of behaviors or set of behaviors that defined the soft skills, however, allowed for comparison. LRI defined each of their five soft skills as being comprised of various behaviors that are grouped together into sets. The participants also mentioned various behaviors that they grouped into sets to explain their stated soft skill preferences. Examining the behavioral definitions of the LRI soft skills terms and the behavioral

definitions of the participants' soft skills preferences provided a vehicle for comparing espoused and demonstrated soft skills.

Research Question 5: What values and characteristics are common to organizational culture and soft skills in the host organization? Schein (2017) wrote that “cultures tell their members who they are, how to behave toward each other, and how to feel good about themselves” (p. 23). In so doing, Schein suggested a connection between organizational-level culture and employee-level soft skills. Research Question 5 explored the commonalities between the organizational levels of culture, soft skills preferences, and demonstrated soft skills.

As with Research Question 4, answering this question required comparing two different phenomena, in this case organizational culture and soft skills. Comparison required a unit of comparison common to both phenomena, which was obtained by noting characteristics of each phenomenon in the data. The characteristics of Wheatstone's organizational culture were compared with the characteristics of their espoused and demonstrated soft skill preferences. Further, the characteristics of each might not be exactly the same characteristics, but might nevertheless express the same values. Therefore, though common characteristics is a way of showing similarity between the two phenomena, the fundamental unit of comparison became values.

What characterized Wheatstone's preferences for particular soft skills either would or would not be expressions of the same values that Wheatstone expressed through the adoption of the particular characteristics of organizational culture. Said differently, the values underlying the characteristics of Wheatstone's soft skill preferences may be the same as the values underlying the characteristics of Wheatstone's organizational

culture. Characteristics may be the same, but even if they are not the same, they may be different expressions of the same values.

Utilizing data from all data sources, analysis examined whether there were common characteristics and values revealed in the findings of the first four research questions. Analysis in Research Question 5 looked to see if the characteristics and values of soft skill preferences of the executives and managers were also present in the soft skills that line staff considered to be ones that made for successful employment, in the soft skills that the line staff demonstrated, and in the characteristics of Wheatstone's organizational culture. This analysis required four steps.

The first step utilized a Microsoft Excel workbook to list the representative characteristics of the organizational culture provided by the data for Research Question 1 in four columns and 137 rows. The first column listed the 137 OC, each code in its own row. The second column listed the research participant (RP) numerical designation(s) of those who mentioned that code, which facilitated differentiation between leader and employee preferences. The third column listed the total number of participants who mentioned the code, and the fourth column listed the total number of times that the code was mentioned. This first step of analysis provided the evidence for what characterized the overall culture. It also revealed similarities and differences between executive, manager, and line staff views of organizational culture.

The second step of analysis listed the characteristics of the important soft skill preferences provided by the SS for Research Questions 2 and 3 in a similar set of four columns on another spreadsheet of that workbook. A third spreadsheet listed the LRI results, with each of five rows containing the average score of the six line staff participant

scores on one of the five LRI soft skill categories, and a separate column for behaviors associated with the soft skill. This second step provided the evidence for what characterized the line staff's demonstrated soft skill behaviors.

In the third step of analysis, the verbiage that described the characteristics of soft skill preferences was distilled to fewer and fewer words to represent the SS's main characteristics. The distillation revealed the commonalities of characteristics among SS. This stating of the main characteristics of the preferred soft skills revealed groups of characteristics. The essence of what characterized those groups of soft skill preferences was values. Each set of soft skills was unified by the common values that were found in the last distillation.

The fourth and last step of analysis, which included data from the codes, memos, and documents, compared those soft skill characteristics and values to the characteristics and values of the organizational cultures described through CVF in answer to Research Question 1. The extent to which the data pertinent to soft skills displayed the same characteristics and values as the data pertinent to demonstrated behaviors and to Wheatstone's organizational culture was the extent to which there was much or little commonality, and therefore a weak or strong link, between the characteristics of organizational culture and of employee soft skills.

Discovering the characteristics and values common to Wheatstone's organizational culture and to its espoused and demonstrated soft skill preferences led to the formation of value-based themes that united the two phenomena. Each theme was a concise statement of core Wheatstone values. Characteristics of organizational culture and characteristics of soft skill preferences were grouped together in themes as

expressions of sets of values. Each theme was labelled by a phrase that expressed the essence of the value.

To compare characteristics and discover themes, the analysis utilized pattern codes as described by Saldaña (2016). Pattern coding grouped together the characteristics common to both organizational phenomena, that is to soft skills and to culture, according to values of those characteristics. Each set of values became a pattern code. For instance, an adhocracy organization that strives to always be on the cutting edge of new technology may prefer to hire, retain, and promote individual employees who possess the soft skill of *thinks outside the box* because values of both the characteristics of adhocracy culture and the characteristics of the soft skill of *thinks outside the box* include newness and creativity. The values of newness and creativity appear in soft skills preferences as *thinks outside the box* and in cultural characteristics as adhocracy. The values common to both are newness and creativity, and the pattern code would then be *newness and creativity*.

Similarly, an organization that maintains a hierarchy culture may also strongly prefers individual employees to possess the soft skill of *attendance and punctuality* as hierarchy culture is characterized by stability, and organizational stability is supported when employees reliably show up on time. The value of stability would then be expressed as the soft skill characteristic *attendance and punctuality* and as a hierarchy organizational culture. The pattern code would then be *reliability and stability*, and the code would name the pattern of common values that characterize both a set of soft skills (attendance, punctuality, reliability, consistency, orderliness) and an organizational culture (hierarchy). To answer Research Question 5, the analysis developed pattern codes, re-examined them against contextual evidence from the interview transcripts, and

grouped similar patterns together into themes. The analysis thereby identified themes that characterized the values common to Wheatstone's culture and to its soft skills preferences.

Summary of Methodology

Academic soft skills research has primarily consisted of survey methodology utilizing Likert scales to determine which soft skills employers value most. Given that the literature findings have produced little consensus as to which soft skills employers most prefer, this study broadened the scope of soft skills investigation to include the consideration of organizational culture as a factor for determining which soft skills employers most prefer and institutions of higher education should educate toward. This study employed a single-site, embedded case study to explore the possibility that the values that characterized the organizational culture of a Central New York dairy production company also characterized the values found in the soft skills valuations of its leaders and employees, and the soft skill traits and behaviors its employees demonstrated.

This study answered five research questions that asked what the company's organizational culture was, what soft skills expectations leaders and employees had, what soft skills employees demonstrated, and what the characteristics soft skills and the organizational culture have in common. To answer those questions, the case study relied primarily on interviews. It also triangulated data from other supporting data sources: (a) direct observations, (b) LRI's soft skills assessment, (c) the company website, and (d) documentation of physical artifacts.

The analysis utilized CVF to understand organizational culture, although it did not utilize the data gathered from the CVF's OCAI due to the insufficient number of surveys

returned. Analysis relied on in vivo, value, and concept coding, as described by Saldaña (2016), to distill the data from the 14 interviews. The analysis grouped codes for soft skills and codes for organizational culture to present evidence for the first four research questions. The analysis then utilized pattern coding, as described by Saldaña (2016), to compare the characteristics revealed by the OC and SS codes. This comparison revealed themes that provided answers to the fifth research question.

Chapter 4 presents the evidence gathered in the case study, the analysis of the evidence, and the findings of the analysis. Chapter 5 discusses whether the themes found in Chapter 4 indicate that there was sufficient evidence of a pattern of common characteristics to warrant future exploration of soft skills through the lens of organizational culture. Chapter 5 also discusses the limitations of the study and addresses the potential impact of the findings for soft skills research, for higher education, and for businesses.

Chapter 4: Results

Research Questions

The primary purpose of this study was to explore whether the characteristics of the soft skills that the host organization preferred also existed in its organizational culture. To frame the exploration, this study posed five key questions:

1. What is the company's organizational culture?
2. What soft skills do the executives and managers prefer their employees demonstrate?
3. What soft skills do the employees believe they should demonstrate?
4. What soft skills do the employees demonstrate?
5. What values and characteristics are common to the organizational culture and soft skills in the host organization?

Data Analysis and Findings

The analysis provided answers to the research questions primarily by the coding of 14 interviews conducted at the host company, and by aggregating the codes into groups. The 14 interviews included four executives, four managers, and six line staff members. Soft skills codes are referred to as SS while codes for the characteristics of organizational culture are referred to as OC. This section designates the executive research participants as *ERP*, the manager research participants as *MRP*, and the line staff research participants as *LRP*. Their participant number follows their RP designation, as, for instance, ERP 13. For confidentiality, the sequence of RP numbers does not

correspond with the sequence in which the participants were interviewed. When this writing refers to *leaders*, it refers to the four executives and the four managers, together, as a group of people who set policy for themselves and for those below them in the organizational hierarchy. When this chapter refers to *employees*, it may refer either to line staff only, those who do not set policy, or to both line staff and managers together, those who comprise the set of people employed at the organizational subunit, and which it is can be inferred by context.

ERP titles were Director of Corporate Learning, General Counsel, Human Resource Director, and Vice President of Operations and Chief Operating Officer. The General Counsel was also the head of IT and procurement. MRP titles were Plant Manager, Production Manager, Shift Manager, and Training Manager. LRP titles were Filler II, Filler Operator, Floater II, Lab Technician, Maintenance Mechanic Level I, and Processor Level II.

There were three male executives and one female executive, one female and three male managers, and two female and four male line staff members. The executives worked primarily at the company headquarters in a small town approximately 20 miles from the production facility at which managers and line staff worked, occasionally visiting the subunit of this study and the other facilities that the organization held in the region. At the time of the interviews, one executive had been at Wheatstone for under 1 month, two had been with the organization under 2 years, and one executive had been with Wheatstone for under 10 years. The managers had been there for under 1 year up to under 20 years. The line staff members had been there between 1 and 6 years.

Complexity of findings. The findings revealed an unexpected complexity. Instead of there being one organizational culture, there were three cultures operating simultaneously. One was the dominant culture, reflecting the purpose of the organization. One was a supporting culture, existing more strongly at the subunit among line staff than at the headquarters among executives. The third culture was present but less embedded than the other two.

Soft skills preferences were also more complex than straightforward. The study reproduced, in microcosm, the research findings of the soft skills literature. The RPs in this study valued many soft skills; they described the same soft skills differently; they grouped various traits, characteristics, attributes, attitudes, abilities, skills, and behaviors together as similar soft skills, and different RPs did so differently; and they also used various combinations of soft skills to explain specific or solitary soft skills. Careful checking of the interview transcripts for context helped the coding and analysis to draw the conclusions presented here to each of the research questions.

Challenges to a complete presentation of the findings. While the interviews provided a considerable amount of data, this study was somewhat impacted by not gathering all of the data called for by the research design. There were three challenges to the data collection that impacted the findings on organizational culture, and one challenge that impacted the findings on soft skills.

The first challenge to collecting data on Wheatstone's organizational culture was that only two of the four ERP completed the OCAI. One of those two ERP had, at the time of the survey, been at Wheatstone under 1 month, and his knowledge of the organizational culture was therefore not deeply informed. The OCAI survey from the

ERP who had been with the organization for over 1 year presented a picture of the organization's culture as being strongly skewed in a direction that was not supported by the ERP's interview statements, by the other ERP's survey, or by the statements of other ERP. That ERP's OCAI was at odds with the totality of the data collected. This presented the possibility of that ERP's OCAI being considerably different from the other three, had all ERP completed the survey, making it unwise to use that ERP's survey to represent the totality of Wheatstone's OCAI results. While plentiful use was made of CVF during the analysis phase, the OCAI data was insufficiently reliable to contribute to the findings, and was therefore not included in the analysis. As OCAI data was intended for supporting the interview material however, removing OCAI data likely did not significantly influence the findings.

The second challenge to collecting data on Wheatstone's organizational culture is highlighted with Schein's (2004) seeing organizational culture as "a pattern of shared basic assumptions that was learned by a group" (p. 17). To be sure that one properly understood the underlying, unspoken assumptions that are a culture's essence, one must move from being an interested researcher to one who is perceived by the company as a valuable helper (Schein, 2017). Making that transition would have demanded more involvement than time for this study allowed. It was therefore not possible to produce reliable findings about Wheatstone's basic underlying assumptions that would have explained the essence of Wheatstone's organizational culture.

This challenge was overcome by relying more on the general amalgam of definitions of organizational culture that Schein (2004, 2017) and Cameron and Quinn (2011) presented. The amalgam was summed up by Schein's (2004) more broad

definition of culture as “the accumulated shared learning of a group” (p. 17), and Cameron and Quinn’s (2011) definitions of culture as “the social glue binding an organization together” (p. 18) and “how things are around here” (p. 19). The analysis of Wheatstone’s culture looked for the organization’s shared values that guided the thoughts, feelings, expectations and action of its members, and the characteristics of those thoughts, feelings, expectations and actions. Reliance on the broader view of culture meant that not finding the unspoken, underlying assumptions was not critical.

Third, Wheatstone did not provide internal archival data. Data such as memos from the Human Resources department and annual budget records may have, in some measure, reinforced or presented a different picture from what the other data presented. While it would have been surprising to find internal archival data that negated the findings on Wheatstone’s organizational culture, examination of such data may have changed or deepened the understanding of the organization’s culture.

Apart from the three challenges to analysis of organizational culture, there was also a challenge to collecting soft skills data. Being able to state with full confidence that line staff members demonstrated particular soft skills would have required observation of the employees in various situations, especially during the performance of their tasks. Both the short duration of the study and the researcher having only attained partial status as a helper limited the observations mostly to nonproduction areas of the subunit. Without being able to repeatedly observe line staff during the performance of their tasks on the production floor, what remained to provide observational data about soft skills was only social interactions during meetings, breaks, and transitions. The answer to Research

Question 4 regarding the line staff's demonstrated soft skills was therefore limited to the LRI online situational judgment test.

Research Question 1. *What is the company's organizational culture?* To understand Wheatstone Dairy's organizational culture, the analysis applied both Schein's (2017) concepts and CVF (Cameron & Quinn, 2011) to the various sources of data. To examine the differences between the participants' viewpoints on their culture, the analysis separately examined the data from the executive leadership level, which was responsible for the overall organizational direction, and the subunit level, which was responsible for implementing the executive direction.

The 14 interviews provided plentiful data to characterize Wheatstone's culture. The process of coding applied 137 in vivo, value, and concept codes, later grouped into 25 categories, to interview statements. A review of the 25 categories and related interview statements, tallies of the number of interviewees who mentioned the various characteristics and the number of times they noted those characteristics, indicated that the participants believed in, valued, or sought five cultural characteristics. In the view of the participants, Wheatstone's culture was characterized by: (a) stability, (b) increased profit, (c) expanded production, (d) safety, and (e) continuous improvement. These five characteristics were drawn from the coding and are explained here. To name the cultures and describe them using an accepted framework, after describing the five characteristics the analysis will apply CVF.

Stability. When asked what they liked about the organization, most of the line staff referred to stability. LRP 01, for instance, characterized Wheatstone as "Constant. You always have a job here." LRP 05 defined Wheatstone as a good company because

“they don’t lay people off.” LRP 02 saw Wheatstone as “a good place to work. What I mean by that is it’s secure. I know it’s going to be here . . . they’re going to make payroll.” The executives also stated their belief in the importance of stability, with ERP 13 positively seeing Wheatstone as “a very stable organization.” When the company owner set—what for Wheatstone was an unusual goal—to double sales in 5 years, ERP 13 saw it as “a pretty monumental task,” demonstrating that the culture had been oriented toward stability and incremental growth rather than toward speedy change.

Profit. The primary purpose of the organization was increasing profit. ERP 09 stated Wheatstone’s purpose succinctly: “We’re here to drive value for the shareholders and the owners.” Another executive, MRP 12, was clear that they judged their managers on their ability to increase profits: “On the managers’ level . . . we look at what’s the value added to the company to the bottom line.” LRP 14, when asked what the company is proud of, referred—as many line staff did—to what management primarily lauded at the quarterly meetings: “their sales.” Wheatstone, while supporting the basic human desire to not hurt others, also valued safety in aiding profits. LRP 10 put safety into this context: “If we have zero people injured throughout 365 days, that’s also positive because there’s less money of the company going to worker’s comp.”

Production. Wheatstone focused on maintaining and expanding production and distribution. MRP 08 stated clearly: “Production, at the end of the day, is probably our most important thing that we do.” MRP 08 was not alone in that assessment. Across all three job levels, 12 participants cited production as Wheatstone’s focus, which was a greater number than for any other value. Although one manager and one line staff employee cited *working with others* as their greatest source of enjoyment, the interviews

indicated that production was, for most employees, what they held in mind as their focus, how they organized their day, and about which they thought the most. This was especially true at the subunit level. MRP 03 explained that their “common goal [was to] put as much product out as we can.” This focus is supported by 85% of the employees at Wheatstone working in roles of production and operations.

Safety. Safety was a value that every interviewee cited, and all seemed to respect safety. While MRP 08 assigned Wheatstone’s *sine qua non* to profitability, the manager cited safety as the company’s most important value.

We always talk about safety, then we talk about quality, and then we talk about production Even though production, at the end of the day, is probably our most important thing that we do . . . we start with safety

We talk safety first because, at the end of the day for us [a] safety culture needs to be number one. (MRP 08)

To MRP 08, safety even trumped production.

The participants maintained different reasons for valuing safety. MRP 08 valued employee safety with, “At the end of the day [we want] safe employees, and they know you’re creating a safe environment for them . . . we want you to be safe and go home safe.” As previously noted, others valued safety for reasons of profit. MRP 03 valued employee safety by saying, “If we follow these [safety] rules, they’re proven to work. It’s really to protect the customer.”

Some participants valued safety because it assisted organizational survival in its highly regulated environment. One manager spoke at length about the many governmental safety regulations that necessitated many specific procedures to prevent

and respond to different types of safety violations. A single violation of some of these regulated procedures, or repeated violation of any of these procedures, could result in governmental intervention that might ultimately close the organization. Regardless of the reason, different employees stated that valuing safety and following safety procedures had become so ingrained that all mentioned it as a value, and most participants described it as a *bedrock value*.

Continuous improvement. The Wheatstone subunit's mission and values statement's primary purpose was "to produce extended shelf life products for retail and foodservice with excellence every day. Safety and quality come first, while efficiency, accuracy, and timely production are the keys to our future." To maintain and expand production, they focused on maintaining and continuously improving procedures. As one of the line staff members described it, "They're always trying to talk about what this is and how this is supposed to be and if you wear uniforms and all different types of [procedural] things" (LRP 01). As one of the executives described it, "We have a Bright Ideas Program where an employee can put on a piece of paper what she or he see[s] as important in how a process or a procedure could be improved for operational gains or productivity gains" (ERP 07).

Competing values. Presenting Wheatstone as an organization that valued and was characterized by stability, profit, production, safety, and continuous improvement, may provide a picture of its culture as clear and harmonious, efficiently working together in safety to produce goods and increase profit. Wheatstone, a company that had survived for 85 years, did integrate those five elements to continue successfully. This valid cultural picture, however, is incomplete. Dynamic tensions existed between opposing cultural

values. To understand the dynamic nature of Wheatstone's culture and to frame it in a way that researchers have understood other organizational cultures, it is useful to utilize CVF.

Viewed through the lens of CVF, Wheatstone maintained three cultures, which, stated in descending order of strength, were market, hierarchy, and clan. This section presents evidence of the presence of each of the three cultures. The participants' statements revealed the five elements of stability, profit, production, safety, and continuous improvement; this section utilizes interview evidence and adds evidence from observations, documents, and artifacts to demonstrate that Wheatstone maintained three cultures. After the cultures are presented, the answer to Research Question 1 completes the picture of Wheatstone organizational culture by describing the dynamic tensions of Wheatstone's competing values.

Market. The subunit's physical structure and its 24/7, 365 day, schedule were designed for productivity. During this study, word exchanges between employees were direct, minimal, and functional. Verbal interchanges were instructional in nature, primarily conveying information that maintained production and safety. Wheatstone continuously expanded its product offerings and increased its speed of production. These characteristics of competition and market expansion were exemplified by two physical items. A mounted and laminated 2010 newspaper article hung in the subunit entrance hallway, describing their installation of a high-speed, extended-shelf-life machine. Also, the headquarters lobby featured a display cabinet with an expanded number of product items that did not easily fit into the case, which seemed to parallel the four expansions

that the subunit had undergone within under 15 years. The cabinet was topped by a silver award, crowning it with the value of a winning characteristic of a market culture.

Hierarchy. There was testimonial evidence of centralized top-down decision making at Wheatstone. Decision-making boundaries were clearly delimited. A single plant manager occupied the top of the subunit's hierarchical pyramid. He was often in contact with the senior leadership beyond the subunit, and he participated in the decision making. Shift managers reported to the plant manager and expressed that they had little or no communication with senior leadership. Roles, position titles, and authority levels marked employee positions in a stable stratified structure. Different clothes clearly differentiated the employees between different hierarchical levels: employees who roamed from machine to machine (floaters) wore blue company-logoed polo shirts, while supervisors wore black company-logoed polo shirts, and the plant manager wore business casual. The Bright Ideas Program for improved efficiencies provided larger financial rewards than the Safety Ideas Program, showing the value that Wheatstone placed on improving efficiency.

Wheatstone physically displayed the value of safety at the subunit, and some participants, mostly the managers, referenced safety. It seems that the value of safety is an element that CVF would most strongly associate with hierarchy because safety maintains stability, is characterized by control, and does not seek expansion. Safety was enacted through Wheatstone's emphasis on measurement, error detection, process control, and following regulations, which are key elements in a hierarchy culture. Safety is also characteristic of a clan's desire for the well-being of its members. When considering safety as an element of the social glue that bound Wheatstone Dairy

together, however, safety's more salient characteristic was that of being part of process orientation.

As the line staff clocked out, a bottleneck of employees usually developed in the hallway. The safety committee took that opportunity to install two glass cabinets in the hallway for the employees to view safety violations that had been reported and ideas that had been adopted. Management also affixed a working traffic light on the wall. The traffic signal appeared significantly larger in a hallway than hanging at an intersection—a strong signal of the safety level achieved during the previous day that reminded employees of the importance of obeying regulations by adhering to procedure.

Clan. Through its website that displayed pictures of farms, farmers, and the Wheatstone founding family, Wheatstone projected a narrative of valuing people. Photographs displayed in the entryways to the headquarters and the subunit supported the narrative of Wheatstone as a family business. The headquarters and subunit were barred to outsiders by locked doors, and the subunit was mostly windowless, providing a sense of being isolated together within a special *members only* group. Wheatstone also donated a small portion of its revenue to local charities, supporting the value of community.

Wheatstone maintained its three cultures simultaneously, each culture vying to influence decisions, rationalizations, structures and processes in its own way. This created dynamic tensions within Wheatstone's overall culture. This section now describes those tensions. While examining the tensions highlights interplay of separate cultures, it also shows how Wheatstone's overall culture is made up of the three different pieces and the tensions between them. Wheatstone did maintain three separate cultures, but the

cultural characteristics that prevailed in the interactions of the separate cultures exposed what the overall Wheatstone culture valued most.

Market versus. hierarchy. The main competing values were market expansion and speedy production on the one hand, and safety, quality, and procedural regulation on the other. The owner's directive to double revenue in 5 years, the focus of the quarterly manager meetings on sales targets, the expansion to supplying national retailers, and meeting the changing consumer tastes, relied on the value of speedy production. LRP 04 exemplified this value when he stated simply, "You can't slow down production."

Opposing the market culture's focus on external customers and production, Wheatstone maintained an inwardly oriented hierarchy culture that emphasized the need for safety and following procedure. Where market culture valued what is accomplished, hierarchy culture valued how it is accomplished. LRP 02, for instance, was very concerned with the *how* in saying, "You really, really have to be extremely careful and be ultra-aware of what you're doing at all time[s]. Measure twice, cut once is definitely a rule of thumb." As with many of the participants, LRP 02 valued safety and accuracy and, therefore, process. LRP 14 also paid close attention to process, saying,

If someone asked you to do something . . . you have to remember that they need you to do that and then just keep everything in order, too, because there is a certain order of the priority list of what we test first, who we accommodate first.

Both line staff members, LRP 02 and LRP 14, spoke from within the value system of a hierarchy culture that opposed the value system of the market culture.

Some executives also sought to increase the values of the hierarchy culture over the values of market culture. ERP 07 was one such proponent:

We're very good in acting fast How about the strategic planning part, the other end of that spectrum? . . . We might, as an organization, default a little bit too much to that sense of urgency and take pride in that, while for some people, for some of us, we would just prefer to plan it out.

The value of speedy production to expand the sales characteristic of the market culture existed in constant tension with the values of planned efficiency, safety, and the process-orientation characteristic of a hierarchal culture. Nevertheless, the proponents of increased hierarchy were fewer than those of increased market, especially among the executives who set strategic direction.

Market versus clan. Interview evidence indicated a second value to compete with the dominant market culture: clan culture. The market culture was oriented toward production for the good of the organization, while the clan culture is more oriented toward the good of the individual employee. One executive acknowledged this clash of values and the dominance of market culture:

It's hard work. It's physically hard, it's mentally hard . . . lots of noise all the time There's still water on the floor all the time You got these guys that are out there driving trucks . . . in the snow, in the rain . . . working 12-14 hours a day. We could do a much better job thanking our employees for what they do. I'm sure every employee would tell you that they should be paid more than they're paid, and they're probably right. It's tough. I don't want to say it's thankless, because we try to thank them

whether it's in benefits or pay or just [with] a company picnic or something. Probably not enough. I'm sure out of the 850 employees, 830 of them would say it's not enough. It's tough. (ERP 09)

The value of prioritizing the employee experience competed with the values of expanding production to increase profit. Clan culture competed with market culture, and market culture was stronger.

The five cultural characteristics derived from coding interview statements—stability, profit, production, safety, and continuous improvement—were subsumed into the CVF culture designations. Market culture, which included stability, production, and profit, had the largest influence over cultural characteristics. Hierarchy, which included stability, safety, and continuous improvement, both competed with and supported production and profit. Its process orientation was a way of working for the line staff and a focus of the managers, an orientation to be balanced with productivity, but the goal and main value for them was production for the sake of profit. For executives, production, profit, and expansion were the main concern. Overall therefore Wheatstone maintained market culture characteristics which were supported by, though also conflicted with, hierarchy culture characteristics. Clan characteristics overlapped with market in that teamwork works together well with production, but were not a value that was strongly enacted. Wheatstone did not display the characteristics of adhocracy culture.

Summary of organizational culture. This study did not obtain sufficient data on the assumptions that undergirded beliefs and values that Schein (2004, 2017) saw as the essence of an organization's culture. This study did, however, find sufficient evidence of Wheatstone's characteristics and values to describe its culture. This case study found

evidence for Wheatstone's dominant culture being what CVF labels *market culture*. Additionally, this study provided evidence of hierarchy, and to a lesser extent clan, cultures operating simultaneously with the market culture. Market characteristics included a sense of urgency; focus on increasing production, and expanding market share; and increasing profit. Hierarchy characteristics included top-down decision making coupled with well-developed hierarchical role differentiations; value placed on adhering to processes and procedures, including safety; and desire for continuous improvement in efficiency. In addition, this study found some evidence, at the executive level, of espousal of clan values and use of clan values in organizational decision making.

Research Question 2. *What soft skills do the executives and managers prefer their employees demonstrate?* This section presents Wheatstone's preferences for employee soft skills as seen from the perspective of the leaders. Their views were separated from those of the line staff employees, whose opinions are presented in answer to Research Question 3. As the executives and managers hire, promote, and set policy, their perspectives on soft skills may have differed from those of the line staff.

The executives and managers made 682 statements that contained many different attempts to describe the soft skills that they valued and wanted their employees to possess. In vivo and values coding of the statements revealed the executive and manager preferences for 117 different soft skills that either managers and line staff, or just line staff, should possess. Their preference statements included many different expressions of preference for soft skills. The statements revealed not only which soft skills the executives and managers preferred, but they also revealed three other key points, namely,

1. For Wheatstone executives and managers, there were three types of soft skills: behaviors, abilities, and traits.
2. Wheatstone executives and managers stated preferences much more often for employees to possess traits than to possess abilities or to demonstrate behaviors.
3. Wheatstone executives and managers spoke of soft skills holistically.

This section first explains these three findings to provide context to leader preferences, then it presents the content of their preferences, and ranks those preferences.

Soft skills were behaviors, abilities, and traits. To the Wheatstone leaders, the term *soft skills* did not necessarily mean a skill in the sense of an ability or proficiency. When the leaders spoke about soft skills, they sometimes mentioned behaviors, sometimes mentioned abilities or skills, and sometimes mentioned traits. They saw some soft skills as individual behaviors or particular actions. They saw some soft skills as abilities that an employee maintained and had the potential to actualize by demonstrating particular behaviors. And they saw some soft skills as traits or characteristics, which were inherent to or missing from the employee, were difficult to teach, and, if present, were likely to manifest through particular behaviors.

The first type of leader statement specified soft skill behaviors, that is, preferences for particular nontechnical actions employees should demonstrate. MRP11 typified this type of soft skills statement when saying, “I want someone who is going to be here on time and be here when they’re scheduled to be.” This soft skill preference most highly valued the employee behaviors of punctuality and attendance.

The second type of participant statement valued employee abilities or skills, that is, an employee's potential to demonstrate the behaviors that the leaders preferred, and the ability to successfully coordinate the application of those behaviors to achieve intended outcomes. The following statement by ERP 07 is an example of a preference for a soft skill ability. This soft skill was in vivo coded both as *SS communication* and as *SS ability to influence*, and was a specific subskill of concept code *SS II interpersonal skills*.

The skill aspect, for me, is you're doing something for something else, to achieve something. That's what you employ your skills for. You want to get your project done at work, can't do it by yourself, no, you need to find a collaborator, how do you go about that? How do you ask for help? How do you agree on participation in something? How do you conduct a group meeting? These are communication skills for me, involving others, influencing others, encouraging, motivating others. (ERP 07)

The thrust of ERP 07's soft skill description is the employee's ability to achieve an end. The ability involves coordinating the use of one or multiple soft skill behaviors to bring about that end. In this case, the participant could be described as valuing an employee's ability to influence through utilization of behaviors that encourage and motivate.

In the statement, ERP 07 saw the ability to influence as synonymous with the employee's skill at communicating. The ability to influence and the skill of communication included utilizing the skills of finding a collaborator, encouraging others, conducting a meeting, asking for help, and obtaining agreement on participation. Each of those skills, in turn, would involve specific behaviors. For instance, arriving on time or

ahead of time is a behavior that supports the skill of conducting a meeting. Abilities or skills involve actuating the skill through more than one behavior.

The third type of statement valued sets of traits. These soft skills statements contained multiple descriptors, typically referring to a preference for a type of employee—an employee who is known by his or her possession of a list of characteristics or traits. These combinations of preferred traits varied by participant and by participant statement, but what unified them was that they described more of who the person was or how they approached his or her work rather than what he or she should do (behavior) or accomplish (ability). For instance, MRP 12 said,

I'd like to see employees that are dedicated, hard-working people that feel like they have an investment in the job. You can always teach people the skill, you can't teach them the motivation, the hard work; those kind of things. We look for people with good attitude, willing to work, wanting to be here every day on time.

Such statements emphasized the internal traits of preferred employees rather than their external behaviors or abilities to achieve specific objectives. Whereas MRP 11's statement valued an employee's arriving on time, MRP 12's statement valued the employee who wanted to arrive on time.

Leaders were more concerned with traits than abilities or behaviors. The interview statements revealed that Wheatstone executives and managers valued soft skills behaviors, soft skills abilities, and sets of employee traits, but not in equal measure. They spoke about traits more than about behaviors or abilities. The analysis tabulated the frequency of mentions of behaviors, of abilities, and of traits, and found that the leaders

most often stated preferences for employee traits. The finding is, therefore, that they were more concerned with employing staff who had certain traits than with employing staff who possessed certain abilities or demonstrated certain behaviors. Table 4.1 shows that of the 16 soft skills mentioned by two or more leaders, 12 were traits, whereas only three were behaviors and one was an ability. The most preferred soft skills are discussed in a later section of findings that answer Research Question 2.

Soft skills were holistic. The third finding provided additional context to the list of soft skills that the executives and managers most preferred the line staff to possess or demonstrate: the *holistic nature* of the participants' soft skills descriptions. The leaders did not usually list the soft skills atomistically, one clearly separated from the other by adherence to universally agreed-upon definitions that distinguished the soft skills and then ranked in order of importance to the participant. Rather, the leaders presented the soft skills holistically, explaining them by citing other soft skills with the result that soft skills explained or set limits to, or in some other way stood in relationship with, other soft skills. Four elements comprised the holistic nature of their soft skills statements: (a) complex sets, (b) mutual comprehensibility, (c) unison, and (d) counterpoint.

Complex sets. ERP 06's statement also indicated that *getting the best production* needed to be demonstrated as a complex set of individual soft skills. Successful employees could be recognized by getting their best-possible production, which included high productivity, doing things right, having an enthusiastic manner, and by the good quality of the products they made. The employees possessed a complex set of skills that made them successful, demonstrating the individual soft skills together as a set. A successful employee possessed a set of situationally valued skills. Different participants

Table 4.1

Soft Skills that Executives and Managers Considered Important for Employees to Possess or to Demonstrate (Descending Frequency of Mention)

Type of Soft Skill	Leader's Main Soft Skill Preference	Number of Leaders Mentioning the Soft Skill	Number of Times Soft Skill was Mentioned
Trait	Personally invested/engaged	8	32
Behavior	Helping team and organization	7	12
Trait	Good attitude	7	10
Ability	Communication	6	17
Trait	Willing to learn	6	10
Behavior	Attendance and punctuality	5	13
Trait	Honest	5	6
Behavior	Takes initiative	3	5
Trait	Flexible	3	4
Trait	Hardworking	3	4
Trait	Reliable	2	4
Trait	Enthusiastic	2	3
Trait	Uncomplaining	2	3
Trait	Teachable	2	3
Trait	Trustworthy	2	3
Trait	Cooperative	2	2

valued different sets of soft skills, but soft skills operated in complex sets that involved more than a few individual soft skills.

Mutual comprehensibility. The necessity of using one soft skill to understand another was typical of the leaders' statements. For instance, for MRP 03, the soft skill *helping the team* meant that an employee used the soft skill of taking initiative (to help the team). *Helping the team* was understood through inclusion of *taking initiative*. For ERP 07, *ability to complete a project* was itself a soft skill that involved *communication*, which included involving others, influencing them, encouraging them, and motivating them—each as a separate soft skill. *Ability to influence*, for instance, had to be considered to understand *ability to complete a project*, and *ability to complete a project* had to be considered to understand *ability to influence*. This may explain why the Likert surveys often used in soft skills studies so consistently return high scores on nearly all the soft skills rated: soft skills include each other in their definitions. When considering the rankings in Table 4.1, the reader can understand, for instance, *helping team and organization* as separate from but also together with *personally invested/engaged*.

Unison. Further, ERP 06's description of the successful employee used soft skills together as a unit.

Successful line staff. Those are the people who are not only . . . going to try to get the best possible production they can numbers-wise output.

They're also going to make sure that the quality of the output is there because without the quality, no matter what you produce, is worthless—especially in our industry. Those people really make a major impact on the company with making sure that they're doing everything in the right

manner and doing it in an enthusiastic manner. You really see good quality and good numbers out of them. They tend to stick around. (ERP 06)

ERP 06's soft skill *gets the best possible production* included both quantity and quality such that, if the employee demonstrated the soft skill of productivity without the soft skill of attention to quality, they had not actually demonstrated the soft skill of productivity. *Gets the best possible production* also included enthusiasm and attention to procedure. If the employee produced a lot and managed to also have the products of high quality but did not follow procedure or happened to be highly skilled but performed with a lackluster attitude, he or she was not demonstrating the soft skill of *getting the best production*. The individual soft skills that made the set needed to work in unison because underperformance on any one soft skill lowered the performance of the set of soft skills.

Counterpoint. ERP 06 listed the soft skills that not only reinforced and harmonized with each other but also acted in counterpoint. The executive's list included enthusiasm, attention to quality, completing tasks in a way that is considered to be correct, creating good quality of product, good quantity of products, and having a major impact on the company. These soft skills maintained competing characteristics: output (as much as possible) and enthusiasm, both of which would typically indicate working speedily; quality (creating an excellent product) and doing everything in the right manner (following procedure), both of which would typically indicate working slowly, deliberately, and carefully; and having a major impact, which might indicate being an agent of change and instability. ERP 06 was not the only participant to balance production with quality or with safety or with following a prescribed procedure.

The understanding that soft skills operate holistically in sets with harmonious counterpoints and that they can only be understood together with the existence of other soft skills, provides context for this next section. While individual soft skills are presented in this section in ranked order to reveal the important and most important soft skill preferences, the previous section demonstrated that soft skills do not operate as independently from each other as rankings would suggest. If a leader prefers soft skill X over Y, it should nevertheless be understood that soft skill Y may also be part of soft skill X. Given this finding that even in preferring one soft skill over another leaders include the presence of the other, this section now presents, ranks, and explains the individual soft skills that the executives and managers most preferred their employees to possess or demonstrate.

The individual soft skills that the leaders preferred. For the purpose of this section, *preferred* and *important* soft skills are defined as being positively mentioned by at least two of the eight participant leaders. If only one leader mentioned a soft skill, it might not have been important to Wheatstone Dairy; if more than one leader mentioned the skill, then there was a likelihood that possessing the skill would benefit an employee, and that therefore it was a skill preferred by Wheatstone. The analysis defined *most preferred* and *most important* as soft skills that a majority of Wheatstone leaders valued. That is, at least five of the eight leader participants had to value a soft skill for it to be *most preferred* or *most important*. There were seven such soft skills.

The list in Table 4.1 shows that leaders preferred 12 particular traits; the ability to communicate; and the behaviors of helping out, excellent attendance and punctuality, and taking initiative. The leaders most preferred four traits, two behaviors, and one ability,

and they had an especially rich sense of the various traits that they wanted their employees to possess. The narrative now explains each of the seven most preferred soft skills, listing them in descending order of valuation.

Personally invested. First, Wheatstone’s executives and managers most strongly valued the soft skill of *being invested* or *engaged*. This was the primary trait because this was the only soft skill about which all eight of the executives and managers participants spoke. They also mentioned the trait of engaged or an invested employee more than twice as many times as the next-most-discussed soft skill. They described the trait both positively—as a preference for employees being personally invested in their work and in group outcomes—and negatively—as a preference against employees being unengaged.

MRP 08 described the trait in the negative sense with, “They almost have the attitude of they’re just here for a check. They’re not really here to work. It’s odd to say, but you see it a lot. People just, ‘I’m just here.’” MRP 11 described unsuccessful employees similarly:

They’re the ones who tend to show up not consistently. When they are here, they tend to wander away from their machines, away from their areas more often than they should. We know we all need breaks here and there that aren’t scheduled breaks, but those people tend to not put as much effort into making sure they’re getting the quality and continuously keeping the output going. They’re the less punctual and, as I’d say, the ones who are here to get a paycheck. That’s all they’re concerned with.

(MRP 11)

Both managers characterized the unsuccessful employees by describing their lack of demonstrations of effort and by their motivation for pay rather than for the work.

Conversely, the successful employee possessed the trait of being personally invested. MRP 12, for instance, said, “I’d like to see employees that are dedicated, hard-working people that feel like they have an investment in the job.” MRP 12 drew connections between other traits—dedication and working hard—to describe the trait of personal investment. MRP 11 preferred to employ,

Individuals who are self-motivated, who want to really take the time to learn and master the skills they’re being taught and continue to master more and more on their own. Those people who really take a true interest and put forward the effort to improve and continuously improve their jobs.

(MRP 11)

The participants defined traits by listing various combinations of behaviors, skills, and other traits, both positive and negative. Taken together, however, the statements exhibited that being personally invested was the soft skill that the Wheatstone executives and managers saw as most important.

Helping team and organization. Second, the executives and managers held *helping others* next highest in importance. Mentioning it slightly less than a third as many times as the trait of *personal investment*; nevertheless, seven out of eight of the executives and managers preferred their employees to possess the behavior of helping others. They stated that they preferred employees to help the team, help the organization, and/or help the community. MRP 03 described the soft skill this way:

If somebody that is working on the line next to you is struggling, you don't wait for someone . . . taking the initiative to help somebody out when they need it or being part of the team and bring them personal[ly] help[s] to correct the situation as a team. Not just "I'm doing my thing over here, that's your problem" type of deal Successful line staff is team-oriented. (MRP 03)

MRP 03 preferred employees who took initiative to help their teammates. LRP 02 stated the importance of an employee taking "an interest in being part of an organization specifically with the success of that organization." LRP 02 also preferred employees "to support . . . both in their behaviors and their actions . . . what will better the community." The manager saw helping out as helping the team while the executive saw helping out as helping the entire organization and the communities in which their facilities operated. Overall however, LRP 02 expressed the same desire for employees to help others outside themselves as did MRP 03.

Good attitude. Third, Wheatstone executives and managers mentioned having a good attitude nearly as much as they mentioned helping out. By *good attitude* they often meant *positive attitude*. ERP 13, for instance, equated the two when he said that, "good attitude is somebody who is, despite the environment they are placed [in], they have a positive outlook or they're looking to preserve it instead of propagating a negative outlook." MRP 03 saw it similarly, without using the word positive. When asked to define good attitude, MRP 03 said, "it's somebody that's somewhat upbeat when they show up every day, enthusiastic Somebody that's outgoing, somebody that's pleasant, somebody that's cooperative." While beginning with positivity, MRP 03 also

added an element of interpersonal skill and team orientation into the soft skill of good attitude.

Other participants mixed in various other elements. MRP 08 saw a good attitude as a positive attitude and equated them both with *perseverance*; it was positivity that allowed an employee to persevere. MRP 08 stated,

A good attitude is always, to me, is always important because the person with a good attitude is going to persevere through issues No matter what the situation is, they're going to have the positive attitude and the drive, you just keep moving forward. (MRP 08)

MRP 08's mentioning of perseverance, rather than positivity or happiness, was similar to that of manager MRP 12 who saw good attitude as having a frame of mind that led employees to focus on production:

I think by invested, you show you're invested. You want to stay with a company by having that can-do attitude It might be at a personal cost, maybe I can't do it, but I'm going to give it my gung-ho best

Employees have got to have the can-do attitude, push themselves to produce.

MRP 12 saw having a good attitude as having a *can-do* attitude, being gung-ho to produce. MRP 08 included perseverance. Others mentioned being respectful, taking responsibility, or being open to guidance. The overall meaning of good attitude for Wheatstone executives and managers seemed to be positivity that facilitated productivity and influenced others.

Communication. Fourth, after being personally invested, helping, and having a good attitude, the executives and managers most mentioned *communication* as a soft skill they wanted their employees to demonstrate. Six out of the eight participants stated communication as important. ERP 13 spoke about it as a necessary skill for a leader: “communication and the ability to communicate at different levels is paramount as you climb the ladder . . . very critical thing to their success as a leader . . . ability to communicate in multi-dimensions, up, down, sideways.” MRP 12 valued keeping people informed. ERP 06 and MRP 12 spoke about the importance of giving and of receiving honest feedback, while MRP 11 thought that honest communication was important, but needed it not to create confusion by being *too honest*. ERP 07, as mentioned earlier, and ERP 13, saw communication as a skill that allowed the employees to influence outcomes by influencing other employees. While the various executives and managers emphasized various aspects of communication, overall, it was one of the soft skills they valued most.

Willing to learn. Fifth, *willingness to learn*, including *inquisitiveness* and *asking questions*, which was one of the other soft skills they considered most important. Six executives and managers mentioned learning and/or asking questions to learn. They connected an element of personal drive with learning. MRP 08 described the soft skill of learning this way: “The successful people have been people who are willing to learn. Not just willing, but also have the want to learn, you know, who want to succeed in the company.” Similarly, ERP 06 said that, “you generally like folks that are self-motivated, self-directed. In order to have that, they need to be able to be teachable and willing to learn.”

Attendance and punctuality. Sixth, the executives and managers spoke of how important being *punctual* and *maintaining good attendance* was. MRP 11 summed up the effects of attendance:

Good attendance; that's very important to the company as a whole.

Because one person [being] out moves two people out of their positions, because you have to move someone out of another position to fill in on that one. It plays a major role in our production. (MRP 11)

MRP 11 noted the effect first, on team, then on production. MRP 03 related it to the primary soft skill of being invested. When asked to describe the kind of employee MRP 03 would like for line staff, MRP 03 responded immediately: "Energetic, takes initiative, punctual, reliable." MRP 03 also confirmed the link later by speaking in the negative: "If you're not here on time every day, committed, engaged, I don't see where you're going to make it." MRP 11 and MRP 12 both noted that poor attendance was a common reason for employees being fired.

Honest. Finally, the seventh soft skill that the executives and managers as a group considered to be important was the trait of *being honest*. As with the other soft skills, being honest meant slightly different things to different participants. MRP 11 stated the most concrete meaning: "I want someone who's going to be honest and straightforward about what's going on at work and being open to us or to everyone about expectations and everything." MRP 11 saw honesty as an interpersonal skill akin to being genuine at work. MRP 11's understanding of honesty involved open interactions. ERP 13 also saw honesty as demonstrated through open interactions and referred to it as transparency: "a level of honesty of course, transparency, [that's] pretty important."

Where honesty for MRP 11 and ERP 13 involved openness, for ERP 07, honesty involved both openness and trustworthiness:

It's something that happens in the interaction between people that you have or don't have. I value somebody who I can trust and somebody who responds to me openly and honestly. If somebody makes a mistake, the ability to say, "I've made a mistake." (ERP 07)

ERP 07 saw honesty as an interpersonal skill and also as a trait (trustworthiness) and an intrapersonal skill that demonstrated to coworkers the trait of trustworthiness. ERP 13 saw honesty not only as a trait that defines a person (such as an honest person), but, like ERP 07, also as an intrapersonal skill: "the honesty to recognize when they have turned from a positive to a negative and the ability to self-adjust."

MRP 11 added another dimension to honesty when speaking of it as a trait that managers needed. MRP 11 believed it was very important that managers display consistency between what they demanded of others and what they demanded of themselves. This provided another dimension to honesty's relationship with authenticity. Honesty "shows me you have the same values and honesty and same expectations of yourself as you'd those working under you . . . I believe in the person who does what they say and expects you to do what they say." MRP 11 was passionate about the side of honesty that related to authenticity: "Walking the talk, to me, is so important because if you expect me to do something as my leader, then I should see that same thing out of you." The executives and managers wanted employees, including themselves, to be open, transparent, authentic, honest in speech, honest in that their own actions, and they were consistent with their demands of others.

Summary. The analysis of the Wheatstone executive and manager soft skills preferences revealed four findings. The first finding was the order of soft skills that leaders most preferred employees to possess. The second, third, and fourth findings were unexpected. They conveyed information about those soft skill preferences and how they can be understood.

Regarding the first finding, only the soft skill *being personally invested and engaged* was cited by all eight participants. Additionally, the leaders preferred employees who showed up to work consistently and punctually. They believed that employees should be fully engaged, help out while—and sometimes by—maintaining a good positive attitude. They believed that employees should communicate well, demonstrate interest in learning, and be honest in the sense of being open, transparent, and genuine. While each leader combined soft skills into a different set, Table 4.1 lists all of soft skills that the executives and managers as a group believed were important for their employees to possess or demonstrate.

The second finding was that leaders saw three different types of soft skills: behaviors, abilities, and traits. The third finding was that the leaders emphasized soft skills traits: 12 of the 16 preferred soft skills and four of the seven most preferred soft skills were traits. The fourth finding was that leaders viewed soft skills holistically. While they mentioned traits the most, their descriptions were not of singular traits as much as sets of traits that included other traits, skills or abilities, and behaviors. Holistic descriptions had four characteristics: (a) complex sets, (b) mutual comprehensibility, (c) unison, and (d) counterpoint.

Research Question 3. *What soft skills do the employees believe they should demonstrate?* Like the leaders, line staff also described soft skills as behaviors, abilities, and traits. Also like the leaders, line staff spoke of soft skills holistically when they described the soft skills that Wheatstone employees needed in order to succeed. Unlike the leaders, the line staff somewhat emphasized behaviors over traits and skills, and their statements were more balanced between the three categories of soft skills than the statements of the executives and managers. To be an important soft skill, more than half of the line staff, that is four out of six, who were interviewed needed to mention the soft skill as important for success. Four soft skills met that criteria.

The soft skills that line staff believed are most important. First, the line staff most strongly valued the soft skills of *attendance* and *punctuality*. Attendance and punctuality are two aspects of the same behavior, and the participants mentioned them together. They sometimes referred to either, or both, as that which various participants referred to as *showing up*. Attendance and punctuality both indicated that employees were present at work during the time that their schedule dictated. They were therefore placed together within one soft skill.

The five line staff members who mentioned attendance all spoke of it in the negative, by mentioning it more often when answering the question of why employees were fired than when answering the question of what characterized a successful employee. The participants included both being present during a day of work (attendance) and being present throughout the day (punctuality). They referred to *attendance, calling in, not showing up, leaving early, tardiness or absence, being absent all the time, or just not showing up*. They tended not to elaborate these soft skills as much

as they elaborated on other soft skills. LRP 02's response to why employees were fired was typical: "Punctuality. The attendance and punctuality; that's huge." LRP 02 then included the aspect of attending to one's tasks as part of the skill of attendance: "Being on task, not being in the break room, not being in the bathroom, not being outside smoking, but on task. Those people [who do not display the skill] won't make it."

Second, five out of six of the line staff participants found the soft skill of *inquisitiveness* and *asking questions* to be important. For some line staff, like LRP 04, asking questions to gain information was part of the way they completed their tasks. LRP 04 reported asking a question about every half hour as part of the fulfillment of their duties. More often, the staff mentioned asking questions as part of being inquisitive for the sake of learning and increasing their capabilities. LRP 10 and LRP 14 mentioned asking questions as one of the qualities, if not the primary quality, that led to promotions. When asked to bring to mind a specific person they knew who was promoted and to describe what caused the promotion, LRP 10 said that,

This person went to actually, forcibly like, enter themselves into learning different machines. They ask a lot of questions from people above them, things like, what does it take to be a floater. They want to know the basics and the things that they had to learn and then they worked on those things. They asked to be in classes to learn how to be a leader, things like that.

(LRP 10)

LRP 10 saw asking questions as important to learning, increasing ability, and to promotion.

Third, the line staff cited the need for the skill of *good communication*. They saw communication as a matter of gathering and conveying information to facilitate completing tasks. LRP 04's remarks typify the line staff's utilitarian relationship to the skill of communication:

It's all about communication. You have to communicate everything.

Numbers. How much more we have to go. Somebody will ask me, since I've already ran that machine, they'll ask me questions and vice-versa. Or asking for permission to go forward with like the upper management or the supervisors. We talk all day [but not in a leisurely manner], it's more working on the machine. The only time you have to talk to somebody is to ask questions, like, real quick.

Another employee provided an example of the task-oriented nature of their communication:

Like, I have to go over and say, "all right, guys, when this all safe drains, we're going to go to this next." Or, "listen, I've got 5,000 more gallons to put up here, and there's only 4,000 gallons of room in that tank. You guys need to run and draw some down so I can get this up, so I can go on to the next thing." (RP 02)

As both employees showed, good communication was speech that most quickly conveyed factual information.

Willingness to learn, fourth in frequency of mention, was connected to the second-most mentioned skill of asking questions. When combining the five-of-six line staff participants who made comments regarding the importance of asking questions with

the four line staff members who made comments regarding the importance of learning as a soft skill, the total number of participants included all six line staff participants. The two soft skills were closely linked, as noted in the quote from LRP 10; however, they are separate soft skills. For some participants, willingness to learn was the desire or drive to learn, and for others, it was the acceptance of constructive criticism.

LRP 10's example of someone being promoted linked learning with what the executives and managers described as being engaged. The person exemplified "showing the knowledge and a willingness to want to do the work, not just knowing how to, but a willingness to do the work yourself. Wanting to learn something new every day" (LRP 05). So important was wanting to learn that LRP 10 equated it with willingness to work, as if the way to demonstrate personal investment was to engage in learning. Learning linked *asking questions* and *wanting to do the work by oneself*. It did not, however, signify the desire to be promoted to a higher position, which went along with the description that LRP 10 and others ascribed to inquisitiveness and asking questions.

Assisting productivity. The concept code *SS II skills that assist productivity* was a category of many thematically connected soft skills, each soft skill usually being mentioned only once. *Communication* was a member of this category. The concept code *skills that assist productivity* included communication because the participants described communication to be a tool of maintaining or increasing productivity. Communication was the only specific soft skill in *skills that assisted productivity* category mentioned by more than half of the line staff participants, and therefore was the only ability of that category that also appeared on the list of soft skills that line staff considered to be most important. The category also included being productive, being good at math,

multitasking, being mechanical, knowing one's job, doing one's job, not ruining machines, being strong and tough, not procrastinating, working under pressure, and working fast. All the participants mentioned skills that assist productivity.

Interpersonal skills. Similarly, all six participants mentioned one or more soft skills that were examples of the broad category of soft skills under *SS II interpersonal skills*. Interpersonal skills that the line staff believed to be important included: *giving honest feedback, ability to convince, being personable, being a good listener, being friendly, being respectful, getting along with coworkers, cooperating, helping the team, doing what one is told, helping the supervisor, and being aware of others' workflows.*

None of the line staff participants referred to interpersonal skills, and therefore it was not listed as a specific soft skill, but it was only a concept coding or category. Because not one of the specific skills that comprised the set of interpersonal skills was mentioned by more than three participants, those skills did not meet the definition of most important. However, the 49 mentions of the specific skills that involved interpersonal skills were of concern to the participants just as were the 56 specific soft skills involved in assisting productivity.

Overall, as represented in Table 4.2, the line staff most strongly believed that to be successful, employees needed to be punctual and have good attendance, and, while at work, they should ask questions and seek to learn. They should communicate information and engage in a variety of specific soft skills that assisted productivity, and they should behave in ways that promoted smooth social interaction at work. Table 4.2 displays the line staff's soft skill valuations in descending order of importance according to how many staff mentioned the soft skill. It lists the two categories of soft skills, which include traits,

abilities, and behaviors, below the four individual soft skills because none of the soft skills in either of the categories was mentioned by more than half the participants. Only collectively did those soft skills constitute a category of most important soft skills.

Table 4.2

*Soft Skills Wheatstone Dairy Line Staff Believed Were Most Important for Success
(Descending Valuation of Individual Soft Skills with Two Categories Appended)*

Type of Soft Skill	Line Staff's Main Soft Skill Valued	Number of Line Staff Mentioning the Soft Skill	Number of Times Soft Skill was Mentioned
Behavior	Attendance and punctuality	5	10
Behavior/Trait	Question-asking/inquisitiveness	5	6
Trait	Willing to learn	5	6
Ability	Communication	4	8
Category	Assisting productivity	6	56
Category	Interpersonal skills	5	49

Research Question 4. *What soft skills do the employees demonstrate?* The methodology design planned to answer this question with observations, with interview descriptions, and with the LRI soft skills assessment. However, the employees were available for observation almost exclusively when they were not performing their normal tasks. Observations took place during transition and at meeting times for the line staff, which was a very small part of the employees' 12.5-hour shifts, but observations did not occur during production in the areas where the line staff normally worked. As such, it

was not possible to rely on observations to draw reliable findings about the soft skills traits, abilities, and behaviors that the employees demonstrated.

Interview descriptions of soft skills demonstrated by line staff. The executives and managers provided few examples of soft skills that their employees demonstrated. MRP 12 believed that other managers acted as a team and utilized the skill of good communication but did not say anything of the line staff performance level. In general, the executives and managers seemed to be thinking of particular examples from which they generalized, when discussing what soft skills made a valuable employee. After discussing the various soft skills ERP 09 would have liked employees to possess, ERP 09 summarized the actual soft skills:

I think we'd like it to be more of a reality than it is We are trying . . . to get managers at all levels to feel more invested in the workplace, in their work in the company, by giving them leadership training, by helping them recognize that, really, everything they do is watched by others, and others take their cues from that. We got a ways to go. In that respect, I don't think we're really a lot different than a lot of companies. (ERP 09)

The executives and managers indicated that their employees possessed some of the desired soft skills to some degree, but they did not state which ones and to what degree.

LRI descriptions of soft skills demonstrated by line staff. The LRI soft skill assessments provided most of the information regarding the line staff's demonstrated soft skills. The LRI's numerical results rated participant performance in five soft skills categories on a scale of 0 to 100. With an overall average score of 70 out of 100, the results of the LRI soft skills assessment for the six line staff participants were at the high

end of the normal score range for U.S. organizations. The results for the five individual skill categories were: responsibility = 88.7; integrity = 79.2; sociability = 74.8; self-esteem = 59.6; and self-management = 50.4.

The focus of responsibility is getting the job done. LRI's definition of responsibility includes working hard and doing one's best, paying attention to details, concentrating—even doing work one does not like—being punctual and enthusiastic. The strong responsibility score the line staff received aligned with their focus on productivity. These characteristics supported the communication style that they described themselves as having and that was observed during the study, speaking directly and communicating details while maintaining concentration. They often spoke of one of the key behaviors of LRI's *responsibility*, that is, *working hard*.

The line staff also scored high on integrity. LRI's definition of integrity involves differentiating between right and wrong, mostly as defined by company policy. The line staff's high integrity score indicated that they were compliance oriented and followed rules and procedures. Based both on the nature of Wheatstone line staff's daily work and on the predominance of the line staff valuing skills that assist productivity, there was incongruity with being compliance- and procedure oriented.

The sociability score revealed that Wheatstone line staff were somewhat flexible and friendly, getting along with one another and with the management at the subunit. This ability to be appropriately social was less strong among the line staff than the previous two soft skills, indicating that, to the line staff, social interaction was less of a value than productivity but, nevertheless, they valued sociability and team orientation.

Their action choices in the LRI assessment demonstrated that they valued self-esteem and self-management, significantly less than responsibility. This means that they were not very concerned with asking for help and getting better (self-management) and learning new things (self-esteem). This may help to explain why they believed that the skill of inquisitiveness and the trait of willingness to learn were more likely to have them stand out and prove them worthy of promotion, especially considering that their main focus was getting the job done. The low scores in self-management and self-esteem also reflected some of the executive and managers' statements who spoke of employees being more motivated by receiving a paycheck than by engaging themselves in doing their best. Overall, the responses that the line staff chose in the LRI's timed situational judgment test indicated that the line staff soft skills were primarily characterized by working hard to support productivity and following proper procedure while paying attention to detail.

Research Question 5. *What values and characteristics are common to organizational culture and soft skills in the host organization?* To answer this question, the analysis restates the essential findings of Research Question 1 focusing on the characteristics of Wheatstone's culture. It then compares them to the characteristics of soft skills described in the findings of Research Questions 2, 3, and 4.

Research Question 1 revealed that Wheatstone's organizational culture primarily displayed characteristics of market culture: a strong focus on production, obtaining market share, expanding sales, and competition. While the participants at all three organizational levels valued safety along with production, when the two values conflicted, they also expressed that without production, there was no purpose for safety. The primary cultural characteristics were therefore those of a market culture.

Wheatstone's executives and managers most strongly preferred that employees be engaged, have a sense of urgency, work hard and invest themselves in their work. They characterized their desired employee as enthusiastic, maintaining a positive attitude, and helping others do their job. The line staff most strongly demonstrated hard work, attendance, getting the job done, and productivity. The line staff characterized the successful employee as one who demonstrated excellent attendance, asked questions to get the job done and expand their capabilities, communicated to get the job done, utilized a wide variety of skills that assisted productivity. The focus on production, achievement, professional expansion, or in the words of the participants, *getting ahead*, are characteristic both of a market culture and of the soft skills that Wheatstone valued. As shown in Table 4.3, the theme that developed between the primary focus of Wheatstone at the level of organizational culture and the primary focus of Wheatstone at the level of individual soft skills, was productivity.

Wheatstone's organizational culture was secondarily a hierarchy culture, characterized by employees focusing on following procedures and processes specific to their hierarchical level to be efficient and properly compliant. Soft skills that the executives and managers considered important that hold characteristics in common with a hierarchical culture included what Wheatstone managers meant by flexibility, that is that line staff employees should do as they are told—even when it was different from their normal tasks. The participants also valued punctuality, which is following a regulated procedure regarding attendance. Attendance and punctuality allowed for efficient scheduling and utilization of resources, and was characterized by accuracy, timing an aspect work correctly. They valued teachability and wanting the employees to learn new procedures. The line staff

Table 4.3

Commonalities Between Wheatstone's Most-Valued Characteristics, Ranked by Strength of Presence

Ranking	Theme	OC	EM	LS	LS-D
Predominant theme	Productivity and expansion	Market	Being invested/engaged Takes initiative Hard working Willingness to learn Enthusiastic Good attitude	Ask questions Communication Willingness to learn Assisting productivity	Responsibility
Strong theme, especially at subunit	Taking care to do things correctly	Hierarchy	Attendance/punctuality Reliable Teachable	Attendance/punctuality	Integrity Responsibility (attention to detail)
Weak but present theme	Consideration of others	Clan	Helping out Good attitude Cooperative Flexibility Honesty	Interpersonal skills	Sociability

Note. OC = organizational culture; EM = executive and manager soft skill preferences; LS = soft skills that line staff believed successful employees possess; LS-D = soft skills that line staff demonstrated.

member's high LRI score in the category of integrity shows that they considered it important to do the right thing, characteristic of following the right procedures. The LRI result of responsibility also indicated that line staff paid attention to detail, which is another aspect of getting things right. The theme of taking care to do things correctly includes the values characterized by those soft skills just mentioned and also by the characteristics of hierarchy, which focusses on how things are done, emphasizing stability by adhering to established processes and efficient procedures.

To a lesser degree, Wheatstone also maintained the cultural characteristics of people and team orientation that are associated with clan culture. Clan culture, though not the primary cultural driver, existed in espoused values at all levels of the organization. In their decision making, the executives sometimes demonstrated the consideration that clan cultures give to individuals and groups. The executives and managers often mentioned preferences for soft skills that shared consideration for the concerns and viewpoints of others, with soft skills such as helping the team, having a good attitude that lifts others, being cooperative, being flexible, being adaptable, and being civil. While the line staff did not espouse clan values as the way for employees to be successful at Wheatstone, their LRI results indicated that their third strongest demonstrated soft skill was sociability. They engaged with each other in a friendly, polite, and flexible manner. Consideration of others was the theme that demonstrated characteristics common to clan culture and the soft skills that Wheatstone valued.

Summary of Results

Answering the study's five research questions, Chapter 4 presented analyses of Wheatstone Dairy's organizational culture and of the preferences it maintained about

employee soft skills. It then explored the characteristics common to both organizational phenomena. The chapter presented three themes of common characteristics that connected Wheatstone's organizational culture and its preferred employee soft skills.

To answer Research Question 1, the analysis examined Wheatstone's organizational culture through the lens of material from Schein (2004, 2017) and the CVF of Cameron and Quinn (2011). While the short duration of this case study prevented analysis of the assumptions and underlying beliefs that Schein saw as describing the essence of an organizational culture, plentiful data from interviews, observations, documentary, and archival sources facilitated a rich analysis of Wheatstone's culture.

The analysis of its espoused beliefs and values, and of material from what Schein (2017) referred to as the *artifact level*, revealed that Wheatstone Dairy's organizational culture was primarily what CVF refers to as a market culture. The company's main organizing principle was production to increase market share and profits. Analysis also revealed a secondary culture of hierarchy, especially at the subunit production facility, which was characterized by strong role differentiation and focus on process, procedures, and safety. The analysis presented data indicating some presence of clan culture, mostly among the executives. The interviewees mentioned almost nothing that demonstrated adhocracy values such as creativity and being on the cutting edge.

The analysis examined Wheatstone's soft skills preferences from three perspectives. The first perspective, shown in the answer to Research Question 2, was that of the executives and managers who decided on policy and who had the ability to hire, promote, and fire. The second perspective, shown in answer to Research Question 3, was that of the line staff members' thinking, and their views or opinions about what soft skills

made a successful employee. The third perspective, shown in answer to Research Question 4, was that of the demonstrated behaviors of the line staff.

The analysis also found that soft skills were described in a holistic, rather than atomistic, fashion. Executive, manager, and line staff members' soft skills statements revealed that soft skills preferences and their descriptions maintained four qualities: (a) unison, (b) complex sets, (c) balance, and (d) mutual comprehensibility. This finding provided a viewpoint on the rankings being more holistic than atomistic, meaning that the soft skills preferences were intended to be heard more as a whole than as a list with clear and strong boundaries between the soft skills.

To discover themes that explained Wheatstone's soft skills preferences, the analysis sought to understand the differences in participant soft skills opinions. Analysis of data for Research Questions 2 and 3 therefore included quantification of the participants' opinions about which soft skills successful employees possessed, while the findings for Research Question 4 included quantification of the participants' demonstrated soft skills. The listing and ranking of soft skills characteristics were also contextualized, given meaning, and tied together through qualitative analysis of the values and characteristics presented in Research Questions 2-4. Viewed together, the findings from all three viewpoints provided a picture of which soft skills Wheatstone valued.

Soft skills preferences, stated by the executives, managers, and line staff, included traits, abilities, and behaviors. As shown in Table 4.1 and evidenced by the interview statements, Wheatstone executives and managers most strongly valued the trait of being personally invested or engaged in work. They also found six other soft skills to be most

important: (a) helping others; (b) having a good attitude, by which was mostly meant having a positive attitude; (c) communication; (d) willingness to learn; (e) attendance and punctuality; and (f) being honest. They also believed that one other behavior and eight other traits were important.

As evidenced by interview statements and the LRI soft skills assessment results, line staff most strongly valued the behavior of attendance and punctuality. They also valued the soft skills of being inquisitive and asking questions, communication, and the willingness to learn. Grouped together, various line staff valued a large variety of skills that the concept coding unified under the categories of interpersonal skills and skills that assisted productivity. Table 4.2 summarized the soft skills that the line staff believed successful employees possessed.

In answer to Research Question 5, three themes emerged. The themes described the characteristics that Wheatstone's organizational cultures shared in common with the soft skills that Wheatstone valued. The first theme was productivity and expansion. Productivity and expansion characterized a market culture and its values of production, expansion, and competition. Productivity and expansion also characterized the soft skills that the executives and managers preferred; namely, being invested, taking initiative, working hard, being enthusiastic and willing to learn, and having a good attitude. Productivity and expansion also characterized the line staff members' stated soft skill values of asking questions and being inquisitive, communication to assist production, willingness to expand one's knowledge through learning, and various skills that assisted productivity. And finally, productivity and expansion also characterized the line staff's most strongly demonstrated soft skill of responsibility, which included the behaviors of

working hard, concentrating, trying to be on time, and working enthusiastically with a positive attitude to attain goals.

The second theme was taking care to do things correctly. The focus in this theme was on employees paying attention to, or valuing, process and procedure including safety. This characteristic exists in a hierarchical culture. The characteristic of doing things correctly also existed in the soft skills of attendance and punctuality, reliability, and teachability that the executives and managers valued, and in the soft skills of attendance and punctuality, integrity, and attention to detail that the line staff valued.

The third theme was consideration of others. The focus in this theme was on the employees paying attention to, or being considerate of, the lived experience of others at work. This characteristic existed within the clan culture, in the soft skills of helping out, having a good attitude, cooperating, being flexible, and being honest, that the executives and managers preferred. This characteristic, consideration of others, also existed in a large variety of soft skills, which were valued by the line staff, that comprised the soft skills category of interpersonal skills. And lastly, the characteristic of consideration of others appeared in the understanding, friendliness, flexibility, and politeness that the employees demonstrated.

The overall finding of this study was that the host organization's cultures and its demonstrated and espoused soft skills preferences held common characteristics. The study found three themes and demonstrated that, at Wheatstone Dairy, the expected pattern of common characteristics existed.

Chapter 5: Discussion

Introduction

To address the gap between the current state of post-secondary soft skills education and the needs of employers, institutions of higher education are beginning to focus their degree programs on helping students get better jobs. The academic literature on soft skills is addressing this education gap by exploring the question of which soft skills employers most want their employees to demonstrate. Research can potentially inform educators' attempts to help students to be more employable. However, research findings appear to conflict and the literature does not provide educators with clear guidance regarding which soft skills are most important to employers.

The goal of this study is therefore to see if there might be a way to make sense of the various findings in a manner that would help post-secondary soft skills education. The sense-making concept explored in this study is the possibility that different types of employers prefer different types of soft skills. To differentiate between types of employers, this study focuses on organizational culture. It investigates the question of whether employers with different organizational cultures prefer employees who possess soft skills that have characteristics in common with the organization's culture. This study employs a case-study methodology and asks the following five research questions:

1. What is the company's organizational culture?
2. What soft skills do the executives and managers prefer their employees to demonstrate?

3. What soft skills do the employees believe they should demonstrate?
4. What soft skills do the employees demonstrate?
5. What values and characteristics are common to organizational culture and soft skills in the host organization?

The findings of this study indicate that there are significant commonalities between characteristics of the host organization's culture and characteristics of the soft skills that the organization believed were valuable for successful employees to possess. This chapter restates the findings, situates them within the soft skills literature, and discusses their significance to the literature. This chapter then discusses the implications of the findings for higher education and for business, suggesting an alternate way of viewing the themes that may be useful for career preparation and for different uses in organizations outside postsecondary education. The chapter narrative considers the limitations of this study, and concludes with recommendations for further research.

Implications of Findings

To provide context for the implications of the study, this section first briefly summarizes the findings of each research question. Findings from Research Questions 1-4 provided the data to answer Research Question 5. The findings of Research Question 5 contain implications for soft skills literature and for higher education. The implications address the main purpose of the study, which is to help the soft skills literature give sense to the plethora of its findings so that institutions of higher education can better integrate soft skills education into the student experience.

Review of findings. The first finding was that Wheatstone maintained several organizational cultures simultaneously. Their primary culture was a market culture and

their secondary culture was a hierarchy culture, and there also existed evidence for a clan culture. Particular values characterized each culture.

Wheatstone's main purpose or value was profitability, and its main focus was increasing profitability through expanding production, both of which characterized market culture as described by CVF. Wheatstone organized itself to achieve profitability through a production process that adhered to detailed procedures with clear role differentiation. It sought continuous improvement. These features demonstrated the presence of a hierarchy culture. Simultaneously, it espoused the values of caring for humans and sometimes made organizational decisions that supported that value, demonstrating the presence of a clan culture.

The second finding was that Wheatstone valued various soft skills. Through in vivo and value coding, the findings reveal 190 different soft skill descriptions. Examining the number of participants who mentioned each soft skill, and how many times each participant did so, analysis found that, more than any other soft skill, the executives and managers valued employees being invested in their work or engaged. They also most valued employees helping out, having a good attitude, having the ability to communicate, being willing to learn, continually showing up for work and doing so punctually, and being honest. Line staff most valued attendance and punctuality, question asking to get ahead and to maintain production, the skill of communication for maintaining production, and a willingness to learn to expand oneself professionally. Line staff also valued various soft skills that comprised the category of *soft skills that assist productivity* and various behaviors, skills, and traits that comprised the category of *interpersonal skills*.

The answer to Research Question 5 produced the third overall finding. In comparing the findings of Research Questions 1-4, it found characteristics common to both Wheatstone's organizational culture and its employees' soft skills. The answer to Research Question 5 presented three themes of common characteristics. The three themes were: (1) productivity and expansion, (2) taking care to do things correctly, and (3) consideration of others.

The theme of productivity and expansion at the level of organizational culture found expression in a market culture, whose focus is on producing, increasing production, increasing market share, and increasing profit by increasing sales. Productivity characterized many important employee soft skills: (a) being invested; (b) taking initiative to assist production; (c) being hard working and enthusiastic; (d) asking questions, being inquisitive, and learning to be more capable; (e) having a good attitude, which ultimately maintained production by positively influencing others to keep up their productivity levels; (f) and a large variety of soft skills that assist productivity, soft skills such as multitasking, being physically fit, and not procrastinating.

The theme of taking care to do things correctly at the level of the organizational culture found expression in a hierarchy culture with an emphasis on following processes and procedures. In Wheatstone's case, the main purposes of following processes and procedures were to increase production and to ensure safety. Taking care to do things correctly found expression in Wheatstone valuing the soft skills of: (a) punctuality; (b) reliability; (c) teachability; (d) attention to detail; and (e) integrity, defined as doing the right thing according to company policy. These soft skills and hierarchy culture were both characterized by doing things correctly.

The theme of consideration of others found expression at the level of organizational culture in a clan-oriented culture. It was expressed at the level of preferred employee soft skills by Wheatstone valuing: (a) helping the team; (b) helping the organization; (c) having a good attitude, which helps everyone else; (d) cooperating; (e) being flexible; (f) being understanding; (g) getting along with others; (h) holding oneself to the same standards to which one holds others; and (i) various interpersonal skills, such as being able to give feedback well. These soft skills and clan culture both expressed the values of helping individuals and groups of people.

The three themes were not equal strength or importance to Wheatstone, as defined by the number of people mentioning the characteristics that were expressions of each theme and by the number of instances of those mentions. Productivity and expansion was the strongest theme, followed closely by doing things right, then, notably weaker, consideration of others. The themes revealed that a pattern of characteristics that the organizational culture and the employee soft skills at Wheatstone Dairy held in common, characteristics based in common values.

Implications. The existence of a strong pattern that connects soft skills sets with organizational culture types at Wheatstone Dairy indicates that employers may prefer employees with sets of soft skills that exhibit the same characteristics as the organizational cultures of those employers. For example, this study demonstrated that an organization whose primary culture displays characteristics typical of market cultures also most highly values employee soft skills that align with market culture by helping the productivity and expansion of the organization. Wheatstone most strongly valued a culture of production and expansion, and it also most strongly valued employees who

were personally invested, engaged, hard-working, inquisitive for the sake of learning more and taking on additional responsibilities—employees who wanted more for themselves and the company. Wheatstone valued employee soft skills and organizational culture characteristics that were themselves characterized by productivity and expansion.

This third overall finding, that of a pattern of themes, grouped employee soft skills together according to characteristics that are expressions of similar values. The process of generating this overall finding necessitated abstracting generalities from details of the specific findings of Research Questions 2, 3, and 4. In so doing, it hid some differences between the leaders' values and the line staff's values that should be mentioned here.

As shown in Tables 4.1 and 4.2, three out of four of the soft skills that line staff found to be most important were also among the soft skills that executives and managers found to be most important. Three-quarters of soft skills that the line staff believed were most important for success at Wheatstone were also among the soft skills most important to the leaders. These were the soft skills of communication, willingness to learn, and attendance and punctuality. This indicates that Wheatstone's line staff understood and perhaps internalized at least some of the leaders' soft skill preferences.

The one skill that line staff believed was most important that leaders did not report as most important or even important was that of inquisitiveness and asking questions. Rather, the leaders cited teachability, that is, that line staff should be willing to do what they are told. However, the discrepancy is minor. And the behavior of asking questions and the trait of being inquisitive aligns with the leaders' emphasis on

employees being engaged. Overall, line staff soft skill values aligned with those of the leaders.

The leaders, however, seemed to want the line staff to possess and demonstrate more soft skills. The leaders' list of most important soft skills included three of the four soft skills that line staff considered to be most important, but it also included an additional four soft skills that the line staff did not mention. In addition to communicating well, showing up consistently and on time, and being willing to learn, leaders also most wanted their employees to be honest, have a good attitude, help the team and the organization, and be personally invested and engaged.

That the leaders found seven soft skills to be most important while the line staff found only four to be most important is consistent with the difference in the overall number of specific soft skill descriptions mentioned in the interviews. The leaders mentioned 135 soft skills, while the line staff mentioned only 98. The difference may be explained by the greater number of leader participants than line staff participants, eight versus six, the same ratio as 135 versus 98. Nevertheless, the line staff, who were chosen by management for their ability to articulate soft skill preferences and most of whose tenure indicated successful soft skills, did not mention these four soft skills. The discrepancy implies that the line staff are either unaware or unconcerned about the four soft skills that the leaders mentioned as being most important and that they, the line staff, did not.

Implications for Wheatstone Dairy. When comparing the soft skills that Wheatstone leaders considered to be most important and those that the line staff considered to be most important, a distinction appears not only in the quantity of soft

skills that they mention as important, but in the type of soft skills. This can be more easily discerned when asking which CVF organizational culture the soft skills support.

As evidenced by an examination of the specific OC and SS that comprised the larger categories of concept codes, the soft skills that the leaders most preferred aligned with market, clan, and hierarchy. In this way, the leaders preferred a balance of soft skills, even if somewhat emphasizing market and clan. Of the most important skills that the leaders cited, one aligned primarily with market orientation (personally invested/engaged), two aligned with both market and clan orientation (good attitude, which was mostly defined by being engaged and respectful; and communication, which transcripts revealed to be simultaneously for production and for interpersonal relations), two aligned primarily with clan values (being honest, for the sake of satisfying human interaction; and helping team and organization), and two supported hierarchy orientation (attendance and punctuality; and willingness to learn, meaning to learn from managers the right way of doing things).

The soft skills that the line staff most preferred aligned with market and hierarchy. Of the most important soft skills that the line staff cited, two aligned primarily with market orientation (inquisitiveness; communication, which was to support unabated productivity), one aligned with both market and hierarchy (willingness to learn), and one primarily aligned with hierarchy (attendance and punctuality). They did also cite many individual soft skills that though not “most important” did align with market (the category of skills that assist productivity) and also with clan (the category of interpersonal skills). The line staff was very focused on getting things right through attendance and punctuality and willingness to learn how to perform tasks correctly, and

on getting ahead through asking questions. From the line staff point of view, the way to be a successful employee has more to do with production and process than with a good human working environment. The implication of this is that this is what they believe the leaders expect and desire from them. While there is some overlap between valued soft skills, there is also a difference between what the leaders want of their employees and how the employees perceive those desires.

Implications for other organizations. The difference between leader and employee views on the preferred soft skills raises the question of whether other organizations also have a discrepancy in understanding of soft skill preferences. Even if leaders believe they clearly communicate which soft skills they expect of their employees, there may be a similar difference of perception among their employees. An undetected difference in perception may be one of the sources of management dissatisfaction with employees. If this were the case, it may be avoidable by leaders conducting a soft skills preference analysis among their employees.

Implications for professional soft skills literature. The finding of patterns connecting organizational culture and the organization's soft skills preferences offers a new direction for soft skills research to explore. The literature has mostly asked which soft skills employers, as a group, most prefer their employees to have. The answers are too varied for higher education to utilize effectively, and this study suggests that the question is too general. Instead, if research asks which soft skills different types of employers most prefer, the variety of answers will be distributed under themes; they will have a unifying sense that soft skills educators will be able to utilize, targeting various soft skills for various students who are preparing for various employment situations.

If the pattern found at Wheatstone is also found in other organizations, it provides a direction for a more nuanced answer to the basic questions that Cimatti (2016) posed of whether and how universities and employers can educate those in their charge to have sufficient soft skills. Instead of continuing to find a number of soft skills that are most important to employers, a number too large for a student to assimilate and put into practice, the soft skills literature has an opportunity to explore the various circumstances under which particular soft skills are found to be most important.

The findings in this study do not conflict with the many various answers that the soft skills literature provides as to which soft skills are the most important. For instance, this study found that Wheatstone most highly valued employees who possessed the soft skills of being energetic, having a sense of urgency, maintaining high motivation, and having the tenacity to go beyond doing what one is told to solve difficult problems. Unlike this study, Ellis et al. (2014), Robles (2012), and Ju et al. (2014) found that employers most highly valued the soft skill of integrity. However, when evaluating soft skills importance, based on thematic connection with the host organization's cultures, it becomes easy to see that the different findings of various studies may align. Integrity or doing the right thing, while not the soft skill most important in this study as a whole, is highly valued within Wheatstone's hierarchy culture. Because the findings in this study explain the presence of integrity as part of a theme of characteristics valued by hierarchy culture, there is no conflict between the findings of the authors just cited and this study because the cultures of the organizations that those authors studied may have been more strongly hierarchically oriented.

Not only do the findings to Research Questions 2-4 of this study not conflict with the findings of other researchers in the soft skills field, but the method of situating soft skills presented in this study provides at least a partial explanation of how authors' findings do not contradict each other. For instance, Dhopte and Sinha (2017) found complex reasoning to be the most important soft skill in the corporate workforce. This finding seems to conflict with the previously mentioned findings and with those of Clokie and Fourie (2016), for instance, who found interpersonal skill to be the soft skill that employers most prefer. The apparent conflicts and contradictions might be a feature of the *most important* soft skills not accounting for the employers' organizational culture. There may have been differences in the cultures of the organizations in these studies that were not taken into account. The method of having multiple sets of the most important soft skills, according to employers' organizational cultures, may resolve at least part of the apparent contradictions in the findings of the literature.

Resolving apparent contradictions in the findings of different soft skills studies also creates a soft skills taxonomy that could be widely adopted and through which findings of different studies could be understood. The literature has yet to demonstrate a widely accepted soft skills taxonomy. SCANS (USDOL, 1991) presented the initial soft skills taxonomy that some authors cite and some have changed. But the taxonomy from even that most-cited study has not been widely accepted. Cimatti (2016) also presented several taxonomies that have not been adopted beyond their original authors. Each of these taxonomies sought to arrange a combination of traits, behaviors, attitudes, abilities, and skills into a hierarchy. One of the confounding forces to this method of building a taxonomy is that the employers and educators mean different things when using the same

terms, and sometimes they use different words to mean the same thing. This phenomenon happens within and between studies.

Creating soft skill categories that are not of the soft skills themselves but rather are of relationships with organizational cultures accounts for conflicting meanings. For instance, Table 4.3 of this study uses the term *responsibility* to indicate the set of soft skills behaviors that LRI includes in the definition of *responsibility*. Other studies present different definitions of responsibility, or they do not define the term at all, taking the meaning as understood. Responsibility in a hierarchical taxonomy may be a subset of traits, as in an employee who is, among other things, responsible. It may be a type of behavior, as in an employee who displays responsibility by completing a task that he said he would complete. It may be a top-level category, along with basic skills and interpersonal skills. Comparing taxonomies to decide which one places the soft skill of responsibility correctly becomes challenging and confusing. In a comparative taxonomy, responsibility could be a trait and/or a behavior without creating confusion since the salient feature of responsibility would be that it is a characteristic of another feature of the work life of the person who is to demonstrate that soft skill, a feature such as organizational culture.

Matteson et al. (2016), after reviewing several differing taxonomies, pointed out that “situating soft skills in a larger framework . . . is a useful way to develop a more universal understanding of soft skills, their antecedent conditions, and the impact they have” (p. 80). Grouping soft skills according to characteristics that are also found in organizational cultures provides that larger framework. Instead of providing taxonomies of groupings of variously defined terms, studies can provide taxonomies of salient

characteristics. The value of a comparative taxonomy is that it incorporates context to assign value. It focuses on utility; it focuses on the ways that the taxonomy can improve the learner's employability.

Implications for soft skills education in post-secondary education. While the implications for a new direction of investigation in soft skills literature is clear, the findings of this case study have little direct implication for higher education. Inquiring minds in higher education may conduct educational experimentation however based on the pattern matching noted in the findings. The study raises the possibility for instructors that it may be possible to educate students on how different employers view the ideal employee differently based on the organization's culture.

This pattern could function as a way to organize teaching of soft skills in the same manner as any organizing principle that divides a multiplicity of facts into categories assists educating students about those facts. The pattern raises the possibility for instructors and administrators with student contact that students do not necessarily need to possess all soft skills to successfully obtain and maintain employment. It raises the possibility that students can focus on understanding their soft skills strengths in sets that make them marketable as certain types of employees who fit better with some employers or with some employment cultures than with others.

The main finding of the study, that there are characteristics in common between soft skills and organizational culture, if replicated in other studies, may have implications for various units within institutions of higher education. It may have implications for how career services departments prepare students for volunteer situations, internships, and employment. Knowing the dominant and supporting organizational cultures of an

organization into which the student will be placed, the career services counselors focus on training their students in the soft skills pertinent to the particular culture set which that organization maintains. If their potential host organization maintains more than one culture, career services departments would use this pattern-matching method to demonstrate, reassure, and encourage the job seeker that there is room for a variety of employees with a variety of skills sets, or, stated differently, there is room for a variety of employee types. This educational approach also applies to other college departments that provide employment preparation. Such departments include offices of disability services, equal opportunity programs, workforce development programs, and residential learning communities.

Beyond administrative departments, this more targeted approach can help department faculty. In their teaching, faculty willing to investigate this pattern matching further could use the connection of soft skills and organizational culture to refine their sense of what the employers with whom they are familiar want from their students. Faculty can emphasize that even within particular industries, not all employers are looking for all employees to have the same traits and behaviors. Those who are familiar enough with particular organizations to have a sense of their cultures can focus the soft skills component of their curricula on the soft skills that have characteristics in common with those cultures. Pattern matching raises the question for educators of whether emphasizing the importance of finding a culture fit and working to adjust the student only at the edges of his or her characteristics, tendencies, and soft skills abilities is a potential alternative to teaching the particular soft skill that they believe to be most important.

Implications for soft skills education in for-profit and not-for-profit

organizations. The findings of this study, if reinforced by continued exploration, would also have ramifications beyond research and higher education. Using the thematic connection between organizational culture and employee soft skills, organizations can gain insight into the strengths and challenges of their teams, units, and divisions. They can apply the thematic connections to create understanding in employee and group conflicts, thereby helping to resolve or moderate the unproductive aspects in conflicts.

Organizations can also use the tool to improve training by focusing on various soft skills trainings and programmatic efforts in different organizational areas or within the same areas at different times. Being clearer on the organizational culture would provide organizations with the opportunity to improve their employee screening in hiring applicants who demonstrate the soft skills that align with the culture of the overall organization or the unit into which they would be hired. Human resources departments and executive staff can utilize this thematic connection as an addition to others they use to reassign staff displaying a poor fit, according to where the employees' characteristics fit more successfully. And finally, training programs can utilize the themes to increase employee awareness of appropriate behaviors, abilities, and traits.

Limitations

There are four factors that limit the impact of the study. First, the study did not include data from either the CEO or any Wheatstone family member. Not interviewing the former company president of Wheatstone somewhat weakened the internal validity of the findings. Even though he was technically junior to the CEO in an executive function, the executives noted that he was still sometimes the final decision maker and influenced

the character of the organization. His views and explanations may have influenced the view of Wheatstone's dominant culture characteristics or the most desired employee soft skills, and not interviewing him prevented that data from being included.

Second, the length of the data-gathering phase of the study, approximately 1 month, was insufficient for an ideal case study. The depth and breadth of the data could have been greater, and the saturation that began to appear could have been more thorough. A longer association with the organization may have provided a full set of OCAI surveys and a reliable understanding of the assumptions embedded in Wheatstone's organizational culture.

Third, the scope of the study was limited to one organization at one point in time. Conclusions are therefore limited to knowing that this particular organization's culture had characteristics that also existed in its soft skill preferences at a particular time. It is not possible from one case study to understand if and how organizational culture influences soft skills valuations. To understand whether organizational culture influences soft skill valuations or the reverse, or whether influence is bi-directional, and if so then what the mechanisms are which create this influence, much more research would be needed.

Finally, the reader might consider another possible limitation. The pattern matching revealed, through the three themes, only coherence in one direction. The themes are best expressed by particular soft skills, but soft skills can be applied to more than one theme. For instance, hierarchy cultures strongly value attention to detail, but although attention to detail is important to hierarchy culture, it could be a soft skill that applies to a clan culture as well. However, this does not seem to limit the significance of

this study's findings because while a single soft skill may be utilized in more than one culture, each culture valued a particular set of characteristics that were also valued by particular soft skill sets. That soft skills may be useful in various organizational cultures would not limit the utility of teaching soft skills in sets as related to particular cultures.

Recommendations

Future research. As this study was an exploratory case study, it developed one view of one aspect of one organization. Further research is needed for the literature to continue this exploration. More studies, which would repeat, add to, change, or contradict the findings of this case study, are necessary to provide an understanding of the interactions of soft skills and other organizational phenomena such as organizational culture. Only a solid understanding of the various situations in which particular soft skills are more valued will allow the literature to securely provide conceptual clarity to institutions of higher education and to educators and trainers in business as they seek to improve the soft skills of their students or employees.

There are three related areas for further research: (a) studies replicating the same research questions utilizing the same research methods, (b) studies examining the connection of soft skill preferences and organizational culture using other research methods, and (c) studies asking new questions around the principle of identifying other organizational or employment phenomena that help explain the plethora of most important soft skills.

Studies replicating the same research questions utilizing the same research methods. As the findings in this study demonstrate, single case studies can be effective for exploring organizational culture and soft skills. More exploration is needed. It is

therefore recommended that future studies reproduce this methodology with other companies. The level of familiarity required to understand an organization's soft skill characteristics and to understand their relationship to the organizational culture or cultures of the host company is provided for by case studies. The same level of familiarity can be achieved in a multiple-site case study given sufficient time and buy-in. The more case studies that are performed at different companies of different sizes, in different industries, and in different locations, the more reliable the conclusion that organizational culture can be used as a guide for understanding employers' soft skills preferences.

Studies replicating the same research questions utilizing other research methods. Many soft skills studies gather data through use of Likert surveys that utilize either 4-point or 5-point scales. The results reveal relative rankings of employers' soft skills preferences. Overall, the large majority of rankings are high, indicating that most employers want employees to possess, or demonstrate, most soft skills. Survey research has the advantage of scale, and it is therefore important. To avoid the finding that most employers prefer most soft skills, however, Likert surveys can be expanded to explore characteristics of both soft skills and organizational culture by using two sets of questions—one pertaining to each. To further clarify the connection of soft skills and organizational culture characteristics, ipsative surveys, such as the OCAI, should also be conducted. Their demand for the surveyed employer to choose between values would help answer the research questions presented in this study.

Studies asking new research questions that differentiate between circumstances under which various soft skills and soft skill sets are valued as most important. Apart

from reproducing the same study under different circumstances and utilizing different research methods to explore the same questions, further studies could also ask different but related questions. The goal of such studies would be to discover patterns common to soft skills and other organizational phenomena, not necessarily just organizational culture. Although the review of literature in Chapter 2 indicates that soft skills preferences do not clearly vary by industry, it would be fruitful to explore the characteristics of soft skills preferences together with other organizational phenomena, such as size of organization, location, organizational type (501 C 3, 501 C 6, S Corp, C Corp, LLC, and other designations), customer base, years in business, history of mergers and acquisitions, or any other phenomenon by which a researcher could group similar organizations.

This case study found that the line staff, who emphasized the importance of behaviors over personal traits, perceived soft skills differently from the executives and managers, who emphasized personal traits more than abilities or behaviors. Further research is necessary to explore the differences in which soft skills are valued by organizational level and job role. Understanding how soft skills valuations change according to role and organizational level can give students and employees the awareness of when they need to emphasize various skills to advance their careers.

Grounded theory studies, which examine soft skills in their organizational context, could contribute to our understanding of what the proper questions are to ask to understand soft skills in a way that would be more useful for higher education. Additionally, despite Süß and Becker's (2013) qualitative study on freelancers, soft skills literature has nearly exclusively focused on employee soft skills. However, as "the gig

economy” (Burtch, Carnahan, & Greenwood, 2018, p. 1) expands, soft skills research should expand to explore the difference between skills that are useful for employees and those useful for entrepreneurs.

Establish an accepted taxonomy. Deepening the soft skills literature with research that explores soft skills in the three ways mentioned above would better enable college educators to formulate and execute plans that will improve their students’ employability. Continued exploration of the relationships between soft skills and other employment phenomena, however, should, at a later stage, be synthesized through the building of taxonomies. Taxonomies, which would help explain the diverse and sometimes conflicting soft skills valuations, should eventually be compared. That would result in one or several taxonomies becoming more widely adopted among educators who would then use such taxonomy or taxonomies to build reliable soft skills educational models.

It is recommended that taxonomies be holistic rather than hierarchical. As noted in Chapter 4, soft skills were found not only to be solitary or independent, but also holistic and dependent. The participants often defined particular soft skills by listing other particular soft skills, as, for instance, when ERP 07 saw the ability to complete a project, itself a soft skill, as involving communication, which itself included involving others, influencing them, encouraging them, and motivating them—each a separate soft skill. If an employee, in order to demonstrate one soft skill, needs to demonstrate several, then soft skills are interlinked; it is difficult to choose one without choosing others. It is logical to assume that in some way most or all soft skills are part of other soft skills, but in building a taxonomy it is also logical to assume that particular soft skills tend to be

mentioned together to explain each other and tend not to be mentioned in relation to other soft skills. This bears examination in further research.

The implication for soft skills research of soft skills descriptions being holistic, is that building soft skills taxonomies as hierarchies of most specific soft skills behaviors to general skills, abilities, attitudes, traits, characteristics, and other soft skills categories, is not necessarily the most natural, accurate, or useful way of representing the multiplicity of soft skills. One employer may rank a skill as fifth most important while another employer ranks it as eleventh in importance, while each employer would nevertheless need the skill to be present as part of the group of soft skills that support the functioning of the organization. It is not that one soft skill should be ranked higher or lower in a taxonomy of all soft skills, but rather, multiple taxonomic sub-groupings should reflect the various ranking of that particular soft skill. The same soft skill is in one soft skill sub-grouping very important, in another soft skill sub-grouping only mildly important. Alternately, a single taxonomy could represent the interrelationship of soft skills more in spherical and three-dimensional than two-dimensional triangular form because this will reflect the way the variety of employers and employees perceive and utilize soft skills.

Utilize further research to establish employee types. Examining the soft skills preferences of the 14 RPs yielded information regarding which employee soft skills sets Wheatstone valued most highly. The data revealed three soft skills sets, each of which described a type of employee. Employee types, or personae, are an educational tool to make sense of the variety of the most-important soft skills. As researchers establish employee types that align with organizational cultures, they would provide direction to answer the questions that Cimatti (2016) posed as to whether and how universities and

employers can educate those in their charge to have appropriate soft skills. Employee typology is also a practical tool for hiring managers to select candidates and executives to group employees. The particular types of employee soft skill sets suggested by the findings of this study are not necessarily those that would be suggested by other studies. More research into the connection of soft skills and organizational culture is necessary to support these employee types and/or to reveal additional types.

Recommendations for Wheatstone Dairy and for other organizations.

Viewing soft skills through the lens of organizational culture provided the insight about a discrepancy between what Wheatstone leaders want of their line staff and what the line staff perceive the leaders' desires for appropriate soft skills to be. It is recommended therefore that Wheatstone Dairy address that discrepancy and other organizations investigate the soft skills views of their employees to determine if their views are aligned. Further investigation at Wheatstone would need to explore how much the discrepancy is a result of the manner and content of communication from leadership to line staff and how much is a result of messages that are sent through the messaging inherent in the more structural aspects of organizational life such as schedules, bonuses and rewards, pay structures and benefits packages, and non-production activities.

In the case of Wheatstone Dairy, the line staff do not believe that maintaining clan values help them succeed at work. This is despite the leaders' valuing soft skills that characterize clan culture. At other organizations the particular value discrepancies may be different. In all cases, however, addressing discrepancies between leader expectation and employee understanding of leader expectation could be useful for increased production or

service, higher rates of employee satisfaction, lower turnover, and perhaps for other useful outcomes such as organizational flexibility.

Beyond uncovering differences in expectations regarding preferred soft skills and helping to align them, it is recommended that organizations apply the thematic connections between preferred soft skills and characteristics of organizational culture to create understanding in employee and group conflicts. This would help to resolve or moderate the unproductive aspects in conflicts. It is also recommended that those involved with staffing decisions examine the alignment of soft skills of various employees with the organizational culture(s) that the staffers are trying to promote in various parts of the organization.

Recommendations for educational practice. As the findings pertain only to one organization, it would be premature to make recommendations for implementation of the findings in educational practice. Pattern matching of employee soft skills and organizational culture would need to be established through further research before being reliable as the basis for action. It is therefore recommended that institutions of higher education monitor the soft skills literature for further evidence of pattern matching, and that research universities contribute to the soft skills literature by conducting research into pattern matching between employee soft skills and organizational culture or other organizational phenomena. Additionally, even though the pattern matching is yet to be verified by other studies, the findings raise two possibilities that faculty and department heads may consider to be worthwhile exploring: teaching soft skills through the lens of organizational culture and teaching soft skills holistically in sets.

Teaching soft skills through the lens of organizational culture. To create a focus for soft skills education and avoid unconnected teachings of various soft skills, both faculty and the administrative departments outlined in the implications section could consider organizing their teaching of the various soft skills found in the soft skills literature according to their greatest relevance to particular organizational cultures. The students would likely not be aware of the cultures of various organizations, but faculty and the departments mentioned that have connections with employers could explore, either in discussion with those employers or in thought experiment, the connection of particular cultures with particular soft skill sets, conveying to their students a sense of coherence between soft skills that are relevant to particular organizational cultures.

Giving the students the view that different employment situations may require different groups of soft skills could increase the facility that students have in adapting to different cultures as they move through various employers in the initial stage of their career. If the instructor or administrator teaching the student soft skills is aware of the culture of a particular organization in which the student will be having an internship and/or heading for possible employment and focuses the student on the soft skills most relevant to that culture, it could reduce the amount of different soft skills that seem to the student to be most important. If a student wants to be prepared for all cultural possibilities, they would still need to learn the multiplicity of soft skills. However, learning soft skills in sets related to the characteristics and values of particular organizational cultures would reduce the learning load into more limited groups that can be more easily assimilated. It would also have the additional benefit of safeguarding against the teaching style that conveys a particular soft skill to the exclusion of others.

Teaching soft skills holistically in sets. The findings of this study revealed that the participants at all three organizational levels spoke about soft skills holistically, and the possibility exists that employers and employees in other organizations also refer to soft skills holistically. Therefore, educators may want to consider the possibility of teaching soft skills as interrelated skills that are possessed and demonstrated together in sets. Dividing the teaching of soft skills into sets related to various organizational cultures would eliminate the need to teach all soft skills in order to properly understand any soft skill.

For instance, the soft skill behavior of showing up on time is often taught as an independent skill. To help the student internalize or possess the skill of showing up on time and see the importance of it, it can also be taught as part of a larger picture: the trait of responsibility. The trait of responsibility would include other particular behaviors that the student might otherwise not have related to showing up on time, skills such as such as completing assigned tasks, sharing information that is valuable to others, and paying attention to details. The trait of responsibility can help bring to mind the performance of various soft skills in a set. Likewise, tying the trait of responsibility to a clan culture will connect it with other traits such as *team player*, potentially increasing facility in accessing the soft skills relevant to employment success in a clan culture.

Conclusion

The primary intention of this study was to explore a new research framework for soft skills studies. The new framework was to provide a means of clarifying value differences among the many soft skills noted in the literature as employers most preferring their employees to possess. This study began exploration into one such a

framework. The framework is designed around a sense-making concept: the possibility that different types of employers prefer different types of soft skills. To differentiate between employer types, this study focused on their organizational culture. It investigated the question of whether employers with different organizational cultures prefer employees who possess soft skills that have characteristics and values in common with the organization's culture.

Problem statement. The character of the workplace has changed dramatically over the past 120 years. As the pace of workplace change has increased, employers and researchers have called for institutions of postsecondary education to provide their students not only with a traditional academic and technical education, but also with soft skills education. The soft skills literature has expanded over the past decade and now provides many lists of soft skills that employers find most important for their employees, and college graduates, to possess and demonstrate. The very plethora of findings, however, leaves higher education without clarity as to which soft skills deserve educational focus.

Review of the literature. Most of soft skills literature focuses on the question of which soft skills employers find to be most important. Some studies ask this question within particular industries, while other studies are pan-industry, seeking transferable skills that apply to employment regardless of industry. Examination of industry-specific studies reveals no significant difference between the soft skills important to one field, such as biology, and those important to other fields, such as computer science.

Soft skills studies published in psychological journals, one segment of the pan-industry studies, find that emotional intelligence, conscientiousness, and general mental

ability are the most important soft skills for positive employment outcomes. Soft skills studies not in psychological journals find that employers want employees with good interpersonal, intrapersonal, and cognitive skills. Apart from agreement on the importance of the general soft skill of communication within the three categories espoused in the non-psychological studies, however, studies agree little on which specific soft skills employers want most. Different studies rank soft skills differently. Studies use the same terms to indicate different behaviors, abilities, and traits, and different sets of behaviors, abilities, and traits. Likewise, between—and sometimes within—studies, different terms refer to the same behaviors, abilities, or traits. In short, the literature provides little clarity on which soft skills are most important.

Theoretical rationale. Adding a theoretical basis from a field related to soft skills provides a method of comparing the many soft skills that are most important. Theory from the field of organizational culture provides a lens through which differences in soft skills importance can be seen. In this study, CVF (Cameron & Quinn, 2011), coupled with Schein's (2017) multidecade research into organizational culture provided theory necessary to assess whether different employers' soft skills valuations differed according to their organizational cultures. Such a difference, if validated by further research, provides a conceptual framework to aid the teaching of soft skills.

The well-vetted CVF (Cameron & Quinn, 2011) names four different culture types: hierarchy, clan, adhocracy, and market. Schein's (2017) work suggests examining organizational cultures at three levels: (a) the surface level of organizational artifacts; (b) the middle level of espoused beliefs and values; and (c) the deepest level of unstated underlying assumptions that are the essence of an organization's culture. This study

utilized both CVF and Schein's conceptual material to understand and describe organizational culture.

Research methodology. The research uses case study methodology to explore the possibility that soft skills and organizational culture connect by holding the same values and similar characteristics. Research was conducted in a single organization, both at the headquarters, where the executive team was located, and at the organization's largest production plant. The case study profiled the values and characteristics of Wheatstone Dairy's organizational culture and its soft skills preferences, and it explored commonalities between the two separate organizational phenomena. The study generated data primarily from 14 interviews at three organizational levels: executive, manager, and line staff. The study also drew data from observations, photographs, online material, and the LRI soft skills assessment.

Findings. Analysis created 197 codes for soft skills and 137 codes for organizational culture. Wheatstone primarily maintains what CVF labels a market culture, supported by a hierarchy culture. Its primary purpose is increasing profit, and it does so through focus on market expansion by maintaining and expanding production, while it maintains production by adhering to processes and procedures. It also partially holds a clan culture with its focus on people, especially at the executive level, but it did not demonstrate a culture of adhocracy with its focus on being at the cutting edge of industry trends.

While Wheatstone executives do value attendance, punctuality, reliability, and employees' helping each other out by being cooperative and flexible, they primarily want employees to be invested and engaged, to take initiative, to work hard, to be enthusiastic,

to maintain a sense of urgency, and to be willing to learn. The line staff primarily valued showing up for work consistently and punctually; working hard to accomplish tasks; asking questions to learn more; a variety of interpersonal skills, such as giving honest feedback; and a variety of skills that assist productivity, such as multitasking. While there is discrepancy between the wider variety of soft skill preferences that leaders maintained and the narrower more production- and process-oriented foci of the line staff, the discrepancy is not between conflicting values as much as quantity of values. The discrepancy is seen as executives wanting more from the line staff than the line staff believe the executives want from them.

Unexpectedly, the study found that all participants described soft skills holistically, explaining the meaning of the soft skills by listing or describing other soft skills. This finding indicates that the rankings of the soft skill preferences, while perhaps accurate, do not fully convey the intentions of the RPs. This finding implied that the top few most important soft skills could not be taught or applied successfully without including other soft skills to support them.

Uniting Wheatstone's soft skills preferences and organizational culture, three themes accounted for similar characteristics within the two phenomena. The theme of productivity and expansion includes Wheatstone's market culture and its valuing of soft skills such as working hard, taking initiative, being enthusiastic, the variety of soft skills that assist productivity, and the willingness to learn, which for Wheatstone demonstrates a desire for increased ability to produce and to expand professionally. The second theme, taking care to do things correctly, includes Wheatstone's hierarchy culture and its valuing of soft skills such as attendance and punctuality, reliability, teachability, and attention to

detail and safety. The third theme, consideration for others, includes Wheatstone's clan culture and its value placed on soft skills such as cooperation; flexibility; helping others; having a positive attitude; and being understanding, friendly, and polite.

Limitations. There are four factors that limited the impact of the study. First, the study does not include data from the CEO or from any family member of this family-owned business. Second, the study's short duration did not allow for findings on the underlying assumptions that Schein (2004, 2017) saw as the essence of culture. Third, the study was a single-site case study that occurred at one point in time and therefore while it opened the possibility that these findings are more widespread, it did not demonstrate that these findings are so. Fourth, there may be ways of clarifying soft skills preferences that provide different utility; this study only explored the possibility of pattern matching with organizational culture.

Implications and recommendations. The main finding of this study is that there is a connection of soft skills to organizational culture that can be seen through similar characteristics that appear in each of these two phenomena and through the same values that underly the two. The characteristics are connected by a set of values and are described by a theme. It is therefore possible that in more than just this one organization the particular soft skills that employers value most can be understood by knowledge of the employer's organizational culture type or types. If the findings of this pattern matching are reproduced in other studies, a taxonomy can be built, and a way of making sense out of the more than 100 different most-important soft skills reported in the literature may have been found. If such a pattern of themes is found in a sufficient quantity of other studies, pattern matching could provide higher education with a way to

better integrate soft skills education into the student experience. The implications for organizational practice also include providing a way to train their employees with targeted soft skill improvement, increasing employee fit, and providing opportunities for conflict resolution.

This study, therefore, recommends that researchers conduct further studies in three ways: (a) conduct studies that replicate the research questions and this case study methodology of this study, (b) conduct studies that replicate the research questions but utilize different methodology, and (c) conduct studies that seek pattern matching between the characteristics of soft skills and organizational phenomena other than organizational culture. While using pattern matching to differentiate between sets of most-important soft skills, researchers should also seek ways to produce explanations holistically rather than presenting hierarchical lists of soft skills. As demonstrated in this study, employers and employees perceive and demonstrate soft skills in holistic rather than atomistic fashion. As more research is conducted, taxonomies that holistically describe complex multilevel mutually defining interrelationships of soft skills and soft skills categories can be built using the relationship of soft skill sets to organizational cultures. This method could facilitate teaching and learning soft skill traits, abilities, and behaviors.

Finally, this study recommends that researchers develop employee typologies based on the pattern matching of soft skills and organizational phenomena. Three examples of employee types are presented in this study: those whose soft skill sets support market culture, those whose soft skill sets support hierarchy culture, and those whose sets support clan culture. Further exploration would likely reveal other typologies.

This study also suggests that academic and administrative departments (career services, academic support centers, workforce development, educational opportunity programs, offices of disability services, and residential learning communities), to the extent that they are connected with employers, consider preparing their students for the organizational cultures that they will face in the workplace. Faculty and administrators may wish to explore teaching soft skills holistically in sets, providing an understanding of the interconnectedness of soft skills with each other and with the cultures of the organizations with which they are familiar and which they foresee their students possibly approaching through internships and later through employment.

Following these recommendations should improve the utility of plethora of findings in the somewhat new field of soft skills research. Should further studies reveal the pattern matching of employee soft skill and organizational culture to be prevalent among many organizations, higher education would be better situated to improve the employability of its students, and businesses would be better situated to hire, place, and train employees according to cultural fit. Not-for-profit and for-profit organizations would have another means of improving organizational outcomes. And the soft skills literature may utilize this opportunity to provide new insight to postsecondary education to help provide students with what they seek in attending college: better employment outcomes.

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Appendix A

Definitions of Soft Skills by Author, Chronologically, Using Their Language

Author	Definition of Soft Skills	Key Employability Concern	Explicit Definition
USDOL (1991)	The skills needed for employment	Employability in the 21 st century	No
Mountain View College (1995)	[Those traits and skills that help with] meeting the demands of the workplace	Employability pedagogy	No
Offermann et al. (2004)	Emotional competence	Organizational performance of individuals	No
Harris and Rogers (2008)	Nontechnical skills; personal characteristics such as: work ethics, positive attitude, social grace, facility with language, friendliness, integrity, and the willingness to learn	Soft skills	Yes
Marks and Scholarios (2008)	Nontechnical skills; social competencies; transferable skills	Employability	No
Gatta et al. (2009)	“People skills” such as communication, flexibility, attitudes, and teamwork	Future skill demands in low wage occupations	No
Weber (2009)	The interpersonal, human, people or behavioral skills needed to apply technical skills and knowledge in the workplace	Soft skills	Yes
Chamorro-Premuzic and Furnham (2010)	Skills, abilities, and personal attributes that can be used within the wide range of working environments	Soft skills	Yes
Mitchell et al. (2010)	Presents different definitions used by three studies by different authors; does not define	Soft skills	No
Stevenson and Starkweather (2010)	Human factors	Competency	No
Nickson et al. (2012)	Cites Hurrell (2009): interpersonal and intrapersonal abilities to facilitate mastered performance in particular contexts	Soft skills/aesthetic labor	No
Pellegrino and Hilton (2012)	Cognitive, intrapersonal, and interpersonal competencies.	21 st Century skills	Yes
Robles (2012)	Interpersonal qualities, also known as people skills, and personal attributes that one possesses	Soft skills	Yes
Hogan et al. (2013)	Team work, interpersonal skills, and cultural awareness	Employability	Yes
Mitchell et al. (2013)	Interpersonal abilities of communication, working with others on team projects, appreciating diversity, and exercising ethical judgment	Soft skills	Yes
St. Louis CC & WG (2013)	Not technical skills	Soft skills	No
Süß and Becker (2013)	Social competences	Employability	Yes
Weber et al. (2013)	the interpersonal, human, people, or the behavioral skills needed to apply technical skills and knowledge in the workplace	Soft skills competencies	Yes

Ellis et al. (2014)	Skills that are not of a technical or technological nature, often called people skills	Soft skills	Yes
Ju et al. (2014)	Skills that better prepare students to meet workforce demands	Employability skills	No
Wikle and Fagin (2015)	Generic competencies such as effective communication or an ability to work within a collaborative environment	Soft skills	Yes
Cimatti (2016)	Transversal competences; competences that are not directly connected to a specific task but are necessary in any position, referring mainly to relationships with other people in the organization	Soft skills	Yes
Clokie and Fourie (2016)	Not technical skills; communication skills; transferable skills; generic skills, especially intrapersonal and interpersonal communication	Soft skills, transferable skills, employability	No
Jones et al. (2016)	Social skill	Soft skills	No
Matteson et al. (2016)	Skills that are not technical; excludes personal traits	Soft skills	No
McMurray (2016)	Not technical skills	Soft skills	No
NACTA Journal / Hart Research Associates (2016)	Skills and knowledge that cut across majors	Broad learning	Yes
Stewart et al. (2016)	Nontechnical competencies associated with one's personality, attitude, and ability to interact effectively with others (i.e., to be optimally employable)	Soft skills	Yes
Dhopte and Sinha (2017)	Those "functional skills" which are not "hard [technical] skills"	Soft skills	No

Appendix B

Comparative List of Up to 10 Soft Skills (SSs) Researchers Found to be Most Important and Their Groupings by Approach

Author	Primary SS Categories	No. of Most Important SSs	Most Important Soft Skills*	Industry
Jones et al. (2016)	(none stated)	21	<ul style="list-style-type: none"> • Positive attitude • Respectful of others • Trustworthy, honest, and ethical • Takes initiative • Takes responsibility • Cooperative/team player • Good communicator/interpersonal skills • Ambitious • Self-confident • Critical thinker 	Business (also pan-industry)
Mitchell et al. (2013)	(none stated)	11	<ul style="list-style-type: none"> • Oral communication skills • General communication skills • Written communication skills • Diversity • General ethics • Time management/organizational skills • Customer service skills • Business etiquette • Leadership skills • Problem solving/critical thinking skills 	Business
McMurray et al. (2016)	Transferable skills	16	<ul style="list-style-type: none"> • Trustworthiness • Reliability • Motivation • Communication • Willingness to learn • Commitment • Interpersonal skills • Adaptability • Teamwork • Initiative 	Business (also pan-industry)
Mitchell et al. (2010)	(none stated)	11	<ul style="list-style-type: none"> • General communication • General ethics • Time management/organization • Written communication • Teamwork • Business etiquette • Diversity • Customer service • Problem solving/critical thinking • Oral communication 	Business: K-12 Teachers

Harris and Rogers (2008)	<ul style="list-style-type: none"> ▪ Nontechnical competencies ▪ Affective domain attributes 	16	<ul style="list-style-type: none"> • Communicate effectively in writing • Possess a high level of reading comprehension • Demonstrate honesty • Be willing to learn • Be open-minded to new concepts and ideas • Solve problems • Follow directions • Communicate effectively in speech • Show a strong work ethic • Demonstrate effective interpersonal communication 	Engineering
Wikle and Fagin (2015)	(none stated)	10	<ul style="list-style-type: none"> • Problem solving/trouble shooting • Critical thinking • Flexibility/adaptability • Working in a team environment • Ability to work independently • Time management/multitasking • Creativity • Verbal/presentation • Writing • Project management or leadership 	Entry-Level GIS
Weber et al. (2009)	(none stated)	10	<ul style="list-style-type: none"> • Turns negative situation positive • Handles objections • Sees big picture as well as details • Shows a vision • Adjusts message to audience • Holds others accountable for their decisions • Holds self-accountable for actions • Sets goals • Compromises • Shows accessibility/approachability • 	Hospitality
Weber et al. (2013)	<ul style="list-style-type: none"> ▪ Performance management ▪ Communication/persuasion ▪ Leadership/organization ▪ Political/cultural ▪ Self-management ▪ [Not] counterproductive ▪ Interpersonal 	33	<ul style="list-style-type: none"> • Build trust, rapport, and cooperation • Provide training • Evaluate performance • Provide recognition • Motivate others • [Does not] micromanage • [Does not] use aggressive management • Responds to customer problems • Provides feedback to improve performance 	Hospitality
Marks and Scholarios (2008)	<ul style="list-style-type: none"> ▪ Nontechnical skills ▪ Customer-facing skills ▪ Transferable skills 	6	<ul style="list-style-type: none"> • Building a network of contacts • Social interaction • Understanding customer needs • Speaking customers' language • Ability to learn and adapt • Experience wide range of work duties 	IT
Stevenson and Starkweather (2010)	<ul style="list-style-type: none"> ▪ Core competencies ▪ Critical competencies (listed here) 	15	<ul style="list-style-type: none"> • Ability to communicate at multiple levels • Leadership • Verbal skills • Written skills • Ability to deal with ambiguity and change • Attitude • Ability to deal with ambiguity and change • Work history • Experience • Ability to escalate 	IT Project Managers

Ellis et al. (2014)	<ul style="list-style-type: none"> ▪ Resource competencies ▪ Information competencies ▪ Interpersonal competencies ▪ Basic skills ▪ Thinking skills ▪ Personal qualities 	23	<ul style="list-style-type: none"> • Integrity/honesty • Listening • Serve Clients & Customers • Responsibility • Participate as Team Member • Work with Diversity • Speaking • Allocate Time • Self-Management • Problem Solving 	Office Technology
Clokie and Fourie (2016)	<ul style="list-style-type: none"> ▪ (none) 	9	<ul style="list-style-type: none"> • Interpersonal skill • Oral communication • Initiative • Self-management • Written communication • Teamwork • Critical thinking/problem solving • Flexibility • Cultural sensitivity 	Pan-Industry
Hart Research Associates (2016)	<ul style="list-style-type: none"> ▪ (none) 	17	<ul style="list-style-type: none"> • Ability to effectively communicate orally • Ability to work effectively with others in teams • Ability to effectively communicate in writing • Ethical judgment and decision-making • Critical thinking and analytical reasoning skills • Ability to apply knowledge and skills to real-world settings • Ability to analyze and solve complex problems • Ability to locate, organize, and evaluate information from multiple sources • Ability to innovate and be creative • Staying current on changing technologies and their applications to the workplace 	Pan-Industry
Robles (2012)	<ul style="list-style-type: none"> ▪ (none) 	10	<ul style="list-style-type: none"> • Integrity • Communication • Courtesy • Responsibility • Interpersonal skills • Positive attitude • Professionalism • Flexibility • Teamwork skills • Work ethic 	Pan-Industry
St. Louis Community College and Workforce Solutions Group (2013)	<ul style="list-style-type: none"> ▪ basic skills 	10	<ul style="list-style-type: none"> • Communication skills • Organizational skills • Writing • Leadership • Customer service • Problem solving • Microsoft Excel • Planning • Microsoft Office • Management 	Pan-Industry
Stewart et al. (2016)	<ul style="list-style-type: none"> ▪ (none) 	10	<ul style="list-style-type: none"> • Communication: written, verbal, listening • Flexibility/openness • Interpersonal skills • Professionalism • Teamwork • Work ethic • Intellect/reasoning/problem-solving • Ethical behavior • Social/diversity awareness and sensitivity 	Pan-Industry

USDOL (1991)	<ul style="list-style-type: none"> ▪ Competencies: Resources, interpersonal, information, systems, technology ▪ Foundations: Basic skills, thinking skills, personal qualities 	36	<ul style="list-style-type: none"> • Allocates time, money, material, and human resources • Participates as a member of a team • Serves clients/customers • Exercises leadership • Acquires and evaluates information • Understands, monitors, and improves systems and technologies • Reads, writes, performs basic math computations • Knows how to learn and reason • Self-management • Integrity/honesty 	Pan-Industry
Ju et al. (2014)	<ul style="list-style-type: none"> ▪ Basic skills ▪ Higher order thinking ▪ Personal management ▪ Interpersonal skills ▪ Personal attributes 	36	<ul style="list-style-type: none"> (for those without disabilities) • Demonstrating personal integrity/honesty • Ability to follow instructions • Ability to show respect for others • Ability to be on time • Ability to read with understanding • Ability to listen actively • Ability to speak so others can understand • Ability to show high regard for safety procedures • Ability to seek help when needed • Ability to follow schedules 	Pan-Industry: Disabilities
Süß and Becker (2013)	<ul style="list-style-type: none"> ▪ Social competence ▪ Networking competence 	5	<ul style="list-style-type: none"> • Social competence • Knowledge of company structures • Coordinating processes • Strategizing • Self-marketing/networking 	Pan-Industry: Freelancers
Dhopte and Sinha (2017)	<ul style="list-style-type: none"> ▪ (none) 	10	<ul style="list-style-type: none"> • Complex reasoning • Incorporating [differing] perspectives • Communication skills • Cultural intelligence • Creativity • Resolve • Empathy • Connecting theory to practice • Reflection • Self-efficacy 	Pan-Industry: Multinational Corporations
Chamorro-Premuzic et al. (2010)	<ul style="list-style-type: none"> ▪ (none) 	15	<ul style="list-style-type: none"> • Taking responsibility • Planning • Work under pressure • Insight • Willingness to learn • Professionalism • Attention to detail • Critical thinking • Team-working • Interpersonal skills 	Pan-Industry: Psychology
O'Boyle et al. (2011)	<ul style="list-style-type: none"> ▪ Emotional intelligence ▪ Personality ▪ Generalized mental ability 	7	<ul style="list-style-type: none"> • Emotional intelligence • Cognitive ability • Conscientiousness • Openness • Extraversion • Neuroticism (negative) • Agreeableness 	Pan-Industry: Psychology

Nickson et al. (2012)	<ul style="list-style-type: none"> ▪ Personality ▪ Personal appearance 	12	<ul style="list-style-type: none"> • Ability to work with others • Ability to deal with customers • Availability and rostering • Product knowledge • Work ethic • Outgoing personality • Dress sense and style • Knowledge of store operations/procedures • Ability to use equipment • Voice and accent 	Retail
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Note. *SSs are ranked in order of importance for each author, except USDOL (1991), Weber et al. (2013), and Süß and Becker (2013), who did not provide rankings. Due to space limitations, lists were capped at the 10 highest-ranked skills. Categories are not presented in rank order.

Appendix C

St. John Fisher College Institutional Review Board Approval Letter



April 6, 2018

File No: 3852-031518-01

Eliyahu Lotzar
St. John Fisher College

Dear Mr. Lotzar:

Thank you for submitting your research proposal to the Institutional Review Board.

I am pleased to inform you that the Board has approved your Expedited Review project, "Employee Soft Skills and Organizational Culture: An Exploratory Case Study."

Following federal guidelines, research related records should be maintained in a secure area for three years following the completion of the project at which time they may be destroyed.

Should you have any questions about this process or your responsibilities, please contact me at irb@sjfc.edu.

Sincerely,



Eileen Lynd-Balta, Ph.D.
Chair, Institutional Review Board

ELB: jdr

Appendix D

Interview Protocols

Interview Questions for Executive Team Members

Context

1. What is your role in the company?
2. How long have you worked for the dairy?

Soft Skills

1. Please describe the kind of employees you would like to have in the company.
2. Are there other traits or characteristics or personal qualities you want them to possess?
3. I see *attitude* as an outlook or mindset that an employee has about their circumstances. Describe what characterizes a good attitude, and how important attitude is compared to traits they should have.
4. What traits do you expect to see in common from all your managers, regardless of their division/role, and what traits are specific to organizational level and function?
5. How much do your successful employees demonstrate these traits, attitudes, and behaviors, and how much is what you described more of an ideal?
6. I'd like you to tell me about those who are maybe not as successful here. Can you tell me anything about what characterizes them and their behaviors?

7. [For VP HR:] How do you screen for these in the hiring and promotion processes, and how do they figure in to decisions to let people go?

Organizational Culture

1. Expanding out to the organizational picture, please tell me about the values that the dairy uses to make organizational decisions. Specifically, to what values do you refer when justifying a decision to others?
2. To what values do you refer when justifying a decision to yourself?
3. Are there values that other executives rely on that are more important to them than to you?
4. You mentioned ... and ... Please tell me why they are important.
5. You mentioned ... Can you give me an example of how that played out on the organizational level?
6. Tell me about how decisions get made at the executive level, and how they get implemented.
7. And finally, how would you describe the organizational culture?

Interview Questions for Managers

Context

1. What is your title, and what is role in the company?
2. How long have you worked for the dairy?

Soft Skills

1. Please describe the kind of employees you would like to have as part of your line staff.

2. Are there other traits or characteristics or personal qualities you want them to possess?
3. Describe a good attitude, and how important is attitude for line staff compared to other personal qualities.
4. Please tell me which behaviors are most important to the company, and if behaviors matter more or less than attitudes and personal qualities.
5. Please describe for me the difference between successful and unsuccessful line staff?
6. How do you screen for staff characteristics in the hiring and promotion processes, and how do they figure in to decisions to let people go?

Organizational Culture

1. Expanding out to the organizational picture, please tell me about the values and guiding principles your department/division/unit/the plant holds to.
2. How are they the same or different than the values or guiding principles used in other parts of the organization do you think?
3. You mentioned ... and ... Please tell me why they are important.
4. Tell me about what kind of decisions you get to make and the kind you don't.
5. What one or two things please you most about your department/division/unit/the plant?

Interview Questions for Line Staff

Context

1. Tell me, how long have you worked for the dairy?
2. What is your title, and briefly, what do you do?
3. When you do those things, where and for how long do you come into contact with other employees?
4. Tell me about your schedule:
 - a. Is it steady? how often does it change?
 - b. When do you get breaks? does everybody take the same break time? what do you do on breaks?

Soft Skills

1. What personal characteristics are best for someone in your job to have? What kind of person should they be, what kind of qualities should they have?
2. So, it's a good idea to...
3. Give me an example of someone you know who got promoted (but don't tell me their name). How would they go about their work, what do you think got them promoted?
4. What about in the other direction, do you know anyone who didn't make it, either quit or got let go? Again, no name, just tell me about why you think that person didn't make it.
5. So, it's not a good idea to...
6. What are one or two things you do that makes things go well around here?

Organizational Culture

1. What kind of messages do you get from the company about what the company is proud of?
2. Do you have any competitions here between employees?
3. How about rewards (aside from the paycheck)? What are they for?
4. Tell me about what kind of decisions you get to make and the kind you don't.
5. What else can you tell me about the kind of place this is to work?

Appendix E

Learning Resources Inc. Assessment Validation Material

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WRS Customer Care Module: Impact Summary Situation

Since 2009 a global Visa processing organization has used the AccuVision WRS Customer Care module worldwide in order to make selection decisions for their agents. The assessment is administered in conjunction with a basic aptitude assessment. All assessments are delivered online in English.

To date, over 8000 individuals have been assessed. From those 8000 individuals 420 were hired. In order to examine the validity of the tool the organization wanted to track “early attrition” (defined by leaving the organization within the first six months) as well as the relationship to on-the-job performance.

Summary Results

Since the introduction of the assessment there has been a 24% decrease over the previous 24 months in early attrition. In addition, there has been a significant decrease in turnover in offices implementing the AccuVision module while there was no significant decrease in turnover for those offices not implementing AccuVision.

In addition to a decrease in turnover, performance levels on the AccuVision assessment were correlated with on-the-job performance ratings. Managers were asked to complete a separate questionnaire for the purpose of this analysis. There was a significant correlation ($r=.34$, $p < .01$) between assessment performance and the managers’ ratings. Correlations between the aptitude assessment and on-the-job performance ratings were also significant ($r=.17$, $p < .05$)

Anecdotal comments from managers also have been very positive. Comments include:

“We have upgraded our workforce considerably.”

“My staff is at a much higher level versus a year ago.”

“We have much better workers now that we have implemented the customer care assessment.”

Conclusions

Meta Analyses conducted over the years have indicated correlations between interview performance and job performance is between .1 and .2. This means that approximately 1% - 4% of the variance in performance is accounted for by the interview. For this (and other AccuVision Systems) the uncorrected correlation of .34 indicates that approximately 12% of the variance is accounted for by the assessment. This number is 3-10 times greater than the variance accounted for by the traditional interview.

These results are similar to ones consistently found examining the relationship between AccuVision and various measures of job success.

Appendix F

The Organizational Cultural Assessment Instrument (Cameron & Quinn, 2011)

1. Dominant Characteristics	Now	Preferred
a. The organization is a very personal place. It is like an extended family. People seem to share a lot of themselves.		
b. The organization is a dynamic and entrepreneurial place. People are willing to stick their necks out and take risks.		
c. The organization is very results oriented. A major concern is with getting the job done. People are very competitive and achievement oriented.		
d. The organization is a very controlled and structured place. Formal procedures generally govern what people do.		
Total	100	100

2. Organizational Leadership	Now	Preferred
a. The leadership in the organization is generally considered to exemplify mentoring, facilitating, or nurturing.		
b. The leadership in the organization is generally considered to exemplify entrepreneurship, innovation, or risk taking.		
c. The leadership in the organization is generally considered to exemplify a no-nonsense, aggressive, results-oriented focus.		
d. The leadership in the organization is generally considered to exemplify coordinating, organizing, or smooth-running efficiency.		
Total	100	100

3. Management of Employees	Now	Preferred
a. The management style in the organization is characterized by teamwork, consensus, and participation.		
b. The management style in the organization is characterized by individual risk taking, innovation, freedom, and uniqueness.		
c. The management style in the organization is characterized by hard-driving competitiveness, high demands, and achievement.		
d. The management style in the organization is characterized by security of employment, conformity, predictability, and stability in relationships.		
Total	100	100

4. Organization Glue	Now	Preferred
a. The glue that holds the organization together is loyalty and mutual trust. Commitment to this organization runs high.		
b. The glue that holds the organization together is commitment to innovation and development. There is an emphasis on being on the cutting edge.		
c. The glue that holds the organization together is the emphasis on achievement and goal accomplishment.		
d. The glue that holds the organization together is formal rules and policies. Maintaining a smoothly running organization is important.		
Total	100	100

5. Strategic Emphasis	Now	Preferred
a. The organization emphasizes human development. High trust, openness, and participation persist.		
b. The organization emphasizes acquiring new resources and creating new challenges. Trying new things and prospecting for opportunities are valued.		
c. The organization emphasizes competitive actions and achievement. Hitting stretch targets and winning in the marketplace are dominant.		
d. The organization emphasizes permanence and stability. Efficiency, control, and smooth operations are important.		
Total	100	100

6. Criteria of Success	Now	Preferred
a. The organization defines success on the basis of the development of human resources, teamwork, employee commitment, and concern for people.		
b. The organization defines success on the basis of having unique or the newest products. it is a product leader and innovator.		
c. The organization defines success on the basis of winning in the marketplace and outpacing the competition. Competitive market leadership is key.		
d. The organization defines success on the basis of efficiency. Dependable delivery, smooth scheduling, and low-cost production are critical.		
Total	100	100

Appendix G

Sequence of Data Collection

1. Some information was initially gathered by observation during preliminary negotiations with the dairy's representatives and a brief tour of the production facility was provided.
2. Thorough review of the dairy's website and other internet-based information on the dairy.
3. Interviews re: culture and preferred soft skills:
 - a. four executives, at Wheatstone headquarters,
 - b. four managers, including overall plant manager, at production facility subunit,
 - c. six line staff interviewed individually in a private space at subunit.
4. Photographing artifacts during interview and observations visits.
5. Provision of Organizational Culture Assessment Instrument survey with verbal and written instructions and stamped self-addressed envelopes, to the executives and managers after each interview, to be completed within one week.
6. Observations of plant operations, during different shifts on the production floor, in break rooms, hallways, in meetings, and outside the buildings on Wheatstone property while not disturbing the employees' normal functioning.
7. Provision of soft skills assessment from Learning Resources Inc. (LRI) to the six line staff.