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Gary Schneider Quinnipiac University

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LETTER FROM THE EDITOR

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THE WORK OF CUSTOMER SERVICE REPRESENTATIVES IN A CANADIAN CALL CENTER: ROLE DISTANCE AND MANAGEMENT OF EMOTIONS AT WORK

Gilles Marcoux, University of Moncton

ABSTRACT

Previous studies on the work in call centers have used the analytic perspectives of structuralism and duality. Although these perspectives have emphasized the level of stress experienced by workers in call centers as well as the forms of resistance they display in their work, few studies have sought to understand how these workers must develop certain skills to manage the emotional labor and to give some meaning to their work. This paper aims to show how customer service representatives (CSRs) deal with the intense pressure placed upon them as they develop the necessary social skills in order to adequately manage their emotions at work. Results suggest that CSRs are able to protect and to affirm themselves socially by applying role distance principles with their employer and customers, all the while depending upon the behavior of the latter and the CSRs' degree of autonomy.

INTRODUCTION

Since the mid 1990s, the economic activity sector of call centers has demonstrated considerable development in many countries. In Canada, the employment of this industry has grown from 20,000 to 112,000 jobs between 1987 and 2004 (Statistique Canada, 2005). The revenues of these organizations have increased, therefore, from 424 million to 2.76 billion Canadian dollars between 1998 and 2006 (Vincent and McKeown, 2008).

This growth has generated multiple studies devoted to the call center industry. Often based on omnipresent surveillance or on Taylorist methods of work (Bain *et al.*, 2002), the scientific literature on this topic has also tried to harmonize the contradictory principles related to work organization in this activity sector. Although these different analytic perspectives highlight the fact that workers in call centers remain prone to a very high level of stress (and this even if workers were able to display some form of resistance), few studies have sought to understand how these workers must develop certain skills to manage adequately the emotions associated with their work (Russell, 2008).

The objective of this paper is to highlight this apparently neglected phenomenon in the literature. Rather than trying to answer the question that consists of asking why CSRs leave their jobs, this paper will attempt to answer why CSRs stay voluntarily, even temporarily, in such a work environment. In other words, to what extent are CSRs emotionally engaged in their work? Can they rely on certain skills, including social skills, to manage adequately their emotions with the associated constraints they experience in their daily work lives? Might these skills help them to give some meaning to their work?

In the following paragraphs, we will discuss the main theoretical perspectives used to analyze work activity in call centers as well as the main concepts related to this study. After having described the area of investigation, the paper will outline the work experience of CSRs as we found it in the call center visited, as well as the various methods used by workers to manage their emotions at work. Finally, an analysis of the stakes related to their work experience will be presented.

THEORETICAL FRAMEWORK

Conceptualizing Framework

Work pressure.

With regards to the analytical approach that integrates the vast majority of studies on call centers, the stream of structuralism emphasizes the work pressure in this sector. In a study based essentially on salary systems, Fernie and Metcalf (1998) describe call centers as the new sweatshops where employees are totally dominated and exploited by hierarchical managerial control similar to Jeremy Bentham's infamous prison design of the late eighteenth century, the Panopticon (Fernie and Metcalf, 1998; Foucault, 1977). Taylor and Bain (1999) rejected the totalitarian perspective of the Panopticon by insisting on the taylorized character of work found in this type of activity. They rejected as well the optimistic vision of call centers that considers them as a workplace providing more power and autonomy to employees largely because of the fact that the CSRs' work consists of a sequence of movements strongly standardized and constantly measured.

A study undertaken by Bain *et al.* (2002) exposes the fact that call center managers tend to quantify increasingly service quality control. Evidently, such quantification has an impact on the creativity applied by CSRs in customer relationships. Moreover, when several large companies, notably American or British, decide to relocate their call centers to developing countries such as India, the standardization of the CSRs' subjectivity assumes proportions until now unexplored. The push to standardization seems to be inscribed within a neo-colonial type of hierarchical

relation especially because employees must adopt an American or a British accent and must use occidental pseudonyms (Poster, 2007; Mirchandani, 2005; Taylor and Bain, 2005).

In sum, studies inscribed in the social domination stream show that the work pressure placed upon the CSRs can produce certain consequences. It can lead to emotional exhaustion (Deery *et al.*, 2002), to absenteeism due to illness (Taylor *et al.*, 2003), to different forms of resistance (Barnes, 2007; Buscatto, 2001) or to resignation (Schalk and Van Rijckevorsel, 2007).

Autonomy.

Work autonomy is defined as "[t]he ability of an individual (...) to freely determine the rules of action and to determine the specific terms of this activity within its action area (...)"(Chatzis, 1999: 29). Autonomy refers therefore to the ability of the worker to take over production by integrating personal work skills that could overcome the failures of the production system. In the case of a call center, Frenkel et al., (1999) and Korczynski (2002; et al., 2000) note that CSRs' work requires a certain degree of autonomy. In fact, they highlight that the work organization in call centers is articulated around two contradictory principles: the standardization of the production process and the customer orientation. The first principle is related to the mass production model sought for by managers. From the organizational point of view, the fundamental objective is to offer services to as many customers as possible at the lowest cost. Consequently, managers establish efficient quantitative standards in order to limit the duration of calls and to enhance the service level. The second principle is in relation to the willingness to offer a personalized service to customers. According to this principle, management aims to secure the customers' loyalty by showing them how important they are to the organization. This second principle reveals that organizations in the service sector remain in a more dependent situation toward customer expectations because the service takes shape at the same time it is offered to the customer. In order to harmonize these principles, the CSRs must use their own judgement and their creativity in the production process. Thus, they must have some degree of autonomy in order to do effectively their work and to minimize the emotional pressure placed upon them. Otherwise, they must develop some strategies to manage adequately the emotional labor.

Emotional labor.

Originating in the work of Goffman (1968), the emotional labor concept has been more recently developed by Hochschild (1983). This notion is defined as 'This labor [requiring] one to induce or suppress feeling in order to sustain the outward countenance that produces the proper state of mind in others (...)' (Hochschild, 1983: 7). Emotional labor has two dimensions. On the

one hand, so called 'deep acting' signifies that the individual, beginning a service relationship, changes his emotions to meet adequately organizational and customer expectations. In doing so, he inhibits his own emotions, not only in order to demonstrate, but also to feel empathy for the customer. In these circumstances, '[he is] faking in good faith' (Grandey, 2003: 87). On the other hand, 'surface acting' means that the individual modifies the expression of his emotions by pretending to be empathetic toward the client. He seeks, therefore, to demonstrate an appearance of empathy without really trying to feel it. In this circumstance, '[he is] faking in bad faith' (Grandey, 2003: 87). Some studies on the work in call centers have also focussed on the concept of emotional labor. Rose and Wright (2005) as well as Deery et al. (2002) have attempted to understand the emotional labor impact upon the CSRs especially in terms of job dissatisfaction. In addition, Callaghan and Thompson (2002) stress that the CSRs manage emotional labor by adopting particular behaviors related to surface acting under a pecuniary perspective of empathy. However, these same authors also identify some behaviors that fall within a philanthropic perspective when the CSRs interact with different client groups, such as the elderly. Finally, Russell (2009) raises the possibility that the CSRs' behaviors are more deep acting than previous studies have demonstrated because the emotions prescribed by the organization are felt by them.

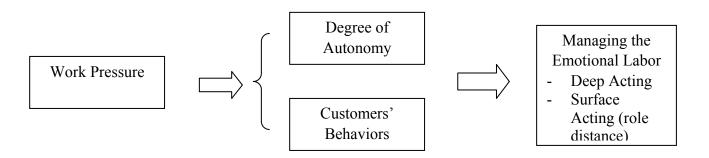
These methods of managing emotional labor involve the fact that the CSRs must possess social skills related to their abilities to keep the good distance during the service relationship. Some studies in the service support sector (Weller, 2002) and the call center industry (Callaghan and Thompson, 2002) present the idea that the service representative must maintain a certain distance between him and the customer in order to protect himself from emotional pressure and to maintain some dignity in his role as the CSR. According to Goffman, the concept of role distance is connected with the idea that we should '(...) define the individual (...) as a being able of distancing, that is to say capable of adopting an intermediate position between the identification and opposition to the institution and ready at the slightest pressure, to react by changing his attitude in one way or another to regain his equilibrium' (Goffman, 1968: 373). For him, a social actor applies the principles of integrated secondary adaptation (Goffman, 1968) in fulfilling its major obligations, but with a certain detachment. This perspective updates the dual concepts of structure and action related to the fact that social actors develop complex action strategies at the midpoint between membership and the complete rejection of the norms, structuring their lives to preserve their 'basic system security' (Giddens, 1987).

Research Model

The previous conceptual definitions have highlight that several studies on call centers have emphasized the intense work pressure placed upon the CSRs. This pressure can be emotional because the CSRs must harmonize contradictory expectations by directly interacting with the

clients' aggressiveness and the organizational mechanisms of monitoring and control. In these conditions, they must have some degree of autonomy to develop action strategies that can control the emotional labor they experience.

Figure 1: Conceptual Model



From this perspective, our research model assumes that the work pressure intensity placed upon the CSRs is dependent on the customers' behaviors and their degree of autonomy. Considering the possible variation of the work pressure intensity, the research model aims to identify how the CSRs build action strategies, in terms of deep acting and surface acting, in order to adequately manage their emotional labor. Thus, this study is guided by the following propositions:

Proposition #1: The customers' behavior is related to the ways in which CSRs manage their emotional labor in terms of deep acting and surface acting.

Proposition #2: The degree of autonomy possessed by CSRs is related to the ways in which they manage their emotional labor in terms of deep acting and surface acting.

The intention of this paper is to outline the articulation of various logics of action displayed by individuals involved in service relationships. It aims to capture how the CSRs come to deal with the constraints that are placed upon them at the organization/market border. We attempt to fill a gap, identified in current call centers literature by Russell (2008), by examining how these employees are engaged in emotional labor, in terms of deep acting and surface acting, while considering the customers' behavior and the CSRs' degree of autonomy.

PRESENTATION OF THE CASE STUDY

Methods

The research is a case study that took place in the Montreal call center of a Canadian organization specializing in communications. The research aims to understand how the CSRs interpret their work situation in order to construct a useful compromise between their own expectations, the organization's expectations as well as the clients'. The methodological strategy consists of penetrating the working world of the CSRs in order to better understand and explain their behaviors.

For this purpose, two series of semi-directed and recorded interviews were conducted, approximately 45 to 50 minutes each. The first phase consisted of interviews with the vice-president, 3 directors, 3 trainers, 11 team managers and 46 CSRs. These interviews were mainly exploratory since we sought to understand the various issues related to the operations and to the nature of work in the call center. It is thus at the end of this first phase that certain propositions were formulated. The second phase of interviews was conducted with 1 director, 15 team managers and 48 CSRs. This phase also included non-participative direct observation sessions conducted in teams responsible for call quality evaluations. The empirical results presented in this work are mainly based on the CSRs' interviews completed in the second phase of this research.

Table 1: Population in The Call Center and Research Participants				
	Population in the call center	Phase 1 (interviews)	Phase 2 (interviews)	
Number of agents	438	46	48	
Men (%)	43,2	37,0	43,7	
Women (%)	56,8	63,0	56,3	
Under 25 years old (%)	32,6	21,7	29,2	
25 to 34 years old (%)	48,4	45,7	52,1	
35 to 44 years old (%)	15,3	23,9	18,7	
45 years old and more (%)	3,7	8,7	0	
Seniority (in months)	29,5	32,4	32,7	
New agents (%)	31,6	n.a.	12,5	
Fully qualified agents (%)	42,5	n.a.	62,5	
Advanced agents (%)	25,9	n.a.	25,0	

The principles of grounded theory (Glaser and Strauss, 1967) have largely inspired theoretical sampling and data analysis of qualitative interviews. This method involves continuous interactions between data collection and its analysis in order to build theory gradually from emerging data and to select subjects that would help deepen our understanding of the CSRs' work experience. Empirical data analysis is based on a three levels process: first, an open coding that consists of elaborating the main study concepts (such as the work nature, emotional labor, role distance, commitment, customer service, and so on); second, an axial coding aimed at establishing relation types (dependence, similarity, contradiction, and so on) between these main concepts according to the discourse and the interpretation of the CSRs; finally, a selective coding is used to integrate data in a theoretical model in order to demonstrate how the CSRs interpret and experiment their work situation.

The Work of CSRs in the Call Center

CanCom, a fictive name used to protect the confidentiality of the company, is a Canadian enterprise founded in 1967. This firm has grown everywhere in the country, especially since the establishment and expansion of call centers. The Montreal call center offers wireless phone services and handles nearly 10,000 calls daily, mostly incoming.

The CSRs are grouped into teams of 15 to 18 members. There are about thirty teams in the Montreal call center. When considering the three types of incoming calls at CanCom, management established three qualification levels for the CSRs: 1- new agents (the lowest ranked) are assigned to activations, 2- fully qualified agents who also deal with information requests and various customer issues, and 3- advanced agents assigned to client retention. In this model, the work of the new and fully qualified CSRs is strongly standardized. They activate phone lines, change addresses and try to solve customers' issues in using standard procedures. Their degree of autonomy is thus limited. However, the advanced CSRs have a higher level of autonomy since their job is related to the retention of the customers. In these conditions, they have discretion in regards to the improvement of clients' services. Their sense of judgment and their creativity are thus greatly important. In this study, the CSRs' degree of autonomy will correspond to their qualification levels.

Overall, even if the advanced agents have more autonomy, the CSRs' work is characterized by an industrial type of rationalization of the service relationship (Buscatto, 2002). They must respect a series of norms concerning the average handle time of calls, the levels of adherence and conformity and the quality of calls. In the next section, we will demonstrate how the CSRs are under many pressures and how they are able to develop strategic actions in order to deal with these constraints.

THE WORK EXPERIENCE OF THE CSRs AT THE FRONTIER OF THE ORGANIZATION AND THE MARKET

The Evaluation System on Call Quality and the CSRs' Opinions

In general, the CSRs seem to be constantly subject to a double pressure from organizational standards relating to the efficiency of the production process and the customer expectations for a personalized service. In the case of the Montreal call center, this pressure is exacerbated with an evaluation system on call quality. This system has the objective of remotely recording, at random, 10 calls per month for each of the CSRs; and the evaluation of these calls is based on various standardized criteria. This electronic monitoring system is especially powerful because it simultaneously records verbal interactions between the client and the CSR while monitoring the technical interaction between the agent and his computer.

This method allows the quality control team to judge whether or not the CSR has chosen the right approach to meet the client's request or to solve his problem. Ranging from the appropriate vocabulary to adopt when taking a call to selecting judiciously a problem-solving scenario, the criteria used for evaluation are designed to standardize the service in order to maintain a high level of quality for each call. This process compresses the space of autonomy of CSRs and it may increase client aggressiveness because they must apply strict organizational standards:

[S]omeone who returns and is already like that, or has a problem but you know that, according to company policy, it is too bad, I can't do anything for you (...). It's hard because you have to separate yourself, you tell yourself that it's his problem, not yours (...). Sometimes you have no solution and the client on the end of the line is freaking out. The company has rules and you must follow them that's it, that's all and it does not change.

(Interview with a fully qualified CSR, Phase 2, M2-E39)

In such circumstances, when the client is increasingly aggressive, and taking into account the limited flexibility of the CSRs, they must find ways to cope, to protect themselves and their dignity:

I have to hang my heart at the door when I come here. I learned to do it. (...) It's a matter of professional pride. (...) You can be empathetic but not allow yourself to be sympathetic to another. Being sympathetic to another means that you share his feelings. Then you feel affected. With empathy, you understand

what he feels without it necessarily affecting you. That's how I prefer to work. I must have a cold mind because otherwise I would make myself feel bad. (...) It's important to distinguish sympathy and empathy, professional involvement and personal involvement. I cannot get involved emotionally. It would be like tying a cord around my neck. (...) [W]ith the right professional dedication, you keep your head cool. You're able to make the right decisions (...). It's like being a good doctor: a good doctor cannot freak out on his patient's pain (...). He must [keep] a cool head to apply the right treatment.

(Interview with an advanced CSR, Phase 2, M2-E53)

In order to demonstrate that they are competent agents, the CSRs exercise emotional detachment toward the customer, the organization and even his or her own person. However, wouldn't this kind of detachment lead the CSR on a path of disenchantment and alienation? Based on the data collected within this study, it seems that the CSRs will succeed in giving meaning to their active work by developing a competence related to role distance.

The Strategic Development of Protective Defence Mechanisms and Social Affirmation: The Role Distance Process

The role distance process applied by the CSRs refers to a strategic action that consists of moving closer to, or distancing one from the organization or client during the service act, depending upon the behavior showed by the client during the phone contact. For example, on the one hand, when the agent decides to take the organization's side during the delivery of service, he will have the tendency to distance himself from the client he is serving. On the other hand, if he decides to take the client's side, it will mean that he is distancing himself from the organization.

This role distance process is based on two basic strategies adopted by the CSRs on the front line. On the one hand is the attitude consisting of keeping one's cool at all costs when a client comes online in order to take control of the call. On the other hand is the strategy consisting of categorizing the client when he comes online. The client's tone, notes inscribed in his file, his level of arrogance, all of these aspects permit the CSRs to appreciate customer personality in order to know what kind of behavior they must adopt.

In the case of calm clients, the classification between a dishonest client and the one who really needs help will allow the service agent to construct his strategic behavior. If a client is trying to manipulate him, the CSR will try to maintain a certain distance:

Yes, because if you take it down to the words, people will abuse you and the system. They will know how to search for the little things, you are launched into a conversation that you are unable to settle, and then he hangs up saying eh, eh! I got you!

(Interview with a fully qualified CSR, phase 2, M2-E17)

However, if the client really needs help, the service agent will verify if the commercial policies of the organization will allow him to settle the problem. If it is possible, he will take the time to do so, sometimes by defying organizational efficiency norms, such as the average handle time or the service level. From this moment, he will let the client infiltrate into the production process of the call center and the service relationship can then become very gratifying for him:

It's about being able, when clients collaborate, to help them and assist them in a good way. (...) I like to help people, it is easy for me to lead people toward something. Most older people 'flip out'. Because I know what technology means for them, I take the time to explain it. That's what I like. (...) We're supposed to be stressed about time but I take the time that it takes.

(Interview with a fully qualified CSR, phase 2, M2-E28)

In the case of an aggressive client, the CSR will try to verify if he is open-minded or if he wants to negotiate. He will then consult the firm's commercial policies to evaluate if he can begin the negotiation or if he can defuse the tense situation at the beginning:

(...) [R]esolving difficult situations, or calming a difficult client is a personal challenge. When the call ends and he is happy, then he thanks you. (...) It happens, and then you feel good, you feel like you have some kind of power.

(Interview with an advanced CSR, Phase 2, M2-E44)

However, if a client seems to be closed to negotiation, if he keeps yelling and manipulating, once again the CSR will adopt a certain distance toward him:

Like this morning, I had a client and I couldn't send him a kind of phone in his area because there are no antennas. I must send him another type of phone. But I can't send him this phone because another woman three months ago (...) sent him the wrong one, which led to it being blocked for a year. Then I can't send it to him because he doesn't have the right to get it, so I can't help him. He was yelling at me, and he had the right to do so, but you have nothing to say. I'm

trying to be logical with him at the end, finally I'm trying to trick him. I'm trying to lose him with numbers and amounts to get him to leave me (...).

(Interview with a new CSR, phase 2, M2-E16)

Distancing strategies toward the organization or the client appear to be attempts by the CSRs to manage adequately emotional pressure in ther work. They try to mobilize some of their resources to protect and to affirm themselves socially in order to rehabilitate their subjectivity. However, we must emphasize that the application of the distancing game does not necessarily constitute a panacea. In fact, beneficial effects can be more temporary than permanent because over the short or the long terms, it can lead to psychological problems or disillusionment.

The table 2 summarizes the role distance game by the CSRs according to the behaviors of the customers. In general, according to the 48 CSRs interviewed in the second phase, every CSR apply the role distance game and their strategies seem to reflect surface acting toward the organization. However, it is important to note that surface acting is nuanced when CSRs' strategies are placed in parallel with their skill levels. In order to understand the CSRs' behaviors, the results must be analyzed in the perspective of the research propositions.

Table 2: Role Distance Game by The CSRs			
Type of Clients	CSRs' Strategies	New and Fully Qualified Agents (%)	Advanced Agents (%)
Honest or	CSRs let clients penetrate into the production process (deep acting) and they keep a distance from organizational procedures (surface acting)	77,8	25,0
Accomodating	CSRs let clients penetrate into the production process (deep acting) and they do not keep distance from organizational procedures (deep acting)	22,2	75,0
Manipulative or	CSRs take refuge in organizational procedures without believing in them (surface acting)and they keep a distance from clients (surface acting)	75,0	25,0
Uncompromising	CSRs take refuge in organizational procedures because they believe in them (deep acting) and they keep a distance from clients (surface acting)	25,0	75,0

The first proposition was that customers' behavior is related to the ways in which CSRs tend to manage their emotional labor. According to the results in tables 3 and 4, this proposition only seems plausible when considering action strategies toward the customers. On the one hand,

every CSR is close to the customers' needs and they adopt a deep acting strategy toward them when they are honest or accommodating. However, when the customers are manipulative or uncompromising, they tend to keep a distance from them and they adopt a surface acting strategy. The relationship between these variables is significant at 0,001. On the other hand, the results suggest that the CSRs' strategies toward the organization also varied according to the customers' behavior, but on a much smaller scale. In fact, 64.6% of the CSRs adopt a surface acting strategy toward the organization when the clients are honest or accommodating. Also, 62.5% of the CSRs adopt a similar strategy toward the organization when the clients are manipulative or uncompromising. Thus, the majority of all CSRs seem to keep a distance from the organization regardless of the customers' behavior. However, the relationship between the customers' behavior and the CSRs' strategies toward the organization is not significant.

Table 3: Customers' Behaviors and CSRs' Strategies toward Customers				
CSRs' Strategies Honest or Accommodating Customers (n) Manipulative or Uncompromising Customers				
Deep acting toward customers	48	0		
Surface acting toward customers 0 48				
Notes: $n = 48$; $df = 1$; Khi-2 = 96 (p < 0,001); Contingency Coefficient = 0,7071.				

Table 4: Customers' Behaviors and CSRs' Strategies toward Organization			
CSRs' Strategies Honest or Accommodating Manipulative or Uncompromising Custom			
Deep acting toward organization	17	18	
Surface acting toward organization 31 30			
Notes: $N = 48$; $df = 1$; Khi-2 = 0,045 (the relationship is not significant); Contingency Coefficient = 0,0217.			

The second research proposition was that the degree of autonomy possessed by CSRs is related to the ways they manage their emotional labor. Considering that the advanced agents have acquired more autonomy than the new or fully qualified CSRs and that their degree of autonomy corresponds to their qualifications, tables 5 to 8 present the agents' action strategies according to their qualification levels. The results highlight that the second research proposition seems only plausible if the action strategies are focused toward the organization.

Table 5 : CSRs' Qualification Levels (autonomy) and CSRs' Strategies toward Customers			
Type of Clients	CSRs' Strategies	New and Fully Qualified Agents (n)	Advanced Agents (n)
Honest or	Deep acting toward the customers	36	12
Accomodating	Surface acting toward the customers	0	0
Notes: There is no rel	ationship between the variables.		

Table 6 : CSRs' Qualification Levels (autonomy) and CSRs' Strategies toward Customers			
Type of Clients	CSRs' Strategies	New and	Advanced
		Fully Qualified Agents (n)	Agents (n)
Manipulative or	Deep acting toward the customers	0	0
Uncompromising	Surface acting toward the customers	36	12
Notes: There is no re	elationship between the variables.		

On the one hand, every CSR adopts a deep acting approach toward the customers when they are honest or accommodating while adopting a surface acting approach when they are manipulative or uncompromising. On the other hand, 77.8% of the new and fully qualified CSRs and 25% of the advanced CSRs adopt a surface acting approach toward the organization when the customers are honest or accommodating. In addition, 75% of the new and fully qualified CSRs and 25% of the advanced CSRs adopt a surface acting approach toward the organization when the clients are manipulative or uncompromising.

Table 7: CSRs' Qualification Levels (autonomy) and CSRs' Strategies toward Organization				
Type of Clients CSRs' Strategies New and Fully Advanced Qualified Agents (n) Agents (n)				
Honest or	Deep acting toward the organization	8	9	
Accomodating	Surface acting toward the organization	28	3	
Notes: $N = 48$; $df = 1$; Khi- $2 = 10,9601$ (p < 0,001); Contingency Coefficient = 0,4312.				

Table 8 : CSRs' Qualification Levels (autonomy) and CSRs' Strategies toward Organization (management of the emotional labor)				
Type of Clients CSRs' Strategies New and Fully Qualified Agents (n) Advanced Agents (n)				
Manipulative or	Deep acting toward the organization	9	9	
Uncompromising Surface acting toward the organization 27 3				
Notes: N = 48; df = 1; Khi-2 = 9,6000 (p < 0,01); Contingency Coefficient = 0,4083.				

The CSRs with less autonomy take thus a distance toward the organization regardless of the customers' behavior while the CSRs with more autonomy always seem to better follow organizational standards, even if they adopt a deep acting strategy toward the clients. The relationship between the degree of autonomy and the action strategies toward the organization seems plausible because it significant at 0,001 in the case of honest or accommodating clients and at 0,01 in the case of manipulative or uncompromising customers.

ANALYTICAL STAKES OF ROLE DISTANCE

The evaluation system on call quality has the goal of improving the level of service in terms of its quantitative and qualitative aspects. Instead of working directly according to statistical norms of performance in order to improve customer service fluidity, managers proposed a better handling of the CSRs' behavior online in order to improve their performance on the quantitative side. By putting the emphasis on the service process, it restrains their autonomy by substantially reducing their creative capacities to resolve a client's problem. Furthermore, by asking the CSRs to go directly to the point, not giving more than what they are asked for, managers diminish certain satisfying aspects of their work, such as helping, serving or demonstrating empathy toward a client. Because these very aspects increase their motivation and because they can give meaning to their stressful work, the managerial perspective to control their action process contributes to the effacement of their sense of being.

This situation corresponds to a crisis of their role. In fact, empirical results demonstrate that the CSRs, especially new and fully qualified agents, seem caught between the objective organizational expectations and the more subjective expectations of customers. In this regard, they must manage constantly the emotional work before the aggressiveness of many customers online or organizational requirements that limit their freedom of movement. Given that the CSRs cannot easily identify with their organization *or* clients since they are burdened with the emotional dissonance between their own expectations as service agents (Jeantet, 2003) and those of their superiors and of the market (Russell, 2009), they must find effective ways to harmonize these three logics.

In these conditions, the CSRs apply two types of pragmatic actions that exemplify the principles of role distance. The first one is related to the control of the call. It consists of being emotionally detached from the customer's problems in order to actualize a certain pride in their work. They tend to preserve their subjective space from intense emotional shock which could destabilize their psychological health and distort the potential to solve problems in an efficient way. The second type of action corresponds to the categorization of clients. They try to seize the behavior fundamentals of the client to get to know which strategy should be applied in the problem-solving process.

In the case of the honest or accommodating clients, the CSRs tend to let them penetrate symbolically into the firm's production process because resolving problems in those circumstances could represent a great source of satisfaction. They accomplished their role in a way that satisfies their subjective aspirations, not only from the perspective of the customers' satisfaction but also according to the pragmatic demonstration of their competences. The CSRs experience then a kind of emotional harmony (Rafaeli and Sutton, 1987) since their work takes place at the confluence of customer expectations and their own aspirations to serve the customer well and to receive recognition from a satisfied client. This situation is a substantial source of motivation for the CSR; he can then have the feeling of being an actor in the true sense of the term, because he changes something in the client's life and he receives gratitude as a direct consequence. This observation can possibly deepen the philanthropic perspective of emotional labor, given that the service relationship subscribes itself less as a part of the logic of giving--, as was noted in the litterature (Bolton, 2005; Callaghan and Thompson, 2002)--, but especially from the perspective of reciprocity in giving and taking. However, it is important to note that when the CSRs are dealing with honest or accommodating customers, the new and fully qualified agents are often distant vis-à-vis the organization whereas the advanced agents tend to adopt a deep acting strategy toward the organization because they believe in the organizational procedures. Under these conditions, the new and fully qualified agents feel some emotional dissonance toward the organization because they do not believe in the organizational procedures whereas the advanced agents experience a kind of emotional harmony at the same time toward the customer and the organization.

In the case of the manipulative or uncompromising clients, the CSRs tend to keep them out of the production process, creating an operational distance toward the market. In this case, the new and fully qualified CSRs tend to adopt a surface acting strategy toward the organization because they apply the organizational procedures without believing in them. They use the rules in a rather utilitarian perspective in order to protect themselves from these unpleasant customers and to preserve some dignity in front of managerial control. However, the advanced CSRs tend to adopt a deep acting strategy toward the organization because they believe in the organizational prescriptions.

In sum, the results presented in this study tend to highlight two main elements. On the one hand, the emotional management by the application of the principles of role distance exceeds the simple question of resistance which is often mentioned in the literature (Schalk and Van Rijckevorsel, 2007; Barnes, 2007; Mulholland, 2004, Bain and Taylor, 2000; Knights and McCabe, 1998). In fact, role distance can preserve some dignity in the CSR's subjectivity especially when they are interacting with the unpleasant customers. Moreover, the application of role distance toward the organization highlights that the new and fully qualified CSRs are able to affirm themselves socially especially when they feel some emotional dissonance toward the

organizational procedures. This role distance strategy is possible because the CSRs play multiple roles (Goffman, 1961). By being the company's ambassadors toward the customers as well as communicating the customers' worries to the firm, the CSRs can take advantage of this double role by distancing themselves from the situation and by practicing an active role as a CSR (Jeantet, 2003). The role distance does not mean that the CSRs do anything they want; rather it refers to the idea that they can use their roles to escape from constraints. In so doing, the CSRs apply integrated secondary adaption principles (Goffman, 1968) while satisfying their major obligations with a certain detachment. Thus, they can recover a part of their ontological security (Giddens, 1987) and recuperate a certain power zone in front of the actors with which they interact.

On the other hand, contrary to the assumption of Russell (2009) on the potentially important deep acting role in the service relationship of call centers because the customers are often aggressive, the results obtained in this study tend to show that the CSRs' action strategies must be nuanced. In fact, the customers' behaviors seem to determine the action strategies of CSRs especially toward the clients. Moreover, the CSRs' degree of autonomy seems to determine their action strategies only toward the organization. In these conditions, the adoption of a deep or a surface acting strategy toward the client or the organization must be placed in parallel not only with the clients' behaviors but also with the CSRs' degree of autonomy. Considering that the CSRs having little autonomy tend to take a distance from organizational procedures regardless of the customers' behavior and that the CSRs having more autonomy seem to get closer to organizational standards regardless of the customers' behavior, this study highlights that the variation of autonomy seems to play a decisive role in the CSRs' action strategies toward the organization. This finding confirms that the issue of autonomy is paramount in the management of call centers' staff and in the management of their emotion at work. If this degree of autonomy reflects little or no personal discretion, the organization can be placed in a dangerous position since the behaviors of their employees will challenge production standards. Thus, in the longer term, the overall performance of the company could be negatively affected.

CONCLUSION

From the very start, the intention of this paper has been to understand how the CSRs come to deal with constraints that are put against them at the front line of the organization and the market. Specifically, this study seeks to fill the gap identified by Russell (2008) in current literature on call centers by examining how the CSRs are engaged in emotional labor in terms of deep acting and surface acting, and by identifying the types of skills that they need to manage such situations.

Results suggest that the daily tasks of the CSRs take place around the notion of role distance. In fact, they are able to mobilize some resources on the front line of the organization and the market. This mobilization enables them to reappropriate bi-dimensional constraints and to manage emotional labor adequately. They can do so by developing and applying social skills, or through role distance, toward either their customers or the employer. Such actions tend to harmonize the conflicting logics of action that produce emotional pressure on them.

In our view, this study takes a significant step forward in the literature on call centers. In addressing the question of the degree of involvement of the CSRs with regards to emotional labor, this paper has succeeded in identifying the conditions under which emotional management related to work integrates the perspective of surface acting or deep acting. In the case of service relationships with disagreeable customers, the distancing from the customer assures that the CSRs can protect themselves emotionally. Moreover, in taking a distance toward the organization, the new and fully qualified CSRs show that they are able to affirm themselves socially. In the case of the service relationship with a more pleasant customer, every CSR tends to let the customer penetrate symbolically into the firm's production process. However, it is important to note that the new and fully qualified agents adopt a deep acting strategy toward the customer in taking a distance toward the organization whereas the advanced agents do not take a distance from the organizational procedures. In these conditions, the CSRs with less autonomy often challenge the performance goals of the organization regardless of customers' behaviors. Contrary to the assumption of Russell (2009) on the potentially important deep acting role in the service relationship of call centers, the results of this study tend to show that the CSRs' action strategies must be nuanced according to the customers' behaviors and the CSRs' degree of autonomy. This finding can alert call center managers to identify some risks for organizations especially when the CSRs feel they receive too little support from their employer or when they perceive they have too little autonomy.

In sum, the contribution of this paper is related to the fact that the CSRs can use their roles to overcome negative relationships through the principles of role distance, and achieve thereby a kind of self-management of their work-related emotions. Under these conditions, this paper has contributed to surpass the simple question of resistance mentioned in call center literature because the application of role distance highlights that they are able to develop certain social skills in order to create pride in their work. CSRs can then assert themselves socially as competent agents during a service relationship because role distance helps them to identify with the active role they expect to play at the front line of the organization and the market.

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DOES SERVANT LEADERSHIP LEAD TO GREATER CUSTOMER FOCUS AND EMPLOYEE SATISFACTION?

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ABSTRACT

Servant leadership has gained an enormous amount of popularity in organizations by being viewed as a promising resolution to a perceived need for leaders to become more efficient, principled, and employee focused. Yet there is paucity of empirical research to substantiate these claims. This study attempted to fill this knowledge gap. The research questions explored the role played by servant leadership in an organization in respect to its customers. Theoretical foundation for the study was provided by Greenleaf's work on servant leadership in combination with other prominent leadership theories, such as transformational and transactional theories. In this qualitative study, research questions were answered through in-depth, unstructured interviews with a convenience sample of 21 senior managers drawn from 16 business organizations. The results suggest that (a) servant leadership enhances profits through reduced customer turnover and increased organizational trust, and (b) employee satisfaction increases in organizations where leaders see themselves as servants first. The implications for social change include promoting servant leadership style among larger segments of leaders and thereby increasing employee morale and commitment to organizational effectiveness along with concern for customer satisfaction and social responsibility.

Keywords — Servant Leadership, Organizational Culture, Customer Satisfaction

INTRODUCTION

Practically all organizations can receive a benefit from improved leadership and management approaches. Servant leadership (Greenleaf, 1970) is one leadership method that has increased in popularity for several decades because of its emphasis on improving the organization through culture-building and empowerment; subsequently leading to greater profits for the firm due to greater focus on the customer. Servant leadership is not established on the more traditional power model of leadership (Harrison, Newman, and Roth, 2006), but on the concept that by placing the needs of others first and helping them to grow and to develop as individuals, institutional effectiveness can be enhanced through greater customer focus resulting from increased employee satisfaction and empowerment.

Greenleaf (1977) inaugurated the dialogue about servant leadership by suggesting that the leader should place the needs of the follower before their own needs by helping the follower to

mature and develop as human beings. Graham (1999) asserted that a servant leader would focus on fulfilling the needs of the follower first, with the needs of the organization coming second, and the needs of the leader placed last. Daft and Lengel (2000) continued the conversation by accentuating that the desire of a leader to serve their followers took precedence above their own ambitions to be in a formal leadership position, thereby, a perspective that is congruent with the essential principles of servant leadership as communicated by Greenleaf.

A follower within an organization that practices servant leadership would most likely realize superior personal achievement and subsequently develop more intensely according to Stone, Russell, and Patterson (2004). Whereas, Hamilton and Bean (2005) hypothesized that servant leadership would effortlessly increase the development of each follower in helping the individual to accomplish their greatest level of development and growth.

The ability of an organization to compete in a very difficult business climate requires that a company have effective leadership. Greenleaf's (1977) servant leadership model places the needs of the employee first and is viewed by many (Glashagel, 2009; Sipe & Frick, 2009) as being an appropriate leadership model that leads to increased organizational performance and enhanced employee satisfaction through improved focus on the customer according to Schneider, (1994).

Although substantial research has been conducted regarding the characteristics that define a servant leader (Spears, 1998), available research has not clearly indicated what the motivation is for an organization to sustain and maintain servant leadership. Therefore, the current research addresses specifically the perceived problem as to whether or not servant leadership leads to increased customer focus detailing the need for leaders to become more proficient, principled, and employee focused and how servant leadership has been proven to be effective once implemented and maintained in organizations (Lynham & Chermack, 2006).

THEORETICAL DEVELOPMENT

Bass (2000) asserted that servant leadership would become quite significant in organizations due to its focus on the follower and the efforts of the leader to promote the independence, knowledge, and development of the individual. Mukli, Jaramillo, and Locander (2005) researched the effects that a sales leader may have on subordinates and concluded that the leader did have an influence on employee performance and the resulting impacts on the customer, thereby, having a potentially significant impact upon the organization and its financial results.

A principal difference between the structure of leadership described by Burns (1978) and Greenleaf's (1977) servant leadership is the fact that servant leadership focuses on the needs of the follower first, as opposed to the needs of the organization or of the individual manager. Matteson and Irving (2006) supported many of the ideas forwarded by Greenleaf and Burns, although, specifically addressing servant leadership and advancing that servant leadership is

fundamentally concentrated on identifying and addressing the requirements of followers ahead of individual considerations, ultimately, leading to the development and growth of the follower (Polleys, 2002). The end results are improved organizational performance through an improved focus on the customer (Guenzi, Pardo, and Georges 2007).

The current research examined servant leadership and the resulting relationship between the leader, follower, and the effects on the customer and what the resulting outcomes were in reference to issues such as employee satisfaction, organizational performance, organizational culture, and empowerment. Franke and Park (2006) found that "servant leadership influences these relationships in that it was found to relate to lesser levels of job stress, higher levels of job satisfaction, and greater organizational commitment" (p.269). Mayer, Bardes, and Piccolo (2008) concluded that increased employee performance led to greater customer focus when an employee viewed their manager as a servant leader.

There were numerous attributes described of servant leaders that included: trust, empowerment, acceptance, empathy, positive morale, and the desire to serve others. These specific traits would become the foundation of a good leader and follower relationship according to Greenleaf (1970). From this idea of servant leadership, Greenleaf promoted the objectives, ambitions, and interests of the followers to the forefront of the organization. At its core, the servant leadership model shares similarities with more established leadership models such as transformational leadership. However, the primary unique feature of servant leadership compared to all others is the emphasis that is placed on helping the follower to grow and develop.

Greenleaf (2002) hypothesized that servant leadership positions the leader in an arrangement within a group, whereby, the leader is not the central focus of the group, allowing resources and support to be provided to followers. The interchange between leader and follower is accomplished without any expectation of acknowledgement for the person in charge. The servant leaders are motivated primarily by an intrinsic desire to serve, rather than being motivated simply by power.

Accordingly, Greenleaf (1970) described that a primary motivation of servant leaders evolves from an underlying attitude of social responsibility and equality. Liden, Wayne, Zhao, and Henderson (2008) expressed that a servant leader may be viewed from a perspective of being moral and that the servant leader sincerely believes that he or she is not superior to any other member of the organization. Servant leaders demonstrate authenticity in leadership by operating as trustees of the organization who facilitate the development and growth of community between members of an organization (Greenleaf, 1977).

Altruistic calling, emotional healing, wisdom, persuasive mapping, and organizational stewardship were all categorized as servant leadership traits (Barbuto & Wheeler, 2006). Guenzi, Catherine, and Laurent (2007) supported the research by Barbuto and Wheeler and were substantial in helping to identify and effectively clarify what characteristics a servant leader possesses. There were practical managerial implications as well related to analyzing employee

satisfaction and identifying an employee who is willing to provide extra effort within the organization. Employees identified emotional healing as the factor that was most influential in their satisfaction (Barbuto & Wheeler, 2006, p. 310). The research indicated that an organization benefited from recruiting, hiring, and training individuals that already had been identified as possessing servant leadership characteristics. Ultimately, outcomes that would positively impact the organization, such as extra effort by the employee, greater employee satisfaction, greater customer focus, and improvements in the overall effectiveness of the company were determined to be realistic goals that when introduced, benefited the company through better financial performance.

Walumbwa, Hartnell, and Oke (2010) stated that "Our findings suggest that servant leadership ameliorates positive employee attitudes as well as climates that yield important behaviors that directly benefit individuals and the work group" (p.528), a notion that is supportive of Greenleaf (1977) and how servant leadership was applied in business and its positive impact on performance.

Netemeyer, Maxham, and Pullig (2005) acknowledged the importance of the relationship between the employee and the supervisor by identifying its impact on the customer interaction. Their research suggested that the employee would go above and beyond the basic requirements of the job responsibilities when interacting with customers as a result of servant leadership. In keeping with the objective of serving customers, Saxe and Weitz (1982) observed that salespeople were certainly more involved in the purchase process and that the salesperson helped facilitate how decisions were made in an effort to persuade customers and subsequently meet customer desires and needs. The overwhelming conclusion is that as a result of implementing servant leadership, the company and its leaders would be more effective and productive from a financial point of view.

An examination of the roles of servant leaders by Whittington (2004) in businesses that are at the top of their industries, such as Synovous Financial Corporation, Southwest Airlines, and TDIndustries supports the premise that servant leadership offers a practical and feasible representation of leadership style that would meet the fiduciary responsibilities of the organization and its leaders. Specifically, Southwest Airlines established a culture committee in order to make certain that the servant leader culture was being maintained at all levels of the company and Southwest Airlines subsequently applied the principles of servant leadership to all of its stakeholders (McGee-Cooper, Looper, & Trammell, 2007). TDIndustries and Synovous implemented similar policies and procedures as well according to Whittington (2004).

Braham (1999) concluded that there were positive outcomes associated with implementing and sustaining servant leadership that included the organization reducing customer turnover. In addition, the organization would expect to experience increased and sustained organizational success, a desired outcome that organizations seek in order to maintain competitive.

Leader trust was examined by Joseph and Winston (2005) following implementation of servant leadership. Organizational trust was also a target of this research study; the authors made a strong argument for trust by identifying that there was indeed a significant association between trust and servant leadership. The conclusions of the research indicated that the association was principally suitable to the perception that servant leadership had a foundation based upon truthfulness and honesty. Furthermore, the authors found that there was in fact a positive relationship between perceptions of servant leadership and both organizational trust and leader trust, resulting in increased leader effectiveness as a result of the servant leadership.

The significance of the Joseph and Winston (2005) study was that it reinforced servant leadership (Greenleaf, 1970) by determining that servant leadership substantially contributed to the development of trust among followers. Joseph and Winston's research added support for servant leadership by showing that the performance of a company or organization can be enhanced through the implementation and maintenance of servant leadership. The information developed may help leaders and managers to implement servant leadership without becoming unduly concerned with possible performance reductions. Joseph and Winston (2005) further emphasized that the performance goals and objectives of an organization may be better attained through the implementation of servant leadership.

Washington, Sutton, and Field (2006) addressed the leader and follower congruency then allows for a smoother conversion within the organization to move forward in a single, positive direction toward servant leadership. In general, performance can be evaluated and improved because the servant leader assists in the development and establishment of a work environment that is encouraging and ensures that the employees are interconnected. Such actions clearly assist in company effectiveness and efficiency through a reduction in turnover and absenteeism according to Washington et al. (2006).

Johns (2006), as well as Ehrhart (2004), determined that there was a definite connection linking job attitudes and job performance in organizations utilizing servant leadership with observed increased organizational effectiveness. Ehrhart created a general assessment of servant leadership founded primarily on an examination of the current literature. The study was subsequently divided into seven categories of servant leader behavioral characteristics. Results of the study indicated strong support for servant leadership within the organizational division as long as the organizational associates believed as though they were being treated fairly and equitably.

Overall, support and conscientious behaviors measured higher, thereby, resulting in a positive outcome directly associated with the organization establishing a culture of servant leadership according to Ehrhart (2004) and Johns (2006). Additionally, the study indicated a strong relationship between leaders and followers as long as the leader was attempting to contribute to the growth and development of the follower, a primary tenant of servant leadership. A significant benefit to the organization resulted in increased organizational effectiveness through the development of the relationship between the leader and the follower.

Other researchers have previously postulated that the most substantive values of servant leaders would include the values of empathy (Spears, 1998), integrity (Russell, 2001), and the capability to lead with competence (Greenleaf, 1977; Russell & Stone, 2002). The capacity of a leader to noticeably appreciate, be considerate of, and genuinely be concerned for followers is considered a valuable attribute of servant leaders (Greenleaf, 1977; Russell, 2001). Servant leaders are described as placing a high value on integrity and competence in order to develop interpersonal trust and confidence in others. Trust and confidence then become important ingredients and unique characteristics that are grounded in servant leadership (Russell, 2001; Russell & Stone, 2002) and are essential elements in the development and growth of the follower.

Sipe and Frick (2009) provided a more up-to-date description of characteristics that describe the servant leader, identifying this leader as "a person of character who puts people first. He or she is a skilled communicator; a compassionate collaborator who has foresight, is a systems thinker; and leads with moral authority" (p. 4). This current examination of servant leadership does not differ significantly from views of servant leaders from thousands of years ago and throughout history. There is no actual transfer of power; however, servant leadership encourages and provides an example of a leader who decides to place the need to serve others (Sendjaya & Sarros, 2002) at the forefront, before their own personal needs.

One of the principal objectives of servant leadership is to advance and subsequently achieve organizational goals and objectives, according to Greenleaf (1977). Therefore, a leader should not blindly go down a path whereby these objectives are not attainable or reasonable just for the sake of appearing to serve others. The growth and development of the organization, through the advancement of the follower, is of paramount importance in servant leadership. Chen, Kanfer, Kirkman, Allen, and Rosen (2007) suggested that it is through enhanced levels of trust and empowerment that the convergence of organizational objectives can be realized and these organizational traits are characteristics of servant leadership.

McGee-Cooper, Trammell, and Lau (1992) explored the effects of servant leadership within the Southwest Airlines, a profit-driven company, and subsequently helped the organization to implement and sustain servant leadership by creating several training and development modules specific to the company. These training modules, along with the establishment of a culture with servant leadership at its core, have allowed Southwest Airlines to stay focused on meeting the needs of its stakeholders as well as being profitable (McGee-Cooper et al., 1992) and a leader in their industry.

Various studies have examined supervisor and subordinate interfaces with Chebat and Kollias (2000) describing the impact of the relationship between a leader and a follower on the customer, suggesting that a company that treats employees well can reap significant benefits, including financial ones. The authors asserted that the employee who is well treated subsequently takes care of customers better, thus, potentially leading both to greater profitability and higher employee satisfaction. McGee-Cooper et al. (1992) found that Southwest Airlines places the

needs of others, to include customers, employees, vendors, and shareholders, before its own needs when describing its corporate culture. McGee-Cooper et al. (2007) further chronicled how to become a change agent for servant leadership at Southwest Airlines. Servant leadership was credited with helping Southwest Airlines to gain greater market share through their placing the needs of others before the needs of just the shareholders.

TDIndustries is another example of a company that implemented and has sustained the servant leadership model for several decades (Glashagel, 2009) with positive organizational results. All of these positive interactions have led to increased profits, customer retention, and greater employee satisfaction (Glashagel, 2009).

Starbucks, Southwest Airlines, and TDIndustries seem to have developed and implemented a dynamic servant leadership culture within their organizations (Behar, 2007; Sipe & Frick, 2009, Glashagel, 2009). All three of these organizations are leaders in their industries and these organizations demonstrate servant leadership in concrete terms in areas that include pay administration, employee empowerment, training, and employee development (Glashagel, 2009). The servant leader provides the follower with everything needed to be successful, as well as the opportunity to flourish through their servant leader example. This prevailing attitude of genuine caring and authenticity for the needs of others has led to improved organizational effectiveness (Sipe & Frick, 2009).

METHOD

Interview-driven, qualitative research and analysis was determined to be suitable for this study because it enabled the pursuit of two goals: (a) servant leadership enhances profits through reduced customer turnover and increased organizational trust, and (b) employee satisfaction increases in organizations where leaders see themselves as servants first. In-depth interviews were conducted for the purpose of investigating the effects of servant leadership and its impact within organizations, the influence on employees, and its bottom line implications.

The design used in the current qualitative study was interview-driven relying on the use of open-ended questions, thereby, providing the opportunity for each participant to clearly elucidate their specific and unambiguous ideas (Bernard & Ryan, 2010). As is common in qualitative research, each of the interview questions were open-ended as opposed to close-ended questions in order to allow the participants to expound on the subject of servant leadership in immense detail. The interview questions were designed to allow each of the participants an opportunity to articulate their viewpoints in as thorough and complete of a manner as necessary. All of the interviews took between one and two hours and were recorded on an audio cassette tape recorder. After collection, the data was subsequently coded (Miles & Huberman, 1994), transcribed, evaluated, and analyzed at a later date.

To stay on task with the each participant, the research design utilized probing questions as necessary in order to qualify and specify answers substantively. Elaborate probes and

questions for clarification were utilized as necessary in order to provide a broader depth and understanding of the answer being provided. The qualitative, interview-driven study was designed to choose purposefully, participants that possessed an essential familiarity with the company and its leadership style, thus enabling them to answer the interview questions from a position of authority and conviction.

The most appropriate criteria used in the participant selection process were developed based on the determination as to the most suitable leaders that would be able to provide the greatest contribution to the study. Specifically, the participant was required to be an owner or senior executive of an organization that used servant leadership as its management model, or the participant was required to be an expert in the advancement of servant leadership. Furthermore, the participant needed to be in a position of leadership, whereby, being able to access information relative to the study.

Criteria related to sales revenues, employee satisfaction, turnover, insurance claims, budget requirements, and even community reputation were all areas that the participant generally needed to have strong data on in order to provide a sufficient amount of necessary information in the interviews so that a detailed analysis and interpretation could be conducted and subsequently concluded.

Participants that matched the specified criteria were chosen and consisted of 21 proprietors, leaders, and employees of various businesses and organizations. In keeping true to the specified criteria, the participants consisted of: ten CEO's, three presidents, six senior vice-presidents, one professor, and one author. It should be noted that both the author and the professor have experience implementing servant leadership. The organizations researched and the individuals that participated in the study were self-identified as servant leaders, or as being in organizations that have followed the servant leadership model from 3 years to more than 40 years, thus giving all of the participants experience with the model of servant leadership.

Snowball sampling (Sudman & Kalton, 1986) was employed as a means of developing potential participants through selected businesses and organizations that were chosen based upon their current use of the servant leadership model. Each respondent was asked for referrals to others who were known to be servant leaders or who were associated with servant organizations.

Creswell (2007, p. 170) detailed data analysis procedures in qualitative studies and developed a template that was used in to analyze the data. The Creswell template included five individual parts that could be used to investigate the fundamental nature of the experience that the participant had with servant leadership. Epoche or bracketing, significant statements, meaning units, textural descriptions, and structural descriptions make up the five components of the template. The essence of the findings consists of the culmination of the data gathered and subsequent analysis derived from the five coded parts. Discrepant situations were minimal or did not arise at all with most participants due to the adherence to the analysis procedures and in turn, many of the participants reviewed the findings prior to final completion. Detailed, verbatim descriptions (Creswell, 2007) provided the specific details of the actual servant leadership

experience of the participant within their organization. Finally, a detailed account of the experience was compiled that encompassed all of the listed elements required and subsequently developed the fundamental nature of the interviews.

MEASURES

The method used to analyze the data that was collected was the method advanced by Creswell (2007), who identified several steps in the analysis process and Creswell. The process included horizonalization, along with clustering and thematizing of the invariant constituents. Individual textural and structural descriptions, along with composite textural/structural descriptions were also parts of the analysis process. Of the 21 participants that were interviewed, 12 actually conducted the member checks, either verifying the data verbally, or verifying the data by editing the original transcripts.

RESULTS

As a result of analyzing the data obtained through the transcribed interviews, themes were determined and subsequently developed and are as follows.

Reduced Turnover Leads to Improved Customer Focus

Many of the respondents in the study listed the reduction in turnover and absenteeism as major factors that had a positive impact on organization performance, as well as having a positive impact on employee satisfaction. Nine participants listed reduction in turnover and three detailed a reduction in absenteeism as critical areas that influenced how cost-effective their organization may be.

Customer Satisfaction Increases

The participants in the study used a wide ranging number of examples as to how servant leadership positively impacted the financial position of the organization. Some of the participants had specific examples of how servant leadership led to reduced costs associated with employee issues, although others addressed areas of productivity increases as well as the impact servant leadership has on marketing and advertising budgets for example. The majority of the participants related that increased customer focus led to increased sales as well.

Trust Develops and Grows as a Result of Servant Leadership

Participants in the study described how trust was a critical component of employee development and growth and the resulting effects specifically related to areas such as employee value to the organization. This trust and value was viewed as a catalyst to an ever evolving and improving relationship with customers, followers, and even the community.

Implementation and Sustaining Begins at the Top

There were many suggestions as to what the requirements were to implement and sustain servant leadership. Many of them included a need for the top management to provide total support and be examples for the organization to follow. Others described the necessity to provide adequate training and development of everyone within the organization so that a culture becomes established.

Customer Focus is Enhanced Through Culture

Culture within the organizations studied created an interesting dynamic. Many of the participants in the study clearly articulated that servant leadership was the actual culture, although others stated that the culture had to exist in order for servant leadership to flourish and become prevalent within the organization. Regardless, the widespread thought by the participants was that a servant leadership culture impacted sales positively because the employees of an organization are building meaningful relationships with the people that they are serving. The prevailing attitude among respondents was that they were there to serve their people and their people were there to serve the customers.

Concern for Others Improves Customer Focus

Respondents in the research found common ground in determining that servant leadership entails establishing a concern for the follower within the organization. An expression of this was made through some participants using the words love and caring. Others displayed similar thoughts through the use of words such as growing, developing, and commitment. The end result was improved customer focus and subsequent organizational commitment by the employee, leading to enhanced firm performance.

Customer Churn is reduced Through Empowerment

Respondents in the study generally had a view of servant leadership that certainly incorporated the principles of empowerment and its value in the decision-making process. Most

of the participants believed that empowered employees were more productive and that decision-making was streamlined, thereby, enhancing organizational performance and increasing customer focus.

Composite Textural-structural Description

The data certainly suggested that servant leadership within an organization has very positive benefits and affirmative outcomes and focus on the customer. Jaramillo, Grisaffe, Chonko, and Roberts (2009) concluded "that salespeople who view their managers as servant leaders exhibit higher levels of customer orientation and are more likely to engage in adaptive selling behaviors and customer-directed extra-role performance (p. 268). These outcomes led to certain themes that included increased organizational performance through higher customer focus, a reduction in turnover among organizational employees, profit increases, and greater organizational trust between the customer, organization, and the follower. According to Román and Ruiz (2005), servant leadership results in a much more favorable opinion of an organization, thus enabling a greater customer-organization connection. Subsequently, the success of the organization is positively impacted (Grisaffe and Jaramillo 2007). Lytle and Timmerman (2006) asserted that servant leadership leads to a more dedicated employee that is more focused on the customer relationship, thus leading to greater organizational effectiveness.

Other results from the study concluded that both implementation and sustaining of servant leadership was required from the top management, subsequently leading to a culture that was conducive to developing the organization from within. The research also showed conclusively that a concern for others was viewed as an absolute necessity for sustaining and maintaining servant leadership. All of the conclusions in the study led to increased organizational performance through an improved, and more focused customer relationship.

DISCUSSION

This qualitative interview-driven study was undertaken to better understand the role that servant leadership plays within an organization in regard to issues such as improving employee satisfaction, customer satisfaction, and increased profitability. Moreover, purposive sampling and snowball sampling were utilized in order to identify individuals that have identified with the experience being studied. The study consisted of recorded in-depth interviews with 21 self-identified servant leaders, or those belonging to servant led organizations that lasted approximately an hour. Consequently, the interviews were transcribed and the data was analyzed according to the methodology advanced by Creswell (2007). Analyzing the data consisted of horizonalization: clustering and thematizing, as well as textural-structural descriptions in the evaluation.

As this was an experimental study, the results for research question one suggested that top management needed to be a fundamental player in establishing servant leadership within the organization. Most of the 21 participants put forth that without senior management support, it would be difficult to implement and sustain servant leadership. Sustaining servant leadership also was addressed through the participants describing that training and hiring practices would need to be considered in order to get the right type of folks into the organization. Research question one also identified that people needed to come first and that there needed to be a concern for others in order for the right conditions to exist for servant leadership to become a reality in the organization. The second research question spoke to how profitability increases and how employees are more empowered, thus enabling them to become more productive within the organization as a result of being more focused on the customer.

A qualitative, interview-driven method was chosen so that the experiences of the participants could be evaluated in complete detail. The 12 open-ended questions used in the indepth interviews with the 21 participants were designed to allow for the best opportunity to collect necessary data for analysis. A driving goal of the research was to try and determine what the necessary and sufficient conditions were in order for an organization to sustain servant leadership. It was only after the tapes were transcribed and that a member check was completed for validation purposes that I was able to look for specific patterns and ultimately thematize the data.

The resulting data suggested that servant leadership can lead to greater organizational productivity as well as increased fiscal strength as evidenced by decreased turnover, increased job satisfaction, and increased revenues. The participants also shared an almost unanimous belief that they should set the standard for excellence within their organization and to not only serve the followers at work, but to lead in service within their communities.

LIMITATIONS

Limitations of the study to be considered would include the possible lack of generalization to other individuals, groups, or settings. Another potential limitation in the study is the difficulty that there may be in trying to quantify the results in order to demonstrate the findings more clearly. Lastly, replication may be considered a potential limitation due to the differences in accuracy of the participants, settings, and organizations.

FUTURE RESEARCH

This study in particular was experimental and the results could not be generalized. However, there could certainly be an expansion of the number and type of organizations and of the individuals that were included in the study. A mix of for-profit firms, not-for-profits, publically owned, and privately owned organizations were used in this study; perhaps subsequent

studies could focus specifically on publically owned organizations, or woman owned organizations in order to see if those results would provide additional value to the discussion. The study primarily centered in the United States with the South, Midwest, and Pacific Northwest being the areas where participants primarily lived and worked. The Northeast and Southwest, as well as the Rocky Mountains might provide different or complimentary results as well.

CONCLUSIONS

This study in particular was experimental and the results could not be generalized. However, it is the hope that those in leadership positions within various organizations discover that the findings contained in this study are able to be used for the betterment of their organizations and for the followers as well. The further hope is that this piece of research is not viewed as another review of a fad management style, in that the conclusions clearly demonstrate a more positive way of leading people and getting the most out of the experience. Greenleaf (1977) certainly had in mind that no further harm should come to those that we are entrusted to lead, and perhaps that comes through in a meaningful way through the results and conclusions of the study. Furthermore, it became clear that greater profits were not the underlying reasons for implementing and sustaining servant leadership according to the research. Profits occurred as a net effect of servant leadership through greater employee satisfaction, reduction in turnover, and greater focus on the customer.

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THE VIRTUAL OFFICE: HRM LEGAL, POLICY, AND PRACTICE ISSUES

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ABSTRACT

It's been nearly thirty years since Chris Kern coined the term "virtual office" (Kern, 2008 & 1983). Since then, a number of other terms have become synonymous with the term, including telecommuting and telework (Mayhew, 2012). Estimates of the number of employees who work outside the traditional work environment vary, from 2.9 million to 33.7 million (Meinert, 2011). Numerous environmental and economic factors have been identified in the literature as stimulating the use of the virtual office including high gas prices, globalization, changing workforce demographics, and advances in information and communications technology (Riley, Mandavilli, and Heino 2000, and Meinert, 2011). As these factors continue to evolve and influence human resource decision making, the legal environment has become an important variable in organizational efforts to reap the benefits of the virtual office. The purpose of this paper is to examine the legal, policy, and employee relations issues associated with a virtual office.

INTRODUCTION

It's been nearly thirty years since Chris Kern coined the term "virtual office" (Kern, 2008 & 1983). Since then, a number of other terms have become synonymous with the term, including telecommuting and telework (Mayhew, 2012). Estimates of the number of employees who work outside the traditional work environment vary, from 2.9 million to 33.7 million (Meinert, 2011). Numerous environmental and economic factors have been identified in the literature as stimulating the use of the virtual office including high gas prices, globalization, changing workforce demographics, and advances in information and communications technology (Riley, Mandavilli, and Heino 2000, and Meinert, 2011). As these factors continue to evolve and influence human resource decision making, the legal environment has become an important variable in organizational efforts to reap the benefits of the virtual office. The purpose of this paper is to examine the legal, policy, and employee relations issues associated with a virtual office.

Even before Kern coined the phrase "virtual office" in 1983, "organizational designers and social activists in the 1970s" were examining alternatives to help American business respond

to the fall-out created by the 1973 Arab Oil Embargo (Riley, Mandavilli, and Heino, 2000 & Admin, 2009). This was also a period when the conservation movement began to gain traction in response to the need to develop "alternatives to the energy consumption, traffic problems, and pollution caused by everyday commuting in the United States" (Riley, Mandavilli, and Heino 2000). Those same issues that spawned interest in the virtual office in the 1970's are still influencing the movement today. As gas prices continue above \$3.00 a gallon and the economy continues to sputter, organizations and their employees are looking for ways to minimize the cost of commuting. Another prominent factor driving use of the virtual office is the changing composition of the American workforce, in particular the increase in the number of women. According to a report from the U.S. President's Council of Economic Advisers, in 1968, nearly 50 percent of children in America were raised in households where the father worked full-time, the mother was not in the labor force, and the parents were married; by 2008, only 20 percent of children lived in such households. The report further noted that in 1950, women constituted about 30 percent of the labor force and in 2009, nearly half (Council of Economic Advisers, 2010). This change in the composition of the workforce has been driving the demand for more flexibility in workplace arrangements, especially with respect to when and where people work. In addition to the demands fueled by those needing flexibility to care for children, the increase in the number of individuals serving as unpaid caregivers to family members over the age of 50 has been growing in recent years further increasing the need for more flexible work arrangements (Council of Economic Advisers, 2010). Another factor frequently mentioned in the literature driving the use of the virtual office is the potential for employers to save money and increase productivity (Meinert, 2011). A 2009 study by Janet Caldow of the Institute for Electronic Government, IBM Corporation reported that "40 percent of its 386,000 global employees do not have a traditional office and many tens of thousands more work outside their offices at least some of the time. Since 1995, office space was reduced by 78 million square feet; 58 million square feet were sold at a gain of \$1.9B; sublease income exceeds \$1B; and, in the U.S. alone, annual savings amount to \$100M" (Caldow, 2009). Meinert reported that flexible work options that Deloitte LLP has offered many of its employees over the last 15 years resulted in \$30 million in savings through reduced office space and energy cost in 2008 (Meinert, 2011).

Just how many organizations and employees are working in virtual offices is a difficult number to calculate. Estimates vary from "2.9 million individuals to 33.7 depending on who you count and where you get your figures" (Meinert, 2011). The Telework Research Network reports from their survey data that in 2008, 2.8 million people consider their home their primary place of work and that another 20 to 30 million people currently work from home at least one day a week (Telework Network, 2012). One thing is consistent across those reporting the use of the virtual office, telework, and telecommuting. The number of employees and organizations involved in the use of these flexible work arrangements has been increasing dramatically in recent years. Further, as the pace of technological change continues to move forward, firms'

ability and the feasibility of expanded use of flexible work arrangements should continue to drive additional increases in their use.

LEGAL ISSUES

Organizations that have utilized the virtual office have encountered a wide variety of HRM legal issues. Chief among these issues that have been noted in the literature are: compliance with the Fair Labor Standards Act's (FLSA) overtime provisions, accommodation issues associated with the Americans with Disabilities Act (ADA), workers compensation and Occupational Safety and Health Act (OSHA) issues, confidentiality concerns, and copyright infringement have been noted in the literature. Additional legal issues include state tax law complications and the tax treatment of employer provided equipment utilized by telecommuters (Horner, 2011).

Complying with the FLSA overtime regulations has become a persistent problem for employers in general in recent years. Recent high profile court cases involving Farmers Insurance and IBM highlight the problem for employers utilizing the virtual office. A jury awarded Farmers Insurance's home-based adjusters \$90 million in a dispute over overtime and IBM, an organization that has utilized the virtual office for a number of years, settled a similar case for \$65 million (Bruce, 2011).

One of the often mentioned problems with utilizing the virtual office is the lack of direct supervision by management especially if the employers' classify the employees as salary exempt under the FLSA and such classification does not hold up under legal scrutiny. Under the FLSA, non-exempt employees must be paid at least the federal minimum wage for all hours worked and overtime pay at the rate of time and one-half their regular rate of pay for all hours worked over 40 hours in a workweek. Section 13(a)(1) of the FLSA provides exemptions from both the minimum wage and overtime regulations for employees employed as bona fide executives, administrative, professional and outside sales employees. There are additional exemptions for certain types of computer employees in 13(a)(1) and Section 13(a)(17). Two tests are utilized to determine if an employee qualifies for exempt status. To qualify for exemption from the overtime provisions, the employee must be paid on a salary basis at not less than \$455 per week. Job titles are irrelevant and in order to qualify for exempt status, the employee's specific job duties and salary must meet all the requirements of the regulations (WHD, 2012). For example, to qualify for the computer employee exemption, the following test must be met:

The employee must be compensated either on a salary or fee basis at a rate not less than \$455 per week or, if compensated on an hourly basis, at a rate not less than \$27.63 an hour;

The employee must be employed as a computer systems analyst, computer programmer, software engineer or other similarly skilled worker in the computer field performing the duties described below; The employee's primary duty must consist of:

- 1. The application of systems analysis techniques and procedures, including consulting with users, to determine hardware, software or system functional specifications;
- 2. The design, development, documentation, analysis, creation, testing or modification of computer systems or programs, including;
- 3. The design, documentation, testing, creation or modification of computer programs related to machine operating systems; or
- 4. A combination of the aforementioned duties, the performance of which requires the same level of skills. Source: Fact Sheet #17E Exemption for employees in Computer-Related Occupations under the Fair Labor Standards Act (FLSA).

The FLSA fact sheet goes on to note that the computer employee exemption...

does not include employees engaged in the manufacture or repair of computer hardware and related equipment. Employees whose work is highly dependent upon, or facilitated by, the use of computers and computer software programs (e.g., engineers, drafters and others skilled in computer-aided design software), but who are not primarily engaged in computer systems analysis and programming or other similarly skilled computer-related occupations identified in the primary duties test described above, are also not exempt under the computer employee exemption (DOL Fact Sheet #17E, 2012).

The availability of and the use of technology are critical ingredients in the virtual office but just because an employee is utilizing technology in their job does not automatically qualify them for the exemption from the overtime regulations. An additional factor that gives rise to legal complications with respect to the overtime regulations is the lack of direct supervision of employees. If the employee does not qualify for one of the exempt categories, they must be compensated for all hours worked. In the traditional workplace, employees can "punch in and punch out" to start the day, for lunch, and to end the day. In the virtual workplace, the employee is more often than not left to regulate start, break, and quit times. This environment complicates the record keeping necessary to make sure employees are properly compensated for all compensable time.

Another reoccurring overtime related issue associated with today's technology is "BlackBerry time" (Genova, 2010). Many managers believe that because the organization provides them with a "smartphone" for use during their regular work hours, the employee should be "constantly plugged in" and available for work (Genova, 2009). Employees, view employer provided smartphones in a different light. According to one survey, employees reported that they viewed their employer provided smartphones as a status symbol signifying "their status or importance at the company" (Marquez, 2009). The employees surveyed reported that while they viewed these devices as a benefit, they felt that they were expected to always be available (Marquez, 2009). The employees in the survey further reported that they used "their wireless devices between one and five hours per day during what they consider nonworking time"

(Marquez, 2009). FLSA regulations require employers to pay workers for time worked in the smallest increment allowed by its payroll system for all time worked and employees contacted outside their regular work time may be entitled to overtime (Genova, 2010).

While determining exempt status and whether time work is compensable under the FLSA is complex in and of itself, employers in many states face additional regulations that can further complicate virtual office arrangements for non-exempt employees (McCoy, 2007). California regulations providing mandated rest and lunch breaks after so many hours of work and the payment of overtime for all work in excess of 8 hours on one day are prime examples (CA.GOV, 2012).

Another popular approach to avoid compensating employees for overtime, not to mention providing workers compensation coverage, paying unemployment taxes and social security matches, is to classify the worker as an independent contractor. In recent years, tax collectors at both the state and federal levels have initiated efforts to reign in misuse of this classification (O'Brien, 2012). The U.S. Internal Revenue Service (IRS) 20-factor, right-to-control test is utilized when tax liability is the issue. The economic realities test is utilized when employee status is the issue under a wide range of statutes including the FLSA and Title VII of the Civil Rights Act of 1964 (Houseman, 1999). Virtual office issues revolve around the amount of control the employer exercises over the worker and who is paying for the technology being utilized. Additionally, does the worker have the opportunity to provide their services for other organizations (Kellner, 2000)?

The Americans with Disabilities Act (ADA) requires employers with 15 or more employees to provide reasonable accommodation for qualified applicants and employees with disabilities. Reasonable accommodation is any change in the work environment or in the way things are customarily done that enables an individual with a disability to perform the essential functions of their job. Employers may not be required to provide specific accommodations if they can show that it would cause significant difficulty or expense (undue hardship) (EEOC, 2012). The ADA does not require an employer to offer a virtual office option as a matter of policy but, if the employer does offer telework options, it must allow employees with disabilities an equal opportunity to participate. Even if the employer does not have a telework program in place, the location where work is performed may fall under the ADA's reasonable accommodation requirement of modifying the workplace policies, even if the employer does not allow other employees to telework (EEOC, 2005). This is another legal area that involves "state-specific" laws and regulations (Bruce, 2011).

Workers compensation issues associated with the virtual office revolve around the issue question of whether or not an injury arouse in the "course of employment" and the area of workers compensation recovery (Genova, 2010). Workers compensation laws do not generally distinguish between home-based and office-based workers. The analysis as to coverage "turns on whether the injury or illness can be said to have arose out of and in the course of

employment" (Kellner, 2000). Workers compensation case law in general can be complicated and even more so when a telecommuting employee is involved.

Section 5 (a) of the Occupational Safety and Health Act (OSH Act) provides that each employer "shall furnish to each of his employees employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees" (29 USC 654, 2012). A 1999 OSHA advisory opinion letter caused a bit of controversy with respect to application of the OSH Act to home-based workers. The letter originally stated that "an employer's obligations might extend to beyond the home office to other safety hazards within an employee's house" and that in certain situations, OSHA may need to conduct on-site inspections of an individual's home (Genova, 2010). In January of 2000, the U.S. Secretary of Labor rescinded the letter and stated that "OSHA will not conduct inspections of employees' home offices, hold employers liable for employees' home offices, and does not expect employers to inspect home offices of their employees" (OSHA INSTRUCTION, 2000).

Confidentiality issues are associated with remote workers utilizing proprietary information. In spite of the availability of advanced security protocols, information utilized and shared in the virtual office is "more vulnerable to interception and sabotage by hackers, and/or inadvertent loss or destruction by employees" (McCoy, 2007). McCoy cites the 2006 loss of a laptop and external drive as a "sobering example of what can happen when proprietary information leaves the building" (McCoy, 2007). The laptop and external drive contained personal information including the Social Security numbers of millions of veterans and active-duty troops and was stolen from the home of a data analyst at the Veterans Affairs office who had been taking home the sensitive data for three years (Epic.org, 2006). While the Veterans Affairs data breach was one of the largest reported, it was one of several similar incidents reported that year (Epic.org, 2006).

EMPLOYEE RELATIONS ISSUES

Before an organization can reap the potential benefits of the virtual office, some very basic issues must be addressed. Is the environment appropriate for the nature of work being done? Is a physical presence in the workplace necessary to facilitate contact with co-workers, customers/clients, and/or co-workers necessary in order to perform the essential functions of the job? Can the quantity and quality of the work being performed be easily measured (Meinert, 2011, Kellner, 2000). Once the organization determines that the virtual office is the appropriate environment for jobs, the organization must then perform a cost benefit analysis. Can the organization afford the necessary investment in technology and training? Equipment needs include laptop and or desktop computers, printers, fax machines, scanners, and basic office furniture (Meinert, 2011). One estimate of the spending range for equipping a virtual office is between zero and \$7,500.00 (Meinert, 2011).

Another key financial variable often cited in the literature is the ability of the organization to cut its real estate and overhead costs. Deloitte LLP reports impressive savings due to reduced office space and energy costs but Meinert reports that another organization that balked at expanding its use of telecommuniting due to an estimated \$4 million investment in an advanced telecommunications system (Meinert, 2011).

A number of key employee relations issues must also be addressed. Is assignment to the virtual office right for current employees? Often cited issues with respect to whether telecommuting is appropriate for an individual are whether individuals are able to work independently and are able to practice self-discipline (Mayhew, 2012, Leonard, 2011, Meinert, 2011, & Kellner, 2000). Horner cited research that identified the demographic characteristics of "workers who are most likely to be able to telecommute, choose to telecommute, and continue" to telecommute (Horner, 2011). Citing a study by the Southern California Association of Governments, workers who are more likely to telecommute are:

more than 30 years old or have another adult in the household. Having young children in the household increases telecommuting, but in households with children over 6 years old (i.e., school-age), having children in the household has no effect on telecommuting. The single most significant demographic variable is having a college degree (Horner, 2011).

In addition to being self-disciplined, employees must have good written communication skills to communicate "easy-to-understand and to-the-point communications" when they are operating in the virtual office (Leonard, 2011).

Supervisors and their management style pose another set of important issues. Supervisors who have been schooled in Management by Walking Around (MBWA) must be able to "learn to manage results" (Kellner, 2000). Providing feedback to employees in a physical work place can be much easier for the MBWA schooled manager than in the virtual office. In addition, when using virtual teams, supervisors must be able to keep team members engaged and promote "a sense of belonging" (Leonard, 2011). Leonard also reports on what some call the "out-of-sight, out-of-mind syndrome" where team members feel "disconnected" from the organization (Leonard, 2011).

POLICY AND PRACTICE SUGGESTIONS

Effectively dealing with the plethora of legal issues facing organizations considering use of the virtual office begins with the development of clear legally based policies and practices. Compliance with the FLSA wage and hour regulations has been identified most often as the number one issue. Employers must properly determine the exempt status of employees regarding their entitlement to overtime compensation. Development of good job descriptions is a start to making the proper determination. Employees who are not exempt must be properly

monitored, and supervisors and the organization must ensure that proper tracking and record keeping systems are in place (Bruce, 2011). In states like California, the "employers must ensure that telecommuting employees are taking their required meal and rest breaks" to avoid compensable time issues (Bruce, 2011).

While under the FLSA, employers are not required to compensate employees for small amounts of time that are "insubstantial or insignificant", employers should develop a policy to make sure "BlackBerry time" does not become a problem. A policy that limits when non-exempt employees are required to have their remote technology active has been utilized by a number of organizations to minimize this issue (Genova, 2010). If employers are utilizing independent contractor status with respect to their telecommuters, remember that misuse of this status is under "heavy scrutiny" by regulators (O'Brien, 2012).

With respect to ADA compliance, employers are not required by law to offer virtual office options, but it is well established that providing someone the opportunity to telework may be a reasonable accommodation. The EEOC has for a number of years supported work at home (telework) as a reasonable accommodation and has over time provided employers with a great deal of enforcement guidance on the issue (EEOC, 2005). Additionally, there are substantial resources available to employers to facilitate this option when employers are dealing with requests for reasonable accommodation associated with an employee's disability. General information can be found on the EEOC's website at 222.eeoc.gov/policy/guidance/html and another government-funded site, the Job Accommodation Network (JAN). JAN is a free service for employers and employees dealing with disabilities and the need for accommodation. Additionally, employers have been cautioned by the EEOC, that when someone requests to work at home as an accommodation, the determination should be made through a flexible "interactive process" between the employer and the individual (EEOC, 2005).

To minimize OSHA and workers compensation issues, employers should make sure home office facilities are free of hazards that may cause harm or injury. While OSHA has made it clear that they will not be conducting home inspections of telecommuters' work sites, employers may consider this option when determining an employee's eligibility to telework from home. At a minimum, "employers should insist on (and offer to pay for) ergonomically sound office furniture, keyboards, and the like" to minimize issues in this area (Bruce, 2011).

To minimize confidentiality issues with respect to proprietary information, employers must develop and enforce policies to minimize these risks. McCoy recommends two:

First, "require employees to access proprietary information remotely only when using computing devices that contain sufficient encryption mechanisms and other protections from outside hackers; Second, before terminating a telecommuter, employers should identify the proprietary information and physical equipment the employee possesses (on his or her home computer or otherwise), and be prepared to give specific and clear directions to the employee about how to return or properly delete such information (McCoy, 2007).

To avoid data breech problems like the U.S. Department of Veterans Affairs (VA) incident in 2006, Genova, citing Frauenheim, recommends that employers "set policies for acceptable remote computer usage as well as ask tough questions about whether sensitive data truly needs to be taken home" (Genova, 2010).

Policy and practice to guide decision making and behavior is only as useful as the performance management utilized to make sure employees and managers are following policy. Legal risks emerge when supervisors improperly manage performance in this area "as in any other context, legal risks emerge" (McCoy, 2007). While most of the virtual office literature dealing with performance management focuses on other issues, McCoy and Kellner both remind supervisors of the difficulty of defending termination decisions based on faulty performance management (McCoy, 2007 & Kellner, 2000). Managing and evaluating performance is difficult enough in a physical workplace and the "increased pressure on supervisors to fairly and directly address performance issues brought on by the remote work arrangement, and what can happen when supervisors unnecessarily manufacture a basis for termination" further enhance the "many legal pitfalls" telecommuting arrangements can create (McCoy, 2007).

SUMMARY AND CONCLUSIONS

The use of the virtual office to facilitate more efficient and effective of human resources is not a passing fad. As the global business environment continues to expand, change in the composition of the labor force continues to drive the demand for more flexible work arrangements, and organizations attempt to reign in the cost of doing business more and more organizations are pursuing virtual office options. Survey after survey indicates that as organizations look to respond to a wide range of economic and social forces, the use of the virtual office will only increase. If organizations are to reap the potential benefits of the virtual office, managing the HR related legal issues is critical. Good planning, sound policy, effective training, and performance management can help organizations more effectively manage the legal risk associated with those issues.

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THE HISTORY OF THE FEDERAL TAXATION OF CAPITAL GAINS

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ABSTRACT

The federal income taxation of capital gains is under scrutiny as Congress looks for ways to reduce the ever increasing U.S. deficit. Lower rates on long term capital gains first appeared in 1922 and have disappeared and re-appeared in the tax laws since that time. Current proposals range from taxing capital gains the same as ordinary income in hopes of directly generating more tax revenues to taxing capital gains at 0% in hopes of stimulating the economy and indirectly generating more tax revenues. This paper reviews the history of the federal taxation of capital gains and outlines some of the major proposals for changing the taxation of capital gains in the future.

INTRODUCTION

A capital gain is the excess of the amount realized over the adjusted tax basis on the sale of a capital asset. The tax rate on long term capital gains is coming under increasing scrutiny. News reports of presidential candidate Mitt Romney having a 13.9% tax rate on income of \$21.6 million for 2010 raise the issue of "fairness" regarding lower tax rates on capital gains. Warren Buffet brought the issue of lower tax rates on capital gains to the discussion of why he believes our tax system is flawed and should be changed so high income taxpayers pay a tax rate equal to lower income taxpayers. This article presents the history of the taxation of capital gains and arguments for and against the lower rate of taxation of capital gains. The history of taxation of capital gains provides a context in which current proposed changes can be evaluated.

THE FIRST CAPITAL GAINS TAX: 1922

Capital gains were taxed as ordinary income from the inception of the federal income tax in 1913 until 1922. The income tax rate was capped at 7% but the need for additional revenue to support the war efforts resulted in a jump in tax rates to as high as 77%. In response to the significantly higher tax rates, the Revenue Act of 1921 allowed for taxing capital gains at 12.5% on investments held at lest two years. Proponents of the lower rate on capital gains argued that higher rates had the effect of reducing the amount of tax revenues derived from capital gains. Those arguing against lowering the rate on capital gains included Andrew Mellon, Secretary of

the Treasury. Mellon stated his belief that wage and salary income should carry a lower tax burden than income from investments. He noted that income from earnings was limited in duration and uncertain while earnings from investments would continue through sickness, old age, and even death. The 12.5% alternative capital gains tax rate remained in effect until 1934.

THE REVENUE ACT OF 1934

The Revenue Act of 1934 revised the taxation of capital gains. The alternative rate was eliminated and capital gains were included as part of ordinary income. The Act provided for an inclusion of a portion of the capital gain or loss contingent upon how long the asset was held: 100% if the capital asset has been held for 1 year or less; 80% if the capital asset has been held for more than 1 year but not more than 2 years; 60% if the capital asset has been held for 2 years but not more than 5 years; 40% if the capital asset has been held for more than 5 years but not for more than 10 years; 30% if the capital asset has been held for more than 10 years. Recognition of capital losses was limited to \$2,000 in excess of capital gains. This provision remained in effect until 1942.

THE REVENUE ACT OF 1942

The Revenue Act of 1942, known as the Victory Tax Act, included the next change to the taxation of capital gains. The Act included a progressive personal income tax which was projected to increase tax revenues by 50%. The Act contained a revision to the portion of capital gain to include as income. Beginning in 1942, taxpayers could elect to exclude 50% of the net capital gain on assets held longer than 6 months or elect a rate of 25% on the net gain if their personal tax rate exceeded 50% (Auten, 1999). This treatment of capital gains remained until 1969.

CAPITAL GAINS TAXATION 1969-1990

The period from 1969 to 1987 included many changes to the taxation of capital gains. The Tax Reform Act of 1969 eliminated the 25% alternate rate on capital gains in excess of \$50,000. The Act allowed for a reduced transition rate during 1970 and 1971 which was above the 25% but below the maximum individual rates which might apply. The alternate rate on capital gains above \$50,000 was increased to 29.5% in 1970 and 32.5% in 1971. For years 1972 and after, the maximum applicable rate was 35% or half the maximum individual tax rate of 70% (the 1969 Act maintained that 50% of the net long term capital gain was excluded from income, therefore the net effect was to tax the gain at one half the ordinary income tax rate). The minimum tax rate in the bill was 10% (U. S. Congress, 1970).

The Tax Reform Act of 1976 made two important changes to the taxation of capital gains. First, the holding period was increased from six months to one year. Second, the deduction of a net capital loss was increased from the \$1,000 allowed in the 1969 Act to \$3,000. The minimum tax was raised in the 1976 Act to 15% (U. S. Congress, 1976).

The Revenue Act of 1978 reduced the tax on capital gains. The 1978 Act increased the amount of net capital gain excluded from taxable income from 50% to 60%. The exclusion made 28% the maximum rate for net long term capital gains. The 15% minimum tax no longer applied to capital gains. However, an alternative minimum tax was introduced which imposed a 25% alternative tax rate on taxable income increased by the capital gains deduction and certain other itemized deductions. Taxpayers would pay the higher of the regular tax liability or the Alternative Minimum Tax (AMT) liability. This provision was added so that high income taxpayers did not pay a low effective rate due to the treatment of capital gains (U. S. Congress, 1978).

The Economic Recovery Act of 1981 reduced federal income tax rates across all income levels. After the Act was fully implemented in 1984, the highest individual tax rate was 50%. Therefore, net long term capital gains were subject to a maximum rate of 20% (maximum tax rate adjusted for the 60% net capital gain exclusion). In addition, the top AMT rate was reduced from 25% to 20% (U. S. Congress, 1981).

The Tax Reform Act of 1986 repealed the exclusion of net long term capital gains. Thus, 100% of net capital gains were taxable income. The 1986 Act lowered and reduced income tax rates to 15% and 28%, replacing more than a dozen tax rates. However, due to phase-out and exclusions the maximum rate could reach as high as 33%. These rates were in effect for net long term capital gains until the Omnibus Budget Reconciliation Act of 1990 passed with a provision to cap the rate on capital gains at 28%.

THE TAXPAYER RELIEF ACT OF 1997

One of the most significant pieces of legislation to impact the treatment of capital gains was the Taxpayer Relief Act of 1997. The 1997 Act contained many transition rules regarding the taxation of capital gains. For capital assets held more than 1 year and sold *before* May 7, 1997, the 28% maximum rate under prior law applied. For property held more than 1 year and sold *after* May 6, 1997, and *before* July 29, 1997, a new 20% maximum rate applied (10% for taxpayers in the 15% bracket). For capital assets held more than 1 year and less than 18 months and sold *after* July 28, 1997, the 28% maximum rate under prior law applied (Buchanan, Ingersoll, et al, 1997). For property held over 18 months and sold *after* July 28, 1997, a 20% maximum rate applied (10% for those in the 15% bracket). An 18% maximum rate applied to property acquired in 2001 or later and held for more than five years. The Act adjusted the AMT rates applicable to capital gains so that they were the same as the regular capital gains rates. The

Act also allowed for the deduction of a net capital loss up to \$3,000 per year with any excess loss carried forward to future tax years.

THE 2001 AND 2003 TAX RELIEF RECONCILIATION ACTS

The Economic Growth and Tax Relief Reconciliation Act of 2001 allowed taxpayers in the 15% income tax bracket to be eligible for an 8% maximum rate on capital assets sold on or after January 1, 2001, and held for five years. Thus, after January 1, 2001 there were three tax rates applicable to net long term capital gains: 8%, 10%, and 20%.

The 2003 Jobs and Growth Tax Relief Reconciliation Act lowered the rate on capital gains from 20% to 15% for those taxpayers above the 15% income tax bracket; this rate was in effect for net capital gains taxed after May 5, 2003 and before January 1, 2009. For those taxpayers in less than a 15% tax bracket, the rate was reduced to 5% for long-term capital gains realized after May 5, 2003, and through 2007. The rate then declined to 0% in 2008 and was scheduled to revert to 10% in 2009 (Carr and Quinn, 2003). In order to pass the 2003 tax legislation, Congress added a sunset provision which made the tax provisions in the Act expire on December 31, 2010. In the Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010 the capital gains tax rates of 15% and 0% were kept in place until the end of 2012.

CURRENT PROPOSALS

There are a number of proposals regarding the future taxation of capital gains. The Report of the National Commission on Fiscal Responsibility and Reform proposes that net capital gains be taxed as ordinary income. The Report also recommends a three tier personal tax rate system: 12%, 22%, and 28%. The main justifications espoused for the taxation of net capital gains as ordinary income are equity and simplicity (National Commission, 2012).

The Debt Reduction Task Force chaired by Senator Domenici and Dr. Alice Rivlin recommended in its report "Restoring America's Future" that net capital gains be taxed as ordinary income with a \$1,000 exclusion. The report further recommended a two tier individual tax rate system: 15% and 27%. The report indicates that the preferential treatment of capital gains distorts the free market economy by decisions being based on the tax consequences rather than on free market signals. The Task Force also states that the current taxation of capital gains is unnecessarily complex. Another reason cited for the change is that it would be a fairer system in which all individuals are taxed equally regardless of the source of income. The report further states a belief that taxing capital gains as ordinary income would eliminate tax shelters used to convert ordinary income to capital gains (Debt Reduction Task Force, 2012).

Representative Paul Ryan has proposed elimination of the capital gains tax. In his plan "A Roadmap for America's Future," Representative Ryan proposes that the tax on capital gains be eliminated so savings are not taxed twice: individuals paying tax on their earnings and again being subject to tax on capital gains. Ryan states that the elimination of a tax on capital gains is

fair to taxpayers and ultimately good for the economy as more individuals make investments (Ryan, 2010).

Several candidates for President have proposals regarding the taxation of capital gains. Mitt Romney in his "Plan for Jobs and Economic Growth" proposes an elimination of capital gains taxation for any couple with less than \$200,000 of adjusted gross income. Taxpayers above that income level would pay a 15% capital gains tax rate (Romney, 2011). Former Senator Rick Santorum has proposed lowering the top capital gains tax rate to 12%. Santorum states this would stimulate investment and economic growth (Santorum, 2011). Newt Gingrich proposes that taxes on capital gains be eliminated. Gingrich states that this will result in creating hundreds of thousands of jobs. According to his proposal, a 0% tax rate billions of dollars would pour into the U.S. to create new firms and build new factories (Gingrich, 2011).

ARGUMENTS FOR PREFERENTIAL TAX TREATMENT OF CAPITAL GAINS

There are several arguments which support the preferential taxation of net capital gains. These arguments can be summarized in three basic points: inflation gains, lock in effects, and lower cost of capital.

Taxpayers pay tax on the full amount of gain—the difference between the cost of the asset and the selling price. Thus, the taxpayer pays tax not only on real gain, but also on gain attributable to inflation. This gain has been referred to by economists as "illusory gain" (Auten, 1999). Historically, net capital gains have been taxed at a lower rate to avoid a penalty tax on inflationary gain.

Lock in effect refers to taxpayers holding on to appreciated assets to avoid paying tax on the capital gain. This effect reduces the mobility of capital since the taxpayer might be unwilling to sell the asset due to the tax burden triggered by the sale. From an economic standpoint, this would mean that capital might remain in less profitable investments rather than exiting the less profitable investment and seeking a higher investment return. Thus, the higher the tax rate on capital gains then the greater the likelihood that a lock in effect would occur.

By having a lower tax rate on capital gains, taxpayers would be more willing to provide businesses with capital. Therefore, the cost of capital to business owners would be reduced. As the tax rate on capital gains increases, taxpayers are less willing to risk investment in business without the promise of considerable return. A lower cost of capital is especially important in a struggling economy and is especially important to small businesses (Pope, 2011). Economic studies show that new business start up flourish during periods when the capital gains tax was lowered and stalled with capital gains taxes were increased (Moore, 2008).

ARGUMENTS AGAINST PREFERENTIAL TAX TREATMENT OF CAPITAL GAINS

There are several arguments opposed to the preferential tax treatment of capital gains. These can be summarized in three points: equity, distribution of the tax burden, and income conversion.

Equity suggests that taxpayers with equal incomes should pay tax at equal rates regardless of the source income. Those who argue against a lower capital gains tax feel that taxing capital gains at a lower rate than ordinary income is "unfair." The release of presidential candidate Mitt Romney's 2010 tax return showing an effective 13.9% tax rate spurred a flurry of media reports which centered upon the multi-millionaire paying a lower effective tax rate than someone earning \$80,000 in salary.

The second argument against preferential treatment of capital gains centers upon the distribution of the tax burden. Capital gains are more frequently earned by high income taxpayers. Recent studies indicate that in 2009 the top 20% of American earners accounted for 86% of all capital gains and 44% of all capital gains went to the richest .1% of taxpayers. In fact, those who had income of \$10 million or more grossed more than \$70 billion in long term capital gains (Kingsbury, 2012). Proponents for taxing capital gains the same as ordinary income point out capital gains are regressive in nature in the U.S. progressive tax system. This fact is also emphasized by the income distribution of capital gains.

The third argument against taxing capital gains at a lower rate than other income is income conversion. Lower tax rates on capital gains encourage taxpayers to convert ordinary income to capital gains thus resulting in tax at a lower rate. Strategies and tax shelters are created to insure that income is categorized as capital gains (Auten, 1999).

CONCLUSION

The taxation of capital gains is again under scrutiny. At issue is whether to continue the preferential tax treatment for capital gains. Current law taxing capital gains at lower rates is in effect until the end of 2012. Many proposals have surfaced with tax rates on capital gains ranging from 0% to taxing capital gains at the same rate as other income. This is not a new debate; the preferential tax treatment of capital gains has been discussed since in first entered the U.S. tax code in 1921. It will be interesting to see in the next few months how any tax reforms affect the taxation of capital gains.

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ENVIRONMENTAL JOLT OF HURRICANES KATRINA AND RITA: THE REALIGNMENT AND TRANSFORMATION OF THE LOUISIANA SENIOR ASSISTED LIVING INDUSTRY

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ABSTRACT

In the year 2012 as this manuscript is authored, the scars of Hurricanes Katrina and to a somewhat lesser extent, Hurricane Rita, are still visible throughout Louisiana. The impact of these two hurricanes to the business environment and to the stakeholders of the Louisiana Senior Assisted Living Industry are explored in this research and documented in this manuscript. Population migration from areas of devastation and the its relocation and resettlement in lessimpacted areas was followed by the dissolution of immobile firms, and the reestablishment of firms in those areas. Utilizing data from Louisiana State and from federal sources, this research shows this phenomena.

INTRODUCTION

In 2005, Hurricane Katrina and to a lesser extent, Hurricane Rita transformed the lives of most in southern Louisiana and Mississippi forever. Landmarks known for generations were washed or blown away, as the tragic reordering of people, businesses and local culture bore the indelible marks of these hurricanes. In this mayhem, businesses sought to assess, reorganize, regroup and reopen. Resources were Spartan. Political leaders offered little of substance. Business facilities suffered in ways on one extreme, which can be termed "disruption," while on the other extreme, can be called "devastation".

Stakeholders to the disrupted businesses are themselves often disrupted. Employees and clients after Hurricane Katrina flooded large parts of the New Orleans area were disbursed some evacuated hundreds of miles from home. Essential services were disrupted; utilities, communications, safe drinking water not restored in some areas for weeks or even months. Those are important questions are rarely addressed in the literature. This study concentrated on Residential Care/Assisted Living Facilities. This industry is a mix of "family business" entities with few employees and customers, and of larger facilities with greater numbers of employees and patrons.

The personal resources and often resourcefulness in time of chaos and crisis calls upon the innate energy, creativity, and adaptability of managers and owners. This near instinctive responsiveness forged in the crucible of life experiences, coupled with education and the ability to draw from resources outside of the disaster impact area. These management skills are tested amid environmental chaos and crisis; few contemporary examples of this are greater than the catastrophic environmental disruptions of Hurricanes Katrina and Rita to the State of Louisiana in general, and to the City of New Orleans and the surrounding municipal areas in particular.

Hurricane Katrina and Hurricane Rita

In 2011, many parts of coastal Louisiana and Mississippi still bear the scars of Hurricanes Katrina and Rita. While some areas have rebuilt, huge swaths of real-estate are reduced to barren properties denuded of any signs of civilization that existed in those locations prior to the hurricanes. Those who lived and worked in those locations are scattered like leaves in the wind, with whole communities uprooted, families and friends disbursed. Businesses attempting to rebuild under these conditions will see among those scattered and relocated, their customers, their employees and their stakeholders.

The State of Louisiana suffered an unheralded and brutal onslaught by Hurricanes Katrina and Rita; these gigantic storms making landfall within a month of each other. Federal, State and Local resources were largely in disarray. Insurance companies that are used to dealing with smaller scale disasters, i.e. a mid-west tornado were overwhelmed with claims. Smaller scale weather events can dismember small towns and communities, and insurers can usually mobilize resources to act upon policy claims by their insured, these hurricanes left in their wake a swath of destruction and mayhem that stretched for hundreds of miles from coastal Texas through northern Florida. Table 1 contains statistics showing the immense impact of these hurricanes.

Table 1 – Hurricane Katrina and Hurricane Rita (2005)								
Item	Hurricane Katrina	Hurricane Rita						
Formed	August 23, 2005	September 17, 2005						
Louisiana landfall	August 29, 2005	September 24, 2005						
Disbanded	August 30, 2005	September 26, 2005						
Landfall location(s)*	Buras, Louisiana and New Orleans, Louisiana , Mississippi Gulf Coast	Sabine Pass, TX, Johnson Bayou, LA						
Highest Measured Winds	175 miles per hour per hour (approx 282 km/h)	180 miles per hour (approx 290 km/h)						
Deaths	1,836 confirmed (probably more)	7 direct, 113 indirect.						
Property Damage	\$81.2 Billion US	US 11.3 Billion US						

THE RESIDENTIAL CARE BUSINESS SECTOR

The business sector researched in this study is a portion of the Continuing Care Retirement Communities group, as categorized and described by NAICS, the North American Industry Classification System; the NAICS numbers are for this sector are 623312 and 623110.

Regulations allow two categories of assisted living facilities in this sector. Home-based "family business" residential units are typically in larger, formerly private, residential homes. These homes are modified to include handicap accessibility, and are typically licensed for two to six residential care clients. The second category, generally viewed as corporate or larger, more commercially- oriented business facility, could in theory have the ability to house and care for hundreds of clients. This research examines both categories of assisted living facilities.

Residential care facilities are required to have an evacuation plan in place in advance of a hurricane season. No provisions in either regulation or law required a plan for business recovery in the aftermath of a disaster. To most in the New Orleans region, a disaster of the magnitude of Hurricane Katrina was never treated as a serious threat. While inhabitants knew that they certainly were in an impact area for hurricanes, their past experiences did not foretell the extensive destruction that was ahead. In the New Orleans area, few companies of any business sector had reliable business recovery plans that could cope with the extensiveness of the destruction that lay ahead. For a residential care facility to function, the patron residents must have adequate space allocated for their sleeping quarters and they must have a place for meals. These essential requirements were impossible to sustain when floodwaters inundated the region, and them were unable to drain from some areas for weeks. Many of the residential care facilities were forced to cease operations while rebuilding. Some ceased operations completely, closed permanently.

LITERATURE REVIEW

Environmental Jolts

Meyer, Brooks, & Goes (1990) describe how environments undergo "cataclysmic upheavals—changes so sudden and extensive that they alter the trajectories of entire industries, overwhelm the adaptive capacities of resilient organizations, and surpass the comprehension of seasoned managers" (p. 93). These cataclysmic upheavals are *environmental jolts*, described by Meyer (1982) are "a sudden and unprecedented event" (p. 515). Meyer (1982) identified issues confronting a group of hospitals that endured an environmental jolt, and the adverse impact upon clients, employees and stakeholders. Meyer (1982) identified three phases of adaptations to environmental jolts: "an *anticipatory phase* when the portents may be perceptible, a *responsive phase* while the primary impacts are being absorbed, and a *readjustment phase* after the shocks

have subsided" (p. 520). These jolts are also times when "astute administrators are alert for clandestine opportunities.....In addition to the dangers they present, environmental jolts create opportunities for organizational learning, administrative drama, and introducing unrelated changes (p. 532). Not all organizations emerge from an environmental jolt configured identically to the way they were prior to the jolt. Environmental jolts also create new realities. Wan & Yiu (2009) found that an environmental jolt creates opportunities for firm acquisitions. An environmental jolt, often viewed by many as a crisis, would represent an altered set of opportunities, and firms that recognize where these opportunities lie would reap significant benefits (p. 792). Regardless of the ultimate post-crisis disposition of the firm, there is dissimilarity in managerial approaches to innovation among chaos. Forbes, Manrakhan and Banerjee (2004) when firms respond to environmental jolts, they do not do so haphazardly or in a uniform fashion (p. 68).

Culture, Chaos and Hurricane Katarina

When considering a disaster of the magnitude of Hurricane Katrina, Nates & Moyer (2005) wrote, "as we look at the whole picture, it appears that the poor outcome in many of these disasters is not the result of lack of knowledge but rather the result of inaction and poor implementation of the necessary measures to prevent, contain, or mitigate the impact of natural disasters on the populations exposed; this, of course, after discounting the enormity of the catastrophes involved" (p. 1146). The *laissez-faire*, *laissez les bons temps rouler* culture of Louisiana was summarized by Jurkiewicz (2009) who described the unique social-political culture of Louisiana, with its unique tolerance for corruption: "As long as the fear of change remains greater than the intolerance for economic, political, and moral degeneration, even the most sophisticated, well-conceived mitigation and recovery plans will not work. Clinging to an ethical culture that prevents progress while at the same time demanding that external forces overlook it and fix what is broken for us, the State continues to be a victim of its own design well before the next hurricane hits" (p. 362).

Boin & McConnell (2007) identify the range of critical infrastructure breakdowns. Some "breakdowns remain isolated events and are quickly remedied, others have cascading effects and cause great harm. These breakdowns can range from mere emergencies to fullblown catastrophes" (p. 51). Stone (2006) described the chaos of post-Katrina government response through the lens of the theoretical perspective of crisis management failure. He discussed how "this crisis remains at the fore of our discussions for a number of other reasons. For, while Hurricane Katrina could NOT have been prevented or avoided, the devastating aftermath to this storm WAS, to a large degree, avoidable" (p. 36). Piotrowski (2006) wrote, "businesses in the impact area had (and continue to have) a myriad of business disruption problems to address, but

there are initiatives that can convey the perception that the company has some control and determination to handle challenges in the aftermath of the storm" (p. 14).

Businesses managers, functioning in this chaotic environment faced realities that influenced the success of their recoveries. To this end, Cater & Chadwick (2008) examined the survival of two businesses after Hurricane Katrina. They identified four factors that were detrimental to small business response to a disaster: "limited financial resources, communication difficulties, supply logistic problems, and government bureaucracy" (p. 71). They found six factors that positively influenced a small firm's response to a disaster: "a sense of proximity, the ability to move rapidly, a concern for employee welfare, employee versatility, networking relationships especially in the form of strong ties to local stakeholders, and a concern for the welfare of the community" (p. 71).

As though reinforcing Cater & Chadwick (2008), Sobel & Leeson (2006) employed *public choice theory* to isolate and identify six problematic incentive structures confronted by government actors when managing the disaster caused by Hurricane Katrina.

- (1) the tragedy of the anti-commons resulting from government disaster management's layered bureaucracy,
- (2) a type-two error policy bias causing over cautiousness in the decisions of government disaster management officials,
- (3) the political manipulation of disaster declarations and relief aid (usually geographic manipulation) to win votes,
- (4) the problem of acquiring timely and accurate preference revelations by those in need,
- (5) glory seeking by government officials attempting to secure the credit for assisting hurricane victims, and (6) the shortsightedness effect causing a bias in governmental decision making (p. 56).

Lambert & Harrell (2008) identified difficult choices that had to be made within the senior care industry in advance of Hurricane Katrina.

"Health care managers had lose-lose propositions before them as Hurricane Katrina approached. *Evacuate*, and there is a high chance that at least some people in their care will die if moved; or *Stay*, and rely upon generators and a stock of food, water, medicine and other supplies, along with trained staff to maintain healthcare services. But with Hurricane Katrina, something happened that was not supposed to happen. Federal, state and local officials guaranteed assured everyone at all levels that given the levees, pumps and drainage infrastructure, this was under control. Given this, heathcare managers and

caregivers considered remaining in place with stockpiled resources as a reasonable plan that kept the best interest of those in their care in mind. Then, the levees failed (p. 84).

After a future Hurricane Katrina; suggestions for improved response

Wheatley (2006) argues that huge outside influences and organizations, along with redtape that slows urgent response, must be avoided."When rebuilding is left to governments, outside contractors, and large nonprofit organizations, progress gets mired down in regulations, time drags on, people's needs aren't served, and no one from the local community is satisfied with the results. Supporting initiatives where local people do the work sustains local cultures, recreates community cohesion, and is accomplished at amazing speed" (p. 20).

Farazmand (2007) employed the concept of *surprise management* in their discussion of the management environment in future, post-disaster environments, stating "Surprise management requires ample resources to operate, with no constraints but clear accountability. It also requires critical opportunities to practice surprise management. It demands full attention, talent, language, and communication as well as personality skills, mostly uncommon ones, to engage extreme, unthinkable conditions and circumstances, people, and dynamics" (p. 158).

Companies residing in areas of seasonal or regularly occurring natural disasters should plan on operating at some minimum level of effectiveness following a major disaster event (Guerra & Kearney Kathie, 2006). It was found that businesses that held practice-sessions to prepare for hurricane season prior to Hurricane Katrina got their operations going again more quickly than those that didn't, according to Mark Vanston, director of business continuity solutions at Hewlett-Packard (Hayes, 2006, p. 55).

Considering this literature, research questions emerge:

Research Question 1 Does the data show that the regions with the greatest

interruption of assisted living business operations are also the regions with the greatest amount of wind and water impact from Hurricane Katrina and from

Hurricane Rita?

Research Question 2: Is there evidence of supply chain disruption, or supply

chain shifts, and/or of management or entrepreneurial action or reaction to marketplace shifts in the years

after Hurricane Katrina and Hurricane Rita?

METHODOLOGY

Qualitative analysis of data accessed from various sources the State of Louisiana's Department of Health and Hospitals, the Louisiana Assisted Living Association, the US Census

Bureau, the US National Oceanographic and Atmospheric Administration (NOAA), and the US Federal Emergency Management Administration (FEMA). This data was arranged into tables depicting regional clusters.

Images depicting the magnitude of Hurricane Katrina and Hurricane Rita demonstrate the intensity of the hurricanes, the civil parishes impacted by the hurricanes, and the severity of flooding in the disaster area of Orleans and St. Bernard Parishes.

ANALYSIS

Geographical, topographical and cultural factors as a preamble to this analysis

Field research into the geographical and cultural factors influencing this research helped group or isolate Louisiana parishes prior to the analysis. Table 2 lists the groupings of Louisiana parishes and the statistics relative to their relevancy to the analysis, especially when considering environmental disruption. For clarity, these groupings are illustrated in Figure 1. A casual examination of the data without an introduction to the geographic position and the topography of that location to the paths of Hurricane Katrina or Hurricane Rita would make analysis meaningless. The cultural makeup of various areas of the within the State of Louisiana plays a role as well in the overall picture that this analysis must consider.

Table 2 Region 1: Orleans Parish, which in its entirety is the City of New Orleans. Geographically, Orleans Parish is in southeastern Louisiana. It is grouped by itself due to the significance of the economic and political influence of the city, as well as having the greatest population of any city prior to Hurricane Katrina, in the State of Louisiana. The eye of Hurricane Katrina crossed over Buras, Louisiana and tracked on the eastern edge of the City of New Orleans. Hurricane winds are strongest near the eye, and weaken in non-concentric bands as distance increases away from the eye. The eye of Hurricane Katrina, shown in Figure 2 at approximately the area of Buras, Louisiana shows the intensity of the winds at that particular time. The counter-clockwise rotation of the hurricane pushed water against the levee systems, which ultimately failed in several locations. The failure of the levees caused the massive flooding of approximately 80% of the City of New Orleans. Figure 3 illustrates the topographic nature of Orleans Parish: it is mostly below sea level. The topography of the area is actually convex bowl-shaped in nature, as it is primarily back-swamp that was drained and reclaimed over the years. After the catastrophic failure of the levee systems and pumping stations, and with the rise in sea level, the bowl filled with water which took weeks to pump-out. Homes and businesses sat in a virtual stew of sewerage, sea-water, industrial chemicals, and untold numbers of biohazards from the dead animals and dead people killed in the flood. Culturally, the areas of the higher-ground in Orleans Parish nearest to the Mississippi River were significantly areas inhabited by the most affluent, while, the areas that received the most significant of the catastrophic flooding, were populated more by lower-income households.

Table 2 Region 2: St. Bernard Parish is the southeast neighbor of Orleans Parish. Prior to Hurricane Katrina, it contained a mix of suburban and rural residential areas, along with several industries. Like Orleans Parish, it is surrounded by levees to protect from springtime floods from the Mississippi River, and hurricane tides from the Gulf of Mexico. Topographically, like Orleans Parish, the highest ground is along the Mississippi River, with the majority of the land area being wetlands or drained wetlands. St. Bernard Parish suffered several levee breaks, and even the high land along the Mississippi River flooded. Culturally, St. Bernard Parish was a closely-knit area with mainly working-class family households. Many of these households lived in close proximity to other households with extended families living in close proximity to each other. In that culture, families of several generations nurtured and supported each other.

Conjoined examination of Figure 3 and Figure 4 - Flooding of Regions 1 and 2: Figure 3, mentioned above, is photographic evidence of the extensive inundation of floodwaters into populated areas of Orleans and St. Bernard Parishes. Figure 4 identifies graphically not only the areas that flooded, but also showing the prolific extent of levee breeches and failures.

Table 2 Region 3: Geographically, this cluster "West of Orleans" are the parishes of Jefferson, St. John the Baptist, St. Charles and Lafourche. These parishes four parishes, are located literally, to the west of Orleans Parish, as shown in Figure 1. These parishes had areas inundated by floodwaters and winds, but they received far less damage from wind and flood than the parishes of Orleans and St. Bernard, and were able to begin repairing and rebuilding in a matter of days instead of months or years. Some of the areas of these parishes received little more than wind damage and short-term power outages, which meant that businesses were able to return with less disruption that those in Orleans and St. Bernard Parishes. This also meant that residents (source of clients and staff) returned home with shorter delays as well. Topographically, these parishes are similar to portions of Orleans and St. Bernard Parishes, with large areas of low-lying wetlands. While portions of them retain coastal features, large portion of them are farther inland and away from coastal topography and conditions, and are less prone to flooding. Culturally, these areas are the beginning of the "Cajun" Louisiana country that flourishes further west in the State of Louisiana. Moreover, these parishes have enjoyed in recent decades, growth in population due in part to population shifts away from Orleans Parish.

Table 2 Region 4: Geographically, this "North Shore; Florida Parishes" cluster of parishes is located to the north and north-west of Lake Pontchartrain and Lake Maurepas. These are the Parishes of Livingston, Tangipahoa, and St. Tammany. Lake Pontchartrain is the second-largest salt-water lake in the United States. Lake Maurepas is a smaller, brackish-water lake immediately to the west of Lake Pontchatrain. The "Florida Parishes" name comes from the establishment of "West Florida" by the British colonial government in the 1700's, in an area that today comprises the southernmost parts of the states Louisiana, Mississippi and Alabama. Aside to their proximities to Lake Pontchartrain and lake Maurepas, they generally do not have the coastal characteristics. Topographically, while there are low-lying parts of these parishes, they also are the start of the higher, rolling land "pine-belt" that spans the Southern United States.

Culturally, the population is a mix of the "Cajun"/French ancestry of the areas of the state that are located to the south, as well as a population of people of Irish and English ancestry. As was the situation described in Region 3 above, this area saw a population migration for several decades of population leaving not only Orleans Parish but also Jefferson Parish, as the Northshore area grew in popularity and affluence. Additionally, as the Baton Rouge area (described in Region 5 below) enjoyed a major surge in population and influence in recent years, Livingston Parish became essentially a bedroom community for the City of Baton Rouge.

Regions 1, 2, 3 and 4, shown in Figure 6, allows a conjoined examination of maximum winds along the path of Hurricane Katrina. The sustained winds while Hurricane Katrina progressed northward exceed100 miles per hour (mph) at the City of New Orleans and eastward, contributing to the intense environmental devastation of the Parishes of Orleans, St. Bernard, and easternmost St. Tammany. The maximum winds shown in bands in Figure 7, show that as the hurricane progressed inland northward, the maximum winds decreased rapidly, and that further west that we examine away from the storm track, the maximum wind rate rapidly declined.

Table 2 Region 5: Baton Rouge area, encompassing the Louisiana Parishes of East Baton Rouge and West Baton Rouge, is geographically situated well-inland. While sharing the name "Baton Rouge," the names of the parishes indicate their location relative to the Mississippi River, as it runs from a north-westerly to south-easterly route toward the Gulf of Mexico. West Baton Rouge is on the west side of the Mississippi River, while East Baton Rouge is on the east side of the Mississippi River. It is the first location on the first area of significant high ground along the Mississippi River if traveled north from the Gulf of Mexico. Topographically, Baton Rouge is on the first of the post-ice-age loess bluffs that are along the Mississippi River northward to Tennessee. Culturally, East Baton Rouge is the location of the City of Baton Rouge, which is the location of the Capital of the State of Louisiana. Given the population shifts in the wake of Hurricane Katrina, East Baton Rouge Parish is today the most populous of the entire state of Louisiana. The ethnic makeup of East and West Baton Rouge Parishes is a diverse cultural mix.

Table 2 Region 6: Geographically, Southwest Louisiana, encompassing Calcasieu Parish, borders the State of Texas. Topographically, the southern-most part of the parish is low-lying and flood-prone, while the northern portion is less prone to flooding. Figure 7 shows the flooding from Hurricane Rita limited to the southern portion of Calcasieu Parish. Figure 8 shows that the highest wind velocities (100 mph+) were in westernmost segment of the parish, with winds significantly lower to the east. Figure 8 clearly shows the track of the eye of Hurricane Rita touching only the briefest section of southwest Louisiana in Cameron Parish, then entering the State of Texas, and not in Calcasieu Parish. Subsequently, while southeast Louisiana received substantial damage from Hurricane Rita, the areas where the assisted-living businesses were located were not in the most severely impacted zones. Culturally, the southwest section of Louisiana is still a French/ "Cajun" region, but this area is heavily influenced by the "cowboy" culture of Texas to the west.

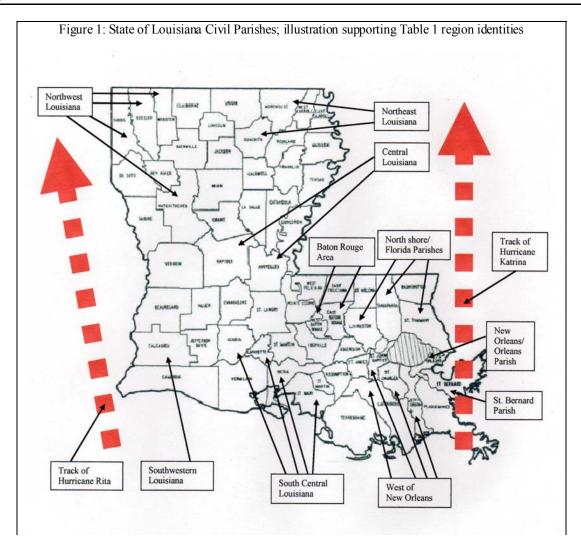
Table 2 Region 7: Northwest Louisiana, includes the Parishes of Caddo, Webster, Bossier, and Natchitoches. Geographically, these Parishes are in the far northwestern portion of the State of Louisiana, generally in the vicinity of the Red River. Topographically, the area is a mix of hilly country and lowlands. Culturally, this is a largely Protestant area, with residents of Irish, English, German, and Scottish ancestry. There is still a flavor of the original French settlements in the area, and some of the residents do have a French/"Cajun" heritage. Significant numbers of African-Americans are found in the region, but they are a minority population. This region received some tropical force winds during Hurricane Rita which caused some wind damage and limited power outages, but nothing of the degree of catastrophic damages endured by coastal communities.

Table 2 Region 8: South-Central Louisiana is geographically located in what locals call the "Cajun" bayou country, being slightly southwest of Baton Rouge, Louisiana, and to the east of Lake Charles, Louisiana. Topographically, the parishes are gently rolling but largely distant from dangers of coastal flooding. Hurricane damage in these areas are usually localized to wind and tornado damage. Culturally, the Parishes of Lafayette, Iberia, St. Mary and Acadia are at the heart of the Louisiana oil and gas industry. Winds in this region from both Hurricane Katrina and Hurricane Rita were generally limited to tropical storm velocities. Damage was generally limited to short-term power outages, and tree-limb and roof issues. Some of the greatest disruption from Hurricane Katrina to this region was in the form of refugees who evacuated from Orleans Parish, who for over a year placed monumental strains upon the infrastructure.

Table 2 Region 9: The area identified as Central Louisiana in this study is geographically at a midpoint in the state and serves as the cultural and political dividing line between the predominately Roman Catholic southern portions of Louisiana and the mainly Protestant northern part of the state. The Louisiana Parishes of Avoyelles and Rapides comprise this area for analysis. Geographically it is a point on the Red River between Shreveport and the terminus of the waterway where it joins with the waters of the Mississippi River near Simmesport, Louisiana. Topographically, the area is a mixture of flat farmland and hills. This area received gusty winds during Hurricane Katrina and Hurricane Rita, but none of the gale-force winds of the coastal area and none of the sea-surge flooding of the low-lying coastal areas.

Table 2 Region 10: Northeast Louisiana, geographically, is a part of the state's northern area bordered by the State of Arkansas to the north and the State of Mississippi to the east. The Parishes of Ouachita and Morehouse are clustered for this analysis. Topographically, it is primarily flat farm-land with some low hilly areas. Ethnically and culturally, it is very similar to northwestern Louisiana. Like Central Louisiana, this area escaped the heavy winds and flooding endured by the coastal areas during Hurricane Katrina and Hurricane Rita.

			Tab	le 2 – Descrip	tive Datas	et from com	bined sour	ces			
Region Specific	City	Parish/ Parishes	AL in 2004 data	AL in 2004 data, but not in 2011 data	Change from 2004 to 2011	New AL firms licensed since 2004	AL Licensed in 2011	Market Change	2000 Census	2010 census	Census Change
1. New Orleans	New Orleans	Orleans	30	22	-77.33	6	14	-53.33%	484,674	343,829	- 29.10%
2. St Bernard	Chalmette	St. Bernard	3	3	-100%	0	0	-100%	67,229	35,897	46.60%
3. West of New Orleans	Kenner, Metairie, Jefferson, LaPlace, Thibodaux	Jefferson, St. Charles, St. John, Lafourche	11	5	-54.55%	13	19	+72.72%	636556	627574	-1.41%
4. North shore; Florida Parishes	Covington, Slidell, Mandeville, Lacombe, Hammond, Walker, Denham Springs	Livingston , Tangipaho a, St. Tammany	17	5	-29%	7	19	+11.76%	1,188,459	1,007,30	+25.85
5. Baton Rouge Area	Baton Rouge, Baker, Zachary, Plaquemine	East Baton Rouge, West Baton Rouge	14	2	-14.29%	13	25	+78.57%	412,854	440,171	+6.60%
6. Southwest LA	Lake Charles, Sulphur	Calcasieu	4	0	0.00% (No change)	1	5	+25%	183,577	192,768	+5.00%
7. Northwest LA	Shreveport, Bossier City, Natchitoche s, Minden	Caddo, Webster, Bossier, Natchitoc hes	14	2	-14.29%	7	18	+28.57%	183,577	192,768	+6.13%
8. South Central LA	Lafayette, Crowley, New Iberia, Abbeville, Broussard, Morgan City	Lafayette, Iberia, St. Mary, Acadia	12	3	-25.00%	4	14	+27.27%	367,154	385,536	+9.38
9. Central Louisiana	Bunkie, Mansura, Alexandria, Pineville	Avoyelles, Rapides	9	4	-44.00%	2	7	-22.22%	550,731	578,304	+3.49
10. Northeast Louisiana	Monroe, West Monroe, Ruston	Ouachita Morehous e	9	0	0.00% (No change)	0	9	0.00% (No change)	178,271	181,699	+1.92



Greatest environmental disruption and greatest business upheavals

The hardest hit regions by both floodwaters and winds, Orleans Parish and St. Bernard Parish, saw the greatest population shifts and the greatest disruption to the number of assisted living firms in operation within their jurisdictions. Table 2 clearly shows that, of all the regions of the State of Louisiana identified for this study, the only two regions to have both a reduction of firms in the market (Market Change) and in population (Census Change): those that received the greatest environmental disruptions due to Hurricane Katrina.

Testing Research Questions 1 and 2, wind data extracted from Figures 6 and 8 were set against business and census data. For those areas outside of the illustration, figures were

assigned that were <50 mph., with most being approximately 20 mph. IBM SPSS Statistics 19 was used to conduct an analysis of change in the number of licensees from 2004 to 2011, of the change in census data from the year 2000 to the year 2010, and of hurricane winds for both Hurricane Katrina and Hurricane Rita.

Table 3: Descriptive Statistics								
	Mean	Std. Deviation	N					
Change from 2004 to 2011	-35.8840%	33.18088%	10					
mchange	6.8340%	54.42163%	10					
Census change	8.1530	45.21942	10					
Max winds Katrina (mph)	68.00	50.728	10					
Max winds Rita (mph)	41.50	34.484	10					

	Table 4:	Correlations				
		04 to 11	mchange	cchange	kwind	rwind
04 to 11	Pearson	1	.679*	.422	775**	.458
(Firms there in 2004 but not	Correlation					
there in 2011)	Sig. (2-tailed)		.031	.224	.008	.183
	N	10	10	10	10	10
Mchange	Pearson	.679*	1	.404	322	.160
(Change in no. of licenses	Correlation					
between 2004 and 2011)	Sig. (2-tailed)	.031		.247	.364	.658
	N	10	10	10	10	10
cchange	Pearson	.422	.404	1	099	.069
(Census % change between 2000 and 2010)	Correlation					
	Sig. (2-tailed)	.224	.247		.785	.851
	N	10	10	10	10	10
Kwind	Pearson	775**	322	099	1	592
(Katrina Sustained Wind	Correlation					
Velocity)	Sig. (2-tailed)	.008	.364	.785		.071
	N	10	10	10	10	10
Rwind	Pearson	.458	.160	.069	592	1
(Rita Sustained Wind	Correlation					
Velocity)	Sig. (2-tailed)	.183	.658	.851	.071	
	N	10	10	10	10	10

^{*.} Correlation is significant at the 0.05 level (2-tailed).

Eleven ranges of correlation classifications are based upon, Davis (1971) p. 49.

^{**.} Correlation is significant at the 0.01 level (2-tailed).

Utilizing IBM SPSS Statistics software, Table 4 shows:

- a. A *substantial positive correlation*, significant at the 0.05 level (2-tailed) between the number of assisted living firms that were licensed in 2004 but were not in the licensing rolls in 2011, and the change in number of assisted living firm licenses between 2004 and 2011. This establishes that for the ten regions identified in Table 2, there was consistency between the relative calm in the marketplace for firms outside of the hurricane impact zones, contrasted to the chaos and disruption endured by firms within the zones. Research question 1 is addressed affirmatively with this correlation.
- b. A moderate positive correlation, between the number of assisted living firms that were licensed in 2004 but were not in the licensing rolls in 2011, and the Census changes between the 2000 and 2010 data. This establishes that of the ten regions shown in Table 2, those with the greatest population changes also had the greatest number of assisted living facility licensing changes from the year prior to Hurricane Katrina to 2011. This population shift, particularly in the region west of New Orleans (Region 3), the region north of New Orleans (Region 4) and the Baton Rouge area (Region 5) was due to population shifts from Region 1 (New Orleans) and Region 2 (St. Bernard), and with those populations resettling still largely in the south-eastern part of the State of Louisiana that remained relatively undamaged during Hurricane Katrina. This has little effect in the Hurricane Rita area, given the relatively less volatile impact of Hurricane Rita to the assisted living firms within its impact area due to geography and terrain. Research question 2 is addressed affirmatively with this correlation.
- c. A very strong negative association, with a figure of -.775, significant at the 0.01 level (2-tailed), between the number of assisted firms that were licensed in 2004 but were not in the licensing rolls in 2011, and the wind velocities from Hurricane Katrina. This clearly shows that the higher winds endured by Regions 1 and 2, coupled with the flooding and long-term rebuilding issues in those areas, created the greatest environmental disruption to the assisted living industry firms in those areas. Research question 1 is addressed affirmatively with this correlation.

- d. It further shows a moderate positive correlation of .458, between the number of assisted firms that were on the state licensing rolls in 2004 but were not in the licensing rolls in 2011, and, the wind velocities of Hurricane Rita. This reinforces that hurricane wind issues do indeed interrupt the business environment as demonstrated in the assisted living industry statistics. Research question 1 is addressed affirmatively with this correlation.
- e. A moderate positive correlation of .404 between the change in the number of licenses for assisted living facilities between 2004 and 2011, and the census change between 2000 and 2010, shows that the shift in workforce and client base influenced business owners in the assisted living industry to follow the population which provides a workforce and client base. Research question 2 is addressed affirmatively with this correlation.
- f. A moderate negative correlation of -.322 between the change in the number of licenses for assisted living facilities between 2004 and 2011, and Hurricane Katrina sustained wind velocities shows yet again a relationship between the disruption of Hurricane Katrina and the change in the providers in the assisted living industry marketplace. Research questions 1 and 2 are addressed affirmatively with this correlation.
- g. A low positive correlation of .160 between the change in the number of licenses for assisted living facilities between 2004 and 2011, and Hurricane Rita sustained wind velocities suggests that as stated earlier in this manuscript, the winds of Hurricane Rita, while severe, were less of a negative factor, due to geography and topography, to the Louisiana assisted living facilities in the impact area of that hurricane. Research question 1 is addressed affirmatively with this correlation.
- h. A negligible negative correlation of -.099 between census changes between 2000 and 2010 and Hurricane Katrina maximum sustained winds, and, a negligible positive correlation of .069 with Hurricane Rita maximum sustained winds, indicates that the population shifts must be explained outside of the issue of winds; i.e. that culture, geography and topography have a role that is best explained qualitatively.
- i. A substantial negative correlation of -.592 between Hurricane Katrina winds velocities and Hurricane Rita wind velocities demonstrates that the coastal areas do indeed endure higher hurricane winds, and as we examine sites further inland and away from the Gulf of Mexico, wind velocity subsides.

CONCLUSION

The application of the theory of environmental disruption to this study of the assisted living industry in the State of Louisiana shows that the environmental interruption of tropical hurricanes does create management problems for firms within the impact areas enduring the highest intensity of the storms. That firms exited the marketplace while others entered the marketplace demonstrates an interruption to this service industry, but also demonstrates the dexterity of crisis management and the opportunities that can exist. The rapid increase in the numbers of new licensees in the assisted living industry in the regions nearest to the devastated areas of Orleans and St. Bernard Parishes, shows not only the interruption of the industry because of facilities being damaged or destroyed, but also of population shifts. These shifts inspired entrepreneurial action that the form of new firms replacing older firms and of new firms entering the marketplace to capitalize upon relocated employees and client bases.

This research was of one industry and may be replicable in future research in industries that are more closely tied to population shifts regardless of location. It may not be replicable within industries that endure catastrophic environmental calamities, such as fisheries or mining.

This research has application in the teaching of management, because the dexterity and adaptability of managers who endure environmental disruption, utilize the essentials of strategic management principles of SWOT, comparative advantage and competitive advantage. Certainly the psychological characteristics of the managers who can withstand the destruction of their assisted living facilities, and then harness financial resources, and reassemble a client base and staffing support, is worthy of further study. The role of insurance and pre-disaster financial planning is also worthy of future study.

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Figure 2: Hurricane Katrina winds

Hurricane Katrina 1200 UTC 29 AUG 2005 Max 1-min sustained surface winds (kt) Valid for marine exposure over water, open terrain exposure over land Analysis based on GPSSONDE_WL150 fro QSCAT from 1100 - 1102 z; om 0959 - 1357 z; FCMP TOWER from 0942 - 1359 z; VAD 88D from 0959 - 1354 z QSCAT from 1100 - 1100 z; SHIP from 1010 - 1212 z; A905 from 0936 - 1359 z; SFMRAS from 0936 - 1359 z; MCORED BUOY from 0939 - 1400 z; METAR from 0930 - 1359 z; CMAN from 0930 - 1400 z; GOES SWIR from 1020 - 1002 z; TAIL_DOPPLER43 from 1020 - 1346 z; MESONET from 0937 - 1400 z; MESONET from 0937 - 1400 z; 1200 z position interpolated from 1132 Army Corps; mslp = 923.0 mb mph speed = knots * 1.15 (approx. mph = kts + 10) Yellow is hurricane-force wind. -88 31 30 30 29 29 81 mph 75 mph 28 28

Observed Max. Surface Wind: 102 kts, 35 nm SE of center based on $1020\,z\,TAIL_DOPPLER43$ sfc measurement Analyzed Max. Wind: $102\,kts$, $36\,nm\,NE$ of center

-88

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Source: NOAA



Figure 3: NOAA image of Flooding in Orleans Parish and St. Bernard Parish immediately after Hurricane Katrina

Source: http://www.katrinadestruction.com/images/d/15880-7/flood+depth+new+orleans



Figure 4: US Geological Survey map of Hurricane Katrina flooding in Orleans Parish and St. Bernard Parish.

Source: http://soundwaves.usgs.gov/2006/01/NewOrleansMapLG.jpg

Hurricane Katrina 1200 UTC 29 AUG 2005
Max 1-min sustained surface winds (kts)

-31

-32

-33

-34

-35

-35

-36

Observed Max. Surface Winds: 101 kts, 41 nm SE of center based on 11592SFMR43 sfc measurement Analyzed Max. Wind: 101 kts, 36 nm SE of center

Figure 5: FEMA sustained winds, Hurricane Katrina

Source: FEMA549H Chapter 1, 8/17/2006, p. 1-18

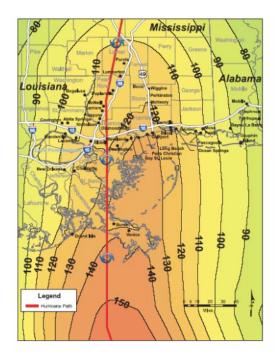


Figure 6: FEMA Hurricane Katrina sustained wind map

Source: FEMA549H Chapter 1, 8/17/2006, p. 1-24

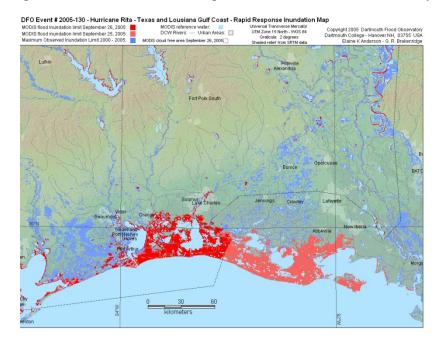
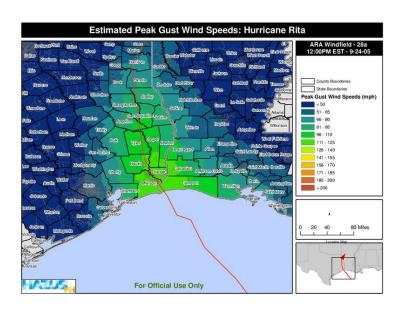


Figure 7: Hurricane Rita Flood Map, from Dartmouth Flood Observatory

Source: http://www.dartmouth.edu/~floods/images/2005130GulfCoastRita.jpg





Source: lagic.lsu.edu/images/hurricanes/fema_advisories/rita/peakgusts.pdf

AN APPLICATION OF SERVICES MARKETING MIX FRAMEWORK: HOW DO RETAILERS COMMUNICATE INFORMATION ON THEIR SALES RECEIPTS?

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ABSTRACT

Product, price, promotion and place are the 4Ps of the traditional marketing mix. In 1960, McCarthy introduced this concept to marketing education and literature. Considered more useful for manufacturing than for services, the 4Ps were adjusted for relevancy to the services industry. In 1977, Shostack recommended that the marketing mix be broadened to include participants and physical evidence of services. In 1976, Kotler elaborated on the marketing mix; in 1981, Booms and Bitner expanded the mix by including three additional Ps: participants, physical evidence, and process. Using the 7Ps of the services marketing mix, this study explores how retailers use this concept, specifically in terms of information included on sales receipts, to communicate with customers. Based on analyzing the content of 3,218 receipts from 380 brick-and-mortar retailers, that information is grouped according to the 7Ps of services marketing mix. This study concludes with recommendations for future research.

INTRODUCTION

As part of their integrated marketing communication efforts, innovative companies recognize the importance of communicating the right messages to the right customers to create value for their customers and to encourage them to purchase more of the company's offerings. One of the cost-effective ways for achieving these goals is to provide customized information printed on sales receipts. Certain types of information on receipts are necessary to provide customers proof of their purchase and to make returning or exchanging a product easier. Most shoppers may not give much consideration to information, other than what is required, on sales receipts. However, innovative companies go beyond providing such basic information as the name of the company, server/cashier, store manager, and product/brand purchased, store address and web site, date, price and sales tax, payment method, and return policy. To build loyalty, some of them print nutritional data, health tips, and recipes for food products purchased (Ruggless, 2010), manufacturers' coupons, personalized savings on a weekly special, reward points, and discounts earned at the company's gas stations (Lindeman, 2010). Even more personalized receipts include messages in the customer's native language, a happy birthday wish, categories of products purchased (e.g., dairy and pet food), and color images to sort the information on a receipt (Lindeman, 2010). Thus, companies clearly use customers' sales

receipts as a communication tool to reinforce repeat purchases and brand loyalty. Yoo, Donthu, and Lee (2000) found support for the relationship between the marketing mix and brand-equity dimensions, namely perceived quality, brand loyalty, brand awareness, and brand associations. However, the challenge is to formulate systematic communication with customers through sales receipts. The traditional marketing mix theory (4Ps) has been criticized for being inadequate to address the people, process, and physical-evidence aspects of services (Rafiq and Ahmed, 1995; Ivy, 2008; Shostack, 1977a; 1979).

Providing information that creates additional value on a sales receipt is a customer service. This paper examines 3,218 receipts from 380 brick-and-mortar retailers to identify what information retailers communicate with their customers on sales receipts. This exploratory study groups the receipt information using the 7Ps of the services marketing mix suggested in the literature to formulate a communication framework for companies to use in designing their sales receipts. The next section elaborates on the theoretical framework of the services marketing mix.

LITERATURE REVIEW

The concept of marketing mix is evolutionary rather than revolutionary. This concept was introduced by Borden in 1953 in his speech at the American Marketing Association conference, where he credited Culliton (1948) for igniting the idea with the term *mixer of ingredients* (Anderson and Taylor, 1995; Rafiq and Ahmed, 1995). Because McCarty (1960) was the first to define the marketing mix concept as being comprised of product, price, promotion, and place (Rafiq and Ahmed, 1995), traditionally in textbooks, his 4Ps have been the guiding framework for strategic planning, mainly for companies of products.

However, because of the unique nature of consumer marketing in service organizations, studies emphasized the need for expanding the marketing mix elements to 7Ps (Rafiq and Ahmed, 1995; Ivy, 2008). Although Kotler (1976) elaborated on the individual marketing mix elements, the 4Ps were criticized as being overly simplistic (Anderson and Taylor, 1995) because building long-term personal relationships with customers was rarely addressed, only in the context of salesperson-customer interaction (Rafiq and Ahmed, 1995). The original concept developed by Borden and defined by McCarthy was considered to be more relevant to manufacturing companies (Cowell 1984; Shostack, 1977b) and was inadequate to address the characteristics of services (intangibility, perishability, variability, and inseparability) relevant to retailers and other service companies (e.g., insurance) (Shostack, 1977a; 1979).

Studies suggested that modifications were needed to expand the marketing mix. Some of the suggestions included participants (e.g., bank personnel) and peripheral tangible evidence of services (e.g., environment in which the service is rendered) (Shostack, 1977a); the product service mix, the presentation mix, and the communications mix (Renaghan 1981); 4C's concept (concept mix, costs mix, channels mix, and communications mix) (Brunner, 1989); and 5Ps (publics, performance, politics, probability (risk) and planning) (Harvey, Lusch, and Cavarkapa, 1996). However, these suggestions did not escape academia's criticism (Rafiq and Ahmed, 1995).

In 1981, Booms and Bitner's 7Ps framework became the most adopted among the alternatives (Rafiq and Ahmed, 1995). This framework not only refined and expanded the elements of 4Ps, but also added three more Ps—participants (people), physical evidence, and process—to become the 7Ps of services mix. The next section will elaborate on the 7Ps and how companies use sales receipts to communicate to their customers the 7Ps of services mix they provide.

Application of the 7Ps of Services Mix Theory to Sales Receipts

The following is a discussion of each of the 7Ps as they relate to sales receipts. These concepts were originated by Shostack (1977a) and developed and defined by Booms and Bitner (1981). *Participants* are all of the personnel who deliver service and other customers who participate in the service environment. The personnel-customer and customer-customer interactions in the service environment are extremely important to make the service experience pleasant and satisfactory. Thus, including the name of the server/sales associate on sales receipts can initiate a long-term customer relationship. In addition, providing a customer-service representative's contact information for future customer inquiries can create value. The sales receipt can also serve as a training tool for personnel by providing the steps to perform (e.g., "Cashier: scan products, then scan coupon"). Receipts can be used to express the personnel's commitment (e.g., "Whatever your business and personal needs, we are here to serve you") and to recruit future employees (e.g., "Now hiring part-time seasonal positions for early morning stocking").

Physical evidence is the environment in which the firm and customers interact and in which services or products are delivered; it can also be any tangible commodities which facilitate performance or communication of the service (Shostack 1977a; Booms and Bitner, 1981). In this respect, sales receipts can be considered physical evidence in the services mix because they serve as a tool to communicate the firms' services and performances and as proof of purchase. They deliver information for other tangible physical evidence, such as web site information, location of the store (address), telephone number for store and/or customer service, and hours of operation.

Process for service assembly is the actual procedures, mechanisms, and flow of activities by which the service is delivered (Booms and Bitner, 1981). Printing on sales receipts such information as return-policy and an invitation to take a customer-satisfaction survey could enhance not only operation efficiency but also customer perceptions of service quality and of how much the retailer cares about satisfying its customers.

While the tangible *product* covers a wide range of variables such as brand name, quality of inputs, features, and options, the intangible nature of *services* results in simultaneous production and consumption (perishability). Sales receipts are tangible proof of customer purchases of products and/or services, and a tangible communication tool for retailers to use both the 4Ps of marketing mix and the 7Ps of services mix. Receipts can add value if they are used as promotional tools to build long-term customer relationships. Certain information printed on the receipts—such as price, quantity, product's brand name, and the retail outlet's name—is necessary as purchase proof in the event of returns or future claims. However, firms should also

consider adding positioning statements for quality and performance they are delivering, including warranty promises (e.g., 100% satisfaction guaranteed) and/or positioning statements (e.g., "Experience the difference").

Price is both an economic variable in the marketing mix affecting the level of demand and a psychological variable affecting the customers' expectations of products' and/or services. A sales receipt can create value by showing the customer's total savings, including a coupon for future purchases or advertising current or future promotional programs. Receipts can also inform the customer about other types of payment that may be more suitable, promote the use of the store's card (e.g., save 10% when you use your store card) rather than a major credit card, or express a value proposition (e.g., "Dress for Less").

Place or distribution decisions can create value for customers by making the products available in accessible locations when needed. For services, customer accessibility involves participants, physical evidence, and process due to direct customer contact at the time of service delivery (Booms and Bitner, 1981). Sales receipts can be used to create value by providing information for accessibility to the web site as an alternative shopping place, the physical store's address for future needs, and store hours for accessible times.

Promotion involves not only traditional methods (such as advertising, personal selling, sales promotion, publicity, and direct marketing) but also participants, physical evidence and process relevant to services. Examples include "Tangible clues such as the design of the organization's building, the name and design of the sign over the door, the interior décor, the level of noise, the appearance and attitude of the contact personnel, and the process by which the service is to be delivered" (Booms and Bitner, 1981, p. 49). A sales receipt is one of the most cost-effective means of advertising (e.g., Try our Panini subs!!), promote future sales (e.g., Save up to 48% on tickets.), promote publicity and long-term relationship (e.g., Thank you for your patronage. Please Come Again!), build customer-salesperson relationship (e.g., Lindsey served you today.), and promote attitudes and interpersonal behavior (e.g., Kroger, the friendly folks).

Using new elements in the services mix promotes new relationships among producers, intermediaries, retailers, and customers. This paper focuses on one application of the seven Ps of services mix: retailers' use of sales receipts to build long-term relationships with customers. The next section will describe the data-collection process and the nature of the receipts.

METHODOLOGY

During the 1980s, the marketing world was debating about how and why services were different from products and how marketing mix must be modified to help service marketers (Zeithaml, Parasuraman and Berry, 1985; Booms and Bitner, 1981). Yudelson (1999) concluded that even though 4P's of marketing were controversial, the basic structure including product, price, promotion and place, was essentially valid and useful in both organizing marketing activities for managers and teaching marketing techniques to students. Various researchers suggest three or four additional P's for services marketing. Booms and Bitner (1981) advocate Participants, Physical Evidence and Process. Lovelock and Wirtz (2007) added Processes, Physical Environment, People and Productivity/Quality as new elements for services marketing.

Because the productivity and quality can be part of the other seven elements in a service encounter, they are not considered in this paper. Table 1 presents the seven Ps of the services-mix framework used in this study.

Retailing has a special place within the service industry. In terms of the relative value physical and intangible elements add to goods and services, retailing has moderate levels of both intangibility and physical evidence (Shostack, 1977). Therefore, researchers can evaluate all seven P's of marketing in an organized manner. Retailing in its largest context includes not only store or non-store based retailers (such as department stores, supermarkets, convenience stores, and e-tailers) but also restaurants, hotels and hotels and other retail-service encounters.

Table 1: Modified Marketing Mix for Services in Retailing								
Product	Price	Place	Promotion	People	Physical Evidence	Process		
Quality	Level	Location	Advertising	Personnel:	Environment:	Policies		
Features and Options	Discounts and Allowances	Accessibility	Personal Selling	Training	Furnishings	Procedures		
Style	Payment terms	Distribution Channels	Sales	Discretion	Color	Mechanization		
Brand Name	Customer's	Distribution	Promotion	Commitment	Layout	Employee Discretion		
Service Line	Perceived Value	Coverage	Publicity	Incentives	Noise level	Customer		
Warranty	Quality/Price	Outlet Locations		Appearance	Facilitating Goods	Involvement		
Capabilities	Interaction	Sales		Interpersonal Behavior	Tangible clues	Customer Direction		
Facilitating Goods	Differentiation	Territories Transportation		Attitudes		Flow of Activities		
Goods		Carriers		Customers and other		Activities		
				customers:				
				Behavior				
				Degree of Involvement				
				Customer-to- Customer Contact				

This paper investigates how retailers use the seven Ps to communicate information on their sales-transaction receipts. A sales receipt is important evidence of finalized exchange between retailer and customer. Moreover, customers may consume and dispose of other sources

of communication such as TV, radio, magazines or Internet but may keep their receipts for a

while, depending on the nature of the exchange. Meanwhile, retailers try to squeeze what they consider the most important messages into the receipts' very limited space.

Receipts were collected throughout a one-year period from 380 brick-and-mortar retailers, mostly in the Eastern and Southeastern U.S. A total of 3,218 receipts were content analyzed. Findings about information used on sales receipts were categorized based on the seven services marketing mix elements: product, price, place, promotion, people, physical evidence, and process. Some of the retailers whose receipts were content-analyzed include department stores, restaurants, specialty retailers, grocery stores, convenience stores, banks, auto service, gift stores, lodging, parking services, wholesale membership clubs, off-price retailers, entertainment services. Each receipt had an average of 1.8 comments in addition to the price and tax paid for the transaction. The majority of these comments included some form of promotion (37.06%) and processes that customers need to notice (40.55%). The nature of comments on the receipts is explained in the following section.

RESULTS

Product

In retailing, quality is an important component of the product element of services marketing mix and is often incorporated into communication regarding the product. For example, Backyard Burgers emphasizes the type of beef used in its hamburgers to denote the quality: "Now serving 100% black angus beef." Shell stresses the performance of the product: "Shell V-Power, our most advanced fuel ever. Experience the difference." Beyond its food quality, Waffle House states its service quality in terms of speed: "Good food fast." Similarly, Delaware North Companies try to make intangible service components tangible: "Providing care and comfort to people away from home." Finally, a Ford dealer specifically states its service goal leading to customer satisfaction: "It is our aim to perform all the repairs requested on this repair order to your complete satisfaction."

Brand name is another key aspect of product element. McAlister's Deli promotes a specific product under its branding: "McAlister's famous sweet tea. By the glass. By the gallon." In retail, the company name can also be the brand promoted, such as Gaylord Hotels: "A Gaylord entertainment company."

Warranty is directly related to products and services. Cognitive dissonance due to lack of warranty or not being able to exchange or return for a refund can cause customers to be dissatisfied. Offering warranties increases customer satisfaction. Therefore, Sears cares about customer satisfaction: "Satisfaction guaranteed or your money back." Totes Sunglass World provides a lifetime warranty: "Lifetime warranty on Totes Umbrellas!"

In terms of capabilities, Shell states: "Shell V-Power actively cleans as you drive." Other features, options, style alternatives, service lines, and references to facilitating goods were not observed in the retailers' receipts.

Price

According to Dillard's web page, "The word 'value' has become a staple in retailing used and perhaps overused, more than any other term in describing what retailers bring to the table" (Anitsal, Anitsal and Bolak, 2003). Content analysis shows that the most frequent reference to "value"s related to low and fair price on retailers' receipts (Anitsal, Anitsal and Bolak, 2003). The customers are assured they are getting their money's worth. In terms of price levels, Wal-Mart used to stress their low prices: "We sell for less." "Always low prices. Always." Later, rather than directly creating a low price image, they began stating that customers save more to live better: "Save money, live better." As a major rival of Wal-Mart, Target uses its sales receipts to communicate with customers: "Expect more, pay less." Other retailers stress their right, great, or best prices:

Kroger: "Right Store. Right Price" Sears: "Sears. Good Life. Great Price" Autozone: "Our best price everyday" Pfaltzgraff: "Best prices of the year!"

Still other retailers emphasize customer savings in terms of money and time as in the following examples:

Payless Shoesource: "Look smart. Pay less."
Ross: "Dress for less."
Food Lion: "Saving you time & money is our business!"
Dollar General Store: "Time is money. Save both at Dollar General!"
Publix: "Where Saving is a part of the Pleasure."

Finally, retailers, such as the following, often provide specific price levels for products they promote:

Wal-Mart: "Visit the Wal-Mart Vision Center for the SunRx Package starting at \$88." Ryan's of Cookeville: "Come dine with us each Fri & Sat night, all day Sun, steak and shrimp \$8.39."

Discounts and allowances are important components in reducing prices. Some retailers emphasize how much a customer will be saving or could have saved in a particular transaction when using the store card—Kroger: "See what you are saving today. You saved \$0.69 with your plus card." "Join Kroger Plus & begin saving today. You could have saved \$0.73." Sometimes retailers bundle their products with services to provide discounts to their customers—Wal-Mart: "Save .03/gal at gas stations next to Wal-Mart with WM Credit or Gift Cards." Still some others try to reward repeat visits and purchases through discounts—Kash N' Karry: "You are a valued

preferred customer. Look for special preferred savings every time you shop!" and Panera Bread: "\$1 off any sandwich next visit."

Payment terms are key components in business to business negotiations. However, those terms are seldom mentioned on transaction receipts while communicating with customers in business to consumer environments of retailing. One example is from Target: "Redeem gift card for merchandise or services at Target."

Quality and price interaction is another key component of price element. Higher prices can be justified by higher quality; therefore, the interaction between the two would create a basis for price justification in consumer decision making. However, this component is barely mentioned in the information printed on transaction receipts. The following is an example from a retailer that chose not to print its name on the receipt: "Commitment to Quality and Price.

Differentiation is a common strategy used to discriminate the price levels among competing retailers. Lowe's, for example, guarantees its prices and promises to beat competitors' higher prices: "We have the lowest prices, guaranteed! If you find a lower price, we will beat it by 10%."

As expected, of the seven Ps, price element was the one most elaborated on in the receipts. Customers' perceived value of the service was not mentioned in this category.

Place

In retailing, the three most important factors for location selection are said to be "location, location and location." Retailers communicate this important information on their receipts by providing the specific store number, address, telephone numbers, and web page links—Big Lots: "Store#1244" "Phone 865-579-0411," "Visit us on www.biglots.com." and K-Mart: "Please continue to shop Kmart at 7428 Kingston Pike NW, Knoxville, TN." Some retailers also emphasize a location as being the right place for customers to shop, for example, Kroger: "Right Store. Right Place" and T. J. Maxx: "Never the same place twice." The retailer's goal is to be more accessible to create more customer traffic. This goal can be accomplished by referencing times available for business—for example, "Sam's Club will be open Labor Day 10:00 – 6:00PM." and "We are open on Memorial Day." Mentioning a combination of phone, fax, and Internet ordering increases customer access—as illustrated by the following:

Office Max: "Order by phone 1-877-OFFICEMAX."

Payless Shoesource: "Shoes online anytime at www.payless.com"

The Body Shop: "Shop nonstop the bodyshop.com"

K-Mart: "Shop morning, noon, and night at kmart.com"

Barnes & Noble Bookseller: "Shop online 24 hours a day www.bn.com"

Page Auction: "Antique Auction, 2nd and 4th Tuesday, 10am. All day sale!!!

Auction every Saturday night 5pm."

Staples: "Order online, by phone, or by fax 24 hours a day 7 days a week."

Many brick-and-mortar retailers provide their website address as an alternative distribution channel—Pfaltzgraff: "There's more to buy at pfaltzgraff.com"; Books-a-Million: "Shop online at booksamillion.com"; and Piggly Wiggly: "www.thepig.net". Only a few retailers mention distribution coverage and delivery, such as Staples: "Staples Business Delivery. That was easy." Outlet locations, sales territories, and transportation carriers were not mentioned on the receipts.

Promotion

Traditional and nontraditional forms of advertising, endorsing specific products and services, are major components of the promotion element. Retailers frequently use receipts to promote products. Wal-Mart is very good at advertising new DVD-movie releases: "Disney's Kim Possible Event coming to a store near to you!" "Lord of The Rings 2' on VHS/DVD Tues, 8/26!" "Lion King' on DVD Tuesday, Oct 7!" Other examples of companies using receipts for promotional purposes are Rocky Top Café: "Try our Panini subs!!" and General Nutrition Center: "GNC is your Low Carb headquarters!"

Personal Selling is an important component of promotion element more often used in business- to-business environments than in business-to-consumer environments. Retailers normally target individual consumers. With few exceptions— such as wholesale membership warehouses (e.g., Sam's Club)—retailers do not seem to customize their messages with personal selling in mind; instead, they suggest they are in business to save money for their business customers—for example, Sam's Club: "Our business is saving your business money."

Sales promotions aim to convince customers to select a product or service in the short-term decision making—for example, Wal-Mart: "For great deals on cruises, go to walmart.com" or Kings: "The Great American Trailer Musical. Save up to 48% on tickets."

Another component of the promotion element is publicity. Retailers appreciate customer traffic in their stores and try to build-long-term relationships with their customers by thanking them for their loyalty in various ways on receipts. The following are some examples:

USPS (United States Postal Service): "Thank you for your business."
Sam's Club: "Thank you for your patronage!" "Thank you shopping at Sam's Club!" Yankee Candle Company: "Thank you for shopping at The Yankee Candle Company." McDonald's Corporation: "Thank you for eating at McDonald's."

Sears: "Thank you for being a Sears premier customer." Eyeglass World: "Thank you for being one of our most valued customers."

Retailers welcome their customers and encourage them for repeat visits and purchases:

Subway: "Thank you for making Subway the World's Best Sandwich!" Mandarin House: "Thank you. Come again."

Café Istanbul: "Hope to see you again!!!!"

Hudson News: "Thank you." "Have a great day!" "Please come again."

Royal House Thai Cuisine: "Thank you. Please come again."

FastPay: "We appreciate your business."

However, sometimes retailers (especially gas stations and convenience stores) do not put their names on the transaction receipts. Examples include No Company Name on Receipt (Gas Station): "Thank you. Have a nice day" or No Company Name on Receipt (Gas Station): "Thank you. Call again." In contrast, some retailers put not only their names and logos on the receipt, but also their customer's name with a customized thank you. Examples include Lowe's: "Thank you, the customer's name, for shopping at Lowe's" and Maddux Hardware Store: "Thank you, the customer's name, for your patronage." Finally, besides using generic statements showing customer appreciations (such as Kroger: "Welcome to Kroger!" "We are delighted that you are here!") some retailers also customize their message based on their retailing niche—for example, Karm Thrift Store: "God bless you."

People

Personnel play an important role in the people category, and retailers sometimes identify personnel on their receipts. Examples include BI-LO: "Your cashier was Chris." "Thank you! Bobby, Store Manager" and Ross: "Lindsey served you today." Although standardized statements are not useful to customers, they can be for retailer's internal use. Such standardized statements include "Your cashier was U-scan" (Kroger) and "Employee 9834" (Office Depot).

While training employees, retailers might also use transaction receipts to create employee loyalty and bonding or to provide direct tasks to perform. Examples include Waffle House: "America's place to work" and Target: "Cashier: scan products, then scan coupon."

Retailers should be committed to serving their customers well and exceeding customers' expectations as reflected in the following examples: Macy's: "Outstanding service is our goal" and Tarpley's Store Colonial Williamsburg: "We take great pride in our WILLIAMSBURG products and in exceeding our guests' expectations." Some retailers remind their personnel that their customers are number one. For example, Wal-Mart often repeats this idea in its famous jingle or as stated by Conoco: "Where customers are #1." Other retailers use receipts to advertise recruitment activities and to communicate employee benefits. For example, Kohl's includes the following information: "Now hiring part-time seasonal positions for early morning stocking. Extra associate merchandise discounts." Retailers use such practices in hiring from their customer base and try to set the stage for interpersonal behavior by mentioning what friendly, good neighbors they are. Examples include "Kroger the friendly folks" and Food Lion: "Good Neighbors." Attitudes, appearance, discretion and other customer behavior and degree of involvement as well as customer-to-customer contact were not mentioned in this category.

Physical Evidence

Sales receipts deliver information regarding tangible physical evidence, including web address, location of store, telephone number for store and/or customer service, and business hours. The above-mentioned information is useful for before and after shopping activities. Physical-evidence examples, however, pertain to the time during the shopping activities while the customer is still on the sales floor are also important to enhance customer loyalty and bonding to the retailer and require creative thinking and innovative implementation methods. For example, on the back of the sales receipts, some retailers provide customized store discount coupons. Still some others (e.g., Sears, Martin's supermarket) use an extended receipt to provide such promotions as physical evidence. Sometimes the receipt is thicker than usual or is a different color with interesting background figures to catch customers' attention. Environmental (e.g., furnishings, color, layout, and noise level) and facilitating goods clues were not found on any of the receipts in the physical evidence category.

Process

An old saying is "Retail is detail." In retailing, numerous policies not only for employees but also for customers help operations run smoothly. Most of those policies that are printed on transaction receipts deal with price, payment, gratuity, return and exchange, restocking fees, and sweepstakes terms. Consider the following examples:

Wal-Mart: "As of 2/1/04, MasterCard debit cards can only be used if a PIN is entered." "Effective Tuesday, May 18th: all tobacco must be purchased at the tobacco aisle."

USPS (United States Postal Service): "All sales are final on stamps and postage. Refunds for guaranteed services only."

Target: "A receipt dated within 90 days is required for ALL returns and exchanges." "Limit one item or offer per coupon. Offer good while quantities last. Void if copied, transferred, purchase, sold or prohibited by law. No cash value."

K-Mart: "Price adjustments will not be given on any Holiday merchandise." "All Sales Final. No Refunds or Exchanges. All merchandise is being sold "as is" and is not subject to any breach of guarantee, specifications, warranties, express or implied, as to the quality or kind of any such product."

McKay Used Books and CDs: "McKay Used Books & CDs Return Policy as follows: 1-"AS IS" no returns. 2-Each customer is limited to 4 refunds (including defective) per calendar year for each of the following: Audio books, video games, CD ROMs, DVDs/Videos. 3- CDs are limited to 6 refunds (including defective) per year."

Easy Spirit Outlet: "Returned merchandise must be unworn, in original packaging with all tags/tickets attached. Full refunds will be given within 30 days if accompanied by a receipt. Exchange or merchandise credit only without receipt."

Books a Million: "If you are not completely satisfied with your purchase simply return it along with your original receipt within 30 days of purchase."

Blockbuster: "Participating stores only. Rental product kept more than 7 days after the due date is converted to a sale. Sale may be reversed by returning the product within 30 days of the sale date paying a \$1.25 restocking fee. Franchise restocking fees may vary."

Hibbet Sports: "Any discount received as a part of a buy one get one or buy multiple items for a special price promotion will be forfeited if one or more of the items are returned. Receipt and drivers license required for cash refund. 10 business-days wait for refund when purchasing with a check."

Silly Dog Bar & Grille: "18% gratuity added to parties of six or more."

K-Mart: "This offer excludes lottery tickets, taxes, milk, eatery, warranties, licenses, concessions, co-pay on Rx, gasoline, tobacco, alcohol, Western Union, layaway/payments, and Kmart cash card sales."

Best Buy: "No purchase necessary. Purchase will not enhance chances of winning. Open only to legal residents of 50 US & DC. 18 or older. Void where prohibited. Limit one entry per person/address per month. Code on cash register receipt/email valid for 7 or 14 days from the date of register receipt/email notification check receipt or email for actual code expirations. Code may only be entered one time."

Retailers encourage their customers to get more involved, for example, in providing feedback through telephone and/or online surveys. They offer multiple prizes in terms of gift cards or coupons, and some choose to communicate this information in Spanish as well. Such examples include the following:

Target: "Let us know. Hasanos saber." "Chance to win a \$5,000 Target gift card!"

Office Max: "Tell us about your shopping experience and enter to win 1 of 5 prizes." Panera Bread: "Tell us how we are doing. Visit www.panerasurvey.com or call 1-877- within 48 hours."

Cracker Barrel: "To complete a guest survey call 1-888-678-5845."

Staples: "We care about what you think! Take a short survey and be entered into a monthly drawing."

Retailers provide guidance and direction to their customers to make certain operations are smoother and controlled. Therefore, increasing number of retailers ask customers to retain sales receipts not only for their records but also for returns, gift giving, order processing and reward, and billing statement verification. Examples include the following:

Jerusalem: "Retain this copy for your records."
Ross: "Please save this receipt. See back of the receipt for return policy."
Target: "Giving a gift? Include a gift receipt!" "Ask about receipt lookup."
Sam's Club: "Please take this claim ticket to the One Hour Photo Center in one hour to pick up your order."
K-Mart: "Earn Kmart Rewards Certificates. Remember to use your Kmart Rewards Credit Card to earn rewards Certificates! See an associate to apply for your Kmart Rewards Credit Card today!"
JC Penney: "Keep this slip for statement verification."

Employee discretion and flow of activities were not mentioned in this category.

CONCLUSION

McCarty's 4Ps have been used in textbooks as part of strategic planning, mainly for companies of products (McCarthy 1960). Yudelson (1999, p. 65) redefined the 4Ps (Product, Price, Promotion and Place) as Performance, "the sum total of all the customer receives"; Penalty, "the sum total of all that the customer has to give up"; Perception, "all the information that affects the perception of either the buyer or seller"; and Process, "all the activities that add value between the point of origin and the point of final utilization." According to MacStraviv (2000), "The four 'P's are alive and well and indeed essential to marketing until something truly replaces them" (p. 20). Yet, studies suggested that certain modifications were needed to expand the marketing mix. Among others, Booms and Bitner (1981) not only refined and expanded the elements of 4Ps but also added three more—participants (people), physical evidence and process—to become the 7Ps of services mix.

This study adopted the 7P's of services marketing mix (product, price, promotion, place participants, physical evidence and process) and elaborated on how retailers use this concept. Specifically, it investigated the information retailers use on sales receipts to communicate with customers. This study grouped the information using the 7Ps of services marketing mix and further discussed the analyzed content of 3,218 receipts from 380 brick-and-mortar retailers.

The research findings indicate that retailers communicate the traditional 4Ps primarily through their sales receipts, although retail stores' environment naturally includes both product and service domains. Regarding the service components as reflected in the last 3 of the 7Ps of services mix, process seemed to be leading element in retailers' communications with customers. Specifically, policies stand out within this category. Physical evidence, among the last 3Ps, would especially provide an area for continuous improvement based on innovative thinking.

In conclusion, using the 7Ps and their relevant subcategories requires detailed planning. Research on customer awareness and comprehension of the 7Ps' different elements as well as the effectiveness of retailer comments/ statements/ slogans on sales receipts would help retailers craft better communication strategies. Retailers should also assess sales receipts' effectiveness as an innovative medium compared to traditional media in terms of integrated marketing communications. Although this study provides ample coverage of multiple types of retailers, one limitation is that it does not cover sales receipt data of all possible retail formats in the US or in other parts of the world. This study should also be repeated longitudinally to provide comparisons over several years.

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STRENGTHS AND WEAKNESSES OF BUSINESS RESEARCH METHODOLOGIES: TWO DISPARATE CASE STUDIES

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ABSTRACT

The case study is a qualitative methodology that is frequently employed in business research, but often without the methodological thoroughness that other research methods receive because of a lack of formal protocol and the perceived obviousness of the results. With some researchers lamenting the restriction of case studies and other qualitative methods to sociological and phenomenological research, business research is increasingly looking to combine qualitative and quantitative methods for a more holistic approach to the organization. This paper will seek to uncover the ways that case studies can illuminate and obfuscate certain business research problems, and how this research method can be applied with more rigor in order to obtain the same level of validity and robustness as quantitative data receive in business research.

Keywords: case study, qualitative methodology, business research, research methodology, combine qualitative and quantitative, holistic approach

BACKGROUND TO THE CASE STUDY

A case study is an in depth investigation comprising an oral, archival, and secondary source-based history of a past or current phenomenon (Leonard-Barton, 1990). The data drawn on for the study can comprise researcher observation and personal interviewing as well as sources from public and private archives. Leonard-Barton (1990), points out that "the phenomenon being researched always dictates to some extent the terms of its own dissection and exploration" (p. 249).

This means that when applied to a business context, case study methodology will adapt to the type of sources and procedures that are available, just as the methodology has been adapted to different social science research. Yin (2008), writes that "the case study method allows investigators to retain the holistic and meaningful characteristics of real-life events – such as individual life cycles, small group behavior, organizational and managerial processes, neighborhood change, school performance, international relations, and the maturation of industries" (p. 4). Tellis (1997) describes case studies, arguing that the unit of analysis is a

critical factor in the case study because rather than studying a group or individual, case study research tends to focus on the process or system of action. He writes that "case studies tend to be selective, focusing on one or two issues that are fundamental to understanding the system being examined". Yin (1994) argues for at least four roles for a case study model: To explain complex causal links in real-life interventions

- 1. To describe the real-life context in which the intervention has occurred
- 2. To describe the intervention itself
- 3. To explore those situations in which the intervention being evaluated has no clear set of outcomes.

Eisenhardt (1989) presents a table of the process of theory building from case study research, focuses on the step in research, the activity that takes place, and the reasoning behind it. This table demonstrates the strengths of case study research in developing a wider theory for broad application beyond the specific case. Stake (1995) pointed out that the internal and external validity protocols that are used to promote accuracy in case studies and foster the development of several explanations for phenomena are known as triangulation.

Triangulation in case study research can result from a mixture of data, researchers, theories, and mixed methodological approaches, such as combined quantitative and qualitative research (Feagin, Orum, & Sjoberg, 1991; Yin, 1984). There are four types of triangulation identified by Denzin (1984) for case study research. These are data source triangulation – wherein the researcher attempts to identify data that remains the same in different contexts; investigator triangulation – where different researchers investigate the same phenomenon; theory triangulation – where different theoretical hypotheses are applied to the same data set; and methodological triangulation – which seeks to reproduce similar results with different methodologies. The purpose of these triangulations is to demonstrate the robust nature of the results from the case study.

STRENGTHS

This section will investigate the literature on the strengths of the case study research methodology, both as a comprehensive research strategy, and specifically with regards to business research. Tellis (1997) points out, that case studies are multi-perspectival analyses. What this means for the researcher is that they can take into consideration the interaction between groups within the organization, as well as, individuals and groups effected by the organization, for instance, CEOs, employees, customers, regulators and other people involved in the organization. This is one of the strengths of the case study over sampling methods and quantitative methods, which tend to favor the organization's 'elite' because they generate the data.

Single-case studies and multiple-case studies are both useful tools for business research. Single cases can be used to support or contest a model or theory, as well as to demonstrate an unusual or exemplary case (Yin,

1994). Single-case studies are strongest for exemplary situations where a researcher has gained access to a phenomenon that has been under-researched or even unknown.

In business, this can be the creation and implementation of a new model, the opening up of a previously closed industry, or even the development of a new organization. Tellis (1997) points out that "these studies can be holistic or embedded the latter occurring when the same case study involves more than one unit of analysis." These seem to be particularly relevant in business research when examining a particular phenomenon, rather than a wider business issue.

Multiple-case studies are equally valuable, although they can be applied to a different type of business research question because they show repeatable phenomena. However, they have a weakness, as well, because they are conflated with the idea of sampling logic. While sample "case studies" frequently appear in business research literature, this type of sample selection is not a true case study because it does not take a holistic approach to each situation, but picks and chooses to fit an argument. The use of multiple-case studies helps to develop external validity and guard against researcher bias (Leonard-Barton, 1990). Yin (1984) suggests that the reasoning for using a multiple-case study methodology is close to the scientific approach of using multiple experiments: each case should be chosen on the basis that it "either (a) predicts similar results (a literal replication), or (b) produces contrary results but for predictable reasons (a theoretical replication)" (pp. 48-49). Campbell (1975) argues that the case study method does not attempt to elicit freedom from a large standardized data set, but the case study tests "theory with degrees of freedom coming from the multiple implications of theory; the process is a kind of pattern-matching" (p. 182).

Another strength of the case study method in business is that any fact relevant to the process or the phenomenon is a potential source of data because of the ultimate role of context and situation (Franz & Robey 1984, Stone 1978).

This relates back to the role of triangulation in the case study approach: in order to make sense of all the interrelated parts in an organization or a number of organizations the research methodology should "slice vertically through the organization, obtaining data from multiple levels and perspectives" (Leonard-Barton, 1990, p. 249). Finally, Yin (2008) points out that a great strength of the case study method is that, like a history, it examines events when "relevant behaviors cannot be manipulated" and therefore, like a history, it is able "to deal with a full variety of evidence – documents, artifacts, interviews, and observations – beyond what might be available in a conventional historical study" (p. 11). In terms of business research, this once again favors the singular or exemplary phenomenon over the more generalizable wider business phenomenon.

WEAKNESS

Many of the weaknesses of case study research methodology stem from the improper understanding of the methodology. Eisenhardt (1989) writes that there is a "lack of clarity about the process of actually building theory from cases, especially regarding the central inductive process and the role of literature" (p. 532). Case studies can also be misused in situations that call for a different research strategy. Yin (2008) points out that case studies are good for explanatory research questions that "deal with operational links needing to be traced over time, rather than mere frequencies or incidence" (p. 9). However, a case study would be inappropriate for a 'how many' or 'how much' research question, where archival research or survey data would be more appropriate (Yin, 2008).

Flyvbjerg (2006) points out five common misunderstandings about case study research that illustrate the potential weaknesses of the method if ill-applied: "(a) theoretical knowledge is more valuable than practical knowledge; (b) one cannot generalize from a single case, therefore, the single-case study cannot contribute to scientific development; (c) the case study is most useful for generating hypotheses, whereas other methods are more suitable for hypotheses testing and theory building; (d) the case study contains a bias toward verification; and (e) it is often difficult to summarize specific case studies" (p. 219).

While he goes on to debunk these assumptions by applying what Kitchenham, Pickard, and Pfleeger (1995) refer to as a "well-understood theoretical basis," (p. 52) the misconceptions he cites often plague business research that uses a haphazard case study methodology.

Another important weakness in the practical application of case study methodology has been the effort by researchers to support internal validity, reliability, construct validity, and external validity (Yin, 1989). Some efforts have been made by researchers, as well as by case study proponents to articulate the process of validity. Yin (1994) argued for the use of multiple sources of evidence, such as archival, interviews, and external reports, as another way of creating construct validity. Levy's (1988) case study research used a single-case exploratory method to establish his researcher's construct validity, and a single explanatory case for internal validity. External validity is generally created by triangulation in multiple-case studies, but is more elusive in a single-case study. External validity in single-case studies could be achieved from theoretical relationships – theoretical triangulation – and generalizing from these (Yin, 1994). As discussed above, triangulation is one way of overcoming the validity and robustness critiques of case study methodology. However, in practice, this is one aspect that is regularly overlooked in applications of the case study to business research.

The methodological fuzziness associated with case studies because of the lack of a formal case study protocol is a significant weakness both in terms of validity of results and reliability of the study in future research.

Another weakness is that in the interviewing and observing process, the high level of contact with subjects can create informal manipulation (Yin, 2008). There are other potential

biases, including the researcher's possible misjudgment of the representativeness of a single event or process and thereby exaggerating the relevance of a data set because of its perceived importance in a particular case, or biasing estimates through unwitting anchoring (Jaikumar & Bohn, 1986; Tversky & Kahneman, 1986). Biases are particularly important in business research because the researchers may have a connection with the organization being studied – particularly in graduate school research settings – and therefore may consciously or unconsciously influence the interpretation and presentation of the study.

Another critique of the case study method is the issue of generalization because the case study is usually relevant to a specific context and therefore not more widely applicable even though researchers try to draw comparisons. Single-case studies in particular are limited in terms of their generalizability (Tversky & Kahneman, 1986). Yin (1984) attempted to refute this criticism of the case study method by arguing that there is a difference between analytic generalization and statistical generalization: "In analytic generalization, previously developed theory is used as a template against which to compare the empirical results of the case study."

The fallacy of generalization assumes that a single case or even a few cases have been drawn from a larger group of similar cases; in these situations, the reference to a 'small sample' of cases arises, treating the single-case study as though it were a single respondent in a survey or sampling study.

In other words, a common problem with the case study method is that it is not treated like a case study, but like a sample or other method that extracts a sample for wider understanding and generalization.

Stake (1995) coined another type of generalization – 'naturalistic' generalization – which focused on a more empirically-based, intuitive extraction from the case study to the generalization. Stake (1995) argued that the data that emerged from various case studies would find resonance in the experiences of a broad selection of readers, and therefore facilitate greater understanding of the phenomenon through triangulation with other researchers and readers.

EXAMPLES

This section will investigate two different types of business research articles: the first uses a single case to investigate a more wide-spread phenomenon; the second uses a number of different cases to demonstrate a theory of business process. These two articles will be critiqued to reveal the strengths and weaknesses of uses of case studies in business research. The first research article that uses case study research looks at the specific example of Sears, Roebuck and Company, an American department store. Rucci, Kern, and Quinn (1998) use the case study of Sears to examine the Employee-Customer-Profit Chain as a business model.

The second research article that uses case study research looks at four different companies in order to examine the retail phenomenon of mass customization. Gilmore and Pine (1997) use the four case studies to reveal four different business approaches to this phenomenon.

These two examples use case studies in different ways, and will thus provide a good basis for critique of the methodology.

The Employee-Customer-Profit Chain at Sears

This case study is used to explain the change in business strategy and implementation of a new business model (Rucci et al., 1998). Sears, Roebuck and Company (Sears) was facing a significant downturn in the 1990s until, as this case study describes, the company implemented a new business model – the employee-customer-profit chain.

The case study describes the model and its method of implementation at Sears. The study presents a detailed history of the inner-workings of Sears' turnaround in 1992 and 1993 under the direction of CEO Arthur Martinez. It demonstrates the strength of the single-case method for relating a detailed process-based narrative of a business model implementation. Because of the researchers' embedded nature in the organization, they are able to describe the development of the change process through a combination of interviews, memory, and archival material. This depth of study reveals the true nature of the phenomenon rather than simply skimming the surface of the issue. As the authors argue, while the case of Sears' crisis was not unique, the implementation of the new process chain followed a trajectory that was unique to Sears' situation. The authors know the limits of their study's generalizability.

The value of this single-case study then is in understanding *how* intervention took place, what the context of this intervention was – in other words, following Yin's (1994) prescription for the correct application of case study methodology to answer research questions.

While this is an interesting case study, one of the major problems with it is the bias of the researchers. The case study is presented by the one current executive vice president and two former vice presidents of Sears, which naturally makes the reader suspicious of the methodological validity of the study. Another critique of the study is its generalizability.

As the researchers themselves write, "any retailer could copy the Sears measures – even our modeling techniques – and still fail to achieve an operational employee-customer-profit chain, because the mechanics of the system are not in themselves enough to make it work" (p. 84). Therefore, while the single-case study presented here does contain an interesting and indepth investigation of a business phenomenon, it is not entirely clear that the case study is widely generalizable, and therefore, that the study is valuable in a research context. There is very little discussion of the methodology of the research at all, and no attempt to explain the internal or external validity of the study.

An example of both the bias and un-generalizability of the study is revealed on page 88: Rucci et al. (1998) concur that "some people in the company thought all of this was far too simplistic, but to most of us, simplicity was its strength." Clearly the researchers are invested in their interpretation of the case study – its strengths and weaknesses, wider applicability and representativeness. However, they may dismiss alternative viewpoints because of this bias,

weakening the validity of the study because of the lack of triangulation. Therefore, while they understand the limits of generalizability, bias and a lack of formalized application of case study methodology weaken the study in terms of concept, internal, and external validity. While Yin (1994) and Stake (1995) present thorough formal protocol for applying case study methodology, it seems that it is frequently overlooked in application to business research in favor of a specific, contextual narrative, rather than a robust, methodologically-sound understanding of data.

The Four Faces of Mass Customization

This second article, by Gilmore and Pine (1997), uses multiple-case studies to argue that there are four different approaches to customization in retail: collaborative, adaptive, cosmetic, and transparent. For each approach they give a brief case study. These studies are useful in developing a picture of exactly what is meant by a particular research approach. The studies are selected to reveal their commonality – mass customization – and the mutability of that concept in terms of both organizational and consumer needs. As Gilmore and Pine (1997) put it, "the four companies that we focus on identified the critical customer sacrifice gaps in their businesses and then carefully identified not only what but also when to customize in an effort to create the greatest customer-unique value at the lowest possible cost" (p. 96). The argument made in the research article is valid because it is triangulated through the data source - the researchers have attempted to identify data that remains the same in different contexts (Denzin, 1984).

The researchers therefore seek to make their study both internally valid, by comparing different approaches to the same phenomenon, and externally valid, by identifying a common phenomenon in business and seeking multiple strategies for addressing it.

However, this paper also represents some of the downfalls of the multiple-case study approach in business research: treating case studies as samples, and working backward from theory to cases. In this paper, the researchers seem to have identified four approaches and then looked for case study examples that fit their framework.

Eisenhardt's (1989) argument that there is a "lack of clarity about the process of actually building theory from cases, especially regarding the central inductive process and the role of literature" (p. 532) seems to be supported by this sampling strategy of case selection. While this presents a compelling theoretical argument, it does not necessarily fit Yin (1994) or others' protocols for effective use of the case study in business research.

The researchers' continuous use of more and more cases as 'examples' of the applicability of their theory helps to generalize, but weakens the depth and contextuality of the case studies, which might in fact limit their usefulness in business research, where context and the process of implementation are important. As Stake (1995) argued, the data that emerged from various case studies would find resonance in the experiences of a broad selection of readers, and therefore facilitate greater understanding of the phenomenon through triangulation with other researchers and readers. This is apparently the approach taken by Gilmore and Pine (1997) in this

study, as they argue that they are providing "a framework for companies to design customized products and supporting business processes" (p. 101). This multiple-case study points out the methodological weaknesses of the case study approach in business research contexts, where samples or examples are often valued for their proof of a framework or theory.

However, if the researcher or businessperson using the article applies their own methodological rigor – as suggested by Stake – some validity and generalizability emerges from this study.

CONCLUSION

With researchers lamenting the restriction of case studies and other qualitative methods to sociological and phenomenological research, business research has increasingly looked to create a more holistic approach to the organization through a combination of qualitative and quantitative methods. This literature review has sought to uncover the ways that case studies can illuminate and obfuscate certain business research problems. The case study is a qualitative methodology that has been increasingly frequently employed in business research, notably in response to the business school approach promoted by such institutions as Harvard Business School. This literature review has examined the theories and value of the case study in examining the operation and functions of business, critically reviewing two research articles from the Harvard Business Review that use case study methodology in order to better understand the strengths and weaknesses of this method. One article presented a single-case study that provided depth and valuable process analysis, but was susceptible to bias and a lack of generalizability. The second article was a multiple-case study in support of a new business framework that provided generalizability and external validity, but little depth and a sampling strategy that did not adhere to the literature's description of good case study protocol. While the majority of case study theory has developed outside of the business research area, the methodological issues that occur in social research are important to understand when applying the methodology to business research because qualitative research methods deserve a rigor comparable to that generally reserved for quantitative methods.

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PERMANENT CURRENT LIABILITIES, CAPITAL BUDGETING, AND THE OPPORTUNITY COST OF CAPITAL

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ABSTRACT

This paper argues that financial managers should include the cost of permanent current liabilities as a component in calculating the opportunity cost of capital. The authors present the rationale for including permanent current liabilities when ranking and selecting proposed capital projects and discuss potential underinvestment and overinvestment arising from excluding their cost. The paper illustrates the way to measure permanent current liabilities, estimate their after-tax cost, convert after-tax costs into effective equivalents, and combine them into a single component cost. The authors use a spreadsheet application and data from an example firm to illustrate overinvestment from ignoring the cost of permanent current liabilities.

Keywords: capital budgeting, working capital, permanent current liabilities, cost of capital, corporate finance

INTRODUCTION

Agency theory suggests that the objective of the firm is to maximize shareholder wealth by increasing stock price. Implicit in this objective is the requirement that management conduct a cost benefit analysis and select proposed capital projects that are expected to maximize shareholder wealth. Discounted cash flow models such as net present value (NPV) and internal rate of return (IRR) are methodologies commonly used in this process.

Applying discounted cash flow models successfully depends on accurately forecasting cash flows and measuring the opportunity cost of capital invested in a proposed project. This paper addresses the cost of permanent current liabilities (PCLs) as a component in estimating the opportunity cost of capital to a company. We argue that part of current liabilities should be included in the calculation. We then illustrate the impact of its inclusion on the opportunity cost of capital, and then extend the calculation to an example company with an Excel spreadsheet suitable for classroom use.

The paper is organized as follows: Part 1 surveys the exclusion of permanent current liabilities from the literature of finance. Part 2 illustrates a method to determine permanent

current liabilities with financial data from a company's operating cycle. Part 3 presents a discussion of the relationship between permanent current liabilities, overinvestment, and underinvestment. Part 4 reviews the way to convert a before-tax cost of a permanent current liability to an after-tax basis and demonstrates how to calculate the overall cost of permanent current liabilities. Part 5 presents an example of including the cost of permanent current liabilities in calculating the weighted average cost of capital. In this section a spreadsheet illustrating the cost of capital calculation with publicly available data from an example firm is presented. Part 6 concludes with a summary and a call for additional research.

NEGLECT OF PERMANENT CURRENT LIABILITIES

Finance text books are almost universal in their neglect of permanent current liabilities when calculating the opportunity cost of capital. For example, Ross, Westerfield, and Jordan (2003, pp. 493-424) in their chapter on the cost of capital do not mention either the cost of current liabilities nor of permanent current liabilities. Besley and Brigham (2008, pp. 449-492) disregard current liabilities in their chapter on the cost of capital. Keown, Martin, and Petty (2011, pp.234-263) also ignore permanent current liabilities in their chapter on the cost of capital. Brealey, Myers, and Allen (2011), however, acknowledge that current liabilities may play a role in capital budgeting. On page 480 of their text they note that many companies ignore the cost of short-term debt when calculating the opportunity cost of capital. They further comment, "In principle this is incorrect. . . . A company that ignores this claim will misstate the required return on investments." Brealey et al., does not develop the methodology to use in including the cost of short-term debt in calculating OCC. Nor does it illustrate its inclusion. We develop the methodology, illustrate its application, and include a spreadsheet for instructor and student use.

The journal literature on the cost of capital also largely fails to address the role of current liabilities as a component in calculating the opportunity cost of capital. For example, Mehta, Curley, and Fung (1984), Arzac (1986), Balzenko and Pavlov (2009), and Fernandez (2007) ignore current liabilities in calculating the opportunity cost of capital. Surveys of the opportunity cost of capital also fail to reveal the use of permanent current liabilities by finance practitioners. For example surveys by Scott and Petty (1984), Gitman and Vandenberg (2000), and Burns and Walker (2009) suggest that financial managers are either oblivious to the need to include permanent current liabilities in calculating the opportunity cost of capital or consider it trivial. We leave the issue for future surveys to consider because none as of this date has asked questions about the use of current liabilities in capital budgeting or in calculating the opportunity cost of capital.

PERMANENT AND TEMPORARY CURRENT LIABILITIES

Permanent current liabilities differ from temporary current liabilities. Permanent current liabilities form the base level of total current liabilities that management expects the company to hold for a period longer than an operating cycle, for example, a fiscal year. Temporary current liabilities, by contrast, change with seasonal demand and with swings in the business cycle.

Total current liabilities = Permanent current liabilities + Temporary current liabilities

Time series analysis of current liability levels would provide a more sophisticated (though perhaps no better) way to differentiate between temporary and permanent current liabilities. A trend line could be used measure the permanent level, and the error around the trend would estimate temporary current liabilities. A seasonal increase in the level of inventory, cash, or receivables is temporary because the company soon eliminates the increase. This increase is financed with temporary current liabilities. For example, a florist's increase in roses before Valentine's Day is a seasonal part of inventory. The florist will soon eliminate the increase by sales to people in love (or to the guilt-ridden). The minimum number of roses the florist maintains during the year is the permanent level of inventory of roses.

Figure 1 illustrates the way a company finances growth. It shows long-term debt and equity growing in stair-step fashion to reflect the episodic nature of its acquisition. The figure shows permanent current liabilities increasing steadily as growth in sales triggers a permanent increase in current liabilities. The curve above permanent current liabilities is the amount of total current liabilities. The area between the maximum and minimum of current total current liabilities is the temporary amount.

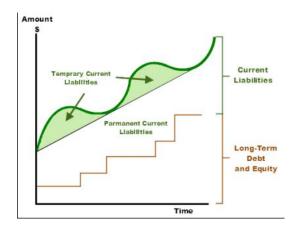


Figure 1 Permanent and Temporary Current Liabilities As a Company Grows

Consider an example of distinguishing permanent from temporary current liabilities. Nesbitt Company has the following values of current liabilities over its 12-month operating cycle as presented in Table 1:

Table 1: Hypothetical Minimum and Maximum Current Liabilities				
Current Liabilities	Maximum	Minimum		
Accounts payable	\$220,000	\$136,000		
Taxes payable	72,000	72,000		
Commercial paper	425,000	280,000		
Notes payable	80,000	15,000		
Bond principal payable	<u>115,000</u>	62,000		
Total current liabilities	\$912,000	\$565,000		

The estimated amount of permanent current liabilities is the \$565,000 minimum and temporary current liabilities are \$347,000 (\$912,000–\$565,000).

Recent four quarters of data for Delta Airlines presented in Figure 2 illustrate the division between temporary and permanent current liabilities for an actual company. All financial data in this paper are publicly available from http://moneycentral.msn.com. Panel A in Figure 2 below shows dollar values of current liabilities during 2009-2010 and in Panel B percentage values along with the minimums in the final column. Total current liabilities reached a maximum of \$11.892 billion and a minimum of \$9.797 billion over the period. The data suggest a value of \$9.797 billion permanent current liabilities.

Panel B shows each current liability as a percentage of total debt and equity financing. The values suggest that the amount of financing with permanent current liabilities is not trivial. Total current liabilities reach a maximum of 27.39% of total liabilities and fall to a minimum of 22.50%. At 22.50%, the amount of financing provided by permanent current liabilities is a large portion of financing for Delta Airlines assets.

Table 2 contains recent (2010) proportions of permanent current liabilities relative to total financing of three firms in addition to Delta Airlines. The implication is that these four firms are ignoring the cost of a substantial amount of financing when calculating the opportunity cost of capital.

Figure 2 Delta Airlines Liability Structure

		D	elta Airlines, lı	nc. (\$ in millio	ns)			
Panel A								
Liabilities			9/30/2010	6/30/2010	3/31/2010	12/31/2009		
Accounts Pa	yable		1661	1630	1505	1249		
Payable/Acci	rued		0	0	0	0		
Accrued Exp	enses		1888	1810	1755	1663		
Notes Payab	le/Short Tern	n Debt	0	0	0	139		
Current Port.	of LT Debt/C	apital Leases	2302	1555	1665	1533		
Other Currer	nt Liabilities,	Гotal	5969	6897	6299	5213		
Total Curren	t Liabilities		11820	11892	11224	9797		
Panel B								
Liabilities			9/30/2010	6/30/2010	3/31/2010	12/31/2009	Minimum	
Accounts Pa	yable		3.85%	3.72%	3.39%	2.87%	2.87%	
Payable/Acci	rued		0.00%	0.00%	0.00%	0.00%	0.00%	
Accrued Exp	enses		4.38%	4.13%	3.96%	3.82%	3.82%	
Notes Payab	le/Short Tern	n Debt	0.00%	0.00%	0.00%	0.32%	0.00%	
Current Port	of LT Debt/C	apital Leases	5.33%	3.55%	3.76%	3.52%	3.52%	
Other Currer	nt Liabilities,	Γotal	13.83%	15.74%	14.21%	11.97%	11.97%	
							Minimum	
Total Curren	t Liabilities		27.39%	27.15%	25.31%	22.50%	22.50%	
Source:						Symbol=DAL&I		

Table 2: Permanent Current Liabilities of Selected Firms			
Firm	Permanent Current Liabilities (% of Total Financing 2010)		
Delta Airlines	22.50%		
Hasbro	16.53%		
Quiksilver	17.63%		
Kraft Foods	14.55%		

PERMANENT CURRENT LIABILITIES IN CAPITAL BUDGETING

Ignoring the cost of permanent current liabilities distorts the calculation of the opportunity cost of capital, the rate of return required by contributors of long-term debt and equity to finance accepted capital projects. By distorting the opportunity cost of capital, ignoring permanent current liabilities misallocates capital investments.

Evaluating proposed capital projects relies on the separation of the investment decision from the financing decision. Management evaluates the project with a discounted cash flow method such as internal rate of return or net present value, then rank orders them. The entire outlay on a proposed capital project is the increase in current assets and depreciable property (long-term assets).

To determine the opportunity cost incurred by the contributors of finance, management calculates the opportunity cost of capital invested in the proposed project. The amount of long-

term financing in a project is the outlay for depreciable property (adjusted as needed for an investment tax credit) plus net working capital. Net working capital is part of the mix because it is the amount of current assets financed with long-term debt and equity. The conventional way of estimating the opportunity cost of capital is to include the costs of long-term debt and equity, ignoring current liabilities.

Net working capital is the amount of current assets financed with long-term debt and equity. Consider the common-size T-account balance sheet below in Table 3.

Table 3: Common-Size Balance Sheet				
Assets Liabilities and Equity				
Current assets	\$ 80	Current liabilities	\$ 60	
Long-term assets	<u>120</u>	Long-term debt	90	
		Shareholder equity	<u>50</u>	
	\$200		\$200	

The balance sheet in Table 3 shows \$20 of current assets financed with long-term debt and equity, measured as net working capital:

Net working capital =
$$(\text{Long-term debt} + \text{Equity}) - \text{Long-term assets}$$

= $(90 + 50) - 120$
= 20

In this example, long-term creditors and shareholders financed \$120 of long-term assets and \$20 of current assets as shown in Table 4. Moreover, \$60 of current liabilities are used to finance the project. If in this example permanent current liabilities are \$50 and temporary current liabilities \$10, then management should include in calculating the opportunity cost of capital the total of long-term debt, shareholder equity, and permanent current liabilities for a total of \$190:

Table 4: Long Term Financing Sources				
Total cost of project		\$200		
Less long-term financing				
Long-term debt	\$90			
Add equity	<u>50</u>			
Total		\$140		
Remaining finance needed		60		
From temporary current liabilities	\$10			
From permanent current liabilities (PCLs)	50			
Long term sources of funds				

Table 4: Long Term Financing Sources				
Permanent current liabilities (PCLs)	\$ 50			
Add long-term financing (from above)	<u>140</u>			
Total project financing including PCLs	\$190			

Failure to include the cost of permanent current liabilities in calculating the opportunity cost of capital results in either underinvestment or overinvestment. Overinvestment or underinvestment leads to failure to maximize shareholder wealth (Pawlina, 2007; Frazoni, 2009; Dybvig and Warachka, 2011). With an upward sloping yield curve, failure to include the (lower) cost of current liabilities in the calculation leads to an overstated OCC and underinvestment. With a downward sloping yield curve, the opposite occurs as management applies an understated hurdle rate to proposed capital projects. Including the cost of permanent current liabilities extends the analysis of Hill, Kelly, and Highfield (2010) who note that management should consider working capital conditions when evaluating proposed capital projects. In this paper, we suggest that the cost of working capital (specifically, of permanent current liabilities) should be a part of the mix in addition to conditions in the capital markets.

TAX CONSEQUENCES AND EFFECTIVE COSTS OF PERMANENT CURRENT LIABILITIES

As with other debt sources, financial managers must adjust the cost of current liabilities for tax consequences to calculate the opportunity cost of capital. Taxes decline with tax-deductible interest payments, thereby reducing the cost of borrowing. For example, paying \$1 interest reduces taxable earnings \$1 which, in turn, reduces the company's tax bill.

The following adjustment is a first approximation of the after-tax cost of permanent current liabilities expressed as a rate:

$$K_{pcl} = i_{bt} - (i_{bt} \times T)$$

$$K_{pcl} = i_{bt} \times (1 - T)$$

Where Kpcl = after-tax cost of permanent current liabilities, ibt = before-tax interest rate of permanent current liabilities, and T = borrower's marginal tax rate.

As an example of the adjustment, consider hypothetical data for Nesbitt Company. It has bank loans outstanding with a before-tax interest cost of 10.03%. Nesbitt Company is in the 34% marginal tax bracket and pays taxes at an average 28% rate. The after-tax interest cost of bank loans Kbl is 6.62% calculated with the marginal tax rate as follows:

$$K_{bl} = i_{bt} x (1 - T)$$

= 0.1003 x (1 - 0.34)
= 0.1003 x 0.66
= 0.0662 or 6.62%

The after-tax cost of each separate permanent current liability combines with the cost of each other to generate the component cost of permanent current liabilities. Doing so requires using effective rates of interest.

Suppose that Nesbitt Company has bank loans with nominal after-tax interest cost of 6.62% annualized monthly. The annual effective after-tax rate of interest cost KBL may be estimated as 6.82% per year compounded annually:

$$K_{BL} = \left(1 + periodic \ cost\right)^{\frac{Periods}{in \ a \ year}} - 1$$

$$= \left(1 + \frac{K_{bl}}{m}\right)^{m} - 1$$

$$= \left(1 + \frac{0.0662}{12}\right)^{12} - 1$$

$$= (1 + 0.0055)^{12} - 1$$

$$= 1.0682 - 1$$

$$= 0.0682 \ or \ 6.82\%$$

Combining individual effective costs into an average requires using a weighted average (rather than a simple average) because a weighted average recognizes the relative influence of each source. The weight assigned to each is the percentage of the total amount each source supplies. Market values should drive these weights, but given the short term nature of current liabilities book values provide a reasonable estimate of market rates.

Consider again the Nesbitt Company data in Table 5. After calculating the nominal cost of each permanent current liability, the financial manager converts each after-tax cost to its effective equivalent rate as follows:

Table 5: Nesbitt Company PCL Amounts and Costs					
Source Permanent Amount Effective After-Tax Cost					
Accounts payable A/P	\$136,000	0.2232			
Taxes payable T/P	72,000	0.0000			
Commercial paper CP	280,000	0.0558			

Table 5: Nesbitt Company PCL Amounts and Costs					
Source	Permanent Amount	Effective After-Tax Cost			
Bank loans payable BL	15,000	0.0682			
Bond principal currently due BP	62,000	0.0806			
Total	\$565,000				

The overall cost of permanent current liabilities is 9.2% per year compounded annually as calculated in Table 6 below. Column 3 is the weight assigned to each individual source to reflect its contribution to the total in column 2. Column 4 shows the assumed effective after-tax cost of each source.

Table 6: Example Calculation of Opportunity Cost of PCL for Nesbitt Company						
(1)	(2)	(3) =	(4)	(5)=		
		$(2) \div \Sigma(2)$		$(3) \times (4)$		
		Weight	Effective			
Source	Permanent Amount	(rounded)	After-Tax Cost	Product		
Accounts payable	\$136,000	0.2407	0.2232	0.0537		
Taxes payable	72,000	0.1274	0.0000	0.0000		
Commercial paper	280,000	0.4956	0.0558	0.0277		
Bank loans payable	15,000	0.0265	0.0682	0.0018		
Bond principal currently due	<u>62,000</u>	<u>0.1097</u>	0.0806	0.0088		
Total	\$565,000	1.0000		0.0920		

Multiplying each effective after-tax cost in column 4 by its proportion of the total in column 3 gives the individual products in column 5. The cost of permanent current liabilities is 9.2% per year compounded annually, the total of column 5.

Placing the cost of each source in an equation makes it easy to see the contribution each makes to the weighted average:

$$\begin{split} K_{PCL} &= \left(K_{A/P} \times W_{A/P}\right) + \left(K_{T/P} \times W_{T/P}\right) + \left(K_{CP} \times W_{CP}\right) + \left(K_{BL} \times W_{BL}\right) + \left(K_{BP} \times W_{BP}\right) \\ &= 0.2232 \times \left(\frac{\$136,000}{\$565,000}\right) + 0 \times \left(\frac{\$72,000}{\$565,000}\right) + 0.0558 \times \left(\frac{\$280,000}{\$565,000}\right) + 0.0682 \times \left(\frac{\$15,000}{\$565,000}\right) + 0.0806 \times \left(\frac{\$62,000}{\$565,000}\right) \\ &= 0.0537 + 0 + 0.0277 + 0.0018 + 0.0088 \\ &= 0.092 \text{ ar } 9.2\% \end{split}$$

K denotes the cost of each source and W is the appropriate weight.

CALCULATING THE OPPORTUNITY COST OF CAPITAL

After estimating the component cost of permanent current liabilities, the financial manager must combine the result with the long-term debt and equity costs to yield the opportunity cost of capital (OCC). Management needs the OCC to select proposed capital projects ranked with discounted cash flow capital-budgeting methods.

The opportunity cost of capital is calculated by finding the weighted average of the component effective costs. Management accomplishes this step by multiplying each effective cost by its contribution to the total capital raised and summing the result. In the Modigliani and Miller (1958) model capital structure does not affect cost of capital and firm valuation. However, market imperfections, potential bankruptcy, and taxes combine to make capital structure a powerful influence on the opportunity cost of capital. See the review by Clark (1993).

The result is a weighted average that reflects the contribution to the total made by each group of investors:

$$\begin{aligned} \text{OCC} &= \left. \mathbf{K}_{\text{PCL}} \! \left(\frac{\text{PCL}}{\text{PCL} + \text{B} + \text{P} + \text{S}} \right) + \mathbf{K}_{\text{B}} \! \left(\frac{\text{B}}{\text{PCL} + \text{B} + \text{P} + \text{S}} \right) + \mathbf{K}_{\text{P}} \! \left(\frac{\text{P}}{\text{PCL} + \text{B} + \text{P} + \text{S}} \right) + \mathbf{K}_{\text{c}} \! \left(\frac{\text{S}}{\text{PCL} + \text{B} + \text{P} + \text{S}} \right) \\ &= \left. \mathbf{K}_{\text{PCL}} \! \left. \mathbf{W}_{\text{PCL}} + \! \mathbf{K}_{\text{B}} \! \mathbf{W}_{\text{B}} + \! \mathbf{K}_{\text{D}} \! \mathbf{W}_{\text{P}} + \! \mathbf{K}_{\text{C}} \! \mathbf{W}_{\text{C}} \right. \end{aligned}$$

Where $K_{PCL} = cost of permanent current liabilities$

 $K_i = cost of long-term debt$

 $K_p = cost of preferred stock financing$

 K_C = cost of common equity financing

 W_j = weight; proportion of total capital represented

by each component (total = 100%)

In this calculation the weights should use market values rather than book (historical) values from the balance sheet because market values reflect cash that management expects from sources. Book values reflect amounts raised in the past. For example, suppose Nesbitt Company will invest in several proposed capital projects during the upcoming quarter. Management expects from each source the following optimal proportions and effective costs given in Table 7:

Table 7: Calculating the Opportunity Cost of Capital Including PCL					
(1)	(2)	(3) Effective	(4)=(3)×(2)		
Source	Weights	Cost	Product		
Permanent current liabilities	0.06	0.0920	0.0055		
Bond financing	0.24	0.0615	0.0148		
New preferred	0.20	0.1310	0.0262		

Table 7: Calculating the Opportunity Cost of Capital Including PCL					
(1) (2) (3) (4)=(3)×(2) Effective					
Source	Weights	Cost	Product		
Internal equity	0.50	0.1735	0.0868		
Total required financing	1.00		0.1333		

OCC =
$$(0.0920 \times 0.06) + (0.0615 \times 0.24) + (0.1310 \times 0.20) + (0.1735 \times 0.06)$$

= 13.33%

The opportunity cost of capital in this example is 13.33% per year compounded annually and is the weighted average cost of capital (WACC). The WACC is the appropriate discount rate to use when calculating net present value of a firm's proposed capital budgeting projects assuming that each project is at the same risk level.

The following spreadsheet example in Figure 3 illustrates the process of calculating the WACC using publicly available data from Quicksilver, Inc., as of 31 July 2010 (Quiksilver, Inc. designs, produces, and distributes branded apparel and accessories in over 90 countries).

Quiksilver, Inc 7/31/10 Balance Sheet Data (3) % Total Financing at Wgt. Avg Cost Wgted Avg Cost Permanent of the PCL as a % of Total Permanent current liabilites \$ in Millions ERI ERI A-T Category Category Financing \$137.35 47.71% 8.71% 2/10 n 30 44.5853% 27.64% 2/10 net 30 ERI 100] 365/(30-20) Accrued Expenses \$84.46 29.34% 5.35% 0.00% 0.0000% 0.00% 0.00% 0.000% 0.94% 1.25%, 3 months N/P & Short term debt \$14.89 5.17% 1.2559% 0.78% 0.04% 0.007% 98 Current Portion LT Debt \$45.20 15.70% 2.87% 5.00%, 6 months 5.0625% 3.14% 0.49% 0.090% Other Current Liabilities 0.38% 0.00% 0.0000% 0.00% 0.00% 0.000% \$6.00 2.08% Total Perm CL \$287.90 100.00% 18.25% 2.504% 2.504% \$ in 000 Weights with no Perm CL ERI ERI A-T Long Term Debt: % category % total \$759.34 6.75% Bonds (10yr) 93.51% 48.14% 4.19% 3.91% 58.88% 0.61% 0.00% 0.00% 0.00% 0.75% Deferred Income Tax \$9.66 1.19% Other Liabilities 2.73% 8.25% 5.12% 0.27% 3.34% \$43.07 5.30% 10 Total Long Term Debt 100.00% 51.48% 62.97% \$812.07 ERI A-T ERI \$477.49 100.00% 15% 15.00% 15.00% 37.03% 11 30.27% Equity \$1,577,46 100.00% 12 Total Total LT Capital 13 \$1,289,56 38% 14 Marginal Tax Rate

8.189%

9.199%

16

WACC with Perm CL

Figure 3 Calculation of WACC and NPV Using Quiksilver Balance-Sheet Data

Rows 1 through 5 of Figure 3 include PCL data for Quiksilver. The balance sheet date for Quiksilver data is 31 July 2010, but the level of permanent current liabilities is the minimum amount of total current liabilities from the prior three quarterly balance sheets. The minimum level of PCAs was in April 2010. The remainder of the liabilities and equities are from the July 31 date.

Category percentages are in Column (3). Column (4) presents the weight of each category as a percent of total financing (the total of PCLs, long term debt, and equity). Terms in Column (5) and ERIs in rows 6 through 11 of Column (6) are assumed, but seem reasonable. Rows 1 through 5 of Column (6) calculate effective annual rates using the terms. Column (7) converts the rates to an after tax basis for both PCL and long term debt categories. Column (8) provides weighted average cost calculations for each category: PCL, long term debt and equity. Rows 1-5 of Column (9) are used to calculate the weighted PCL cost as a percent of total financing. Rows 7 through 10 of Column (9) give the weights of the long term financing sources if PCLs are excluded. The amount of PCLs is 18.25% with an average cost of 13.72%. The quantity of PCLs is 17.63% of the April quarter's total financing as reported in Figure 4. However, these PCLs are 18.25% of the 31 July balance sheet sources of funds.

In this example, the cost of permanent current liabilities is more than that of long-term debt (13.72% > 4.18%). WACC calculations are as follows:

$$WACC_{with\ PCLs} = (18.25\% \times 13.72\%) + (51.48\% \times 4.18\%) + (30.27\% \times 15.00\%)$$

= 0.092 or 9.2%

WACC without PCLs =
$$(62.97\% \times 4.18\%) + (37.08\% \times 15\%)$$

= $0.0819 \text{ or } 8.19\%$

Although the difference in the calculated costs is approximately one percentage point, as a percentage, the WACC with PCLs is 12.33% more than without PCLs. We explore the implications of this difference below.

WACC no Perm CL 8.189% WACC with Perm CL 9.199% Simple NPV Example; assumed cash flows Year 1 2 3 4 5 \$0 \$520,000 \$520,000 \$520,000 \$520,000 \$520,000 OCF NCS (\$2,000,000) ANWC (Non permanent) (\$100,000) \$100,000 \$520,000 \$520,000 \$520,000 \$620,000 CFA (\$2,100,000) \$520,000 IRR 8.778% Conclusion NPV @ WACC no Perm CL \$33,361 Accept NPV @ WACC w/ Perm CL (\$23,367)Reject

Figure 4 Calculation of the Net Present Value (NPV) of a Hypothetical Project

Using the WACC Calculated with and without PCLs

Figure 4 presents expected annual cash flows, NPV and IRR from a hypothetical 5-year project for Quiksilver. The internal rate of return is 8.778%. Net present value calculations apply the two WACC measures calculated with and without PCLs to calculate the project's net present value in each alternative. NPV using WACC without permanent current liabilities is \$33,361, and NPV with PCLs is -\$23,367. The difference would be greater if the economic life of the project were longer.

The example calculations in Figure 4 emphasize the materiality of excluding PCLs because in the former case management would accept the project, but reject it in the latter case. Even if the projects were acceptable with either methodology, the difference in NPV has implications under conditions of capital rationing: The rank order of a proposed project without permanent current liabilities in the mix may be substantially greater than that with it, leading to the proposed project being accepted in place of another. In this sense, the company runs the risk of overinvesting by selecting a project with overstated NPV.

SUMMARY AND CONCLUSION

This paper examined the role of the effective after-tax cost of permanent current liabilities as a component of the opportunity cost of capital. The first part of the paper examined the way current liabilities divide into permanent and current parts. An example calculation showed that permanent current liabilities are the minimum level of current liabilities over an operating cycle.

The paper noted the need to convert each cost used in the calculation of the opportunity cost of capital into its effective equivalent. An example of a bank loan illustrated the method to

convert a quoted rate and into its after-tax and effective equivalent rate. The paper developed the method to combine several permanent current liabilities into one after-tax effective component cost to use in calculating the opportunity cost of capital and then calculated the opportunity cost of capital for an example company. The paper concluded with a spreadsheet application of the process using publicly available data.

Although this paper presented a coherent and consistent way to incorporate permanent current liabilities into the calculation of the opportunity cost of capital, it begs the question of a need to do so. That is, we have not yet shown the materiality of the choice. For example, we hope to conduct time-series analyses of current liabilities for a large sample of companies, and then use the resulting standard error of the estimate as a dependent variable in further analysis.

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PREDICTION OF KNOWLEDGE ACQUISITION, KNOWLEDGE SHARING AND KNOWLEDGE UTILIZATION FROM LOCUS OF CONTROL: AN EMPIRICAL INVESTIGATION

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ABSTRACT

This study investigated the relationship between locus of control (LOC) and knowledge management (KM), i.e. knowledge acquisition, knowledge sharing and knowledge utilization. Participants were 155 individuals working in medium sized Lebanese organizations. Using hypothesis test and regression analysis, results indicated that internal LOC was positively related to knowledge acquisition, knowledge sharing and knowledge utilization. Also, a positive and significant correlation exists between external LOC and knowledge utilization whereas no relationship was found between external LOC and knowledge acquisition and sharing.

INTRODUCTION

Since the start of family business, owners have transferred their profit-making shrewdness to their children, artisans have conscientiously taught their skills to beginners, and employees have transferred their technical skills and ideas between each other. Therefore, there is actually nothing new about knowledge management (KM) (Hansen *et al.*, 1999). However, nowadays, fast environmental changes and rapid technological progress, KM has become significantly important. Researchers have recognized the fact that efficient KM is a key success factor and a driving force for achieving a sustainable competitive advantage (Nonaka, 1991; Quinn, 1992; Klein & Prusak, 1994; Winslow & Bramer, 1994; Bohn, 1994; Ulrich, 1998; Drucker, 2001; Bryant, 2005). In addition, other scholars contended that the traditional production factors (land, labor, and capital) have now diminishing returns whereas knowledge which has become the primary asset for both organizations and the economy (Drucker, 1994), is subject to increasing returns (Grant, 1995).

The number of studies on KM has more than doubled in the past decade as reported by Despres and Chauvel (1999). These studies have focused on different aspects of KM. Such as KM and organizational commitment (Putti *et al.*, 1990), knowledge transfer and individual characteristics (Vera-Muñoz, Ho & Chow, 2006), KM and experience (Fargher et al., 2005), KM and ability and motivation (Solomon & Shields, 1995) and KM and culture (Taylor *et al.*, 2001).

According to Gupta and Govindarajan, (2000, p. 478), "there are many possible determinants of motivational dispositions to engage in inflows or outflows e.g., personal characteristics of subsidiary managers such as age or locus of control and their organizational commitment". Despite this considerable abundance in KM literature, no existing studies have investigated thoroughly the relation between KM and locus of control (LOC).

This research studies the influence of internal and external LOC as a personality trait on knowledge acquisition, sharing and utilization. This paper will assist human resource managers when selecting employees for certain positions which require KM. Moreover, it observes the effect of LOC on KM in organizations.

LITERATURE REVIEW

Knowledge Management

Knowledge is information, ideas and expertise with a purpose that have been put to productive use (Bartol & Srivastava, 2002). It is described as the consciousness to understand ideas, events, information acquired through experience and learning, and the collection of interrelated information which has less significant value when separated. However, it is the individual's justified true belief which may improve the potential, efficiency and capacity of individuals, groups, communities and organizations (Nonaka, 1994).

There are two forms of organizational knowledge: explicit or tacit (Nonaka, 1991; Nonaka & Takeuchi, 1995). Explicit knowledge is knowledge that may be codified, documented or stored in accessible information technology systems such as corporate intranet web site, databases, shared directories on file servers or any other forms of the organization's intellectual property portfolio. While tacit/implicit knowledge resides in the individual's mind which makes it harder to express in writing. It includes operational know-how, technical expertise, insights about an industry, and business decision (Hansen *et al.*, 1999). The main challenge today is how to manage knowledge in a way to transform tacit into explicit.

During the past decade, organizational knowledge activities have increased drastically (Davenport & Klahr, 1998) and knowledge became the primary asset which generates organizational wealth (Cole, 1998) and whose protection has turned to be critical for the generation and preservation of competitive advantage (Porter-Liebeskind, 1996). According to Scarborough & Swan (1999), KM is a procedure of creating, acquiring, capturing, sharing and utilizing knowledge in order to develop organizational performance and learning. It encompasses the creation and acquisition, modification, utilization, storing and protection, transfer and sharing, translation and repurposing, and access and disposal of knowledge. However, it is not only about the knowledge flow between people and information technology systems and vice versa, but it is also about how knowledge is conveyed from one individual to another.

It is essential to conserve and share knowledge in the organization so that when an employee leaves, the existing employees will have sufficient information about how to perform their job (Probst *et al.*, 1999 and Shaw *et al.*, 2003). However, a common problem of KM is knowledge retention. When there is a lack of knowledge sharing, difficulties exists in obtaining adequate knowledge after the employee leaves the organization.

According to Tan (2000), KM is the practice of actively and analytically controlling knowledge and information within an organization. KM possess strategies which intensively promote knowledge sharing by linking people together and making information easily accessible so that they learn from documented experiences (i.e. explicit knowledge). When knowledge is retrieved from those who hold it and shared with those who need it, organizational effectiveness is significantly improved, as Mecklenberg *et al.*, (1999 p.162) affirmed that "knowledge management allows companies to capture, apply and generate value from their employees' creativity and expertise".

Two attitudes toward KM have been identified (Hansen, 1999): codification and personalization. The first is a document driven strategy where the knowledge which is thoroughly encoded easily accessible information technology systems, becomes independent of its original owner, and easily accessible and used by others. Conversely, the latter is a collaboration strategy between at least two individuals to share tacit knowledge, closely tied in this case to its owner.

From the above, KM within the organization leads to a sustainable competitive advantage (Riege, 2005; Nonaka & Takeuchi, 1995). On the other hand, personality traits explain how individuals behave in different situations (Costa & McCrae, 1992). According to Lin (2007), knowledge sharing depends on the person's values, beliefs, motivation, experience and personal traits. Then, the researchers expect personality traits (e.g. LOC) to correlate with knowledge acquisition, knowledge sharing and knowledge utilization.

Locus of Control

The psychological concept of LOC was first introduced in 1954 by Julian Rotter (Rotter, 1954). It is defined as the people's perception of the source of control over their destiny or actions (Gershaw, 1989). It is the extent to which individuals judge themselves or believe that an external force, such as luck, is related to the influence on particular events in their life (Moorhead and Griffin, 2004; Firth *et al.*, 2004). Individuals, who consider that their own capacities and behaviors can determine their rewards, are referred to as internals, while externals assume that they obtain rewards outside of their control (Rotter, 1966).

Thus, internals consider that they have the capability to influence the environment around them and that they can alter the outcome of events that influence them through their behavior, attitudes, ability, personality and effort. On the other hand, externals consider that the outcome

of the events is a function of uncontrollable or incomprehensible forces such as fate, luck, chance and stronger people or powerful institutions (Phares, 1962).

This concept has been first applied to the field of organizational behavior by Spector (1982). Further research has related it to individual's job satisfaction, job performance and job stress (Chen & Silverthorne, 2008; Martin *et. al.*, 2005), motivation (Chen & Silverthorne, 2008) and commitment (Judge *et al.*, 2000). In addition, it has been presented as a moderating factor between incentives and motivation, satisfaction and turnover. Also, many scholars proved that high internal LOC scores are good predictors of occupational success (McShane & Von Glinow, 2008).

Previous researches show that individuals with high internal LOC are more likely to experience higher levels of job satisfaction and performance and lower levels of job stress (Chen and Silverthorne, 2008). According to Phares (1962), people with internal LOC prefer to have power over their own environment, learn faster and perform better in tasks that require expertise and skills. They do not value outside support or help, and prefer to count on themselves. Their capability will lead to high self-confidence. However, individuals who think that the rewards they receive are due to external factors rather than internal factors are more likely to be less productive and act more passively. Externals tend to adapt to the group's influences and believe that success is achieved with the help of others.

Rahim (1996) concluded that internals can cope with stress more easily and effectively than externals. According to Kalbers and Fogarty (2005), individuals with an internal LOC are less likely to experience a high level of stress but those with an external LOC are more likely to be vulnerable to stress and perceive certain events as stressful. Moreover, external LOC has a significant negative influence on job stress and tends to reduce personal accomplishments and job performance.

Internals are more likely to have higher levels of job performance and satisfaction (Martin *et al.*, 2005). It has long been assumed that higher employee satisfaction leads to an increase in employee performance and productivity (Lucas, 1999). However, while some researchers found that higher job satisfaction may lead to higher job performance others have not (Nerkar *et al.*, 1996). Jamal (1984) found that as job stress increased, the level of job performance decreased. He also found that job stress was significantly related to job satisfaction (Jamal and Baba, 2000).

Internals, tend to ask for more information about the tasks they have to perform in order to increase performance (Lefcourt, 1982). According to Gershaw (1989), internals can better evaluate, learn and obtain larger benefits from social support. They search and apply new knowledge that is helpful for dealing with difficulties and for control. Since internals are concerned with information and knowledge, the researchers predict that:

- H1: Internal LOC will be positively related to Knowledge Acquisition.
- *H2: Internal LOC will be positively related to Knowledge Sharing.*

H3: Internal LOC will be positively related to Knowledge Utilization.

Externals approach the task with less enthusiasm (Lefcourt, 1982) and are concerned with social demands. They merge easily with a group for support (Phares, 1962). Thus we predict that:

H4: External LOC will be negatively related Knowledge Acquisition.

H5: External LOC will be negatively related Knowledge Sharing.

H6: External LOC will be negatively related Knowledge Utilization.

METHODOLOGY:

The research aim was to determine the effect of internal and external LOC (the independent variables) on knowledge acquisition, knowledge sharing, and knowledge utilization (the dependent variables). For that purpose, the researchers surveyed employees working in medium size organization operating in Lebanon. Medium size enterprises are defined in this study according to the number of employees (100>employees<500) relative to the country size, where the majority of businesses are either small or medium.

The questionnaire used for this research was of three main parts: the first part collected demographic data and asked about age, gender, level of education, promotion and position. The second part included the Work Locus of Control Scale (WLCS) developed by Spector (1998). It is designed to measure LOC orientation in the work place, i.e. internal or external. This scale showed high reliability and validity (Furnham and Steele, 1993). This scale consisted of 16 questions, half related to internal LOC, and the other half to external LOC. This scale has a minimum score of 16 and a maximum score of 96. The lower score represents internal LOC and the higher score represents external LOC. In the third part KM components was measured using OECD (2003) scale. The researchers used 15 items with 5 questions related to knowledge acquisition, 5 related to knowledge sharing and 5 to knowledge utilization. The questionnaire were measured on a five point Likert scale that ranged from 1=strongly disagree to 5=strongly agree.

To test our hypotheses, a survey was carried out between October and December 2008. 200 questionnaires were distributed across six reputable companies in Lebanon with a letter indicating the purpose of the survey. The overall response rate was 77.5 per cent or 155 employees. The researchers stimulated participants to answer all the questions in the survey, assuring them absolute anonymity.

RESULTS:

Demographic Analysis

The purpose of this research was to investigate the relationship between LOC and KM (KA, KS and KU) and whether it enhances or impedes KM.

The major demographic results were as follows: 83.87% of the respondents were internals with a mean of 55.84 and standard deviation of 4.87. The remaining 16.13% were externals with a mean of 44.44 and a standard deviation of 2.66.

Fifty-five and one half percent (55.5 %) of the respondents were between 20-29 years old (see Diagram 1), with 51% females and 49% males. 58% held BA/BS degrees, 40% held Masters Degree, and the remaining 2% Doctorate. 62.6% (97 out of 155) were promoted, 42 out of 97 were between 20-29 years old, while the remaining was not promoted.

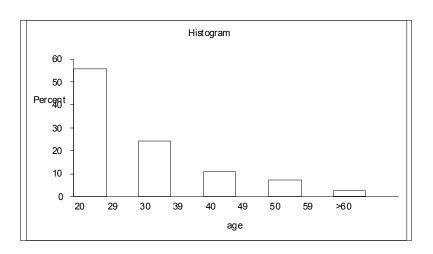


Diagram 1

The demographic variables did not show any significant relationship to neither KM facets (knowledge acquisition, knowledge sharing and knowledge utilization), nor personality traits (internal LOC/external LOC).

Discriminate Analysis for the variables: internal/external LOC

Using SPSS, a discriminate function analysis was performed to predict group membership based on a linear combination of the interval variables.

Table 1: Classification Results						
		loc	Predicted Group Membership			
			external	Internal	Total	
	Count	external	15	10	25	
Original		internal	34	96	130	
Original	%	external	60.0	40.0	100.0	
		internal	26.2	73.8	100.0	
a.71.6% of original grouped cases correctly classified.						

The above table (Table 1) shows that 15 individuals out of 25 were external LOC and 96 individuals out of 130 were internals. Therefore, the model correctly predicts our results, i.e. 71.6% of original grouped cases are correctly classified.

Hypothesis test

The hypothesis test (Means vs. Hypothesized value) was used to examine the association between LOC and KM variables (i.e. knowledge acquisition, knowledge sharing and knowledge utilization). The null hypotheses for each dependent variable (KA, KS and KU) are stated below:

- H1-0: Internal LOC and knowledge acquisition are not related.
- H2-0: Internal LOC and knowledge sharing are not related.
- H3-0: Internal LOC and knowledge utilization are not related.
- H4-0: external LOC and knowledge acquisition are not related.
- H5-0: external LOC and knowledge sharing are not related.
- H6-0: external LOC and knowledge utilization are not related.

Where Mean KA is the mean of knowledge acquisition, KS is the mean of knowledge sharing and KU is the mean of knowledge utilization.

The results from null hypotheses are stated in Table 2, 3, 4 and 5.

Table 2: Hypothesis Test results for H1-0		
Hypothesis Test: Mean vs. Hypothesized Value Internal LOC with knowledge acquisition		
3.0000	hypothesized value	
3.6508	mean KA	
0.5531	std. dev.	
0.0485	std. error	

Table 2: Hypothesis Test results for H1-0	
130	N
13.41	Z
0.00E+00	p-value (one-tailed, upper)

The result of the hypothesis test H1-0 is presented in Table 2. The computer output produced a Z-value of 13.41 and a corresponding P-value of 0.0000. Therefore, the test is highly significant. Thus, H1-0 is rejected.

Table 3: Hypothesis Test results for H2-0		
Hypothesis Test: Mean vs. Hypothesized Value		
Internal LOC with knowledge sharing		
3.0000	hypothesized value	
3.3092	mean KS	
0.5405	std. dev.	
0.0474	std. error	
130	N	
6.52	Z	
3.45E-11	p-value (one-tailed, upper)	

The result of the hypothesis H2-0 test is presented in Table 3. The computer output produced a Z-value of 6.52 and a corresponding P-value of 0.000. Therefore, the test is highly significant. Thus, H2-0 is rejected.

Table 4: Hypothesis Test results for H3-0		
Hypothesis Test: Mean vs. Hypothesized Value Internal LOC with knowledge utilization		
3.0000	hypothesized value	
3.8262	mean KU	
0.6534	std. dev.	
0.0573	std. error	
130	N	
14.42	Z	
0.00E+00	p-value (one-tailed, upper)	

The result of the hypothesis H3-0 is presented in Table 4. The computer output produced a Z-value of 14.42 and a corresponding P-value of 0.0000. Therefore, the test is highly significant. Thus, H3-0 is rejected.

No relationship has been found between External LOC and Knowledge Acquisition and Knowledge Sharing, thus H4-0 and H5-0 are accepted.

Table 5: Hypothesis Test results for H6-0		
Hypothesis Test: Mean vs. Hypothesized Value: external LOC with knowledge utilization:		
3.0000	hypothesized value	
3.5280	mean KU	
0.7346	std. dev.	
0.1469	std. error	
25	N	
3.59	Z	
.0002	p-value (one-tailed, upper)	

The result of the hypothesis test H6-0 is presented in Table 5. The computer output produced a Z-value of 3.59 and a corresponding P-value of 0.0002. Therefore, the test is highly significant. Thus, H6-0 is rejected.

From the above hypothesis tables (Table 2, 3, 4 and 5), results indicate that the null hypothesis H4-0 and H5-0 are accepted, while the null hypothesis H1-0, H2-0, H3-0 and H6-0 are rejected. Then more analysis of H1, H2, H3 and H6 among LOC is required.

For further analysis the researchers conducted a regression analysis with knowledge acquisition, knowledge sharing and knowledge utilization being the dependent variables and LOC being the independent variable. Hypothesis 1, 2, 3 and 6 were further tested for statistical significance.

Regression analysis

Regression results for internal LOC with Knowledge Acquisition

The analysis of these findings generated the following linear regression equation:

The results of the ANOVA showed an F-value of 33.286 and a significance of 0.000 at 0.05 significance level. Thus, the results support Hypothesis 1, i.e. knowledge acquisition is affected positively by internal LOC.

Regression results for internal LOC with Knowledge Sharing

The analysis of these findings generated the following linear regression equation:

The results of ANOVA showed an F-value of 68.632 and a significance of 0.000 at 0.05 significance level. The results support Hypothesis 2, i.e. knowledge sharing is affected positively by internal LOC.

Regression results for internal LOC with Knowledge Utilization

The analysis of these findings generated the following linear regression equation:

The results of ANOVA showed an F-value of 29.5 and a significance of 0.000 at 0.05 significance level. The results support Hypothesis 3, i.e. knowledge utilization is affected positively by internal LOC.

Regression results for external LOC with knowledge Utilization

The analysis of these findings generated the following linear regression equation

The results of ANOVA showed an F-value of 4.904 and a significance of 0.037 at 0.05 significance level. The results did not support Hypothesis 6 since knowledge utilization is affected positively by external LOC.

DISCUSSION

The researchers investigated the relationship between the internal/external LOC with the three variables of KM (knowledge acquisition, knowledge sharing and knowledge utilization). To the researchers' knowledge, this is the first study that examines the above mentioned relationship. The results from current study demonstrated overall strong empirical evidence that:

(a) a relationship exists between LOC and KM; (b) different relationships existed between internal and external LOC and the different aspects of KM.

The results showed that internal LOC is positively related to knowledge acquisition because internals like to acquire knowledge in order to develop their skills and enrich their knowledge. These individuals have a strong desire to learn, adopt new ideas and receive empowerment from managers (Lefcourt, 1982; Gershaw, 1989).

Internal LOC is highly linked to knowledge sharing. The higher the internal LOC the higher the individual contribution to knowledge sharing is. Individuals with high internal LOC have intrinsic interest and desire and are self-motivated people who like to share their knowledge with other employees in order to broaden their knowledge.

Although the results of the study demonstrated that both internals and externals were positively associated with knowledge utilization, their level of knowledge utilization varies from one another. In fact, externals are likely to rely more on automatic decision aids than internals because they prefer applying what others have come up with rather than making the effort themselves (Kaplan et al, 2001). They also tend to behave passively since they prefer delegating decision-making and problem-solving processes (Merton, 1946). However, individuals with high internal LOC prefer to take decisions themselves since they have more control of their work environment (Phares, 1962). This is in agreement with Hyatt and Prawitt (2001) that externals outperform internals in structured firm (Bamber and Snowball, 1988). Since structured firms have a stronger codification strategy and therefore stored knowledge is accessed and used more easily when making decisions. An interesting finding in this study is that having internal LOC positively correlated with the three variables of KM (knowledge acquisition, knowledge sharing and knowledge utilization) i.e., the higher the level of internal LOC the more the knowledge acquisition, sharing and utilization in the organizations.

CONCLUSION

This research extends the Organizational Behavior and KM literature and empirically tests the relationship between two personality traits, internal LOC and external LOC, with knowledge acquisition, knowledge sharing and knowledge utilization. The analysis showed how the personality traits had significant impact on knowledge acquisition, knowledge sharing and knowledge utilization. Our results cannot be generalized due to the small sample size, we recommend that further research should be carried on different size organizations, (small/large), different countries and sectors, where organizations value and support KM, to ensure its survival and success

MANAGERIAL IMPLICATION

The researchers recommend that human resource managers should focus on personality traits of the candidate as a predictor to knowledge acquisition, knowledge sharing and knowledge utilization. Human resource managers would also focus on personality traits that are unlikely, in order not to select these candidates.

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