UNIVERSITY OF LA VERNE

La Verne, California

THE HUMAN RESOURCE LEADERS' USE OF KNOWLEDGE RETENTION
TOOLS TO SUPPORT STRATEGIC BUSINESS PARTNERS IN
ATTRACTING AND RETAINING TALENT WITHIN THE
WAREHOUSE AND LOGISTICS INDUSTRY

A Dissertation Submitted in Partial Fulfillment of the
Requirements for the Degree
Doctor of Education
in
Organizational Leadership

Elizabeth DaValos

LaFetra College of Education

Organizational Leadership Department

August 2019

DISSERTATION BY

Elizabeth DaValos _____

RESEARCH AND EXAMINING COMMITTEE

_____, Dissertation Chair
Douglas DeVore, EdD
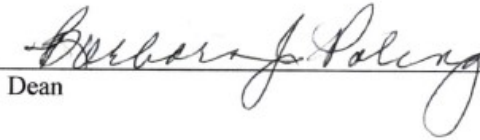
_____, Committee Member
Linda I. De Long, EdD

_____, Committee Member
Nicholas Richter, EdD

_____ Date 8/20/19
Dean

ABSTRACT

The Human Resource Leaders' Use of Knowledge Retention Tools to Support
Strategic Business Partners in Attracting and Retaining Talent Within
the Warehouse and Logistics Industry

By Elizabeth DaValos, EdD

Purpose. The purpose of this quantitative study was to determine the degree of importance of Liebowitz's (2009) knowledge management strategies model to support the attraction and retention of talent, as perceived by human resource (HR) leaders and strategic business partners in the warehousing/logistics industries located in the Inland Empire region of Southern California, as measured by the Liebowitz and Chen (2001) Knowledge Sharing Effectiveness Inventory Questionnaire. Another purpose of this study was to determine whether there was a significant difference in the degree of importance of the knowledge management strategies model to support the attraction and retention of talent, as perceived by (a) HR leaders and (b) strategic business partners in warehousing/logistics industries located in the Inland Empire region of Southern California, as measured by the Liebowitz and Chen Knowledge Sharing Effectiveness Inventory Questionnaire.

Theoretical Framework. The theoretical foundation for this study was based on knowledge management and determined by Liebowitz's (2009) knowledge retention framework, as measured by the Liebowitz and Chen (2001) Knowledge Sharing Effectiveness Inventory Questionnaire.

Methodology. The design of this study supported descriptive and ex post facto methods for survey research, along with an independent-samples *t* test. HR leaders and strategic business partners in the Inland Empire were invited to participate in this study. The design of the research was selected to determine whether knowledge management practices supported the attraction and retention of talent. The Knowledge Sharing Effectiveness Inventory Questionnaire instrument was used to survey the HR leaders and warehouse/logistics leaders.

Findings. Though the differences are not statistically significant, mean score differences exist between the degree of importance of the knowledge management strategies.

Conclusions and Recommendations. This study looked into knowledge management strategies that could help the organization gain competitive advantage. Some recommended areas of focus would fall under the knowledge retention arena: Foster a learning environment through shared engaged practices, create a professional knowledge center, and create a teaming environment to transfer knowledge.

iv

CONTENTS

FIGURES

TABLES

ACKNOWLEDGEMENTS

First of all, I wish to thank my dissertation chair, Dr. Doug DeVore, for his encouragement and guidance throughout this process. His willingness to share his expertise in understanding of research, coupled with his motivation to finish this journey, patience, and kindness, will be cherished forever. In a special way, I feel very fortunate to be his last dissertation candidate for the University of La Verne as he pursues other journeys in his academic career.

I am honored to say that I have two of the finest professionals on my committee. Thank you to my committee members, Dr. Linda DeLong and Dr. Nicholas Richter. Dr. DeLong embraced the many struggles I had and encouraged me to keep moving. When I met with Dr. DeLong, she always shared something positive and reminded me that I was making steady progress. Without her guidance, I would have been lost! Thank you, Linda, for your support! Dr. Richter planted so many seeds for me to be able to get through the IRB process. He always took time from his busy schedule to talk to me either on his way in to work or on his commute home. Thank you, Nick, for your positivity and words of encouragement!

In addition, I am deeply grateful to Dr. Jay Hoffman, my learning group leader for 2 years. I greatly admire him. Also, thank you to Dr. Shari Fox. She always had words of wisdom and nuggets of knowledge to share.

I wish to thank the following individuals for their expertise. Thank you to my editor, Dr. Kathleen Rowley, for her expertise and support. She is an amazing wordsmith! In addition, to Wendy Wood and Kelli Wyngarden, thank you for all your support. I would like to thank Dr. Mike Winters for his assistance with statistical analysis. Also, to Pam Alvarado, my learning group colleague, who shared her statistical knowledge and help with data collection. I look forward to the day she becomes Dr. Alvarado.

I am grateful for all my professors and friends who joined me on the ULV EdD journey. I met such wonderful people and made lifelong friends.

Thank you to all my professors at Cal Poly Pomona for giving me the courage to take the first step in my academic journey. Especially to Dr. Steve Iman, a retired professor in management with whom I still keep in touch through LinkedIn, and Dr. Moses Walters, the wonderful person who would allow me to vent to him when I didn't get my classes I needed to graduate. . . . I know he is looking down on me from heaven telling me not to worry and to put it in the hands of God. I do exactly what he said. May he rest in peace!

In addition, I would like to thank my FedEx family for their support and encouragement. I am lucky to work with such a fine group of people in the transportation business. You are friends I wish to enjoy for a long time. Thank you to Mr. Steve Handy, executive at FedEx Ground and cofounder of RPS. His kind words in my early HR career with FedEx Ground planted the seed for my idea of HR leaders working closely with their strategic business partners. May he rest in peace!

In addition, I am lucky to work also with such a fine group of educators, students, and staff at Riverside Community College. I am privileged to work with excellent educators and leaders who really place students first. A special thanks to Dr. Kevin Fleming, Dr. Gail Zwart, Professor Patty Worsham, Professor Rex Beck, and Dr. Ron Pardee for their kind words of encouragement with my doctoral journey. My students at Riverside Community College, where I have been an adjunct professor since 2002, call me Professor DaValos. Now my students can call me Dr. DaValos.

Thank you to the HR Network Group of the Inland Empire for supporting my data collection by allowing me to survey this group. Also, a special thank you to Mr. Steve Harrington, industry liaison for the National Center of Supply Chain Technology Education and board member of the Distribution of Management Association for the logistics industry of Southern California.

Most of all, I am extremely grateful to the top four men in my life. I would like to acknowledge my husband, Ernie, who spent endless hours supporting my work. Thanks to him for all the times he placed his needs aside to help me accomplish my dream. Thank you for the meals he made, the many times he would drop me off at the La Verne library or the University of Redlands library on weekends to work on my dissertation while he spent time with our boys, the errands he ran, and most of all his words of encouragement to keep me going. This monumental task of writing a dissertation would have been incredibly more difficult without him by my side. A special thanks to my three sons, Jonathan, Gabriel, and Luke, who had to sacrifice and accept their mom's absence so that it would allow me the time with my dissertation journey. Luke, you were only 1 year old when I began this journey. Thank you for letting me write, guilt free, and

for being sensitive to my time constraints. I realized quickly that your dad put you up to asking me often, "Are you working on your dissertation this weekend?" especially when Luke could barely say the word *dissertation*. I have set the bar high for all three of you with your educational goals, and I know you will achieve all of your goals. I appreciate your support and encouragement and look forward to spending more time with all of you again.

DEDICATION

This dissertation and my doctoral degree is dedicated to my mom, who departed this world in 2003. When I attended the University of Redlands in my master's program, she would ask me daily how I was coming along with my school work. In 2001 when I graduated from the University of Redlands, I saw in her face how happy she was for me, especially in my graduation picture, where she is standing on the steps of the chapel during the graduation ceremony, with me and her first grandchild, Jonathan.

Mom, I finally finished my school work!

CHAPTER I

THE PROBLEM AND ITS SIGNIFICANCE

In the last several decades, business books, articles, speeches, and seminars have emphasized the importance of human capital (i.e., people) in gaining a competitive advantage in finding and retaining top talent in organizations (Lawler, 2008). Pace (2012) stated the findings of the 2012 CEO survey conducted by PricewaterhouseCoopers showed that CEOs placed a high priority on three areas: (a) finding the right talent, (b) commitment to talent, and (c) workforce development as a top investment goal for the future.

Also, today's organizations are challenged by globalization, technological trends, a challenging economy, regulation, and trends in the nature of work (Dessler, 2011). For example, the challenge of rapidly changing technologies has impacted how people work, along with creating a demand for facility and skills they need to be successful. With technology being updated rapidly, a leading skills sector is the wireless and mobility field. This field is helping logistics professionals work smarter and faster in an increasingly competitive business environment, but it also requires today's logistics professionals to have an understanding of this new technology (McCall, Arnold, & Sutton, 2008).

The world of work has advanced from manual labor to technical expertise. As organizations introduce new technologies for manufacturing, communications, and

1

human resource (HR) management, they are also increasing their need for more specialized employees. In general terms, the best jobs will require more education and more skills (Lawler, 1992).

Knowledge workers are employees whose jobs are to acquire and apply knowledge, and they contribute to the organization by the nature of what they know and how well they can apply what they know (Drucker, 1998). Despite the fact that knowledge workers include more than individuals who work with computer technology (lawyers and scientists, for example, are usually considered knowledge workers), the combustion of technology has led to a huge increase in the need for this technology (Drucker, 1967). These employees present a unique problem for recruitment, retention, and compensation purposes.

Feasibly, the biggest challenge facing organizations that employ knowledge workers is seeking ways to attract and retain them. Organizations can build competitive advantage if they can learn how to better use and manage the knowledge resources (people) they have acquired. This is becoming increasingly important as the skills required for most jobs become less manual and more cerebral and knowledge-based in nature (Lawler, 1992).

Top executives are looking at talent development closely since this directly impacts their business strategy. *Human Resource Executive* conducted a survey with 387 chief HR officers and concluded that not only are chief officers concerned about having candidates ready for the next top position to be filled, but CEOs had also spent more time on HR issues in the previous 2 years (Bunch, 2013).

While some organizations may view knowledge management as not being a necessity, proactive organizations see knowledge management as a key aspect of an effective business strategy (Hayek, 1945; Styhre, 2002). As a strategic business partner, HR can forward organizational success through the development, retention, and transfer of organizational knowledge. Also, the literature supports the finding that HR management practices can be used to support knowledge management initiatives through creating and supporting an organizational culture that promotes knowledge sharing and development practices (DeLong & Fahey, 2000; Pan & Scarbrough, 1999).

The idea that knowledge management planning is a key management challenge is being recognized by HR leaders as they strive for profitability in their organizations (Ulrich & Smallwood, 2005). Lengnick-Hall and Lengnick-Hall (2002) stated that leveraging knowledge sharing is increasingly seen as a vital strategic resource for competitive advantage.

Recruiting employees who possess this organizational knowledge with a highly competitive relevance is becoming a legitimate challenge. These employees, known as *knowledge workers*, "have high degrees of expertise, education, or experience, and the primary purpose of their jobs involves the creation, distribution or application of knowledge" (Davenport, 2005, p. 9).

According to a 2011 forecast from the California Community Colleges' Economic and Workforce Development program, growth industries that Inland Empire job seekers were expected to look at in 2014 included healthcare, wholesale and retail, and transportation and warehousing (Centers of Excellence, 2011). According to the report,

"Transportation and warehousing industries in the Inland Empire account for about 87,100 jobs. Through 2014, employment is expected to increase by 4,600 jobs—with the greatest amount in warehousing and storage, followed by freight trucking" (Centers of Excellence, 2011, p. 3). Table 1 shows the growth forecast for the warehousing and storage industry as well as freight trucking.

Table 1

Industry Sectors and Job Growth: 2011-2014 Forecast

Industry sector	2011 jobs	2014 jobs	Change	% change	# of establishments
Warehousing and storage	19,327	21,519	2,192	11%	333
General freight trucking	28,877	30,444	1,567	5%	831

Note. Adapted from *Regional Labor Market Profile: Inland Empire/Desert Region*, by Centers of Excellence, 2011, p. 3, retrieved from https://desertcolleges.org/docs/coe/dwm-profile-ie-12.pdf.

Inland Empire economist John Husing, in his 2014 annual outlook for the Inland Empire report, predicted that 8,000 more logistics positions would be needed in 2014 than in 2011 (Katzanek, 2014). Much of the increase stemmed from the addition of major fulfillment centers in the Inland Empire area, such as the new Amazon.com goods processing facility in San Bernardino for online retail sales (Katzanek, 2014).

At the same time opportunities are growing, demographic trends are making hiring and supervising employees more challenging (Dessler, 2011). The U.S. Department of Labor (as cited in Dessler, 2011) stated that job growth will not keep pace with labor force growth since there will be an estimated shortfall of approximately 14 million college-educated workers by 2020. A study of 35 large global companies' senior

HR managers recently concluded that "talent management which included the acquisition, development and retention of talent to fill companies' employment needs" ranked as their top concern (Dessler, 2011, p. 11).

Background of the Problem

HR leaders benefit when they are involved with their business partners' strategic recruitment plan to hire a talented workforce. Lawler and Boudreau (2009) asserted,

> In this knowledge economy, a firm's strategy must be closely linked to this talent. Thus the human resources function must be positioned and designed as a strategic partner that participates in both strategy formulation and implementation. Its expertise in attracting, retaining, developing, deploying, motivating, and organizing human capital is critical to both. Ideally, the Human Resources function should be knowledgeable about the business and expert in organizational and work design issues so that it can help develop needed organizational capabilities and facilitate organizational change as new opportunities become available. (p. 4)

To be strategic business partners, HR leaders' role requires extending HR's focus beyond delivery of HR services and practices to the quality of decisions about organization design and human capital (Boudreau & Ramstad, 2007). Employers want HR leaders to be their companies' internal consultants, identifying changes that help employers contribute to the organization's success while instituting their long-term goals or strategies. Schramm (2011) stated that the role of HR as a strategic business partner is often described as twofold: HR is involved in contriving strategy in addition to implementing it. This contribution requires a focus on financial expertise and financial results, not only employee morale concerns or administrative efficiencies (Schramm, 2011).

Boudreau and Ramstad (2007) asserted that HR professionals' focus is on administrative and service goals rather than on strategic decisions. The authors cited a 1995 survey conducted by the Center of Effective Organizations in which HR professionals were asked how much time they spent on strategic tasks as opposed to administrative tasks performed 5 to 7 years before. Then, they documented the time they currently spent on the actual tasks. Their perception was that each year they shifted toward a more strategic focus; yet when the data were examined to see what their actual duties were, it was shown that there was very little change, reflecting the same percentages since 1995. Boudreau and Ramstad noted, "The data vividly reveals a profession that is getting better and better at the traditional paradigm" (pp. 7-8).

Since strategic business partners see the HR functions of strategic HR planning, organizational design, and strategic change as significant, this gap between reality and perception suggests the HR function is missing an opportunity to add value to what is important to the leaders' business partners. Lawler and Boudreau (2009) commented, "Missing almost entirely from the list of HR focuses are key organizational challenges such as improving productivity, increasing quality, facilitating mergers, acquisitions, managing knowledge, implementing change, developing business strategies, and improving the ability of the organization to execute strategies" (p. 4).

Another concern for HR is that successive generations of qualified candidates will be substantially smaller, meaning that within a few years, there will be a shortage of employees in the workforce (Ball & Gotsill, 2011). In addition, corporate leaders are faced involuntarily with many challenges in losing their competitive advantage. With

radical changes in the workforce demographics in that baby boomers are retiring and a younger workforce is moving rapidly from one position to another, this can have serious implications on an organization and its ability to innovate, compete, and align itself for a bright future in meeting its goals (Liebowitz, 2009; Trautman, 2010).

Problem Statement

When an employee leaves an organization for retirement, there is a risk of his or her wealth of knowledge leaving too unless it has been adequately transferred. This loss of knowledge affects, in particular, the knowledge-intensive sections of high-technology, healthcare, aerospace, defense, energy, and other technical and scientific industries (DeLong, 2004; Rothwell, 2011; Trautman, 2010). However, knowledge transfer is not the only problem facing organizations today. Replacing the experience and talents of long-term workers is a challenge facing employers in all industries. Employers are developing programs to retain current employees, have them mentor and transfer knowledge to younger employees, and find ways for them to continue contributing in limited roles (Dumay & Rooney, 2011).

Even if knowledge has been effectively captured from the person who is retiring, it may be impossible to acquire the full knowledge possessed by him or her (DeLong, 2004). At the same time, companies are dealing with several aspects of the impact of retirees leaving the organization and are working to find a range of solutions. One survey found that 41% of surveyed employers were bringing retirees back into the workforce, 34% were conducting studies to determine projected retirement rates in the company, and

31% were offering employment options designed to attract and retain semiretired workers

(Baier & Fahlander, 2008).

**Knowledge Management
Leadership Need**

Operating in the global business arena creates a need for HR management

professionals to develop knowledge management leadership; the lack of such is one of

the most pressing problems facing organizations today (Parise, 2007). Brewer and

Brewer (2010) argued,

> The generation and availability of new and existing knowledge presents a
> tremendous challenge and opportunity to organizations attempting to compete in a
> global arena. Human resource managers are challenged to meet the ever
> increasing demands of the technologically driven environment. Educational
> institutions are equally challenged to keep pace with changes in the global
> business environment as well as the increased demands of stakeholders for
> accountability. Examining the relationships between KM, human resource
> management (HRM) activities, and university business program goals may lead to
> a better understanding of ways to prepare graduates to assume roles in the
> business environments as well as give university programs a good way to measure
> assurance of learning. (p. 330)

In *Addressing the Human Capital Crisis in the Federal Government: A Knowledge*

Management Perspective, Liebowitz (2004) stated,

> The human capital in an organization primarily emanates from the "brainpower"
> of the organization's employees. . . . The knowledge management and human
> capital strategy should be aligned with the organizational mission and strategy in
> order to maximize the contributions of the organization's human capital. (p. 11)

Knowledge Management

Dr. Jay Liebowitz (2012) developed his framework of human capital

management, part of which is knowledge management. At Johns Hopkins University,

Liebowitz founded a graduate program in competitive intelligence and was the first

knowledge management officer at NASA's Goddard Space Flight Center. He has

published more than 40 books and myriad journal articles on knowledge management,

intelligent systems, and information technology (IT) management (Liebowitz, 2012).

Regarding knowledge management, Liebowitz (2004) stated,

> A good knowledge management strategy to follow is to embed knowledge
> management within strategic human capital management in the organization.
> Linking Knowledge Management to the strategic management of human capital
> can provide great synergies. In this manner, KM will serve as a key pillar
> underpinning a human capital strategy for the organization. Most senior leaders
> can appreciate the need for retraining and recruiting employees and capturing key
> knowledge before it leaves the organization. KM may seem amorphous to many
> individuals, so weaving it into a human capital strategy for the organization may
> be a wise approach. (p. 66)

Knowledge Retention Model

Liebowitz (2009) identified a knowledge retention framework, broken down into

the four key pillars of knowledge retention: "(1) recognition and reward structure,

(2) bidirectional knowledge flow, (3) personalization and codification and (4) the *Golden*

Gem" (p. 26).

Recognition and reward structure. The first pillar in the framework identified

by Liebowitz (2009) is *recognition and reward structure*. Liebowitz stated that people

should be recognized and rewarded because employees want to feel good about

themselves and their contributions, and by rewarding them in some manner on a daily

basis, this will motivate employees.

Bidirectional knowledge flow. The second pillar in the knowledge retention

framework that Liebowitz (2009) identified is bidirectional knowledge flow.

Bidirectional knowledge flow is attaining knowledge from different levels of management, such as senior employees and new employees, and having them exchange their knowledge and work experiences so that the transfer of vital knowledge is captured and retained within the organization. Conducting this process ensures that the culture of continuous learning and sharing knowledge is instilled in the organization (Liebowitz, 2009).

Personalization and codification. The third pillar is personalization and codification. Liebowitz (2009) referred to personalization as the *connection* part of knowledge management by promoting methods to build the connection between people. Codification transfers the tacit knowledge into explicit knowledge so that it can be readily shared. Liebowitz stated that examples of codification would be lessons learned and best practices.

The golden gem. The fourth pillar in Liebowitz's (2009) knowledge retention framework is the golden gem. Liebowitz suggested that one way to ensure the talent remains in the organization is to bring back this talent from retirement and use different approaches to bring these individuals back to the organization.

Knowledge Assessment

Although there are various instruments that can be used to assess knowledge management and organizational effectiveness with learning and applying knowledge, these tools do not analyze knowledge-sharing effectiveness for building knowledge-sharing proficiencies in the organization. In an effort to fill this void, Liebowitz and Chen (2011) developed an assessment instrument in the form of a questionnaire. This

questionnaire focused on four main areas: (a) communication flow, which looked at how knowledge and communication exchanges were captured and disseminated throughout the organization; (b) knowledge management environment, which reviewed internal cultural factors related to knowledge management within the organization; (c) organizational facilitation, which assessed the sophistication of the knowledge management infrastructure and knowledge-sharing capability within the organization; and (d) measurement, which analyzed the possibility of knowledge sharing and knowledge management being successful within the organization (Liebowitz, 2009).

Purpose Statement

The purpose of this quantitative study was to determine the degree of importance of Liebowitz's (2009) knowledge management strategies model to support the attraction and retention of talent, as perceived by human resource (HR) leaders and strategic business partners in the warehousing/logistics industries located in the Inland Empire region of Southern California, as measured by the Liebowitz and Chen (2001) Knowledge Sharing Effectiveness Inventory Questionnaire. Another purpose of this study was to determine whether there was a significant difference in the degree of importance of the knowledge management strategies model to support the attraction and retention of talent, as perceived by (a) HR leaders and (b) strategic business partners in warehousing/logistics industries located in the Inland Empire region of Southern California, as measured by the Liebowitz and Chen Knowledge Sharing Effectiveness Inventory Questionnaire.

Research Questions

1. What is the degree of importance of knowledge management strategies as perceived by HR leaders in warehousing/logistics industries, as determined by Liebowitz's (2009) knowledge retention framework and as measured by the Liebowitz and Chen (2001) Knowledge Sharing Effectiveness Inventory Questionnaire?

2. What is the degree of importance of knowledge management strategies as perceived by strategic business partners in warehousing/logistics industries, as determined by Liebowitz's (2009) knowledge retention framework and as measured by the Liebowitz and Chen (2001) Knowledge Sharing Effectiveness Inventory Questionnaire?

3. Is there a significant difference between the degree of importance of knowledge management strategies as perceived by (a) HR leaders and (b) strategic business partners in warehousing/logistics industries, as determined by Liebowitz's (2009) knowledge retention framework and as measured by the Liebowitz and Chen (2001) Knowledge Sharing Effectiveness Inventory Questionnaire?

Significance of the Study

This study aims to support organizations as they prepare to plan for the future of knowledge management needs and their HR assets. This will be important to the success of organizations in finding and retaining top talent in the complex knowledge era that is emerging in the 21st century. Also, these results will benefit professionals in HR and organizations that are committed to changing the culture by undertaking the study of knowledge management. Currie and Kerrin (2003) and Storey and Quintas (2001) warned that there is still a lack of understanding with regard to the role of HR in the

process of knowledge management to ensure a competitive advantage for the organization.

Furthermore, this study contributes to the literature in the field of HR management and helps to describe the alliance between HR leaders and their strategic business partners. This management dilemma is what this study addressed.

Delimitations of the Study

The study included those organizations in the warehouse/logistics industry specifically located in the southern part of the state of California. Those surveyed consisted of HR leaders and business partners in the warehouse/logistics organizations within the Inland Empire area of Southern California. The study was conducted in late 2015 and early 2016.

Definitions of Terms

Explicit knowledge. "Knowledge that is well-documented and easily transferred to other persons" (Noe, Hollenbeck, Gerhart, & Wright, 2013, p. 758).

Human capital. "The employee's brainpower and experience, which often provides the competitive advantage for the organization" (Liebowitz, 2012, p. 13). The collective experience, knowledge, and expertise of those contributing to an organization's mission (Liebowitz, 2004).

Human resources (HR) management. "The policies, practices, and systems that influence employees' behavior, attitudes, and performance" (Noe et al., 2013, p. 759).

Involuntary turnover. "Turnover initiated by the organization (often among people who would prefer to stay)" (Noe et al., 2013, p. 759).

Knowledge management. This involves recognizing, generating, documenting and distributing, and transferring between persons explicit and tacit knowledge to increase organizational effectiveness (Davenport & Prusak, 1998; Rossett, 1999). Additionally, the definition of knowledge management reflects that "it is the process of creating value from an organization's intangible assets. . . . [K]nowledge management deals with how best to leverage knowledge internally and externally" (Liebowitz, 2004, p. 63).

Knowledge retention. Knowledge that should be captured, shared, and leveraged as "lost knowledge" that will be taken as baby boomers retire and organizations face human capital challenges (Liebowitz, 2009, p. 2).

Knowledge workers. "Employees who own the intellectual means of producing a product or service" (Noe et al., 2013, p. 760).

Lost knowledge. "The decreased capacity for effective action or decision making in a specific organizational context" (DeLong, 2004, p. 21).

Strategic business partner. Employers want HR leaders to be their companies' internal consultants, identifying changes that help employers better contribute to the organization's success while instituting their long-term goals or strategies (Boudreau & Ramstad, 2007).

Strategic human capital management. "The ability to be prepared, from workforce development and succession planning perspectives, in terms of having the

human talent available and educated as the future workforce to meet the organization's strategic mission and vision" (Liebowitz, 2009, p. 1).

Tacit knowledge. "Knowledge based on personal experience that is difficult to codify" (Noe et al., 2013, p. 763).

Talent management. "Attracting, retaining, developing, and motivating highly skilled employees and managers" (Noe et al., 2013, p. 763).

Voluntary turnover. "Turnover initiated by employees (often whom the company would prefer to keep)" (Noe et al., 2013, p. 764).

Organization of the Study

This study is organized into five chapters. Chapter I introduced the framework and background of this study of HR leaders examining strategic business partnerships and developing knowledge management strategies. The investigation of the relationships between these variables contributes to the knowledge base for a number of fields including HR development, HR management, knowledge management, and warehouse/logistics. Chapter II consists of a focused literature review on the HR function and knowledge management in the warehouse/logistics industry; theories, concepts, comparisons, and analyses of the relevant theoretical knowledge; and a comprehensive discussion of the role of HR leaders and their strategic business partners and the process of implementing knowledge retention tools within their organizations. Chapter III consists of the research methodology and includes an overview of the research design, sample, setting, instrumentation/measures, data collection, data analysis, validity and reliability, and ethical considerations. Chapter IV reviews the data collected,

key findings, and the results of the study. Chapter V concludes the dissertation with a

discussion, implications, and recommendations for future research.

CHAPTER II

LITERATURE REVIEW

A literature review typically offers an evaluation of the existing research related to the topic of study. The literature review allows the researcher to demonstrate knowledge of the field, sets the context for the research through an examination, and synthesizes relevant literature. Also, it justifies the need for the study by identifying gaps in the literature and related significant problems in practice. This chapter represents an overview of the relevant literature from a theoretical standpoint and lays the foundation for the research.

The objective of this chapter is to illustrate why human resources (HR) issues are of central importance to the topic of knowledge management and to give an overview of the way the topics have been linked thus far in the literature. In addition, this review aims to provide relevant information to support organizations as they prepare to plan for the future of knowledge management needs and their HR assets. This will be important to the success of organizations in finding and retaining top talent in the complex knowledge era that is emerging in the 21st century. Also, these resources will benefit HR leaders and their strategic business partners in the warehousing/logistics industries who are committed to changing the culture by undertaking the study of knowledge retention strategies to support the attraction and retention of talent.

Currie and Kerrin (2003) and Storey and Quintas (2001) warned that there is still a lack of understanding with regard to the role of HR in the process of knowledge management to ensure a competitive advantage for the organization. This literature review first covers the literature in the field of HR management and then offers literature relevant to the alliance between HR leaders and their strategic business partners.

Generations and Baby Boomers

Baby boomers represent 28% of the working population in the United States, and employers lose tacit knowledge as these employees retire (Gorman, 2010). Baby boomers are exiting the workforce and not sharing tacit knowledge. This occurs for some because of the time to transfer and for others because organizations have not included, or leveraged, this generation's knowledge as they exit the workforce. The lack of skilled workers for increasingly complex jobs is considered to be a major and ongoing problem. Partly as a result of this shortage of skilled labor, many older workers with high-level skill sets remain in the workforce (Gorman, 2010).

Some agencies estimated that 90% of the growth in the U.S. labor force between 2006 and 2016 would be from workers ages 55 and older (Gordon, 2005). Over the next few years, the fastest growing labor force segment will be those from 45 to 64 years old. The segment of those in the workforce from the ages of 25 to 34 will decline by almost 3 million, which reflects fewer births in the late 1960s and early 1970s (Gordon, 2005). Companies such as Home Depot draw on this trend by hiring older workers who "serve as a powerful draw to baby-boomer shoppers by mirroring their knowledge and perspective" (Shellenbarger, 2005, para. 6).

Andrews and Boyne (2010) cautioned that leaders should not underestimate the significance of knowledge management strategies in organizations as baby boomers leave established roles within the workforce. Leaders lack strategies to retain and transfer tacit knowledge from baby boomer employees to their replacements. The retirement of the baby boomer generation will lead to skill shortages in the United States (Neumark, Johnson, & Mejia, 2013). Leaders without a succession plan could realize a loss of tacit knowledge, coupled with a shortage of competent leadership, leading to failure of daily operations (Andrews & Boyne, 2010).

Human Resources

In addition to the concerns of workforce shortages, HR leaders are increasingly expected to demonstrate leadership capabilities as strategic business partners. This shift in roles has been made possible by fundamental changes in the HR function. Many transactional and specialized services can be handled through software applications, provided by internal shared services or outsourced to external vendors. This releases resources and time for other activities (Woodward, 2008).

The development of HR leaders fosters a new identity for the profession, one that focuses on the organizational system in its societal context, not simply on HR practices. Kulik and Perry (2008) stated, "The reputation of an HR unit has important implications for the attitudes and behavior of HR managers within the unit, HR effectiveness, and organizational performance" (p. 554). Kulik and Perry further asserted the view that only with such an expanded perspective can HR leaders add

value in working with their business partners and employees to reframe the HR

aspects of the system unconstrained by traditional organizational assumptions.

The Role of Human Resources

The role of HR management professionals has been described by some

management scholars as one that includes providing an environment contributing to the

success of the organization. HR professionals provide a culture of trust and commitment

for employees to grow and develop as knowledge workers. According to Soliman and

Spooner (2000), "The human resources department could play a role in building trust

among staff so that they can share knowledge" (p. 339). The HR management

professionals' most difficult task is to ensure that workers are properly guided through the

process of knowledge management when the issues of the organization are extremely

complex (Soliman & Spooner, 2000). As asserted by Oltra (2005),

> How can senior managers involve the HRM [human resource management]
> function more in the development and implementation of an enterprise KM
> [knowledge management] strategy? First of all, the HRM function can only lead
> KM efforts effectively if the people behind that function are perceived positively
> and highly trusted by the rest of the organization. (p. 80)

As posited by Lengnick-Hall and Lengnick-Hall (2002), "Obtaining employees

in the knowledge economy requires new ways of viewing the selection process"

(p. 135). Authors writing about HR management, culture, and knowledge management

(Alavi, Kayworth, & Leidner, 2006; Ghosh & Scott, 2007; Hislop, 2003) posited that

the role of HR management professionals in the knowledge age should be focused on

the employees as they model the knowledge needed to support the behavior. The level

of commitment and trust that is established within the organization directly impacts

how employees generate, capture, and store knowledge. Lengnick-Hall and Lengnick-Hall (2002) argued,

> Knowledge facilitators help individuals [in the organization to master] how to learn. Art Kleiner (1994: 194) defines personal mastery as "the capacity not only to produce results, but also to 'master' the principles underlying the way you produce results . . ." As facilitators of individual mastery, HR professionals are personal coaches, [bringing corporate resources together with the intent to foster organizational growth].
>
> The relationship builder—manages the collective knowledge of the organization. The relationship builder is essential in linking the capital steward and facilitator in a context of an organized community. Therefore, HR professionals can help contribute to a firm's ability to leverage its resources and develop strategic capabilities and core competencies by helping individuals build a strong [link] of relationships. (pp. 173-175)

Lengnick-Hall and Lengnick-Hall (2002) submitted that by adopting these roles, HR leaders can become a bridge between a firm's past and its future by capitalizing on path-dependent investments while always searching for new prospects and creative applications of explicit and tacit knowledge. Brelade and Harman (2001) supported this notion, offering that HR management professionals as bottom-line decision makers have an important role to play, especially in the development of knowledge management.

Authors writing about HR management and knowledge management (Gubbins & Garavan, 2005; Parise, 2007; Storberg, 2002; Vosburgh, 2003) suggested that today's organizations require the capability of HR management professionals to access timely expertise, and this is most likely accomplished through workers' personal or social networks or the informal connections and relationships among employees where much knowledge sharing occurs and very often where critical work gets done.

While HR leaders' role in working with tacit and explicit knowledge has been

expected to require a set of skills (Soliman & Spooner, 2000), HR leaders' mission is to

support the advancement of business goals and to develop employees (Fleetwood &

Hesketh, 2006; Hendrickson, 2003; Lipiec, 2001). As Brelade and Harman (2001)

pointed out,

> The development of a knowledge-based economy is giving knowledge workers
> the power that arises from the ability to solve critical contingencies facing the
> organization. This is challenging existing power relationships, and means that
> knowledge workers will be increasingly able to determine that they are managed
> in ways acceptable to them. For managers, this will involve a paradigm shift
> where they see themselves as facilitators rather than controllers, and the role of
> HR will be to support them in making this transition. The changing power
> relationships will also impact on the role of HR and the HR agenda—moving it
> further in the direction of flexible, employee-centered approaches based on
> consensual models of managing. (p. 33)

Drucker (2005) argued, "Success in the knowledge economy comes to those who

know themselves—their strengths, their values, and how they best perform" (p. 100).

Drucker added that the "secret of effectiveness is to understand the people you work

with . . . so that you can make use of their strengths" (p. 107).

Small and Sage (2006) challenged HR leaders to create continuous learning

opportunities for knowledge workers, as they are the lifeblood of knowledge-age

organizations. Small and Sage's challenge struck at the core of two key roles of HR

leaders: valuing and developing employees (Bhattacharya & Wright, 2005).

Bukowitz, Williams, and Mactas (2004) warned,

> Intellectual capital is often referred to as the "hidden value" of an organization. It
> is that hard-to-define property that everyone knows is worth a great deal but finds
> difficult to express in monetary terms. Leveraging value from intellectual capital
> can involve anything from the establishment of a more aggressive licensing policy
> for the company's under-utilized but patented technology (intellectual property)

to more people-focused activities such as transferring best practices across the organization, creating communities of practice that encourage new forms of innovation, or eliciting tacit knowledge so that the real keys to successful performance are available to the organization at large. (p. 43)

According to Bukowitz et al., the most important role for HR leaders in all organizations is to develop business success through the development of knowledge management.

HR leaders have an opportunity to be proactive in recognizing knowledge management capabilities as a hierarchy that progresses from acquired knowledge to more complex unique and creative knowledge (Tsoukas & Vladimirou, 2001). Tsoukas and Vladimirou (2001) emphasized, "Knowledge is a flux mix of framed experiences, values, contextual information, and expert insight that provides a framework of evaluating and incorporating new experiences and information" (p. 974). This is worthy of careful consideration by HR leaders because it is understood that the employees of the organization are truly the chief source of knowledge creation and knowledge generation (Wright, Dunford, & Snell, 2001). Wright et al. (2001) stated that "growing acceptance of internal resources as sources of competitive advantage brought legitimacy to HR's assertion that people are strategically important to firm success" (p. 702).

HR leaders need to treat these knowledge workers with utmost respect and to recognize and reward them appropriately because organizational creativity and innovation starts and ends with them (Haesli & Boxall, 2005). As opined by Haesli and Boxall (2005), "There is much about knowledge that resides within individuals and communities that cannot be managed or cannot be managed in straightforward ways" (p. 1971).

HR leaders will need to be mindful that rewarding knowledge workers for outstanding job performance will only make their task easier as they continue to develop and lead knowledge management initiatives (Ball & Gotsill, 2011). Bhattacharya and Wright (2005) confirmed that a firm's human capital, which consists of the workers and the collection of their knowledge, skills, and practices, helps management make informed decisions. HR can acquire human capital by recruiting knowledge workers, and it can develop human capital through training and work experience (Elias & Scarbrough, 2004).

Consequently, according to Achieve (2012),

By 2018, the United States will have 46.8 million job openings. Thirty million of these jobs will require some kind of postsecondary education, and there will be a shortfall of 3 million individuals with the appropriate level of education to fill them. (p. 3)

Lussier and Hendon (2013) stated that there are "too few knowledge workers with too many knowledge jobs open" for HR leaders to have to fill (p. 11). Furthermore, A. P. Carnevale, Smith, and Strohl (2010) noted,

Between 2008 and 2018 there will be just under 47 million job openings, which will include 14.4 million new and 32.4 million replacement jobs. Some 29.9 million of these openings—63 percent total—will require at least some college education. (p. 26)

Future of Human Resources Work

Lawler and Boudreau's (2009) survey posed the question, "What does HR need to do to become a strategic business partner?" (p. 134). Their findings reflected that there was some need for change; however, it was not necessarily the kind of change they were seeking. They concluded,

There is good reason to believe that if organizations increasingly pursue strategic focuses and management approaches that draw on deep and widespread human capital excellence, HR will change. Our belief is that this will be more likely a function of HR responding to organizational changes than HR driving those changes. (Lawler & Boudreau, 2009, p. 134)

Additionally, Table 2, from Boudreau and Ramstad's (2007) study, illustrates HR professionals' focus on administrative and service goals rather than on strategic decisions. The authors noted, "The data vividly reveals a profession that is getting better and better at the traditional paradigm" (Boudreau & Ramstad, 2007, pp. 7-8).

Table 2

How HR Professionals Actually Spent Their Time, 1995-2004

Percentage of time spent on…	1995	2001	2004
Maintaining records	15.4%	14.9%	13.4%
Auditing and controlling	12.2%	11.4%	13.4%
Providing HR services	31.3%	31.3%	31.7%
Developing HR systems and practices	18.5%	19.3%	18.2%
Serving as strategic business partner	21.9%	23.2%	23.3%

Note. Adapted from *Achieving Strategic Excellence*, by E. E. Lawler III, J. W. Boudreau, and S. Mohrman, 2006, Palo Alto, CA: Stanford University Press, as reprinted in *Beyond HR: The New Science of Human Capital* (p. 8), by J. W. Boudreau and P. M. Ramstad, 2007, Boston, MA: Harvard Business School Press.

Survey results from a study by Cappelli (2008) suggested that opportunities for career growth, learning, and development and performing exciting and challenging work are some of the most important factors in determining employees' engagement and commitment to their current employers. As a result, as the economy improves, high-achieving employees may be looking to leave their organizations if they do not believe

they have adequate opportunities to develop or move to positions in which they can utilize their skills (Cappelli, 2008).

Talent Management

Literature addressing organizations' talent management references the HR management practices includes attracting, retaining, developing, and motivating highly skilled employees and managers. This speaks to the organizations' need to recognize that all HR practices are interrelated, aligned with organizational goals, and help the organization manage talent to meet its business goals (Attafar, Soleimani, Shahnazari, & Shahin, 2012).

Technological solutions to managing knowledge are capable of aiding in capturing and storing employee knowledge for the benefit of the organization (Davenport & Prusak, 1998; McCall et al., 2008). However, the existence of collaborative tools and technology does not guarantee that knowledge management initiatives will succeed (Harris, 2005). Technology by itself does not create knowledge or dictate that it is to be shared or used. Keskin (2005) noted that since knowledge "only flows through the technology" and actually "resides in people" (p. 171), the role of 21st-century HR management professionals to effectively manage knowledge is to create an environment that gives knowledge workers the ability to experiment, share, and learn from each other.

Warehouse Distribution

In Southern California, the Inland Empire is among the biggest product distribution markets in the United States and is experiencing a boost in development.

Nisperos (2015) quoted an expert as explaining, "'Last year, 20 percent—one out of every five—jobs created in the Inland Empire was created by the logistics sector, which is warehousing, distribution and trucking,' said John Husing, chief economist for Inland Empire Economic Partnership" (para. 3). Also, the *Inland Empire Quarterly Economic Report* stated that in California, there was a growth of 36.6% of private sector jobs in the Inland Empire from 2011 to 2015 (Husing, 2017). Specifically, 57% of this growth came from the logistics operations, which had the largest growth due to the continued increase in imports at the ports of Los Angeles and Long Beach, and the expansion of distribution centers that process goods that are purchased on the Internet in Southern California (Husing, 2017).

The primary role of warehouses is to serve as buffers in the flow of inventory along the supply chain (Baker, 2007; Gu, Goetschalckx, & McGinnis, 2007). During the 21st century, total U.S. business inventories have been growing consistently and reached $2.269 trillion in 2012 (Council of Supply Chain Management Professionals [CSCMP], 2013). The growth of inventories demands an increase in the warehouse capacities. However, capacity increases can only occur in much higher increments than inventory changes and result in a substantial cost. In 2012, the total logistics costs in the United States and the total inventory carrying costs grew by 3.4% and 4.0%, respectively, while the cost of warehousing, a part of inventory carrying costs, increased by 7.6% (CSCMP, 2013).

Thus, modern warehouses face a double-sided challenge of accommodating the ever-increasing demands on capacity and throughput, especially during periods of peak

demand (Berry, 1968). Failure to meet these challenges will mean imposing constraints on the ability of the warehouse to store the required volume of goods, handle the required goods flow, or both. In the long term, a single warehouse firm can address the growth of operations through planned warehouse expansion, such as moving to larger premises or renting adjacent or remote warehousing space to complement the existing facility. Larger multiwarehouse firms may have an additional option of redistributing finished goods flows based on changing the product mix or geographical areas served by individual warehouses. Warehouses of raw materials for manufacturing firms may lack this option (Berry, 1968).

Moving to a larger facility or constructing a new warehouse is a major decision likely to be made by senior management since it involves substantial capital resources and coordination across the departments of the organization beyond warehousing. It is also one that takes considerable planning and time. It is rare that this long-term process can be precisely synchronized with the dynamic changes in modern high-paced warehouse operations (Swamidass & Newell, 1987).

Warehouses may reach limits in their storage capacity or throughput before long-term solutions are made. In these situations, managers have problems with overflowing product in storage, long lines of trucks waiting for loading and unloading, complaints from customers and/or managers in other departments within their own organizations, or countless other challenges arising at times of limited or inadequate capacity of warehouse resources (Berry, 1968).

**Warehouse Human Resources
Management**

Outside of operations research, a considerable body of literature regarding warehouse HR management has been published in supply-chain-management journals. Most studies have recognized the critical importance of availability and effective management of HR to warehouse operations (Autry & Daugherty, 2003). There have also been indications of problems with employee job satisfaction and turnover in warehouses, with turnover exceeding 100% in the worst cases (Murphy & Poist, 1992). However, smaller warehouses have been found to do a better job of attracting and retaining human capital (Min, 2007). Only two ways to match the workload with the availability of personnel appear to be considered in the academic literature. Some studies have emphasized efficient labor scheduling and workload forecasting that "minimizes labor costs while maintaining service commitments" (Sheehan, 1989, p. 35) whereas most other work has considered ways to simply attract more employees and do a better job of retaining them, such as through higher job satisfaction (Autry & Daugherty, 2003; Murphy & Poist, 1993).

There does not appear to be literature that has considered the possibility of operational tradeoffs between warehouse labor and other resources. The closest to this was the study by Sanders and Ritzman (2004) that considered the flexibility of warehouse personnel in itself (through cross-training) to be used as a tool to offset workload forecast errors. However, labor is frequently the most flexible resource in the warehouse (Autry & Daugherty, 2003).

The new global landscape has forced organizations to improve on existing knowledge deficiencies in their workforce to satisfy the customers and maintain value in the marketplace. The workforce of the future will be depicted by different genders as well as a wide array of ethnicities, languages, values, and cultural backgrounds (Murphy & Poist, 1993). Organizations will be expected to operate in a complex, global arena demanding high levels of employee performance in order to gain competitive advantage. Consequently, HR management professionals are being challenged to continuously reinvent themselves by embarking on refining knowledge categories as a strategic effort (Brewer & Brewer, 2010; Hislop, 2003; Nicolini, Powel, Conville, & Martinez-Solano, 2007; Soliman & Spooner, 2000).

The key component in an organization's competitive position is the effectiveness of its talent supply. Despite a considerable body of literature on talent, there are very few academic papers that have addressed the problem of the shortage of logistics and supply-chain talent. In the article "Supply Chain Talent: A Practical Approach to Hardening Soft Skills," Stein (2015) shared a story about what the Caterpillar organization is doing with encouraging the senior management team to focus on developing their soft skills in the areas of leadership, communication, and teamwork, in order to go beyond technical proficiency.

According to a press release from DHL (2015),

At the start of 2015, DHL Global Forwarding published a study on talent shortage in the automotive industry's supply chain. The study presented current problems in the industry and showed the steps that companies can take to overcome the talent crises. (para. 5)

Effective knowledgeable management will provide the best support for organizations to be in a position to compete in the future. This will require a carefully crafted strategy by HR management professionals in developing a knowledge management vocabulary capable of meeting the challenges of a global environment (Pearson, 2014).

Knowledge Management

Several organizations are now embracing the notion of knowledge management as a concept that refers to a set of practices to gain competitive advantage by helping them reach key markets and cater to a demanding customer base. For example, the retailer Zara does not have extensive inventories (Capell, 2008). Zara has its own Internet-based worldwide distribution network linked to its checkout registers around the world. This organization uses virtual online communities to improve efficiency (Capell, 2008). Brewer and Brewer (2010) posited that HR leaders in these organizations realize that from a resource-based perspective, the value of a company is increased with proper knowledge management, making this a crucial strategic imperative. The creation of an environment conducive to knowledge sharing requires the consideration of both sociopsychological factors and people management practices (Cabrera & Cabrera, 2005).

Knowledge

How organizations manage knowledge is increasingly becoming important for competitive advantage and organizational success. When an employee leaves an organization due to retirement, there is a risk of an organization's wealth of knowledge leaving, unless it has been adequately transferred. These concerns impact, in particular,

the knowledge-intensive sectors of high-technology, healthcare, aerospace and defense, energy, and other technical and scientific industries that may suffer important gaps in knowledge (DeLong, 2004; Rothwell, 2011; Trautman, 2010). DeLong (2004) stated, "Knowledge is generally classified as either explicit or tacit. Explicit knowledge is knowledge that has been articulated and documented, while tacit knowledge is knowledge that has been articulated" (p. 83). However, knowledge transfer is not the only problem. The ability of an organization to retain this knowledge will be considerably lowered in the future since the labor pool of available replacements will have shrunk (Calo, 2011). Therefore, more knowledge needs to be assimilated by fewer individuals than is necessarily possible within a certain time frame (DeLong, 2004). In addition, even if knowledge has been effectively captured from the retirees, it is nearly impossible to have grasped the full wealth of knowledge possessed by them (DeLong, 2004). This is due to the "spectral properties of knowledge existing on several planes simultaneously," as described by Ball and Gotsill (2011, p. 46).

Knowledge has many definitions. DeLong (2004) defined knowledge from a corporate perspective. He asserted that knowledge is the capacity to act and make decisions effectively within the context of organized activities (DeLong, 2004). Jashapara (2004) described knowledge as the ability to use information and data to draw conclusions and make decisions, what he called "actionable information" (p. 189). Leonard and Swap (2005) took these ideas a step further by more intricately describing the kind of knowledge contextual to the subject of knowledge retention. They brought up the notion of the existence of *deep smarts*, a metaphor to describe the engrained

knowledge that exists in employees' minds, built on experiences and social contacts within an organization (Leonard & Swap, 2005). Knowledge within an organization can be defined as a collective ability: knowing about something, knowing how to do something—Jashapara's (2004) actionable information—and knowing who to contact when in need. Leonard and Swap (2005) noted this ability is accumulated through experience. This terminology has commonly become known as *know-what*, *know-how*, and *know-who* (Leonard & Swap, 2005).

What does knowledge really mean in the organization, and why should employers care about potential knowledge loss? Jashapara (2004) described knowledge as something that enables decision-making, then actions, and builds experiences: actionable information. This actionable information gives employees the ability to make better decisions and promotes an organizational environment that values communication, sharing, and creativity (Jashapara, 2004). From an organizational point of view, this ability is clearly important and advantageous (O'Dell & Grayson, 1998). As a result, knowledge and effective knowledge management have progressively come to be understood as providing a competitive advantage and value creation for organizations to be successful. Therefore, it should be apparent that a loss of knowledge is going to weaken an organization's ability to compete and create value (O'Dell & Hubert, 2011).

Data

Jashapara (2004) observed that the description of data is dependent on whether the data are looked at from the receiver's or sender's point of view. As receivers, humans receive data as signals from the external world through their senses. These data

"stimulate our brain and [are] shaped through our experiences and saved in our minds as facts" (Jashapara, 2004, p. 13). However, these facts can be distorted by individuals' own perceptions. From the sender's point of view, data are transmitted to other humans' senses. A sender of data can also distort the data to a certain extent so that they are understood wrongly (Jashapara, 2004).

Types of Knowledge

For organizations to be able to successfully capture and transfer knowledge from retiring employees, they need to understand the different types of knowledge that exist (Ball & Gotsill, 2011). There are three general types of knowledge: (a) explicit knowledge, (b) implicit knowledge, and (c) tacit knowledge (Nonaka, 1994).

Explicit knowledge is knowledge that can easily be expressed in speech or text form (Nickols, 2000). This knowledge is objective and rational. The biggest portion of know-what could be said to be composed of explicit knowledge (Davenport & Prusak, 1998). Implicit knowledge is knowledge that can be expressed through the action of doing something, but it is unintentionally or unconsciously expressed (Ball & Gotsill, 2011). On the other hand, tacit knowledge is the type of knowledge that cannot be articulated directly, for example, the knowledge of how to ride a bike. From an organizational perspective, tacit knowledge is often knowledge that a worker has never tried to make explicit. This is knowledge that is subjective and experiential (Davenport & Prusak, 1998).

The process flow diagram in Figure 1 is a good tool for understanding how to organize knowledge by following the process. The input, or *start*, is a fact, piece of

information, or skill that can be analyzed (Nickols, 2000). Asking whether it has been articulated may lead one to suspect that it is explicit. If not, it is necessary to ask if it can be articulated, which will lead one to believe that it is either tacit or implicit (Nickols, 2000). Although simple, this diagram is a starting point to understand how a person's knowledge bases should be captured. Different methods are needed with respect to which knowledge type one seeks to capture as well as store (Ball & Gotsill, 2011).
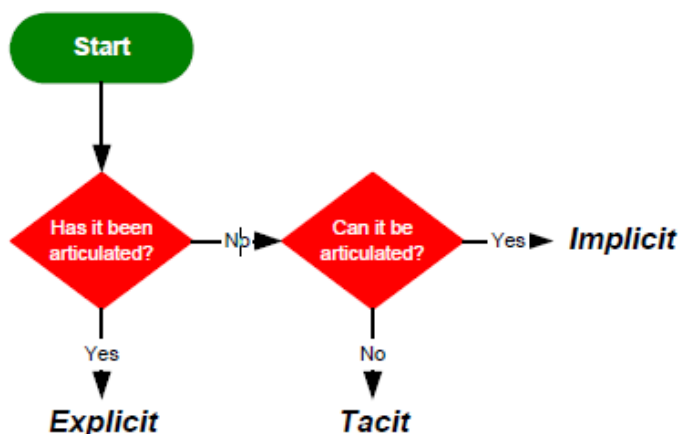
Figure 1. Distinctions between tacit, implicit, and explicit knowledge. From *The Knowledge in Knowledge Management* (p. 3), by F. Nickols, 2000 (http://studylib.net/doc/14781120/the-knowledge-in-knowledge-management).

However, most theory would challenge the Figure 1 diagram by Nickols (2000) because of its simplicity. Even though it is a helpful tool, it postulates that knowledge only exists within one of the three levels. However, the generally accepted knowledge theory posits that knowledge exists in a continuum (Polanyi, 1966) and on a spectrum (Leonard & Sensiper, 1998), meaning that it can move between levels and that it can exist on multiple levels.

As shown in Figure 2, tacit and explicit knowledge are at opposite ends of the spectrum. Implicit knowledge exists somewhere in the middle (Leonard & Sensiper, 1998). Nonaka and Takeuchi (1995; Nonaka, 1991) were probably the most prominent in bringing this to light. They built on Polanyi's (1966) categories of tacit and explicit knowledge to posit that knowledge can be converted from one form into another and that different knowledge on different levels can also be shared between humans. A model illustrating these conversions, sometimes known as the SECI (socialization, externalization, combination, and internalization) model, is shown in Figure 3.
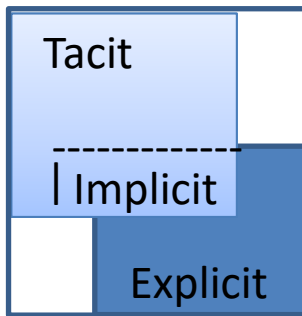
Figure 2. Tacit and explicit knowledge are at opposite ends of the spectrum. From Larry Todd Wilson, as recreated in *Surviving the Baby Boomer Exodus: Capturing Knowledge for Gen X and Y Employees*, by K. Ball and G. Gotsill, 2011, p. 46 (Boston, MA: Course Technology, Cengage Learning).

In addition, detailed descriptions of each conversion are given, as interpreted by Jashapara (2004), followed by some arbitrary examples of its functions in a corporate context. The step moving from tacit knowledge to tacit knowledge is known as *socialization*, which can be achieved through shared experience and interaction. For example, an employee may learn from another employee by working together.
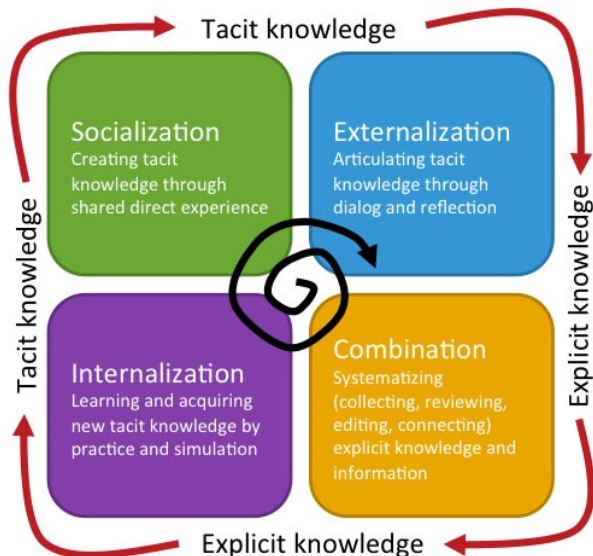
Figure 3. The "engine" of knowledge creation. Illustration of knowledge conversion progressing in a knowledge-creating organization. From *The New Edge in Knowledge: How Knowledge Management Is Changing the Way We Do Business*, by C. O'Dell and C. Hubert, 2011, p. 50 (Hoboken, NJ: John Wiley & Sons).

The progression from explicit knowledge to tacit knowledge is the process of

combination. Here, existing knowledge is reconfigured by sorting, adding,

recategorizing, and recontextualizing it, leading to new explicit knowledge. For example,

a new employee may be asked to convert a database from outdated software to newer

software, where the employee learns and creates new explicit knowledge. Converting

tacit knowledge to explicit knowledge, which can be the most complicated

transformation, is known as *externalization*. This externalization uses metaphors and

figurative language to try to explain something that is difficult to explain concretely. For

instance, the way an experienced salesperson makes a sale is difficult to describe in detail

because it involves so many subjective and emotional factors. Therefore, explaining it

figuratively may assist in externalizing it. Finally, the process of converting explicit knowledge to tacit knowledge is known as *internalization*. This is something that happens through repetition and gained experience (Jashapara, 2004).

Tacit knowledge. A common understanding is that tacit knowledge exists everywhere on some level and therefore also within organizational settings. The implication of this, with relation to this research problem, is that there exists knowledge that can be extremely difficult to transfer from a retiree to a successor. While explicit knowledge can be relatively easily transferred from person to person (Davenport & Prusak, 1998), a possessor of tacit knowledge is often not even fully aware of the tacit knowledge that he or she possesses. Leonard and Swap (2005) believed the only way for a successor to absorb tacit knowledge is to learn it from the ground up through experience combined with observation, or to relearn it entirely on his or her own.

Lost knowledge and its implications. If, as defined by Jashapara (2004), knowledge is presumed to be a capacity for action and making decisions effectively, then lost knowledge can be seen as a diminished capacity for taking action and making decisions effectively within the context of organized activity. DeLong (2004) described lost knowledge through the notion of *organizational memory*. Organizational memory is characterized by three main activities, which are the acquisition, storage, and retrieval of knowledge (Walsh & Ungston, 1991). DeLong (2004) encompassed these as part of knowledge retention activities. He asserted that knowledge retention is, effectively, the act of building organizational memory. In effect then, lost knowledge could be said to diminish organizational memory (DeLong, 2004).

Ball and Gotsill (2011) observed that the indirect financial cost of losing knowledge is also an important factor here, which links in with two things: the awareness of losing knowledge and measurements for "counting knowledge assets" (p. 92). The complexity of knowledge retention programs has proven to be very time-consuming and requires a lot of effort from all areas of an organization. Therefore, it should be recognized that knowledge retention is "definitely not free" (Ball & Gotsill, 2011, p. 92).

Levels of Learning

According to Dixon and Flood (1993), the three levels of learning shown in Figure 4 can be distinguished: individual learning, group learning, and organization learning.
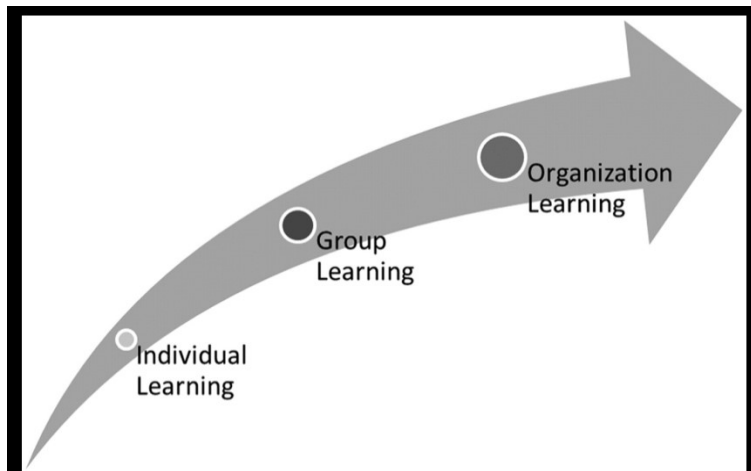
Figure 4. Levels of learning. From "Conceptual Paper: Organizational Learning and Its Practices," by M. Dasgupta, 2012, *SAGE Open*, p. 4.

In behavioral psychology theory, the process of *unlearning* (Hedberg, 1981) is brought up, which closely resonates with the notion of lost knowledge, or as a process, losing knowledge. Unlearning actually occurs while learning, in the sense that new knowledge replaces the old. However, Hedberg (1981) also pointed out that problems often are triggers to unlearning. One of the main triggers to organizational unlearning is people; specifically,

> when key individuals leave the organization, [they take] with them the experiences of procedures and processes from the organizational memory. Assuming that experience of procedures and processes are an essential part of an organization's knowledge base, the retirement of employees who also are possessors of experiential knowledge can have a vast negative unlearning impact on an organization. Therefore from a behavioral psychology perspective, organizations losing knowledge is very similar to organizational unlearning. (Jashapara, 2004, p. 75)

Knowledge Management

Knowledge Management Definitions

Davenport and Prusak (1998) stated that the idea of managing knowledge as a competitive asset to a corporation is new to the general workplace. This is where knowledge management as a discipline fits in. Ball and Gotsill (2011) summarized knowledge management as comprising knowledge capture, knowledge transfer, and knowledge retention. Jashapara (2004) described knowledge management as something interdisciplinary, combining many different dimensions. Jashapara defined knowledge management as effective learning processes that have to do with research, use of knowledge, and sharing knowledge (tacit and explicit). Relating to the definition put forth by Ball and Gotsill (2011), Jashapara (2004) stated the main purpose of knowledge

management is to foster an organization's intellectual capital and improve performance. He also listed the different disciplines in which knowledge management is rooted: strategy, psychology, HR, philosophy, sociology, economics, anthropology, and other areas. Also, Jashapara shared that knowledge is categorized into the content that overlaps in all these disciplines. These are strategic management, organizational learning, and knowledge management tools. Within strategic management, there are learning organization, culture, intellectual capital, and knowledge management systems. Jashapara noted that the importance in this area is not to identify how these factors are interlinked but to show the cross-disciplinary properties of knowledge management and portray how many very different kinds of factors can have an impact on knowledge management, and knowledge retention, through these links.

Wenger, McDermott, and Snyder (2002) remarked that moving the ideas about knowledge management from theory to a practical approach has been slow in developing. The reason identified was that business executives are not clear on how to develop "an intentional knowledge strategy" (Wenger et al., 2002, p. 8). The difficulties encountered with knowledge management practice have caused those in the trade to be confronted with "slashed budgets, eliminated KM [knowledge management] departments . . . the elimination of chief knowledge officers," and the prediction of "the death of KM" (Pollard, 2005, p. 55).

In a criticism of knowledge management practice, Elmholdt (2004) stated, "Despite the resources invested, the policy of knowledge management has proved difficult to accomplish in practice" (p. 328). Also, Elmholdt's study found that "the

guiding metaphor of knowledge as an entity that can be owned and controlled implies a superficial understanding of the knowledge informing professional practice" (p. 338). Thomas, Kellogg, and Erickson (2001) viewed the current knowledge management paradigm as "overly tidy," where "a number of new pieces [need to be added to the knowledge management] puzzle" (pp. 863-864). Knowledge management "must be approached by taking human and social factors into account," and knowledge communities may be the key to successful knowledge management projects (Thomas et al., 2001, p. 881). These examples of recent research and others (dePaula & Fischer, 2005; B. Gupta, Iyer, & Aronson, 2000; Hildreth, Wright, & Kimble, 1999; McAdam & McCreedy, 1999) have indicated that the current understanding of the knowledge-sharing process is limited.

Knowledge Sharing

Wang and Noe (2010) identified knowledge sharing as one of the most critical issues in knowledge management processes in their article "Knowledge Sharing: A Review and Directions for Future Research." In addition, they recognized that "research has shown that knowledge sharing and combination is positively related to reductions in production costs, faster completion of new product development projects, team performance, firm innovation capabilities, and firm performance" (Wang & Noe, 2010, p. 115). In a similar study, Chong and Choi (2005) indicated that more understanding is necessary with regard to a knowledge-sharing process and stated that existing knowledge management models provide minimum guidance and understanding regarding what is needed to get knowledge workers to adopt appropriate knowledge system behavior.

These studies are indicators of the need to improve understanding of the knowledge-sharing experience.

Current researchers (Birkinshaw, 2001; DeLong, 2002; DeTienne, Dyer, Hoopes, & Harris, 2004) have reported that the majority of knowledge management efforts are not successful, resulting in dissatisfaction with knowledge-based initiatives. Knowledge management scholars (Alvesson, 2000; Currie & Kerrin, 2003; Haesli & Boxall, 2005; Storey & Quintas, 2001; Swart & Kinnie, 2003) have offered the perspective that while organizational competitiveness is based on knowledge generated from within, HR management professionals are responsible for the larger portion of that knowledge. Soliman and Spooner (2000) supported this argument, offering that a major portion of the HR management professional role is in identifying and filling the knowledge gaps of the organization. According to Scullion, Collings, and Gunningle (2007), "The role of human resource professionals is changing, to where it must parallel the needs of his or her changing organization" (p. 310).

Knowledge management can improve the quality of an organization's workforce through increased efficiency and productivity (Brelade & Harman, 2001). According to Cowell (2006), organizations that fail to implement a corporate culture that incorporates strategic planning for rewarding knowledge generation will experience low productivity, high absenteeism, and high turnover. T. Carnevale (2005) observed that they will find it difficult, or even impossible, to compete in an environment in which knowledge management is evolving. These organizations will lose in the short term, forcing them to

make strategic changes that will be crucial to their long-term success (T. Carnevale, 2005).

Knowledge Management Theories

Theorists Nonaka and Takeuchi

The theory of Nonaka and Takeuchi (1995) described the processes of interplay between explicit and tacit knowledge structures that lead to the creation of new organizational knowledge. Nonaka and Takeuchi argued that intention is necessary for successful knowledge creation in a single organization situation. As the knowledge may be tacit or explicit, it requires different means to acquire it. Knowledge acquisition is ideally driven by strategy in which an organization determines what knowledge is needed (Judge, 2008), what it has, and then fills in the gap by developing new knowledge or acquiring it.

Introducing Knowledge Acquisition

Organizations need an inexpensive and quick means to find and correctly use internal or external knowledge. Knowledge acquisition has several roles: to codify explicit knowledge, to convert tacit knowledge to an explicit form and codify, and to acquire tacit knowledge as explicit metaknowledge (i.e., knowledge about knowledge; Nevo & Wand, 2005). This is generally a directory of who knows what and how to contact them. The purpose of the codification is to make it easy to organize, locate, share, store, and use the knowledge (Davenport & Prusak, 1998). Common materials containing codified knowledge are manuals, spreadsheets, decision support systems, and

procedures (Zollo & Winter, 2002). However, the codification process is generally expensive, and it is difficult to code for universal understanding, too. All these codified materials exist within the organization's memory only. So, in order to overcome this deficiency, organizations need to use the information technologies to acquire and share the knowledge. The common theme from the literature recommended distinguishing between a codification strategy and a personalization strategy (Liebowitz, 2009).

Theory of Hansen, Nohria, and Tierney

A more general approach to the analysis of knowledge management strategies is the one introduced by Hansen, Nohria, and Tierney (1999), who distinguished between a codification strategy and a personalization strategy. Procedures to elicit knowledge from employees, convert it into a systematized form, and store it in a companywide repository are core activities in this codification strategy. However, knowledge is often very implicit and tacit; it is built on personal experiences and reflected in skills. In contrast, the personalization strategy focuses on the exchange of tacit knowledge and mostly emphasizes people meeting, which is interpersonal knowledge sharing. This strategy engenders a philosophy in the knowledge sharer as it enhances one's status and position when others consult the individual for his or her expertise (Hansen et al., 1999).

Hansen's Theory

Hansen et al.'s (1999) approach for managing knowledge management is one of the simplest and most widely known, and it incorporates a distinction between personalization and codification strategies. With his personalization strategy, he focused

on sharing knowledge between people and linked it to a business strategy of knowledge creation. Breaking it down further, two fundamental approaches to knowledge management defined by Hansen et al. were the process approach and the practice approach.

Process approach. The process approach predominantly focuses on how to codify organizational knowledge (Hansen et al., 1999). This can be done by applying computer technologies such as data warehousing, decision support tools, intranets, knowledge repositories, and groupware. This process will not only enhance the speed and quality of creation of knowledge but also the distribution of this knowledge within the organization (Hansen et al., 1999). Moreover, it encourages individuals to think in a fixed pattern (J. S. Brown & Duguid, 1998; Hargadon, 1998; Von Krogh, 2000). The main weakness of this process approach is that it fails to acquire tacit knowledge embedded in the firm.

Practice approach. In contrast, the practice approach to knowledge management assumes that more of the organizational knowledge is tacit (Hansen et al., 1999). This suggests that the formal processes, controls, and computer technologies may not be suitable for this type of knowledge transfer. Instead, the practice approach focuses on how to build social environments to collaborate and share tacit knowledge (J. S. Brown & Duguid, 1998; A. K. Gupta & Govindarajan, 2000; Hansen et al., 1999; Wenger et al., 2002). These communities could be informal social networks or groups that meet regularly to share insights, ideas, and best practices. Hence, successful knowledge

management initiatives ideally will include both process and practice approaches as these two complement each other.

Additional Roles and Outcomes

Many managerial tasks cannot be learned from a book; they take years of trial-and-error experience to learn. Valuable sharing of knowledge occurs in managerial staff meetings where younger managers reap the benefits of watching and learning from more experienced managers. This is also true for knowledge workers since much of the sharing of knowledge occurs by watching others execute their tasks (Judge, 2008). Knowledge sharing works more efficiently when the receiver and giver of knowledge are actively involved in the task of knowledge sharing. This dynamic relationship requires a willingness on the part of both parties to be both students and teachers of knowledge, regardless of employee age, to benefit from everyone's knowledge.

Additional Knowledge Theories

According to Schilligo (2007), one needs to identify the kinds of knowledge that will create the most value for an organization and create ways for increasing that knowledge using computer technology. Once that knowledge is identified, then one can come up with ways to acquire or generate knowledge (Cummings & Worley, 2005). One can acquire the knowledge by using strategic alliances, joint ventures, and social relationships gained through people, process, and technology.

Knowledge management activities are also affected by organizational learning processes, which can be influenced by organizational characteristics such as cultural and

leadership drivers (Cummings & Worley, 2005). These characteristics remain important in all three components of knowledge acquisition, knowledge creation, and knowledge sharing. Nonaka (1994) suggested that creating new knowledge requires the participation of frontline employees, middle managers, and executive leadership. He further argued that everyone in a knowledge-creating company is a knowledge worker (Nonaka, 1994). But why should an employee share his or her knowledge? What are the motivational factors needed? This raises a big question with this approach. At the same time, the managers are challenged with a question: How do they make this newly acquired knowledge in an organization sharable with other members of the organization?

Human Capital

The idea that knowledge management planning is a key management challenge is being recognized by HR management professionals as they strive for profitability in the global arena. Lengnick-Hall and Lengnick-Hall (2002) observed that leveraging knowledge sharing is increasingly seen as a vital strategic resource for competitive advantage. HR leaders will be required to link knowledge creation to their strategic goals, thereby making them accountable for results. It would therefore behoove managers to recognize the benefits to be derived from effective knowledge management systems and develop a plan to incorporate this in their goals and objectives (Nonaka, 1994).

Knowledge Retention

Dychtwald, Erickson, and Morison (2006) identified the CEO and head of HR as the key persons in owning the challenges of knowledge retention. The CEO is the person responsible for an organization's overall performance and sustainability. He or she sets the organization's business goals and direction while making sure that processes, capital, facilities, technology, and people are all aligned to meet those goals. The second person, the head of HR, by definition is responsible for developing and executing workforce policies and practices. The HR leader needs to make the composition of the workforce in the organization explicit to the CEO. He or she needs to monitor the age makeup, how many employees are eligible to retire, and the risks that the composition may give rise to in the future (Dychtwald et al., 2006).

HR takes certain factors into account when looking at organizational culture and planning for knowledge retention. There are three things to identify in a culture that supports knowledge retention:

1. The employees' trust in the organization: This is reflected in a collective purpose (distinguished by clear and broad goals and strategic intent, e.g., mission and vision) that should make employees feel engaged on an emotional level and thereby be motivated to share knowledge. Motivation plays a big role in knowledge sharing.
2. Support for individual development: If employees believe the organization is led is a way that takes into account their own interests, this should increase the willingness to share knowledge.
3. High level of unity and cooperation: When employees are embedded in groups and networks, there is a greater possibility for knowledge sharing and transfer to occur. (Argote, 2012, p. 168)

Employees' trust, support, and cooperation cannot be achieved without the coordination of the organization's systems, processes, and activities to support a

knowledge retention culture (Liebowitz, 2006). In a case where employees have high trust in the organization and are willing to share knowledge, nothing will happen unless there are systems in place to facilitate the transfer and management of knowledge. An arbitrary example of a system to facilitate this could be an online forum. It is also possible that the management of the organization presumes employees do not want to share knowledge while the actual problem is that there are no spaces/places (Nonaka & Konno, 1998), opportunities, or media to do so (DeLong, 2004).

Knowledge Acquisition—Relating to Learning

Huber (1991) described knowledge acquisition as the process through which organizations build their knowledge base. Identifying the knowledge acquisition processes helps to understand the core knowledge sources and resources and how knowledge has been built up. Five knowledge acquisition constructs underlie these processes: congenital learning, experimental learning, vicarious learning, grafting, and searching and noticing (Huber, 1991).

Congenital learning is inherited knowledge from the creators of an organization (Huber, 1991). Its influence is not always pronounced, but depending on the organization, it may be reflected in the way new knowledge is interpreted (Jashapara, 2004). Experimental learning builds up knowledge through learning by doing, and therefore, from a knowledge-based perspective, can be reflected in the form of stories, accounts, statistics, and reports (Huber, 1991). Vicarious learning is the learning by doing by looking at other organizations or by receiving advice from consultants or publications. This may not always be pronounced either, unless it is official, such as a

consultancy report. Grafting is a type of learning that happens when people with certain skills or knowledge are employed to fill a shortage of that skill or knowledge. These skills and knowledge, therefore, resonate to a highly individual need. Searching and noticing is a form of intentional learning whereby new knowledge is identified from within. For instance, a manager may seek to document the nonroutine, yet relevant, knowledge needed for a particular task (Huber, 1991).

Finally, understanding from where an organization's knowledge base originates is an important starting point when thinking about knowledge retention activities because it can make it easier to track down where valuable knowledge is contained in the organization and thereby also its possessors.

Knowledge Capturing

Knowledge capturing involves understanding what valuable knowledge is and how to transfer it. Ball and Gotsill (2011) emphasized that another important aspect of knowledge retention is the realization that not all knowledge can or should be captured. Therefore, it is useful to be able to identify the knowledge that actually is valuable to attempt to retain and where it resides. This entails understanding the different levels of knowledge that can exist and also understanding that a large portion of people's knowledge has not necessarily been explicated. Understanding these things helps to ensure valuable knowledge is not accidentally overlooked (Ball & Gotsill, 2011).

Rothwell (2011) outlined some steps that should be taken when identifying valuable knowledge:

1. Identify key work processes: A work process is defined as "any identifiable list of actions that lead to a result needed by the organization"
2. Pinpoint the employees who possess specialized knowledge: Within each key work process, the experts should be identified.
3. Assess the risk of losing key people: The next step is assessing what happens if an in-house expert leaves the organization. It is good to consider things like the likelihood of them leaving in the near future and what risks the loss of losing their special knowledge will pose.
4. When the key knowledge has been assessed and priorities have been set, practical ways to capture and transfer this knowledge have to be chosen. (p. 121)

There are many practical methods for capturing and transferring knowledge, and they are typically selected depending on the knowledge type that needs to be transferred.

Knowledge Capture and Transfer
Methods for Explicit Knowledge

Documentation. Documenting knowledge is very effective for capturing knowledge needed on how to complete a task. However, it may be difficult to assess how much of a knowledge base has been captured in documentation if it is not questioned after it has been done. Placing this in the realm of baby boomers leaving for retirement, if a key person were to retire, would his or her replacement be able to understand that person's knowledge in the form of documentation that he or she has left behind? One way to avoid risks of the documentation not being sufficient is to set standards and centralize documentation accessibility (DeLong, 2004; Jashapara, 2004). Basically, the documentation has to be formulated in such a way that it is embedded in the actual tasks of the work (e.g., in a logical order).

Interviews. Interviews are a very good way to capture valuable knowledge, especially when there are time constraints such as in the baby boomer retirement case.

Interviews can be planned and executed quickly with low costs. However, the biggest problem with conducting interviews is in translating the raw interview data (e.g., a digital recording) into knowledge that is useful for the people who need it (DeLong, 2004). Therefore, a standardized, semistructured interview guide needs to be carefully built for the responses to be categorized in an easily understood manner—standardized so it can be reused, and semistructured to allow for adaptability (Liebowitz, 2009).

Training. Training differs from documentation and interviews because it entails the transfer of knowledge to the specific people who need it instead of just capturing it for the organization (Rothwell, 2011). In this sense, documentation and interviews are techniques for capturing knowledge and therefore are incomplete in the context of knowledge retention.

**Methods for Transferring Implicit
and Tacit Knowledge**

Storytelling. Storytelling is one of the most common ways knowledge is transferred daily within organizations. Stories are the way in which people generally give meaning to their experiences. They can reveal what employees think of their foremen, colleagues, and customers. If management were to listen to all these stories, it would help shape an image of what the organizational culture is like (Schein, 1992). Concerning transferring knowledge from baby boomers to replacements, storytelling can be used as a method by simply having a baby boomer tell stories about his or her work experience to the replacement. Stories are effective in transferring both implicit

knowledge of how to get things done and tacit knowledge reflecting values and how those values shape behavior (Jashapara, 2004; Rothwell, 2011).

Mentoring. Mentoring is probably one of "the most effective ways of transferring implicit and tacit knowledge between two individuals" (Rothwell, 2011, p. 136). Knowledge shared through mentoring encompasses everything from detailed technical facts and skills to cultural values. The ideal situation would require the mentor or coach (the baby boomer) to be motivated to teach and to be skilled at teaching and would require the protégé (the novice) to be motivated to receive knowledge in a respectful and goal-oriented relation between both parties (Leonard & Swap, 2005).

Mentoring can help transfer technical, functional, and leadership knowledge (DeLong, 2004). It can also help a protégé learn about who does what in an organization. In the mentoring process, the protégé develops the social contacts that are needed for the particular work tasks and captures the cultural and political knowledge of organizational values and acceptable behavior. Much of the latter is absorbed through observation of the mentor, as the protégé increasingly comes to see the mentor as his or her role model or symbol for how things should be done (DeLong, 2004). Even though these positive aspects often arise in mentoring, there are also factors that can hinder successful mentoring.

After action reviews (AARs). AARs are analyses that are made after a task has been completed in an organization (Liebowitz, 2009). Organizations use AARs to generate, retain, and retrieve knowledge that has arisen as a byproduct of organizational activity (DeLong, 2004). They tend to revolve around four aspects of a task: what was

supposed to happen, what happened in reality, why there were differences in expectations and outcome, and what can be learned and done differently next time (Collison & Parcell, 2001). If AARs are well documented and intended for knowledge-transfer purposes, they can transfer knowledge to replacements of baby boomers (Rothwell, 2011).

Communities of practice (CoPs). CoPs can be described as communities or networks that develop naturally within organizations. They contain groups of people who have similar interests, values, or problems, and therefore communication between members is natural (Liebowitz, 2009). CoPs naturally support the retention of knowledge in organizations, and promoting them is "one of the main ways to enhance the sharing of tacit knowledge" (Jashapara, 2004, p. 299), meaning they should be encouraged. A well-organized CoP can help a new employee feel unified with the rest of the organization as he or she takes part in learning from experts' discussions (DeLong, 2004).

Investing in Intellectual Capital

One major consideration of optimal knowledge is the involvement of the financial department in the integration of a knowledge retention strategy. This is to assist in the measurement processes in assessing the value of, and hence dependence on, the organization's intellectual capital (i.e., knowledge base) as well as calculating investment costs and returns in initiating a knowledge retention strategy (Liebowitz, 2004).

It has been noted that market conditions tend to define the type of knowledge relied on (Eisenhardt & Martin, 2000) because the value of certain knowledge is not necessarily the same across time and across organizations acting in different markets.

Organizations that act in "stable and moderately dynamic market conditions are much more dependent on their tacit knowledge base, as opposed to if they were in high-velocity and volatile markets" (Jashapara, 2004, p. 80). In any case, however, organizations tend to notice the value of knowledge only when it has been lost.

Sveiby (1997) offered an overview of the process of investing in knowledge. In very broad terms, investments can be in the form of either tangible or intangible assets. Investing in knowledge retention is an investment in intangible assets because "knowledge is an intangible asset which can be measured in intellectual capital" (Jashapara, 2004, p. 268). Intellectual capital is defined as the difference between market value and net book value of an organization (Sveiby, 1997).

Knowledge Retrieval

A similar theoretical concept to knowledge management is that of organizational learning. Easterby-Smith (1997) identified the disciplines of organizational learning as psychology, management science, sociology, strategy, and cultural anthropology. Although the study of organizational learning is much newer than knowledge management, it has played an important part in the foundation of the literature on knowledge management (Jashapara, 2004). Most of the research on organizational learning is of a qualitative nature because of the difficulty to produce effective quantitative measurements, according to Jashapara (2004).

Organizational Learning

Organizational learning is tied with knowledge acquisition. The definition of organizational learning is the process of improving actions through better knowledge and understanding (Fiol & Lyles, 1987). Huber (1991) presented organizational learning as a framework with a behavioral perspective. His framework can be used to describe how organizations have created their organizational knowledge base. As posited by Argyris (1999), a learning organization's getting and staying ahead means the productive use of all knowledge in the organization by all of its members. The framework encompasses four functions: knowledge acquisition, information distribution, information interpretation, and organizational memory (Huber, 1991). From a knowledge retention perspective, the two most prominent and relevant functions are knowledge acquisition (it tells where and how an organization's knowledge base forms) and organizational memory (this is what suffers when knowledge is lost). According to Huber (1991), "Knowledge acquisition is the process by which knowledge is obtained. Organizational memory is the means by which knowledge is stored for future use" (p. 90).

Organizational Memory

The other relevant function in Huber's (1991) framework for organizational learning is organizational memory. In this context, it can be considered as the collective knowledge base of an organization. Figuratively, this is what an organization can remember. Jashapara (2004) stated,

> It is often scattered, with some employees having a larger chunk of organizational memory in their individual minds, and are important possessors of knowledge. If

they leave an organization due to retirement, that part of the organizational memory may be forever lost. (p. 73)

Jashapara recognized the importance of Huber's (1991) organizational memory by identifying some circumstances where it can be invaluable to an organization. For example, it may include knowledge of how to diagnose an error in a piece of complex technology or the knowledge of an organization's skills, experts, and resources (Jashapara, 2004). These ideas resonate closely with the notions of know-how and know-who, or tacit and implicit knowledge, the difficult knowledge types that employees possess.

<div align="center">

Knowledge Retention

</div>

One of the core functions in knowledge retention is the transfer of knowledge from retiring individuals to the organization. The literature identifies several barriers to knowledge transfer, but one of the recurring ones is organizational culture (Pfeffer & Sutton, 1999). In other words, an organization needs to make sure that its culture is supportive of knowledge transfer for knowledge retention to be successful. DeLong (2004) pointed out that if the organizational culture does not promote knowledge sharing, there is no use in trying to implement knowledge retention.

Jashapara (2004) and A. D. Brown (1998) observed that organizational culture incorporates values, beliefs, attitudes, and assumptions that are explicated through dynamic interactions. Therefore, people are seen as members of a social system. In this manner, the organizational culture stems from a *soup* of aspects in the social environments that collectively occur (McGuire & Rhodes, 2009). The idea behind

changing an organization's culture is that it can be done from either direction. Changing norms or artifacts (which are temporary and subject to physical control) could theoretically influence the values, beliefs, attitudes, and assumptions of employees. The other approach is to directly try to influence the employees' values, beliefs, assumptions, and attitudes (Schein, 1992).

Values, Beliefs, Attitudes, and Assumptions

The values of an organization's culture exist on four different levels (Lencioni, 2002a). According to Jashapara (2004), "The failure of many knowledge management systems is more often due to cultural factors than any other ones" (p. 186). Thus, it is also important to know the difference between cultural values to avoid any confusion. These values may be described as various types: core values, aspirational values, permission to play, and accidental values.

Core values are principles that are deeply engrained and generally act as a guide to the organization's actions (Davenport & Prusak, 1998). They are sometimes traceable back to the values of the founders of the organization. Core values could be correlated with Huber's (1991) notion of "congenital learning" (p. 90). Because of the inherent properties of core values, they will never be compromised and, as such, are very difficult to change. Jashapara (2004) maintained that core values can be intentionally modified by managers through the development of value statements, keeping in mind that it is of equal importance that they reflect these values in their actions; "if they don't manifest the values in their own behavior, the effects may be employee mistrust in management and de-

motivation to work" (p. 192). However, if the values are reflected in their actions, managers can "reinforce individual commitment and willingness to give energy and loyalty to an organization. Individuals may make sacrifices and investments based on corporate values" (Jashapara, 2004, p. 193). In other words, from a knowledge retention perspective, if an organization's core values are correctly implemented, employees may be more willing to share their knowledge.

Aspirational values are values that an organization wishes to pursue. These values are often part of a strategic intent and could be distinguished as something that the organization needs for the future but currently does not have (Jashapara, 2004).

Lencioni (2002a) described permission-to-play values as the minimum required values that any employee must have in order to be accepted by social standards. This could be compared to the notion of cultural knowledge (Ball & Gotsill, 2011) and accidental values, which are the values that develop on their own with time as a reflection of the commonly accumulated values of the employees. These may be either positive or negative, depending on the aspirational values. In the context of creating a culture that supports knowledge sharing, for instance, the value of personal achievement does not promote communication between employees because it enhances competitiveness between them. This might, however, promote innovation, which may be desirable in other contexts. Another undesirable value could be that *knowledge is power*; that could cause anxiety among employees and, as a result, cause them to moderate the extent to which they wish to express themselves and share knowledge (Liebowitz, 2006).

Beliefs, another component of organizational culture, are not the same as values because they are less enduring. Simply put, beliefs are what employees think is true. Even though they are hard to distinguish from each other, one way to look at it is to think of values as enduring beliefs (Rokeach, 1973). Attitudes, then, are the manifestations that "connect our beliefs and values with feelings" (Jashapara, 2004, p. 193). They have an impact on employees' motivation. Prejudices are an example of attitudes. Assumptions are what employees take for granted, and these are closely related to organizational routines (Jashapara, 2004).

Developing a Knowledge-Sharing Culture

Knowledge-sharing cultures are more conducive to knowledge creation and enhanced performance. (Jashapara, 2004, p. 199)

Jashapara's (2004) statement conveys one of the primary assumptions in knowledge management literature. The phrase itself is not difficult to comprehend, but understanding how to turn knowledge sharing into a part of organizational culture is challenging.

Nonaka and Konno's (1998) idea of knowledge creation was built on Nonaka's (1991) earlier SECI model, illustrated in Figure 3, showing four different knowledge conversions. Deploying artifacts assumes that organizational culture can be influenced by changing norms and artifacts (Schein, 1985). However, Nonaka and Konno (1998) did not explore in depth whether the artifacts themselves influence values, beliefs, attitudes, and assumptions. Yet it is possible to theorize how an organization's aspirational values, beliefs, attitudes, and assumptions could be changed to create a

knowledge-sharing culture. Nonaka and Konno built on their SECI model, revising it by placing a new term in each box. These terms referred to something they called *ba*, which is a Japanese word for "space" or "place" (Jashapara, 2004, p. 200). In socialization, the space is called *originating ba*; in externalization, the space is called *interacting ba*; in combination, it is called *cyber ba*; and in internalization, it is called *exercising ba* (Nonaka, 1991). The premise is that different artifacts can be deployed to support whichever knowledge conversion or transfer is desired.

For example, if tacit-to-tacit knowledge is desired, then a space or place where individuals can share feelings, emotions, experiences, and other tacit knowledge should be employed. In "Originating Ba" (Jashapara, 2004, p. 201) here, a stimulation of aspirational values that support tacit-to-tacit knowledge transfer, such as care and commitment, would theoretically occur.

Organizational Culture
Competitiveness

The organizational culture can be the most problematic and encompassing barrier to knowledge transfer and thereby knowledge retention. As Jashapara (2004) noted, the culture must be made to support "care and commitment" as values (p. 201). Argote (1999, 2012) identified a major cultural barrier to knowledge transfer as being competition between subunits in an organization. The same was also noted by Messick and Mackie (1989). The notion of competition impeding knowledge transfer comes from the idea that competitiveness causes individuals or groups to not want to share knowledge with other individuals or groups because their knowledge empowers them to act in their

own interest (Coopey & Burgoyne, 2000). Theory also states that organizational settings naturally are conducive to the development of competition between groups (Kramer, 1991). This idea is grounded in social identity theory (Tajfel, 1981), which states that when people are categorized into groups, it produces competition between them. The implications of this are that there will always be some level of competitiveness, but it is dependent on the structure of the organization. If there are many subgroups and work teams, there will probably be some level of competition between and among them. In addition, knowledge sharing may be less existent in organizations that reward employees and teams for innovativeness and performance, as the competition between individuals and groups will be fiercer.

Power

Regarding organizational learning as a whole, the power relations and internal politics of an organization can have a very strong influence on the extent to which knowledge is shared. Vince (2001) investigated the psychological effects that politics and power can have on individuals in an organization. According to Vince, learning in organizations on an individual level is determined by anxiety and how individuals relate to one another. If this is true, it can have a very strong impact on the way learning occurs and on "the nature of learning spaces in organizations" (Jashapara, 2004, p. 81). Positive emotions allow people to express themselves more in social situations, and as such, anxiety is an inhibitor of this expression. Anxiety, which is almost always coupled and sometimes confused with fear (Kaplan & Sadock, 1994), is a negative emotion and is

likely to cause people to express themselves much less, making knowledge sharing less common (Coopey & Burgoyne, 2000).

The reality is that politically competitive environments, promoted by strict hierarchical structures, also have an impact on employees' behavior by making them more anxious. This can prevent effective communication between employees as each individual seeks to act in his or her own personal interest (Coopey & Burgoyne, 2000). This interest is driven by the political tensions in the organization in what Jashapara (2004) called a "cycle of fear which perpetuates indefinitely as relationships reinforce an individual's emotional make-up" (p. 82). From the knowledge retention perspective, this means that over time, individuals increasingly develop a power to control what knowledge they share and with whom. Politics in this manner can play a big role in how organizational culture impacts knowledge retention.

Influence Culture/Values

Good leaders have a natural power to influence individuals in organizations to act and behave in a certain way. They do this by reflecting the cultural values in their own behavior and actions (Jashapara, 2004). Consistently engaging in symbolic actions that reinforce aspirational values such as "care" (Jashapara, 2004, p. 201) can allow for knowledge sharing cultures to emerge and develop. An example of a symbolic act to reflect care is the way a leader uses his or her time, for instance, when a manager frequently visits ground-level functions and operations to engage in conversation with employees. As stated by A. D. Brown (1998), these kinds of acts demonstrate to the employees what values are important to the manager or leader. Other ways to turn

employees in a certain cultural direction is to arrange activities, or rites. Also, existing rites can be adapted to new aspirational values, and rites that discourage those values can be removed (Pfeffer & Sutton, 1999).

However, it is not only leaders who can effect cultural change. Interventions by HR can also be used to demonstrate aspirational values. A. D. Brown (1998) provided examples of HR interventions such as changing performance appraisal, reward, and recognition norms. In the context of knowledge retention, this would entail rewarding employees who exhibit caring. In other words, an employee who is willing to engage in sharing knowledge is recognized in some way, which in turn motivates him or her to continue displaying that behavior. An accumulation of employees displaying certain behaviors that promote knowledge sharing can help to facilitate cultural change that supports knowledge retention.

Strategy Integration

Most of the literature that concerns knowledge management and knowledge retention places an emphasis on strategy, strategic intent, and implementation (Ball & Gotsill, 2011; DeLong, 2004; DeLong & Trautman, 2010; Dychtwald et al., 2006; Jashapara, 2004; Leonard & Swap, 2005; Liebowitz, 2009; Rothwell, 2011). In knowledge management strategy, the two main pillars have been said to be technology and HR considerations (Jashapara, 2004). Nonetheless, a starting point for aligning knowledge retention with strategy is investigating how knowledge retention can relate to an organization's business strategy. There are several schools of thought with relation to this topic.

Need for the Study

The importance of knowledge management can be explained by the increased demands within a specific industry—notably, the operating practices in the warehousing and logistics arena (Myers, Griffith, Daugherty, & Lusch, 2004). Pressure to bring about the effective management of knowledge has been summarized by Perrott (2006, as cited in Perrott, n.d.) as follows:

- Rapidly changing and turbulent operating environments . . .
- Stakeholder demands and expectations . . .
- Corporate governance . . .
- Accountable risk management . . .
- Replication of performance (p. 6)

According to Perrott (n.d.), knowledge management can be expected to be a priority going forward. A proactive and organizational perspective of how knowledge is created, processed, and retained can be expected to become increasingly mainstream in order for organizations to be effective and sustainable in the future (Perrott, 2013).

The Need for Knowledge Retention
in Warehousing/Logistics

As businesses continue to grow, they need to invest in human capital to market their competitiveness (Elsdon, 1999). The personal dimension is especially critical to achieving most supply-chain and logistics objectives (Van Hoek, Chatham, & Wilding, 2002). As summarized by Bowersox, Close, and Stank (2000),

Effective management of the logistics process . . . is complicated by the fact that over 90% of all logistics work takes place outside of the vision of any supervisor. No other employees within the typical business enterprise are expected to do so much critical work without direct supervision as those that make logistics happen. (p. 12)

Myers et al. (2004) stated the challenge in developing human capital in logistics organizations is that it is difficult to attract and retain qualified employees. This research focused on employee worth and supported the notion that investment in all of these areas is related to HR, with recruiting and retaining talent critical to operations remaining competitive for the organization's stakeholders (Myers et al., 2004). Figure 5 points to the areas of education, experience, and job skills thought to influence performance and worth of employees.
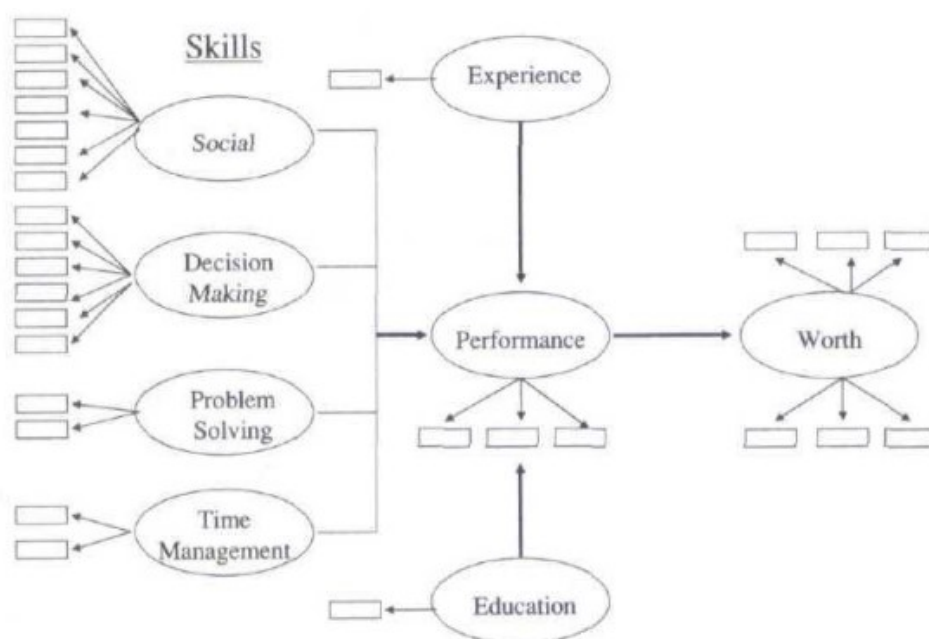
Figure 5. Human capital in logistics. From "Maximizing the Human Capital Equation in Logistics: Education, Experience, and Skills," by M. B. Myers, D. A. Giffith, P. J. Daugherty, and R. F. Lusch, 2004, *Journal of Business Logistics, 25*(1), p. 213.

Human Capital Strategy

Liebowitz (2004) stated that *strategic human capital management* has emerged as an important area in recent years within government, industry, and academe. Strategic human capital management can be defined as "the ability to be prepared, from workforce development and succession planning perspectives, in terms of having the human talent available and educated as the future workforce to meet the organization's strategic mission and vision" (Liebowitz, 2009, p. 29).

Knowledge management is one of the pillars of Liebowitz's (2004) strategic human capital management framework. He identified the other key pillars forming this human capital strategy framework as competency management, performance management, and change management. The four pillars of strategic capital management are described as follows:

1. Competency management refers to what competencies the organization needs in its workforce of the future.
2. Performance management deals with how best to reward or recognize people for their performance as well as perhaps provide disincentives for those less productive.
3. Knowledge management involves how best to capture, share, and apply knowledge in the organization to create and leverage knowledge.
4. Change management refers to how to build and nurture a knowledge-sharing culture whereby "sharing knowledge is power" versus the "knowledge is power" paradigm. (Liebowitz, 2004, p. 48)

Organizations may be impacted by lost knowledge unless this knowledge has been adequately transferred to stay within the organization. DeLong (2004) noted, "Leaders who fail to confront this threat will increasingly be held accountable for jeopardizing the future viability of their organizations. In the long term, you cannot

compete effectively in the knowledge economy unless you are serious about knowledge retention" (p. 25). Additionally, DeLong cautioned,

> Research shows that even when leaders in industry and government recognize the problem, most do not know what to do about it. They need an answer fast, however, because the hidden costs of lost knowledge are becoming a huge drain on organizational productivity and, in some cases, a threat to sustaining competitive advantage. And the problem is going to get worse. (p. 19)

Further research (Birkinshaw, 2001; DeLong, 2002; DeTienne et al., 2004) demonstrated that many knowledge management strategies are tested in meeting expectations, resulting in disappointment with knowledge-based proposals. Knowledge management scholars (Alvesson, 2000; Currie & Kerrin, 2003; Haesli & Boxall, 2005; Liebowitz, 2004; Storey & Quintas, 2001; Swart & Kinnie, 2003) have posited that while organizational competitiveness is based on knowledge generated from within, the work of HR management leaders is responsible for the larger segment of that knowledge.

Knowledge Retention Framework

Within the knowledge management pillar, theorist Liebowitz (2004) developed a knowledge retention strategy in 2001. A knowledge retention strategy advances the areas of innovation, organizational growth, efficiency, employee development, and competitive advantage (Liebowitz, 2004). This has the result that in many organizations, intellectual capital has become as important as financial capital. Increasingly, companies are trying to manage their knowledge assets to support their strategic objectives (Key, Thompson, & McCann, 2009).

In *Knowledge Retention: Strategies and Solutions*, Liebowitz (2009) shared the four pillars of his knowledge retention framework, identified as "(1) recognition and

reward structure, (2) bidirectional knowledge flow, (3) personalization and codification and (4) the *Golden Gem*" (p. 26). These four pillars are defined as follows:

1. *Recognition and reward structure*: Liebowitz (2009) stated that people should be recognized and rewarded because employees want to feel good about themselves and their contributions. By rewarding them in some manner on a daily basis, the employees will be motivated.

2. *Bidirectional knowledge flow*: The second pillar in the knowledge retention framework that Liebowitz (2009) developed is bidirectional knowledge flow. This means attaining knowledge from different levels of management. An example is having senior employees and new employees exchange their knowledge and work experiences so that the transfer of vital knowledge is captured and retained within the organization. Conducting this process strengthens the likelihood that the culture of continuous learning and sharing knowledge is instilled in the organization.

3. *Personalization and codification*: Liebowitz (2009) referred to personalization as the connection part of knowledge management; personalization promotes methods to build the connection between people. Further, codification transfers the tacit knowledge into explicit knowledge so that it can be readily shared. Liebowitz gave examples of codification as lessons learned and best practices.

4. *The golden gem*: The fourth pillar in Liebowitz's (2009) knowledge retention framework is what he termed the golden gem. Liebowitz suggested that the way to ensure talent remains in the organization is to bring back this talent (people) from retirement and use different approaches to bring them back to the organization.

Liebowitz (2009) asserted, "Organizations are waking up to the fact that they may lose their competitive advantage if they do not apply knowledge management and knowledge retention efforts to stimulate collaboration and knowledge creation" (p. 6). This involves recognizing, generating, documenting, distributing, and transferring between persons explicit and tacit knowledge (Davenport & Prusak, 1998; Rossett, 1999). For organizations to have a competitive advantage in business, they must be able to keep their top talent (Lawler, 2008).

Summary

There is growing evidence that the search for talent is becoming more difficult for organizations (Beaven, 2009, Bessen, 2014, Rice, 2015). Also, in Southern California, logistics employment is the fastest growing industry in the Inland Empire region (Smith, 2014). As the logistics arena in Southern California continues to grow, so will the need for the recruitment and development of employees in this sector (Kirkham, 2015; Smith, 2014). Knowledge management is one approach that implements processes to increase organizational effectiveness and allows organizations to retain rather than lose their most valuable asset: human capital (Liebowitz, 2009).

CHAPTER III

METHODOLOGY

The methodology used to address the purpose and research questions in this study is outlined and reviewed in Chapter III. Subsequently, this chapter includes descriptions of the study's design, population, selection process, instrumentation, data collection procedures, data analysis, and limitations as well as a chapter summary.

Purpose Statement

The purpose of this quantitative study was to determine the degree of importance of Liebowitz's (2009) knowledge management strategies model to support the attraction and retention of talent, as perceived by human resource (HR) leaders and strategic business partners in the warehousing/logistics industries located in the Inland Empire region of Southern California, as measured by the Liebowitz and Chen (2001) Knowledge Sharing Effectiveness Inventory Questionnaire. Another purpose of this study was to determine whether there was a significant difference in the degree of importance of the knowledge management strategies model to support the attraction and retention of talent, as perceived by (a) HR leaders and (b) strategic business partners in warehousing/logistics industries located in the Inland Empire region of Southern California, as measured by the Liebowitz and Chen Knowledge Sharing Effectiveness Inventory Questionnaire.

72

Research Questions

1. What is the degree of importance of knowledge management strategies as perceived by HR leaders in warehousing/logistics industries, as determined by Liebowitz's (2009) knowledge retention framework and as measured by the Liebowitz and Chen (2001) Knowledge Sharing Effectiveness Inventory Questionnaire?

2. What is the degree of importance of knowledge management strategies as perceived by strategic business partners in warehousing/logistics industries, as determined by Liebowitz's (2009) knowledge retention framework and as measured by the Liebowitz and Chen (2001) Knowledge Sharing Effectiveness Inventory Questionnaire?

3. Is there a significant difference between the degree of importance of knowledge management strategies as perceived by (a) HR leaders and (b) strategic business partners in warehousing/logistics industries, as determined by Liebowitz's (2009) knowledge retention framework and as measured by the Liebowitz and Chen (2001) Knowledge Sharing Effectiveness Inventory Questionnaire?

Research Design

The research design selected comprised descriptive research. Descriptive analysis was used to indicate the "means, standard deviation, and range of scores for these variables" (Creswell, 2009, p. 152). Additionally, for Research Question 3, the researcher used a *t* test to look for significant differences between the perspectives/ perceptions of HR leaders and strategic business partners.

For this quantitative research, an overview of the reasons HR leaders and strategic business partners used these knowledge management practices helped to determine the

level of effectiveness of these management practices. Additionally, the design of the

research was selected to determine whether knowledge management practices supported

the attraction and retention of talent.

For this study, the researcher selected a quantitative methodology with a design

that provided a way or method to generalize or make inferences regarding a population;

hence, this study utilized a descriptive design. Creswell (2014) discussed that a

quantitative approach is used for "testing objective theories by examining the

relationships among variables" (p. 4). The specific research approach selected was

quantitative utilizing a survey methodology. A quantitative design was appropriate for

this research study since the known independent and dependent variables predicted or

explained the degree of importance and effectiveness of Liebowitz's (2009) model of

knowledge management strategies (Nardi, 2006).

According to Creswell (2005), the researcher investigates by administering "a

survey to a sample or to the entire population of people" (p. 354). The study looked at "a

description of trends, attitudes or opinions of a population by studying a sample of that

population" (Creswell, 2005, p. 155). This was an appropriate design because surveys

are used to obtain information on beliefs, attitudes, and opinions. The research explored

among the populations of both HR leaders and strategic business leaders those variables

of the Liebowitz (2009) knowledge management framework.

Creswell (2012) stated that surveys are appropriate as a research design to depict

trends, determine relationships, or compare groups. Additionally, Fowler (2009) also

highlighted that survey research depicts trends, attitudes, or opinions similarly to what

Creswell described. The survey instrument, when used for data collection, has the intent to generalize from a sample to a population (Creswell, 2014). In the survey research design, the researcher collects all data at a single point in time, analyzes all study participants as a single group, and draws conclusions from statistical results (Creswell, 2005, 2012; Remler & Van Ryzin, 2011).

Population and Sample

Population

According to Black (1999), "A population is considered to be any group that shares a set of common traits" (p. 111). Creswell (2005) defined a population as "a group of individuals that have the same characteristics" (p. 145). Creswell further described that researchers cannot always study the entire population and instead focus on a target population. A target population (or the sampling frame) "is a group of individuals [or a group of organizations] with some common defining characteristic that the researcher can identify and study" (Creswell, 2005, p. 145). With a target population, the researcher creates a list of individuals that he or she can actually obtain. The population for this study comprised two groups: (a) HR managers and (b) their strategic business partners, who primarily managed warehousing distribution and fulfillment centers in the Inland Empire of Southern California, which includes Riverside and San Bernardino Counties.

Sample Population

From the general population fitting the study definition, the researcher selected a sample. Creswell (2005) described a sample as "a group of participants in a study

selected from the target population from which the researcher generalizes to the target population" (p. 359). This sample defines the group of actual participants studied. Simon and Francis (2001) stated that there are five areas that can affect sample size, including (a) population size, (b) purpose of the study, (c) utilization of study results, (d) statistical tests that will be applied to the research, and (e) the overall research design. Although Creswell (2008) suggested a sample size of 350 respondents for a survey study, he indicated that a number of factors must be considered when establishing the size of the sample.

Along these lines, Fowler (2009) suggested that sample size determination relates to the analysis plan for the study. He recommended that the researcher first determine the subgroups to be analyzed in the study. Then, he suggested going to the table found in many survey books to look at the appropriate sample size, as this gives the researcher an alternative method to use in determining the sample size (Fowler, 2009).

Sample Size Selection Process

HR leaders—Research Question 1. For the first group studied, HR leaders, selected individuals made up the sample population. This entire group related to Research Question 1 and was compared to Group 2, the strategic business partners, which related to Research Question 2. This group of HR leaders included individuals who primarily managed warehousing distribution centers and fulfillment centers in the Inland Empire. They belonged to an HR-affiliated network group, which included the surrounding areas of Riverside and San Bernardino Counties.

Strategic business partners—Research Question 2. The second group of the sample population comprised strategic business partners in warehousing/logistics industries located in the Inland Empire region of Southern California. The members of this sample population were selected primarily through association with their HR leaders who were affiliated through the HR network group.

Strategic business partners and HR leaders—Research Question 3. Research Question 3 involved HR leaders and strategic business partners, using the sample populations selected for Research Questions 1 and 2. Research Question 3 aimed to determine the significant differences between survey responses of the two groups: HR leaders and their strategic business partners. The population samples were derived from the HR leaders and business partners who were contacted, agreed to participate, and completed the researcher's questionnaire.

Sample Size

As discussed in Chapter I, HR leaders impact the culture and the talent that comes into their organizations. The researcher selected a target population for this study that included HR leaders who worked in the Inland Empire, which encompasses both San Bernardino and Riverside Counties in Southern California. Since HR leaders work in such a wide array of organizations and industries, an HR group, known in this study as the HR Network Group, was chosen. This network was a logical choice for the study since this group of HR leaders interacted regularly with the warehouse and logistics industries in the Inland Empire.

To establish an appropriate sample size from the target population, the researcher decided to survey both of these populations. The first target population, the HR Network Group, included 66 HR leaders from 117 different warehousing, distribution, and logistics centers throughout the Inland Empire. During the months of September through November of 2015, the survey was administered by the researcher to 66 HR professionals from the HR Network Group.

The second target population for this study, Group 2, was made up of strategic business partners of the selected HR leaders from warehouse and logistics industries in the Inland Empire, encompassing both San Bernardino and Riverside Counties in Southern California. There were 66 participants in this group.

This sample population comprised both HR leaders and strategic business partners to ensure that all parties' depth of knowledge management was explored and examined from both perspectives. Research reflects that, in responding to a problem or question, the result can impact a wide range of people. It is important that all parties involved with the issue have a voice. Stringer (2007) believed,

> Researchers therefore need to ensure that all stakeholders—people whose lives are affected—participate in defining and exploring the problem or service under investigation. Although it is not possible for all people to be thus engaged, it is imperative that all stakeholder groups feel that someone is speaking for their interests and is in a position to inform them of what is going on. (p. 44)

Instrumentation

Although there are various instruments that can be used to assess knowledge management and organizational effectiveness with learning and applying knowledge, most of these tools do not analyze knowledge-sharing effectiveness for building

knowledge-sharing proficiencies in the organization. In an effort to fill this void, Liebowitz and Chen (2001) developed a questionnaire. Their resultant Knowledge Sharing Effectiveness Inventory Questionnaire instrument was used to survey the HR leaders (Group 1) in this study. Another instrument, similar to the first instrument with the only difference being that it was targeted to warehouse and logistics leaders, was used to survey Group 2, the warehouse and logistics leaders who worked in the Inland Empire.

Cox (2008) noted that, as a rule, it is important to keep the instrument (questionnaire) in a simple form. The other rule they emphasized was to make no assumptions that respondents understand how to complete the instrument and to look at the directions carefully (Cox, 2008).

Knowledge Retention Strategies
Questionnaire for HR Leaders

The first questionnaire, Knowledge Retention Strategies Questionnaire for HR Leaders (Appendix A), focused on four main areas or categories: (a) communication flow, (b) knowledge management environment, (c) organizational facilitation, and (d) measurement. The communication flow section looked at how knowledge and communication exchanges were captured and disseminated throughout the organization. The next section, knowledge management environment, reviewed internal cultural factors related to knowledge management within the organization. The organizational facilitation section assessed the sophistication of the knowledge management infrastructure and knowledge-sharing capability within the organization. Finally, the

measurement section analyzed the possibility of knowledge sharing and knowledge management being successful within the organization (Liebowitz, 2009).

Furthermore, this first questionnaire used a 6-point Likert-scale format. Creswell (2005) stated that a Likert scale is used "to illustrate a scale with theoretically equal intervals among responses" (p. 168). The participants responded using an intensity scale that included rankings of *very strongly disagree* (1), *disagree* (2), *somewhat disagree* (3), *somewhat agree* (4), *agree* (5), and *very strongly agree* (6) for each of the four main areas of (a) communication flow, (b) knowledge management environment, (c) organizational facilitation, and (d) measurement. The response scale allowed the participants to rate their level of agreement regarding their perception of the importance of knowledge retention strategies to support the attraction and retention of talent in the workplace.

Knowledge Retention Strategies
Questionnaire for Strategic
Business Partners

The second questionnaire, Knowledge Retention Strategies Questionnaire for Strategic Business Partners (Appendix B), also focused on four main areas: (a) communication flow, which looked at how knowledge and communication exchanges were captured and disseminated throughout the organization; (b) knowledge management environment, which reviewed internal cultural factors related to knowledge management within the organization; (c) organizational facilitation, which assessed the sophistication of the knowledge management infrastructure and knowledge-sharing capability within the organization; and (d) measurement, which analyzed the possibility of knowledge

sharing and knowledge management being successful within the organization (Liebowitz, 2009). This second questionnaire also used a 6-point Likert-scale format in each of the four main areas of (a) communication flow, (b) knowledge management environment, (c) organizational facilitation, and (d) measurement. The response scale allowed the participants to rate their level of agreement regarding their perception of the importance of knowledge retention strategies to support the attraction and retention of talent in the workplace.

The difference between the two questionnaires was the title of the participants, where the first questionnaire targeted HR leaders, and the latter questionnaire was for warehouse and logistics leaders. The author of the instrument gave permission for the researcher to use the instrument for this study (see Appendix C). The difference between the original survey and the researcher's adaptation is that the original survey had an intensity scale that included five rankings of *strongly agree* (1), *agree* (2), *neutral* (3), *disagree* (4), and *strongly disagree* (5) for each of the four main areas of (a) communication flow, (b) knowledge management environment, (c) organizational facilitation, and (d) measurement. The researcher's adaptation had an intensity scale that included six rankings of *very strongly disagree* (1), *disagree* (2), *somewhat disagree* (3), *somewhat agree* (4), *agree* (5), or *very strongly agree* (6) for each of the four main areas of (a) communication flow, (b) knowledge management environment, (c) organizational facilitation, and (d) measurement.

Validity

Field Test

To support the validity and reliability of the instrumentation and process, the researcher conducted a field test. The field test gave the researcher an opportunity to examine, correct, and revise documents and procedures before conducting the actual study. According to Roberts (2004), "Any time you create your own instrument or modify an existing one, it must be field tested" (p. 154).

For this field test, the researcher selected two individuals from each targeted group of HR professionals and warehousing/logistics leaders who were then not selected to participate in the final study. These field testers were representative of the targeted respondent HR leaders and warehouse and logistics leaders of the population for the actual study. After the selected HR leaders and warehouse and logistics leaders received the field test (survey), the researcher contacted them via phone to obtain feedback regarding the survey, process, and suggestions to improve data collection procedures and increase reliability of the instrument and thus the study. Roberts (2004) also discussed that "following the field test, it is usually necessary to revise your instrument to reflect the various recommendations from field test respondents" (p. 155).

This study's field testers represented depth and years of HR experience, and the majority of the field testers worked in HR with their profession intertwined in the logistics, warehousing, and manufacturing industries. These field testers represented the target population and actively engaged in a review of this survey. They provided insight about the design, layout, and structure of the questions. Each field tester completed the

short survey/ questionnaire and responded to the questions. After completing the questionnaire, the field testers provided feedback to the researcher regarding the ease and explanatory nature of the instrument.

Results of Field Test

Feedback received from these HR leaders and warehouse and logistics leaders addressed minor editorial changes to the consistency of the questions asked within the survey instrument. Changes to the questions could not be made because this instrument is owned by Liebowitz and Chen, and the other feedback received stated that the instrument was clear and concise. Additional feedback received was a recommendation to describe what knowledge management meant.

Data Collection and Institutional Review Board Procedures

In a quantitative, descriptive study, ethical analysis and scientific procedure are important protocols of the data analysis process. Prior to collecting the data, a thorough review of the data collection plan and data analysis procedures supported the reliability and validity of the research. The initial review was conducted by the researcher and confirmed by the Institutional Review Board (IRB) of the University of La Verne, to whom the study's purpose, research questions, methodology, and instruments were submitted. (See Appendix D for IRB approval letter.)

A quantitative and descriptive approach was used to conduct the data analysis and interpretation of the results based on Leedy and Ormrod's (2001) criteria. The objective of this quantitative and descriptive study was to examine the degree of importance of

knowledge management strategies as perceived by HR leaders and strategic business partners in warehousing/logistics industries located in Southern California, as determined by Liebowitz's (2009) knowledge retention framework and as measured by the Liebowitz and Chen (2001) Knowledge Sharing Effectiveness Inventory Questionnaire. The examination of the relationship in the quantitative study denoted a correlational analysis of the variables to "measure the degree of association" within the population sample (Creswell, 2005, p. 52). The variables under examination were four pillars of strategic capital management (independent variables) and the ability to attract and retain talent (dependent variable). An electronic survey was distributed to HR leaders and warehouse/logistics leaders to explore the research questions for this study. The items on the questionnaire were designed to gather information related to the research questions.

The first questionnaire, Knowledge Retention Strategies Questionnaire for HR Leaders, was a paper survey distributed to the first group studied, HR leaders, at the biquarterly HR Network Group meeting. This group received written instructions that included an overview of the study, a request for participation, a statement that data would be collected over a 2-month period, and a memo with directions and the link that directed their strategic business partners to instructions on how to take the electronic survey. These business partners were selected through their association with the HR leaders affiliated with the network group.

The second group of the sample population, comprising strategic business partners in warehousing/logistics industries, received the electronic survey through their affiliation with the HR leaders who participated in this study. Upon initiating the

electronic survey, participants saw a description of the study, an assurance that survey responses would be confidential, and a statement that participants would provide their consent to participate in the study by proceeding to the next page of the survey. Respondents answered survey questions, and responses were stored on the secure SurveyMonkey server (https://www.surveymonkey.com/). Results of the survey were downloaded from SurveyMonkey to a Microsoft Excel spreadsheet. These raw data were submitted to a statistician to be analyzed using a *t* test.

The study was submitted for approval to the University of La Verne IRB to ensure compliance with federal guidelines regarding research with human subjects. The researcher promised to protect all personal information of study participants in a letter of invitation (Appendices A and B) to participants and an informed consent form (Appendix E). Participants were assured they could leave the study at any time, and they participated in the study without any inducements. The IRB responded with approval of the study on August 10, 2015. The IRB approval letter is contained in Appendix D. At the conclusion of the study, data will be stored in a locked safe for a period of 7 years, after which they will be destroyed.

Data Analysis Procedures

Descriptive statistics were used to present the results of the survey, an overview of the reasons HR leaders and warehouse leaders use knowledge management practices, and the level of effectiveness of using knowledge management practices to support the attraction and retention of talent. Descriptive analysis was used to indicate "the means, standard deviation, and range of scores for these variables" (Creswell, 2008, p. 152).

Using the Likert scale on the questionnaire, participants were able to rate their level of agreement with the survey items in the four areas of (a) communication flow, (b) knowledge management environment, (c) organizational facilitation, and (d) measurement of knowledge retention strategies for both HR leaders and strategic business partners. The Liebowitz and Chen (2001) Knowledge Sharing Effectiveness Inventory Questionnaire was used to analyze all data gathered from the questionnaires.

Responses from the multiple-choice questions yielded results indicating the successes and challenges of knowledge retention strategies for HR leaders and strategic business partners. The data referred to the common barriers that HR leaders face with knowledge management in the warehousing/logistics industries located in the Inland Empire region of Southern California.

Correlation methods were used to determine whether there was a connection between the information given by HR leaders and their strategic business partners. The data were analyzed to identify major themes and categories. Gall's (2007) technique of segmenting was used to break down the data into manageable sections. Coding using segments and themes made the data retrieval more accessible and made the audit trail comprehensive (Gall, 2007). The intent of this effort was to draw any conclusions and/or provided any implications from the results of the questionnaire (Creswell, 2008).

Limitations

For this study, the approach taken was to narrow down the study's population. One of the limitations was in following a convenience sampling technique. This technique was intended to include only study participants who were HR leaders in the

logistics field and warehouse leaders. The sampling design of including members of two specific professional organizations as potential participants eliminated collection of data from HR leaders who were not members of these organizations. This could have led to a sampling error, which is the difference between an estimate derived from sample data and the value obtained through a survey of an entire population (Creswell, 2005). To eliminate sampling errors, Creswell (2008) explained that a researcher should choose as large a sample as possible.

As depicted by Roberts (2004), a study's limitations are "particular features that you know may negatively affect the results or your ability to generalize" (p. 146). A limitation of this study was the narrowing of the HR population to a particular geographical area. In the greater Southern California area, there are hundreds of HR professionals, not all of whom were included in the study population. Further, this study was limited by the potential turnover of HR leaders and warehouse/logistics leaders, which may have led to a reduced population size meeting the threshold for inclusion in this study.

For this research study, the selection of one research design was a limitation. The number of variables to evaluate increases the number of research questions, expands the literature review, and requires more time for data analysis (Galvan, 2006; Nardi, 2006).

Summary

As discussed in this chapter, this quantitative study was intended to determine the degree of importance of Liebowitz's (2009) knowledge management strategies model to support the attraction and retention of talent, as perceived by HR leaders and strategic

business partners in the warehousing/logistics industries located in the Inland Empire region of Southern California, as measured by the Liebowitz and Chen (2001) Knowledge Sharing Effectiveness Inventory Questionnaire. This chapter described the study design, including the research design strategy, sampling design, procedures for data collection, instrumentation, field testing of the instrument, procedures for data analysis, and study limitations.

CHAPTER IV

ANALYSIS OF THE DATA

This chapter (a) details the statement of the purpose, (b) reviews the research

questions, (c) describes the population and sample, (d) provides an analysis of the data

for each of the three research questions, and (c) presents a summary of the findings. This

study considered the perceived level of importance of knowledge management strategies

according to human resource (HR) leaders and their strategic business partners in the

warehousing and logistics industries in the Inland Empire region of Southern California

to support the attraction and retention of talent using Liebowitz's (2009) knowledge

management strategies model.

Research Background

Liebowitz (2004) stated that *strategic human capital management* has emerged as

an important area in recent years within government, industry, and academe. Strategic

human capital management can be defined as "the ability to be prepared, from workforce

development and succession planning perspectives, in terms of having the human talent

available and educated as the future workforce to meet the organization's strategic

mission and vision" (Liebowitz, 2009, p. 29).

Knowledge management is one of the pillars of Liebowitz's (2004) strategic

human capital management framework. He identified the other key pillars forming this

89

human capital strategy framework as competency management, performance management, and change management (see Figure 6). The four pillars of strategic capital management are described as follows:

1. competency management refers to what competencies the organization needs in its workforce of the future;

2. performance management deals with how best to reward or recognize people for their performance as well as perhaps provide disincentives for those less productive;

3. knowledge management involves how best to capture, share, and apply knowledge in the organization to create and leverage knowledge; and

4. change management demonstrates how to build and nurture a knowledge-sharing culture whereby "sharing knowledge is power" versus the "knowledge is power" paradigm (Liebowitz, 2004, p. 48).

Organizations may be impacted by lost knowledge unless this knowledge has been adequately transferred to stay within the organization. DeLong (2004) noted, "Leaders who fail to confront this threat will increasingly be held accountable for jeopardizing the future viability of their organizations. In the long term, you cannot compete effectively in the knowledge economy unless you are serious about knowledge retention" (p. 25).

Knowledge Retention Framework

Within the knowledge management pillar, theorist Liebowitz (& Chen, 2001) developed his knowledge retention strategy. A knowledge retention strategy advances
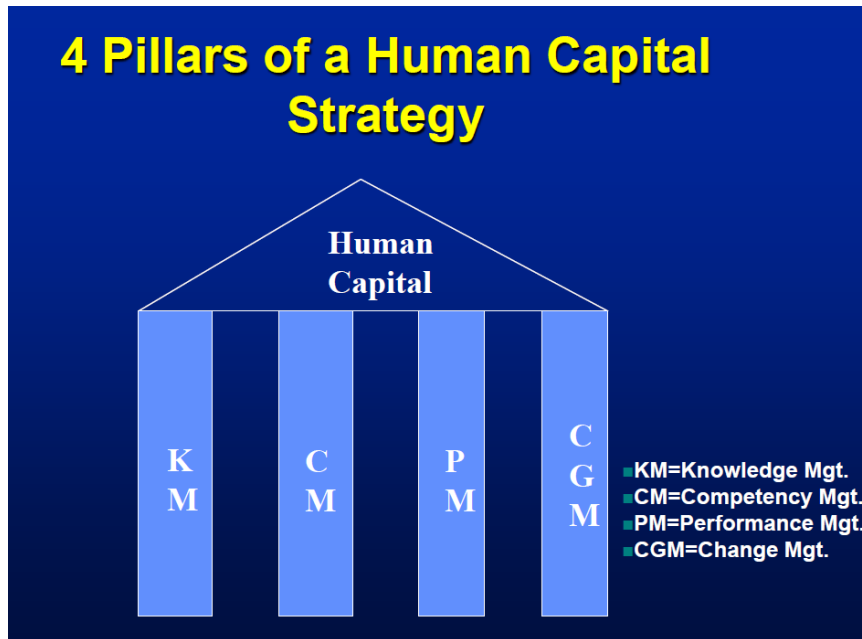
Figure 6. Liebowitz pillars of a human capital strategy. From *Addressing the Human Capital Crisis in the Federal Government: A Knowledge Management Perspective* (p. 59), by J. Liebowitz, 2004, Amsterdam, Netherlands: Butterworth Heinemann.

the areas of innovation, organizational growth, efficiency, employee development, and competitive advantage (Liebowitz, 2004). This has the result that in many organizations, intellectual capital has become as important as financial capital. Increasingly, companies are trying to manage their knowledge assets to support their strategic objectives (Key et al., 2009).

In *Knowledge Retention: Strategies and Solutions*, Liebowitz (2009) shared the four pillars of his knowledge retention framework: "(1) recognition and reward structure, (2) bidirectional knowledge flow, (3) personalization and codification and (4) the *Golden Gem*" (p. 26). These four pillars are defined as follows:

1. *Recognition and reward structure*: Liebowitz (2009) stated that people should be recognized and rewarded because employees want to feel good about themselves and their contributions. By rewarding them in some manner on a daily basis, the employees will be motivated.

2. *Bidirectional knowledge flow*: The second pillar in the knowledge retention framework that Liebowitz (2009) developed is bidirectional knowledge flow. This means attaining knowledge from different levels of management. An example is having senior employees and new employees exchange their knowledge and work experiences so that the transfer of vital knowledge is captured and retained within the organization. Conducting this process strengthens the likelihood that the culture of continuous learning and sharing knowledge is instilled in the organization.

3. *Personalization and codification*: Liebowitz (2009) referred to personalization as the connection part of knowledge management; personalization promotes methods to build the connection between people. Further, codification transfers the tacit knowledge into explicit knowledge so that it can be readily shared. Liebowitz gave examples of codification as lessons learned and best practices.

4. *The golden gem*: The fourth pillar in Liebowitz's (2009) knowledge retention framework is what he termed the golden gem. Liebowitz suggested that the way to ensure talent remains in the organization is to bring back this talent (people) from retirement and use different approaches to bring them back to the organization.

Liebowitz (2009) asserted, "Organizations are waking up to the fact that they may lose their competitive advantage if they do not apply knowledge management and

knowledge retention efforts to stimulate collaboration and knowledge creation" (p. 6). For organizations to have a competitive advantage in business, they must be able to keep their top talent (Lawler, 2008). Knowledge management is one approach that implements processes to increase organizational effectiveness. This involves recognizing, generating, documenting, distributing, and transferring between persons explicit and tacit knowledge (Davenport & Prusak, 1998; Rossett, 1999).

Although there are various instruments that can be used to assess knowledge management and organizational effectiveness with learning and applying knowledge, most of these tools do not analyze knowledge-sharing effectiveness for building knowledge-sharing proficiencies in the organization. In an effort to fill this void, Liebowitz and Chen (2001) developed an assessment instrument in the form of a questionnaire. This questionnaire focused on four main areas: (a) communication flow, which looked at how knowledge and communication exchanges were captured and disseminated throughout the organization; (b) knowledge management environment, which reviewed internal cultural factors related to knowledge management within the organization; (c) organizational facilitation, which assessed the sophistication of the knowledge management infrastructure and knowledge-sharing capability within the organization; and (d) measurement, which analyzed the possibility of knowledge sharing and knowledge management being successful within the organization (Liebowitz, 2009).

Research Design Methodology

For this study, the researcher selected a quantitative methodology with a design that provided a way or method to generalize or make inferences regarding a population;

hence, this study utilized a descriptive design. Creswell (2014) noted that a quantitative approach is used for "testing objective theories by examining the relationships among variables" (p. 4). The specific research approach selected was quantitative utilizing a survey methodology. A quantitative design was appropriate for this research study since the known independent and dependent variables predicted or explained the degree of importance and effectiveness of Liebowitz's (2009) model of knowledge management strategies.

Purpose Statement

The purpose of this quantitative study was to determine the degree of importance of Liebowitz's (2009) knowledge management strategies model to support the attraction and retention of talent, as perceived by human resource (HR) leaders and strategic business partners in the warehousing/logistics industries located in the Inland Empire region of Southern California, as measured by the Liebowitz and Chen (2001) Knowledge Sharing Effectiveness Inventory Questionnaire. Another purpose of this study was to determine whether there was a significant difference in the degree of importance of the knowledge management strategies model to support the attraction and retention of talent, as perceived by (a) HR leaders and (b) strategic business partners in warehousing/logistics industries located in the Inland Empire region of Southern California, as measured by the Liebowitz and Chen Knowledge Sharing Effectiveness Inventory Questionnaire.

Research Questions

1. What is the degree of importance of knowledge management strategies as perceived by HR leaders in warehousing/logistics industries, as determined by Liebowitz's (2009) knowledge retention framework and as measured by the Liebowitz and Chen (2001) Knowledge Sharing Effectiveness Inventory Questionnaire?

2. What is the degree of importance of knowledge management strategies as perceived by strategic business partners in warehousing/logistics industries, as determined by Liebowitz's (2009) knowledge retention framework and as measured by the Liebowitz and Chen (2001) Knowledge Sharing Effectiveness Inventory Questionnaire?

3. Is there a significant difference between the degree of importance of knowledge management strategies as perceived by (a) HR leaders and (b) strategic business partners in warehousing/logistics industries, as determined by Liebowitz's (2009) knowledge retention framework and as measured by the Liebowitz and Chen (2001) Knowledge Sharing Effectiveness Inventory Questionnaire?

Population and Described Sample

Population

The population for this study comprised two groups: (a) HR managers and (b) their strategic business partners, who primarily managed warehousing distribution and fulfillment centers in the Inland Empire of Southern California, which includes Riverside and San Bernardino Counties.

Sample Size Selection Process

HR leaders—Research Question 1. The first research question was, "What is the degree of importance of knowledge management strategies as perceived by HR leaders in warehousing/logistics industries, as determined by Liebowitz's (2009) knowledge retention framework and as measured by the Liebowitz and Chen (2001) Knowledge Sharing Effectiveness Inventory Questionnaire?" For the first group studied, HR leaders, selected individuals made up the sample population. This entire group related to Research Question 1 and was compared to Group 2, the strategic business partners, which related to Research Question 2. This group of HR leaders included individuals who primarily managed warehousing distribution centers and fulfillment centers in the Inland Empire. They belonged to an HR-affiliated network group, which included the surrounding areas of Riverside and San Bernardino Counties.

Strategic business partners—Research Question 2. The second research question was, "What is the degree of importance of knowledge management strategies as perceived by strategic business partners in warehousing/logistics industries, as determined by Liebowitz's (2009) knowledge retention framework and as measured by the Liebowitz and Chen (2001) Knowledge Sharing Effectiveness Inventory Questionnaire?" The second group of the sample population comprised strategic business partners in warehousing/logistics industries located in the Inland Empire region of Southern California. The members of this sample population were selected primarily through association with their HR leaders who were affiliated through the HR network group.

Strategic business partners and HR leaders—Research Question 3. The third research question was, "Is there a significant difference between the degree of importance of knowledge management strategies as perceived by (a) HR leaders and (b) strategic business partners in warehousing/logistics industries, as determined by Liebowitz's (2009) knowledge retention framework and as measured by the Liebowitz and Chen (2001) Knowledge Sharing Effectiveness Inventory Questionnaire?" Research Question 3 involved HR leaders and strategic business partners, using the sample populations selected for Research Questions 1 and 2. Research Question 3 aimed to determine the significant differences between survey responses of the two groups: HR leaders and their strategic business partners. The population samples were derived from the HR leaders and business partners who were contacted, agreed to participate, and completed the researcher's questionnaire.

Target Population

The first target population, the HR Network Group, included 66 HR leaders from 117 different warehousing, distribution, and logistics centers throughout the Inland Empire. The survey was administered during the months of September to November of 2015. Specifically, the researcher attended the two HR Network Group meetings, in person, held September and November 2015. The researcher introduced the purpose for conducting the survey. Each HR professional voluntarily completed the survey in person during the meeting. Additionally, each participant signed a consent form to participate in the research study, as outlined by the University of La Verne Institutional Review Board (IRB) standards. Further, each HR professional completed the questionnaire using a 6-

point Likert scale. The response scale allowed the participants to rate their level of agreement regarding their perception of the importance of knowledge retention strategies to support the attraction and retention of talent in the workplace.

During the months of September to November of 2015, the survey was administered by the researcher to approximately 66 HR professionals from this HR Network Group in warehouse, logistics, and distribution centers. Once this survey was completed, the researcher requested that the HR professionals, which constituted Group 1, take the letter of invitation, along with the online survey directions, back to their warehouse and logistics business partners and request that they complete the online survey.

The second target population for this study, Group 2, was made up of strategic business partners of the selected HR leaders from warehouse and logistics industries in the Inland Empire, encompassing both San Bernardino and Riverside Counties in Southern California. The second questionnaire, which was for the warehouse and logistics business partners (Group 2), also used a 6-point Likert-scale format. The four main areas of (a) communication flow, (b) knowledge management environment, (c) organizational facilitation, and (d) measurement were identified. The response scale allowed the participants to rate their level of agreement regarding their perception of the importance of knowledge retention strategies to support the attraction and retention of talent in the workplace. The difference between the two questionnaires was the title of the participants, where the first questionnaire targeted HR leaders, and the latter was for

warehouse and logistics leaders. There were 66 participants from this group of strategic business partners in the same locale.

The Knowledge Sharing Effectiveness Inventory Questionnaire instrument was used to survey the HR leaders (Group 1). Another instrument, similar to the first instrument with the only difference being that it was targeted to warehouse and logistics leaders, was used to survey Group 2, the warehouse and logistics leaders who worked in the Inland Empire. The questionnaires focused on four main areas or categories: (a) communication flow, (b) knowledge management environment, (c) organizational facilitation, and (d) measurement. The communication flow section looked at how knowledge and communication exchanges were captured and disseminated throughout the organization; the next section, knowledge management environment, reviewed internal cultural factors related to knowledge management within the organization; the organizational facilitation section assessed the sophistication of the knowledge management infrastructure and knowledge-sharing capability within the organization; and the final section, measurement, analyzed the possibility of knowledge sharing and knowledge management being successful within the organization.

Percentage of Responses by Gender

The distribution of HR leaders and business partners by gender is included in Table 3. The respondents for this study comprised 21% males and 79% females for the HR leaders and 71% males and 29% females for the business partners. Within this sample population, all participants identified their gender.

Table 3

Sample Population by Gender

	HR respondents		Business partner respondents	
Gender	Number	%	Number	%
Male	14	21%	47	71%
Female	52	79%	19	29%

Percentage of Responses by Time in Position

The distribution of HR leaders and business partners by time in position is included in Table 4. Regarding time in position of the HR leader population, the smallest groups had been in their positions less than 6 months (7.5%) and 6 months to less than 1 year (7.5%). Additionally, the largest percentage of respondents (26%) had 1 year to less than 3 years of experience in their positions. The next group, made up of 12% of the sample, had 3 years to less than 5 years of experience in their positions. The "more than 5 years" category comprised 23% of the population. Finally, the second largest group, constituting 24% of the population surveyed, had more than 10 years of experience in their positions.

Regarding time in position of the business partners population, the smallest groups had been in their positions 6 months to less than 1 year (4%). Additionally, the largest percentage of respondents (14%) had 1 year to less than 3 years of experience in their positions. The next groups, made up of 7.5% of the sample, had 3 years to less than 5 years of experience and 7.5% had less than 6 months in their positions.

Table 4

Sample Population by Time in Position

Time in position	HR respondents		Business partner respondents	
	Number	%	Number	%
Less than 6 months	5	7.5%	5	7.5%
6 months to less than 1 year	5	7.5%	3	4.0%
1 year to less than 3 years	17	26.0%	9	14.0%
3 years to less than 5 years	8	12.0%	5	7.5%
More than 5 years	15	23.0%	23	35.0%
More than 10 years	16	24.0%	21	32.0%

Percentage of Responses by Job Title

The distribution of HR leaders and business partners by functional job title is included in Table 5 and Table 6. Regarding the functional job titles of the HR leader sample population, 24% of this group was represented by HR directors or senior HR managers. The largest population came from the HR manager category at 41% of the survey group. The second largest group held the functional job title of HR generalist/HR representative at 29% of the sample population. The smallest categories of HR leaders included the functional job titles of HR specialist, HR assistant, student, and other, at 1.5% of the sample population each. Finally, the HR consultant category had no participants as part of the population surveyed.

Table 5

HR Sample Population by Job Title

Job title	Number	%
HR director/senior HR manager	16	24.0%
HR manager	27	41.0%
HR generalist/HR representative	19	29.0%
HR specialist	1	1.5%
HR assistant	1	1.5%
HR consultant	0	0.0%
Student	1	1.5%
Other	1	1.5%

Table 6

Business Partner Sample Population by Job Title

Job title	Number
Director VP level	6
Senior DC manager	5
Warehouse manager	7
Operations manager	10
Logistics manager	7
Manager	7
Warehouse supervisor	7
Operational supervisor	4
Logistics supervisor	1
Leader	4
Trainer	2
Student (studying whse/logistics)	2
Other	4

Analysis of Data

Research Question 1

What is the degree of importance of knowledge management strategies as perceived by HR leaders in warehousing/logistics industries, as determined by Liebowitz's (2009) knowledge retention framework and as measured by the Liebowitz and Chen (2001) Knowledge Sharing Effectiveness Inventory Questionnaire?

Tables 7-10 were developed from raw data that supported the responses of HR leaders when asked to rate the importance of a series of knowledge management strategies, determined by the Liebowitz (2009) knowledge retention framework, on a 6-point scale. The six ratings on the scale were *very strongly disagree* (1), *disagree* (2), *somewhat disagree* (3), *somewhat agree* (4), *agree* (5), and *very strongly agree* (6) for each of the four main areas of Liebowitz's knowledge retention framework: (a) communication flow, (b) knowledge management environment, (c) organizational facilitation, and (d) measurement.

The results related to the HR leaders' responses are portrayed by mean order by mean standard deviation. Additionally, the percentages for each response that allowed the participants to rate their level of agreement regarding their perception of the importance of knowledge management strategies are illustrated in Tables 7-10.

HR leaders believed that the most important knowledge management strategy under the category of communication flow was having the time to chat informally with colleagues (Survey Question 3; $M = 4.39$ on a 6.00 scale). The strategy selected as the second most important by HR leaders was that they usually work in teams or groups

Table 7

Perceived Degree of Importance of Knowledge Management Strategies by HR Leaders—Communication Flow

Communication flow: How exchanges are captured and disseminated	1	2	3	4	5	6	*M*	*SD*
1. Key expertise is often captured in an online way in my organization.	3.0%	12.0%	20.0%	29.0%	30.0%	6.0%	3.89	1.230
2. I get appropriate lessons learned sent to me in areas where I can benefit.	0.0%	4.5%	7.5%	47.0%	35.0%	6.0%	4.30	0.877
3. I usually have time to chat informally with my colleagues.	0.0%	12.0%	7.0%	23.0%	44.0%	14.0%	4.39	1.188
4. Individualized learning is usually transformed into organizational learning through documenting this knowledge into our organization's knowledge repository.	3.0%	2.0%	26.0%	24.0%	39.0%	6.0%	4.14	1.107

Note. 1 = very strongly disagree, 2 = disagree, 3= somewhat disagree, 4 = somewhat agree, 5 = agree, and 6 = very strongly agree.

(Survey Question 9; *M* = 4.35 on a 6.00 scale), under the category of knowledge management environment. These two strategies were followed by having a knowledge-sharing culture within the organization versus a hoarding one (Survey Question 11; *M* = 4.33 on a 6.00 scale) and having lessons learned and best practices repositories with the organization (Survey Question 6; *M* = 4.33 on a 6.00 scale), under the knowledge management environment category. The next most important strategy to HR leaders was that they get appropriate lessons learned sent to them in areas that they can benefit from (Survey Question 2; *M* = 4.30 on a 6.00 scale), under the communication flow category.

Table 8

Perceived Degree of Importance of Knowledge Management Strategies by HR Leaders—Knowledge Management Environment

Knowledge management environment	1	2	3	4	5	6	*M*	*SD*
1. There are many knowledge fairs/ exchanges within my organization to spawn new colleague-to-colleague relationships.	0.0%	15.0%	17.0%	27.0%	35.0%	6.0%	4.00	1.176
2. There are lessons learned and best practices repositories within my organization.	0.0%	4.0%	11.0%	42.0%	32.0%	11.0%	4.33	0.966
3. We have a mentoring program within my organization.	11.0%	17.0%	12.0%	21.0%	32.0%	7.0%	3.70	1.518
4. We have Centers of Excellence in our organization whereby you can qualify to become a member/ affiliate of the Center[a].	17.0%	24.0%	21.0%	18.0%	18.0%	2.0%	3.02	1.408
5. We typically work in teams or groups.	0.0%	9.0%	8.0%	36.0%	33.0%	14.0%	4.35	1.102
6. Our main product is our knowledge.	5.0%	12.0%	18.0%	30.0%	24.0%	11.0%	3.90	1.325
7. I feel that we have a knowledge sharing culture within our organization versus a knowledge hoarding one.	0.0%	6.0%	14.0%	32.0%	38.0%	10.0%	4.33	1.042
8. We have a high percentage of teams with shared incentives whereby the team members share common objectives and goals.	0.0%	5.0%	18.0%	35.0%	36.0%	6.0%	4.21	0.969

Table 8 (*continued*)

Knowledge management environment	1	2	3	4	5	6	*M*	*SD*
9. There are online communities of practice in my organization where we can exchange views and ideas.	1.0%	5.0%	27.0%	36.0%	26.0%	5.0%	3.94	1.020

Note. 1 = very strongly disagree, 2 = disagree, 3= somewhat disagree, 4 = somewhat agree, 5 = agree, and 6 = very strongly agree.
[a]Center of excellence refers to a team, a shared facility, or an entity that provides leadership, best practices, research, support, and/or training for a focus area.

These five knowledge retention strategies appear to be the most effective as perceived by HR leaders to support the attraction and retention of talent in the workplace.

The strategy in Liebowitz's (2009) knowledge retention framework perceived by HR leaders to be least important was having centers of excellence in the organization whereby they could qualify to become members/affiliates of the center (Survey Question 8; *M* = 3.04 on a 6.00 scale). Two other knowledge retention strategies were rated as not important by majorities of HR leaders: tracking the degree to which the organization is entering team-based relationships with other business units, organizations, or customers (Survey Question 21), and having internal surveys on teaming to observe if departments are supporting and creating opportunities for one another (Survey Question 20). These strategies had mean scores of 3.40 and 3.68, respectively.

Table 9

Perceived Degree of Importance of Knowledge Management Strategies by HR Leaders—Organizational Facilitation

Organizational facilitation	1	2	3	4	5	6	*M*	*SD*
1. I am promoted and rewarded based upon my ability to share my knowledge with others.	1.0%	11.0%	23.0%	30.0%	26.0%	9.0%	3.95	1.195
2. There is an adequate budget for professional development and training in my organization.	6.0%	11.0%	11.0%	29.0%	24.0%	19.0%	4.14	1.455
3. Success, failure, or war stories are systematically collected and used in my organization.	3.0%	14.0%	15.0%	36.0%	24.0%	8.0%	3.88	1.234
4. The measurement system in my organization incorporates intellectual and customer capital, as well as the knowledge capital of our products or services.	2.0%	11.0%	20.0%	35.0%	21.0%	12.0%	4.00	1.215
5. We have technological infrastructure to promote a knowledge sharing environment within our organization.	0.0%	7.0%	23.0%	35.0%	24.0%	11.0%	4.08	1.099
6. We typically have integrated assignments where the number of projects in which more than one department participates occurs.	2.0%	7.0%	18.0%	29.0%	27.0%	17.0%	4.23	1.237
7. We have internal surveys on teaming, which surveys employees to see if the departments are supporting and creating opportunities for one another.	6.0%	24.0%	18.0%	11.0%	29.0%	12.0%	3.68	1.550

Table 9 (*continued*)

Organizational facilitation	1	2	3	4	5	6	*M*	*SD*
8. We track the degree to which the organization is entering team-based relationships with other business units, organizations, or customers.	3.0%	27.0%	24.0%	23.0%	18.0%	5.0%	3.40	1.275
9. The organization's office layout is conducive to speaking with my colleagues and meeting people.	4.5%	7.5%	14.0%	27.0%	38.0%	9.0%	4.14	1.263

Note. 1 = very strongly disagree, 2 = disagree, 3= somewhat disagree, 4 = somewhat agree, 5 = agree, and 6 = very strongly agree.

Table 10

Perceived Degree of Importance of Knowledge Management Strategies by HR Leaders—Measurement

Measurement: Assesses the likelihood of knowledge sharing and knowledge management being successful within the organization	1	2	3	4	5	6	*M*	*SD*
1. The reuse rate of "frequently accessed/ reused" knowledge in my organization is high.	5.0%	12.0%	15.0%	27.0%	36.0%	5.0%	3.92	1.268
2. The distribution of knowledge to appropriate individuals in my organization is done actively on a daily basis.	3.0%	12.0%	21.0%	24.0%	35.0%	5.0%	3.89	1.229
3. New ideas generating innovative products are a frequent occurrence in my organization.	4.5%	7.5%	20.0%	33.0%	26.0%	9.0%	3.95	1.245

Note. 1 = very strongly disagree, 2 = disagree, 3= somewhat disagree, 4 = somewhat agree, 5 = agree, and 6 = very strongly agree.

Research Question 2

What is the degree of importance of knowledge management strategies as perceived by strategic business partners in warehousing/logistics industries, as determined by Liebowitz's (2009) knowledge retention framework and as measured by the Liebowitz and Chen (2001) Knowledge Sharing Effectiveness Inventory Questionnaire?

Tables 11-14 were developed from raw data that supported the responses of business partners in the warehousing and logistics industries regarding their perception of the importance of a series of knowledge management strategies, determined by the Liebowitz (2009) knowledge retention framework, as rated on the same 6-point scale used for HR leaders.

Business partners believed that the most important knowledge management strategy was working in teams or groups (Survey Question 9; M = 4.48 on a 6.00 scale), under the category of knowledge management environment. The strategy selected as second most important by business partners was having time to chat informally with colleagues; this was Survey Question 3, with a mean score of 4.38 on a 6.00 scale, under the category of communication flow. These two strategies were followed in ranking by having teams with shared incentives whereby the team members share common objectives and goals; this was Survey Question 12, with a mean score of 4.36 on a 6.00 scale, under the knowledge management environment category. The next most important strategy was reported to be the feeling that there is a knowledge-sharing culture within

Table 11

Perceived Degree of Importance of Knowledge Management Strategies by Strategic Business Partners—Communication

Communication flow: How exchanges are captured and disseminated	1	2	3	4	5	6	M	SD
1. Key expertise is often captured in an online way in my organization.	8.0%	15.0%	18.0%	36.0%	21.0%	2.0%	3.53	1.240
2. I get appropriate lessons learned sent to me in areas where I can benefit.	6.0%	9%	17.0%	45.0%	20.0%	3.0%	3.73	1.160
3. I usually have time to chat informally with my colleagues.	0.0%	9.0%	9.0%	32.0%	35.0%	15.0%	4.38	1.130
4. Individualized learning is usually transformed into organizational learning through documenting this knowledge into our organization's knowledge repository.	4.0%	11.0%	17.0%	44.0%	20.0%	4.0%	3.77	1.160

Note. 1 = very strongly disagree, 2 = disagree, 3= somewhat disagree, 4 = somewhat agree, 5 = agree, and 6 = very strongly agree.

the organization versus a knowledge-hoarding one; this was Survey Question 11, with a mean score of 4.26 out of 6.00, again under the knowledge management environment category. The fifth most important strategy rated by business partners was their perception that their main product is their knowledge; this was Survey Question 10, with a mean score of 4.23 on a 6.00 scale, under the knowledge management environment category. These five strategy factors appear to be the most important as perceived by the business partners in the warehousing and logistics industries.

Table 12

Perceived Degree of Importance of Knowledge Management Strategies by Strategic Business Partners—Knowledge Management

Knowledge management environment	1	2	3	4	5	6	*M*	*SD*
1. There are many knowledge fairs/ exchanges within my organization to spawn new colleague-to-colleague relationships.	4.0%	17.0%	17.0%	24.0%	32.0%	6.0%	3.80	1.340
2. There are lessons learned and best practices repositories within my organization.	5.0%	12.0%	15.0%	18.0%	39.0%	11.0%	4.08	1.370
3. We have a mentoring program within my organization.	11.0%	16.0%	12.0%	23.0%	27.0%	11.0%	3.71	1.550
4. We have Centers of Excellence in our organization whereby you can qualify to become a member/ affiliate of the Center[a].	7.0%	29.0%	9.0%	29.0%	17.0%	9.0%	3.45	1.480
5. We typically work in teams or groups.	3.0%	3.0%	5.0%	19.0%	20.0%	16.0%	4.48	1.320
6. Our main product is our knowledge.	0.0%	11.0%	15.0%	29.0%	32.0%	13.0%	4.23	1.190
7. I feel that we have a knowledge sharing culture within our organization versus a knowledge hoarding one.	4.0%	4.0%	20.0%	20.0%	35.0%	17.0%	4.26	1.330
8. We have a high percentage of teams with shared incentives whereby the team members share common objectives and goals.	1.5%	7.5%	6.0%	36.0%	35.0%	14.0%	4.36	1.310

Table 12 (*continued*)

Knowledge management environment	1	2	3	4	5	6	*M*	*SD*
9. There are online communities of practice in my organization where we can exchange views and ideas.	11.0%	18.0%	23.0%	20.0%	24.0%	4.0%	3.42	1.430

Note. 1 = very strongly disagree, 2 = disagree, 3= somewhat disagree, 4 = somewhat agree, 5 = agree, and 6 = very strongly agree.
[a]Center of excellence refers to a team, a shared facility, or an entity that provides leadership, best practices, research, support, and/or training for a focus area.

The strategy in Liebowitz's (2009) knowledge retention framework perceived by business partners to be the least important was having online communities of practice in the organization where there is an exchange of views and ideas; this was Survey Question 13, with a mean score of 3.42 on a 6.00 scale, under the knowledge management category. The second least important strategy was having centers of excellence in the organization whereby they could qualify to become members/affiliates of the center; this was Survey Question 8, with a mean score of 3.45 on a scale of 6.00. Two other strategies were rated as not important by majorities of business partners. The first was having internal surveys on teaming to see if the departments are supporting and creating opportunities for one another; this was Survey Question 20. The second strategy ranked as not important was key expertise often being captured in an online way in the organization; this was Survey Question 1. These strategies had mean scores of 3.50 and 3.53, respectively, on a 6.00 scale.

Table 13

Perceived Degree of Importance of Knowledge Management Strategies by Strategic Business Partners—Organizational Facilitation

Organizational facilitation	1	2	3	4	5	6	*M*	*SD*
1. I am promoted and rewarded based upon my ability to share my knowledge with others.	7.5%	14.0%	9.0%	38.0%	27.0%	4.5%	3.77	1.320
2. There is an adequate budget for professional development and training in my organization.	4.0%	17.0%	17.0%	24.0%	26.0%	12.0%	3.86	1.410
3. Success, failure, or war stories are systematically collected and used in my organization.	6.0%	18.0%	18.0%	24.0%	29.0%	5.0%	3.65	1.350
4. The measurement system in my organization incorporates intellectual and customer capital, as well as the knowledge capital of our products or services.	2.0%	11.0%	12.0%	30.0%	36.0%	9.0%	4.17	1.180
5. We have technological infrastructure to promote a knowledge sharing environment within our organization.	1.5%	14.0%	6.0%	36.0%	35.0%	7.5%	4.12	1.180
6. We typically have integrated assignments where the number of projects in which more than one department participates occurs.	1.5%	15.0%	20.0%	23.0%	36.0%	4.5%	3.90	1.220
7. We have internal surveys on teaming, which surveys employees to see if the departments are supporting and creating opportunities for one another.	6.0%	29.0%	20.0%	12.0%	21.0%	12.0%	3.50	1.540

Table 13 (*continued*)

Organizational facilitation	1	2	3	4	5	6	*M*	*SD*
8. We track the degree to which the organization is entering team-based relationships with other business units, organizations, or customers.	6.0%	18.0%	14.0%	32.0%	24.0%	6.0%	3.68	1.160
9. The organization's office layout is conducive to speaking with my colleagues and meeting people.	4.0%	9.0%	11.0%	32.0%	30.0%	14.0%	4.15	1.373

Table 14

Perceived Degree of Importance of Knowledge Management Strategies by Strategic Business Partners—Measurement

Measurement: Assesses the likelihood of knowledge sharing and knowledge management being successful within the organization	1	2	3	4	5	6	*M*	*SD*
1. The reuse rate of "frequently accessed/ reused" knowledge in my organization is high.	5.0%	9.0%	21.0%	23.0%	27.0%	15.0%	4.05	1.370
2. The distribution of knowledge to appropriate individuals in my organization is done actively on a daily basis.	2.0%	14.0%	9.0%	33.0%	27.0%	15.0%	4.17	1.280
3. New ideas generating innovative products are a frequent occurrence in my organization.	6.0%	6.0%	17.0%	30.0%	29.0%	12.0%	4.06	1.320

Research Question 3

   Is there a significant difference between the degree of importance of knowledge management strategies as perceived by (a) HR leaders and (b) strategic business partners in warehousing/logistics industries, as determined by Liebowitz's (2009) knowledge retention framework and as measured by the Liebowitz and Chen (2001) Knowledge Sharing Effectiveness Inventory Questionnaire?

   To answer Research Question 3, the researcher compared the scores of the comparable questions across the two survey instruments for HR leaders and business partners. An independent-samples *t* test was utilized in making this comparison, as the comparison groups only contained two classifications. The *t* test is a statistical test that is utilized to determine if there is a significant difference between the mean or average scores of two groups (Gay, Mills, & Airasian, 2012). The level of statistical significance was defined as having a *p* value of less than .05, which is commonly accepted as the standard in survey research. Differences between the mean scores of the two groups are identified in Tables 15-17.

   Tables 15-17 were developed from raw data that illustrated only two of the 25 strategies listed on the questionnaire resulted in a mean difference between the two groups that was large enough to be statistically significant. HR leaders perceived having appropriate lessons learned sent to them in areas that they can benefit from (Survey Question 2) as much more important than business partners did, with a mean difference of .57 on a 6.00 scale. HR leaders assessed this strategy almost halfway in between a

score of *somewhat agree* and *agree* (4.30) while business partners were much closer to an

assessment level of *somewhat disagree* (3.73).

Table 15

HR Leaders and Business Partners Comparison of Mean Scores—Communication

Communication flow: How exchanges are captured and disseminated	HR leaders	Business partners	Mean difference	Significance
1. Key expertise is often captured in an online way in my organization.	3.89	3.53	.36	0.093
2. I get appropriate lessons learned sent to me in areas where I can benefit.	4.30	3.73	.57	0.002*
3. I usually have time to chat informally with my colleagues.	4.39	4.38	.01	0.940
4. Individualized learning is usually transformed into organizational learning through documenting this knowledge into our organization's knowledge repository.	4.14	3.77	.37	0.068

*$p < .05$.

The next strategy containing more of a widespread differential between the two

groups was having online communities of practice in the organization where they can

exchange views and ideas; this was Survey Question 13. HR leaders rated their

perception of this strategy between the levels of *somewhat disagree* and *somewhat agree*

(3.94) while business partners were more likely to view this strategy as not important,

selecting the response of *disagree* (3.42); the mean difference between these two scores

was .52.

Table 16

HR Leaders and Business Partners Comparison of Mean Scores—Knowledge Management

Knowledge management environment	HR leaders	Business partners	Mean difference	Significance
1. There are many knowledge fairs/exchanges within my organization to spawn new colleague-to-colleague relationships.	4.00	3.80	.20	0.371
2. There are lessons learned and best practices repositories within my organization.	4.33	4.08	.25	0.215
3. We have a mentoring program within my organization.	3.70	3.71	-.01	0.955
4. We have Centers of Excellence in our organization whereby you can qualify to become a member/affiliate of the Center[a].	3.02	3.45	-.43	0.083
5. We have technological infrastructure to promote a knowledge sharing environment within our organization.	4.34	4.48	-.13	0.358
6. We typically have integrated assignments where the number of projects in which more than one department participates occurs.	3.90	4.23	.33	0.131
7. I feel that we have a knowledge sharing culture within our organization versus a knowledge hoarding one.	4.33	4.26	.07	0.716
8. We have a high percentage of teams with shared incentives whereby the team members share common objectives and goals.	4.21	4.36	-.15	0.410
9. There are online communities of practice in my organization where we can exchange views and ideas.	3.94	3.42	.52	0.019*

[a]Center of excellence refers to a team, a shared facility, or an entity that provides leadership, best practices, research, support, and/or training for a focus area.
*$p < .05$.

The next seven strategies that followed were rated closely enough by the two groups not to yield statistically significant differences: individualized learning usually being transformed into organizational learning through documentation into the

Table 17

HR Leaders and Business Partners Comparison of Mean Scores—Organizational Facilitation

Organizational facilitation	HR leaders	Business partners	Mean difference	Significance
1. I am promoted and rewarded based upon my ability to share my knowledge with others.	3.95	3.77	.18	0.409
2. There is an adequate budget for professional development and training in my organization.	4.14	3.86	.28	0.277
3. Success, failure, or war stories are systematically collected and used in my organization.	3.88	3.65	.23	0.315
4. The measurement system in my organization incorporates intellectual and customer capital, as well as the knowledge capital of our products or services.	4.00	4.17	-.17	0.426
5. We have technological infrastructure to promote a knowledge sharing environment within our organization.	4.08	4.12	-.04	0.820
6. We typically have integrated assignments where the number of projects in which more than one department participates occurs.	4.23	3.90	.33	0.108
7. We have internal surveys on teaming, which surveys employees to see if the departments are supporting and creating opportunities for one another.	3.68	3.50	.18	0.407
8. We track the degree to which the organization is entering team-based relationships with other business units, organizations, or customers.	3.40	3.68	-.28	0.210
9. The organization's office layout is conducive to speaking with my colleagues and meeting people.	4.14	4.15	-.01	0.939

organization's knowledge repository (Survey Question 4); having centers of excellence in

the organization whereby employees can qualify to become a member/affiliate of the

center (Survey Question 8); key expertise often being captured in an online way in the

organization (Survey Question 1); typically having integrated assignments where the

Table 18

HR Leaders and Business Partners Comparison of Mean Scores—Measurement

Measurement: Assesses the likelihood of knowledge sharing and knowledge management being successful within the organization	HR leaders	Business partners	Mean difference	Significance
1. The reuse rate of "frequently accessed/ reused" knowledge in my organization is high.	3.92	4.05	-.13	0.794
2. The distribution of knowledge to appropriate individuals in my organization is done actively on a daily basis.	3.89	4.17	-.41	0.326
3. New ideas generating innovative products are a frequent occurrence in my organization.	3.95	4.06	-.11	0.576

number of projects in which more than one department participates occurs (Survey

Question 19); the main product being the knowledge (Survey Question 10); tracking the

degree to which the organization is entering team-based relationships with other business

units, organizations, or customers (Survey Question 21); and having lessons learned and

best practices repositories within the organization (Survey Question 6).

The five strategies that were essentially perceived as having equal levels of

importance by the two groups were having a mentoring program within the organization

(Survey Question 7), usually having time to chat informally with colleagues (Survey

Question 3), the organization's office layout being conducive to speaking with colleagues

and meeting people (Survey Question 22), having technological infrastructure to promote

a knowledge-sharing environment within the organization (Survey Question 18), and

having online communities of practice in the organization where employees can

exchange views and ideas (Survey Question 13).

Summary of Findings

This study provided quantitative data from HR leaders and their strategic business partners in the warehousing and logistics industries in the Inland Empire region of Southern California on their assessments of the importance of Liebowitz's (2009) knowledge management strategies model to support the attraction and retention of talent. The statements included in the survey were taken from two separate questionnaires: Knowledge Retention Strategies Questionnaire for HR Leaders (Appendix A), designed for HR professionals, and Knowledge Retention Strategies Questionnaire for Business Partners (Appendix B), designed for warehousing and logistics leaders. The strategy factors were consistent across the two questionnaires; however, the titles were modified to appropriately represent the type of participants responding to the surveys. The data collection involved a hard-copy survey for the HR leaders from the HR Network Group, which included 66 HR leaders from 117 different warehousing, distribution, and logistics centers throughout the Inland Empire, and an online survey for the warehousing and logistics leaders who were voluntarily solicited through the HR leaders.

For this study, the researcher selected a quantitative methodology with a design that provided a way or method to generalize or make inferences regarding a population; hence, this study utilized a descriptive design. Creswell (2014) discussed that a quantitative approach is used for "testing objective theories by examining the relationships among variables" (p. 4). The specific research approach selected was quantitative utilizing a survey methodology. A quantitative design was appropriate for this research study since the known independent and dependent variables predicted or

explained the degree of importance and effectiveness of Liebowitz's (2009) model of knowledge management strategies (Nardi, 2006).

Through the use of descriptive statistics, the researcher identified measures of central tendency for each of the three research questions. In addition, the researcher descriptively used measures of variation with the data of HR leaders and warehouse and logistics leaders. The researcher utilized descriptive and inferential statistical tests to answer the three research questions. Specifically, frequencies, means, standard deviations, mean comparisons, and the independent-samples *t* test were employed. The research findings were presented for each research question, and statistically significant differences were pointed out where applicable. According to Gay et al. (2012), "The t-test is used to determine whether there is a significant difference between two or more means at a selected probability" (p. 467).

Overall, there was no significant difference (*t* test overall score of 0.093489) in the degree of importance of the knowledge management strategies model to support the attraction and retention of talent, as perceived by (a) HR leaders and (b) strategic business partners in warehousing and logistics industries located in the Inland Empire region of Southern California, as measured by the Liebowitz and Chen (2001) Knowledge Sharing Effectiveness Inventory Questionnaire.

Patterns in the Findings

Patterns emerged in the findings of this research across the two groups. Three strategies were the same from among the top five strategies in each group. The three highest rated strategies were as follows:

1. usually have time to chat informally with colleagues (Survey Question 3), which ranked in the number one position among HR leaders and the number two position among business partners;

2. typically work in teams or groups (Survey Question 9), which ranked in the number two position among HR leaders and in the number one position among business partners; and

3. feel that there is a knowledge-sharing culture within the organization versus a knowledge-hoarding one (Survey Question 11), which ranked in the number three position among HR leaders and in the number four position among business partners.

Among the bottom five strategies in each group, three strategies appeared in both lists:

1. having centers of excellence in the organization whereby employees can qualify to become a member/affiliate of the center (Survey Question 8), which ranked in the number 25 position among HR leaders and in the number 24 position for business partners;

2. having internal surveys on teaming to see if the departments are supporting and creating opportunities for one another (Survey Question 20), which ranked in the number 23 position for both HR leaders and business partners; and

3. success, failure, or war stories being systematically collected and used in the organization (Survey Question 16), which ranked in the number 21 position for both HR leaders and business partners.

Divergent Responses

While the highest and lowest groupings showed consensus as noted, agreement with some questions was ranked at different levels by the two groups. These are organized according to the span of the difference in ranking, with the greatest difference first:

1. the distribution of knowledge to appropriate individuals in the organization being done actively on a daily basis (Survey Question 24), which ranked in the number 20 position among HR leaders and in the number seven position among business partners, representing a difference of 13 positions in ranking;

2. having online communities of practice in the organization where employees can exchange views and ideas (Survey Question 13), which ranked in the number 16 position among HR leaders yet ranked in the number 25 position among business partners, representing a difference of nine positions in ranking;

3. tracking the degree to which the organization is entering team-based relationships with other business units, organizations, or customers (Survey Question 21), which was ranked in the number 24 position by HR leaders and in the number 20 position by business partners, representing a difference of four positions in ranking; and

4. having a mentoring program within the organization (Survey Question 7), which ranked in the number 22 position among HR leaders and in the number 19 position among business partners, representing a difference of three positions in ranking.

Chapter V details the conclusions of the research and discusses recommendations for future research.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS FOR
FUTURE RESEARCH AND ACTION

This chapter provides a review of the study. It is divided into eight sections:

(a) summary of the study, (b) purpose of the study, (c) research questions,

(d) methodology summary, (e) major findings (f) conclusions, (g) implications, and

(h) a chapter summary with recommendations for further research.

Summary of the Study

The objective of this study was to illustrate why human resources (HR) issues are

of central importance to the topic of knowledge management and to give an overview of

the way the topics have been linked thus far in the literature. In addition, this research

aimed to provide relevant information to support organizations as they prepare to plan for

the future of knowledge management needs and their HR assets. This will be important

to the success of organizations in finding and retaining top talent in the complex

knowledge era that is emerging in the 21st century. Also, these resources will benefit HR

leaders and their strategic business partners in the warehousing/logistics industries who

are committed to changing the culture by undertaking the study of knowledge retention

strategy models to support the attraction and retention of talent. All of this will be a vital

link to the work in organizations to drive the levels of productivity and performance

forward.

124

Review of the Purpose

The purpose of this quantitative study was to determine the degree of importance of Liebowitz's (2009) knowledge management strategies model to support the attraction and retention of talent, as perceived by human resource (HR) leaders and strategic business partners in the warehousing/logistics industries located in the Inland Empire region of Southern California, as measured by the Liebowitz and Chen (2001) Knowledge Sharing Effectiveness Inventory Questionnaire. Another purpose of this study was to determine whether there was a significant difference in the degree of importance of the knowledge management strategies model to support the attraction and retention of talent, as perceived by (a) HR leaders and (b) strategic business partners in warehousing/logistics industries located in the Inland Empire region of Southern California, as measured by the Liebowitz and Chen Knowledge Sharing Effectiveness Inventory Questionnaire.

Review of Research Questions

1. What is the degree of importance of knowledge management strategies as perceived by HR leaders in warehousing/logistics industries, as determined by Liebowitz's (2009) knowledge retention framework and as measured by the Liebowitz and Chen (2001) Knowledge Sharing Effectiveness Inventory Questionnaire?

2. What is the degree of importance of knowledge management strategies as perceived by strategic business partners in warehousing/logistics industries, as determined by Liebowitz's (2009) knowledge retention framework and as measured by the Liebowitz and Chen (2001) Knowledge Sharing Effectiveness Inventory Questionnaire?

3. Is there a significant difference between the degree of importance of knowledge management strategies as perceived by (a) HR leaders and (b) strategic business partners in warehousing/logistics industries, as determined by Liebowitz's (2009) knowledge retention framework and as measured by the Liebowitz and Chen (2001) Knowledge Sharing Effectiveness Inventory Questionnaire?

Methodology Summary

This study provided quantitative data from HR leaders and their strategic business partners in the warehousing and logistics industries in the Inland Empire region of Southern California on their assessments of the importance of Liebowitz's (2009) knowledge management strategies model to support the attraction and retention of talent. The statements included in the survey were taken from two separate questionnaires: Knowledge Retention Strategies Questionnaire for HR Leaders (Appendix A), designed for HR professionals, and Knowledge Retention Strategies Questionnaire for Business Partners (Appendix B), designed for warehousing and logistics leaders. The strategy factors were consistent across the two questionnaires; however, the titles were modified to appropriately represent the type of participants responding to the surveys. The data collection involved a hard-copy survey for the HR leaders from the HR Network Group, which included 117 HR leaders from 64 different warehousing, distribution, and logistics centers throughout the Inland Empire, and an online survey for the warehousing and logistics leaders who were voluntarily solicited through the HR leaders.

Through the use of descriptive statistics, the researcher identified measures of central tendency for each of the three research questions. In addition, descriptive

research was used for measures of variation with the data of HR leaders and warehouse and logistics leaders. The researcher utilized descriptive and inferential statistical tests to answer the three research questions; specifically, frequencies, means, standard deviations, mean comparisons, and the independent-samples t test were employed. The research findings were presented for each research question, and statistically significant differences were pointed out where applicable. According to Gay and Airasian (2003), "The t-test is used to determine whether there is a significant difference between two or more means at a selected probability" (p. 467).

Findings of the Study

For this study, the researcher selected a quantitative methodology with a design that provided a way or method to generalize or make inferences regarding a population; hence, this study utilized a descriptive design. Creswell (2014) discussed that a quantitative approach is used for "testing objective theories by examining the relationships among variables" (p. 4). The specific research approach selected was quantitative utilizing a survey methodology. A quantitative design was appropriate for this research study since the known independent and dependent variables predicted or explained the degree of importance and effectiveness of Liebowitz's (2009) model of knowledge management strategies (Nardi, 2006).

Overall, there was no significant difference (t test overall score of 0.093489) in the degree of importance of the knowledge management strategies model to support the attraction and retention of talent, as perceived by (a) HR leaders and (b) strategic business partners in warehousing and logistics industries located in the Inland Empire region of

Southern California, as measured by the Liebowitz and Chen (2001) Knowledge Sharing Effectiveness Inventory Questionnaire.

Patterns in the Findings

Patterns surfaced in the findings of this research across the two groups. Three strategies were the same from among the top five strategies in each group. The three highest rated strategies were as follows:

1. usually have time to chat informally with colleagues (Survey Question 3), which ranked in the number one position among HR leaders and the number two position among business partners;

2. typically work in teams or groups (Survey Question 9), which ranked in the number two position among HR leaders and in the number one position among business partners; and

3. feel that there is a knowledge-sharing culture within the organization versus a knowledge-hoarding one (Survey Question 11), which ranked in the number three position among HR leaders and in the number four position among business partners.

Among the bottom five strategies in each group, three strategies appeared in both lists:

1. having centers of excellence in the organization whereby employees can qualify to become a member/affiliate of the center (Survey Question 8; center of excellence refers to a team, a shared facility, or an entity that provides leadership, best practices, research, support, and/or training for a focus area), which ranked in the number 25 position among HR leaders and in the number 24 position for business partners;

2. having internal surveys on teaming to see if the departments are supporting and creating opportunities for one another (Survey Question 20), which ranked in the number 23 position for both HR leaders and business partners; and

3. success, failure, or war stories being systematically collected and used in the organization (Survey Question 16), which ranked in the number 21 position for both HR leaders and business partners.

Divergent Responses

While the highest and lowest groupings showed consensus as noted, agreement with some questions was ranked at different levels by the two groups. These are organized according to the span of the difference in ranking, with the greatest difference first:

1. the distribution of knowledge to appropriate individuals in the organization being done actively on a daily basis (Survey Question 24), which ranked in the number 20 position among HR leaders and in the number seven position among business partners, representing a difference of 13 positions in ranking;

2. having online communities of practice in the organization where employees can exchange views and ideas (Survey Question 13), which ranked in the number 16 position among HR leaders yet ranked in the number 25 position among business partners, representing a difference of nine positions in ranking; and

3. having a mentoring program within the organization (Survey Question 7), which ranked in the number 22 position among HR leaders and in the number 19 position among business partners, representing a difference of three positions in ranking.

Findings and Recommended Actions

Changes in technology advances have come so fast that traditional HR methods no longer work. HR leaders must find new ways of working with their strategic business partners in order to be effective throughout their organizations. Only with an expanded perspective can HR leaders add value in working closely with their business partners and employees to reframe the HR business drivers unconstrained by traditional organizational assumptions and perspectives.

Similarities Between the Two Groups

First major finding. The strategies of working in teams or groups (Survey Question 9) and having time to chat informally with colleagues (Survey Question 3) were found to be important knowledge retention strategies to support the attraction and retention of talent in the workplace by both HR leaders and business partners. The strategy of working in teams or groups was the second most important for HR leaders ($M = 4.35$) and the most important for business partners ($M = 4.48$). The strategy of having time to chat informally with colleagues was the most important for HR leaders ($M = 4.39$) and the second most important for business partners ($M = 4.38$)

Recommended actions. In review of the current literature regarding relationships, HR leaders and business partners responded similarly to what was discussed in the literature. They advocated implementing an environment with engagement activities that will allow HR leaders and business partners to interact with peers and instill these activities throughout the organization. Healthy social relationships

in organizations build trust, make people learn faster, and encourage people to be more productive and creative (Cohen & Prusak, 2001).

HR leaders and business partners who are not genuinely open with each other about their mistakes and weaknesses make it impossible to build a foundation of trust between them. By not having trust, there is no synergy through the building of relationships on this foundation (Lencioni, 2002b). HR leaders and business partners should incorporate team activities, such as icebreakers, and best practices into the organization. Also, they should identify team strengths and use these strengths to leverage buy-in throughout the organization. Furthermore, icebreakers should be a standard operating practice. This will also assist with changing the culture to a knowledge-sharing culture.

Therefore, HR leaders need to find ways to bring together early teaming relationships, and for every project, they should have an initial team-building event so that they practice healthy social events to build that collaboration and healthier social relationships. Additionally, they should have an interactive team-building activity to practice project management and networking skills.

Second major finding. The statement that asked whether the HR leaders and business partners felt that there was a knowledge-sharing culture within their organizations versus a knowledge-hoarding culture was Survey Question 11. It ranked in the number three position among HR leaders and in the number four position among business partners.

Survey Question 8 addressed having centers of excellence in the organization whereby employees can qualify to become a member/affiliate of the center. (Center of excellence refers to a team, a shared facility, or an entity that provides leadership, best practices, research, support, and/or training for a focus area.) It ranked in the number 25 position among HR leaders and in the number 24 position for business partners.

Recommended actions. In organizations, trust provides support and enables collaboration and knowledge sharing; these processes are related to effective knowledge acquisition. By not using the wisdom of all employees, this knowledge is not being transferred in the organization, which hampers creating a knowledge-sharing culture. HR leaders need to support strategies that enhance trust building through various organizational development interventions such as the DISC (dominance, inducement, steadiness, or compliance) model, Myers-Briggs instrument, and StrengthsFinder so that HR leaders can build the trust through these strategies.

HR leaders and business partners should lead the creation and attainment of this knowledge acquisition. One area to explore would be the creation of a mentor advisory council. The council would reflect on and share ideas related to key issues and decisions regarding knowledge acquisition. In addition, it may be beneficial to establish a process for new employees to interview long-term and short-term employees in order to learn from them, to build relationships, and to foster cross-generational collaboration. One way is through structured job rotations. Another beneficial action would be to invite long-term employees to participate on strategic teams or task forces in order to leverage the existing institutional knowledge.

Based on the results derived from the survey administered to both of these sample populations of HR leaders and business partners, the findings indicate that as technology advances, they must continue to update their education with current events and issues in their respective areas of expertise. HR leaders and business partners must foster intellectual improvement at every level of the organization by providing different types of learning tools for their employees. These learning tools would consist of instructional training, followed by web-based training as an enhancement to the instructional training.

Third major finding. Survey Question 20 addressed having internal surveys on teaming, which survey employees to see if the departments are supporting and creating opportunities for one another. It ranked in the number 23 position for both HR leaders and business partners.

Recommended actions. HR leaders and business partners need to pursue competitive advantage in performance excellence with teams through shared goals, shared leadership, collaboration, and open communication. Teams have an advantage over the work of individuals because each member can offer new ideas, talent, and viewpoints. HR leaders and business partners should utilize a survey tool to ask team members to describe to the team what a great team environment looks like to them.

Fourth major finding. Survey Question 16 asked whether success, failure, or war stories are systematically collected and used in the HR leaders' and business partners' organizations. It ranked in the number 21 position for both HR leaders and business partners, and it was the bottom ranking of both groups.

Recommended actions. HR leaders and business partners in the organizations have the ability to share their strategic insights so that this can become public knowledge and change the thinking to a knowledge-sharing culture. As asserted by Senge (1990), "'Leader as teacher' is not about 'teaching' people how to achieve their vision, it is about fostering learning for everyone in the organization. Such leaders help people throughout the organization develop systemic understandings" (p. 356). HR leaders and business partners can use storytelling to inspire employees to develop trust and change their views. In addition, it will motivate employees to share values and transfer knowledge to others.

**Differences That Stood Out
Between Both Groups**

Fifth major finding. Survey Question 24 asked HR leaders and business partners whether the distribution of knowledge to appropriate individuals in their organizations is done actively on a daily basis. It ranked in the number 20 position among HR leaders and in the number seven position among business partners.

Recommended actions. HR leaders should work closely with their business partners to share knowledge; since knowledge sharing cannot be mandated, it must occur willingly. Also, HR leaders should work closely with business partners to "learn the business," fostering learning through shared engaged practices. Oltra (2005) asserted,

> How can senior managers involve the HRM [human resource management] function more in the development and implementation of an enterprise KM [knowledge management] strategy? First of all, the HRM function can only lead KM efforts effectively if the people behind that function are perceived positively and highly trusted by the rest of the organization. (p. 80)

Sixth major finding. Survey Question 13 addressed having online communities of practice in the organization where employees can exchange views and ideas. It was ranked in the number 16 position by HR leaders yet was ranked in the number 25 position by business partners.

Recommended actions. Technology will continue to be an important part of organizations to remain competitive. HR leaders and business partners should develop online communities of practice by designating a specific role in their organizations that will lead as the moderator of this program. Organizations need to support retention and technology-enabled transfer of knowledge with organizational professional knowledge centers and knowledge-sharing forums.

Seventh major finding. Survey Question 7 addressed having a mentoring program within the organization. It was ranked in the number 22 position by HR leaders and in the number 19 position by business partners.

Recommended action. HR leaders and business partners should think less of the traditional and formal direct mentoring programs and implement new ways of sharing knowledge in their organizations. They need to create mentoring programs through job shadowing, leadership development, and job rotation. Having mentoring circles would allow employees to have an exchange between two or more individuals in a more informal setting.

<h3 style="text-align:center">Implications for Action</h3>

The objective of this study was to show why HR issues are of central importance to the topic of knowledge management and to give an overview of the way the topics

have been linked thus far in the literature. From the major findings captured, additional implications and action items evolved in this study. These additional reflections may now be added in a contributory way to the current literature (please refer to Table 19). Table 19 provides some interesting action items for each of the nine major findings from this research about HR leader topics of importance to the area of knowledge management.

Recommendations for Further Research

All technologically enabled approaches to knowledge management depend on the attraction, development, motivation, and retention of talent. How people use and evolve their knowledge is at the core of the ability of organizations to accomplish their strategies and to a large extent defines the employment relationship (Woodward, 2008). From a knowledge contribution perspective, this study advances the HR management literature as well as the literature on knowledge management and knowledge retention. The following are recommendations for further research:

1. Replicate this study in other parts of the state and country to determine potential differences.

2. Utilize a mixed-methods research design to support the quantitative study.

3. Conduct a quantitative study on how HR leaders can implement knowledge retention strategies to curb employee retention and reduce attrition in the organization.

Table 19

Major Findings, Implications, and Recommended Actions

Major finding	Implication	Recommended actions
Top three strategies that appeared in both HR leaders and business partner surveys		
1. Usually have time to chat informally with colleagues (Survey Question 3)	HR leaders and business partners in the organization should strive as a whole to provide an environment with good working relations among peers.	• Engagement practices • Development workshops • Knowledge cafes: Initiate a pilot program of collaborative topics of discussion either in person or online
2. Typically work in teams or groups (Survey Question 9)	HR leaders and business partners who are not genuinely open with each other about their mistakes and weaknesses make it impossible to build a foundation of trust for others. By not having trust, there is no synergy through the building of relationships on this foundation (Lencioni, 2002b)	• Engagement practices • Development workshops • Knowledge cafes: Initiate a pilot program of collaborative topics of discussion either in person or online • Leadership development • Wikis: Forum for team to share concerns and progress status • Blogs: Improve communication across depts.
3. Feel that there is a knowledge-sharing culture within the organization versus a knowledge-hoarding one (Survey Question 11)	HR leaders and business partners should lead the creation and attainment of a knowledge-sharing culture. By not using the wisdom of all employees, this knowledge is not being transferred in the organization.	• Mentor advisory council • Interview process • After-action reviews

Table 19 (*continued*)

Major finding	Implication	Recommended actions
Bottom three strategies that appeared in both HR leaders and business partner surveys		
4. There are centers of excellence in the organization whereby employees can qualify to become a member/affiliate of the center (Survey Question 8; center of excellence refers to a team, a shared facility, or an entity that provides leadership, best practices, research, support, and/or training for a focus area)	HR leaders and business partners must foster intellectual improvement at every level of the organization by providing different types of learning tools for their employees.	• E-learning: Mobile and social computing • Professional development: Personalization tailored to own needs • Leadership and development workshops • Knowledge cafes: Initiate a pilot program of collaborative topics of discussion either in person or online • Wikis: Forum to share concerns and progress status • Blogs: Improve communication across depts.
5. There are internal surveys on teaming, which survey employees to see if the departments are supporting and creating opportunities for one another (Survey Question 20)	HR leaders and business partners need to pursue competitive advantage in performance excellence with teams through shared goals, shared leadership, collaboration, and open communication.	• Utilize a survey tool to ask team members to describe to the team what a great team environment looks like to them.
6. Success, failure, or war stories are systematically collected and used in the organization (Survey Question 16)	HR leaders and business partners in the organizations have the ability to share their strategic insights so that this can become public knowledge and change the thinking to a knowledge-sharing culture. "'Leader as teacher' is not about 'teaching' people how to achieve their vision, it is about fostering learning for everyone. . . . Such leaders help people throughout the organization develop systemic understandings" (Senge, 1990, p. 356).	• Exit interviews • Cheat sheets: Capture knowledge in a codified manner (Liebowitz, 2009) • After-action reviews

Table 19 (*continued*)

Major finding	Implication	Recommended actions
Strategies that stood out in both HR leaders and business partner surveys		
7. The distribution of knowledge to appropriate individuals in the organization is done actively on a daily basis (Survey Question 24; ranked in the number 20 position by HR leaders and in the number seven position by business partners)	HR leaders should work closely with their business partners to cultivate the knowledge sharing and think less about traditional "line versus staff roles." Knowledge sharing cannot be mandated; it must occur willingly. Schein (1992) and Phillips (1999) suggested that information sharing promotes common identity, mutual trust, and organizational learning and is directly related to organizational cultures that foster generative learning.	• Mentoring circle: Create informal settings • Job shadowing: "Learn the business" • Leadership and development workshops • Job rotation: "Line versus staff roles"
8. There are online communities of practice in the organization where employees can exchange views and ideas (Survey Question 13; ranked in the number 16 position by HR leaders yet ranked in the number 25 position by business partners)	Technology will continue to be an important part of organizations to remain competitive. HR leaders and business partners should develop online communities of practice by designating a specific role in their organizations that will lead as the moderator of this program.	• E-learning: Mobile and social computing • Professional development: Personalization tailored to own needs • Leadership and development workshops • Knowledge cafes: Initiate a pilot program of collaborative topics of discussion either in person or online • Wikis: Forum to share concerns and progress status • Blogs: Improve communication across depts.
9. Have a mentoring program within the organization (Survey Question 7; ranked in the number 22 position by HR leaders and in the number 19 position by business partners)	HR leaders and business partners should think less of the traditional and formal direct mentoring programs and think about new ways of sharing knowledge in the organization.	• Mentoring circle: Create informal settings • Job shadowing • Leadership development • Job rotation

Summary

This study looked into knowledge retention strategies that could help organizations gain competitive advantage. Some recommended areas of focus would be under the knowledge retention arena: Foster a learning environment through shared engaged practices, create a professional knowledge center, and create a teaming environment to transfer knowledge.

REFERENCES

141

REFERENCES

Achieve. (2012). *The future of the U.S. workforce: Middle skills jobs and the growing importance of postsecondary education*. Retrieved from http://www.achieve.org /files/MiddleSkillsJobs.pdf

Alavi, M., Kayworth, T. R., & Leidner, D. E. (2006). An empirical examination of the influence of organizational culture on knowledge management practices. *Journal of Management Information Systems, 22*(3), 191-224.

Alvesson, M. (2000). Social identity and the problem of loyalty in knowledge-intensive companies. *Journal of Management Studies, 37*(8), 1101-1123.

Andrews, R., & Boyne, G. A. (2010). Capacity, leadership, and organizational performance: Testing the black box model of public management. *Public Administration Review, 70*, 443-454. doi:10.1111/j.1540-6210.2010.02158.x

Argote, L. (1999). *Organizational learning: Creating, retaining and transferring knowledge.* Boston, MA: Kluwer Academic.

Argote, L. (2012). *Organizational learning: Creating, retaining and transferring knowledge* (2nd ed.). Heidelberg, Germany: Springer.

Argyris, C. (1999). *On organizational learning* (2nd ed.). Malden, MA: Blackwell.

Attafar, A., Soleimani, M., Shahnazari, A., & Shahin, A. (2012). The relationship between enhancement of human resource productivity and knowledge management in Iranian libraries: A correlation analysis. *African Journal of Business Management, 6*(8), 3094-3099.

Autry, C. W., & Daugherty, P. J. (2003). Warehouse operations employees: Linking person-organization fit, job satisfaction, and coping responses. *Journal of Business Logistics, 24*(1), 171-198.

Baier, J., & Fahlander, A. (2008). Managing demographic risk. *Harvard Business Review, 86*(2), 119-128.

Baker, P. (2007). An exploratory framework of the role of inventory and warehousing in international supply chains. *International Journal of Logistics Management, 18*(1), 64-80.

142

Ball, K., & Gotsill, G. (2011). *Surviving the baby boomer exodus: Capturing knowledge for Gen X and Y employees*. Boston, MA: Course Technology, Cengage Learning.

Berry, J. R. (1968). Elements of warehouse layout. *International Journal of Production Research, 7*(2), 105-121.

Beaven, D. (2009). People make the difference. *Logistics & Transport Focus, 11*(6), 45.

Bessen, J. (2014, August 25). Employers aren't just whining – the "skill gap" is real. *Harvard Business Review*, p. 2.

Bhattacharya, M., & Wright, P. (2005). Managing human assets in an uncertain world: Applying real options to HRM. *International Journal of Human Resource Management, 16*(6), 929-948.

Birkinshaw, J. (2001). Why is knowledge management so difficult? *Business Strategy Review, 12*(1), 8.

Black, T. R. (1999). *Doing quantitative research in the social sciences*. Thousand Oaks, CA: Sage.

Boudreau, J. W., & Ramstad, P. M. (2007). *Beyond HR: The new science of human capital.* Boston, MA: Harvard Business School Press.

Bowersox, D. J., Closs, D., & Stank, T. P. (2000). Ten mega-trends that will revolutionize supply chain logistics. *Journal of Business Logistics, 21*(2), 1-16.

Brelade, S., & Harman, C. (2001). How human resources can influence knowledge management. *Strategic HR Review, 1*(1), 30-33.

Brewer, P. D., & Brewer, K. L. (2010). Knowledge management, human resource management, and higher education: A theoretical model. *Journal of Education for Business, 85*(6), 330-335.

Brown, A. D. (1998). *Organizational culture* (2nd ed.). New York, NY: Financial Times Management.

Brown, J. S., & Duguid, P. (1998). Organizing knowledge. *California Management Review, 40*(3), 90-111.

Bukowitz, W. R., Williams, R. L., & Mactas, E. S. (2004). Human capital measurement. *Research-Technology Management, 47*(3), 43-49.

Bunch, W. (2013, November). Partners at the helm. *Human Resource Executive,* 14-17.

Cabrera, E. F., & Cabrera, A. (2005). Fostering knowledge sharing through people management practices. *International Journal of Human Resource Management, 16*(5), 720-735.

Calo, T. (2011). Talent management in the era of the aging workforce: The critical role of knowledge transfer. *Public Personnel Management, 37*(4), 403.

Capell, K. (2008, October 20). Zara thrives by breaking all the rules. *BusinessWeek*, p. 66.

Cappelli, P. (2008). *Talent on demand: Managing talent in an age of uncertainty.* Boston, MA: Harvard Business Review Press.

Carnevale, A. P., Smith, N., & Strohl, J. (2010). *Help wanted: Projections of jobs and education requirements through 2018*. Retrieved from Georgetown University, Center on Education and the Workforce website: https://cew.georgetown.edu/wp-content/uploads/2014/12/fullreport.pdf

Carnevale, T. (2005). The coming labor and skills shortage. *Training and Development, 59*(1), 36-41.

Centers of Excellence. (2011). *Regional labor market profile: Inland Empire/desert region*. Retrieved from https://desertcolleges.org/docs/coe/dwm-profile-ie-12.pdf

Chong, S. C., & Choi, Y. S. (2005). Critical factors in the successful implementation of knowledge management. *Journal of Knowledge Management Practice*. Retrieved from http://www.tlainc.com/articl90.htm

Cohen, D., & Prusak, L. (2001). *In good company: How social capital makes organizations work*. Boston, MA: Harvard Business School Press.

Collison, C., & Parcell, G. (2001). *Learning to fly—practical lessons from one of the world's leading knowledge companies*. Oxford, England: Capstone.

Coopey, J., & Burgoyne, J. (2000). Politics and organizational learning. *Journal of Management Studies, 37*(6), 869-885.

Council of Supply Chain Management Professionals. (2013). *CSCMP's annual state of logistics report*. Chicago, IL: Author.

Cowell, R. (2006). Knowledge management: Essential, not optional. *Nursing Management–UK, 13*(6), 10-13.

Cox, J. (2008). *Your opinion, please! How to build the best questionnaires in the field of education* (2nd ed.). Thousand Oaks, CA: Corwin.

Creswell, J. (2005). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (2nd ed.). Upper Saddle River, NJ: Pearson, Merrill Prentice Hall.

Creswell, J. (2008). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (3rd ed.). Upper Saddle River, NJ: Merrill Prentice Hall.

Creswell, J. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd ed.). Thousand Oaks, CA: SAGE.

Creswell, J. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (4th ed.). Boston, MA: Pearson Education.

Creswell, J. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). Thousand Oaks, CA: Sage.

Cummings, T. G., & Worley, C. G. (2005). *Organization development and change*. Mason, OH: Thompson South-Western.

Currie, G., & Kerrin, M. (2003). Human resource management and knowledge management: Enhancing knowledge sharing in a pharmaceutical company. *International Journal of Human Resource Management, 14*(6), 1027-1045.

Dasgupta, M. (2012). Conceptual paper: Organizational learning and its practices. *SAGE Open*, 1-11. doi:10.1177/2158244011432198

Davenport, T. H. (2005). *Thinking for a living: How to get better performance and results from knowledge workers.* Boston, MA: Harvard Business Review Press.

Davenport, T. H., & Prusak, L. (1998). *Working knowledge: How organizations manage what they know*. Boston, MA: Harvard Business School Press.

DeLong, D. (2002). *Better practices for retaining organizational knowledge: Lessons for the leading edge.* Cambridge, MA: Accenture Institute for Strategic Change.

DeLong, D. (2004). *Lost knowledge: Confronting the threat of an aging workforce.* New York, NY: Oxford University Press.

DeLong, D., & Fahey, L. (2000). Diagnosing cultural barriers to knowledge management. *The Academy of Management Executives, 14*(4), 113-127.

DeLong, D. W., & Trautman, S. (2010). *The executive guide to high-impact talent management: Powerful tools for leveraging a changing workforce.* New York, NY: McGraw-Hill.

dePaula, R., & Fischer, G. (2005). *Knowledge management: Why learning from the past is not enough!* Retrieved from University of Colorado, Center for LifeLong Learning & Design website: http://l3d.cs.colorado.edu/~gerhard/papers/km-final-2005.pdf

Dessler, G. (2011). *Human resource management* (12th ed.). Upper Saddle River, NJ: Pearson Education, Prentice Hall.

DeTienne, K., Dyer, G., Hoopes, C., & Harris, S. (2004). Toward a model of effective knowledge management and directions for future research: Culture, leadership and CKOs. *Journal of Leadership and Organizational Studies, 10*(4), 26-43.

DHL. (2015). DHL continues to promote innovative knowledge transfer for automotive supply chain managers in the Americas [Press release]. Retrieved from http://www.businesswire.com/news/home/20151210005972/en/DHL-Continues-Promote-Innovative-Knowledge-Transfer-Automotive

Dixon, N., & Flood, C. (1993). Questioning the learning concept. In S. M. Scott, B. Spencer, & A. Thomas (Eds.), *Learning for life: Readings in Canadian adult education* (pp. 140-152). Toronto, Ontario, Canada: Thompson.

Drucker, P. F. (1967). *The effective executive.* New York, NY: Harper & Row.

Drucker, P. F. (1988). The coming of the new organization. *Harvard Business Review, 66*(1), 45–53.

Drucker, P. F. (2001). The next society—a survey of the near future. *The Economist, 361*(8246), 1-5.

Drucker, P. F. (2005, January). Managing oneself. *Harvard Business Review*, 100-109.

Dumay, J., & Rooney, J. (2011) Dealing with an aging workforce: Current and future implications. *Journal of Human Resource Costing and Accounting, 15*(3), 174-195.

Dychtwald, K., Erickson, T., & Morison, R. (2006). *Workforce crisis: How to beat the coming shortage of skills and talent.* Boston, MA: Harvard Business School Press.

Easterby-Smith, M. (1997). Disciplines of organizational learning: Contributions and critiques. *Human Relations, 50*(9), 1085-1116.

Eisenhardt, K., & Martin, J. (2000). Dynamic capabilities: What are they? *Strategic Management Journal, 21*, 1105-1121.

Elias, J., & Scarbrough, H. (2004). Evaluating human capital: An exploratory study of management practice. *Human Resource Management Journal, 14*(4), 21-40.

Elmholdt, C. (2004). Knowledge management and the practice of knowledge sharing and learning at work: A case study. *Studies in Continuing Education, 26*(2), 327-339.

Elsdon, R. (1999). Creating value and enhancing retention through employee development: The Sun Microsystems experience. *Human Resource Planning, 22*(2), 39-47.

Fiol, C., & Lyles, M. (1987). Organizational learning. *Academy of Management Review, 10*(4), 803-804.

Fleetwood, S., & Hesketh, A. (2006). HRM-performance research: Under-theorized and lacking explanatory power. *International Journal of Human Resource Management, 17*(12), 1988-1993.

Fowler, F. (2009). *Survey research methods* (4th ed.). Thousand Oaks, CA: Sage.

Gall, M. (2007). *Educational research: An introduction* (8th ed.). New York, NY: Pearson Education.

Galvan, J. L. (2006). *Writing literature reviews* (3rd ed.). Glendale, CA: Pyrczak.

Gay, L. R., Mills, G. E., & Airasian, P. (2012). *Educational research: Competencies for analysis and applications* (10th ed.). Boston, MA: Pearson Education.

Ghosh, B., & Scott, J. (2007). Effective knowledge management systems for a clinical nursing setting. *Information Systems Management, 24*(1), 73-84.

Gordon, E. E. (2005). *The 2020 meltdown: Solving the impending jobs crisis.* Westport, CT: Praeger.

Gorman, M. F. (2010). A case study in effectively bridging the business skills gap for the information technology professional. *Journal of Education for Business, 86*(1), 17-24. doi:10.1080/08832321003663348

Gu, J., Goetschalckx, M., & McGinnis, L. F. (2007). Research on warehouse operation: A comprehensive review. *European Journal of Operational Research, 177*(1), 1-21.

Gubbins, M. C., & Garavan, T. N. (2005). Studying HRD practitioners: A social capital model. *Human Resource Development Review, 4*(2), 189-218.

Gupta, A. K., & Govindarajan, V. (2000). Knowledge flows within multinational corporations. *Strategic Management Journal, 21*(4), 473.

Gupta, B., Iyer, L., & Aronson, J. (2000). Knowledge management: Practices and challenges. *Industrial Management and Data Systems, 100*(1), 17-21.

Haesli, A., & Boxall, P. (2005). When knowledge management meets HR strategy: An exploration of personalization-retention codification-recruitment configurations. *International Journal of Human Resource Management, 16*(11), 1955-1975.

Hansen, M. T., Nohria, N., & Tierney, T. (1999). What's your strategy for managing knowledge? *Harvard Business Review, 77*(2), 106-116.

Hargadon, A. B. (1998). Firms as knowledge brokers: Lessons in pursuing continuous innovation. *California Management Review, 40*(3), 209-227.

Harris, K. (2005). *Leadership style, KM and culture*. Reston, VA: Gartner Research Group.

Hayek, F. A. (1945). The use of knowledge in society. *American Economic Review, 35*(4), 519-530.

Hedberg, B. L. T. (1981). How organizations learn. In P. Nystrom & W. Starbuck (Eds.), *Handbook of organizational design* (Vol. 1, pp. 3-27). New York, NY: Oxford University Press.

Hendrickson, A. (2003). Human resource information systems: Backbone technology of contemporary human resource. *Journal of Labor Research, 24*(3), 381-394.

Hildreth, P., Wright, P., & Kimble, C. (1999, April). Knowledge management: Are we missing something? In L. Brooks & C. Kimble (Eds.), *Information systems—the next generation: Proceedings of the 4th UKAIS Conference* (pp. 347-356). Retrieved from http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.64 .349&rep=rep1&type=pdf

Hislop, D. (2003). Linking human resource management and knowledge management via commitment. *Employee Relations, 25*(2), 182-202.

Huber, G. P. (1991). Organizational learning: The contributing processes and the literatures. *Organization Science, 2*(1), 88-115. Retrieved from https://pubsonline.informs.org/doi/abs/10.1287/orsc.2.1.88

Husing, J. (2017). Inland Empire city profile 2017. *Inland Empire Quarterly Economic Report, 29*(4). Retrieved from http://www.johnhusing.com/QER%20Reports /QER%20Oct%202017%20web.pdf

Jashapara, A. (2004). *Knowledge management: An integrated approach*. Edinburgh, Scotland: Pearson Education Limited.

Judge, R. A. (2008). *Simulating knowledge flows to formulate strategies for implementing knowledge management in small organizations* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database. (UMI No. 3308406)

Kaplan, H., & Sadock, B. (Eds.). (1994). *Comprehensive textbook of psychiatry*. Philadelphia, PA: Williams and Wilkins.

Katzanek, J. (2014, April 17). Economy: More solid job growth anticipated. *The Press-Enterprise*. Retrieved from https://www.pe.com/2014/04/17/economy-more-solid-job-growth-anticipated/

Keskin, H. (2005). The relationship between explicit and tacit oriented KM strategy, and firm performance. *Journal of American Academy of Business, 7*(1), 169-175.

Key, M., Thompson, H., & McCann, J. (2009). Knowledge management: A glass half full. *People and Strategy, 32*(4), 42-47.

Kirkham, C. (2015, Apr 17). Inland empire sees surge in jobs, but many are low-paid, temporary. *Los Angeles Times.* Retrieved from https://www.latimes.com/business/la-fi-inland-empire-warehouses-20150419-story.html

Kramer, R. M. (1991). Intergroup relations and organizational dilemmas: The role of categorization processes. *Research in Organizational Behavior, 14*, 191-228.

Kulik, C., & Perry, E. (2008). When less is more: The effect of devolution on HR as a strategic role and construed image. *Human Resource Management, 47*(3), 541-558.

Lawler, E. (1992). *The ultimate advantage: Creating the high involvement organization*. San Francisco, CA: Jossey-Bass.

Lawler, E. (2008). *Talent: Making people your competitive advantage.* San Francisco, CA: Jossey-Bass.

Lawler, E. E., & Boudreau, J. W. (2009). *Achieving excellence in human resources management: An assessment of human resources functions*. Stanford, CA: Stanford University Press.

Leedy, P. D., & Ormrod, J. E. (2001). *Practical research: Planning and design* (7th ed.). Upper Saddle River, NJ: Merrill Prentice Hall.

Lencioni, P. M. (2002a). Make your values mean something. *Harvard Business Review, 80*(7), 113-117.

Lencioni, P. M. (2002b). *The five dysfunctions of a team*. San Francisco, CA: Jossey Bass.

Lengnick-Hall, M. L., & Lengnick-Hall, C. A. (2002). *Human resource in the knowledge economy: New challenges, new roles, new capabilities.* San Francisco, CA: Berrett-Koehler.

Leonard, D., & Sensiper, S. (1998). The role of tacit knowledge in group innovation. *California Management Review, 40*(3), 112-132.

Leonard, D., & Swap, W. (2005). *Deep smarts.* Boston, MA: Harvard Business School Press.

Liebowitz, J. (2004). *Addressing the human capital crisis in the federal government: A knowledge management perspective*. Amsterdam, Netherlands: Butterworth Heinemann.

Liebowitz, J. (2006). *What they didn't tell you about knowledge management*. Lanham, MD: Scarecrow Press/Rowman & Littlefield.

Liebowitz, J. (2009). *Knowledge retention: Strategies and solutions*. Boca Raton, LA: CRC Press.

Liebowitz, J. (2012). *Beyond knowledge management: What every leader should know.* Boca Raton, LA: CRC Press.

Liebowitz, J., & Chen, Y. (2001). Developing knowledge-sharing proficiencies. *Knowledge Management Review, 3*(6), 12-15.

Lipiec, J. (2001). Human resources management perspective at the turn of the century. *Public Personnel Management, 30*(2), 137.

Lussier, R. N., & Hendon, J. R. (2013). *Human resource management: Functions, applications, skill development*. Thousand Oaks, CA: Sage.

McAdam, R., & McCreedy, S. (1999). A critical view of knowledge management models. *The Learning Organization, 6*(3), 91-100.

McCall, H., Arnold, V., & Sutton, S. G. (2008). Use of knowledge management systems and the impact on the acquisition of explicit knowledge. *Journal of Information Systems, 22*(2), 77-101.

McGuire, J., & Rhodes, G. (2009). *Transforming your leadership culture.* San Francisco, CA: Jossey-Bass.

Messick, D. M., & Mackie, D. M. (1989). Intergroup relations. *Annual Review of Psychology, 40*, 45-81.

Min, H. (2007). Examining sources of warehouse employee turnover. *International Journal of Physical Distribution & Logistics Management, 37*(5), 375-388.

Murphy, P. R., & Poist, R. F. (1992). Managing the human side of public warehousing: An overview of modern practices. *Transportation Journal, 31*(3), 54-62.

Murphy, P. R., & Poist, R. F. (1993). In search of warehousing excellence: A multivariate analysis of HRM practices. *Journal of Business Logistics, 14*(2), 145-164.

Myers, M. B., Griffith, D. A., Daugherty, P. J., & Lusch, R. F. (2004). Maximizing the human capital equation in logistics: Education, experience, and skills. *Journal of Business Logistics, 25*(1), 211-232.

Nardi, P. (2006). *Doing survey research: A guide to quantitative methods.* Boston, MA: Pearson Education.

Neumark, D., Johnson, H., & Mejia, M. C. (2013). Future skill shortage in the U.S. economy? *Economics of Education Review, 32*, 151-167. doi:10.1016/j.econedurev.2012.09.004

Nevo, D., & Wand, Y. (2005). Organizational memory information systems: A transactive memory approach. *Decision Support Systems, 39*(4), 549-562.

Nickols, F. (2000). *The knowledge in knowledge management.* Retrieved from http://studylib.net/doc/14781120/the-knowledge-in-knowledge-management

Nicolini, D., Powel, J., Conville, P., & Martinez-Solano, L. (2007). Managing knowledge in the healthcare sector. *International Journal of Management Reviews, 10*(3), 245-263.

Nisperos, N. (2015, April 23). Logistics experts gather in Pomona to address industry issues. *Inland Valley Daily Bulletin*. Retrieved from http://www.dailybulletin .com/business/20150423/logistics-experts-gather-in-pomona-to-address-industry-issues

Noe, R. A., Hollenbeck, J. R., Gerhart, B., & Wright, P. M. (2013). *Human resource management: Gaining a competitive advantage* (9th ed.). New York, NY: McGraw-Hill.

Nonaka, I. (1991, November-December). The knowledge creating company. *Harvard Business Review*, 96-104.

Nonaka, I. (1994). A dynamic theory of organizational knowledge creation. *Organizational Science, 5*(1), 14-37.

Nonaka, I., & Konno, N. (1998). The concept of "ba": Building a foundation for knowledge creation. *California Management Review, 40*(3), 40-54. Retrieved from http://home.business.utah.edu/actme/7410/Nonaka%201998.pdf

Nonaka, I., & Takeuchi, H. (1995). *The knowledge-creating company: How Japanese companies create the dynamics of innovation*. New York, NY: Oxford University Press.

O'Dell, C., & Grayson, C. J., Jr. (1998). *If only we knew what we know*. New York, NY: Free Press.

O'Dell, C., & Hubert, C. (2011). *The new edge in knowledge: How knowledge management is changing the way we do business.* Hoboken, NJ: John Wiley & Sons.

Oltra, V. (2005). Knowledge management effectiveness factors: The role of HRM. *Journal of Knowledge Management, 9*(4), 70-86.

Pace, A. (2012). The enduring talent trial. *Training and Development, 66*(7), 22.

Pan, S., & Scarbrough, H. (1999). Knowledge management in practice: An exploratory case study. *Technology Analysis and Strategic Management, 11*(3), 359-374.

Parise, S. (2007). Knowledge management and human resource development: An application in social network analysis methods. *Advances in Developing Human Resources, 9*(3), 359-383.

Pearson, M. (2014, July). Manufacturers need to address the talent supply chain. *Logistics Management,* 26-27.

Perrott, B. E. (n.d.). *Knowledge management from an industry perspective*. Retrieved from https://pdfs.semanticscholar.org/92c2 /25d38af72d4c7ab9f82705bafedddfadd8e7.pdf

Perrott, B.E. (2013, February). *Knowledge that flows in health communities of practice.* Paper presented at the Association for Marketing and Health Care Research Conference, Big Sky, MT.

Pfeffer, J., & Sutton, R. (1999). *The knowing-doing gap: How smart companies turn knowledge into action.* Boston, MA: Harvard Business School Press.

Phillips, T. (1999, July). The truth about sharing knowledge. *Director, 52*(12), 75.

Polanyi, M. (1966). *The tacit dimension*. Garden City, NY: Doubleday Anchor.

Pollard, D. (2005). The future of knowledge. *Across the Board, 42*(1), 54-56.

Remler, D., & Van Ryzin, G. (2011). *Research methods in practice: Strategies for description and causation.* Thousand Oaks, CA: Sage.

Rice, D. (2015, November 13). *Talent shortage is a weak link in the supply chain. Industry Week*. Retrieved from https://www.industryweek.com/supply-chain/talent-shortage-weak-link-supply-chain

Roberts, C. M. (2004). *The dissertation journey: A practical and comprehensive guide to planning, writing and defending your dissertation.* Thousand Oaks, CA: Corwin Press.

Rokeach, M. (1973). *The nature of human values*. New York, NY: Free Press.

Rossett, A. (1999). Knowledge management meets analysis. *Training & Development, 53*(5), 63-68.

Rothwell, W. J. (2011). *Invaluable knowledge*. New York, NY: American Management Association.

Sanders, N. R., & Ritzman, L. P. (2004). Using warehouse workforce flexibility to offset forecast errors. *Journal of Business Logistic, 25*(2), 251-270.

Schein, E. H. (1985). *Organizational culture and leadership: A dynamic view.* San Francisco, CA: Jossey-Bass.

Schein, E. H. (1992). *Organizational culture and leadership* (2nd ed.). San Francisco, CA: Jossey-Bass.

Schilligo, J. A. (2007). *Predictors of effective knowledge management* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database. (UMI No. 3272572)

Schramm, J. (2011). Under pressure. *HR Magazine, 56*(4), 104.

Scullion, H., Collings, D., & Gunningle, P. (2007). International human resource management in the 21st century: Emerging themes and contemporary debates. *Human Resource Management Journal, 17*(4), 309-319.

Senge, P. M. (1990). *The fifth discipline: The art and practice of the learning organization.* New York, NY: Doubleday.

Sheehan, W. G. (1989). Contract warehousing: The evolution of an industry. *Journal of Business Logistics, 10*(1), 31-49.

Shellenbarger, S. (2005, December 1). Gray is good: Employers make efforts to retain older, experienced workers. *The Wall Street Journal*. Retrieved from https://www.wsj.com/articles/SB113339569082710746

Simon, M., & Francis, J. B. (2001). *The dissertation and research cookbook* (3rd ed.). Dubuque, IA: Kendall/Hunt.

Small, C., & Sage, A. (2006). Knowledge management and knowledge sharing: A review. *Information Knowledge Systems Management, 5*(3), 153-169.

Smith, K. (2014, Aug 21). Local leaders discuss challenges, opportunities for those in poverty. *Redlands Daily Facts*.

Soliman, F., & Spooner, K. (2000). Strategies for implementing knowledge management: Role of human resource management. *Journal of Knowledge Management, 4*(4), 337-345.

Stein, A. (2015, July/August). Supply chain talent: A practical approach to hardening soft skills. *Supply Chain Management Review,* 20-26.

Storberg, J. (2002). The evolution of capital theory: A review of a theory of social capital and implications for HRD. *Human Resource Development Review, 1*(4), 468-499.

Storey, J., & Quintas, P. (2001). Knowledge management and HRM. In J. Storey (Ed.), *Human resource management: A critical text* (pp. 339-363). London, England: Thornson Learning.

Stringer, E. (2007). *Action research* (3rd ed.). Thousand Oaks, CA: Sage.

Styhre, A. (2002). The knowledge-intensive company and the economy of sharing: Rethinking utility and knowledge management. *Knowledge and Process Management, 9*(4), 228-236.

Sveiby, K. E. (1997). *The new organizational wealth: Managing & measuring knowledge-based assets.* San Francisco, CA: Berrett-Koehler.

Swamidass, P. M., & Newell, W. T. (1987). Manufacturing strategy, environmental uncertainty and performance: A path analytic model. *Management Science, 33*(4), 509-524.

Swart, J., & Kinnie, N. (2003). Sharing knowledge in knowledge management: Concepts and controversies. *Journal of Management Studies, 38*(7), 913-921.

Tajfel, H. (1981). *Human groups and social categories: Studies in social psychology.* Cambridge, England: Cambridge University Press.

Thomas, J., Kellogg, W., & Erickson, T. (2001). The knowledge management puzzle: Human and social factors in knowledge management. *IBM Systems Journal, 40*(4), 863-884.

Trautman, S. (2010). Focusing knowledge retention on millennials. *Workforce Management, 89*(8), 6.

Tsoukas, H., & Vladimirou, E. (2001). What is organization knowledge? *Journal of Management Studies, 38*(7), 973-993.

Ulrich, D., & Smallwood, N. (2005). HR's new ROI: Return on intangible. *Human Resource Management, 44*(2), 137-142.

Van Hoek, R. I., Chatham, R., & Wilding, R. (2002). Managers in supply chain management: The critical dimension. *Supply Chain Management, 7*(3), 119-125.

Vince, R. (2001). Power and emotion in organizational learning. *Human Relations, 54*(10), 1325-1335.

Von Krogh, G. (2000). *Enabling knowledge creation: How to unlock the mystery of tacit knowledge and release the power of innovation*. London, England: Oxford University Press.

Vosburgh, R. (2003). The state of the human resources profession in 2003: An interview with Dave Ulrich. *Human Resource Planning, 26*(1), 18-22.

Walsh, J. P., & Ungston, G. R. (1991). Organizational memory. *Academy of Management Review, 16*, 57-91.

Wang, S., & Noe, R. A. (2010). Knowledge sharing: A review and directions for future research. *Human Resource Management Review, 20*, 115-131.

Wenger, E., McDermott, R., & Snyder, W. (2002). *Cultivating communities of practice*. Boston, MA: Harvard Business School Press.

Woodward, N. (2008). New breed of human resource leader. *HR Magazine, 53*(6), 53-57.

Wright, P., Dunford, B., & Snell, S. (2001). Human resources and the resource based view of the firm. *Journal of Management, 27*, 701-721.

Zollo, M., & Winter, S. G. (2002). Deliberate learning and the evolution of dynamic capabilities. *Organization Science, 13*(3), 339-351.

APPENDICES

157

APPENDIX A

KNOWLEDGE RETENTION STRATEGIES QUESTIONNAIRE
FOR HR LEADERS

158

Knowledge Retention Strategies Questionnaire for HR Leaders

_____

Overview:

Thank you for participating in this survey regarding the knowledge retention strategies model to support the attraction and retention of talent.

This study addresses the perceptions by human resource leaders and strategic business partners in the warehousing/logistic industries located in the Inland Empire Region of southern California.

_____

Demographic data

Directions: Please checkmark the item that best describes you.

Please select your gender:
_____Male _____ Female _____

How long have you been an employee in the organization?

☐ Less than 6 months
☐ 6 months – less than 1 year
☐ 1 year – less than 3 years
☐ 3 years – less than 5 years
☐ More than 5 years
☐ More than 10 years

Please select by checking the appropriate job title or the title that more closely matches your job function:

_____ HR Director/Senior HR Manager
_____ HR Manager
_____ HR Generalist/HR Representative
_____ HR Specialist
_____ HR Assistant
_____ HR Consultant/Vendor
_____ Student (studying in HR)
_____ Other:_____

1

Knowledge Retention Strategies Questionnaire for HR Leaders

_____

Part One

Directions

Please respond to the following statements regarding *your perceptions* about the importance of knowledge retention strategies to support the attraction and retention of talent in the workplace.

This study addresses the perceptions by human resource leaders and strategic business partners in the warehousing/logistic industries located in the Inland Empire Region of southern California.

Indicate your level of agreement by circling the number that best describes your belief on the Likert scale from 1 (Very strongly disagree) to 6 (Very strongly agree) regarding these statements below.

Sample Question: **Attracting talent in the workplace is important:**

Very Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Very Strongly Agree
1	2	3	4	5	6

Part Two   **Questionnaire**

Communication – Communication flow assesses how knowledge and communication exchanges are captured and disseminated throughout the organization.	Very Strongly Disagree 1	Disagree 2	Somewhat Disagree 3	Somewhat Agree 4	Agree 5	Very Strongly Agree 6
1. Key expertise is often captured in an online way in my organization.						
2. I get appropriate lessons learned sent to me in areas where I can benefit.						
3. I usually have time to chat informally with my colleagues.						
4. Individualized learning is usually transformed into organizational learning through documenting this knowledge into our organization's knowledge repository.						

2

Knowledge Management (KM) Environment – looks at internal cultural factors related to knowledge management within the organization.	Very Strongly Disagree 1	Disagree 2	Somewhat Disagree 3	Somewhat Agree 4	Agree 5	Very Strongly Agree 6
5. There are many knowledge fairs/exchanges within my organization to spawn new colleague-to-colleague relationships.						
6. There are lessons learned and best practices repositories within my organization.						
7. We have a mentoring program within my organization.						
8. We have Centers of Excellence in our organization whereby you can qualify to become a member/affiliate of the Center.*						
9. We typically work in teams or groups.						
10. Our main product is our knowledge.						
11. I feel that we have a knowledge sharing culture within our organization verses a knowledge hoarding one.						
12. We have a high percentage of teams with shared incentives whereby the team members share common objectives and goals.						
13. There are online communities of practice in my organization where we can exchange views and ideas.						

*Center of Excellence - Refers to a team, a shared facility or an entity that provides leadership, best practices, research, support and/or training for a focus area.

www.manaraa.com

Organizational facilitation- This assesses the sophistication of the knowledge management infrastructure and knowledge sharing capacity within the organization.	Very Strongly Disagree 1	Disagree 2	Somewhat Disagree 3	Somewhat Agree 4	Agree 5	Very Strongly Agree 6
14. I am promoted and rewarded based upon my ability to share my knowledge with others.						
15. There is an adequate budget for professional development and training in my organization.						
16. Success, failure, or war stories are systematically collected and used in my organization.						
17. The measurement system in my organization incorporates intellectual and customer capital, as well as the knowledge capital of our products or services.						
18. We have technological infrastructure to promote a knowledge sharing environment within our organization.						
19. We typically have integrated assignments where the number of projects in which more than one department participates occurs.						
20. We have internal surveys on teaming, which surveys employees to see if the departments are supporting and creating opportunities for one another.						
21. We track the degree to which the organization is entering team-based relationships with other business units, organizations, or customers.						
22. The organization's office layout is conducive to speaking with my colleagues and meeting people.						

4

Measurement – Assesses the likelihood of knowledge sharing and KM being successful within the organization.	Very Strongly Disagree 1	Disagree 2	Somewhat Disagree 3	Somewhat Agree 4	Agree 5	Very Strongly Agree 6
23. The reuse rate of "frequently accessed/reused" knowledge in my organization is high.						
24. The distribution of knowledge to appropriate individuals in my organization is done actively on a daily basis.						
25. New ideas generating innovate products are a frequent occurrence in my organization.						

Source: Liebowitz and Chen (2001) Knowledge Sharing Effectiveness Inventory Questionnaire

5

APPENDIX B

KNOWLEDGE RETENTION STRATEGIES QUESTIONNAIRE
FOR STRATEGIC BUSINESS PARTNERS

164

Knowledge Retention Strategies Questionnaire for Strategic Business Partners

_____

Overview:

Thank you for participating in this survey regarding the knowledge retention strategies model to support the attraction and retention of talent.

This study addresses the perceptions by human resource leaders and strategic business partners in the warehousing/logistic industries located in the Inland Empire Region of southern California.

_____

Demographic data

Directions: Please checkmark the item that best describes you.

Please select your gender:
_____Male _____ Female _____

How long have you been an employee in the organization?

☐ Less than 6 months
☐ 6 months – less than 1 year
☐ 1 year – less than 3 years
☐ 3 years – less than 5 years
☐ More than 5 years
☐ More than 10 years

Please select by checking the appropriate job title or the title that more closely matches your job function:

_____ Director/VP level
_____ Senior/DC Manager
_____ Warehouse Manager
_____ Operations Manager
_____ Logistics Manager
_____ Manager
_____ Warehouse Supervisor
_____ Operations Supervisor
_____ Logistics Supervisor
_____ Leader
_____ Trainer
_____ Student (studying in Whse/Logistics)
_____ Other:_____

1

Knowledge Retention Strategies Questionnaire for Strategic Business Partners

Part One

Directions

Please respond to the following statements regarding *your perceptions* about the importance of knowledge retention strategies to support the attraction and retention of talent in the workplace.

This study addresses the perceptions by human resource leaders and strategic business partners in the warehousing/logistic industries located in the Inland Empire Region of southern California.

Indicate your level of agreement by circling the number that best describes your belief on the Likert scale from 1 (Very strongly disagree) to 6 (Very strongly agree) regarding these statements below.

Sample Question: Attracting talent in the workplace is important:

Very strongly disagree	Disagree	Somewhat disagree	Somewhat Agree	Agree	Very Strongly agree
1	2	3	4	5	6

Part Two   **Questionnaire**

Communication – Communication flow assesses how knowledge and communication exchanges are captured and disseminated throughout the organization.	Very strongly disagree 1	Disagree 2	Somewhat disagree 3	Somewhat Agree 4	Agree 5	Very Strongly agree 6
1. Key expertise is often captured in an online way in my organization						
2. I get appropriate lessons learned sent to me in areas where I can benefit.						
3. I usually have time to chat informally with my colleagues.						
4. Individualized learning is usually transformed into organizational learning through documenting this knowledge into our organization's knowledge repository.						

Knowledge Management Environment – looks at internal cultural factors related to knowledge management within the organization.	Very strongly disagree 1	Disagree 2	Somewhat disagree 3	Somewhat Agree 4	Agree 5	Very Strongly agree 6
5. There are many knowledge fairs/exchanges within my organization to spawn new colleague-to-colleague relationships.						
6. There are lessons learned and best practices repositories within my organization.						
7. We have a mentoring program within my organization.						
8. We have Centers of Excellence in our organization whereby you can qualify to become a member/affiliate of the Center *						
9. We typically work in teams or groups						
10. Our main product is our knowledge.						
11. I feel that we have a knowledge sharing culture within our organization verses a knowledge hoarding one.						
12. We have a high percentage of teams with shared incentives whereby the team members share common objectives and goals.						
13. There are online communities of practice in my organization where we can exchange views and ideas.						

*Center of Excellence - Refers to a team, a shared facility or an entity that provides leadership, best practices, research, support and/or training for a focus area.

3

www.manaraa.com

Organizational facilitation- This assesses the sophistication of the knowledge management infrastructure and knowledge sharing capacity within the organization.	Very strongly disagree 1	Disagree 2	Somewhat disagree 3	Somewhat Agree 4	Agree 5	Very Strongly agree 6
14. I am promoted and rewarded based upon my ability to share my knowledge with others.						
15. There is an adequate budget for professional development and training in my organization.						
16. Success, failure, or war stories are systematically collected and used in my organization.						
17. The measurement system in my organization incorporates intellectual and customer capital, as well as the knowledge capital of our products or services.						
18. We have technological infrastructure to promote a knowledge sharing environment within our organization.						
19. We typically have integrated assignments where the number of projects in which more than one department participates occurs.						
20. We have internal surveys on teaming, which surveys employees to see if the departments are supporting and creating opportunities for one another.						
21. We track the degree to which the organization is entering team-based relationships with other business units, organizations, or customers.						

4

	Very strongly disagree	Disagree	Somewhat disagree	Somewhat Agree	Agree	Very Strongly agree
22. The organization's office layout is conducive to speaking with my colleagues and meeting people.						
Measurement – Assesses the likelihood of knowledge sharing and KM being successful within the organization.	**Very strongly disagree** **1**	**Disagree** **2**	**Somewhat disagree** **3**	**Somewhat Agree** **4**	**Agree** **5**	**Very Strongly agree** **6**
23. The reuse rate of "frequently accessed/reused" knowledge in my organization is high.						
24. The distribution of knowledge to appropriate individuals in my organization is done actively on a daily basis.						
25. New ideas generating innovate products are a frequent occurrence in my organization.						

Source: Liebowitz and Chen (2001) Knowledge Sharing Effectiveness Inventory Questionnaire

5

APPENDIX C

PERMISSION LETTER FROM JAY LIEBOWITZ

170

RE: Request Permission to reference your material for my dissertation research

Jay Liebowitz [jay.liebowitz@umuc.edu]

Sent: Monday, April 23, 2012 8:46 AM

To: DaValos, Elizabeth

Sounds fine, Elizabeth. When you have your survey, could you also forward me a copy (and of course, once you complete your dissertation, I would be happy to read it as well). Good luck in your research. Jay

-----Original Message-----
From: Elizabeth.DaValos@rccd.edu [mailto:Elizabeth.DaValos@rccd.edu]
Sent: Sunday, April 22, 2012 4:24 AM
To: jay.liebowitz@umuc.edu
Cc: elizabeth.davalos@Ulv.edu; elizabeth.davalos@fedex.com
Subject: Request Permission to reference your material for my dissertation research

April 22, 2012
Dr. Liebowitz:
I am currently a doctoral student in the Organizational Leadership program at the University of La Verne located in La Verne, Southern California. I am writing to you to request written permission to reference your Four Pillars of Human Capital Strategy Framework from your books Knowledge Retention Strategies and Solutions, What They Didn't Tell You about Knowledge Management, and Addressing the Human Capital Crisis in the Federal Government.
Also, I would like to reference your book Knowledge Retention Strategies and Solutions to create a survey that will be used to gather data about knowledge retention techniques used by Human Resource leaders for my dissertation.
The topic of my dissertation is to study and explore knowledge management by examining knowledge retention techniques used by Human Resource leaders and their Strategic Business Partners in the warehousing/Logistics industries located in the Inland Empire Region of Southern California. Upon completion of my dissertation research, I would be more than willing to forward you a copy of the results and a completed copy of my dissertation.
Thank you in advance for your consideration and I would appreciate any additional thoughts you may have toward my studies.
I look forward to hearing from you.
Respectfully,
Elizabeth DaValos
(Cell) 909-967-5657
(W) 909-879-7122

APPENDIX D

INSTITUTIONAL REVIEW BOARD (IRB) APPROVAL

www.manaraa.com

University of La Verne
Institutional Review Board

TO: Elizabeth DaValos, Doctor of Education in Organizational Leadership Program

FROM: University of La Verne, Institutional Review Board

RE: **2015-CAS-13, The Human Resource Leaders' Use of Knowledge Retention Tools To Support Strategic Business Partners In Attracting and Retaining Talent within the Warehouse and Logistics Industry**

The research project, cited above, was reviewed by the College of Education and Organizational Leadership Institutional Review Board (IRB) and University of La Verne (ULV) IRB Committees. The college review determined that the research activity has minimal risk to human participants and the application received an Expedited Review. The application was approved with no additional conditions.

A copy of this approval letter is required to be included as an appendix to your completed dissertation. The project may proceed to completion, or until the **date of expiration of IRB approval, 8/10/2016.** Please note the following conditions apply to all IRB submissions:

> No new participants may be enrolled beyond the expiration date without IRB approval of an extension.

> The IRB expects to receive notification of the completion of this project, or a request for extension within two weeks of the approval expiration date, whichever date comes earlier.

> The IRB expects to receive prompt notice of any proposed changes to the protocol, informed consent forms, or participant recruitment materials. No additional participants may be enrolled in the research without approval of the amended items.

> The IRB expects to receive prompt notice of any adverse event involving human participants in this research.

There are no further conditions placed on this approval.

The IRB wishes to extend to you its best wishes for a successful research endeavor.

Sarah Dunn	Sarah L. Dunn, Ph.D.	8/10/2015
Approval Signature	IRB Director/Chair	Date

For the Protection of Human Participants in Research
Contact: email irb@laverne.edu or phone (909) 448-4756
ULV IRB Website: laverne.edu/irb

APPENDIX E

INFORMED CONSENT FORMS

CONSENT TO PARTICIPATE IN RESEARCH
Human Resource Professionals

Human Resource Leaders' Use of Knowledge Retention Tools to Support Strategic Business Partners in Attracting and Retaining Talent Within the Warehouse and Logistics Industry.

You are being asked to participate in a research study conducted by Elizabeth DaValos, for her dissertation research as an Ed.D. student from the University of La Verne. You were selected as a possible participant in this study because you are an HR Professional and belong to the prospective audience that entails this study.

- **PURPOSE OF THE STUDY**

The purpose of this study is to determine if there a significant difference between the degree of importance of knowledge management strategies as perceived by human resource leaders and strategic business partners in warehousing/logistic industries.

- **PROCEDURES**

If you decide to participate in this study, we will ask you to do the following things:

1. As a Human Resource Professional, this study is based on your perceptions about the degree of importance of knowledge management strategies as perceived by human resource leaders and strategic business partners in warehousing/logistic industries.

2. Respond to a short 25 item questionnaire by marking the number that closely corresponds to your perception using the scale from 1 describing Very strongly disagree to 6 describing Very strongly agree.

3. This questionnaire should take approximately 10 minutes to complete. Please complete Part One and Part Two.

- **POTENTIAL RISKS AND DISCOMFORTS**

There may be minor discomfort for participants as a result of sharing their opinions in the survey if they perceive some type of impact on professional/employment by participating in the research. By participating in this research study, and due to confidentiality and not identifying the participants by

name, there should be little to no impact on the professional/employment relationship for the participant.

Participants may withdraw from participation at any time. Data will not be specifically attributed to subjects in the study unless permission is obtained. To secure this data, all signed hard copies of informed consent forms will be securely stored and then shredded three years after conclusion of the study.

- **POTENTIAL BENEFITS TO PARTICIPANTS AND/OR TO SOCIETY**

Participants in this study may contribute to insight and strategy about what HR professionals perceive as the significant difference between the degree of importance of knowledge management strategies as perceived by (1) human resource leaders and (2) strategic business partners in warehousing/logistic industries.

Through this research, Human Resource professionals will obtain strategy to align with their strategic business partners in the warehousing/logistics industries.

There may be minor discomfort for participants as a result of sharing their opinions in the survey if they perceive some type of impact on professional/employment by participating in the research.

Participants will give consent prior to beginning any survey work. Participants will have the right to decline or withdraw from the study at any time and are free to not answer any question.

- **PAYMENT FOR PARTICIPATION**

None.

- **CONFIDENTIALITY**

Information gained from participants will remain confidential. Identifying information or specific responses of participants will not be disclosed without permission of the participants or as required by law.

Confidentiality will be maintained by means of using codes to protect the names of participants. Information gathered in this study will be stored in electronic files and will remain secure through password access.

The information will be deleted 3 years following the conclusion of the study.

● **PARTICIPATION AND WITHDRAWAL**

Participants can choose whether or not to participate in this study. If they volunteer to be in this study, they may withdraw at any time without consequences of any kind.

Participants are working professional adults over the age of 18 years old. They may also refuse to answer any questions they do not want to answer and still remain in the study. The investigator may withdraw them from this research if circumstances arise which warrant doing so.

● **IDENTIFICATION OF INVESTIGATORS**

If you have any questions or concerns about the research, please feel free to contact Elizabeth DaValos at (909) 967-5657 or electronically by email at Elizabeth.davalos@rcc.edu, or my faculty advisor, Dr. Doug DeVore, University of La Verne, at (623) 293-2421, or by email at ddevore@laverne.edu.

● **RIGHTS OF RESEARCH PARTICIPANTS**

You may withdraw your consent at any time and discontinue participation without penalty. You are not waiving any legal claims, rights or remedies because of your participation in this research study. If you have questions regarding your rights as a research participant, contact Sarah L. Dunn, Ph.D., IRB Director, at 909-448-4756, (irb@laverne.edu). University of La Verne, Institutional Review Board, 1950 Third Street, Kinesiology Department B108, La Verne, CA 91750.

SIGNATURE OF RESEARCH PARTICIPANT OR LEGAL REPRESENTATIVE

I understand the procedures described above. My questions have been answered to my satisfaction, and I agree to participate in this study. I have been given a copy of this form.

_____
Printed Name of Participant

_____
Printed Name of Legal Representative (if applicable)

_____   _____
Signature of Participant or Legal Representative   Date

SIGNATURE OF INVESTIGATOR (If required by the IRB)

In my judgment the participant is voluntarily and knowingly giving informed consent and possesses the legal capacity to give informed consent to participate in this research study.

_____   _____

Signature of Investigator   Date

CONSENT TO PARTICIPATE IN RESEARCH
Business Partners

Human Resource Leaders' Use of Knowledge Retention Tools to Support Strategic Business Partners in Attracting and Retaining Talent within the Warehouse and Logistics Industry.

You are being asked to participate in a research study conducted by Elizabeth DaValos, for her dissertation research as an Ed.D. student from the University of La Verne. You were selected as a possible participant in this study because you are a strategic business partner and belong to the prospective audience that entails this study.

- **PURPOSE OF THE STUDY**

The purpose of this study is to determine if there a significant difference between the degree of importance of knowledge management strategies as perceived by human resource leaders and strategic business partners in warehousing/logistic industries.

- **PROCEDURES**

If you decide to participate in this study, we will ask you to do the following things:

1. As a Strategic Business Partner, this study is based on your perceptions about the degree of importance of knowledge management strategies as perceived by human resource leaders and strategic business partners in warehousing/logistic industries.

2. Respond to a short 25 item questionnaire by marking the number that closely corresponds to your perception using the scale from 1 describing Very strongly disagree to 6 describing Very strongly agree.

3. This questionnaire should take approximately 10 minutes to complete. Please complete Part One and Part Two.

- **POTENTIAL RISKS AND DISCOMFORTS**

There may be minor discomfort for participants as a result of sharing their opinions in the survey if they perceive some type of impact on professional/employment by participating in the research. By participating in this research study, and due to confidentiality and not identifying the participants by

name, there should be little to no impact on the professional/employment relationship for the participant.

Participants may withdraw from participation at any time. Data will not be specifically attributed to subjects in the study unless permission is obtained. To secure this data, all signed hard copies of informed consent forms will be securely stored and then shredded three years after conclusion of the study.

- **POTENTIAL BENEFITS TO PARTICIPANTS AND/OR TO SOCIETY**

Participants in this study may contribute to insight and strategy about what strategic business partners perceive as the significant difference between the degree of importance of knowledge management strategies as perceived by (1) human resource leaders and (2) strategic business partners in warehousing/logistic industries.

Through this research, Human Resource professionals will obtain strategy to align with their Strategic Business Partners in the warehousing/logistics industries.

There may be minor discomfort for participants as a result of sharing their opinions in the survey if they perceive some type of impact on professional/employment by participating in the research.

Participants are asked to give consent prior to beginning any survey work. Participants will have the right to decline or withdraw from the study at any time and are free to not answer any question.

- **PAYMENT FOR PARTICIPATION**

None.

- **CONFIDENTIALITY**

Information gained from participants will remain confidential. Identifying information or specific responses of participants will not be disclosed without permission of the participants or as required by law.

Confidentiality will be maintained by means of using codes to protect the names of participants. Information gathered in this study will be stored in electronic files and will remain secure through password access.

The information will be deleted 3 years following the conclusion of the study.

- **PARTICIPATION AND WITHDRAWAL**

Participants can choose whether or not to participate in this study. If they volunteer to be in this study, they may withdraw at any time without consequences of any kind.

Participants are working professional adults over the age of 18 years old. They may also refuse to answer any questions they do not want to answer and still remain in the study. The investigator may withdraw them from this research if circumstances arise which warrant doing so.

- **IDENTIFICATION OF INVESTIGATORS**

If you have any questions or concerns about the research, please feel free to contact Elizabeth DaValos at (909) 967-5657 or electronically by email at Elizabeth.davalos@rcc.edu, or my faculty advisor, Dr. Doug DeVore, University of La Verne, at (623) 293-2421, or by email at ddevore@laverne.edu.

- **RIGHTS OF RESEARCH PARTICIPANTS**

You may withdraw your consent at any time and discontinue participation without penalty. You are not waiving any legal claims, rights or remedies because of your participation in this research study. If you have questions regarding your rights as a research participant, contact Sarah L. Dunn, Ph.D., IRB Director, at 909-448-4756, (irb@laverne.edu). University of La Verne, Institutional Review Board, 1950 Third Street, Kinesiology Department B108, La Verne, CA 91750.

SIGNATURE OF RESEARCH PARTICIPANT OR LEGAL REPRESENTATIVE

I understand the procedures described above. My questions have been answered to my satisfaction, and I agree to participate in this study. I have been given a copy of this form.

_____
Printed Name of Participant

_____
Printed Name of Legal Representative (if applicable)

_____   _____
Signature of Participant or Legal Representative   Date

SIGNATURE OF INVESTIGATOR (If required by the IRB)

In my judgment the participant is voluntarily and knowingly giving informed consent and possesses the legal capacity to give informed consent to participate in this research study.

_____   _____
Signature of Investigator   Date

APPENDIX F

NIH CERTIFICATE OF COMPLETION

www.manaraa.com

Certificate of Completion

The National Institutes of Health (NIH) Office of Extramural Research certifies that **Elizabeth DaValos** successfully completed the NIH Web-based training course "Protecting Human Research Participants".

Date of completion: 08/10/2015

Certification Number: 1811006