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DISSERTATION

**VENTURING INTO THE DIGITAL ECONOMY: AN EXAMINATION OF AN
ELECTRONIC BUSINESS CORPORATE ENTREPRENEURSHIP TEAM**

Submitted by

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School of Education

In partial fulfillment of the requirements

for the Degree of Doctor of Philosophy

Colorado State University

Fort Collins, Colorado

Fall 2000

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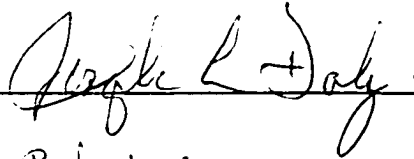
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WE HEREBY RECOMMEND THAT THE DISSERTATION PREPARED
UNDER OUR SUPERVISION BY JEFFREY S. LEWIS ENTITLED VENTURING
INTO THE DIGITAL ECONOMY: AN EXAMINATION OF AN ELECTRONIC
BUSINESS CORPORATE ENTRENEURSHIP TEAM BE ACCEPTED AS
FULFILLING IN PART THE REQUIREMENTS FOR THE DEGREE OF DOCTOR
OF PHILOSOPHY.

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ABSTRACT OF DISSERTATION

VENTURING INTO THE DIGITAL ECONOMY: AN EXAMINATION OF AN ELECTRONIC BUSINESS CORPORATE ENTREPRENEURSHIP TEAM

We now have a business environment enhanced by digital technology. One of the keys to success in the digital economy is the appropriate management of human capital. Because of the sweeping changes being initiated by technology, some human capital management behaviors may not be suitable for the new digital domain. Traditional businesses will need to evolve and transition into the New World of electronic business. The study implements qualitative case study methodology to examine an electronic business corporate entrepreneurship team within a traditional business. The study was designed to identify human resource development related factors emerging from the digital economy. Additionally, the study endeavored to discover hypotheses related to the impact of the factors on traditional businesses. To that end, twelve hypotheses are proposed in the discussion section of this dissertation. The notion that digital economy factors do impact corporate entrepreneurship teams within traditional businesses is supported by this study. The study also supports the claim that human capital must be managed and deployed uniquely when interacting with digital economy factors.

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“Any enterprise is built by wise planning, it becomes strong through common sense, and profits wonderfully by keeping abreast of the facts.” – The Book of Proverbs

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CHAPTER ONE: INTRODUCTION

The Problem and the Question

We now have a business environment enhanced by digital technology and are rapidly approaching an era that will require most companies be built upon a foundation of digital technology. One of the keys to success in the digital economy is the appropriate management of human capital. Because of the sweeping changes being initiated by technology, old behaviors of human capital management may not be suitable for the new digital domain. Traditional businesses will need to evolve and radically transition into the New World of electronic business.

At the turn of the 21st century, businesses should be highly concerned with the following two questions posed by Kalakota and Robinson (1999). First, how will existing, traditional companies make the transition into digital economy companies? Second, what are the impact of digital economy factors on the form and function of 21st century companies?

The research objective of this study is to lead the academic research focusing on the two questions presented in the previous paragraph. This study will focus on emerging human capital management practices that enable companies to transition into the digital domain. Of primary importance is an examination of the team processes involved as a traditional business initiates a new electronic business creation team and that team

progresses from the development of an idea to the operation of a revenue-generating electronic business.

The New Economy

Business is evolving extremely fast. Fiber-optic lines, high-bandwidth Internet connectivity, and hyper speed microprocessors have significantly marked business in the late 20th and early 21st centuries. The impact has been significant enough to change business terminology. Most contemporary business publications and conversations include references to *e-business*, *e-commerce*, *virtual teams*, *Web portals*, *Internet Service Providers*, and *high-tech sector alliances*. These terms and concepts were not in the business lexicon 10 years ago except in the predictions of high-tech futurists with keen senses of foresight.

Technology has transformed business and initiated the creation of a new digital economy. As a result, the new economy's innovators have developed new business models, strategy, and processes. These new ways of conducting business have affected businesses on a global scale and initiated a renaissance that will certainly be distinctive to future business historians. Tapscott (1996) states, "Today we are witnessing the early, turbulent days of a revolution as significant as any other in human history" (p. x).

Tapscott added,

A new medium of human communications is emerging, one that may prove to surpass all previous revolutions – the printing press, the telephone, the television, the computer – in its impact on our economic and social life. Interactive multimedia and the so-called information highway, and its exemplar the Internet, are enabling a new economy based on the networking of human intelligence. In this digital economy, individuals and enterprises create wealth by applying knowledge, networked human intelligence, and effort to manufacturing, agriculture, and services. In the digital frontier of this economy, the players,

dynamics, rules, and requirements for survival and success are all changing.
(Tapscott, 1996, p. xiii)

As a result of the proliferation and usage of new technology, a new economy has been birthed. The new domain of electronic business is more than a mere trend or paradigm shift; a new reality has emerged in business. As Figure 1 illustrates, new economies have emerged in the past as the agricultural economy was displaced by the industrial economy, which was displaced by the service economy, which was displaced by the global economy, which is currently being displaced by the digital economy (Aldrich, 1999, p. 6).

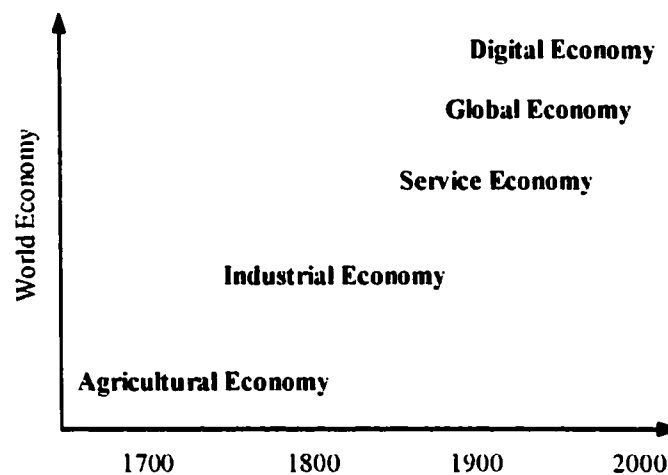


Figure 1. Timeline of Emergent Economies. Adapted from Mastering the Digital Marketplace (p. 6), by D. F. Aldrich, 1999, New York: John Wiley & Sons.

Throughout history, each time universal standards have emerged the consequences have been dramatic. Railroads are an obvious example (Evans & Wurster, 2000). Like the railroads, intercorporate networks and intercorporate computing are fundamentally changing worldwide patterns of commerce (Martin, 1996).

As each new business reality has emerged, businesses have been required to rediscover how to exist by balancing the new and the old. Existing companies must now find answers for the following two questions:

1. "How will existing companies make the transition into e-commerce companies?"
2. "What are the implications of e-commerce on the form and function of twenty-first-century organizations?" (Kalakota & Robinson, 1999, p. 29)

The digital economy is creating a tremendous challenge and problem for companies that pre-date its emergence. Machiavelli eloquently identified the problem facing companies with his quote, "There is nothing more difficult to take in hand, more perilous to conduct, or more uncertain in its success, than to take the lead in the introduction of a new order of things" (Bergin, 1947, p. 15). Companies need to understand that digital technology has fundamentally changed the way business will be conducted in the 21st century. Those who choose to discount the pervasiveness of the changes or feign away because of intimidation will quickly be replaced by the techno-savvy. A new set of rules is being written daily in the digital economy, and all businesses must significantly change their game plan if they are to stay in the game. The following sections provide a framework for understanding this new digital economy.

The New Economy Embraced

Many scholars are announcing the birth of the new economy with great clarity and volume, and many insightful creative thinkers forecast it. Since its arrival, few voices have diminished or discounted the potential and far-reaching effects of the digital economy. The following statements are birth announcements of the digital economy posted for "those who have ears to hear."

Kelly (1998) stated,

while the fast-forward technological revolution gets all the headlines these days, something much larger is slowly turning beneath it. Steadily driving the gyrating cycles of cool technogadgets and gotta-haves is an emerging new economic order. The geography of wealth is being reshaped by our tools. We now live in a new economy created by shrinking computers and expanding communications. This new economy represents a tectonic upheaval in our commonwealth, a far more turbulent reordering than mere digital hardware has produced. The new economic order has its own distinct opportunities and pitfalls. If past economic transformations are any guide, those who play by the new rules will prosper, while those who ignore them will not. We have seen only the beginnings of the anxiety, loss, excitement and gains that many people will experience as our world shifts to a new highly technical planetary economy. (p. 1)

Papows (1998) wrote,

It has become clear to me that we are all now engaged in a change of monumental proportions that will have broad social, political, and economic implications, greatly affecting our lives and times. In fact, it is my conviction that we are in the early years of a fundamental change in the way that our civilization works. Seemingly basic conventions and terminology such as customers, communities, culture, and even competition will take on new meaning as we begin to come to grips with the truly borderless, twenty-four-hour world enabled by today's technology. (Papows, 1998, p. xi)

The Search for Digital Excellence explained,

The "information age," as it is so often called, is ushering in an era where economic and social order is dictated not by physical resources but by knowledge and the ability to manage it and create value from it. Today the Internet and its related technologies are fostering a new realization that knowledge can indeed be created, stored, transmitted and sold for economic value. (Ware, Gebauer, Hartman, & Roldan, 1998, p. 2)

Peter Drucker (1989) points out that a new form of capitalist society has evolved.

The old order of capitalism focused on capital, equipment, labor, land, and natural resources. Today the most important resource is knowledge, and value is created by applying knowledge to work. An era in which the key economic resource is knowledge

is startlingly different from an era in which the key resources were capital, raw materials, land, and labor. Most knowledge, unlike traditional economic resources, is endlessly replicable (Drucker, 1989). An example of Drucker's endlessly replicable knowledge resource is a digitally encoded musical recording that can be downloaded and played on personal computers all over the world.

These quotes are just a fraction of the notions supporting the emergence of a new economy that can be found in recent business literature. The challenge for businesses as they enter the digital economy is to leave behind 20th century logic and management tools and begin developing ones that will work in the 21st century (Aldrich, 1999).

A Brief History of the New Economy

The development of computers influenced a new digital reality. Digital can be defined as "anything that can be fully expressed using digits, or numbers. Effectively, this means anything that can be translated into numerical form, and – most important – retranslated back to its original state without losing its essential aspects" (Aldrich, 1999, p. 5). A dissertation can be expressed digitally. Digital books, photographs, music, and movies have emerged from the technological advancements. Digital technology cannot transform or transmit many items but the "Beam me up" world of Star Trek does not seem too far-fetched from the vantage point of the 21st century.

The military and space exploration programs have driven the development of high technology. The first stages of the Internet grew from a military experiment and have been around since the 1960s. It took 30 years for technology to develop and proliferate to its current business potential. The first commercial Web sites began to be deployed in

1993 (Tapscott, 1998). A more detailed explanation of the Internet's development follows in Chapter Two.

The E-volution of Business

The transformative power of the Internet continues to astonish all who encounter it (Bollier, 1998). No business leader can presume that the business realities of the last decade will still be valid a few years from now (Evans & Wurster, 2000). Electronic commerce will change not only the way firms do business but will also transform organizations (Choi, Stahl, & Whinston, 1997). The Internet's impact is profound enough to identify it as a *disruptive technology* (Kalakota, Oliva, & Donath, 1999). To realize the full potential of electronic commerce, businesses must be willing to change the way they operate. History has shown that significant advances occur when technological change is combined with organizational restructuring. Not only is business conducted more efficiently, but also new business opportunities are created. Management must play a large role in the formulation and implementation of electronic business strategies (Kalakota & Whinston, 1996). Human capital must be managed and deployed differently in the digital economy.

Electronic business drives intra-firm behaviors and impacts those behaviors specifically in the human capital dimension. Figure 2 identifies the context of this presupposition. The figure also illustrates the unique bridge that must be constructed, through human capital development and deployment, to enable firms to become players in the new digital economy.

The beginning of the new economy was evident as businesses began using digital tools in the 1980s. The proliferation of computers and other electronic devices paved the

way for the transformation that is now recognized as the digital economy. A short list illustrating the related aspects of electronic commerce includes

1. Internal electronic mail and messaging
2. Online publishing of corporate documents
3. Online searches for documents, projects, and peer knowledge
4. Distributing critical and timely information to employees digitally
5. Managing corporate finance and personnel systems digitally
6. Digital manufacturing logistics management
7. Digital supply chain management for inventory, distribution, and warehousing
8. Sending order processing information and reports to suppliers and customers digitally
9. Tracking orders and shipments digitally. (Choi et al. 1997, p.14)

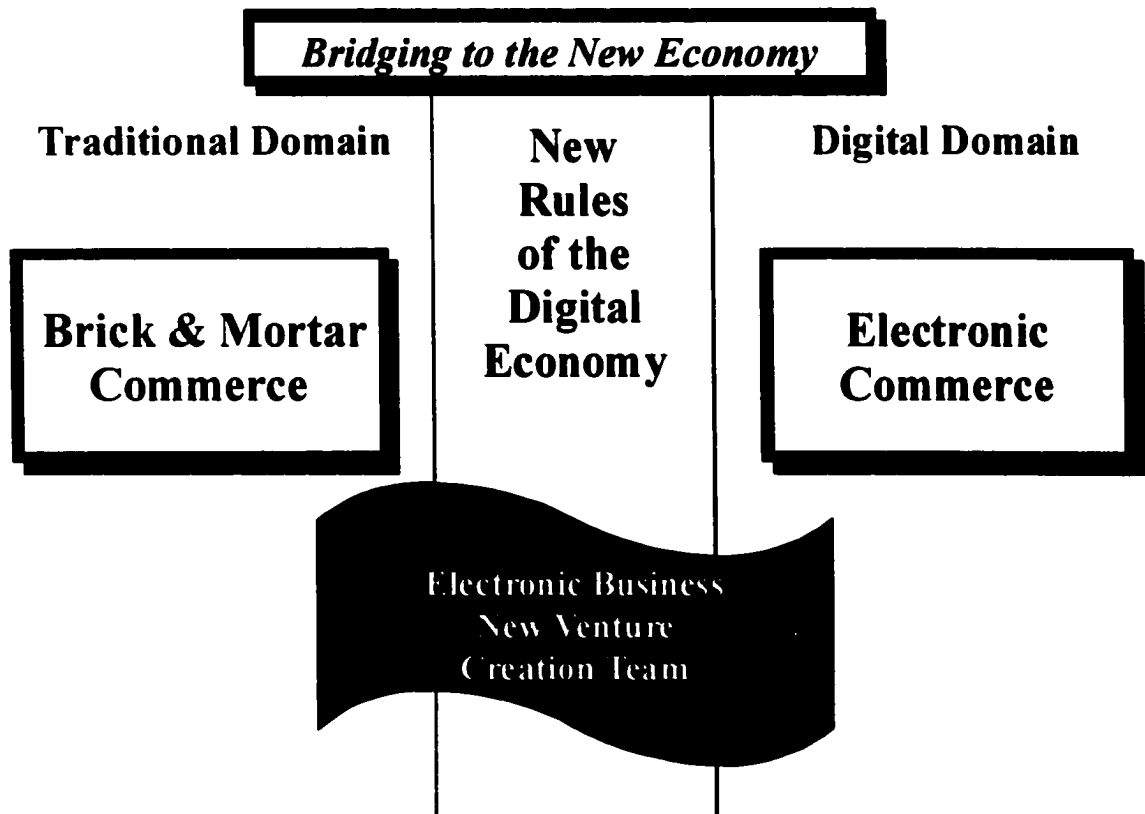


Figure 2. The Traditional Company's Challenge: Building a Bridge to the Digital Economy using Electronic Business New Venture Creation Teams. (Lewis & Geroy, 2000).

Electronic business goes far beyond simply “doing business electronically.”

Doing business electronically means that many conventional business processes, such as advertising and product ordering, are being digitized and conducted on the Internet.

However, the Internet is not a mere alternative channel for marketing or selling products online (Choi et al. 1997, p. xxiv). Aldrich (1999) presented two critical questions that business leaders are now required to answer:

- 1. “How will the digital economy change my relationships with workers, vendors and customers?**
- 2. “What will be the impact of the digital economy on my company’s culture and organizational structure?” (p. 21)**

Business Model Innovation

“We are at the dawn of an Age of Networked Intelligence – an age that is giving birth to a new economy. Businesses will be transformed with the help of the new information technology” (Tapscott, 1996, p. 2). Technology has birthed a new digital economy that is forcing business to evolve and develop. In the digital economy, the critical tool for competitive advantage is business model innovation because of the implementation of technology (Kalakota et al. 1999). The challenges associated with balancing the old and new business realities and the development of new business models have become top priority for business leaders. The challenge of electronic business is to reconcile its novel ideas to the established business principles we have been using for generations (Tapscott, 1996). A relational concept of this is presented in Figure 3. Of particular interest and concern for this study are the team processes of new electronic business venture creation teams. An examination of team values, beliefs, and norms and corporate entrepreneurship activities was conducted.

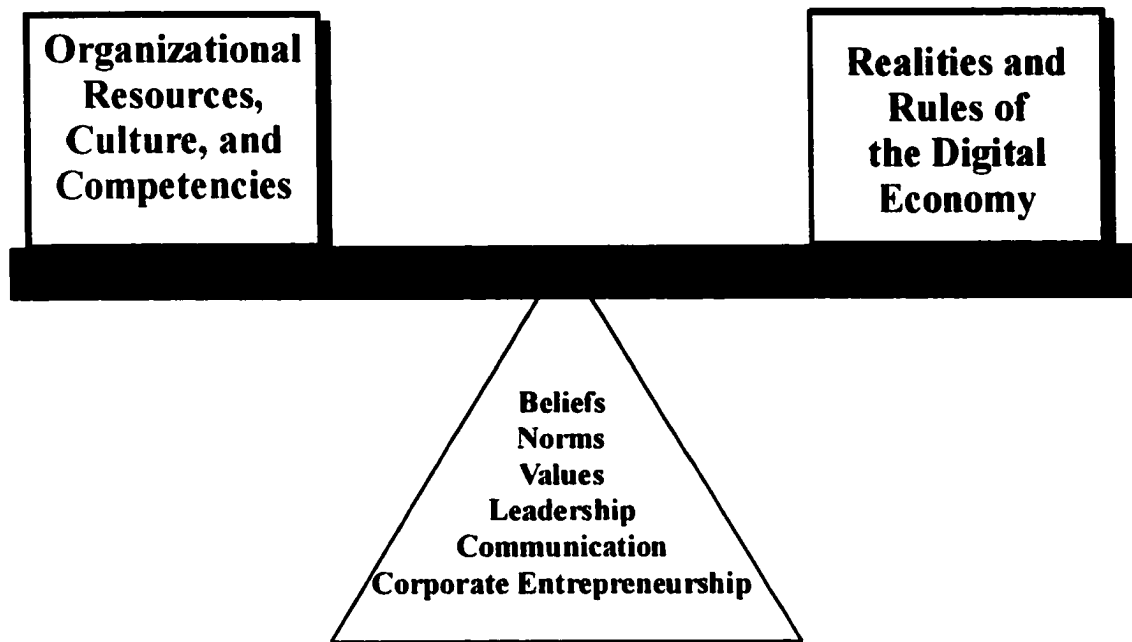


Figure 3. The Challenge of Electronic Business New Venture Creation Teams: Balancing New Rules with Organizational Culture and Assets. (Lewis & Geroy, 2000).

Businesses must still focus on competitive advantage and its sustainability as the key drivers of success, but the means to these ends are drastically changing (Evans & Wurster, 2000). Business leaders must look past making the electronics and software work and focus on how to create business value with these technologies (Martin, 1996). Many would argue that the greatest challenge for corporations and established large-scale organizations is the requirement to embrace the unknown and tolerate the ambiguity associated with the rapidly developing digital economy (Evans & Wurster). The new electronic marketplace will necessitate new innovative models of firm organization, production, delivery, and overall market institutions (Choi et al. 1997).

Process reengineering, cost cutting, or other operational initiatives are not pathways to success for businesses in the new economy. As Figure 4 illustrates, a

comprehensive and radical redefinition of business models is crucial for success in the digital domain.

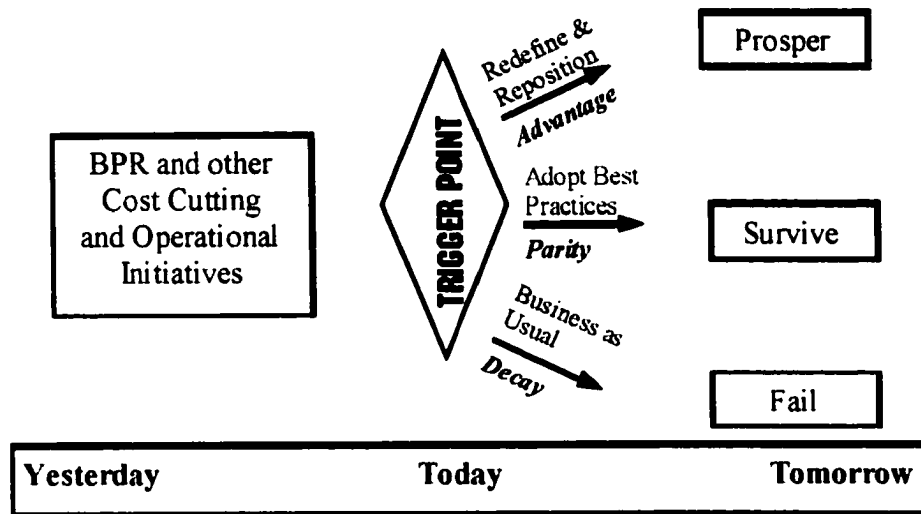


Figure 4. Business Model Innovation Paths. Adapted from Mastering the Digital Marketplace (p. 16), by D. F. Aldrich, 1999, New York: John Wiley & Sons.

“The basis of competition and wealth creation in the digital economy is not good use of information, quality, process reengineering, speed, effective decision making, empowerment or the other countless management techniques popular today. It is business model innovation” (Kalakota & Robinson, 1999, p. xiii).

As electronic business innovation gains momentum, companies are reformulating business strategies (Kalakota & Robinson, 1999). The primary question confronting all businesses is “What is the new business model in the electronic business world?” Companies must rethink strategy, products, and business processes and develop a cohesive management approach. Clearly, we have entered the age of electronic business design. Competition is not so much product versus product but traditional business design versus electronic business design. Managers must confront the creation and execution of the electronic business design. Businesses must learn how to construct an

electronic business design and transform a traditional business into an electronic business (Kalakota & Robinson).

The current focus on the size of the online market or the novelty of doing business with digital tools will have diminishing relevance because all commerce is jumping on the Internet. The distinctions between the new economy and the industrial economy will likewise blur and fade as all economic activity is touched in some way by the new rules of electronic commerce (Kelly, 1998).

Brick-and-Mortar Companies in the Digital Economy

The transition into the digital economy is difficult for incumbent, brick-and-mortar organizations. Brick-and-mortar companies were birthed in the economic eras that preceded the digital economy, in which brick and mortar representations of buildings and other physical locations were the foundation for success. The digital economy has implemented a new set of rules that incumbent companies must learn. “The genie is out of the bottle, cyberspace cannot be switched off” (Martin, 1996, p. 239). All businesses are being forced to interact with the new realities of electronic commerce, and there is a belief that the changes are initiating a time of natural selection in business in which only the fittest will survive (Martin). The transforming power of the digital economy is rapidly changing the rules of the industrial economy, company by company and industry by industry (Kelly, 1998).

Information has become the prime commodity in the digital economy, which is significantly different from an economy of physical things (Evans & Wurster, 2000). As long as information is embedded within a physical thing, the two kinds of economies are wedded together, but that arrangement will soon become obsolete (Evans & Wurster,).

The connection between physical things and information dissolves as high tech digital processing appliances proliferate on a greater scale than telephones and televisions. Telephones and televisions are evolving into appliances used in the processing of digital information. This section includes a discussion of the contrasting realities between the new and old economies and the challenges unique to incumbent companies. An examination of the digital economy reveals two primary areas of contrast between the new economy and the established economy—one related to economics and the other to operating principles.

Economic Contrasts

Electronic commerce is changing the notion of value (Kalakota & Robinson, 1999). The introduction of knowledge capital and unique aspects of technology value have changed many rules for business. In the past, value was directly correlated to the scarcity and demand for a product. Value resulted from scarcity. The icons of wealth—diamonds, gold, degrees, and patents—were valuable because they were scarce. As things become plentiful, they usually devalue. In the digital economy, value is often derived from plentitude; power comes from abundance. For example, a fax machine is worthless without another fax machine with which to communicate. Fax machines gain value as more fax machines enter the network.

In the digital economy, technology is the only economic commodity guaranteed to cost less as time passes (Aldrich, 1999). Because of the quick proliferation of technology and the steady cost reductions, the digital economy sets up a level playing field. Small companies can acquire the same technological tools as the large companies. Technology solutions are easily replicable by competitors with the resources and capabilities to react.

Ease of use and development of technology have enabled many business opportunities, but they have also made it easier for others to do the same (Ware et al. 1998).

Economics of Information

The economics of a physical commodity and the economics of a piece of information are fundamentally different. When a physical commodity is sold, the seller does not own it and must recreate another to continue revenue streams. When information is sold, the seller retains the knowledge and can easily sell it again. Information never wears out and is not limited by physical resources. Its primary opponent is the development of new information that will make it obsolete or reduce its value (Evans & Wurster, 2000).

Information also has a new set of rules regarding return on investment. Most things are subject to diminishing returns. Increasing labor effort does not guarantee an increase of production because of other limiting resources. Information has almost perfectly increasing returns. An investment can be made to develop or learn the knowledge once, and that information can be reused at no additional costs (Fulk & DeSanctis, 1995; Evans & Wurster, 2000).

Rules of supply and demand have also changed in the digital economy. Traditionally, as a resource was consumed, it became more expensive to produce because limited resources were consumed; and demand reduced as supply increased. The demand curve sloped down, with prices dropping as the product became abundant. In the digital economy, the demand increases as price goes down (Kelly, 1998).

Operational Contrasts

The digital economy has also influenced a new set of operational rules for businesses. Technology has made the “global economy” even more global in scope. A company operating in Siberia has the same access to Internet customers as a company operating in New York. This escalating global competition is a new force in the digital economy (Ware et al. 1998). Recent history has shown that technology leadership and global economic success are often inseparable (Papows, 1998).

Other basic business assumptions are not presumed to be true in the digital economy. Firms are no longer based in a single location because all functions need not be operated in one locale. Going beyond even decentralization, a firm on the Internet becomes a distributed company, or virtual firm, in which where any operation can be anywhere (Choi et al. 1997).

Additionally, outsourcing activity has drastically increased in the digital economy. Companies must focus on their core competencies and key products. Because of the changing environment, companies must balance outsourcing non-core operations and protecting products crucial to their business (Ware et al. 1998). Through outsourcing and strategic arrangements with other companies, a higher level of relationships is formed between companies. A company’s ability to bring together players to form these relationships is a distinct advantage in this emerging economy (Ware et al.). In the previous business model, outsourcing was an option for many companies; in the digital economy, outsourcing is necessary for success.

At the same time, competitive advantage is more difficult to attain and even more difficult to sustain in this emerging economy. Competitiveness is reliant on the ability to

“identify and capitalize on emerging opportunities, shore up the intellectual capital and resources required to exploit the opportunity, and ruthlessly implement a strategy, rather than building long-lasting sustainable solutions that competitors cannot overcome” (Ware et al. 1998, p. 10-11). Collins (2000) refers to the new competitive advantage as being “built to flip” (p. 131). Instead of building an organization that has a long-term mission and objectives, many firms in the digital economy focus on quick development of functionality, then capitalize the firm’s new value through divestiture or equity sale (Collins). The challenges of the digital economy are lessened for entrepreneurs starting online businesses (Kalakota et. al. 1999).

The realities of customer interaction have changed in the digital economy. The time is approaching where a company’s primary connection to their customer will come through an Internet-based contact like a Web site. This interactivity has been called a “market-facing enterprise” by IBM’s senior strategist John Landry (Papows, 1998, p. 5). This rule will radically evolve the old industrial and early postindustrial business model into something entirely new and different (Papows). The customer also has an increase of power in the commerce process. Because of their ability to interact on a level field with other consumers, customers are gaining the balance of bargaining power from sellers (Bollier, 1998).

Challenges for Brick and Mortar Companies

A unique set of challenges is facing companies seeking to become players in the digital economy. Many have advanced with technology, but the gulf between their current reality and the new rules of the digital economy requires evolution rather than adaptation or reengineering. The large brick-and-mortar companies are rethinking their

business models to compete in the new marketplace (Korper & Ellis, 2000). The new technologies are changing the most basic rules of management, work practices, and values (Bollier, 1998).

In the short history of the digital economy, the most widely shared parable is told about the decline and near demise of Encyclopedia Britannica. New technology was presented to the leaders of Encyclopedia Britannica; unfortunately, it was rejected because of their history of success and their competitive advantage over other companies. Britannica's competitors capitalized on the technology, and inferior encyclopedias began to be published on CD-ROM discs rather than paper. The inferior encyclopedias captured huge market shares from Britannica because the consumer was ready for the paradigm shift before Britannica was. Britannica came very close to business death even though they had the best encyclopedia in the world. This story communicates the dangers of complacency.

It [Britannica] illustrates how the evolving technological capabilities for sharing and using information can transform business definitions, industry definitions, and competitive advantage. It illustrates how the most stable of industries, the most focused of business models, and the strongest of brands can be blown to bits by new information technology. (Evans & Wurster, 2000, p. 4).

Many of today's market leaders face demise if they hold strongly to their traditional strengths (Kalakota et al. 1999).

Incumbents Verses First Movers in the Digital Economy

The first major challenge for incumbent companies is the head start that many companies have in playing by the new rules of the digital economy. Many incumbents have been preoccupied by their current success with the old rules and have not seen the new digital economy emerge. The digital economy has been birthed through the efforts

of entrepreneurs, innovators, and first-movers. Latecomers can establish a place for themselves in the digital economy by cutting across the terrain dominated by the first entrants and finding pockets of opportunities within that terrain. The latecomers would have to outperform the first entrants, playing by their rules (Evans & Wurster, 2000). The digital economy favors the quick; anything requiring patience and slowness is handicapped (Kelly, 1998). Most latecomers are forced to follow Drucker's Rule (1989), they must be 10 times better than what they hope to displace.

Deconstruction of Brick-and-Mortar Companies

The second major challenge is the need for companies to deconstruct their current business structures, models, and strategies to compete in the digital economy.

Deconstruction is the dismantling and reformulation of traditional business structures (Evans & Wurster, 2000). Incumbents can behave like the owners of Britannica: they can become paralyzed by their reluctance to cannibalize their established business model (Evans & Wurster). Even if the incumbents grasp the impact of new technologies they still face a major disadvantage because they are incumbents. Incumbents are burdened with legacy assets, sales and distribution systems, bricks and mortar, brands, and core competencies. "Competing in the face of the new economics of information requires cannibalizing those assets, perhaps even destroying them. Incumbents hesitate to do that, especially as long as the business has positive margins" (Evans & Wurster, p. 6). It is difficult to deconstruct assets when many customers still prefer the current business model; it is difficult to cannibalize current profits. It is also difficult to change core competencies that were built with many years of corporate efforts.

Leaders must look past the presuppositions of the old economy and compete according to new rules of engagement. Their decision-making processes must shorten and tolerate a much higher level of uncertainty. They must acquire new technical and entrepreneurial skills that are often very different from what made their organization successful. They must manage for maximum opportunity and not minimum risk. “They must devolve decision making, install different reward structures, and perhaps even devise different ownership structures. They have little choice. If they don’t deconstruct their own business, somebody else will do it to them” (Evans & Wurster, 2000, p. 66).

The paralysis of the incumbent is the best competitive advantage enjoyed by new competitors. Waiting for someone else to demonstrate the benefits of deconstruction hands over the biggest advantage a competitor could possibly hope for—time (Evans & Wurster, 2000). Incumbent hesitancy

is an advantage that they often do not deserve, since if the incumbent would only fight all out by the new rules, the incumbent would often win. The paralysis of the leading incumbent is also the greatest competitive advantage for the marginal incumbent, who has lost the old game and has every motive to change the rules. (Evans & Wurster, p. 65)

Context for the Research

Research has shown that new business targets require new processes of internal operations. For example, it is impossible to reach the global market using technologies and business models developed in the 1960s. Innovation and technology implementation are critical to business survival in today’s digital economy. Product lines and services must be constantly judged for relevance and profitability in the marketplace. Businesses must also have the foresight to capitalize on new technologies and opportunities presented in the new economy.

Businesses must not only respond to the new forces within the new economy but also closely examine internal fundamental processes. It has been shown that the post-modern society has influenced the development of team-based operations to accomplish organizational objectives. More recently, the emergence of technology-mediated communication and virtual team operations have changed the day-to-day business interactions. Businesses must move faster and smarter and be willing to accept increased risk to survive within the electronic business environment.

The challenge for this study will be to identify the forces influencing the processes and behaviors of electronic business venture creation teams that are operating within traditional brick-and-mortar businesses. The realities of the new economy are forcing existing businesses to evolve fast or die. This study strives to describe the evolutionary processes of businesses seeking to bridge the chasm from the traditional economy to the electronic economy. The conceptualization of this challenge is represented in Figure 2. The illustration identifies the need for existing corporations to make efforts to navigate the new rules of the digital economy. This study will examine efforts related to the implementation of electronic business new venture creation teams.

Figure 3 represents the major constructs that will be examined in this study. There are three primary categories of constructs: the existing organizational resources, culture, and competencies; the realities of the digital economy; and the processes within the new business creation teams. As the electronic business new venture creation teams' processes have been examined, a number of sub-constructs were defined and described. These constructs included leadership, core values, strategic synergistic relationships, intrapreneurship and innovation, intra-organizational communication, and human capital

migration and deployment. This study focuses on businesses that did not originate with an electronic business mission; the formation of the company must have preceded the advent of the new digital economy.

This study has been a challenging endeavor for the researcher. The new digital economy is young, with most agreeing it emerged in the early 1990s. Since that time, the factors associated with electronic business have been fast moving and fluid in nature. The economy is quickly evolving and forcing businesses to evolve also. An additional challenge is associated with a lack of academic, empirical research related to the issues associated with this study (Penbera, 2000). Empirical models that predict the behavior of firms engaged in electronic business need to be developed (Barney & Ouchi, 1986). Most of the attention in academic research has been given to marketing and information technology aspects of electronic business. Very few researchers have conducted significant research efforts relating to human resource development and business model identification.

Research Question

The research question to be addressed in this study is, “What are the significant factors supporting a successful transition of a new venture creation team emerging from a traditional domain to a new business organization working in the digital economy domain?”

To address this research question, several enabling questions were asked. The enabling questions included, but were not limited to, the following five questions:

1. What does the establishment of an electronic business creation team from within a traditional business look like?
2. What are the new rules of electronic business, and how do electronic business venture creation teams address them?
3. How do electronic business venture creation teams balance their organization's resources, culture, and competencies with the new rules of the digital economy?
4. What human resource development processes occur within electronic business venture creation teams?
5. What is the impact of the digital economy on the team's culture and organizational structure?

This study was process orientated, not outcome orientated, and its goal was to describe what is occurring and avoid an attempt to measure the effectiveness or efficiency of the efforts. The definition and descriptions resulting from this study should enable researchers to form quantitative hypotheses and perform additional empirical research.

Significance of the Study

This study will contribute to the field of human resource development by discussing whether there is a difference between brick-and-mortar venture creation teams and electronic business venture creation teams. This will be accomplished by describing the processes that occur as brick-and-mortar businesses deploy teams to develop electronic business functionality. This study will also begin to balance the focus of electronic business by addressing human resource development realities. The predominance of research and attention within electronic business has been focused

marketing and computer information systems. This study provides businesses with definition and structure for enacting electronic business venture creation teams from a human resource development perspective.

This study also provides specialized insight for evolving corporations. An examination of corporations that originated before the advent of the new digital economy was the focus of this study. The issues surrounding the establishment of electronic business functionality within a corporation without an original electronic business mission are unique.

The next chapter looks to the existing literature for answers to the research questions. Previously conducted research and scholarly work will be examined to frame the issues related to the research questions.

CHAPTER TWO: LITERATURE REVIEW

Introduction

Complex and multifaceted challenges await companies who pursue opportunities within the digital economy. In many ways, the challenges can be likened to the processes involved with initiating global, cross-cultural business. Traditional companies are the sojourners traveling into a new land; the new land is the realm of the digital economy. The sojourners discover different languages, different cultures, different currency, different values, and different rules of business. The traditional businesses are sure to be perplexed by people who look and act similar but incorporate new words into their native language. The sojourners look for landmarks to commemorate the great successes of the first inhabitants but find massive networks of information appliances and a handful of bricks. The inhabitants of the digital realm appear to be moving at a speed unknown to most sojourners because of its fast pace. Everywhere they look, the sojourners see people locked arm-in-arm as partners and teammates.

In preparation for the move into the new land, traditional businesses can access a shallow pool of literature to investigate some of the challenges they will face as they embark on their journey. Only a few ambiguous maps are available and the high price travel outfitters are difficult to engage. Some inhabitants of the digital economy have sent back reports, and some brave sojourners have traveled to the new land and have returned to tell a story of great benefit to others. This study adds to the pool of

knowledge by telling the story of one team within one company that is striving to venture from the traditional economy into the new digital economy. To begin this research effort, a thorough literature review has been conducted to analyze the data and information made available from scholars and practitioners on the leading edge of the digital economy. The goal of this review is to answer the research questions posed in Chapter One.

A representation of the primary realms to be investigated can be found in Figure 5. The scope of this study can be found at the intersection of the fields of corporate entrepreneurship, team processes, and the new rules of the digital economy.

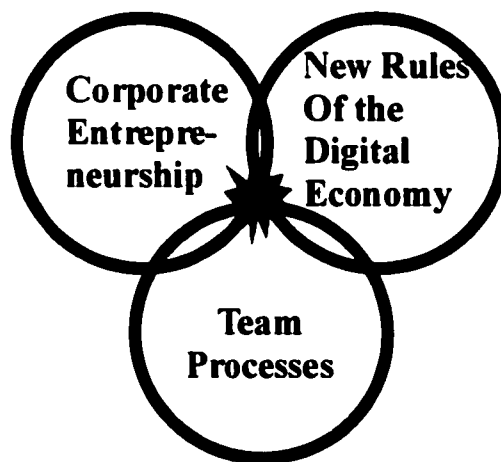


Figure 5. Primary Realms of Literature for this Study.

Topic Area One: The Rules of the Digital Economy

The History of the Digital Economy

The Internet as it is known today began as a military experiment in the late 1960s. The military needed a system that networked a large number of geographically dispersed computers designed to withstand geographic attacks and remain functional. Having a

network that ran through one primary server in one geographic region posed a security risk. The system had to work if part of the system became disabled. The Internet creation project became known as ARPnet from the Advanced Research Projects Agency of the U.S. Defense Department in 1969. Connections to the Internet are based on open standards to enable flexibility and maintain communications capability even under a catastrophic disaster or a serious system failure. The project built the foundation for the Internet to grow into a network of networks where no single computer or network acts as a central authority (Choi et al. 1997). Management or ownership of the Internet is a misnomer; what was initiated as a tool for the U.S. Department of Defense has evolved into a network of computer communication that has changed the face of business and society.

Choi, Stahl, and Whinston (1997) described the Internet as a network of networks. Each network is comprised of computers connected by wire or wireless mediums, such as radio signals, that enable component computers to “talk” to each other. Once computers are networked, files on one computer can be accessed from any other computer on the network; messages can be exchanged, and limited resources such as printers can be shared.

Computers on these component networks became a part of the larger Internet when they used the same standard for cross-communication – the TCP/IP protocol – known as the language of the Internet. Therefore, any computer “speaking” TCP/IP protocol is Internet-enabled in terms of connectivity. (Choi et al 1997, p. 2)

Growth of the Digital Economy

The number of computers connected to the Internet is significant. According to Bollier (1998), as many as 163 million personal computers worldwide would have access

to the Internet by 2000. As of 1999, about 50% of households in the United States had personal computers and more than half of those households had connections to the Internet (Evans & Wurster, 2000). Evans and Wurster added, “the daily users of Yahoo (a popular Internet directory) now outnumber viewers of the most popular show on television” (page 13).

The explosion in connectivity has also had major impact in business and industry. “Almost all knowledge workers in the United States have networked personal computers on their office desks” (Evans & Wurster, 2000, p.13).

Continued innovation and growth is expected for every area of Internet-related technology. Broadband connections, such as cable modems and xDSL technologies, which enable full-motion, switched video, are expected to reach 16 million U.S. households by 2002 (Evans & Wurster, 2000). This increase in bandwidth will significantly increase the functionality and use of Internet applications at home and in the workplace.

Communications capacity is exploding:

Improvements in data compression, amplification, and multiplexing now permit a single fiber-optic strand to carry twenty-five terabits of information per second: twenty-five times more information than the average traffic load of all the world's communications. Companies are now laying optical fiber networks at the rate of 4,000 strand miles per day. The total bandwidth of U.S. communications systems is tripling every year. (Evans & Wurster, 2000, p. 14)

In addition to the increase in bandwidth, a proliferation of Internet-enabled appliances will impact the digital age. Such appliances are in addition to desktop and laptop computers and include digital assistants, wireless telephones, television connections, intra-automobile devices, and calculators. These devices are expected to outsell personal computers by 10:1 by 2010 (Evans & Wurster, 2000).

The proliferation of the Internet is not confined to the United States. It is estimated that over 140 million people worldwide had access to the Internet in 1999. This number is expected to grow to a billion by 2005. European countries are no more than a couple of years lagging behind the United States in terms of Internet penetration, and some Scandinavian countries are ahead (Evans & Wurster, 2000). The Republic of China is expected to catch up to and then surpass the technological infrastructure of many Asian countries. China's technological delays might prove to be a benefit because the systems they implement will be more advanced than those in place in many countries. Many countries such as Taiwan and South Korea made major investments in infrastructure in the early 1990s when technology was not as advanced as it is in 2000.

Characteristics of the Digital Economy

Defining the characteristics of the new digital economy is difficult because the factors are fast moving targets (Choi et al. 1997). This study is built upon the notion that the digital economy has initiated a new set of rules that organizations must learn and incorporate in their human capital development practices. The literature has identified a number of factors that, while descriptive of the young phenomena, have not been thoroughly documented in academic research or literature. The digital economy is a dynamically changing environment. The new rules of the digital economy emerge from the following nine factors of the digital economy:

1. The new business-consumer relationship
2. The power of technology implementation
3. The window of extravagant business opportunity
4. The culture of collaboration

5. The value of knowledge and information
6. Leading and managing the digital workforce
7. The digital economy rule makers are a new breed
8. A more global commerce
9. The digital economy has mercury-like change moving at Webspeed

The following paragraphs describe the factors listed above, which result from summarizing academic and popular literature focused on the digital economy. The researcher acknowledges the list is not all-inclusive or comprehensive. Because of the newness of the digital economy, very little empirical or academic research has been conducted related to the factors.

Even though business within the digital economy is still business, the electronic commerce that the Internet has created operates under a dual set of rules. The first set involves established principles, such as identifying target markets, meeting the customer's needs, and providing reliable service. The second set is no less important but is less familiar to most businesses (Tapscott, 1996). In addition, many of the digital economy factors seem to contradict established business rules. These differences set the framework for the challenges faced by traditional businesses with electronic business ambitions.

Factor 1: The New Business-Consumer Relationship

The Internet has changed the way businesses communicate with their consumers. Within the digital economy, it is possible for businesses to

- Communicate better with their consumers
- Communicate with more consumers in dispersed regions

- Provide a new and improved level of customer service because of the increased communication

Communication. Kelly (1998) placed a high value on communication

because communication, which in the end is what the digital technology and media are all about, is not just a sector of the economy – communication is the economy. The new economy is about communication. Communication is the foundation of society, of our culture, of our humanity, of our own individual identity, and of all economic systems. Communication is so close to culture and society itself that the effects of technologizing it are beyond the scale of a mere industrial-sector cycle. Communication, and its ally computers, is a special case in economic history. Not because it happens to be the fashionable leading business sector of our day, but because it's cultural, technological, and conceptual impacts reverberate at the root of our lives. (p. 5)

Communication has improved significantly because technology has advanced to improve both its richness and reach. Reach is the number of people communicating through the technology (Evans & Wurster, 2000). The digital economy provides a free channel of information distribution (Aldrich, 1999). The economical nature of the channel and the expansion of channel availability have enabled businesses to reach a larger audience than possible outside the digital economy.

Evans and Wurster (2000) presented a more complex definition of richness that concerns six aspects of information:

- Bandwidth, or the amount of information that can be moved from sender to receiver in a given time: stock quotes are narrowband: a feature film is broadband.
- The degree to which the information can be customized: an advertisement on television is far less customized than a personal sales pitch but reaches many more people.
- Interactivity: dialogue is possible for a small group, but to reach millions the message must be a monologue.
- Reliability: information is reliable when exchanged among a small group of trusted individuals but is not when it is circulating among a large group of strangers.

- **Security:** managers share highly sensitive business information only in closed-door meetings, but will disseminate less sensitive information to a wider audience.
- **Currency:** on Wall Street, where seconds count, a few market makers have instantaneous quotes, a larger group of financial institutions receives quotes with a three- to fifteen- minute delay, and most retail investors receive quotes with at least a 15-minute delay. (p. 25)

In the past, businesses were faced with decisions between the reach and richness of their messages. For example, a Colorado-based business is tasked with an assignment to share information at a meeting in Cairo, Egypt. The richest message would involve sending a delegation to the meeting in Cairo to present the information in real-time on a face-to-face basis. This choice would cost the highest amount of resources because of the time and money involved with travel. They could also choose to send a written proposal or paper to the meeting and allow for the Cairo participants to discuss their information. This choice would cost much less but the richness of the message would be greatly diminished. Digital networks are now making it possible to exchange very rich information with decreased economic impact.

According to Evans and Wurster (2000),

the richness and reach trade-off is being displaced and, in some cases, obliterated. Once information can travel by itself and there are standards that allow everyone to share that information, it becomes possible to have richness and reach. This blowup of trade-off between richness and reach is creating a new economics of information. And with the blowup go the behavioral patterns, institutions, and asymmetries that have defined marketing, supply chains, organization, and the boundaries of the corporation. (p. 30)

In today's digital economy, the company could communicate in a rich manner with the meeting in Cairo using digital technologies while saving time and money.

Competition. In addition to the communication benefits, the consumer has become the beneficiary of a new level of competition in many economic sectors. Suppliers, incumbent retailers, and new electronic business players are competing against each other for the consumer relationship (Evans & Wurster, 2000). The consumer benefits from increased choice and a more competitive market that is driving costs down and improving the quality and quantity of many market sectors. The digital economy eradicates many traditional barriers to entering new markets, which results in more choice for consumers (Aldrich, 1999).

Factor 2: The Power of Technology Implementation

Technology has radically changed the way business is conducted. Continued innovations and inventions related to technology implementation have a direct impact on business effectiveness and efficiency. Technology creates an opportunity for a demand because of new products and services and then fills it. As Kelly (1998) states, “technology is no longer an afterthought in forming business strategy, but the actual cause and driver” (page 30). There are two accepted laws of technology influencing business: Moore’s Law and Metcalf’s Law.

The impact of technology implementation is related to the emergence of new and expanded functionalities. Underlying the growth of connectivity and functionality is the extraordinary force of Moore’s Law. Moore’s law is attributed to Gordon Moore, the former chairman of Intel. The law states that the number of possible transistor circuits etched on a computer chip doubles every 18 months. “Moore’s Law implies a tenfold increase in memory and processing power every five years, a hundred fold every ten years, a thousand fold every fifteen. This is the most dramatic rate of sustained technical

progress in history” (Evans & Wurster, 2000, p. 14). Evans and Wurster explained that this law has prevailed for the past 50 years and is likely to prevail for the next 50 years.

Metcalf’s law is a modern version of the old law of increasing returns. The law states that the value of a network increases in direct proportion to the square of the number of machines that are on it. Although not statistically verifiable, this law communicates the important message of the network effect (Tapscott, 1996).

Factor 3: The Window of Extravagant Business Opportunity

The digital economy has opened a window of extravagant business opportunity for those with vision, competencies, and access to resources. Significant business growth has been seen in the realm of intermediaries. Technology encourages the proliferation of intermediaries. Technology also enables the development of niche companies where niches could not have existed before (Kelly, 1998).

Factor 4: The Culture of Collaboration

Businesses do not have all the resources necessary to capitalize on the opportunities within the digital economy. As a result, a culture of collaboration has emerged that takes the forms of partnerships, strategic relationships, mergers, and acquisitions. These collaborations allow businesses to share resources and competencies.

Factor 5: The Value of Knowledge and Information

Evans and Wurster (2000) argue that there is a “new economics of information” (page 30). As stated in earlier sections, knowledge and information can be considered a resalable asset.

Factor 6: Leading and Managing the Digital Workforce

The digital economy is forcing a change in the way leaders lead and managers manage. Technology has been credited as a displacer of human employment. Although technology is displacing and eliminating jobs, “the number of old jobs lost increases but not as fast as the number of new jobs created. More important, the spread of gained jobs over lost jobs widens” (Kelly, 1998, p.109).

Cyberspace changes the capability of teams. A team can access a vast amount of information. Technology demands new skills from people and, in return, enables them to achieve more powerful results. The team may be scattered geographically but tightly linked by technology. It can access important specialized talents that do not exist locally, possibly with the Internet, possibly with videoconferencing (Martin, 1996).

Knowledge workers and their organizations. Work in the Information Age can be distinguished as being knowledge work instead of physical work. Drucker (1993) used the phrase “knowledge work” in early 1990. He identified knowledge work as requiring mental power instead of physical power. Another scholar defined the phenomena as: “Knowledge work involves analyzing information and applying specialized expertise to solve problems, generate ideas, teach others, or create new products and services” (McDermott, 1995, p. 72).

Fisher and Fisher (1998) identified five characteristics of knowledge work that differentiates it from physical work:

1. The core task for knowledge work is normally thinking; for physical work, it is normally doing something.

2. The critical skills for knowledge work are mental; for physical work, they are physical skills.
3. The work process for knowledge work is concurrent and nonlinear, processing and creating; for physical work, it is linear—assembling and repairing.
4. The work outcome for knowledge work is the production of information; for physical work, it is a product.
5. The knowledge used for knowledge work is created knowledge; for physical work, it is applied knowledge

Fisher and Fisher (1998) argued that there is a new season of knowledge work. Knowledge work is “activity that frequently produces new knowledge. Its core task is thinking, its outcome is information, it is typically nonlinear in nature, and it requires mental skills to perform successfully” (page 8).

Fisher and Fisher (1998) also differentiated between physical teams and knowledge teams. Knowledge teams’ primary work is mental in nature. Knowledge teams consist of multiple specialists rather than generalists. Knowledge team representatives are often from several different organizations.

Knowledge workers are generally defined as those who acquire, create, package or apply knowledge. They are further characterized by being either professional or technical, with a high degree of skill or expertise, who engage in activities more exceptional in nature rather than routine (Davenport, Jarvenpaa, & Beers, 1996.) Due (1995) stated that knowledge workers could be divided into three major categories:

- Professionals with specialized skills and information
- Engineering, scientific, and technical workers

- Decision makers at the top level of management

The rapid growth of knowledge workers is requiring management to rethink traditional ways of motivating, coaching, and directing employees (Barner, 1996). Dove (1998) wrote, “our collective knowledge is changing much faster today than it was when we designed our business practices and developed our employment relationships” (p. 26). As a result, old management tools may be ineffective and may no longer excite and challenge an organization’s best employees (Meyer, 1997). AlBanna and Osterhaus (1998) propose that knowledge organizations need a new management paradigm that moves the focus away from the management of resources, skills, and technical implements and toward “a flat organization of knowledge workers who continuously learn and adopt new methods, technologies and disciplines” (p. 13).

Factor 7: The Digital Economy Rule Makers Are a New Breed

A new population of rule makers are driving the culture and norms of the digital economy. These people would probably not take the lead in the traditional economy. Because of their vision and competencies related to technology, they have amassed the resources and power to lead the new economy.

Factor 8: The Digital Economy Has Initiated a More Global Commerce

According to Kelly (1998), the digital economy has the distinguishing characteristic of being global. Some scholars have labeled the traditional economy as global, but the digital economy makes the global economy more global. Technology’s reach has dissolved many of the world’s boundaries: “No geographical or temporal boundaries exist – relations flow ceaselessly 24 by 7 by 365” (Kelly, 1998, p. 72). The heart of this transformation is *virtuality*, or the ability to conduct transactions on a global

level, in an instantaneous, or real-time, format without having to consider the constraints of physical location. In the virtual world of electronic business, physical distance is irrelevant (Tapscott, 1996).

Factor 9: The Digital Economy Has Mercury-Like Change Moving at Webspeed

One of the most notable factors of the digital economy is the incredible speed at which it is evolving and changing. Companies are faced with the significant challenge of trying to keep up with the innovations and adaptations of electronic businesses.

Topic Area Two: Corporate Entrepreneurship

The topic of corporate entrepreneurship has been identified as an important realm of literature for this research. The focus of this study is to identify how established corporations build teams to establish ventures in the digital economy. The activities associated with this task can be labeled new venture creation, corporate entrepreneurship, new business development, or a number of other descriptive phrases. The common thread is related to the actions taken by an established organization to capitalize on an opportunity or reduce a threat in their external environment.

As the phenomena of corporate entrepreneurship has been identified and defined, researchers have focused their efforts to better understand the uniqueness of new venture creation within established organizations. The purpose of this study is to identify the factors associated with a new venture creation initiative related to the digital economy. The researcher must look to the body of literature related to corporate entrepreneurship to identify the new and unique factors associated with the digital economy.

New venture creation is identified by the term *corporate entrepreneurship* by many academic researchers (Kanter, 1985; Pinchot, 1985; Burgelman & Sayles, 1986; Zahra, 1991). Using a broad definition, corporate entrepreneurship is the pursuit of new business activities by established companies. The term *intrapreneurship* is also used to describe the phenomena of new venture creation within established businesses (Pinchot, 1985). Ginsburg and Hay (1994) defined corporate entrepreneurship as the generation and exploitation of “new technologies, products or businesses under the corporate umbrella of an established firm” (p. 382). There has been a growing interest in applying corporate entrepreneurship as a means for corporations to enhance the innovative abilities of their employees and increase success through the creation of new ventures (Miller & Friesen, 1985; Pinchot, 1985; Kurkato & Montagno, 1989).

The body of literature focusing on corporate entrepreneurship has emerged from a number of sources. Most of the research has involved case studies from fieldwork, large sample studies, or contributions from practitioners who had direct contact in the workplace with corporate entrepreneurship activities (Ellis & Taylor, 1988).

It appears that most definitions of corporate entrepreneurship refer to something more than new product or service development or other innovations within an established business. Much of the writing on corporate entrepreneurship involves the activity of seeking and exploiting new business opportunities (Guth & Ginsburg, 1990). Lumpkin and Dess (1996) defined corporate entrepreneurship as the introduction of a new venture into a new or existing market. Corporate entrepreneurship differs from individual entrepreneurship in that an existing organization initiates the venture.

Some definitions focus on the resource deployment aspect of business operations. Corporate entrepreneurship involves changes in resource deployment resulting in new capabilities and opportunities that are exploited (Stopford & Baden-Fuller, 1994). Burgelman (1988) defined corporate entrepreneurship as activity that combines internally held resources in novel ways to uncover new opportunities and extend the organization's competencies.

Characteristics of Corporate Entrepreneurship

According to Block and MacMillan (1993), a corporate venture involves the following six characteristics:

- It involves an activity new to the organization.
- It is initiated or conducted internally.
- It involves significantly higher risk of failure or large losses than the organization's base business.
- It is characterized by greater uncertainty than the base business.
- It will be managed separately at some time during its life.
- It is undertaken for the purpose of increasing sales, profit, productivity, or quality. (p. 14)

Garud and Van de Ven (1992) described corporate entrepreneurship as an uncertain and ambiguous process. The process is uncertain because the phenomena are novel and the total resources needed to be successful in the effort are unknown. Ambiguity is related to the lack of knowledge regarding which outcomes the organization should pursue (Guard & Van de Ven).

As stated by Daellenbach, McCarthy, and Schoenecker (1999), "many organizational and environmental factors influence a firm's commitment to innovation (p. 199). A description of the factors associated with corporate entrepreneurship are segmented in this literature review into three primary levels: organizational, operational,

and individual. The organizational level focuses on organizational characteristics that facilitate or discourage new venture creation. The operation level focuses on new venture teams and organizational characteristics specifically impacting entrepreneurship efforts. The individual level focuses on characteristics of employees that facilitate or discourage venture creation.

Organizational Level Factors

Corporate entrepreneurship does not occur by happenstance. Many scholars and researchers have worked hard to identify the factors related to successful corporate entrepreneurship efforts. This section of the literature review focuses on the organizational level factors associated with corporate entrepreneurship. The organizational level factors focus on the primary characteristics necessary for corporate entrepreneurship to emerge and become established within an organization. The specific factors to be examined include the organization's culture, external environment, political nature, and internal resources.

Many organizations are structured to maintain familiar processes and behaviors and discourage innovation (Burgelman, 1983; Kanter, 1985). This statement supports the notion that some organizations are more prone to succeed in corporate entrepreneurship.

As stated earlier, organizations must exert a purposeful effort if corporate entrepreneurship efforts are to succeed. Sykes and Block (1989) argue that fundamental differences exist between the management of mature organizations and the management of corporate entrepreneurship ventures. Accepting this difference is an important first step for organizations.

Corporate entrepreneurship requires an organization that encourages and supports entrepreneurial activity (Kanter, 1985; Sathe, 1985; Sykes, 1986). Entrepreneurial activities are supported and encouraged through the development of entrepreneurial competencies. The organization must develop a tolerance for the ambiguity and uncertainty associated with corporate entrepreneurship.

According to Block and MacMillan (1993), a corporation desiring to be entrepreneurial must develop three primary competencies:

- Leadership that communicates the vision for entrepreneurship and develops a successful strategy for it
- The development of a organizational culture that encourages and supports entrepreneurial behavior
- Skilled management practices for managing individual ventures and the overall venturing activity (p. 4).

Kanter's (1983) research found that entrepreneurial organizations have the following distinguishing characteristics:

- Operating at the edge of their competence
- Focusing more of their resources on acquiring knowledge capital verses controlling what they already know
- Measuring themselves against their vision of the future verses the standards of the past
- And they do not allow the past to serve as a restraint on the future (p. 27-28).

Corporations have turned to new venture creation activities to address a number of internal issues, including evolving as an organization in response to their marketplace and external environment (Miller & Friesen, 1985) and stopping the turnover of innovative-minded employees who are frustrated with bureaucratic organizations (Kanter, 1985; Pinchot, 1985; Goddard, 1987).

Corporate entrepreneurship may take several different forms within the organization, depending on the scope and focus of the effort. Schollhammer (1982) identified five types of efforts, including administrative, acquisitive, imitative, incubative, and opportunistic. Each type presents unique challenges and variables to the organization. The type that corresponds most strongly to a new venture creation team is Schollhammer's incubative entrepreneurship. The incubative type refers to a creation of semi-autonomous units within an existing organization for the purpose of sensing external and internal innovative developments, assessing new venture opportunities, and initiating and developing new venture initiatives.

An organization's structure can have a significant effect on its corporate entrepreneurship effort. Many scholars believe that organic organizational structures encourage new venture performance (Miller & Friesen, 1983; Hornsby, Naffziger, Kuratko, & Montagno, 1993; Kuratko et al. 1990, Kanter, 1995). Organic organizational structures are considered to have more open and flexible internal and external boundaries, with less centralized hierarchy and bureaucracy. According to Kast and Rosenzweig (1972), organic organizations are better prepared to interact within uncertain environments because of a higher capability for rapid change and problem solving. A key to the organic structure's facilitation of new ventures is the minimization of internal and external boundaries (Kanter, 1985; Hornsby et al. 1993; Zahra, 1991). The flexible and permeable boundaries allow for a high level of interaction with the external environment to scan for opportunities and threats. A mechanistic structure inhibits corporate entrepreneurship because of engrained operating procedures, rigid job descriptions, and a higher level of bureaucracy and centralization.

External environment factor. The literature has documented a strong relationship between corporate entrepreneurship and the external environment. Environmental factors such as social and economic trends, political and legal issues, and advances in technology can affect or be affected by the organization (Covin & Slevin, 1991). The environment can facilitate or constrain corporate entrepreneurship (Pfeffer & Salancik, 1978). Pfeffer and Salancik's resource exchange theory illustrates that new ventures must meet a need in the environment and secure necessary resources to achieve success.

The corporate entrepreneurship process is stimulated by the environment (Covin & Slevin, 1994; Zahra, 1991). The stimulation comes from conditions within the environment that cause the organization to act in an entrepreneurial manner to address a threat or capitalize on an opportunity. The environment also facilitates the new venture's behavior (Burgelman, 1983; Garud & Van de Ven, 1992).

Norburn, Manning, and Birley (1986) report that forces within the external environment have led some large companies to foster internal entrepreneurship to maintain innovation. Some of the means to innovate include

1. Minimization of managerial levels
2. Biases for action
3. Creation of task teams

It has become imperative for businesses to focus on tomorrow's customer in addition to today's customer (Imparato & Harari, 1994). Product life cycles are measured in years rather than decades (Slan, 1994). In the high-technology industry, the product or service life cycle can be even faster. The rapid changes occurring in technology are forcing organizations to find new sources of revenue to replace products

or services that become obsolete. Corporate entrepreneurship is a way for organizations to cope with environmental change. According to Jarillo (1989), as ventures develop past the early stages, they require more inputs. The ability to secure and utilize external resources is a critical entrepreneurial skill.

Zahra (1991) identified three environmental conditions that influence an organization to choose entrepreneurial behavior. The first condition, dynamism, is related to the dynamic and uncertain nature of the organization's markets. Dynamism challenges the organization's homeostasis and elicits a response from the organization. The second condition is identified as hostility. An environment's hostility condition is related to the factors that threaten the organization's survival and accomplishment of its mission. Researchers have shown that organizations within hostile environments demonstrate more innovative and competitive behaviors (Zajac, Golden, & Shortell, 1991; Miller & Friesen, 1985). Covin and Slevin (1989) found that an organization's perception of hostility can result in better performance. The third environmental condition is the level of heterogeneity. Environments are heterogeneous when there is a diversity in customer needs and expectations.

In addition to dynamism, hostility, and heterogeneity, Covin and Slevin (1991) identified two additional factors that affect the corporate entrepreneurship process. The two factors are technological intensity and the stage of the associated industry life cycle. High technology industry encourages a high rate of entrepreneurship because of the rapid technological advances and the newness of the industry life cycles (Covin & Slevin, 1991).

Organizational culture factor. An organization's culture can influence the corporate entrepreneurship function. Cultures that support and encourage corporate entrepreneurship include a value for creative and innovative activities and individuals. Organizational cultures that support innovation and entrepreneurship are least segmented and emphasize pride, commitment, collaboration, and teamwork. There is an encouragement to "do what needs to be done" and encourage members to take initiative and behave cooperatively (Kanter, 1983, p. 178).

Intrapreneurship may run against prevailing corporate philosophies or cultures. According to Duncan, Ginter, Rucks, and Jacobs (1988), corporations face two significant issues in trying to encourage intrapreneurship: (a) Few organizations are committed to hiring creative talent for fear of disruption, and (b) few corporations know how to compensate creative employees. "Innovation is an unpredictable, ambiguous and uncertain adventure; it requires a set of mental attitudes and actions quite different from those prevalent in companies where the environment strives to control and preserve the status quo" (Pryor & Shays, 1993, p. 44).

It is possible for organizations to establish a culture of mediocrity that produces lethargy, complacency, reactivity, and defensiveness rather than initiative and risk taking (Imparato & Harari, 1994). "If managers feel the atmosphere within their organization does not support their efforts, intrapreneuring will probably not occur" (Kuratko, Montagno, Hornsby, 1990, p. 50). Organizational barriers that discourage entrepreneurship are perceived irrelevance of innovation, punishment for taking a risk and failing, rewards only for short-term achievements, culture of "not-invented-here," and stodgy and unchangeable conventions (Betz, 1998).

Block and MacMillan (1993) established three guidelines to creating a venturesome climate, which included

- **Require innovation and new business development in every business unit and function**
- **Build organizational confidence by celebrating venture success and demonstrating visible support and commitment to new business creators and their units**
- **Start ventures close to core competencies and extend from there. (p. 65)**

Oden (1997) identified the significant characteristics of innovative cultures. His characteristics include

- **Far-sighted, high-level strategic and cultural leadership and emphasis on intrapreneurship and achievement**
- **Emphasis on Total Quality Management, including a strong customer focus and continuous learning and improvement**
- **Flexible and adaptable organization with a high level of collaboration, teamwork, and trust**
- **Participative management style and employee empowerment**
- **Emphasis on human resources**
- **Effective information, communication, and decision-making systems**
- **Emphasis on process management**
- **Emphasis on the corporate venturing process**

In a study conducted by Rule and Irwin (1988), respondents identified five methods to encourage and support intrapreneurship:

- **Innovation teams and task forces**
- **Recruitment of new staff**

- Applications of strategic planning
- Customer focus groups
- In-house research and development

Rule and Irwin (1988) also stated that an organization can develop a more intrapreneurial culture by establishing a program that allows senior managers to focus on

- Generating new ideas
- Screening new ideas to allocate resources
- Supporting idea development
- Encouraging flexibility
- Rewarding the contributors
- Providing leadership

According to Luchsinger and Bagby (1987), companies that foster intrapreneurship are characterized by

- Practicing enlightened management principles
- Adopting an entrepreneurial style that avoids bureaucratic barriers and fosters and innovative climate
- Encouraging intrapreneurship and innovation among the work force
- Focusing on results and teamwork
- Rewarding innovation and risk-taking
- Learning from mistakes
- Remaining flexible and change-oriented

According to de Chambeau and Mackenzie (1986), obstacles to innovation are embedded in the organization of a company. It is possible to remove the obstacles to

intrapreneurism by changing organizational structure in the areas of the system size, teamwork in an intrapreneurial environment, and reward system. Structural changes that encourage intrapreneurs in large organizations include open communication, identification and recognition of intrapreneurs, resource allocation for expanding research, and assuring continuity by having intrapreneurs, resource allocation for expanding research, and assuring continuity by having intrapreneurs lead their projects from beginning to end.

Robinson and Stern (1997) identified six essential elements of corporate creativity:

- Alignment (ensuring interests and actions are directed toward the company's key goals)
- Self-initiated activity (employees feel free to try to solve any problem for any reason)
- Unofficial activity (employees feel free to act without direct official support to initiate something new and useful)
- Serendipity (a fortunate accident in the presence of keenness of insight)
- Diverse stimuli (results in fresh insights to routine activity)
- Within-company communication (free flowing information throughout organization).

Kuratko and Montagno (1989) argued that businesses must create an "Intrapreneurial Spirit" within their cultures. Organizations must learn to encourage and protect intrapreneurs as part of their corporate strategies. New managerial practices must be incorporated including:

1. Identifying potential intrapreneurs or “champions” early in their careers
2. Sponsoring intrapreneurial projects
3. Establishing both diversity and order in a firm’s strategic activities
4. Allowing experimentation and tolerating failure
5. Developing new managerial approaches and innovative administrative arrangements so that intrapreneurs and their organizations cooperate effectively
6. Instilling an expectation of results
7. Rewarding success.

Organizational politics factor. Organizational politics can influence the corporate entrepreneurship process. New ventures often require significant organizational resources and a high level strategic decision among top managers. These two factors may create a political circumstance or event within the organization.

Burgelman’s (1983, 1988) research showed that garnering support from top management is a critical part of the venture’s development. Top management support for the venture is related to management’s perception of the venture’s economic potential. It will be difficult for the new venture to win support from top management if the venture is not perceived as having characteristics of crossing a certain threshold of economic return on investment.

There is a factor of competition where internal corporate ventures compete against each other for survival. Venture survival is related to internal level selection and political processes in addition to external selection processes, including market acceptance (Burgelman, 1983; 1986).

Block and MacMillen's (1993) guidelines for venturing success in organizational political environment have been found to assist the corporate venture through the political landscape. Their guidelines are

- Politics exist. Either manage them or be managed by them.
- Identify the venture's key objectives and needs.
- Identify the venture's key allies and opponents and analyze their needs to find ways to co-opt, influence, or neutralize these parties as appropriate.
- Continually monitor the progress of the political strategy and adjust as necessary.
- Involve the executive sponsor.

Organizational resources factor. Corporate entrepreneurship revolves around organizational sanctions and resource commitments for the purpose of innovative results (Burgelman, 1984; Kanter, 1985; Alterowitz & Zonderman, 1988). A good idea, an external opportunity, or an external threat cannot be acted upon without a resource allocation by the organization.

A number of studies have identified resource allocation as a significant predictor of venture success (Kanter, 1985; Sykes, 1986; Fry, 1987; Kuratko et al. 1990; Hisrich & Peters, 1986). Entrepreneurial employees are able to pursue corporate entrepreneurship ventures when given access to the appropriate organizational resources. Organizational resources may be human capital, financial, informational, time, or technology related (Kuratko et al. 1990; Hornsby et al. 1993).

Related to an organization's human assets, studies have shown that corporate entrepreneurship is not directly related to hiring proven entrepreneurs because the corporate culture and resource allocation inhibit or encourage entrepreneurial behavior

(Sathe, 1988; Sykes, 1986). Rather than hiring entrepreneurs, Brazeal (1993) argued for retention and promotion of employees who demonstrate the ability to successfully participate in corporate entrepreneurship.

Research has shown that a large company has an advantage over smaller companies because of amassed resources and competencies. According to Pinchot (1985), the big companies' advantages are marketing clout, technology base, trusted people based on prior experiences, bounded networks, capitalization on shared-time production, and financial resources.

Operational Level Factors

As stated earlier, the operational level factors are the intraorganizational issues directly associated with the corporate entrepreneurship effort. These issues have been identified in the literature as being the organizational values and beliefs, reward system, management support, organizational resources, intraorganizational communication, use of teams in the new venture, and process of new venture creation. Each of these issues is discussed in the following paragraphs.

Kanter (1989) described the new business creation process as swimming in a newstream verses swimming in a mainstream. Newstreams and mainstreams have very different characteristics and relationships to the organizations that result in intraorganizational tensions and conflict. Newstreams are marked by high uncertainty, high intensity, high autonomy, and tension with the mainstreams (Kanter). Kanter argued that creative projects share a set of characteristics that shape the newstream workplace which include

- The need to move quickly when opportunity or inspiration strikes
- Missed deadlines and encounters with the unexpected

- The constant need to justify the project, especially as new options come up that sound even better
- Extreme emotional swings: numerous frustrations and moments of despair coupled with clear highs
- If it is a joint effort, the difficulty of keeping up with what everyone else on the project is doing and thinking
- An all-encompassing and absorbing project world, which makes it easy to get disconnected from the surrounding world. (Kanter, p. 202-203).

Within corporate entrepreneurship activities, operation level values, cultures, practices, and procedures are often different than the organization at large because of the influencing factors (Block & MacMillen, 1993). These differences precipitate the question “Will the parent company be able to adapt to those differences?”

Organizational beliefs and values factor. Most successful ventures within established organizations emerge when there are values that facilitate the entrepreneurship process. A primary value is related to a tolerance for failure related to the practicing entrepreneurs (Sathe, 1988; Hisrich & Peters, 1986). The tolerance creates an environment where risk takers are willing to pursue ventures in uncertain conditions (Lumpkin & Dess, 1996). Tolerance for failure also encourages learning because employees practice experimentation (Sathe; Hisrich & Peters; Kanter, 1985). Organizations that tolerate failure and value the learnings associated with experimentation create an environment where employees believe their personal risk associated with the new venture is minimized.

Reward systems factor. A consistent factor throughout the literature is the appropriate use of rewards (Fry, 1987; Sathe, 1985; Block & Ornati, 1987; Scanlon, 1981; Souder, 1981; Kanter, 1985). These theorists argue that any effective reward

system must consider goals, feedback, emphasis on individual responsibility, and rewards based on results.

Rewards can be used to encourage creative behaviors (Gardner, 1985; Schuler, 1986). How the individuals associated with a corporate entrepreneurship venture are rewarded has been identified as a highly important issue at the operational level.

According to Chisolm (1987), organizations must realize that intrapreneurs expect rewards that exceed those for ordinary achievement because of the added risks they assume. Changes may have to be made so that intrapreneurs can move up through the company via nontraditional paths. Profit-sharing mechanisms may help to retain them (de Chambeau & Mackenzie, 1986).

Some scholars argue that intrinsic rewards should be the focus of a corporate entrepreneurship philosophy rather than extrinsic rewards (Sathe, 1988; Sykes, 1986). Other scholars argue that extrinsic rewards, including monetary incentives and equity interests, are an integral part of a corporate entrepreneurship reward structure (Hisrich & Peters, 1986).

Hornsby, Naffziger, Kuratko, and Montagno (1993) argue for a combination intrinsic and extrinsic reward structure. They propose combining financial rewards with recognition and praise.

In response to a survey, middle managers of Fortune 500 firms recommended promoting corporate entrepreneurs (Brazeal, 1993). Promotions usually appeal to the intrinsic and extrinsic desires of recognition and financial gain.

Management support factor. The element of management support that relates to the willingness of managers to facilitate entrepreneurial projects is often identified as a

significant factor related to corporate entrepreneurship (Hisrich & Peters, 1986; Sykes, 1986; Souder, 1981; Sykes & Block, 1989; Macmillan, Block, & Narasimha, 1986; Quinn, 1985; Daellenbach, McCarthy, & Schoenecker, 1999). Managers must facilitate risk taking by employees and demonstrate a tolerance for failure, should it occur (MacMillian et al., 1986; Sathe, 1985; Sykes, 1986; Burgelman, 1983; Quinn, 1985; Kanter, 1985; Bird, 1988; Sykes & Block, 1989). Intrapreneurship requires active top management support that is tolerant of uncertainty, unpredictability, some confusion, and even occasional failure (Chisolm, 1987).

A study conducted by Daellenbach, McCarthy, and Schoenecker (1999) found that the CEO and top management team have direct influence on the overall innovation activity within an organization. The results of their study suggest that the level of commitment to organizational innovation will be promoted or impeded by the predispositions of the CEO and top management team.

Managers can also play a protector role in the development process. Ginsburg and Hay (1994) advocate new ventures be protected and insulated from the external environment during the early stages of development. There is a need for protection provided by the team's sponsors during the young vulnerable time of the venture's development. According to Pinchot and Pellman (1999), no corporate entrepreneurship effort "could long survive without the services of a sponsor, a person of some clout who coaches, protects, and marshals resources for the team" (p. 3).

Managers may also act detrimentally to the team through micro-managing. Harris and Trescott-Lambert (1998) report that a 1995 IRI study found "meddling managers" to be one of the three biggest factors leading to team failures.

McKinney and McKinney (1989) raise a critical question by asking, “Can traditional managers, even successful managers, manage entrepreneurs within the corporate environment?” (p. 77). Their research suggests traditional managers cannot. McKinney and McKinney believed that the entrepreneurial function and the management function serve significantly different purposes. Managers develop routines to handle day-to-day problems. Entrepreneurs must be free to operate strategically and allocate resources in highly unstructured conditions. Established corporations must understand the differences between management and corporate entrepreneurship. They argue that intrapreneurship can only operate effectively in a large corporation if the management function is subordinate to the entrepreneurial function. McKinney and McKinney (1989) state, “managers spend significant energy trying to impose the old rules on the new venture when they should be developing new rules” (p. 79).

Organizational resources factor. A corporate entrepreneurial team must receive the necessary resources to accomplish its task. There must be a perception that organizational resources are available for the entrepreneurial activities (Sathe, 1985; Von Hippel, 1977; Souder, 1981; Sykes, 1986; Katz & Gartner, 1988; Kanter, 1985; Sykes & Block, 1989). Betz (1998) identified the capital necessary to launch the new venture as a critical ingredient to the corporate entrepreneurship activity.

Organizational communication factor. The need for effective communication appears to be heightened during the corporate entrepreneurship activity. Corporate entrepreneurship is a knowledge intensive activity that requires the sharing of expertise and information at the intraorganizational level; corporate entrepreneurs must have easy

access to the information. Open communication facilitates cooperation and collaboration across intraorganizational divisions (Kanter, 1985).

Successful corporate entrepreneurship activity has been associated with communication networks that facilitate a free flow of information and dialogue (Kanter, 1985; Sathe, 1988; Zahra, 1991; MacMillan et al. 1986). According to Kanter, “more challenging, more innovative, more partnership-oriented positions carry with them the requirement for more communication and interaction” (1989, p. 275).

Understanding the Process of Corporate Entrepreneurship Theorists and researchers have focused efforts to describe the corporate entrepreneurship process in mature organizations. One researcher described the process as occurring in stages (Burgelman, 1983). Guth and Ginsburg’s (1990) three stages involve activities considered fundamental to the corporate entrepreneurship process. The first stage involves the identification and defining of an opportunity. The second stage involves pursuing and exploiting the venture. The third stage involves the transformation of the organization resulting from the corporate entrepreneurship experience. The corporate entrepreneurship activity within organizations is not isolated; the venture often crosses levels and functions within the organization (Burgelman, 1983; Kanter, 1985).

Using Teams for Corporate Entrepreneurship The use of small teams to launch a corporate entrepreneurship effort has been identified in the literature as a successful tactic (Forrester, 2000). “Most innovations are too complex for one person to accomplish individually. A group of people needs to be recruited, organized, and directed. As these people associate with the innovation unit, they apply their different skills, energy levels, and frames of reference to the innovation ideas as a result of the backgrounds,

experiences, and activities that currently occupy their attention (Van de Ven, Polley, Garud, & Venkataraman, 1999).

Few intrapreneurs are soloists, most work in intrapreneurial teams. Intrapreneurs may have a specific idea of teamwork, which is focused on output of the organization (de Chambeau & Mackenzie, 1986). The best teams are cross-functional or cross-disciplinary, bringing together several, quite different viewpoints and professions in service of a common cause. Each member devotes himself or herself to creating and implementing a shared vision (Pinchot, 1999). The ideal team consists of volunteers recruited to the idea by the original intrapreneur.

They (the team) form a core group that stays with the project from its early stages to well past its initial commercialization or implementation. The quality of a team arises not just from the attributes of its individual members; the way those members relate to each other is equally important (Pinchot, p. 17-18).

According to Betz (1998), a new high-tech venture team will have the following competencies available on the initial team: one member has prior market experience, one member has research/technical experience, one member has production experience, and one member has financial control experience.

Pinchot (1999) wrote,

when we meet with intrapreneurial teams, it is often difficult at first to tell who is from which function. Technical types make marketing suggestions and marketing types help solve production problems. In the early stages of an innovation, sharing all major issues with the whole team helps to create an integrated vision and to make sure that no issue falls between the chairs (p. 2).

Team leadership has also been identified as a critical issue. According to Lynn and Lynn (1992), a number of characteristics are required for a successful venture team leader, including skilled with tact and persuasion, capacity to attract and coordinate a

team directed at a recognized objective within a defined time frame, tolerance to accept suggestions from team members, willingness to acknowledge contributions made by others, fair with recognition and rewards, organization talents that propel the team forward, and enthusiasm that sparks excitement when team spirits wane.

Team leaders and managers associated with the new venture should be evaluated according to a unique set of criteria. Block and MacMillen (1993) proposed the use of six evaluation criteria to use with managers of corporate ventures:

- Actual completion of planned events; completion based on reasonable time and costs
- Quality of learnings and their applications; actual business results
- Evidence of commitment to making the venture a success
- Evidence of team spirit; level of collaboration with other parts of the organization; ability to overcome internal obstacles without putting the firm at risk
- Minimal turnover of venture team members
- Parsimony in the use of resources; training and development of team personnel.

Individual Level Factors

Individuals who lead the corporate ventures are often referred to as intrapreneurs (Pinchot, 1985), corporate entrepreneurs (Kanter, 1985), or venture champions (Green, Brush, & Hart, 1999). The intrapreneur, or corporate entrepreneur, has been hailed as the new business hero (Luchsinger & Bagby, 1987).

Venture Champions The role of the venture champion has received limited discussion in the literature related to corporate entrepreneurship (Burgelman, 1988; Venkatamaran, MacMillan, & McGrath, 1992; Shane, 1994). The venture champion and

the other individuals participating in the venture bring individual level factors that must be examined to understand the context of corporate entrepreneurship. Entrepreneurship and innovation within corporations has been known for exciting many employees and increasing their job satisfaction. (Kidder, 1981; Kanter, 1983)

Schon (1983) initiated the study of venture champions. According to Schon, any new idea must have a champion to survive. A champion is an individual who becomes a driving force and primary advocate for the idea or new venture. "Champions are group members imbued with the leader's vision and capable of moving an idea through all the development phases to full implementation" (Fairholm, 1991, p. 112)

Intrapreneur Characteristics. Brockhaus and Horwitz (1986) concluded that few psychological characteristics distinguish corporate entrepreneurs from business managers. They felt that locus of control, risk-taking propensity, and achievement motivation are important factors in the decision to start a business. Other findings include variables of energy level, conformity, and need for autonomy (Sexton & Browman-Upton, 1986); need for achievement, need for autonomy, dominance, high energy level, and persistence (Neider, 1987); a desire for personal control (Greenberger & Sexton, 1988); and the desire to build something of one's own (Knight, 1987).

According to Greene, Brush, and Hart (1999), typical corporate venture champions have some unifying characteristics, including

- An MBA Degree
- Experience weighted toward the management side verses the technical side
- An established network of interdepartmental and intraorganizational relationships
- A strong reputation within the organization

- Access to organizational resources including finances and human capital.

Ross and Unwalla (1986) identified the intrapreneur personality as

- Focusing on results, not activity
- Questioning status quo
- Motivated by problem-solving, effecting change and innovation
- Frustrated by bureaucratic systems
- Ambitious and competitive

Kanter (1983) examined the corporate entrepreneurship phenomena in detail in The Change Masters: Innovation and Entrepreneurship in the American Corporation. In the book, she defined corporate entrepreneurs as “the people who test limits and create new possibilities for organizational action by pushing and directing the innovation process” (Kanter, p. 210). According to Kanter, corporate entrepreneurs must utilize three new skill sets to bring about change and innovations. The skill sets are identified as power skills related to competing intraorganizationally for resources, the ability to manage the problems associated with the greater use of teams and employee participation, and an understanding of how organizations change (Kanter, 1983). Power skills involve the abilities to compete in three intraorganizational markets for knowledge, resources, and legitimacy.

Researchers have listed several consistent attitudes and values in the typical successful entrepreneur: a desire to dominate and surpass, a need for achievement, a desire to take personal responsibility for decisions, a preference for decisions with risk, an interest in correct results from decisions, a tendency to plan ahead, and a desire to be one’s own boss (Vesper, 1980, p. 9).

There appear to be a number of personal motivators related to the choice of some individuals to become corporate entrepreneurs. Corporate entrepreneurs are often motivated by an ego trip or intrinsic rewards because significant material rewards are not given by many corporations (Kanter, 1989). They may also be motivated by the opportunity to “make a difference” or “have an impact.” Some employees may want to prove that their contribution is significant for use as insurance during restructuring or cutbacks. The desire to establish an entrepreneurial career path is also a motivation for some to choose involvement in a corporate entrepreneurship venture. Instead of climbing the corporate ladder, corporate entrepreneurs will move up as the new organization grows beneath them. There is also a higher degree of freedom, independence, and control over one’s tasks within a new corporate venture. The potential rewards and benefits are not without cost. According to Kanter, work hours are rising and can range even longer for those employees engaged in new ventures.

Topic Area Three: Team Processes

Team Processes Introduction

The purpose of this research effort is to examine and identify a team’s values, beliefs, norms, and practices as they have been influenced by the factors of the digital economy within the context of a corporate entrepreneurship venture. Teams have been the subject of significant scholarly research effort in the last century. This study draws on literature related to teams and specifically examines research related to team values, beliefs, norms, and practices.

Team Values

Many scholars and practitioners consider the establishment and enactment of team values to be absolutely critical to the team's success and team member satisfaction.

Values have been referred to as the "silent power" of organizational life (Posner & Schmidt, 1992). Values are defined as "the shared goals, beliefs, ideals, and purposes of the group" (Kuczmarski & Kuczmarski, 1995, p. 25). "Values are enduring beliefs that a specific kind of conduct or particular state of existence is personally or socially preferable. They define the organization, prescribe its purposes, and provide the basis for measures of success" (Fairholm, 1994, p. 14-15). Values can be consciously chosen and clearly articulated direction for the organization. In addition, they often incorporate the talents and abilities of team members. They contribute to the super ordinate goals of the organization and lead stakeholders to a sense of fulfillment (Buchholz & Roth, 1987). According to Truskie (1999), successful organizations are able to balance the four values of achievement, cooperation, consistency, and inspiration. Jaffe and Scott (1998) explained, "Personal values provide an important bridge to team values that everyone can commit to. A team's values must be linked to each member's personal values" (page 25). They advocate that a process of clarifying team values can motivate commitment, align action, and transcend individual conflicts.

Team Values Model

In Values Leadership: Toward a New Philosophy of Leadership, Fairholm (1991) set forth a model of organizational values. Fairholm's model and principles can be used to identify how team leaders and members choose and activate values within their organization.

The first focus of Fairholm's (1991) value model is self and follower development. In summary, the stakeholders of the team should experience personal growth and development as a result of their participation on the team. Fairholm advocates for an adherence to the Japanese model of the Z-Organization (Ouchi, 1984), which features ideas such as long-term employment and a holistic concern for people. The underlying purpose of stakeholder development is to create independent, self-directing team members.

Within the development principles are six dimensions of function. The first is the caring dimension. The model calls for a leader who "honestly cares for all the people in the group" (Fairholm, 1991, p. 110). Caring is demonstrated through personal regard, goodness, listening, trust, empowerment, and one-on-one relationships. To enact empowerment, team leaders must hold the core values of humility and honesty (Snyder, Dowd, & Houghton, 1994).

The second dimension is service. The service role casts the participants as stewards or trustees of the resources entrusted to them. Service is a mindset of the team members that enables them to perceive stakeholders as customers to be pleased. The service dimension also encourages a mindset of facilitation. Participants work to facilitate the success of team members and external parties.

Innovation has been identified as the third dimension of the development focus. Team leaders and members foster innovation in the organization by having a bias towards change. This bias results from alertness to the needs of stakeholders, customers, and clients.

The fourth dimension is productivity improvement. The team takes responsibility for improving its productive capacity. Improvement should be connected to reward incentives that emphasize the development of individual capacities and respect for the team values, norms, processes, and results.

Vision-setting is the fifth dimension. A vision must be established and re-communicated often within the team. The team should have future-oriented goals that inspire, challenge, and encourage individuals to aspire to something greater than the present state of affairs. Fairholm (1991) argued that there are five founding values that should be represented within all vision statements. The founding values are: respect for life, liberty or freedom of choice, justice, unity, and happiness.

The sixth dimension has been identified as the self-development dimension. The team leader facilitates the growth of team members but also continually grows personally and professionally. Fairholm (1991) identifies seven growth areas for team leaders to focus on personally:

- Leaders are personally mature.
- Leaders are horizon thinkers.
- Leaders pay attention to what is important.
- Leaders know themselves.
- Leaders encourage leadership behavior in others.
- Leaders are symbol users.
- Leaders are teachers of their followers.

The second focus of the values model is culture setting. Fairholm (1991) stated, “unless the culture is suitable, values leadership is impossible” (p. 141). Culture defines

the nature and character of the organization and determines organizational practices and environmental adaptations. According to Fairholm, a team or organization must focus on creating a shared culture conducive to the team's values, philosophies, and standards.

The third focus of the values model involves the implementation of leadership technologies to facilitate team values. Fairholm identified seven technologies:

- Common courtesy, respectful behavior toward others
- Management by wandering around, using face-to-face interaction whenever possible
- Caring, counseling behavior towards others
- Focus on the strategic vision, reinforcement of the vision statement through all actions and communication
- Naïve listening
- Use of symbols
- Celebration, recognition, and honor for performance of stakeholders

Creating independent, self-directing team members is the results focus of the values model. The team leaders must focus on instilling values and vision within the team's members verses operating on a prescriptive, parental level of team operations.

Team Beliefs

A team's primary belief is related to its reason for existence. There must be a reason for the team to exist. D. W. Johnson and F. P. Johnson (1991) stated that teams exist for a reason. Individuals join teams to achieve goals they cannot accomplish alone.

Larson and LaFasto's (1989) research determined what makes teams of all kinds successful. Only one requirement became clear: High performance teams must have a

clear understanding of their goal and the belief that the goal is a worthwhile or important result (Larson et al. 1989).

Jensen and Chilberg (1991) asserted that although teams have identifiable reasons for existence, individuals bring additional goals to the team. The individual goals may be cooperative, competitive, or individualistic (Deutsch, 1949; Johnson & Johnson, 1989). Individual goals can be positive, negative, or have no interdependence in relation to the goals of the team.

A team member's commitment to accomplishing team goals is related to eight factors (Johnson & Johnson, 1991).

1. How desirable the goal seems to them
2. How likely it seems that the group can accomplish the goal
3. How challenging the goal is (A moderate risk of failure is more challenging than a high or low risk of failure.)
4. Being able to tell when the goal has been accomplished
5. The satisfaction or reward the member expects to feel or receive when the goal is achieved
6. The ways in which the member will relate to other members in working toward the accomplishment of the goal (Some ways of relating to other members are more fun.)
7. The extent to which members participated in setting the goals (This increase in motivation comes in part from the fact that participation produces a better matching of the team goals to the motives of members, which results in greater acceptance of the goals. It also provides a better understanding of the team

actions needed to reach the goals and a better appreciation of how individual behavior contributes to the team effort.)

8. The level of cohesiveness that exists within the team

To be effective, goals must be clear. Goal ambiguity results in high levels of tension, joking, tangents, horseplay, and a failure to support good ideas. For individuals to perform well within a team, they must know what the team goals are and understand what actions need to be taken and when to attain them. They must also know the criteria the team will use to measure attainment and have an awareness of how their behavior contributes to the team.

Research has shown that the effectiveness of team goals depends on eleven variables (Johnson & Johnson, 1991).

1. The extent to which the goals are operationally defined, countable, and observable
2. The extent to which team members see the goals as being meaningful, relevant, realistic, acceptable, and attainable
3. How cooperative the goal structure is and how cooperatively oriented the team members are
4. The degree to which both team goals and individual members' goals can be achieved by the same tasks and activities
5. The degree to which conflict exists among the team members about the teams' goals and the tasks the team must complete to achieve the goals
6. The extent to which the goals are challenging and offer a moderate risk of failure
7. The degree of coordination achieved among team members

8. The availability of the resources needed for accomplishing the team's task and goals
9. How specific the goals are because specific goals indicate what needs to be done next
10. How easily the goals can be modified and clarified
11. How long a group has to attain its goals

George and Wilson (1997) and McIntosh-Fletcher (1996) frame team purpose in terms of charter. A charter is a formal document, accessible to the team. The key elements are purpose, responsibilities, completion, boundaries, ground rules, and meetings. The charter is intended to clarify roles, purpose, and keep the team focused on its purpose.

Team Norms

Norms are the standards shared by members of the team. They are expectations for the team as a unit. Norms define standards for acceptable behavior (Jensen & Chilberg, 1991). Norms provide the basis for predicting behavior of team members and serve in guiding individual behavior. Norms promote conformity to facilitate effective team interaction, performance, and harmony (Johnson & Johnson, 1991). They can be prescriptive (i.e., how members should act) and proscriptive (i.e., how members should not act) (Behling & Schriesheim, 1976). "Norms are expected behaviors by members of a group; they are group decided codes of conduct. A norm is a standard to guide group behavior" (Kuczmarski & Kuczmarski, 1995, p. 25). In summary, norms are pervasive ways of acting that are found in group interactions (Truskie, 1999) and strongly influence member behavior (Zalenznik, Christiansen, Roethlisberger, 1958).

Research on team norms has indicated that norms cannot be imposed on teams. They emerge out of the social interaction of the team members. They are the result of social interaction (Sherif, 1936). Newcomb (1943) studied the relationship between individual values and group norms. He found that the norms of reference groups influenced individual values. The norms of groups outside the primary identification of the individual did not significantly affect individual values.

According to Kuczarski and Kuczarski (1995), norms emerge from a three-step process:

1. An open, honest and vulnerable exchange of feelings and emotions by the individuals in the team
2. An individual's need to interpret and personally internalize the messages expressed
3. A compromising and consensus-building phase where each member reaches agreement on the norms of the group

Norms have characteristics important to team members. First, norms are formed in relation to things that have significance for the team. Teams are concerned about behavior that affects the accomplishment of the team's purpose. Second, team members individually accept norms at different levels. All team members accept some norms while other norms are only partially accepted. Third, norms may apply to every member or to only some team members. Every member is expected to comply with the production norm while only team leaders may disagree verbally with a management assignment (Gibson, Ivancevich, & Donnelly, 1997). Norms must align with values without compromise or incongruence (Kuczarski & Kuczarski, 1995).

Johnson (1970) presented a set of seven guidelines for establishing group norms.

1. For members to accept group norms, they must recognize that they exist so that the other members accept and follow them and feel some internal commitment to them.
2. Members will accept and internalize norms to the extent that they see them as helping accomplish the goals and tasks to which they are committed. It is helpful, therefore, for a group to clarify how conformity to a norm will help goal accomplishment.
3. Members will accept and internalize norms for which they feel a sense of ownership. Generally, members will support norms that they have helped set up.
4. Group members should enforce the norms on each other immediately after a violation. Enforcement should also be as consistent as possible.
5. Appropriate models and examples for conforming to the group norms should be present. Members should have the chance to practice the desired behaviors.
6. Cultural norms that prompt goal accomplishment and group maintenance and growth should be imported into the group.
7. Because norms exist only to help group effectiveness, they should be flexible so that more appropriate norms can be substituted at any time.

Summary

The literature review conducted for this study has enabled the researcher to examine the issues related to electronic business new venture creation team activities. As stated earlier, there were three primary realms of literature contributing to this study. The

first realm examined the factors associated with the digital economy. The digital economy is a young phenomenon but unique factors have emerged as influences on business activity.

The second realm focused on the issue of corporate entrepreneurship. The literature was useful for describing the major factors, processes, and issues involved when an existing company launches a new venture. The review has assisted the researcher in determining what a new venture creation team within an existing corporation will look like according to previous research effort.

The third realm focused on team processes. A review of literature related to team values, beliefs, and norms was conducted. This facet of the literature has helped the researcher to frame the issues related to team member interactions and shared culture.

The literature review helped to investigate this study's research question and its enabling questions but was not able to answer the research questions. Within the current body of literature are detailed descriptions and definitions of corporate entrepreneurship efforts and team processes; these realms have been researched and written about extensively by scholars. There is also limited description and definitions related to the new phenomena associated with the digital economy. This literature review has given the researcher an increased understanding of characteristics of the digital economy, corporate entrepreneurship, and team processes.

There is a new phenomena emerging from the intersection of corporate entrepreneurship, team processes, and the digital economy. The researcher was not able to find any scholarly research or writing focused on the new phenomena. This literature review has confirmed that this study will contribute to advancing the body of literature.

This study ventures into a new realm of study by examining a team that is experiencing an interaction of forces from the digital economy, corporate entrepreneurship, and team processes.

CHAPTER THREE: RESEARCH METHODOLOGY

Introduction

The purpose of this study is to describe the team processes occurring in an electronic business venture creation team. The key context for the study involves a specific examination of a team within an organization that did not originate within the digital economy. The outcome of this study will be a rich, thick description of team processes and experiences. Insights into how modern organizations react and comply with the new factors associated with the digital economy would be a significant contribution to the field of human resource development.

The literature review has examined and identified the issues surrounding and influencing the team. The literature described team processes of new business creation teams, characteristics of innovative organizations, and specific issues emerging from the new digital economy. In part, the literature has answered the research question. Researchers and scholars are confident in describing what characteristics and processes support new venture creation teams. Not present in the literature were specific descriptions of ventures successfully transitioning from within a traditional business to the digital economy.

In an attempt to address the void, this study compiles data from within a traditional business endeavoring to launch a new electronic business. The case

organization has a widely regarded reputation for being innovative and setting best practice benchmarks within its pre-digital economy industry.

The objective of this research is to interview participants of a team consisting of engineers, administrators, and analysts engaged in an electronic business venture creation initiative. For this study, the researcher identified a high technology company with a strong commitment to innovation and a new charter to develop a strong electronic business focus. The venture initiative began as a small team and has grown into an operational business within the larger corporation. The epilogue following the conclusion provides more detail regarding the development and success of the subject team.

The research plan employs an in-depth ethnographic case study of the identified team. Due to the limited amount of literature related to teams and the new digital economy, an ethnographic case study approach was chosen for an initial exploration and understanding of the team processes related to the research questions. The primary data generation strategy will be structured interviews with the team's managers and other associated parties within the organization.

Research Approach

Most modern management theory is based on positivistic, rationalistic principles. Positivistic principles and methodology are essential for research that builds theory and models, but certain humanistic interactions and processes are not yet thoroughly understood to be effectively modeled in this fashion. Traditional survey and questionnaire research techniques fall short in describing the complex issues and process dynamics found in knowledge-based organizations (Scholtes, 1997). Traditional

quantitative methodologies are not appropriate when teams and groups are focused on intensive information processes and knowledge discovery in fast moving environments (Stacy, 1996). Because of the social nature of the subject team, qualitative methodologies have been used in this research.

Selection of Qualitative Methodology

This study of an electronic business creation team deals with human qualities that are difficult to quantify. The phenomena of team formation and development into an organization occurs in a complex, and holistic environment related to the new digital economy. Therefore, a qualitative, naturalistic method of investigation was used for this study. A qualitative case study is useful because it can deal effectively with the holistic nature of the subject under investigation (Guba & Lincoln, 1989). According to Merriam (1990), a case study is an examination of a specific phenomenon, such as a program, an event, a person, a process, an institution, or a social group.

A qualitative case study is an in-depth, holistic description and analysis of an event, phenomena, or social unity. It is particularistic and descriptive – focusing on process, understandings, and interpretation – rather than a deductive or experimental focus. Interest in processes, interpretations, exploration of relationships, and the development of grounded theory are all justifications for using a case study approach (Merriam, 1990). The essence of qualitative research involves two primary conditions: the use of close-up, detailed investigation of the natural world by the investigator and the attempt to avoid prior commitment to any theoretical model. A case study can be used to explore those situations in which there is no single set of clear outcomes. There is more emphasis on

description and discovery and less emphasis on hypothesis testing and verification (Rudestam & Newton, 1992).

The research question and the enabling questions for this study were best addressed by the heuristic, qualitative method. The primary purpose was to describe team processes of an electronic business venture creation team. Hypotheses were developed during the course of the study in an inductive fashion. There was no specific independent variable as the study's intent was to study venture teams without interference. The research design was variable and developmental over the course of the study. The data were represented and summarized in verbal forms. The study examined behavior in its natural setting, as reported through interviews. The venture creation teams were studied holistically as a complex system. The conclusions were tentative and subject to on-going examination. The focus was on process, not outcome or product.

Constraints

The scope of the study was bound by three major constraints. The first constraint was fiscal. The researcher was limited in the ability to conduct more interviews with the team because of fiscal constraints.

The second constraint was related to geographic regions. The subject organization had multiple sites in different geographic regions. The team members interacted intra-team and inter-organizationally from different geographic locations. The researcher was constrained to one primary team location for most of the study.

The third constraint was accessibility of confidential information. The researcher entered into a non-disclosure agreement with the case organization. The agreement provided a high level of access to the team and the company. Even with this high level of

access, certain conversations and processes were excluded from the study at the discretion of the subject organization.

Research Characteristics

Qualitative researchers are faced with the challenge of establishing trustworthiness in their research. Lincoln and Guba (1985) suggested that credibility is a key concept in establishing trustworthiness of qualitative inquiry. Trustworthiness is related to the validity of the study (Guba, 1981; Krefting, 1990). According to Lincoln and Guba (1985), Marshall and Rossman (1989), and Erlandson, Harris, Skipper, & Allen, (1993), three criteria could be used to establish trustworthiness in a qualitative study: credibility, transferability, and dependability.

Credibility

Credibility can be achieved through peer examination, reflexivity, and triangulation (Erlandson, et al., 1993). This study involved aspects of each credibility building activity. A peer examination and reflexivity were incorporated through the expert reviews and debriefs. Triangulation was achieved through the coding review and literature review during the data analysis phase of the study.

Transferability

The researcher conducted the study with the goal of transferability to future studies. The results of this study should establish a foundation for future empirical research related to team processes in the digital economy. For this study to be transferable, or usable in other situations, the data collection and analysis must include thick descriptions (Geertz, 1973; Lincoln & Guba, 1985). This study included detailed

descriptions of the experiences from the participants to ensure transferability of the findings.

Dependability

Dependability is related to the degree that this study could be replicated or repeated. The key to a dependable study, according to Lincoln and Guba (1985), is the existence of an audit trail. An audit trail can be described as thorough documentation from the start of the study through to its completion. The documentation provides other researchers with the evidence to reconstruct the study and reach similar conclusions. This study included an audit trail that began with the initial written correspondence and consent forms from the participants and incorporated all the interview questions and raw transcripts of the interviews.

Validity and Reliability

In this study, various methods were used to address the issues of validity and reliability. The methods have focused on expert review of methodology, member checking, and expert debriefs following data collection.

The research design for this study consisted of three primary themes—design for an acceptable level of internal validity, an acceptable level of external validity, and the principle of allowing themes to emerge from the analysis. The first theme is related to internal and external validity. According to LeCompte and Preissle-Goetz (1982), internal and external validity are two primary facets related to validity in ethnographic research. The issue of internal validity can be addressed by asking: Are the researchers actually observing or measuring what they think they are observing and measuring? (LeCompte & Preissle-Goetz). The issue of external validity is also related to the

question: To what extent are the abstract constructs and postulates generated, refined, or tested by scientific researchers applicable across groups? (LeCompte & Preissle-Goetz). To simplify, internal validity is related to good qualitative research methods and external validity is related to the ability to generalize findings to the appropriate population. In this study, both validity issues were carefully considered and the research design reflects a sincere attempt to have a high degree of validity.

The external validity component of qualitative research examines the degree that a research study is generalizable to a specific population (Creswell, 1998). “There is a danger of error whenever the researcher generalizes beyond the sampling frame. To avoid or reduce such error, the ethnographer may specify the relationship between the sampling frame and the target universe” (Honigmann, 1970). For this ethnographic project, the researcher was not concerned about the ability to generalize the findings to a larger population at this stage. The purpose of this study was to identify factors associated with team processes in an electronic business venture creation team and use the identified factors to develop testable hypotheses for future research.

Philipson (1992) indicated that certain attributes of qualitative research should be present in quality work. His attributes are in situ in nature, non-manipulative, exploratory, and participatory description. Each of these attributes were factored into the research design of this study. In situ in nature refers to the naturalness of the data collection. This study involved interviews conducted at the participants’ workplace. The researcher was non-manipulative in the interactions with the participants through the careful development of unbiased interview questions. This research is exploratory in

nature since there is little known about electronic business venture creation teams.

Lastly, the researcher included a participatory description in the data analysis.

Expert review of methodology was used to ensure that the questions asked in the interviews were appropriate and devoid of researcher bias. A panel of experts reviewed and critiqued the research proposal and interview questions prior to the data collection phase. Experts were also used in mock interview sessions to ensure the questions were understandable and free from researcher bias.

Member checking was used throughout the data collection phase. After interviews were conducted and transcribed into written format, the transcripts were presented to the interviewees to allow for clarification and editing of comments. Member checking should increase the validity by ensuring that what was recorded by the researcher was a correct representation of the comments of the participant (Guba, 1981). Member checking also contributed to the anonymity and confidentiality of the participants. The participants were encouraged to omit any comments that might identify them or create a potential risk.

Expert debriefs were used after each round of interviews to provide the researcher with feedback and checks for validity and reliability. Experts were also used during the coding phase of the data analysis to ensure the accuracy of the researcher's code selection and analysis.

Data Source

The selection of the participating company was conducted through judgment, non-probability sample (Banning, 1998). Judgment sampling is defined as: the ethnographer uses his prior knowledge of the universe to draw representatives from it

who possess distinctive qualifications (Honigmann, 1970). The company is highly respected and has been used in the past for many best practice and benchmarking studies. Within the company are multiple teams focusing on electronic business venture initiatives. One of these teams was chosen because of its convenient geographic location in relation to the researcher.

Participants for the Study

The participants for the study were members of the electronic business venture creation team at Hewlett Packard. Individuals with management responsibilities and those responsible for the team's supervision participated. Eleven individuals were invited to participate in the interviews. The pool included eight individuals within the team and three individuals who were highly involved with the team but were not team members. The individuals within the team included the general manager, finance manager, product development manager A, product development manager B, product development manager C, product development manager D, product development manager E, and an administrative manager. This group of participants is referred to as A1, A2, A3, A4, A5, A6, A7, and A8. The external individuals included company employees outside the team who had significant interactions with the team. These individuals represented managers from a level of the organization higher than the team. This group of participants is referred to as B1, B2, and B3.

Each individual was invited to participate in the interviews, and consent was solicited after the research commitment was explained. This study was reviewed and approved by the Human Subjects Review Committee at the researcher's University. The approval letter from the committee is included in Appendix A. A condition of the

approval required the use of signed consent forms. The consent form informed the potential participants of any associated risks, and individuals were not interviewed without their signed consent. An example of the consent form used in the study is included in Appendix B.

Demographic information related to the participants was included in the analysis portion of this study. The participants were employees of a large, high-tech, multinational corporation. There is some cultural diversity among the participants, but most are U.S. natives. There is some gender diversity among the participants. The researcher estimated all participants were between 35 and 60 years old.

Location and Setting for the Research

Participants chose the specific location for the interviews. They had the opportunity to choose a time and place convenient to their personal schedules. The researcher ensured that each setting was private to protect the interviewee's confidentiality. A number of private conference rooms at the team's site were available for the interviews.

Research Process

This study involved approximately 30 hours of interviews with the participants conducted over a six-week period. Figure 6 provides a conceptual drawing of the research process executed during the data collection phase of this study. The first round of interviews were conducted during the first week of data collection and involved team participants A1-A8. The second round was conducted approximately two weeks after the first round and included active members of the team (A1-A7) and the external

participants (B1-B3) in the project. The third round was conducted approximately two weeks after the second round and included the active team members (A1-A7).

The researcher anticipated some maturity effect to occur during the study, which involved increased understanding and development of the team. The maturity effect did not negatively impact the study and gave the researcher insight into the trajectories of the team. The researcher also anticipated the possibility that some participants might terminate their involvement on the team. In the event of a change in team membership, the research design was adaptable to accommodate new participants; and the leaving participants were to be interviewed for their experiences. Major change would only contribute to the richness and thoroughness of this study.

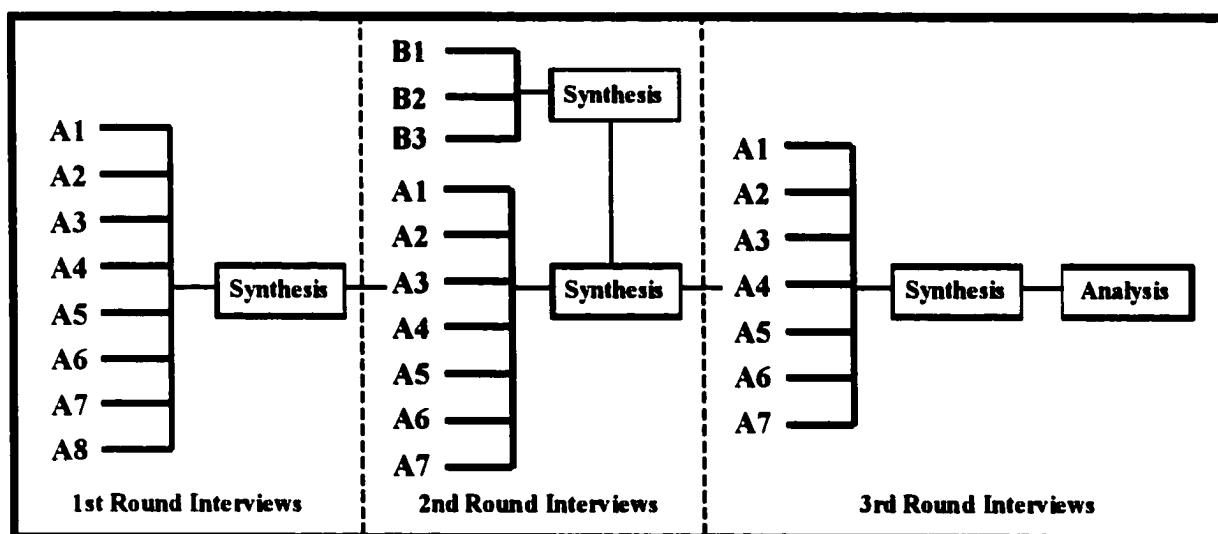


Figure 6. Research Process of the Study: Rounds of Interviews and Syntheses Activity.

All interviews were audio recorded using a small, unobtrusive, digital recorder. The participants' consent to be recorded was solicited before the researcher began recording the interview. After the interviews were conducted, the audio recordings were

transcribed into a typed electronic format, with copies of the transcripts provided to the interviewees for their review. The interviewees had the opportunity to edit, clarify, or omit any comment before it was submitted for analysis. The researcher used the edited transcripts in the data analysis of this study.

Interviews

The data collection process for this study involved a series of structured interviews. The interviews were conducted in three phases over a six-week period. The first round of interviews included a number of interview questions structured to stimulate interviewee disclosure of their perceptions and experiences related to their participation with the team. The interview questions were developed based on research and information gleaned from the literature review. Patton's (1982) guidelines for writing interview questions were followed for this study. The issues addressed in this study overlapped the three domains of beliefs, attitudes, and behaviors. Questioning focused on each domain as the interview questions were developed. The questions were pilot tested with experts for relevancy, clarity, and bias and modified or omitted as necessary. The interview questions were provided to the interviewees prior to the interviews to allow interviewees time to prepare. Examples of the interview questions are found in Appendix D.

After the first round of interviews, the researcher reviewed the data for emerging themes. The themes were used to develop the interview questions for the second round of interviews. The process used in the first round of interviews related to question review and question distribution was followed for the second round of interviews. The third

round of interviews followed the processes established in the second round and included the participants who were not active members of the team (B1-B3).

Data Analysis

The data collection phase terminated after all the third round interviews were conducted, and the data analysis phase began. All of the interviews were transcribed and imported into a computer-mediated data analysis tool—the qualitative research software package HyperRESEARCH. An example of an interview transcript is included in Appendix F.

Qualitative data analysis is comprehensive and intuitive in nature. The primary activity in the analysis process is termed coding. The coding activity involves the assignment of descriptive terminology to the phrases, concepts, and words communicated by the interviewees. Many authors (Coffey & Atkinson, 1996; Glaser, 1978; Miles & Huberman, 1994; Seidel, Freise, & Leonard, 1995; Tesch, 1990) have stated that coding is analysis and establishes the foundation for the interpretation of the data. The coding process is refined as themes and issues emerge from the analysis.

The coding process for this study included open coding, axial coding, and systemic coding. Open coding is the first stage and focuses on constant comparative analysis (Glaser & Strauss, 1967). Second, the axial coding involves a merging of initial codes into like categories. The third stage, called systemic coding, involves a careful analysis of each category developed during the refinement (Glaser & Strauss, 1967). The purpose of systemic coding is to recognize relationships between categories and discover the emerging themes, attitudes, and key experiences of the participants.

Researcher Perspective

This researcher faced two primary challenges associated with researcher perspectives and biases. The first challenge is related to the researcher's relationship with one of the team's members. Access to the team for this research study was granted on the basis of an acquaintance relationship with a team member. It could have been difficult for the researcher to report a critical finding based in the research data. To account for this potential bias, an expert review and debrief process was incorporated to reduce the possibility of this bias.

The researcher also has a high level of regard and respect for the company being studied. The researcher was exposed to a number of writings focusing on the best practices and benchmarks developed by the company. It was a challenge for the researcher to examine the company with an unbiased perspective and allow for a critical examination that could have reflected unfavorably on the company. Expert review and debrief should have counteracted this potential researcher bias.

Summary

This study enacts qualitative research methodology in an attempt to answer the research questions posed in Chapter One. An electronic business new venture creation team from within a traditional organization has been chosen as the focus of this study. A number of team members and other individuals associated with the team were interviewed by the researcher to identify their experiences. The interviews are analyzed using qualitative methodology and themes and issues emerge from the analysis.

CHAPTER FOUR: RESULTS

Introduction

This chapter explores the results of this study. The intent of this qualitative study is to identify the issues that emerge when a traditional organization interacts with the significant factors emerging from the digital economy. As stated in earlier sections of this document, existing companies are facing challenges resulting from an economy heavily influenced by digital technology, and more specifically, the Internet. Many believe that the digital economy has and will cause traditional organizations to modify their human resource development practices. Managers are forced to manage differently, and business leaders are forced to lead differently. This study makes the assumption that teams are also evolving and developing a unique set of values, norms, and practices as they interact with forces within the digital economy.

In an attempt to answer the research question of this study, one team was identified and studied. The research question featured in the study was

- What are the significant factors supporting the successful transition of a new venture creation team emerging from a traditional domain to a new business organization working in the digital economy domain?**

Five enabling questions were asked to support the research question. The enabling questions in this study were

- What does the establishment of an electronic business creation team from within a traditional business look like?
- What are the new rules of electronic business and how do electronic business venture creation teams address them?
- How do electronic business venture creation teams balance their organization's resources, culture, and competencies with the new rules of the digital economy?
- What human resource development processes occur within electronic business venture creation teams?
- What is the impact of the digital economy on the team's culture and organizational structure?

The team selected for this study was birthed from a traditional organization and given a charter to investigate the Internet economy and seek to leverage organizational competencies through the development of a transaction-based revenue model conducted using the Internet. A thorough description of the team follows.

As explained in Chapter Three, a qualitative case study was proposed as the most appropriate approach to address the research questions. The researcher implemented an interview process with key individuals involved with the team. The answers to this study's research questions emerged from the information and experiences communicated by the team within the interviews. The interviews resulted in the "voice of the team." In many ways, the team became a unique entity with a high degree of consistency and camaraderie communicated within the individual interviews. The researcher has reported on the "voice of the team" and has highlighted individual voices within the analysis.

This chapter provides a description of the interview process, an explanation of the coding process used to examine the interviews, and a description of the results. The reporting of the results are structured around issues that emerged from the interviews. The study followed the methodology presented in Chapter Three and a description of the methodology as it occurred is included in this chapter.

The Interview Process

Interviews were conducted with key members of the organization who were directly involved with the subject team. Eight of the interviewees were members of the team, and three were significantly involved with the team from an upper level of the organization. All interviews were conducted individually between the researcher and the interviewee. One researcher interviewed all of the interviewees. The interviews began the week of May 15, 2000, and were finished the week of July 15, 2000. The researcher scheduled hour-long appointments with the subjects in accordance with the subject's schedule. The researcher sought to schedule times that were most convenient for the subject. All interviews were scheduled during the workweek and during normal business hours.

Interview Schedules and Locations

Most of the interviews were conducted at the organization's place of business. Private conference rooms were used to conduct the interviews. One of the team members was working at a company site located in a distant state and the interviews with that individual were conducted by telephone. In an attempt to accommodate team member's schedules, the researcher conducted one interview at a team member's home and another

at the researcher's private office. The researcher also traveled to a distant state by airplane to conduct interviews with two individuals; these interviews were conducted at the organization's facilities in private conference areas.

In all interview situations, the interviews were conducted in a comfortable and private setting. The researcher tape-recorded each of the interviews using two small tape recorders. All participants consented to having the interview tape-recorded. The settings were chosen to facilitate a quiet area for recording without risk of interruption during the interviews.

The time involved with most of the interviews was approximately 50 minutes. Two interviews lasted for approximately 70 minutes, and two were approximately 25 minutes. In all situations, the interviewee was given the opportunity to spend the amount of time they had available. Three of the interviews also included a short break at the halfway point. The total time spent in one-to-one interviews with the interviewees was approximately 30 hours.

Interview Questions

Interview questions were developed before the interviews were conducted. The interviewee was given a summary of possible questions prior to the interviews. These questions were used as a guide to initiate the discussion. As the interviews progressed, an open discussion evolved with the interviewees. The researcher conducted the interviews with a primary goal of drawing out the voice of the team and was careful to avoid questions that were not open-ended or would be prescriptive.

Interview Transcribing Process

At the conclusion of a week of interviews, the audiotapes containing the individual interviews were delivered to a professional transcriptionist. The interviews were transcribed within five days and returned to the researcher in electronic format. The audiotapes were also returned to the researcher. The transcripts of the interviews were delivered to the associated interviewee. Each interviewee was asked to review the transcripts and to change, modify, or omit any statement on the transcript. Any changes, modifications, or omissions were communicated to the researcher by the interviewee before the interview was analyzed. The interviewees understood that their transcripts would be analyzed and used in the study after they had the opportunity to revise and modify their transcripts.

After the transcripts were returned from the interviewees, the researcher verified the accuracy of the transcripts. The accuracy was checked by listening to the interview audiotape and following the text of the transcript. Some words were changed in the transcripts by the researcher. This was necessary because some of the interviewees had an accent. The interviews also focused on technical issues and specific companies that were difficult for the transcriber to understand. The researcher also changed the names of the team members and companies in the transcripts to pseudonyms.

The Coding and Analysis Process

Coding Tool

As proposed in Chapter Three, electronic versions of the edited transcripts were consolidated in an electronic folder in the researcher's personal computer. The

researcher purchased and used a qualitative analysis software package called HyperRESEARCH Version 2.0 to facilitate the coding process. The instructor of a doctoral level qualitative methodology course recommended its use, and the researcher compared its functionality to other software tools such as ATLAS TI and NUDIST before selecting HyperRESEARCH.

Qualitative software tools facilitate the coding process of the transcripts. The transcripts are loaded into the software as data sources in text files. Then, the researcher generates a list of codes that are assigned to specific words, phrases, or sections of text in the transcripts. The codes and their associated texts are easily reviewed, consolidated, analyzed, and printed throughout the course of the data analysis. HyperRESEARCH allowed the researcher to code all data numerous times, retrieve and manipulate portions of coded source material, test propositions about the data on any one code or combination of codes using Boolean searches, test hypotheses about the overall meaning of the data using artificial intelligence, and print the retrieved data. Many scholars (Coffey & Atkinson, 1996; Glaser, 1978; Miles & Huberman, 1994; Seidel et al. 1995; Tesch, 1990) have proposed that coding is analysis and forms the basis of description from which interpretation is made.

Coding Levels

The researcher incorporated a coding process involving three coding levels as was explained in Chapter Three. Open codes were the initial codes given as the transcripts were examined. These codes were the most numerous as many words and phrases were identified as relevant to the study. The open coding process occurred soon after the transcripts were returned to the researcher by the interviewees. Additional interview

questions were generated as a result of the open coding process. The cumulative list of open codes is located in Appendix E.

Axial coding was used after all of the transcripts for a particular interviewee were open coded by the researcher. This level of analysis involved a grouping activity of open codes. Axial codes are groups of related open codes that begin the process of identifying emerging themes and issues from the transcripts. The 15 axial codes identified are illustrated in Figure 7.

Third, systematic codes were given to axial codes after all of the transcripts had been open and axial coded. Systematic codes are grouped between subjects and help to identify the voice of the team and the consistent or inconsistent messages communicated by the participants. Three systematic codes were identified: corporate entrepreneurship issues, team processes issues, and digital economy issues.

Systematic Codes		
Corporate Entrepreneurship Issues	Team Processes Issues	Digital Economy Issues
Axial Codes		
*Executive sponsorship *Participant experience *Risk, uncertainty, and ambiguity *Organizational resources leveraged for the venture *Organizational response to the venture	*Team values *Team beliefs *Team communication *Team operational principles	*Webspeed *High level of collaboration with external organizations *Rapidly advance up the learning curve *Staff with unique human capital resources *Address the issue of external e-culture *Higher level of autonomy and protection from organizational immune system

Figure 7: Systematic and Axial Codes

The Voice of the Team: Issues and Themes Identified Through Analysis

The remaining sections of this chapter report on the issues and themes that emerged from the interviews. Direct quotes from the interviews are used to illustrate the themes and give voice to the issues. A brief discussion will be presented related to the systematic codes of Corporate Entrepreneurship Issues and Team Process Issues. This study is focused on the issues that emerged related to the Digital Economy systematic

code. The italicized font text represents interview quotes from team members. The following analysis report provides a description of the purpose of the team and detail surrounding how the team was established. The analysis report will also elaborate on each of the axial codes emerging from the Digital Economy Issues systematic code.

The Subject Team Background Information

Birth of the Team

One of the subject company's presidents initiated the birth of the team, as described by the team leader.

Our program was initiated because George Smith, who's the president of - at that time it was called Computer Products. The president had experienced a presentation by someone who was doing an investigation into e-services at our organization. The guys got really excited about the opportunities - wow, this is really cool, and it's the future and what could we be doing in this space. At that point I think they (the presenters) talked about that there are eight different e-services that we can offer and the feeling was that seven of the eight were being handled by another part of the organization.

The only one that hadn't really been covered was entertainment, e-services around entertainment, of which the first thing that was coming out was music. And it made sense for the president's organization to look at this because a lot of the devices that our company was producing were dabbling in entertainment and music as recognizing that that's what consumers were looking for, in that personal devices in their homes, whether it be computer or non-computer related stuff. And all that was in Tracy's organization so it made sense to look at the services provided as well, from that standpoint. So he chartered Chris, a VP, executive sponsor) and asked Tracy, a VP to be an executive sponsor too, that puts the team together. So they asked me to lead it and it was a fast paced thing, in terms of one day they asked me to lead it and I was to start the next day. They went out and pretty much gave me an open check book in terms of getting people that were needed to launch the team. Basically I was told, who do you need? What kind of people do you need? I was basically given the ability to go into different internal organizations and hand-pick people out of them.

The team was birthed because of an opportunity perceived by a company president and executives within his organization. It is important to note that the

organization is a very large, Fortune 50 company with multiple divisions and products. There are multiple presidents and numerous vice presidents represented within the organization at large.

The president mentioned above appointed two vice presidents within his organization to serve as executive sponsors for the new team. The executive sponsors chose one individual to lead the team and empowered the leader to build the team quickly.

Team Charter

In this organization, the term *charter* is used frequently to describe purpose and direction at all levels of the organization. Charters can be granted and pulled from projects. It is implied within the organization that charters also represent an adequate level of resources to accomplish the mission or directive. The team leader explained the team's charter:

The charter focused on three things - one is to investigate digital music services, to see if there's a way to generate revenues or create a business model, or revenue generation process that is not going to sell the product, but profit from facilitating the transactions. That was the basic premise, which was the new Internet model that was emerging. The second was to leverage as many HP assets as possible in doing this. There wasn't a singular play, but it was across organization planes. The third was to establish some kind of a foothold in the entertainment industry. The purpose for the foothold was related to future opportunities related to video that will develop as bandwidth increases. I felt like I had been given some pretty clear marching on this right up front.

In summary, the executive sponsors established three purposes for the team:

- Develop a transaction-based revenue model that allows the company to profit from digital music sales to our hardware customers and other Internet users

- Examine all organizational resources available and strive to implement and leverage when possible
- Establish the company within the electronic business digital entertainment space, which would facilitate future growth when digital video is adopted throughout the market

A team member described the charter in the following statement:

It was the digital music distribution and the way people were going to experience music was changing at that time. And basically what we were about is to try to find a way to build a business, or several businesses taking advantage of this new world coming out, or digital delivery of music for HP. And it was clear from the beginning, even though we talked about it quite a few times just to be sure that we understood this, it was clear that it had to be a service business. It was not about selling boxes. It was not about selling hardware. It was not about selling more hardware either. So from the very beginning we were about, "Okay. So we are service based. What does that mean?" We want to be a service that other competitors, currently hardware competitors, want on their system.

Team Deliverables

The team was directed to deliver a plan of action within 60 days. The plan of action was to include a "fleshing out" of the team's charter, which would focus on a compelling business argument that would justify further investment of financial and human capital resources for the team. The team followed a new business development model that included the conceptual stage, the business concept stage, the seed business venture stage, and the conversion business stage.

The team leader described the development experience as follows:

I think in the very first part we moved faster. I think we collapsed the first couple phases together. And so we went through the first phase, or up to milestone one, the first three months we did a lot of investigation. Is there a viable business for us to pursue. Then asked for our first venture funding. That all came out in that first three months. We kind of did all that very quickly and in succession but went through the first few phases. Then from the milestone one to milestone two, it was

really developing a business case for a long-term business and at that point starting to - well and then coming out in milestone two it was really at that point we were saying that this is not emerging business. And actually we got promoted from being what we called a New Business Creation team (Tracy called it an incubator team), we moved from Incubator team emerging business (he called it developing business).

Team Staffing

The initial staffing choice was made by the executive sponsors when they chose the team leader. The team leader was working as a manager in one of the executive sponsor's organizations. The leader had 16 years of work experience within the company and a degree of Master of Business Administration. The leader described his personal experience within the organization as:

My history is that I've always been viewed as - I mean even from the first time that I did that inventory job is - if you need something fixed or you need to start something new, I'm the guy to go do that. And so I operate pretty well in an ambiguous environment. I operate well where things are yet to be discovered, and I'm not at all burdened by - I don't think I'm at all burdened by the HP culture or the way things have always been done, and so when this thing came up, you know, they were looking for someone who could pull together a team and do a very quick investigation.

Team Members

The leader's first priority was to form a small core team of individuals who could move quickly to create the plan of action for the executive sponsors. The leader reported,

I think our first team meeting was June twentieth and we were at, so it took me a couple of weeks to get the team together, to identify the people and pull them out of the existing assignments.

I was not looking for tactical people, I was looking for broad sort of thinkers, I was looking for people who looked at time instead of clocks. There was an individual from "a division" who had been kind of looking at this space a little bit, that made a lot of sense to bring on Dan, so we transferred him straight across. We pulled some people who were doing the same kinds of things from a division standpoint, and actually they were in the futures team, that's how Sam

and Pete came across. Dan really was kind of a business guy, Sam is a business guy and marketing guy – Pete is an engineer. I immediately went to our company's technology division and said, I need your best technologist around this whole space of digital music, they had one person with educational experience in audio and that was J.J. who's has a Ph.D. in audio compression, decompression and so he was assigned to the team immediately. So I was looking for business people and technology people. I brought on Hank who I was working with for the prior three or four months going to all the industry meetings around secure digital music because, you know, one is we were going to need to understand what was the dynamic around digital rights. But the second thing is - one of the objectives that I was given months before I started this team was to network, and build a network. I pulled him on the team because of all the contacts he had with all the different players around the digital rights political environment.

The finance guy I pulled in did double duty at the initial stages. He had just come to me from corporate development but had a financial background. So he was serving as kind of high level financial background, but he also had a lot of insight in terms of, how do you make a play into a new space. Sometimes you have to buy it, sometimes you have to put an equity stake in - when you do that, when do you know to do that, so I brought him on the team in order to help with that as well.

I also hired a consulting company because I knew that if we were going to move as fast as - we made a commitment to deliver in 60 days a recommendation and it ended up being a little bit more than that, more like 75 days, because of scheduling. But I knew that I would not be able to do it that fast with as little knowledge - we didn't have any knowledge of the industry. Hank, who was the industry guy, had a little bit, probably four or five months investment. J.J. certainly had an understanding of the technology, but the rest of us we were pulled out of other, ordinary jobs to come do this, so there was a huge learning curve we had to go through.

The last individual to join the initial core team came would end up on the team is Don who had multiple experiences, in multiple different areas of HP. He didn't join the team until the mid-July time frame, so he was three or four weeks later into the process. He is so versatile - the other thing I needed was - although I did need some specialists, I was always looking for people who could do multiple different tasks, and he's very mature, has an incredible insight into business - very versatile. I was lucky to get him on board.

The leader also reported that the executive sponsors assisted in the selection process, which enabled quick action and selection of very competent individuals. The team selections were made because of recommendations from the executive sponsors and the team leader's professional relationships.

Corporate Entrepreneurship Phenomena

A significant amount of the information communicated by the interviewees related to corporate entrepreneurship issues, thus it was one of the three systematic codes. The subject team represented a new venture creation team and experienced issues related to corporate entrepreneurship efforts. A consistent message within the interviews was that the team considered itself an Internet start-up organization within a large corporation.

There were five primary axial codes within this category:

- Executive sponsorship
- Participant experience
- Risk, uncertainty, and ambiguity
- Organizational resources leveraged for the venture
- Organizational response to the venture

Many of the issues communicated in the interviews would have been experienced by both digital-economy and non-digital economy focused ventures. This confirmed to the researcher that the right type of team had been chosen to identify the specific issues associated with traditional companies venturing into the digital economy through corporate entrepreneurship.

Team Processes Phenomena

The examination of the team through the interviews also exposed a team leader and a team focused on developing and investing in team values, beliefs, and norms. These issues were categorized under a second systematic code, team processes. Such characteristics confirmed that an appropriate team had been chosen for the study. It was

apparent that the team leader acted purposefully in the establishment and development of the team.

The following four axial codes related to the systematic code of team processes:

- Team values
- Team beliefs
- Team operational principles
- Team communication

Team members reported that the team had very strong values and norms.

Members commented on the processes in the following paragraphs.

There are very strong values, those were conveyed all the way from the top down. I was very impressed with his (the team leader's) very people oriented values. People were the most important thing. He managed jobs, he managed people and he found the right people to do the jobs, the jobs just got done. That emphasis came all the way down the organizational charts. As he brought new people on those contributors also found like kind of values, strong work ethic - valued people for their diversity, for individual contributors, for what they could contribute to the project, gave people a lot of freedom to create new advances.

There was kind of a like-mindedness across the whole team. There wasn't any kind of diversion with one, it was real clear what the rules were and how it was to be played. There weren't politics involved so to speak. Conversations and information flowed very freely, people weren't into this is mine, I'm going to keep this! It was pretty much everyone shared everything across the board here, there weren't like secrets. The team was a team, because it was as equal as any team I've ever been with, from the top down to the bottom. In the hierarchy you always felt like, no matter where you were at the structure, you were important and had access to information, had access to - so it was a real open, real open environment.

Members also emphasized the operational principles established by the team leader. First, the “80% rule” reminded the team that decisions would be made when 80% of the data or information was gathered. They believed that working for the remaining 20% would be an investment with small returns. The second principle

was called “straight talk.” The team strived to openly and honestly communicate about the issues and decisions without stepping on toes or egos. The third principle, “move slow to move fast,” applied to staffing in later stages of the team. There was a belief that taking the time to find the right people would result in increased performance.

It appeared that the team developed a unique set of team values, norms, and practices that built upon their organization’s values, norms, and practices. The team represented an evolution of the organization to adapt to the uniquenesses of the digital economy issues.

Digital Economy Phenomena

As the coding process was completed, a number of issues emerged that were independent of the corporate entrepreneurship process and team processes. A third systematic code was identified and titled digital economy issues. These issues represent the crux of the data the researcher hoped to encounter in this study. The research questions could be answered as a result of the identification and analysis of the issues related to the digital economy.

The voice of the team consistently reported on the unique factors they were facing as they investigated, planned, and executed a plan that created a new electronic business within the digital economy. The team voice pointed out six axial code issues that addressed what the team needed to do to be successful and what other ventures teams would need to achieve success. The following axial codes are not presented with any level of rank order or importance.

- The need to move at Webspeed

- The need for a high level of collaboration with external organizations
- The need to rapidly advance up the learning curve
- The need to staff with unique human capital resources
- The need to address the issue of external e-culture
- The need for a higher level of autonomy and protection from organizational immune system

The Need to Move at Webspeed

A new word has been coined within the digital economy, *Webspeed*. This term refers to a new speed of business development and operations that exceeds any level previously experienced. Because of the proliferation and rapid development of technology, businesses must move faster than ever before to capitalize on current technology and deploy infrastructures for technologies that will be on the scene in the near future. Team member comments related to Webspeed were numerous.

We were trying to model what it would be like to be an Internet company which is moving really fast.

I think the team recognized pretty quickly that things in that space went extremely fast.

I think it's speed, speed, speed, and everything is going faster and faster.

The Internet is faster than even I thought it was. The pace is insatiable.

The team constantly reported meeting objectives faster than any previous experience, and individuals reported this was the result of a personal commitment to work harder and faster. The team had a sense of urgency. Upon examination of the charter, the urgency did not appear to be a directive of the executive sponsors. The team exceeded the executive sponsor's expectations for speed on many instances. The

sponsors reported that the team had made progress well beyond what they had expected or deemed as appropriate performance.

I would say that we adopted Webspeed to a tremendous degree relative to the yardstick of HP and we adopted it hardly at all relative to the yardstick of Internet companies. So there is a continuum of moving as quickly as any dot-com today and moving like HP. I would say that our team was roughly moving a lot faster than HP was moving but we certainly weren't moving as fast as an Internet company. We were moving about mid-point. In my mind the upper management of the company was slowing us down. And we still weren't going fast enough, we weren't going as fast as your typical start-up.

On one hand it was extremely frustrating because we saw how fast we needed to move and how relationships were forming and how other people were moving at lightning speed into space and getting positioned with partnerships and everything else, and we saw the opportunity for HP. Even though we would continue to push on going fast, we were prevented from going as fast as we needed to.

Internet speed is the antithesis of glacial speed which is considered to be the HP approach. The idea that decisions are made quickly and that there is an acceptance of risk, tremendous risk, there is an acceptance of mistakes. That you can go ahead and go early, you try something, get feedback on it. It's an attitude or a mind-set. The attitude is things are possible, you can move quickly, as opposed to the traditional HP mind-set which is things are not possible unless you really work hard to make them and then things must move slowly to succeed.

The fact that we were moving at light speed in comparison to the standard HP, that still might have been a crawl compared to the Internet speed. We were trying to get that across, that things are happening quick, we're making decisions quick, we're making decisions in front of them, you know, we're making decisions quickly at home and getting back to them to try and help them feel confident that that truly was the reality and do things differently.

The team reported that the standard for speed had been set within the digital economy, and they believed they would need to operate according to digital economy standards. There was also a belief that the team was a few steps behind many of the significant players within the digital economy. The charter had been issued because there

were opportunities being missed in the digital economy, not because of futuristic thinking or planning.

You have to move fast, for example let's examine pricing. When we used to do pricing it was, you know, Harvard business school, textbook pricing exercises. Focus groups, market samples, and we had these complicated pricing models and then we'd go through multi-phased pricing reviews, like there would be hundreds of people involved in the pricing discussion and there would be great wailing and gnashing of teeth, and at the end the price would spit out, you know. If your competitor sells direct, like Dell for example, on their web page, and they go in and say, NO, I'm going to change it from 5,500 to 5,200, well what do they have to do to make that change? Well literally all they have to do is - a single person has to log onto the website, change it and enter and save and it's re-priced. You know, bam, it's done. So what that's caused is we went from taking five months to make a pricing quote, which by the way is speedy. I remember it used to take us like a year to make a pricing quote, people would just laugh today about that. But now if your competitor makes a move like that you've got to, depending on the market you're in. You've got to be able to make a pricing move anywhere from 4 hours to 1 week, at the most, depending on what site you're in. That's why speed is important because the consumer can go up there on the Internet and look at your site, and their site and say, oh, they're cheaper, I'll buy from them. So it's not just price, if they announce a new feature or whatever, or they're sensitive to what some of the customers mind. So everything upstream has to be fast, fast, fast. How do you move fast? Well you move fast by the combination of pulling some things up and pushing some things down, so the things you pull up are being really clear about what we're about and what we're not about - if you don't allow lots of independent Dukes and Earls to decide, well we don't value that in my kingdom, we're going to do this.

The need for Webspeed necessitated a need for collaboration with internal organizations. The team was given the ability to recruit team members from multiple internal organizations, allowing the team leader to hand pick the best individuals with the correct competencies for the task. (A discussion of competencies follows in a later section.) The internal collaboration also enabled team members to access information gathered by other efforts related to the digital economy. Finally, other organizations within the company had established relationships and interfaces with major players in the

digital economy. The internal organizations allowed this venture creation team to step into those relationships to accomplish their goals.

The Need for Collaboration with External Organizations

One of the significant rules of the new economy stresses the need for collaboration among businesses and organizations with related missions and charters. This rule is related to the need for Webspeed. Organizations have learned that the development of all required competencies for a venture takes an extended amount of time. The time spent developing these competencies may put the organization's time to market and market share capture goals in jeopardy.

This issue is challenging to larger organizations accustomed to working with like organizations. In the digital economy, significant companies may be very small and very young. The team reported,

You have to take more risk because of the nature of some of these companies that are developing these competencies as start-ups, so before you would partner with somebody and go through this incredible financial analysis or risk assessment of a company to see whether or not they're going to be a viable, going concern for the next twenty years. In the Internet economy you don't have that luxury because in a lot of cases the finances aren't even there because everything's emerging so you have to take more risks in terms of putting together those partnerships. I don't think we've got the luxury of waiting to place the bets

A culture of collaboration has developed within the digital economy where organizations are willing to play their part in the venture to have a stake in the economy. The major pieces necessary to form a strong venture are financial resources, human capital resources, intellectual property, industry expertise, marketing competencies, and management competencies. The subject team was carrying financial resources, human

capital resources, marketing competencies, and management competencies. The pieces they needed to acquire were related to intellectual property and industry expertise.

Intellectual property may be in the form of patents, trademarks, copyrights, licenses, computer software, or unique hardware. In this case, they were focused on collaborating with external companies who had the rights to sell digital music content and had already developed software that would facilitate its distribution.

The team also sought to collaborate with industry experts related to both content and technology. Content experts were individuals and companies directly related to the entertainment industry. The team interacted with artists, managers, producers, and music labels and developed collaborative relationships with many industry players. These experts were able to share information and a new perspective. The team members experienced a high level of excitement because of the opportunity to meet and interact with well-known artists and industry experts.

The team also sought collaborative relationships with companies who had developed intellectual property and software related to the distribution of digital music. The primary focus was on software that would facilitate the delivery of music to personal, Internet-enabled devices that had been developed by the team's company. The team's company could have chartered a software development team to construct similar software packages, but opportunities to collaborate with companies who had already built such solutions outweighed the investment.

I guess I used several strategies to initiate interaction with external companies. One is definitely through conferences or workshops - try to hook up with these people. Start talking to them, get a business card and then when I'd get back home, contact them back. Another one was by referral. Another one which actually a couple of times was kind of boldish, is go ahead and guess what their e-

mail address is and send it directly to the CEO. I contacted several dot-com CEO's like that.

The work that I did just before Tim started his organization really laid a lot of the groundwork for our team. It was easy for us to get in to see the labels, because I had established relationships with the labels. It was easy to go and see a lot of companies. I had worked over the past six months developing relationships. So, my role, it was kind of fun, my role up until that point was simply to build the relationships. And then, once I started on Tim's team we were able to use those relationships that I built. That was fun.

XMII was meeting every two weeks. So, every two weeks, we'd see these same guys. I mean we were working together to try and put something together. And so I was able to build, you know, these relationships a lot through the work, a lot through building trust, communication. You know, plus I'm not shy. You just go up and start talking to a guy, and you know, what's HP doing, and what are you guys doing, and where it might be good to work together. The relationships mean everything.

Within the culture of collaboration, the parties build relationships because of envisioned win-win opportunities. In all situations, the subject team brought to the table significant legacy assets that were very attractive to other companies. As stated earlier, the team's parent company is a Fortune 50 company with a very strong reputation. The team members reported that they were immediately treated with respect and generated a high level of interest when interacting with external companies. The company name alone opened any door in the external environment with potential collaborators. The external companies were aware of the high potential for success should they develop an association with this company's team.

The name of HP opens a lot of doors. So people do answer.

The name and the marketing power. HP was a nobody - is a nobody in the entertainment space, it's not a name that's known. But when you take that name into the entertainment space people go, oh yeah. OK, yeah! You see it in all the focus groups, HP often is not one of the first names, or on occasion isn't even a name mentioned, but when the question's raised and, you know, a focus group moderator will toss out a number of different names, you know, so they can still

hide the identity of the participants. And each time the respondents go, HP? Yeah, I can see HP in that space, and so you get some support. Well then, somebody like Music Match who is fighting against a behemoth of Microsoft and the power of Real, Real Networks, they need a way to get their product out in front of millions of people, well HP's a way to do that and do it with trust and confidence, so that people will actually use it. And so they see us as big daddy in a lot of ways. And so all of these companies were just tripping over themselves to get to HP.

They (the external companies) were incredibly open. We were the ones that would slow them down, if anything.

The opportunity for HP to be interested in your business, you got to be kidding. We are the largest presence of PC's in retail establishments in the U.S. so we make this huge customer opportunity for them. Generally speaking, companies would just swarm to us. Once there was any wind that we might be interested in stuff, we were constantly deluged with phone calls from other companies.

The Need to Rapidly Advance Up the Learning Curve

As stated earlier, the digital economy precipitated phenomena unfamiliar to traditional organizations. The phenomena involve new rules and players which must be accounted for in business plans and daily operations. Because of the uniquenesses within the digital economy, the team reported that they experienced a very steep learning curve. Previous methods of business planning and operations had to be modified to match the realities of the digital economy.

And so what you had is a bunch of HP people that spent a year going out and learning everything we could from talking to people, and some secondary research and in some cases a little bit of primary research.

The team reported that they spent a significant amount of time in research and examination of the digital entertainment industry, which is embedded in the digital economy. The team sought to identify the major players, issues, and technologies within the industry. A primary goal from gathering and processing the information was to

identify significant control points within the digital entertainment value chain. As the control points were identified, the team used them to identify the areas that they could gain control through collaboration with existing players or equity investments in companies that had already established control in the value chain.

We did a lot of business meetings, team meetings, where we would process. First we would try to establish as a team what we thought were the objectives, what we thought would be the things we'd need to go look at and solve. Split up the team and everybody would go run and try to understand what their piece of it looked like and what they could find out. And having to answer those questions and then get back together at another team meeting and say, "Okay. What have we learned? What does it look like?" I'd say the meetings spent, we spent a lot of time trying to understand what the business models looked like, or the opportunities. We would set up a meeting where you'd say, "Go off and understand what we need to do. Evaluate the alternatives and make a recommendation of one." It was good because it created a lot of learnings. People could process. They could start to see trends in how the business would flow, or different partnerships might start to happen. The markets might start to move. So they could see all of that and learn from it. The drawback from that is that there were a number of competing views of how that, of what that data was telling us. So there was a lot of time spent trying to reconcile back to a common view.

Learning Technologies The team reported that they educated themselves using the five primary methods. First, the team was staffed with individuals who had some exposure to the digital entertainment industry. Some of the team members had experienced opportunities to interface with professional organizations and external companies within the industry. One team member specifically assisted in the rapid identification of issues and key businesses with the industry because of a prior involvement with a specific music industry professional organization.

The second method involved consultants who were experts in the field of digital entertainment. Because of the financial resources available to the team, they bought knowledge by hiring consultants to share their information and advice.

Third, the team sought out many Web sites, publications, and journals related to digital entertainment and the digital economy. Additionally, they reported attending many industry conferences that exposed them to individuals and information that facilitated the learning process.

Fourth were face-to-face meetings with industry players. The team reported spending many days traveling to facilitate meetings with industry players, which often focused on an investigation of the company's technology and strategy for industry involvement. The face-to-face meetings were reported to be effective and significant for discovering the unique factors in the digital economy.

The fifth method involved interacting with individuals within the team's organizations who have some level of prior experience with players or organizations within the digital music industry. The team was fortunate at times to be contacted by co-workers who had heard about their activity and wanted to assist by sharing information. The team members also spent time seeking out internal parties who may have had information or relationships that would help them move forward with their charter. The team reported a special event conducted approximately nine months after the team's creation. The E-Music Summit hosted many individuals within the organization for two days at a resort in California to share information and build intraorganizational relationships.

The E-Music Summit was an attempt to break down silo mentality and to pull together the people within HP who had an interest in music services. And so, in the course of the development of the program, we had made a lot of contacts, all of us as team members, with other people that were working in the music space. So there's a lot of people at HP Labs, within other internal organizations, there are people who build devices that play MP-3 files so they had an interest, there are groups, there's a group in the UK that's building out a website for musicians, and so, we knew about them. The thought was, "Let's bring everyone together,

have each group share with the rest of the team, what are the activities you're involved in and look for those natural opportunities for synergy, to work together across boundaries." I think it was an important event just from the perspective of coming of age, if you will, but being able to host the summit, we were saying we were real, we were in music, and, the benefit to us was letting other people know where we were at and being able to form relationships. It was really meant to be a stepping stone, and the sort of thing that if you limit it to just one summit, it's probably never going to pay back what you invest in it, but if you use that as a first step toward building relationships across organizations, then it's very valuable.

Processing Team Knowledge The team reported that processing the information into usable knowledge was challenging and time consuming. In the early days of the team, many meetings were held that involved all the team members. Discussions would take place, and the information gathered was processed and used in strategy development. Team members would return from face-to-face meetings with external players and report the information on standardized forms that were catalogued and posted using computer-mediated communication technology. The team members also reported receiving an overwhelming number of emails from other team members who were sharing information learned from individual activities.

The Need to Staff with Unique Human Capital Resources

The fourth major issue that emerged from the interview analysis was the need to staff the team with unique human capital resources. The team reported a specialized set of competencies enabled team members to be productive within electronic business venture creation teams. The first characteristic involves having an “affinity for all things digital.” Individuals must have a significant level of techno-savvy and enjoy interacting with the Internet. Team members reported a high level of feeling in a positive work flow because they were dealing with a technology that was exciting and interesting.

The second characteristic is an ability to move fast. As mentioned earlier, team members were moving at Webspeed. The team sought out and recruited members that would be able to perform well at higher speeds along with higher levels of ambiguity and risk. The team reported the increased speed involved increased energy expenditure and higher levels of stress, but they had the ability to tolerate the strains. One of the initial members of the team resigned from the team after six months because of health reasons associated with accelerated nature of the team.

We were concerned with was we had a lot of things that were moving very quickly, so we needed people that had a lot of energy and enthusiasm to come in and work hard in very short periods of time, so those were kind of the attributes that we were looking for.

I was psyched about the pace - not necessarily that level of pace but that kind of environment is what I thrive on. So you focused on the things you really need to focus on. I thrive on that kind of environment. I was totally jazzed by the intensity of everybody around me, it's infectious. When everybody else is working that way, you want to do too. Not only, do you not want to let them down but you have to do to keep up and get the project done. And I was learning. I am so far outside of my comfort zone and my sphere, it's ridiculous. I was so far outside of my comfort zone, I figured I was making it up, and I was learning. I was playing way over my head and learning. How could you not be jazzed?

The third characteristic is a team member's ability to work well with internal and external constituents. As mentioned earlier, collaboration is a significant factor in the digital economy; and individuals must have the ability to interface with others successfully. Team members must have a team and partnership mentality. It was reported in the interviews that the team had established an apolitical atmosphere where team members sought the good of the team before individual concerns. This facilitates a necessary skill as collaborative relationships are pursued with internal and external constituencies.

The fourth characteristic identified by the team was a learner mentality. Because of the high level of learning that occurs in electronic business venture creation activities, the individuals involved must have an affinity for continuous learning. Related to the learning mentality is the characteristic of "knowing what you don't know" and possessing the humility to pursue the learnings you need to advance the charter.

The ability to do a start up attracted me to the team, and the opportunity to be creative, and be fast. I was missing the ability to create. So I went through pretty deep assessment of myself in this year, and my first strength is results orientation. My second one is creating. I like to use creativity to solve business problems, and I like to use creativity to invent. And so, I was missing that creativity. I wanted to try something new, and even if it failed, learning and spinning something else off that's a result.

The fifth characteristic was labeled as an entrepreneurial attitude. This was described by the team leader in the following statements:

One of the things that we said that we needed was an entrepreneurial attitude, and we defined that to mean someone who was very, very flexible, who thrived in an environment of change, and that was because we were never very clear. We just didn't know up front exactly, what the jobs were going to be. And we joked about the fact that people would be hired in and before they ever showed up for work, their job would already be changed. And so, that was one of the interview questions we usually used, how would you feel if once you were offered this

position and come on, your job was immediately changed to something different. We tried to make sure that we were finding people that were tolerant of that kind of change. The second thing was ambiguity, dealing with the fact that we were very unclear a lot of times as to what needed to be accomplished and we wanted people that could go off and look in a very general space and come back and tell us exactly what needed to be done. People that didn't need a lot of very specific direction.

You need a team of motivated people. I think a big company like HP, and I've worked in other big companies, you always have people - sort of people that are ready for such an adventure that some others are not ready for such an adventure. And you definitely need people that are actually ready for this adventure - who are motivated. You need also a good structure that actually allows you to compensate these people which actually I think this could be a little bit better, that's my thought. It was understood since the beginning that we were on iffy grounds on that side

The Need to Address the Issue of External Electronic Culture

The digital economy had established a new culture that has begun to influence the values, beliefs, and norms of the business landscape. The values, beliefs, and norms emerging from the digital economy are different than those possessed and advocated by many traditional organizations. As employees from within traditional organizations interact with employees and organizations from the digital economy, several issues emerge that cause the traditional organization employees to reconcile the differences.

One of the primary issues is related to the perception that many individuals from digital economy companies are gaining significant wealth because of equity shares and the success of their entrepreneurial employers. The team realized that the potential for rewards might have been significantly greater if they were performing the same roles and tasks next door at a young entrepreneurial company. The team members reported that they weighed the external opportunities against working with a wealthy established organization that represented a high level of job security.

The reward would have been, you know, the internal rewards. We really did something here, had an impact on humans, an impact on an industry. Yeah, there would have been the stock options but HP doesn't give stock options like start-ups give stock options to say the least. HP gives very small stock options in those comparisons. Don't get me wrong, HP stock options have paid for a lot of things for me. But over the course of 15 years, 100K as opposed to millions and retire. But no, there was no expectation that there was going to be huge rewards. For myself it was a growth opportunity and the reward was that all that growth, higher salary in the long run, not the short run, and things along those lines.

The house that just got built in front of where we live got sold last weekend for \$1.7 million in cash. This is a five-bedroom house, it's a big house, but the couple that just moved in are 22 years old. That tells you one, they're a drug dealer, which is not the case. Two, they made a lot of money on stock options. And that's what's happening in the Silicon Valley. It's actually in the nicest places to live, it's a market for stock options. It's not a market for people with salaries.

We came up with "my music anywhere." A similar effort came from a start up and the company's called "My Place." The rumor is that Yahoo is going to buy that company for 200 million dollars. Wow, that's not even a year after becoming an IPO. So am I asking, you know - I'll be frank, yeah sure... Retire young ...

There may be a perception that the employees in digital economy companies are having a better work experience because of the autonomy and fast-paced work environment. As the team members visited the work sites of many digital economy companies, they noticed fun, relaxed atmospheres. The work experience in the external companies also involved significantly higher work hours. They reported that many times the offices would be filled with employees until 9 or 10 p.m. and employees also worked over the weekends.

It seemed like with Emerald, we would meet in the evening more often with them. It was kind of an afternoon and push into the evening type of thing. We probably had, I'm going to guess, five evening meetings with them. So, that was always a late night type of thing, which was really interesting. It's like the nature of the .com was that you had evening business meetings. So, you'd go to dinner and you'd talk to 9 o'clock or something at a business meeting. So those were always really late nights.

Individuals with different mentalities also drive the digital economy culture. The players are often individuals with minimal exposure to traditional businesses who have experienced a high level of success within the digital economy. These successful players have established the rules according to their preferences, values, and beliefs. Individuals who have ventured out of the traditional business culture and have established themselves in the digital economy also drive the culture. These individuals are purposefully implementing the rules of the digital economy because they reject many of the traditional values, beliefs, and norms for various reasons. One team member reported that their experience interacting with Japanese companies helped in interactions with the digital economy culture. The new values, beliefs, and norms can be compared to those of a different ethnicity or race of people.

There were three external partners that I particularly worked with. Clearly one characteristic that was obvious amongst all of them I call bravado. They all thought they knew it, they were the experts in the industry - you sort of have to have that approach and attitude in the start-up world. What they had was pure bravado.

The Need for a High Level of Autonomy and Protection from Organizational Immune System

The coding of the interview transcripts illuminated a very unique phrase that was used by the team members. The interviewees used the phrase “organizational immune system” to illustrate an intraorganizational issue they experienced. The team sought to establish an electronic business venture within a traditional organization using electronic business values, beliefs, and norms.

The team reported that a high level of autonomy and independence from intraorganizational policy and bureaucracy marked their initial three months of

operations. This level of autonomy reduced as the team presented a compelling business argument for activity within the digital entertainment space. For example, the team leader reported that the initial permission to hand pick team members from within the organization and put them to work immediately was not available a short time later as the team faced a need to grow. The team was required to use preexisting hiring processes that involve significantly more time, especially when compared to smaller, external ventures. The team leader reported,

So this is the type of thing that in a pure Internet start-up you never would have had to deal with. If I felt like I needed these people I had the funding for, which I did, I could just go get the people, okay. And not have somebody two levels removed come down and say "I don't quite understand the structure, I'm missing the whole picture, therefore, I'm not going to let you go hire two people." You know, two people in the scheme of things - just out. That's where, when those kinds of things would come down, my team would get really discouraged. Because here again we are trying to operate at Internet speed, moving as fast as we can, and then you have this huge bureaucracy bogging you down and can't get out of that old mind-set of control.

The team emphasized the frustration of being required to spend a significant amount of time developing reports and presentations to satisfy intraorganizational requests. The members felt that the internal reporting requirements were not applicable to their venture and hampered their efforts to accomplish the charter.

Maybe we were too into working together, but I would like to think like we were in kind of a special group inside HP that was, you know just really willing to do something entirely out of character for HP. But HP structure got in the way. I mean, just, and I saw it coming. The minute we were granted our business charter, and we went from a group of ten to having the staff up and put all our charts together and develop business plans, all of that stuff was fine and necessary, but you could just see it. You could just see us being sucked in to the HP process and the HP process is brought with check, re-check, and double check, and triple check, and validate. And as you know, the Internet just goes screaming by. We had a hard time getting in the game.

The frustration is actually telling us, go and find a business in this space and you can be as grandiose as you want. So it's - we really want to hit big on this thing and come back with what you think is a very good analysis and understanding of what needs to happen in that world. Then you know that actually now its time to just stop doing the brain storming. It's a cue to learn by doing. And actually find yourself in front of a set of management that basically wants PowerPoint presentations and want to be sure they understand everything so that they could actually tell their boss how things are going. We're losing three or four months into doing that process and losing also the steam that you built up actually trying to do that. So my guess is that we would have gone very well if we could get the money faster and have the people just let us go for about 6 months to a year, let us do something.

The team also indicated a feeling of being treated like a foreign body within the organization. The organization's immune system "cracked down" on them because of the different nature that developed out of the digital economy factors. The team possessed a belief that it may have been more productive had it operated outside of the organization's firewall and had executive sponsors who were more protective of the young venture.

We were starting to get feedback. I think a lot of people felt that there was a sense that we are going to do something different and unique, that we were operating out of the box and running hard.

We were doing something so different for HP and it was a bad idea to actually have us reporting to another business. I think that an interesting structure would be to have a VC start-up pool that would not be managed by a VC, but someone from the VC community and would be reporting directly to the CEO, through with points in direct links with general managers because they - this idea came out of some of the general managers' ideas. But instead of actually keeping it at the level where we were, just take it out and pick it up at a point where - you know, it's really venture capitalist that we have as a group general manager. Instead of a manager who is actually saying, "OK, well how much are going to cost me this month?" So you know, more wings, we're here to deploy our wings.

Summary

The interviews were conducted as planned and proposed in Chapter Three except for one change. The interviewee identified as A8 did not respond to the request to participate in the interviews. The researcher had planned to interview A8 once to include his experiences in the study. This individual was a member of the team for approximately five months. It was reported that this individual contributed to the advancement of the team and was a well-liked individual. It was reported that this individual resigned from his role on the team for health reasons and was reassigned to a separate division of the same company. The researcher interviewed another member from the active team in place of the proposed A8 interviewee.

From the analysis of the team member interviews, a number of issues have emerged regarding how a new venture creation team seeks to develop electronic business activities from the foundation of a traditional organization. The researcher encountered a team that experienced a multitude of challenges, successes, and frustrations resulting from corporate entrepreneurship phenomena, team processes phenomena, and digital economy phenomena. This study focused on the factors associated with the digital economy phenomena. The corporate entrepreneurship phenomena and team processes phenomena were present in the voice of the team, and issues resident within the digital economy affected these phenomena. The issues and themes identified in this chapter have been used to answer the research questions in the next chapter.

CHAPTER FIVE: DISCUSSION

Introduction

This study began with an investigation of the digital economy. Technology has changed the way businesses develop products, generate revenues, interact with consumers, interact with suppliers, manage employees; it has touched every aspect of business operations. Some companies have chosen to isolate themselves where possible from the influence of the digital economy. Other companies have chosen to leverage their assets and competencies to evolve into organizations that capitalize on opportunities within the digital economy. The team investigated in this study emerged from an organization committed to winning as a digital economy player. The researcher successfully evoked the voice of a team experiencing the unique phenomena involved with bridging into the digital economy.

In the second chapter, the literature review identified unique aspects of the digital economy that were labeled the “rules of the digital economy.” The researcher also sought to document the unique phenomena and issues involved with corporate entrepreneurship because the subject team was directly involved in a corporate entrepreneurship effort. Third, the literature review covered team values, beliefs, and norms. Each topic helped frame the study for the researcher, enabling the researcher to classify issues that emerged from the data as being related to corporate entrepreneurship, team processes, or factors directly related to bridging to the digital economy.

The third chapter outlined the qualitative case study methodology used for this research. The goal of the researcher was to become immersed into the life of the team through one-on-one interviews with team members.

When the interviews were complete, they were transcribed, coded, and analyzed as described in Chapter Four. As a result, a number of issues emerged that were used to answer the research question. This study utilized five enabling questions to address the research question.

The following discussions present the researcher's answer to the research question. The following discussions focused on the research question answers represent the researcher's synthesis of analyzed data from the interviews. Because of the qualitative nature of this study, the researcher has the responsibility of immersing themselves in the data and then reporting the findings based on qualified analysis and synthesis activity. In addition, limitations of this study, new hypotheses to be investigated, and study implications and applications for human resource development are discussed.

Research Question Findings

Team Establishment Characteristics

The first enabling question proposed in the study was, "What does the establishment of an electronic business creation team from within a traditional business look like?" The voice of the team provided clear descriptions of team establishment including the uniquenesses involved with a corporate entrepreneurship effort. The researcher found that team establishment is a fast-paced, exciting event. The participants

appeared to be very satisfied with the experience despite the stress and risk involved with the endeavor. Launching an electronic business from within a traditional organization involves the challenge of balancing multiple stakeholders' interests. The team in this study spent considerable effort interacting with executive sponsors and accommodating organizational processes.

Addressing the New Rules of the Digital Economy and Electronic Business

The second enabling question asked, "What are the new rules of electronic business, and how do electronic business venture creation teams address them?" In this case, the subject team encountered three primary new rules. The first rule was the requirement to operate at Webspeed verses a traditional business speed. The previous report in Chapter Four related to Webspeed elaborated on this issue. This rule is accommodated through staffing with the right people and committing the appropriate resources to enable a high level of speed and effort into the venture.

The second rule is related to the culture of collaboration within the digital economy. Identifying the significant players through a thorough investigation of the business landscape accommodates this rule. Once the players are identified, the team must begin a process of relationship building with the external constituents. Staffing with team members who have the ability to communicate well and interact successfully with external constituents is an important aspect of collaboration. Collaboration was found to be one of the axial codes within the realm of digital economy issues.

The third rule is related to the external e-culture encountered as the team members venture into the digital economy space. A report of the e-culture issue was found in Chapter Four's discussion of axial codes for the digital economy issues. The team must

be aware that business culture is different within the digital economy as compared to most traditional organizations. The organization must also be aware that the interaction may elicit a response from the team members as they consider their own experience in relation to the e-culture experience.

Balancing Bricks and Mortar in the Digital Economy

The third enabling question was, “How do electronic business venture creation teams balance their organization’s resources, culture, and competencies with the new rules of the digital economy?” The researcher found the team leader played a critical role in balancing the team’s experience with the organizational resources, culture, and competencies. The team members demonstrated somewhat of a love-hate relationship with their organization. Although the organization possessed a valuable reputation and allowed the team access to tap a wealth of financial and human capital, the team struggled with many aspects of the organization’s culture and processes. The team leader sought to shelter the team from the hindering aspects and take advantage of the positive aspects.

The team advocated creating a new place within the organizational chart that would allow the team to operate outside the company’s direct control but still allow access to leverageable assets. This area would provide a protection from bureaucracy and an immune system yet facilitate enough interfaces to leverage assets and competencies. These issues were identified within the axial code discussion of digital economy issues, team process issues and corporate entrepreneurship issues.

Human Resource Development Processes

The fourth question asked, “What human resource development processes occur within electronic business venture creation teams?” The researcher found seven prominent processes directly related to electronic business issues.

Selection of Appropriately Skilled Team Members The first was related to the selection of appropriate individuals with the right competencies and characteristics. Team members should be screened for entrepreneurial characteristics, high performance characteristics, technology affinity, and solid communication and collaboration characteristics.

Employee Migration The second process was related to employee migration. The team garnered a high level of attention within the organization, and many employees sought to migrate to the team. The organization should note that many employees are looking for like opportunities, and offering those opportunities could contribute to employee retention.

Reward Systems Third, this study illuminated the need for a reward system that focuses on the increased risk of the employee and high performance required for success. The team reported on the need for new and improved reward systems that would compensate adequately for the risk they had taken and the innovation contribution they were making to the larger organization.

Learning Processes The fourth process involves team learning. Managers and facilitators should be aware of the high need for learning and effective and efficient processes for documenting, processing, and incorporating the learnings. Learning process involved effective and efficient activities to account for the newness and

dynamism of the digital economy issues. The team developed means and methods to gather, process, analyze, and disseminate learnings within the team and the team's larger organizational scope.

Communication Processes Fifth, the team must have efficient and effective communication processes in place to facilitate a successful endeavor. The subject team used combinations of face-to-face meetings and computer mediated communication tools to facilitate their communication processes.

Operational Principles The sixth process is identified as the incorporation of appropriate operational principles. The subject team established operational principles that served them well and facilitated successful operations. The principles enabled the team to make advances in uncertain conditions because of the team's shared commitment.

Impact of Digital Economy on Team Culture and Organizational Structure

The fifth enabling question was, "What is the impact of the digital economy on the team's culture and organizational structure?" The digital economy influenced the team to move faster, incorporate a higher level of interpersonal trust and relationship, use a more open style of communication, and incorporate a higher level of team member empowerment. The themes and issues that emerged from the interviews promote the notion of a new business culture.

Factors Supporting an Intrapreneurial Team

The primary research question for this study asked, "What are the significant factors supporting the successful transition of a new venture creation team emerging from

a traditional domain to a new business organization working in the digital economy domain?”

New venture creation teams are supported to transition from a traditional to a new business venture working within the digital economy when the team

- Is empowered to move fast
- Is built with high performance members
- Possesses a clear understanding of how organizational assets can be leveraged
- Is empowered to leverage organizational assets
- Is sheltered from detrimental organizational processes
- Establishes appropriate operational principles
- Endeavors to learn the rules of the digital economy and identify the major players in the related industry
- Strives to collaborate with appropriate players external to the organization

Limitations of the Study

Teams are complex entities because they consist of unique people. Embedded within this study are unique phenomena related to the specific people and circumstances surrounding the subject team. As a result, this study faces many limitations in relation to generalizing its findings to other teams or organizations. This study was an investigational study with one team. The purpose was to identify issues related to young and slightly researched phenomena.

The identified issues are evolving fast, in relation to the rapidly advancing technology. It is possible that the issues identified in this study will be unimportant within a short period of time because of the rapid changes occurring within the digital economy. However, as a baseline from which to build theoretical and practitioner process models, this study is at the forefront of inquiry.

Future Research

Within academia, there are three research objectives built on decreasing levels of abstraction. In basic research, knowledge is sought as an end in itself – discovery of truth is the end. Basic research's primary contribution is to theory and seeks to be broadly generalizable. Applied research contributes to pre-existing theories; generalizability is specific within limited applications. Summative research focuses on theoretical interventions and the related effectiveness. The focus is to improve the effectiveness of proven theories (Patton, 1990).

This study focused on basic research. It was intended to suggest hypotheses related to teams from within traditional organizations who are focusing on ventures related to the digital economy. During the course of the study, several hypotheses surfaced related to the effectiveness of electronic business venture creation teams.

Two primary areas of new hypotheses emerged, one related to team performance and the other related to individual outcomes. The following hypotheses are suggested for additional study:

Team Performance Hypotheses

1. **Electronic business creation teams from traditional organizations exhibit higher performance when they have a solid understanding of the rules of the digital economy.**
2. **Electronic business creation teams from traditional organizations exhibit higher performance when they are protected from organizational policies and bureaucracy.**
3. **Electronic business creation teams from traditional organizations exhibit higher performance when they have are staffed with appropriate team members with a unique set of competencies.**
4. **Electronic business creation teams from traditional organizations exhibit higher performance when they have an empowered team leader who is able to leverage organizational competencies and assets.**
5. **Electronic business creation teams from traditional organizations exhibit higher performance when they are compensated according to their venture's success.**

Individual Outcomes Hypothesis

6. **Members of electronic business creation teams from traditional organizations exhibit higher work satisfaction because of the exciting work environment.**

7. **Members of electronic business creation teams from traditional organizations exhibit higher work satisfaction when they are rewarded for the risk they are assuming.**
8. **Members of electronic business creation teams from traditional organizations exhibit higher levels of stress than other employees from the same organization.**
9. **Members of electronic business creation teams from traditional organizations exhibit higher work performance than other employees from the same organization.**
10. **Members of electronic business creation teams from traditional organizations advance further within the organization than other employees from the same organization.**
11. **Members of electronic business creation teams from traditional organizations are more likely to leave the organization to participate in a start-up venture within the digital economy than other employees from the same organization.**
12. **Members of electronic business creation teams from traditional organizations are more likely than other organization members to stay with the organization if their compensation is based on the success of their venture.**

Implications and Applications for Human Resource Development

Human capital must be managed and deployed different in the digital economy.

Scholars and practitioners within the realm of human resource development should note the issues identified in this study. This researcher believes human resource development professionals can play a significant role in assisting traditional businesses in establishing ventures in the digital economy.

First, traditional businesses need assessment tools such as surveys and interview questions that can assist in the selection of appropriate employees for electronic business venture creation teams. Second, individuals, ranging from members of the Board of Directors to members of the electronic business venture creation team, could benefit from training that focuses on the new rules of the digital economy and strategies for success related to the digital economy phenomena.

Third, human resource development professionals should investigate the development of new reward systems and career paths congruent with the new e-culture of the digital economy. Traditional organizations are operating under reward systems that may have served them well for many years but are a liability in the digital economy. It is crucial that traditional organizations retain their human capital resources, and reward systems are directly related to that effort.

Conclusion

The digital economy is impacting traditional businesses. The business environment now consists of opportunities and threats that were previously unknown, and many traditional businesses are awakening to the significance of the changes. This study

endeavored to examine how the digital economy impacts traditional businesses at the most primary level – the new venture creation team. The challenges presented to the subject team are not insurmountable and should not discourage traditional businesses from undertaking similar ventures. Identification of these challenges and issues should assist businesses trying to form a strategy and plan of action for entering the digital economy.

The researcher encourages traditional businesses to look for one of the many opportunities within the digital economy. Once an opportunity is identified, empower a proven leader within your organization to form a specialized team and charter them to create and execute a plan that will further the mission of your organization. Encourage, challenge, and enable the team to move as fast as possible and learn as much as they can about the new environment. It is also important to accommodate the need for deconstruction of current business structures, models, and strategies. Avoid the tendency to micromanage the team, and allow them to push the envelope of previous experience and current policy. If the right pieces are combined, the team will be able to leverage your company's competencies and resources in ways that will thrill stakeholders and contribute to the success and longevity of your business.

The introduction of this study proposed two questions. Peter Drucker recently addressed similar questions and issues during an interview for a popular digital economy publication (Daly, 2000). The first question was, "How will existing, traditional companies make the transition into digital economy companies? This will occur as companies come to the realization that there are new forces at work in the business world. Digital technologies have forever changed the business landscape. Once

traditional companies recognize the change, they must exert effort to determine their organizational strengths and weaknesses related to the digital economy. They must also conduct a process of evaluating the opportunities and threats emerging from their business' environment. As demonstrated by the subject team in this study, the researcher believes that traditional organizations should charter teams to venture into the digital economy. The electronic business corporate entrepreneurship teams should be empowered and granted resources to accomplish their assigned tasks. The organizations should understand that the team might develop principles and values and act in a way that is foreign to their previously established organizational norms and culture. For example, the team's decision-making process must shorten and incorporate a much higher level of uncertainty. They must acquire new technical and entrepreneurial skills that are often very different from what made their company successful. This is to be expected because of the significant differences resident in the digital economy. It may also be possible to develop mutually beneficial relationships between traditional businesses and Digital Economy organizations. According to Drucker, "both sides (established old-line companies and dot-com companies) still need to learn from each other" (Daly, 2000, p. 137).

The second question posed at the beginning of this study asked, "What are the impact of digital economy factors on the form and function of 21st century companies?" Drucker has made a bold statement related to this question in his comment, "The corporation as we know it, which is now 120 years old, is unlikely to survive the next 25 years. Legally and financially yes, but not structurally and economically (Daly, 2000, p. 139). The researcher agrees with Drucker and with Hamel (1999) who proposes that the

digital economy has initiated a new business model that is focused on resource attraction verses resource allocation. Hamel (1999) advocates for a new level of competition within all organizations where innovative ideas and corporate entrepreneurship efforts are given license to compete for and attract organizational resources including capital and talent.

The question focusing on the form and function of 21st century companies will take a number of years to answer but the researcher believes the evidence of impact has been seen in this study. Basically, business operations will change from the executive level down to the line levels. Managers have given evidence that the digital economy is causing them to manage differently and leaders are influenced to lead differently. To enable success in the digital economy, companies must be structured to act quickly and move with Webspeed. They may need to lift policies and allow their employees and team to “learn by doing.” In addition to speed and learning issues, the traditional companies must realize that there are new players with their business landscape. Although these players may be business neophytes, they have significant competencies and technological resources that may be needed by the older, more successful, traditional companies. The digital economy has initiated a strong culture of collaboration and traditional companies will find themselves needing partnership like never before.

As a result of this study, the researcher has developed a new belief system that must be pursued through further qualitative and empirical research efforts. The researcher believes there is a “new order of things” that must be investigated, tested, and reported for the benefit of the business community. Academicians have made advances in the research of information technology and electronic commerce marketing, but the digital economy has become much more than an Internet enabled distribution channel for

goods and services. Scholars have not adequately investigated the impact of the digital economy on human resource development theory and practice.

As represented by the experiences reported in this study, the researcher believes academicians must pick up the pace and operate at Webspeed to meet the challenges faced by the business community. Academicians must strive to collaborate more than ever to speed up the process and leverage their personal competencies for the benefit of the business community. Academicians should acknowledge the gap in the body of knowledge related to digital economy issues and assume the posture of a learner in research inquiry. The business community is in need for theory and principles that will assist in their staffing challenges, their e-culture challenges, and their organizational immune system challenges.

In conclusion, new phenomena have emerged and this study has helped to define the phenomena. There are numerous hypotheses to be tested to further this research stream. The researcher is grateful for the efforts expended by practitioners and scholars who have begun to document and explain the issues associated with the digital economy, but there is much more to do. Drucker's words ring true in his summary, "so the changes are very profound and very deep and very long lasting. And we are just beginning to understand what it all means" (Daly, 2000, p. 144).

EPILOUGE

The researcher believes the subject team was an excellent source of data to answer the research question of this study. As illustrated in this study, the team experienced the dynamics of venturing into the digital economy and reported their experience to the researcher. This study was focused on process rather than outcome but the question of “was the team successful” can be briefly addressed. The team did develop a plan focused on the charter and took steps to execute the plan. It was reported by the team’s supervisors that the team was a high performance team and performed above expectations.

During the interview process, a significant decision was made at the highest levels of the company that changed the composition and course of the team. The decision divided the team into three sections based on the current operations of the team. One section of the team continued their focus and work on the portion of the charter they were assigned. The second section of the team was reassigned to a related division and the individuals were assimilated into pre-existing projects. The third section, which included the team leader, was given an opportunity to take an extended vacation. The team leader was informed that he would be given the opportunity to launch a “to be determined” venture after the vacation. The individuals in this section were committed to staying with the team leader and hope to experience a similar venture with the next assignment.

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APPENDIX A

PROJECT APPROVAL FROM HUMAN RESEARCH COMMITTEE.

OFFICE OF REGULATORY COMPLIANCE

COPY

MEMORANDUM

TO: Gary Geroy, School of Education, 1588

FROM: Celia S. Walker, Administrator 
Human Research Committee

SUBJECT: PROJECT APPROVAL
Title: An Investigation of Team Processes within Electronic Commerce New Venture Creation
Initiatives Emerging from Traditional Business Organizations.
Protocol No.: 00-08811
Funding Agency: N/A
Funding Agency Deadline: N/A

DATE: May 16, 2000

I am pleased to inform you that the above-referenced project was approved by the Human Research Committee on May 16, 2000 for the period May 16, 2000 to May 16, 2001 with the condition that the attached consent form is signed by the subjects and each subject is given a copy of the form. It is the investigator's responsibility to obtain this consent form from all subjects. *NO changes may be made to this document without first obtaining the approval of the Committee.* **Approval is for 8 managers.**

A status report of this project will be required within a 12-month period from the date of approval. You will be sent a reminder approximately two months before the protocol expires. The Principal Investigator will report on the numbers of subjects who have participated this year and project-to-date, about problems encountered, and provide a verifying copy of the consent form or cover letter used. The necessary form (H-101) is available from the Regulatory Compliance web page (see below). Should the protocol not be renewed before expiration, all activities must cease until the protocol has been re-reviewed.

It is the responsibility of the investigator to immediately inform the Committee of any serious complications, unexpected risks, or injuries resulting from this research. It is also the investigator's responsibility to notify the Committee of any changes in experimental design, participant population, or consent procedures or documents. This can be done with a memo which completely describes the changes and their consequences (new consent form or cover letter, or altered survey instrument, for example). Students serving as Co-Principal Investigators may not alter projects without first obtaining PI approval. The PI is ultimately responsible for the conduct of the project.

This approval is issued under Colorado State University's OPRR Multiple Projects Assurance M 1153-01 issued August 1, 1996. If approval did not accompany a proposal when it was submitted to a sponsor, it is the researcher's responsibility to provide the sponsor with the approval notice.

Please direct any questions about the Committee's action on this project to me for routing to the Committee.

Additional information is available from the Regulatory Compliance web site at www.research.colostate.edu/regulatory/

Attachment

cc: Rick Edgeman, CIS
✓ Jeff Lewis w/attachment

APPENDIX B

COLORADO STATE UNIVERSITY INFORMED CONSENT TO PARTICIPATE IN A RESEARCH PROJECT FORM

**COLORADO STATE UNIVERSITY
INFORMED CONSENT TO PARTICIPATE IN A RESEARCH PROJECT**

TITLE OF PROJECT: An investigation of team processes within electronic commerce new venture creation initiatives emerging from traditional business organizations.

NAME OF PRINCIPAL INVESTIGATOR: Dr. Gary Geroy, Colorado State University

NAME OF CO-INVESTIGATOR: Jeff Lewis, Colorado State University

CONTACT NAME AND PHONE NUMBER FOR QUESTIONS/PROBLEMS: Jeff Lewis, 970.490.5585

PURPOSE OF THE RESEARCH:

The purpose of the research is to develop hypothesis related to effective e-commerce venture creation initiatives. The study will not test any hypotheses but intends to distill your experiences to describe processes that may be tested in subsequent studies.

PROCEDURES/METHODS TO BE USED:

Your part of the study would involve a series of interviews beginning mid May, 2000 and ending in late June, 2000. The interviews will be conducted with the co-investigator at a time and place chosen by you. The time involved in the interviews is dependent upon your availability; it is requested that you would be available for three, 55-minute interviews during the time span identified above. The interview will be audiotaped to facilitate the creation of interview transcripts. The audiotapes will be destroyed after the transcripts are made. Your identity will not be presented in the research transcripts; pseudonyms will be used in place of your real name. Before your comments and experiences are written into the dissertation, you will have the opportunity to review the transcripts and clarify, modify, or omit your statements. The interviewer is under a non-disclosure agreement with your company. A representative of your company will review the dissertation before it is read by any person outside of your company to protect your company's strategic plans or intellectual property.

RISKS INHERENT IN THE PROCEDURES:

The primary risk associated with your involvement is a breach of confidentiality. Measures will be taken to prevent breaches of confidentiality; the measures will include the use of gender-neutral pseudonyms and your personal review of the transcripts to clarify, modify, or delete any statement that would identify yourself or cause any type of harm should the comment be attributed to you. Because of the researcher's non-disclosure agreement with Hewlett Packard, drafts of the research project will be reviewed by HP representatives. HP reviewers may be able to ascertain participants' identities, even though pseudonyms are used. It is not possible to identify all potential risks in research procedures, but the researcher has taken reasonable safeguards to minimize any known and potential, but unknown, risks.

BENEFITS:

Your organization will benefit from having a detailed examination of team experiences and learnings documented. The dissertation research will provide a means to evaluate and understand team processes of an e-commerce new venture creation team.

CONFIDENTIALITY:

Although I will know who the participants are and what their responses are, your name will not be used in the study. The name of the organization and the organizational team will not be used in the study. Any quotations from your recorded interviews will be made using gender-neutral pseudonyms.

LIABILITY:

The Colorado Governmental Immunity Act determines and may limit Colorado State University's legal responsibility if an injury happens because of this study. Claims against the University must be filed within 180 days of the injury.

Questions about subjects' rights may be directed to Celia S. Walker at (970) 491-1563.

Page 1 of 2 Subject initials _____ Date _____

PARTICIPATION:

Your participation in this research is voluntary. If you decide to participate in the study, you may withdraw your consent and stop participating at any time without penalty or loss of benefits to which you are otherwise entitled.

Your signature acknowledges that you have read the information stated and willingly sign this consent form. Your signature also acknowledges that you have received, on the date signed, a copy of this document containing 2 pages.

Participant name (printed)

Participant signature

Date

Witness to signature

Date

Co-investigator signature

Date

APPENDIX C

HEWLETT PACKARD LETTER OF APPROVAL



Hewlett-Packard Company
800 South Taft Avenue
Mail Stop 7
Loveland, CO 80537
www.hp.com

[REDACTED]
General Manager
Digital Music & Audio Services

4 May, 2000

Celia Walker
Colorado State University
Office of Regulatory Compliance
410 University Services Center
Fort Collins, CO 80523-2046

Dear Ms Walker:

This letter confirms that I have consented to participate in Jeff Lewis' dissertation research titled "An investigation of team processes within electronic commerce new venture creation initiatives emerging from traditional business organizations." I have read Jeff's research proposal and understand the scope of his project.

I am the general manager of the subject organization and have provided access to Jeff to invite team members to participate in the interviews. The team members are aware that their participation in the interviews is voluntary and can be terminated at any time.

We are confident that our personnel are adequately protected in the study. We have no un-addressed concerns related to the risks associated with the study. Jeff has signed a non-disclosure agreement and I will review his research report to ensure that Hewlett Packard's interests are protected before the report becomes public. The purpose of the non-disclosure agreement is to protect any confidential, proprietary, or strategic information.

Our team will assist the research project through participation in the interviews. Jeff is aware of the team's time constraints and we believe that a flexible interview schedule can be established to accommodate the project.

Sincerely,

[REDACTED]
General Manager
Digital Music and Audio Services
Hewlett-Packard Company

APPENDIX D

INTERVIEW QUESTION EXAMPLES

Sample Interview Questions:

Interview 1:

Focused on subject's work experience and perspectives of the digital economy.

Describe your work experience before HP.

How long have you worked for HP?

Describe your work assignments with HP.

Describe your role on this team.

How did you become a member of this team?

What is your motivation for working with this team.

Describe your level of satisfaction with your involvement with this team.

How does your role on this team differ from your previous work experiences?

What are the primary factors emerging from the digital economy?

How have these factors influenced your work experience?

What are the challenges associated with working within the digital economy?

Interview 2:

Focused on team processes of communication and leadership.

What are the primary channels used to communicate on this team?

Which channels are more effective, least effective? Why?

Describe the communication climate of your team.

Describe the communication patterns within your team.

What are the communication challenges?

What are the communication successes?

How does working within the digital economy change the communication of teams?

How do you define leadership?

In what ways do you see leadership being used on this team?

Describe the leadership patterns within your team.

What are the leadership challenges?

What are the leadership successes?

How does working within the digital economy change the leadership roles of teams?

Interview 3:

Focused on team values and team norms.

Identify the values of your team.

How did those values become established?

How are the values evolving or changing?

Describe how your personal values relate to the team values.

How does working within the digital economy influence the values of teams?

Identify the norms of your team.

How did those norms become established?

How are the norms evolving or changing?

How does working within the digital economy influence the norms of teams?

APPENDIX E

LIST OF OPEN CODES

The Master Code List for this Study is:

30/20 rule
Acceptance of offer
Accountability
Allocation of resources
Ambiguity
Autonomy
Big money opportunity
Break from pace
Building team externally
Business planning
Business strategy
Catch up with team
Cell phone rules
CEO influence
CEO support
CEO vision
Change HP way
Change in Job Security
Changing expectations
Changing rewards
Charter evolution
Collaboration
Commitment to HP
Commitment to leader
Commitment to team
Communication
Communication consultants
Communication with executive sponsor
Comp time
Compelling business argument
Compensation
Computer mediated communication
Consultants
Consulting firm usage
Deciding the play
Deliverables
Digital Affinity
Due diligence
Early experience
Education
Effect on Family
Effect on Health
Email effectiveness
Email guidelines
Email overload
Employee retention
Employee satisfaction
Energy
Engineer role
Enjoy music
Enjoy travel
Entrepreneurial employees
Entrepreneurial principles
Entrepreneurial spirit
Environment factor

Equity investments
Evaluation
Excitement
Exciting job
Executive feedback
Executive perceptions
Executive selection
Executive sponsor
Executive support
External bravado
External company characteristics
External culture
External environment
External excitement
External incompetence
External interactions
External interest
External perspective
External relationships
External visits
External work ethic
External work hours
Face-to-face communication
Facilitators
Facilitators
Fast pace
Fear
Financial
Financial role
Frequent flier miles
Frustration with sponsor
Frustrations
Fun role
Future roles with HP
Gap in culture and reality
Gap in reality
Go meet them
Growing
High performance team
High speed
Hiring Process
Hope
HP career paths
HP Competencies
HP Culture
HP customers
HP immune system
HP marketing channels
HP Security
HP startups
HP suppliers
Identification of leverage opportunities
Incubator
Inferior communication tools
Initial team activities
Integrate into operating principles
Intellectual property

Interacting with team mates
Interaction center
Internal interactions - music summit
Internal response
Internal skeptics
Internal support
Internal vs. external entrepreneurship
Internet Company
Internet economy
Internet Hype
Intraorganizational collaboration
Intraorganizational competition
Intraorganizational envy
Intraorganizational excitement
Intraorganizational startup
Job Ranking
Job Security
Leader affinity
Leader challenges
Leader communication
Leader empathy
Leader encouragement
Leader role
Leader selection
Learn from doing
Learn from them
Learn quickly
Learning
Learning
Learnings used in future
Legacy assets
Legacy capital
Legacy processes
Legacy systems
Leveraged assets
Leveraged competencies
Long-term vision
Management role
Marketing role
Meet with artists
Meet with industry leaders
Meeting fatigue
Meeting productivity
Meeting rules
Meeting scheduling
Member recruitment
Member roles
Member selection
Microsoft outlook
Motivation for joining team
Music industry issues
Music Summit
Need more team members
New business model
New rewards
New way of work
New way of working

On-Line interaction
Operating principles
Operational principle discussion
Operational principle establishment
Operational principle evolution
Opportunity for change
Organizational immune system
Pace
Path onto team
Performance Appraisal
Performance evaluation
Personal advancement
Personal competencies
Personal growth
Phone calls
Players-external environment
Political forces
Power of HP name
Preparing executive sponsor reports
Previous experience-success
Process learnings
Promotions
Protect team
Reactivity
Read the periodicals
Recruiting
Resources-people
Reward expectations
Reward systems
Rewards
Risk
Role blurs
Role evolution
Roles
Rules of the Garage
Skepticism
Service vs. hardware
Shelter the new team
Silicon Valley
Silo mentality
Slow down
Special leader
Special team
Speed
Spirit of straight talk
Staffing
Startup Company
Stock options
Straight talk
Stress
Stress from sponsor
Stretched experience
Stretching
Surf the net
Team birth
Team charter
Team competencies

Team culture
Team growth
Team interaction with executive sponsors
Team member leaving
Team up with external
Teamwork
Technical people doing business roles
Technical role
They are eager
They are faster
They see our potential
They want us
Time out
Timing
Tiredness
Too Fast for Sponsor
Too much travel
Top people
Travel
Traveling
Understanding sponsor
Unmotivating rewards
Us vs. them
Using straight talk
Utilize team
Value of rewards
We can change
Work experience
Years with company

APPENDIX F

EXAMPLE OF INTERVIEW TRANSCRIPT

I: Is there anything from our last conversation that you would like to address?

R: I think it was interesting to go back and to try to think about some of those generic questions, and how did it go? What were some of the issues? How was I feeling at the time? How does it look back? There's always a very quick growth, or learning curve, that everybody goes through when they step into a new job. What I noticed through that whole team was we were all in this new growth because it was Internet. It was way different from what we'd ever done before. And so nobody knew what this economy was. What this business model was. And so I think that helped to bring the team together on that note(?). Nobody was saying, "Well, we've got to do it this way because we've always done it this way." And so that was something that brought the team together.

I: Was there like an Internet expert? I mean like on a team you might have a financial expert, a marketing expert, a technology expert.

R: All in all I would say no. XX. had, I think he had the most insight into kind of who was playing where. XX. and XX was doing some fabulous jobs with understanding kind of how to bring the bear of the technical side of this thing in an e-commerce world. And then from there I would say we'd step outside the team, and as we started going, talk to the third parties. You know the Sapphires, the Blazers, and those type of folks, is really, really where we were starting to get some of that done.

I: What would you describe as being the key team competences? If a team becomes like an entity onto itself, and the Team did, how would you describe the competences that that team was able to develop?

R: Communication in that. Well, let me add, communication and I'd almost say like role identity. So, we had enough diversity of our responsibilities that we weren't necessarily stepping on each other's toes. I mean we truly needed everybody in that small team to step up and do what they were responsible for. And then in that, the communication became this real key for us to be able to identify what the issues were, what the solutions were, what the opportunities were, those types of things. So, from my perspective, bringing in the financial view was critical to understanding it was a viable business model. XX being able to bring in some of the marketing view. XX. was not only R&D, but project management and overall business management. And partnership work is just critical there. XX with bringing in this kind of industry relations thing, and you could just put XX onto, it seems like we need to go find some names, and identify some people we could talk to. He'd go off for a few days, and pretty soon he would come back and he had something. So there was this diversity in roles. Enough separation that we could independently just get in and run, and yet we had some help. We had team communications that were going on.

I: How did the team communicate? What sort of tools were used, and how would you describe the patterns that emerged?

R: There was a couple of sets. I would say there was, if you will, the interpersonal, and then the technological if you will. So, from the interpersonal, we did a lot of business meetings, team meetings, where we would process. First we would try to establish as a team what we thought were the objectives, what

we thought would be the things we'd need to go look at and solve. Split up the team and everybody would go run and try to understand what their piece of it looked like and what they could find out. And having to answer those questions and then get back together at another team meeting and say, "Okay. What have we learned. What does it look like." So, within those meetings it was. I'd say the meetings spent, we spent a lot of time trying to understand what the business models looked like, or the opportunities. And then, at the end of that with an objective of "Okay, let's decide on what we're going to do." So, it wasn't, the meeting, if I could contrast(?) that a different way, you could set up a meeting where you'd say, "Go off and understand what we need to do. Evaluate the alternatives and make a recommendation of one." And so you'd come into a meeting and you'd essentially kind of do a review and then you'd say, "And therefore, there's no recommendation." Where our meetings were set a little bit more in terms of, "So, identify what all the alternatives and bring that back to us and we'll talk about that, and then we'll select the one." And so that was, I think that created, it was good because it created a lot of learnings. People could process. They could start to see trends in how the business would flow, or different partnerships might start to happen. The markets might start to move. So they could see all of that and learn from it. The drawback from that is that there were a number of competing views of how that, of what that data was telling us. So there was a lot of time spent trying to reconcile back to a common view. But, we had a tool for that, which was we said, "Let's, if we know 80% of the data, let's try to make a decision and go." So there was one tool. And the second tool was what we called straight talk, which was we'll just, if it's on your mind it's an issue. Say it. It's a business issue. We're not working against personal type of things here, but straight talk in the meeting where just from a business perspective, something is not happening for you, you need to say it and put it out on the table. So there was a couple of tools we tried to use to help with that. Let me jump back. The other tool for communications was this technology. And so we had a web site that we developed to do communications. And so we were able to post documents. Virtually anything, including creating conversations around subjects. So we used it, the conversations were used either to start to create ideas, or to even in some cases, actually manage a project or an idea. Once you had it set, then you were a certain to do this(?). So we used it for that. Posting documents so that if we had presentations, or we had received some electronic communications or presentations about other companies, plus that for viewing by the whole team. And I would say it was invaluable particularly as we started to bring people onto the team that you could. It was somewhat unfortunate, but fortunate that you could set them down in front of the PC and say, "Okay, here you go. Spend a day or two and review this. And get a sense of where we've been and where we're going." So, you had this, you could put the technology towards that and get people quicker up to speed on what was going on. The unfortunate part, of course, is you get pretty excited about coming onto a team and the first thing you do is sit in front of a PC for two days. And a lot of reading. So I thought the tool, the idea, was very good to have the web site. So that was really helpful. There was, for me I think there was some question as to

whether the particular software package that we had picked was the right software package for us. And so that it was there and we needed to use it. We needed to go. So those are the kind of interpersonal communications, and then the technology.

I: Any of those tools or values novel, or different, then things you've operated before in your assignments at HP? I was thinking back to the straight talk.

R: Yes. That's what I was thinking too. So yes, and kind of no, but more yes. I mean the straight talk is something that definitely is. You need to establish that as a value on your team and keep that out in front of people. And I noticed even for our team that we would use that as people felt a little bit nervous about pulling that card and saying, "Okay. Straight talk time." They would say, "In the spirit of straight talk, here it comes." So it's just, that was a good outward example of how HP, I think, is creating a culture where you don't do straight talk. And it's very hard to kind of bring that out and just say something, which seems very rough, and it may seem personal, but your objective is try to get to the business issue. So that was definitely something that was unique. The 80/20, the kind of being willing to stop and say, "We've got enough. Let's go. Let's take the risk and make it happen." And believing in the team that if we got down the road a few days, or a few weeks, and things weren't right, that we had the capability of stopping the train and diverting it onto what would be better. So that's a risk. The other experiences within HP created this culture where you had to ensure that you nailed down everything to 100%. And so you spent a lot of time trying to make sure you ticked and tied and everything looked good, and then you'd make the step. Well, most of the time, everybody knew we were going to make the step, so let's go ahead and do it, and let's sort of run with it instead of wasting the time. So there's some The technology part on the web site, I've been in a couple of teams where we have utilized communication tools like that. And, it's a learning experience for people to go out and tap into that tool. You know, it's like another way of communicating. It's like I get to work, I've got my phone, I've got my e-mail, and I've got this web site. I've got stuff that people have dropped off on my desk, and it's just a lot of communication sources, and how do you keep up with all of them? I think there's still components there that are valuable, like the historical piece of it, and the training piece of it. It's like how do you keep up with the speed unless there's one very good tool to help you do that.

I: In terms of interacting with this new environment, did the team operate in terms of trying to get everybody at the same level of understanding?

R: That's an interesting question. I'd say yes. There was, I think all the way through, there was probing to ensure that people felt comfortable doing that. I'm trying to think. One that kind of strikes me was around branding, and some of the. There are kind of two things. One is this branding of the whole music, and kind of entertainment if you will. And two, the web site. And so, the branding impact of the web site, because HP said, "If thing says HP on it, then it has to have the HP look and feel." And the HP look and feel wouldn't play well with the music web site. You know, it's just like two different worlds here. Two different customers. So as a couple of people so much as had charge for that. XX was

one. And then, XX And those two really worked to try to understand well, what was this branding issues, and how far could we go with the web site? How radical could it look? And then, XX with, he used the web site designer to really come up with different alternatives, and gave him the specs and then said, "Get creative. Show us how much you can still kind of hold to the letter of the law, and yet make this thing look like a pretty cool web site." And then, XX had to go back and actually work that out. So a lot of that happened. You know, that was just like XX and XX understanding what the branding issues were, having those communications and bringing that back into the team. So they became those, if you would, experts. And through that process there was a lot of questions and probing. So, why does it have to? Or, who is this person? Or, what is? So, I would say yes with a lot of probing. Now, I think there was a difference that I saw in this team in that the level of people that we had, you know, it was a very high performing team with a good amount of HP experience. So, you had people that could ask some pretty pointed questions relative to the business issues, and kind of drill in right where they needed to drill. On other teams you had this disparity between, or a dispersion between the level of experienced people, and knowledge, the ranking or scoping levels of people. So you'd get a lower admin type of person that gets on your team, or an accountant in my case, on the team, and they were not quite as competent about what question you asked. So they may not speak up. And your higher level, higher performance people will speak up. So you get 20% of the team that ask questions in that situation. Where here we had 100% of the team that was asking questions, which was really cool. I mean that was a lot of fun being in that environment.

I: Do you think that was the right design?

R: Yes. I would say it would be. So, yes by design, and yes by necessity. So, you've got a small enough group of people where you need to. Let me change that. So you need to have a very small team, because one you were, particularly here at HP, we can't invest just buckets of money to throw a whole lot of people out, and two we have this corporate culture around kind of taking care of our people. So, you don't want to go out and invest in a large structure, and then go down the road six to nine months and then say, "Oop, sorry we cut off 100 folks." So that very small team, it becomes this, I don't know, like a SWAT team, or a special forces team. They can just, they're all very capable. And they would come in and they would flush out a business model, and once it's very credible and advantageous for Hewlett Packard, then you can start stacking up and build into some of those positions where kind of A, you will need certain types of people on the team where they're very good at doing their job and their very focused on that, and that's what they want to do. So there are roles like that in Hewlett Packard. So we can find places for those type of people. And in this case where we had a special forces type of environment, we needed very capable people that were really pushing the edge.

I: That's a great way to describe it. Any values other than the 80/20 Rule, the straight talk? Any sort of operating values that were established, or either spoken or unspoken that you can identify?

R: I was kind of thinking of more of the unspoken values. You know, some of it comes just from, I guess I would call it kind of the HP culture that we respect everybody on the team. There was somewhat of a difference in scoping levels, and it depends on kind of where you end up in HP, where you open the door and look in. Scoping levels can become this hierarchy thing that people are concerned about. In this team, that wasn't there. And I don't know if that's, you know at a certain level you get within experience and capabilities, you know scoping becomes less important versus the person that you really have there. I suppose if you really had a disparity between them. So, the team, I believe, was scoped at a X, and let's say you brought in another scoping level below a X, a X, actually there was a X and a X and a X. So let's say you brought in a X, which is usually around an undergraduate type of person that, you know, they might have been out of their league and the team would have sensed that and worked around them. But, it was kind of like on this team there was this value of everybody needed to contribute, and everybody was. So, they looked to those particular people, in my case finance, or in XX it was marketing, to contribute from that perspective. I think those ones of 80/20, straight talk and. I don't know. There was kind of this excitement about there being this new economy that we were chasing. That we were truly forging into the new world, or a new world. And in a way that kind of created this maybe culture or value around, you know, let's go out and try some new stuff. You know, let's be different. Let's really push the edge of the envelope and see what happens. Where in other situations you hear those words of, "Well, we can't because we don't do it that way. The boss said no." You never can document that, the statements, but there it is. Everybody believes them And on this team it didn't exist.

I: And you tie that back to the excitement of working in the new economy?

R: Yes, because we knew we had to be different from what we had done before. We knew that the rules of building boxes, and if we built it, they would buy it, and those types of things. That wasn't going to happen here. And we needed to move fast. You know, the e-commerce was moving fast and we were. Things like the web site, the Music Web Site, breaking the rules of the HP. We had called them the Web Police. It's like we broke those rules. It's just we had to do that to get in the face of the consumer and make a credible, viable business.

I: In what ways if any did your job spill over into personal time and life? And was that different from previous experience?

R: Immediately from when I took on the job, I started to travel a lot more. And, so I was traveling, I want to say it was once every couple of weeks. It was kind of like twice a month, sometimes three times a month, and it was always to California. And rarely did we do a one-day trip. It was usually two, and sometimes three. So that had an impact of not being around the kids, and. It's always funny, when I start on a trip or start traveling, I'll get the boys on the phone and they'll talk to me in the evening. You know, they just want to talk and that kind of stuff. By the end of it they were like, "Oh, it's Dad. Well, gee, I'm playing this computer game, could you call back." So my heartstrings were being

tugged. So, for me I've found that if you can decide on which side of your family existing or growing up, you know, you could either be working with them and growing up with them, or you can be working. And you need to decide which side of that you're going to fall on. So this threw in some barriers to being on that side of being with your family. It was interesting that they understood more, my kids understood more what I was doing. I could explain to them I was working with music, and we were going to play music on these devices. And so, they could understand that a lot more. And I think they kind of had fun with that, but "Gee, Dad's working with amazing stuff. That's pretty cool." And the same with my wife. She had fun thinking that we were really pushing the envelope. Doing different things within Hewlett Packard and seeing that. So, I actually found it kind of interesting that physically, that I didn't find that I was staying awake at night a whole lot. I mean there were definitely times that I was awake thinking about it, or worrying about it, but in the previous job I found that I would work late, or get up early and try to work early to try to get things done, and in this role I found that I wasn't doing as much of that. I think part of it was how we had processed the work, or done the work, within the teams. We were more dependant on the other team members. And so, there became less of what I could individually do, and I'm more apt to being in the office working, talking to somebody, and therefore I didn't have to do So that was kind of interesting. So, yes. Just the traveling put a lot more pressure on being with the family, and doing things around the house and.

I: Was there off the job communication? Phone calls with team members, or pressure to check e-mail, or check into the communication center on the weekends or at night?

R: For me there was a bit, but not a whole lot. I can remember my sisters 40th birthday, and we had gone to Vail, and I was trying to negotiate an equity deal with Sapphire. And so, I was trying to get in touch with their CFO and move that process along. So, here I am in Vail trying to get him on the phone. So, there was a time when that happened. So most of the time the weekends were pretty open, and I think part of that was around even. At least I took away with XX leading the team as saying, "Family time and personal time is very important. So, you need to make that happen." So, I felt like when I'm home, I'm home. And when I'm at work, I'm at work. So, for the weekend. And with the travel too, it kind of added all up, it's like, "When I get home, I've got to focus on the family, or do some work around the yard, or I've got to wash the car," or do a few things that I just couldn't get done otherwise. And so, yes. So there was a bit of it, but I didn't feel there was an overabundance of it. More than in the previous job that I had.

I: Is there comp time for travel? I mean your spending that time away from the home.

R: Do you want the official HP?

I: No.

R: Probably the official HP would be somewhere around, if it's excessive, then you need to work with your manager or supervisor and work out some understanding of what's going on. Frankly, I never felt it was an issue that

if I needed to take some time, I did. So, with the Scouting stuff that I talked about, when I needed to scoot early to get prepared for something, or we had some afternoon, right after school field trips, you know, I just went and did it and didn't take it as vacation time. And so, I was comfortable with that. I know XX was comfortable with that. And I told my people, and do tell my people that, "You know, look, I expect you guys to be professionals. And so, I expect you to know what you need to do to get your job done, and if you need to take some time, if you're working overtime, take some time. If you're looking to take two or three days, come talk to me so I know where the hell you're at, but please, if you're doing a little bit more, make sure you catch up."

I: When you're on the trips, like going to California to meet with the team out there, did you work at night? How did that time dispatch?

R: Actually, I almost appreciated, particularly when I got on the plane, because I would focus on my e-mail. So, we have all these Omni Books, the lap top computers, which was invaluable. I mean that really, really helped to have the e-mail, the presentations, my financial worksheets. I mean just everything was there and I could carry it. So, I'd get on the plane, and it's not quite two hours to the San Jose airport, and my battery lasts just about two hours, and I could just cruise through e-mail during that time. In the evening then, it was, you know you'd get back to the hotel and get logged in. Usually we'd do dinner. We'd try to get out. So, you wouldn't get back much before 8:30, 9 o'clock to go to town.

I: Because you had gone to dinner?

R: Yeah. So, it would seem like we'd try to leave at. We'd usually catch a 9 o'clock flight out of Denver. So you had to leave here at 7. You'd get in there, local time, around 11, and is that right? Yes. That kind of works out. Yes. 10:30, 11, you could be in a meeting at 11 o'clock if you really pushed it hard. And then we'd meet or work until maybe sixish generally.

I: Was there a facility there that you could kind of call your own? Like a conference room, or?

R: Not really, but we had people there. So, XX. was there, and XX, and eventually XX. And so, we could lean on them. Plus the admin staff for XX. and the Paso(?) Organization. We could lean on them to say, "Hey, we're coming out. Could you get us a room, or find us a place." And we always had a meeting room or someplace to go, so that seemed to work out pretty well. And so, we'd work to sixish, sevenish, and then go to dinner. And so, you'd get back to the hotel 8:30, 9 o'clock, and always logged in and get your new e-mail and that type of stuff. And then, depending on, either watch TV, or work on e-mail, or go to sleep, depending on where you were at. And then, it was up in the morning. And I always found for myself, I'd wake up around 4:30, 5 o'clock in the morning, because that's, you know, 5:30, 6 o'clock in Colorado. So then I'd either get up and work out, or get on e-mail again, and try to work on that type of stuff to move things along. At times we were. It seemed like with Sapphire, we would meet in the evening more often with them. It was kind of an afternoon and push into the evening type of thing.

I: Where were they located?

R: They are in Redwood City. So, we probably had, I'm going to guess, five evening meetings with them. So, that was always a late night type of thing, which was really interesting.

I: Was that dictated by them? Was that part of their culture?

R: No, it was kind of like they had meetings, other things they were doing, and we were like, well, you know, if we come out and tie this all in. And so, it almost ended up, a little bit of the sense I had was around this .com environment, you know, it just ecosystem. It's like the nature of the .com was that you had evening business meetings. So, you'd go to dinner and you'd talk to 9 o' clock or something at a business meeting. So those were always really late nights.

I: Were they at a restaurant, or would you bring food in?

R: A couple of times we brought dinner in. A couple of times we meet after dinner, and at least a couple of times we were out at dinner. So we would go out. One, or both times we just walked down the street from their offices. We did dinner

I: You had your own room at the hotel? So you had some down time?

R: All except for one situation where we couldn't get, I couldn't get a room local to where everybody else had a room. And so instead of having to rent another car, and to run around, we asked if they had a suite. And so, XX and I shared a suite. But yes, which was nice. I mean you're with these people every moment, and it is kind of nice to have your own room, and go get showered, or just kind of kick back.

I: Did you ever feel like travel was taking away from your productivity?

R: Yes. Frankly so. I mean although it was interesting, it was like we traveled because we needed to, and to talk to the people, or to complete the objective we had at that moment, we needed to be together and that type of stuff. So, we were clearly getting things done, but then you had this thing that was occurring back at the office. It was like your e-mail was filling up, or you had other negotiations that you were trying to get done. And so, there were people back here that you needed to be with. So, it was advantageous to travel. Pulling together this business as it starts up, I don't know how you couldn't travel. You know, just being face to face with people is just so valuable to be with them, and just see the physical communications that go on. The non-verbal type of stuff. See whether their offices are real. You know, kind of what's going on from that perspective and that type of thing. So I think that that was just invaluable. Again, I don't know how you could do it without travel. On the other hand, it does create this down time, and it sucks up, from particularly where we're at, to get to a meeting. What, we're leaving at 7, which is 6 o'clock California time, and you could be there at a meeting at earliest at 11. So, it's five hours of travel. You know, it's not real productive. Sort of once you get on the plane, you start working on e-mail.

I: Who would coordinate your travel arrangement?

R: Most of the time, we just did that ourselves. We did have, in the beginning, XX, who is XX's admin, was doing it. It was a lot of work for here. Then once XX came on, she took on some of that, and I think she did most of like XX's. That type of thing. But in my case, and I think XX, and I think XX too, we just ended up doing our own. We could call the HP travel desk and say, "I need to be in San Jose, here's the flights I want to take, and find me a hotel close to this location." They could do all that.

I: How was your level of stress throughout this team experience?

R: Well, that's interesting. All in all, I'd say it was pretty high. It was exciting though. You know, it's kind of, I've been in situations where the stress, it was really, really stressful, and you weren't having fun, and you didn't know how you were going to get it all done. And it was like, "Oh my God." You know. But, here it was really stressful, but you were having a lot of fun. We didn't know what the end of it was going to look like, but we knew we'd get there. And so, it was a different type of thing. I would come into work and I'd always have a plan, all right I need to get X, Y and Z done, and next thing you know, you're doing items 3, 4 and 5, and a sudden different thing. And you just didn't know from day to day quite what the issue was going to be, but you knew that the series of things would come together and you'd push this thing forward. So, that was pretty unique to just not to be, you know again, I always had a plan of okay, I need to get these things done, but you just kind of, once you were driving in you just, well, if that makes it, fine, but let's see what the day holds. So I think the flexibility, and I mean there was always this on every job where I could see key skill is flexibility. And it's like this has been the one role that I can point to. Somebody said, you know, describe for me a role where you demonstrated flexibility, and I would just say, "Well, there was this job that I had. I think it was the job title was flexibility, and then what I had to be was the controller to the team. You just didn't know from day to day what the hell you were going to do.

I: In looking at the whole financial side, your controllership, did the Internet economy teach you anything new about doing book? Do Internet start-ups do books differently than a traditional technology company?

R: Well, yes they do, but no they shouldn't. So, one thing that the Internet accounting, or e-commerce accounting is really, really new, so the SEC has just started to issue some of their opinions on how things should be accounted for. FASB, Financial Accounting and Services Board is also just now working on that type of stuff. Internal HP would be, I want to say accounting, there's like an accounting in reporting standards, and they essentially manage what we call our AFM, Accounting Financial Manual And they are working, they've done a little bit of work, but over this last two quarters, they've finally started to take in just kind of like white papers on how to account for some of this stuff. The Financial Services Center, which does our general accounting work, accounts payable type of stuff, they have pulled together a team to try to understand how to do merger banking within HP. And that's always been something that, one, we haven't had to a whole lot because we've been more corporate focused. And so now that we're moving into spaces where we are creating the business models where we are consumer focused and Internet

based, now we need to worry about how do you process credit card transactions. And so they just started to do that. So from the perspective of is there new ways, or new rules of doing things, some of the .com companies have done things that were new that they shouldn't have done, and then there's almost more of a barter transaction, or world, that's been created. A more active barter world on the Internet. So, they'll trade some advertising, or cool advertising for access to certain consumer bases. So, in the past where they would have paid for the advertising, and they would have bought consumer lists and those type of things, then they would just do this trade. You know I'll advertise your web site, or your product on line, and you give me something in exchange. So some of that didn't get accounted for and some of it got accounted for in different ways. Another thing is this middle man type of environment where you broker the transaction. You don't really take control of the asset, ownership of the asset, and you're just brokering this transaction, and people were booking inappropriate revenue levels. So, in our case in the music, we would broker the transaction, or the sale of a CD at let's say \$X, and yet we make X on that \$X. So, in reality we shouldn't show \$X worth of revenue, what we should show is just the X worth of revenue so that our stockholder doesn't look at this and go, "Wow, they're making all these X of dollars, but they have no income at the bottom. Or no net income." So, in reality we're only brokering or being paid that way. Those things are different from the traditional HP, which is really what stretched me and stretched the people that I have working for me. We know how to account for building boxes and shipping boxes, and you know, repairing boxes, but we didn't know how to account for doing Internet brokering and transactions, and the barter transactions.

I: What about the projections? Do you see an optimism or pessimism in terms of this whole Internet projection?

R: I would say in the beginning. So, there are a couple different time periods. So in the fall, late summer into the fall, where we built a business model that was wrapped around effectively advertising, at the time, no. We believed that, and it was, we thought that was, you know we were like Midas has come and the gold was here. As we blew past got that and got into December, January, February time frame and started to look back at what that really meant and what that was, and the reality of it, then I believe yes. We kind of really overestimated what that could be. The same thing was happening in the external world at the same time. You know, there was this euphoria about, you know, we'll set up all these web sites, and not only will you be able to sell your product, but you'll have all this advertising to use. And some of the web sites were just advertising based. So, you just get people to come to your web site, make it real sticky and make them want to come back to it, and then you just show them a whole bunch of advertising and life is wonderful. But what reality is is that you still, you know good old business rules still apply. You still have to have a valuable product people want delivered to them at the time when you want it. All those type of things. So, finally the world figured out that the advertising base business models weren't quite going to do it, and now the .com model is diverse(?). So, we were on that same gravy train, but nicely we worked through

that and I think we finally saw what could be a viable business model for Hewlett Packard and it switched.

I: Thank you.

R: Okay.

[END OF TAPE]