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Exploring the Experiences of Call Center Employees Regarding Business Scripting

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Walden University

College of Management and Technology

This is to certify that the doctoral study by

Roman Dzuba

has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

Review Committee

Dr. Steve Roussas, Committee Chairperson, Doctor of Business Administration Faculty

Dr. Lisa Marie Kangas, Committee Member, Doctor of Business Administration Faculty

Dr. Gail Ferreira, University Reviewer, Doctor of Business Administration Faculty

Chief Academic Officer
Eric Riedel, Ph.D.

Walden University
2015

Abstract

Exploring the Experiences of Call Center Employees Regarding Business Scripting

by

Roman Dzuba

MBA, McGill University, 1994

BComm, McGill University, 1983

Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Business Administration

Walden University

June 2015

Abstract

Scripting, defined as the mechanization of business processes through automated tools or orchestrated responses, has played a significant role in shaping call center activities and the resultant customer relationship. However, findings of industry research have shown that the use of scripting to maximize operational efficiency has had a disempowering effect on call center employees by lowering their job-skill and knowledge requirements. Grounded in the concepts of knowledge management and knowledge transfer, this study explored the experiences of frontline call center employees on the effects of scripting on customer problem solving. A single-case study design with semistructured interviews was used with a population of 20 frontline employees in a North American call center to gather insights. Thematic analysis was applied to the interview data using nodes to identify emerging themes and insights. Three major themes emerged: First, although scripting had contributed to improved service quality and operational efficiency, scripted practices undermined the use of team knowledge and limited the amount of shared information. Second, the employees requested that call center scripted solutions be more intuitive and better aligned to knowledge requirements. Third, the employees suggested that an object-oriented approach to solution management be used, one that could better leverage communities of practices and collective team knowledge sharing within the organization. This object-oriented approach to solution management may promote virtual knowledge flow and the building of subject matter expertise that could elicit higher agent engagement and problem ownership. The proposed object-oriented approach to knowledge sharing is important to management, as it could help facilitate knowledge reuse and improved organizational performance.

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Dedication

I dedicate this research to the devoted agents of outsourced call centers who continue to service the global community. I hope that this research will shed light on scripting management practices and how these practices have affected the opportunity to learn, grow, and contribute to the operational success of the organization.

Acknowledgments

My sincere thanks goes to my committee members Dr. Lisa Kangas and Dr. Maurice Dawson for their help in ensuring that my study meets the required academic standards of Walden University. Special thanks go to my committee chair, Dr. Steve Roussas, whose guidance and support made the road less arduous. You are awesome, Dr. Roussas. Finally, I would like to thank Dr. Laurel Walsh for your continued feedback on the doctoral process. Laurel, your reviews and feedback were invaluable. I could not have done this without your friendship and support. I am also grateful to my wife for her patience and appreciation of the message of social change that I seek to bring forward. Your relentless support is what has made this happen and part of you is in this paper. Lastly, I thank my parents for instilling the value of education in my life for it is through their sacrifices that I was able to contribute at this level.

Table of Contents

Section 1: Foundation of the Study.....	1
Background of the Problem	2
Problem Statement	4
Purpose Statement.....	5
Nature of the Study	6
Research Question	7
Interview Questions	7
Conceptual Framework.....	9
Definition of Terms.....	10
Assumptions, Limitations, and Delimitations.....	12
Assumptions.....	12
Limitations	13
Delimitations.....	14
Significance of the Study	14
Contribution to Business Practice.....	14
Implications for Social Change.....	15
A Review of the Professional and Academic Literature.....	15
Call Center Practices.....	16
Outsourcing Issues	23
Scripting.....	30
Knowledge Transfer.....	37

Transition and Summary	46
Section 2: The Project	47
Purpose Statement	47
Role of the Researcher	48
Participants	49
Research Method and Design	50
Method	51
Research Design	52
Population and Sampling	54
Ethical Research	55
Data Collection	56
Instruments	56
Data Collection Technique	56
Data Organization Techniques	57
Data Analysis Technique	58
Reliability and Validity	59
Reliability	59
Validity	60
Transition and Summary	61
Section 3: Application to Professional Practice and Implications for Change	63
Overview of Study	63
Presentation of the Findings	64

Theme 1: Coherent Business Model	65
Theme 2: Customer-Perceived Service Quality.....	67
Theme 3: Service Priorities.....	68
Theme 4: Scripted Procedures	70
Theme 5: Learning Organization	72
Theme 6: Control Paradigm.....	74
Theme 7: Workflow Integration	75
Theme 8: Knowledge Sharing and Exchange.....	77
Theme 9: Information Repositories	79
Theme 10: Managers as Active Knowledge Agents.....	82
Theme 11: Information Sharing Challenges	84
Theme 12: Management Controls.....	86
Applications to Professional Practice	87
Implications for Social Change.....	89
Recommendations for Action	90
Recommendations for Further Study	91
Reflections	92
Summary and Study Conclusions	92
References.....	95
Appendix A: Letter of Cooperation from a Community Research Partner	115
Appendix B: Consent Form	116
Appendix C: Interview and Research Questions	119

Section 1: Foundation of the Study

A common sense approach to outsourcing the lowest paying positions in call centers was to hire lower paid employees who used scripts to communicate with customers (Brophy, 2011). The growth and development of new information communication technologies (ICT) had enabled customer-care and back room call center operations to use scripts to separate service and process (Tichy, 2012). At the same time, it created negative perceptions of the skills and abilities of frontline staff (Tichy, 2012). The use of prescriptive scripts to maximize operational efficiency and reduce the level of skilled labor required has had a profound disempowering effect on human resources (Burns, 2009). Scripts often replaced repetitive, unimaginative, and mundane processes (Burns, 2009). Management of call centers that relied heavily on scripting had high levels of employee dissatisfaction and turnover (Burns, 2009). For nonprofit organizations that depended on alumni contributions or grants, call center outreach improvements could enhance the conditions of employees and the success of the phone call center connections with potential clients or customers (Mann & Klofstad, 2013).

Despite the potential for employee and customer dissatisfaction, economies of scale to outsourced call center operations that leveraged scripted processes to reduce transactional costs caused the practice to flourish (Tichy, 2012). Business process outsourcing (BPO) stood at \$38 billion in 2009 (Palugod & Palugod, 2011) while the National Association of Software and Services Companies' Strategic Review (2012) forecasted BPO growth to \$153 billion by 2011 as management pursued cost arbitrage. The gain that management accrued depended not only on the talents of employees, but on

the way the employees networked, interacted, and shared knowledge in work processes (Hidalgo, 2011). Early-adopters of scripting, however, neglected to consider the structure and development of information flow. Specifically, the differential effect of information distribution and knowledge transfer could undermine the effectiveness of an organization (Tichy, 2012).

Although early adopters assumed outsourced processes could improve performance and operational competitiveness, pressures to reduce costs had the unintended effect of reducing the focus on new business opportunities (Yang, Wacker, & Sheu, 2012). Management had become dependent on scripting and had ceded new skills and process improvements that could distinguish the company in the marketplace (Yang et al., 2012). Knowledge, if thoroughly encoded, could become independent of the owner and be easily accessible, reducing the competitive position that an organization could secure (Yang et al., 2012). In this research study, I used a single-case design to explore the effect of scripting on creative problem-solving skill development in the context of a call center. The research study contributed to social change by demonstrating how improvements in scripting processes could elicit a higher level of employee customer engagement and problem resolution.

Background of the Problem

The United States Bureau of Labor Statistics (2012) estimated that approximately 453,000 call center jobs served customer relationships and retention in U.S.-based call centers. Kwon and van Jaarsveld (2013) highlighted that call center job design has shifted in response to outsourcing strategies, leading to concerns about employee engagement to

knowledge transfer. Management of call centers recruited the least experienced members of the labor force, and the job positions were predominantly nonsalaried (Kwon & van Jaarsveld, 2013). Management of North American call centers had adopted outsourced call center scripting strategies to contain costs and to create uniform interaction with the company (Kwon & van Jaarsveld, 2013). Using the knowledge effectively, be it serial, near, far, strategic, or expert, and the employee's absorptive capacity to identify, assimilate, transform, and apply such knowledge was critical for business success in a global environment (Roberts, Galluch, Dinger, & Glover, 2012).

Management adapted scripting procedures to help organize call center activities, avoid significant startup costs, and eliminate the need for significant resource training (Baranoski, Belloum, Bubak, & Malawski, 2012). However, such scripted knowledge became informational and often broke down under the rigor of diverse problem permutations (Baranoski et al., 2012). Knowledge managed in this manner was successful for induction purposes, but remained outside the closed-systems learning loop and contributed little to the growth of organizations or their knowledge base (Garavan, Cross, Wilson, & Carbery, 2012). In a study of 78 consulting firms, Gardner (2012) demonstrated that the team-member dependence on general expertise led to discounted member expertise and suboptimal performance. Members turned to task-relevant knowledge and low-risk-solution mechanisms, such as scripted processes, rather than seeking out innovative practices (Gardner, 2012).

Scripting codified the knowledge in a narrow range and eventually lost control of the knowledge employees possessed (Aliei, Ashrafi, & Aghayan, 2011). Furthermore,

because knowledge eroded with attrition and changed as much as 50% over 5 years, learning how to make knowledge productive was as valuable as sharing knowledge. Aliei et al. (2011) evaluated a diverse set of 53 knowledge managers and subordinates in Iran about the seven dimensions of organizational-citizenship behavior and found that there was a positive correlation between behavior and knowledge sharing. Effective knowledge sharing with a forward-looking agenda could build organizational capacity in the face of accelerated change (Aliei et al., 2011). Management needed to create a knowledge-sharing culture that encouraged people to collaborate and share information rather than limit information through scripts that impact associated decision-making capabilities (Aliei et al., 2011).

Problem Statement

Call centers represented a significant realignment of the customer interface across the entire economy (Hannif & Vo, 2011). Within these process realignments, prescriptive scripts served as mechanisms that maximized operational efficiency, reduced the need for skilled labor, and had negatively affected customer relationships (Burns, 2009). Moreover, prescriptive scripts had reduced call center ambient knowledge influencing the delivery of call center processes and the capacity of employees to resolve problems (Slof, Erkens, Kirschner, Janseen, & Jaspers, 2012). Perrin (2011) conducted a global study on these process realignments and concluded that only 38% of employees were fully engaged in their job in 2007-2008. This disengaging effect cost U.S. business some \$300 billion in lost productivity each year (Iyer & Israel, 2012).

The general business problem was that scripting practices had failed to generate high-involvement systems that leveraged worker skills and experience (Doellgast, 2010). The existing scripting management skills may not adequately leverage the complex cognitive skills needed to develop reflective learning and innovative solutions (Revere, Decker & Hill, 2012). The specific business problem was that some call center managers did not have the scripting skills that they would need to apply to frontline call center employees for effective customer problem solving.

Purpose Statement

The purpose of this single-case study design was to explore what scripting skills knowledge managers needed to apply to frontline call center employees to enable them to resolve problems. The population of interest was a North American call center because it had experienced significant growth with the home sourcing of call center activities (van Jaarsveld & Zuberi, 2011). Using the single-case study design, I observed frontline staff, collected general policies related to scripting, and conducted semistructured interviews with 20 frontline call center employees (Yin, 2014).

The participating frontline employees actively used scripts in their customer dialogues and exchanges. The sample size supported sample-size considerations established for qualitative studies (Griffith, 2013). The single-case study design facilitated a deeper understanding of the scripting practices through the categorization of interview data and the identification of emerging themes (Yin, 2014). By collecting and reviewing call center artifacts and data related to day-to-day operations, the interviews provided rich data about the perceptions of the call center frontline teams with scripting.

Theme saturation was evident when the findings from the interviews no longer added to the emerging themes.

The exploration of scripting and the effects on the codification of skills knowledge and knowledge transfer contributed to the overall business knowledge in call center design, performance, and overall process effectiveness. I explored how the use of scripting in job design influenced employee development and how the associated knowledge containment affected productivity.

Nature of the Study

I used this single-case study design to explore frontline call center perceptions with scripted practices. I conducted semistructured, face-to-face interviews with 20 frontline employees. The interview questions aligned to the research questions identified in the study. The participants were employees in a North American call center that used scripting with their customer dialogues and exchanges. Observing call center activity and analyzing emerging patterns and themes from interview data provided insights on the effectiveness of scripted processes in U.S.-based call centers.

I examined three research methods for this single-case research study. I did not select the mixed method because I could not accommodate the necessary processes within the timeframe of this doctoral study. A quantitative method could not measure the effects of scripting on the knowledge processes or the complex behavioral patterns (Goldman, 2010). A qualitative study was appropriate to probing participants' attitudes, beliefs, desires, and perceptions. This method aligned with a social-constructivist worldview that based its recommendation on core perceptions and derivative viewpoints

(Torrönen, 2014). Yin (2014) discussed an interpretive process that used the complete transcripts of the interviews to gather insight on emerging themes. I selected this single-case design as it best suited the need for the critical test of significant theories on knowledge management and knowledge transfer (Yin, 2014). Although I considered using a phenomenological design for the research study, the collective meaning of the scripting phenomena would be difficult to conclude with the various possible perspectives involved (Moustakas, 1994; Yin, 2014). Furthermore, ethnography combined both observation and interview data over a prolonged period, yet it would be difficult to coordinate in the dynamic call center setting. This exploratory single-case elaboration went well beyond ethnographic or phenomenological fieldwork that focused uniquely on participant-observations of a given situation (Yin, 2014).

Research Question

My goal was to explore call centers' employee perceptions with scripting on customer problem solving and the skills that managers needed to apply to effect process improvements.

Interview Questions

I used an open-ended interview approach to observe and gather data, addressing the following research questions:

RQ1: What are the scripting skills managers need apply to call center frontline employees to enhance customer problem solving?

I used the following questions for the interview process with the frontline employees in relationship to RQ1:

1. How does management use scripting skills to help you resolve customer problems?
2. How do you feel about your manager's scripting skills to solve customer problems?
3. How do you feel about your manager's scripting skills in providing you feedback on your use of scripts?
4. How do you feel about your manager's scripting skills in encouraging you on your use of scripts to resolve problems?
5. What scripting skills do you feel your management has?
6. What scripting skills do you feel your management should have?

RQ2: How can managers apply scripting skills to call center frontline employees to enhance customer problem solving?

I used the following questions for the interview process with the frontline employees in relationship to RQ2:

7. How do you determine which script is most appropriate?
8. How do you feel customers perceive your use of scripts?
9. How does management provide you feedback on your use of scripts?
10. How do managers encourage your use of scripts to resolve problems?
11. How does management allow you to draft or modify your scripted responses to resolve a customer concern?
12. What would you improve in the deployment of scripts? Why?

Conceptual Framework

I applied and leveraged the concepts of knowledge management and knowledge transfer throughout this study. Knowledge management (KM), first introduced by Nonaka in 1991, dealt with sharing and distributing knowledge through information platforms and communication technologies so that it could be leveraged to address and solve ongoing business issues (Krishnaveni & Sujatha, 2012). Organizational strategy and tactics helped shape employee assumptions about the importance of knowledge (Aliei et al., 2011). Although scripting was able to mediate the relationship and the knowledge construct involved, the optimal information structure and concomitant data flow was important to problem resolution and desired performance level (Anantatmula, 2012). Scripted knowledge still needed to capture and communicate knowledge that was more intuitive. Management used this data sharing strategy to drive the strategic customer relationship and responsiveness that they wished to sustain (Beirne et al., 2004).

Alberghini, Cricelli, and Grimaldi (2010) further examined a model for KM, KM processes, and participatory technologies that enhanced the productivity of business processes. These new techniques and technologies included groupware and knowledge collaboration through social-network platforms such as blogs, wikis, and automated scripts. Often deployed as rogue solutions in the past, these solutions were relatively inexpensive to deploy and maintain. Alberghini et al. (2010) viewed KM as a business process that formalized management strategies with its intended use of the enterprise's intellectual assets. Knowledge had not improved by merely making knowledge available; rather, it was the strategic purpose and intent of knowledge that enhanced productivity

and the ability of workers to resolve customer issues in a creative manner (Alberghini et al., 2010). Krishnaveni and Sujatha (2012) termed this exchange as a transfer of knowledge and viewed it as an essential element to building out new solution sets. The results of the research study built on these concepts by examining the impact of scripting skill's knowledge on the organization's management capacity and willingness to capture, assimilate, and apply old and new knowledge towards its business needs.

Definition of Terms

Absorptive capacity: Absorptive capacity is a set of organizational capabilities for managing, applying, and assimilating knowledge to address business needs. Absorptive capacity depends on the person standing as an interface to the outside world (Cepeda-Carrion, Cegarra-Navarro, & Jimenez-Jimenez, 2012).

Adaptive learning: Adaptive learning is the use of knowledge gleaned from industry best practices. A skilled trainer designs and delivers the learning to address certain business issues (London & Hall, 2011).

Ambient knowledge: Ambient knowledge is the knowledge derived from what one learns from one's environment (Olaru & Gratie, 2011).

Collective knowledge: Collective knowledge is the aggregate knowledge of an organization created through past-experiences, acquisition of new knowledge, and disseminating and creating such new knowledge (Littlejohn, Milligan, & Margaryan, 2011).

Double-loop learning: Double-loop learning is an adaptive process that enables an individual or organization to modify and adapt its approach and business processes based on experiences secured (Mattia, 2011).

Explicit knowledge: Explicit knowledge is knowledge structured and encoded for dissemination (Mahroeian & Forozia, 2012).

Generative learning: Generative learning uses feedback from past actions to create transformational change. Often self-initiated and controlled, generative learning focuses on generating and applying new ideas (London & Hall, 2011).

Individual knowledge: Individual knowledge is knowledge based on the business experience of the individual (Mahroeian & Forozia, 2012).

Knowledge: Knowledge is a combined informational capability enriched with experience, context, interpretation, and reflection (Mahroeian & Forozia, 2012).

Knowledge management: Knowledge management deals with information platforms and communication technologies that share and distribute knowledge to help address and solve ongoing business issues (Krishnaveni & Sujatha, 2012).

Knowledge transfer: This process addresses the transfer of knowledge from one employee or part of the organization to another (Krishnaveni & Sujatha, 2012).

Learning organization: A learning organization is one that has embedded systems and processes for the sharing of knowledge and the collective exploration of new ideas to solving business problems (Alipour et al., 2011).

Organizational knowledge: Organizational knowledge is comprised of the set of rules, policies, and business procedures that guide business activities on a daily basis (Littlejohn et al., 2011).

Panopticon: The concept of the panopticon is to establish management controls that convey ongoing employee surveillance; effectively controlling employee behavior at all times (Bain & Taylor, 2000).

Prescriptive scripts: Prescriptive scripts are the orchestrated responses to business processes and the required customer interaction involved (Baranowski et al., 2012).

Scripting: Scripting is the administrative practice of mechanizing business processes through automated tools or orchestrated responses to reduce operating costs (Baranowski et al., 2012).

Single loop learning: Single loop learning is an adaptive mechanism that maintains existing processes and restricts personnel to detect and correct errors in a given system of rules (Mattia, 2011).

Tacit knowledge: Tacit knowledge is knowledge built on the experiences of individuals that require extensive interaction and focus to transfer (Chang, Gong, & Peng, 2012).

Assumptions, Limitations, and Delimitations

Assumptions

Cultural and regional differences had varying effects on interview responses provided and may have included a subdued tendency to offer an opinion and not fact. The intent was to ground such variations in the operational realities that call center staff must

address on a daily basis in North America. It was important to develop questions that would delineate feedback based on inner- and outer-world perceptions. I depended on the honesty of participant responses to be representative of their scripting perceptions. I assumed there was a consistent behavioral approach to the use of scripting across the call center industry, and that I would capture feedback on the effects of scripting in a consistent manner. Although personal judgments could create their own degree of variation, I conducted interviews to validate emerging themes.

Limitations

Kieruj and Moors (2013) noted the dangers with an open-questionnaire design, as responses could vary due to perceptions of the moment, relevance to the individual interviewed, and operational circumstances that may affect awareness of the processes and problems involved. A potential weakness of the interview process was that the human exposure to the effect of scripting did not necessarily reveal the full extent of the issue in any single environment. The role and power dynamics between interviewer and respondent could be a limitation as respondents may offer responses that they felt the interviewer was anticipating. Kieruj and Moors (2013) observed that interviewers must be careful not to create associations because of concerns about reliability and because authenticity can provide meaningful patterns and help establish the validity to findings. A longitudinal approach would be useful, but the scope and scale of this doctoral study did not allow for the tracking of the phenomena over a protracted period.

Delimitations

I limited the targeted population to frontline call center employees in North America to help ensure cultural consistency and data integrity. The purpose of the criterion-based purposeful sampling was to select a population representative of a community that used scripted processes in their daily operation and who had information relative to this study (Yin, 2014). The research sample size was critical to success (Pringle, Drummond, McLafferty, & Hendry, 2011); thus, I interviewed 20 frontline call center employees from a North American call center using a direct-interview exchange format and a predetermined set of interview questions. My understanding of the scripting phenomenon depended on participating frontline employees providing honest responses of their scripting perceptions.

Significance of the Study**Contribution to Business Practice**

Although many researchers had explored outsourcing and knowledge constructs, few had explored the effect of the scripting in call centers on problem solving when dealing with customers. In a quantitative study conducted by Mani, Barua, and Whinston (2010), the authors examined the impact of information capabilities and the efficiency gains realized through process automation, which included scripting. Mani et al. (2010) investigated the interdependencies of variables. They examined how the variables contributed to the organization and its ability to build knowledge. Using data from a structured questionnaire that targeted 600 precommitted senior executive participants, Mani et al. (2010) confirmed efficiency gains realized through process automation;

however, the authors also revealed dissatisfaction with BPO arrangements and realized costs savings. The value of the qualitative single-case research study was that its findings extended the quantitative analysis of Mani et al. (2010) and provided valuable insights on the effects of scripting on customer problem solving.

Implications for Social Change

The intent was to explore how the use of scripting in job design has curtailed employee development and created social inequality through its mechanization of the process and applied knowledge containment. The research contributed to social change by demonstrating how improvements in scripting processes could elicit a higher level of customer engagement, problem ownership, and to validate how effective knowledge transfer could play an important role in the productivity of the knowledge worker and their ability to solve problems creatively.

A Review of the Professional and Academic Literature

The purpose of this qualitative single-case research study was to identify and explore frontline call center agents' perceptions of scripting in problem solving when interacting with customers. The main research questions focused on how frontline call center employees reacted to these scripts and their understanding of the perceived effects of scripting on customer problem solving. Using a literature review of scholarly works, which included (a) management journals, (b) academic journals, (c) industry statistics, (d) United States Bureau of Labor statistics, (e) NASSCOM Strategic Review, and (f) peer-reviewed scholarly articles, I expanded my understanding of scripting and its effect on customer problem solving. Within the literature reviewed, I explored emerging themes

and potential gaps and documented the key developments that would influence the understanding of scripting practices within call centers. The literature review aligned to the following four areas of academic and business concern:

- Call Center Practices
- Outsourcing Issues
- Scripting
- Knowledge Transfer

Call Center Practices

Aksin, Armony, and Mehrotra (2007) identified that call center service quality was a function of customer service wait-time and the value the customer attributed to the information and services received. Regardless of whether the call center regulated its customer calls through ICT, as an admission-control mechanism, callers were inherently impatient and hung up if they did not have their call answered in a timely manner (Down, Koole, & Lewis, 2011). Although abandonment evoked a bad customer experience, it did provide an unlikely approach to load balancing (Down et al., 2011). Notwithstanding that, processes and controls applied to call center activities were the root of call center employee burnouts, turnover, absenteeism, and quality problems (Aksin et al., 2007). The call center industry, driven by many factors including increasingly powerful information technology and reducing costs, had grown significantly, yet the conflict between efficiency and service quality needed to be better modeled (Aksin et al., 2007).

Issues such as first-call resolution, perceived agent complacency, and perceived lack of politeness and friendliness needed to be more consistent with customer values and

not only performance-based criteria (Aksin et al., 2007). Askin et al. (2007) predicted that by 2008, the United States would have over 47,000 call centers that would manage 80% of the firm's customer interaction; 92% of customers would form their opinion of the firm based on their call center experience.

Using interview data collected from 170 call center employees of a large retail bank in New Zealand, Ashill, Michel, Thirkell, and Carruthers (2009) examined the effects of stressors on job performance and burnout. Although they found that the highly demanding scripted customer interactions construed a process for consistent service delivery, customer experiences often fell outside the timeframes, rules, and scripted procedures. Ashill et al. (2009) concluded that these scripted customer interactions contributed to the constant need for recovery and stress.

Role stressors had a significant impact on emotional exhaustion, depersonalization, and service performance (Ashill et al., 2009). Service representatives with tendencies to higher social interaction reported higher stress levels, yet were considerably more resourceful in finding solutions. Ashill et al. (2009) determined that job resourcefulness moderated the effects of stress and emotional exhaustion. Ashill et al. highlighted the importance of matching personality traits to call center roles and responsibilities rather than job design.

Cappelli, Singh, Singh, and Useem (2010) examined the Indian approach to call center management, which blended social responsibility and social mission to motivate and empower employee participation and involvement. Indian companies addressed the management of human capital by investing in the capabilities of their employees,

promoting internally, and engaging employees through empowerment (Cappelli et al., 2010). The continued engagement of Indian employees reflected a unique Indian approach to problem solving called *jugaad*, an approach of trial and error, deeply rooted in the culture and sense of mission, which addresses difficult problems. By creating a social mission, Indian management had embedded a powerful mechanism to motivate employees (Cappelli et al., 2010).

Cappelli et al. (2010) observed that capability building ranked next to the bottom in the list of corporate priorities in the United States, whereas Indian companies invested in their employees as their key to organizational capability and competitiveness. Much like Japanese companies, Indian corporations protected the investments they made in employees. Developing enduring capabilities was the key to success.

Kwon and van Jaarsveld (2013) examined how human-resource management shifted in response to outsourcing strategies. The issue was how to manage employees in outsourced roles while enhancing performance, ownership, and self-development and learning. It was important to understand the level of tolerance for ambiguity and interpersonal skills that the job required for a proper job design. Kwon and van Jaarsveld concluded that workgroup structures using blended teams enhanced knowledge sharing.

Sahaya (2012) examined the influence of the learning organization on the relationship between leadership styles and financial performance. Moreover, Sahaya attributed transformational qualities to (a) influence, (b) motivational leadership motivation, (c) intellectual stimulation, and (d) individual consideration. Sahaya compared these transformational qualities to the transactional qualities identified with (a)

contingent reward, (b) management-by-exception, (c) passive-avoidance, and (d) laissez-faire. Using a multifactor leadership questionnaire with an assessment of the dimensions of learning, Sahaya targeted 400 respondents from 100 firms in the Thailand Stock Exchange. Their study results indicated a degree of reliability with nine elements of leadership style, correlating toward learning organizations. This finding reenforced the concept that the organization structures built for learning had better financial performance (Sahaya, 2012).

Doellgast (2010) compared the processes and outcomes of high-involvement employment systems in Germany to the narrower division of labor and the disciplined environments of the United States. Doellgast demonstrated that previous industrial relations still had a substantial influence, reflecting that strong employee-bargaining positions still characterized some institutions. Another explanation for the design was to locate the differences in employee skills necessitated by the work design and content of the prevalent management strategy. For example, the German call centers put practices in place that promoted internal flexibility and worker discretion, whereas the United States call centers adopted Taylorist practices that promoted control, discipline, and cost containment (Doellgast, 2010). Doellgast found that high-involvement systems provided workers the ability to negotiate alternatives to rationalize activities when addressing customer issues and concerns. There were strong pressures to pursue the low-cost model, as call centers were not revenue generating activities (Doellgast, 2010).

Hannif and Vo (2011) examined the relationship between three interrelated concepts of job content, job variety, job autonomy, and the quality of work life. These

concepts were relevant to call center work design when weighed against current economic drivers of control, extensive monitoring, and cost containment. Hannif and Vo highlighted that some organizations were content to function under a *sacrificial human-resources strategy* when it cost more to maintain morale than to train new staff. The organizational structure, culture, and people-management skills were the main determinants of the quality of work life, even if Hannif and Vo argued that managers had little control over the corporate call center strategies that shaped the quality of work-life experiences.

Given the economic climate and the drive to increase call center productivity and financial performance, Altaf and Awan (2011) examined the notion of fairness in the workplace. They also examined management's effect on the employee's perception of job quality and commitment. The authors found that excessive hours or work pressures were counterproductive to the commitment, productivity, and creativity of the employee. Furthermore, Salge, Glackin, and Polani (2014) posited that an empowerment strategy led to higher levels of job satisfaction. Low people-oriented management behaviors increased absenteeism, grievances, turnover, and job dissatisfaction. Moreover, performance also tended to be lower among employees who worked for low-task-oriented supervisors (Salge et al., 2014).

Russell (2008) highlighted that call center job design exhibited the qualities of a new sociotechnical platform for the production and delivery of information. Seen as a *Taylorization of white-collar information work*, call center management had deliberately chosen to limit worker autonomy and access to knowledge, and deployed ICT technology

to maximize an intense labor process of customer calls (Russell, 2008). The redesign of call center workflows posed significant challenges to existing professional patterns of work and identity formation (Russell, 2008).

Using a literature review, Hasle, Bejesen, Jensen, and Bramming (2012) examined the relationship between lean work design and levels of strain experienced by employees. Three characteristics best described lean organizations; Integrated workflows, knowledge interdependence, and process simplification. Integrated workflows lowered process slack work time, leading to a higher pace in the production process. Process simplification involved the simplification and standardization of processes through mechanization, such as dialog scripting (Hasle et al., 2012). Through the centralization of functions and scripted repetitive processes, organizations were able to lower costs and control customer interaction. Moreover, the standardized forms of interaction intentionally limited knowledge transfer and creative-solution capability. Organizations sought predictability and a reduced role conflict at the cost of reduced skill use (Hasle et al., 2012). Hasle et al. found a definitive relationship between lean systems and job-related strain. Hasle et al. identified a higher level of strain associated to the limited opportunity to apply additional skills and concluded that managers should minimize the practices of dialog scripting and performance monitoring to improve employee health and engagement.

The advent of ICT increased workers' ability to telework or work from a remote location outside the conventional workplace (Caillier, 2013). Drawing on the literature of teleworking and management control for results, Caillier (2013) argued that telework

lacked the required socialization of knowledge and feedback to drive shared mental schemas necessary for problem resolution. Although teleworking presented a strategy to decrease costs and increase productivity, the social and professional isolation disrupted cognitive processes (Caillier, 2013). Workers lacked the verbal, nonverbal, personal, and paralinguistic channels of a face-to-face environment. Furthermore, teleworkers developed mental models that were different from those that other workers would construct knowledge jointly through face-to face interaction (Caillier, 2013). As a result, managers had to work at developing inclusion tactics to protect knowledge-sharing norms and performance in the telework environment.

Golden and Fromen (2011) examined the impact of telework and virtual management relationships and found that organizational structure moderated teleworker knowledge sharing and exchange. Furthermore, Golden and Fronen linked teleworker relational qualities to the level of empowerment, feedback, job satisfaction, and knowledge shared. Their hypothesis was that a manager's work mode altered the teleworkers work experience. Golden and Fronen concluded that the higher the quality of the teleworker's relationship with their supervisor and others in their work unit, the higher the level of knowledge sharing.

Sieben, DeGrip, Longen, and Sorensen (2009) examined the relationship between ICT and two call center training and selective hiring strategies. Sieben et al. identified that ICT was a valuable substitute for simple, well-defined tasks skills that complimented problem solving and complex communication activities, and had limited knowledge development capability. Computer interaction only worked in the framework of limited

rule-based selection and somehow downgraded job-skill level (Sieben et al., 2009). Using surveys of five call centers, Sieben et al. determined that there was still a positive relationship between selective hiring, formal training, and the informal training realized on the job in the first year. This positive relationship supported the premise that, even with the scripting of routines, there was a need for increased skill level and training for the newer job designs (Sieben et al., 2009).

Outsourcing Issues

Globalization, facilitated and leveraged by the Internet, had enabled a disparate supply chain across the world (Tichy, 2012). Where supply chains constantly examined and reviewed their structures for cost savings. The trend to globalize and outsource had increased with the effect that supply chains had become longer and more complex (Tichy, 2012). A coherent overview of business processes had been difficult to realize, and the process of scripting had been the adopted mechanism to expedite outsourcing mechanization (Burns, 2009). I examined the cultural and human implications of outsourcing business practices, as well as the environmental factors that affected the analysis.

Kleinhempel, Nitchi, and Rusu (2010) examined business-process management in call centers. From an entrepreneurial perspective, a business-process model was a concise representation of how an interrelated set of processes, variables, business-strategies, and data created sustainable competitive advantage, products, and services. Kleinhempel et al. discussed the use of a software solution called Telmar 2000, which delivered an object-oriented set of scripts driven by an intuitive interface and customer dialog. Call center

efficiency was a function of a results-oriented operational model that did not sufficiently support the building or creation of knowledge; rather, it supported the exploitation of explicit instruction sets (Kleinhempel et al., 2010).

Mani et al. (2010) examined the design of information capabilities that facilitated the right structure and flow of information to cope with uncertainty and desired performance. Moreover, Mani et al. researched two areas of concern: (a) the performance of processes when they were congruent to information resources, and (b) the impact of transactional arrangements on performance. Mani et al. determined that the greater the complexity and interdependence of processes, the greater was the required level of technological investment in process execution and that coordination was greater. Performance differences were a function of fit between information resources and information capacity. Underinvestment in information capacity impeded achieving the greatest benefits from outsourcing. Furthermore, Mani et al. posited that firms did not expect any cost savings to materialize with BPO arrangements.

In a literature search of knowledge, as intellectual capital, Diugwu (2011) highlighted that knowledge created sustainable competitive advantage when uniquely applied to value-creating processes. Organizations in supply-chains leveraged intellectual capabilities into improved customer relationships, greater awareness of business processes and performance, faster and better decision-making, and effective product and service development. However, companies had difficulty competing when they outsourced inherent core competencies and capabilities to organizations that replicated the same model across organizational boundaries (Diugwu, 2011). Tsougas (2009) stated

that additional knowledge could emerge when we applied enhancements over time to meet distinctive emerging customer needs. Companies should go beyond the explicit knowledge conveyed in scripts that attempted to shape how people function and interact with one another. The continual creation of new knowledge was critical to a firm's sustainability, and applied knowledge, rather than knowledge creation, influenced performance (Diugwu, 2011).

Christopher and Tanwar (2012) attempted to capture the challenges and opportunities that arose while implementing a KM system. Using a comprehensive questionnaire of 30 respondents from three renowned BPO organizations in India, Christopher and Tanwar concluded that *people could empower people* by means of a robust knowledge exchange. These processes could lead to increased service intensity, improved quality, and standardization of processes, better understanding of organizational goals, learning culture, improved customer responsiveness, employee retention, lower operating costs, knowledge creation, innovation, and operational excellence (Christopher & Tanwar, 2012). KM required a culture that promoted collective sharing and thinking (Christopher & Tanwar, 2012).

Terry (2007) examined the challenges of making learning effective in the face of a changing workforce that had evolved in learning approaches. Gaining access to intrafirm knowledge from diverse colleagues leveraged the development of tailor made customer solutions (Verbeke, Belschak, Bagozzi, & Wuyts, 2011). For example, the new Generation Y workforce was comprised of natural multitaskers who innately used technology to communicate and go to the Internet or other resources for information in

real time (Terry, 2007). Terry concluded that 70% of learning was still on the job, 20 % occurred when leveraging workplace knowledge, whereas only 10% occurred through formal training. However, organizations still invested 80% of their training budget on formal training. Moreover, average knowledge workers spent 15% of their time looking for information with only 50% success rate of finding the right information. Having the right information to do the job affected productivity (Terry, 2007).

Ojha and Kasturi (2005) examined the operational metrics that were a part of the call center management process. The metrics often reflected cost reduction strategies rather than customer satisfaction when one considered that the salary could amount to 70% of the cost of running a call center (Ojha & Kasturi, 2005). Using a questionnaire of 95 attributes, Ojha and Kasturi concluded that extrinsic motivation, the ability to empathize with the customer, and the ability to control stress had no impact on performance. The lack of influence of stress was surprising and yet indicated that call centers should not be spending time to develop elaborate rewards and incentive programs to motivate performance. Ojha and Kasturi found that the training programs focus needed to be on job skills in order to sustain operational efficiency. Moreover, Ojha and Kasturi identified call center work as an emotional labor that could be very stressful, as the operators working in relative isolation are de-skilled to respond in a predetermined manner to the tasks involved. Based on these parameters, those who were confident of their knowledge and had a desire to learn were poor performers based on current job designs (Ojha & Kasturi, 2005).

Tillot, Walsh, and Moxham (2013) examined the use of engagement to improve knowledge-worker retention within an organizational. Tillot et al. (2013) concluded that valued and recognized workers had a higher engagement to the social network and culture used to provide services. The organizational elements used to create this culture of engagement included; (a) collaboration and shared objectives, (b) teamwork, (c) clear roles and responsibilities, (d) learning at the organizational level, and (e) stakeholder participation. Tillot et al. concluded that organizations needed to focus on the connection between employee, job culture, and collaboration on knowledge building if they were going to enhance an organization's success.

Bain and Taylor (2000) examined the effects of surveillance and the panopticon effect on employees in U.K. call centers. The surveillance and monitoring through statistics and scripting were key factors in the intensification of labor processes and the resulted compliance. Foucault best summarized the effects, showing that although some surveillance was discontinuous, the perception that employees were being watched had a lasting effect on their response mechanisms. The use of scripting to organize labor and response mechanisms towards functionally oriented working relationships led to what was termed "white-collar team Taylorism" (p. 10) where phone tapping was used to assess the desired attitude, behavior, and adherence to scripts (Bain & Taylor, 2000).

Although employees were often silent about such controls, managers continued to face high turnover, sickness, absence rates, and refutation (Bain & Taylor, 2000). Statistics indicated that perpetual control over the workforce was weak and one where employees could still ignore and adapt processes involved, despite the phone-tapping

process (Bain & Taylor, 2000). Furthermore, control was dependent on successful human intervention. Rejecting the panopticon effect, Bain and Taylor (2000) concluded workers mobilized subtle resistance through collective and oppositional structures that undermined the reach of electronic monitoring, and the use of surveillance was not a motivator toward performance.

Beirne, Riach, and Wilson (2004) examined agency and constraint in call center job design. Beirne et al. argued that purposeful human agency better fueled employee participation and engagement despite the existence and application of the panoptic technology. Panoptic means of surveillance and manipulations through high levels of fragmentation and scripting ensured that workers reproduced the power relationships management desired to employ (Beirne et al., 2004). These control mechanisms stifled a worker's capacity for innovation, and made sense disappear as workers police themselves into subjugation. Despite the claims of techno-bureaucratic efficiencies through control and cost minimization, the call center cases examined revealed further cost and quality issues that were damaging operational performance. Contradictory tendencies toward imperatives led to the continuing inefficient operating arrangements (Beirne et al., 2004).

Ashton, Brown, and Lauder (2010) researched how global skill webs shaped skills and competencies to job requirements. Ashton et al. examined the way; (a) processes associated with globalization were changing skill-development strategies, (b) the impact of new emerging economies on skill development strategies, and (c) skill-development strategies differentiated by country of origin or business-sector. Ashton et al. concluded that skill-web platforms rationalized knowledge work and stifled creativity and

independence of judgment. To reduce costs companies moved away from knowledge work to working knowledge used across the company (Ashton et al., 2010). This form of digital Taylorism created global competencies, yet moved knowledge away from being the *property* of an individual worker. Furthermore, Ashton et al. found that the skill-web platforms helped speed the creation of knowledge. However, this internationalization of skill, integrated related agents, strategies, and processes around a particular function that was globally transparent (Ashton et al., 2010). Corporations globally resourced skilled labor and sped the process of task-related learning (Ashton et al., 2010).

Brophy (2011) introduced the autonomist concept of *immaterial labor* to call center activity, providing an overview of why such an environment reflected a collective-labor organization. Brophy suggested that the call centers were a product of the process and of work transformation that facilitated the restructuring of large companies. Call centers, therefore, stood for the promise of accessibility, responsiveness, and easily scripted personalized processes. However, the job redesigns driven by scripting deliberately devalued and exploited labor (Brophy, 2011).

Dean (2009), concerned with the vortex of information exchange and the value of the exchange itself, introduced the concept of *communicative capitalism* to frame the socio-economic relationship between the networked digital media and the global outsourcing market. Dean found that the marginalization of progressive social movements through process changes, as well as the involvement of social media, led to increased inequality. Dean also suggested that significant corporate interaction provided corporations with vital customer information but did little to become the agency of the

customer. Working under extreme duress, employees addressed working conditions and job content. However, labor resistance has emerged globally as collective union agreements continued to emerge through embryonic unionism in Canada, Italy, and Ireland (Dean, 2009).

Rowe and Widener (2011) examined a conceptual knowledge and performance framework that measured the exchange of tacit and explicit knowledge. Challenged because explicit knowledge was observable and measurable and tacit knowledge was unobservable, it was difficult to measure the direct impact of knowledge on a favorable outcome. Using statistics gathered from 18 U.S. subsidiaries, Rowe and Widener concluded; (a) there was a negative relationship between explicit knowledge and process-performance measures, (b) there was a positive relationship between tacit knowledge and process-performance measures, (c) firms depended more on tacit knowledge, and (d) firms relied less on performance-measurement systems than on cultural and personal controls. Thus, in an environment characterized by tacit knowledge, managers were likely to choose operational over process measurement (Rowe & Widener, 2011). Collaborative knowledge units relied on outcome-related knowledge metrics and used nonfinancial measures to drive their businesses (Rowe & Widener, 2011).

Scripting

Hawk, Zheng, and Zmud (2009) reflected on the knowledge-transfer challenges and barriers associated with the outsourcing of infrastructure management. Hawk et al. discussed the importance of knowledge-transfer mechanisms and recommended a set of processes that could help prepare the organization for knowledge capture and transfer.

Hawk et al. based their findings and recommendations on results secured from a case study conducted on the outsourcing of JohnsonDiversey's Inc. global infrastructure management to Indian offshore service provider named Wipro Technologies. They secured qualitative feedback using interviews (28 in total) in client and service-provider organizations. Hawk et al. discussed issues and challenges encountered as well as the actions taken to address them.

Davenport (2011) highlighted that multitasking environments, such as unstructured knowledge work, were so distracting that they eroded productivity. Productivity losses resulted in substantial time spent searching for information without the proper training or understanding of tool capabilities. Examining a free-access knowledge environment, Davenport (2011) documented that knowledge workers accessed e-mails more than 50 times, used instant messaging 77 times, and visited more than 40 websites a day. Davenport suggested bringing structure to workplaces where free-knowledge approaches dominated. Using a combination of technology and structure and managerial discretion, Davenport felt that free-access knowledge stimulated a revolution in job design by addressing costs that matter most to contemporary organizations.

Bautista-Frias, Romero-Gonzalez, and Morgan-Beltran (2012) examined the knowledge map mechanisms involved in converting tacit knowledge to explicit knowledge in an institution of higher learning. Bautista-Frias et al. concluded companies wishing to codify knowledge should follow four principles; (a) they must decide on their business objectives, (b) identify knowledge that exists in different forms, (c) evaluate

appropriateness and usefulness for codification, and (d) identify adequate means for codification and distribution. A knowledge map facilitated knowledge-construct resource acquisition, prevented people from creating knowledge that existed, facilitated the location of the best source for obtaining knowledge, and facilitated the mapping of decision processes (Bautista-Frias et al., 2012).

Linderman, Schroeder, and Sanders (2010) investigated the framework that led to organizational knowledge creation in companies that had adopted the Six Sigma quality-service methodology. Linderman et al. found that organizational routines established organization memories that, in turn, encoded organizational capabilities and knowledge. Routines stabilized processes and became a source of change. Organizational routines included items such as programs, standard operating procedures, heuristics, or scripts (Linderman et al., 2010). Cross-functional teams of diverse backgrounds formed a collective mind around a plurality of perspectives and processes that often led to the creation of knowledge (Linderman et al., 2010). Linderman et al. concluded that shared mindsets and dialog enabled a group to overcome cultural barriers and defensive routines. Reliance on ICT was insufficient for transferring knowledge between communities of practice because thinking outside one's domain expertise becomes problematic. Furthermore, establishing and integrating knowledge creation metrics positively influenced process improvements (Linderman et al., 2010).

Goldman (2012) proposed a theoretical model to help understand the dynamics of organizational knowledge where learning occurred through observation and shared mental models. The process was broader than simple class training for employees or e-

training. Learning was an emergent phenomenon of single- and double-loop learning (Goldman, 2012). Goldman argued that some firms still could not address knowledge as an economic factor of production and their processes had heavy bureaucratic mechanisms of command and control. Goldman found that some KM systems were information-management systems that used knowledge already known and were restricted to the dissemination of best practices and experiences. These systems ignored the cognitive aspects of knowledge (Goldman, 2012). Thus, frequent organizational problems did not deliver best solutions, as ideas were often the result of tacit knowledge of people bound by their rationality of the organizational context (Goldman, 2012). KM should focus on process improvements and its outcomes. Scripting falls under the coding of explicit knowledge that drives repetitive operational activities (Goldman, 2012).

Through a review of the literature, Vo (2012) argued for an approach to KM termed *reflective knowledge management*. Reflective KM embraced positivist and nonpositivist thoughts on KM sharing. From the pluralistic perspective, knowledge required knowing people with an attitude to knowledge sharing called knowledge responsibility (Vo, 2012). Reflective KM argued for the participation of all people in the sharing of knowledge. One should be open to many different interpretations of the knowledge process that varied from the standpoint of the problem and process (Vo, 2012). This approach drew heavily on the pragmatist perspective that embedded knowledge in situated practices and positivists believed that knowledge justified true belief (Vo, 2012). The positivist goal was to capture, codify, and distribute and share knowledge through the application of ICT (Vo, 2012). Scripts followed this premise as a

form of knowledge that preceded action. The focus was on knowledge used, not knowledge creation. Nonpositivists considered knowledge to be socially constructed based on interactions and discursive behaviors. From the nonpositivists' perspective knowledge was the product of a creative act or process (Vo, 2012).

Foray and Steinmueller (2003) examined inscription, or scripting, in relation to the individual and group skills. Additionally the authors examined how the representation of knowledge influenced the scripting alternatives and possible elaborations applied. Foray and Steinmueller found that scripting provided a cognitive framework for expected action and dialogue responses in certain processes, but they also concluded that knowledge transfer was a complex process that involved individual perception and the ability to understand the underlying principles and intended purpose. Scripts often represented existing knowledge and an already-mastered experience base, and there were limited opportunities to disrupt or build on this knowledge base (Foray & Steinmueller, 2003). Foray and Steinmueller found that scripting problems did not arise because of the tacit qualities of knowledge, but rather emerged from the complexity of maintaining knowledge and the inability to apply the improved technological capabilities of new scripting techniques in organizations. Moreover, Foray and Steinmueller concluded that the next generation of ICT would enable the coding of additional tacit knowledge, reducing the cost of representational knowledge, and greatly improving problem-solving capabilities.

Using qualitative research, Burnett (2012) examined the role of explicit knowledge in technological innovation. The author revealed that the use of narratives in

the exchange helped form participants' perspectives on the technological innovation process and the exchange itself. With the narratives, the author helped participants reflect on the data and sources used to acquire knowledge. Burnett highlighted the importance of the manner in which he converted tacit knowledge to explicit knowledge for externalization of the knowledge itself. The method to codifying knowledge was important to the dialogue conducted across internet-based technologies, and that the infrastructure-to-knowledge transfer should emphasize the desired meaning and its comprehension (Burnett, 2012). This requirement escalated the importance of the narrative system and how scripting was applied to customer engagement. Burnett also showed the value in developing an understanding of why players engaged in the process, the experiences they gained from it, and what contributed to the development of an Internet-based narrative system that helped improve deployed narratives.

Stary (2012) examined semantic technologies, such as annotation, as learning enablers. This mechanism emerged as an organizational learning process that leveraged content by interacting with the user on a context-specific need. Knowledge was tagged and activated based on its explicit assignment to a user activity (Stary, 2012). These stakeholder-driven-enablers captured the semantic representation of knowledge, content, and its individual management. The automated exchange of perspective supported scripting procedures and processes that were task driven, with participatory thinking and evidence of prior responsive action (Stary, 2012).

Laha (2011) found that KM subscribed either to a task-based approach or to the needs of knowledge workers in ways that directly affected their performance of

knowledge-intensive tasks. Laha found that it was not effective to build out stand-alone support systems for each activity, as every task instance presented significant novelty created by the situational aspects of the environment. Furthermore, Laha proposed a knowledge-work-support platform that supported the granularity of information involved, yet also recognized the interoperability of tasks.

Slof et al. (2012) examined the effects of scripting on complex-learning tasks. Using a phase-related task-congruent representation, participants did better on complex-learning tasks, though individual learning did not increase. Slof et al. found that students could be; (a) motivated to externalize their knowledge through chat and representational tools, (b) provided scaffolding scripting learning, and (c) introduced to external representations and information sources that enhanced problem solving capabilities. Furthermore, Slof et al. concluded that, although scripting could improve learning-task performance, the effects of a particular scripted design were dependent on the problem complexity and the pertinent knowledge domains. Learning environments needed to consider tool design, as improvement was not an automatic benefit (Slof et al., 2012).

Karakostas and Demetriadis (2014) examined the role and fabric of scripted learning in the future. They found that a new environment had emerged; one that intersected economic and social needs to facilitate a higher level of learning a social outcome. Cross-disciplinary content and experiences interconnected and integrated the world. Karakostas and Demetriadis (2014) argued that service learning made possible an intense level of learning, necessary for collaborative learning and organizational sustainability.

Knowledge Transfer

Alipour, Idiris, and Karimi (2011) presented an integrated view of how learning organizations affected knowledge creation and knowledge transfer. Learning organizations had a democratic culture with embedded systems that captured and shared learning, based on business problems. Individuals and team member expressed ideas and perspectives such that the collective exploration of ideas could improve organizational memory and solution capabilities. Alipour et al. argued that knowledge and the application of knowledge were the main factors of competitive advantage and organizational performance improvement. According to Nonaka and Takeuchi (1995), factors essential to the knowledge-creation spiral included; (a) organizational intention to create knowledge, (b) autonomy to absorb new knowledge, (c) fluctuation and creative chaos, and (d) redundancy and overlapping approaches to problem resolution.

A team should actively manage project success through the combination of team-member knowledge, background, and work processes (Manley, O'Keefe, Jackson, Pearce, & Smith, 2014). Manley et al. (2014) determined that managers could empower a group of people to work together through shared objectives and approaches by creating and communicating trust around a collaborative process. However, Slof et al. (2012) concluded that scripting processes might not leverage knowledge nor enable the creative thought process that employees sought in their job design. Scripting practices clearly undermined the use of team knowledge and local innovation, as they limited the amount of shared information (Slof et al., 2012).

Juceviciene and Mozuriuniene (2011) introduced the term *organizational knowing*, referring to the explicit or tacit knowledge that was significant for an organization. Using a case study of a multinational company headquartered in Finland, Juceviciene and Mozuriuniene examined the types of knowledge needed to perform work at an organization, and determined that informal knowledge was significant in order; to understand all the knowing of an organization and to understand its limitations. Moreover, Juceviciene and Mozuriuniene concluded that organizational knowing could not predict competence at a particular task, as a continuous learning strategy was required to adapt to the ever-changing global business environment. The development of the company hinged on its ability to promote learning at all levels and to share this knowledge throughout (Juceviciene & Mozuriuniene, 2011).

Durcikova and Fadel (2012) examined the behaviors of knowledge-repository users and their perceptions of the repository-validation process. Durcikova and Fadel suggested that a repository contained information that was useful when it answered questions relative to the problem at hand. However, without a validation process, this repository overflowed with knowledge of questionable value. The validation processes could lead to failure if employees saw them as an obstacle to contribution. Durcikova and Fadel confirmed the importance that the knowledge-repository-validation processes remain transparent. Managers who implemented stringent validation processes may unintentionally have created pitfalls and challenges for knowledge contribution (Durcikova & Fadel, 2012). Validation procedures positively influence perceived knowledge-repository quality and contribution behavior (Durcikova & Fadel, 2012).

Tahir, Naeem, Sarfraz, Javed, and Ali (2011) examined the correlation between organizational learning and employee performance. The authors found that although work practices were often resistant to change, learning was distinct from work as it was problematic and challenged existing processes by adapting them to environment conditions and new insights. Experimentation often led to lower productivity in the short-term, and it was through failure that the authors achieved a true process of continued self-improvement and employee development (Tahir et al., 2011). Tahir et al. also found it important to distinguish the learning organization from organizational learning, which they felt dealt with simple intervention to an existing problem. In contrast, a learning organization actively promoted, facilitated, and rewarded collective learning. Additionally, Tahir et al. found significant improvements by motivating employees through feedback mechanisms on process improvement.

Salim and Sulaiman (2011) examined the hypothesis that a firm's level of learning orientation contributed to innovation, and to the firm's organizational performance. Organizational management needed to be able to learn faster than their competitors did to cope with the external opportunities and threats posed by the dynamic global environment (Salim & Sulaiman, 2011). They could no longer improve performance uniquely through the standardization of routines, division of labor, or management control (Salim & Sulaiman, 2011). Companies should acquire new knowledge and skills if they were to compete in the future (Salim & Sulaiman, 2011).

Chen, Guo, and Xu (2014) examined the relationship between social capital, and knowledge transfer. The intermediate role of knowledge was critical because it enabled

the combination of individual and corporate capabilities. Chen et al. held that a firm's ultimate success was a function of its ability to update and renew knowledge and skills with lower costs and perform more quickly than competitors. Furthermore, Chen et al. concluded that knowledge collaboration was an important mediator in the relation between social capital and performance. The results supported the premise that firms needed to consider the structure and the strength of individual ties if they sought to enhance performance by transferring knowledge (Chen et al., 2014).

Karkouljian and Mahseredjian (2012) used a questionnaire of 155 individual working in a medium-sized Lebanese organization. Through regression analysis, the authors determined that knowledge acquisition, sharing, and use, affected the locus of control. According to Karkouljian and Mahseredjian (2012), the sharing of knowledge depended on a person's principles, philosophies, drive, understanding, and personal traits. Individuals with high locus of control had interest and desire, and were self-motivated to share knowledge with other employees (Karkouljian & Mahseredjian, 2012). Karkouljian and Mahseredjian recommended that human-resource managers should examine candidate personality traits as a predictor of knowledge-acquisition sharing and use.

Through a review of the literature on individual intellectual capital acquired through the experience of doing, Tuan (2011) examined how multinational corporations administered knowledge transfer. Such knowledge affected how individuals and organizations viewed and created the world around them. Tuan surveyed 134 employees of a semiconductor company to explore why patterns of knowledge exchange were different across industries and countries. Tuan concluded that culture shaped assumptions

about which knowledge was important. Culture mediated the relationship among levels of knowledge and created a context for social interaction around knowledge. Culture thus helped shape knowledge creation and the adaptation of new knowledge. Tuan also determined that multinational corporations used personal movement as a mechanism for skills transfer where human resources' policies played an important role in team-based production, problem ownership, assignment rotation to expand experience base, and training.

Krishnaveni and Sujatha (2012) examined the different kinds of knowledge shared in call center operations and identified the emergence of a concept termed *community of practice*. Krishnaveni and Sujatha shed light on the role of organizational dynamics and commitment to people, where commitment levels influenced the effectiveness of learning and the KM processes. Krishnaveni and Sujatha (2012) concluded that community learning was a delicate balance of organizational and technological, strategic choices geared to problem solving.

Coyte, Riceri, and Guthrie (2012) examined how an individual's recognition of expertise related to work performance and how solution resourcefulness mediated this relationship. The employee recognition underscored the value of knowing who knew what in the workplace and the motivation associated with the recognition of resident expertise. Such individuals were key resources and solution mobilizers. Coyte et al. that there was a significant benefit derived from helping resources recognize other people's expertise, especially in team-related activities where sharing knowledge was important to

developing new and innovative solutions. However, such benefits can only exist if an organization supported and promoted the sharing of knowledge (Coyte et al., 2012).

Nag and Gioia (2012) examined the role of managers as active knowledge agents. They posited that the two pathways to knowledge creation were knowledge adaptation and knowledge augmentation. Knowledge adaptation arose from the various efforts applied to devise clever, improvisational solutions to particular problems, whereas knowledge augmentation happened when one challenges existing processes, seeks to expand organizational knowledge, or adds insights and understanding that altered or changed the scope of the problem (Nag & Gioia, 2012). Using these two pathways as a foundation, Nag and Gioia concluded that knowledge needed not be in the hands of operational resources, but rather in those hands that knew how to apply or translate its usefulness. The question raised is whether should one streamline knowledge to what one needs to perform a task or should one streamline knowledge to facilitate the generation of new ideas and solution sets (Nag & Gioia, 2012).

Karani (2014) further proposed using transfer strategies deployed by educational institutes to transfer knowledge among collaborating organizations. Karani detailed the use of an action-oriented transfer strategy that focused on capturing and transferring tacit knowledge. Karani suggested that organizational structure, resources, available skill sets, and the deployment decisions on knowledge sharing impacted knowledge sharing. The greater level of relatedness enhanced the absorptive organizational capacity (Karani, 2014).

Jamal and Iqbal (2011) examined leadership practices that affected the motivation to share knowledge. They concluded that the delegation and transformational leadership styles could explain variances of 24% in knowledge acquisition, and 57.1% and 47.6% in implicit and explicit KM respectively. Jamal and Iqbal also found a strong correlation between leadership style and organizational-knowledge sharing and concluded that transformational job self-management led to increase of knowledge sharing and learning-capacity development.

Bonner and Baumann (2012) examined the recordings of group interactions when solving problems yielding 12,405 discrete statements and 96,834 associated with the effect of knowledge transfer. Using an MANOVA statistical analysis, they found that the interaction between problem solver and knowledge transfer was significant. Bonner and Baumann also demonstrated that individual problem solvers benefited from having participants who formerly solved problems in groups. Furthermore, groups benefitted from member-knowledge transfers that brought such knowledge with effective problem-solving strategies in hand. Facilitating knowledge transfer, prior to group interaction, can improve group performance. Furthermore, in a larger context, informational social influence, and interaction led to greater problem-solving capabilities (Bonner & Baumann, 2012).

Antoaneta and Ileana (2008) examined knowledge-intensive processes involved in the construct of KM platforms. They determined that management needed to focus on double-loop learning to enhance and evolve existing processes. Generative learning emphasized continuous experimentation and feedback in the same manner organizations

used to solve problems (Antoaneta & Ileana, 2008). Adaptive learning involved incremental learning of routines and practices that required no fundamental change in one's thinking or system. Scripting was as an instrument of adaptive learning (Antoaneta & Ileana, 2008). Learning organizations should move beyond training on existing procedures to the creation of mental models that build shared vision, and a systems thinking about the creation of practice and subject matter expertise (Antoaneta & Ileana, 2008). People in the organization were part of this system, and it was through the effective sharing, communication, and understanding of information that the authors created bodies of knowledge (Antoaneta & Ileana, 2008).

Using a literature review, Kovacevic and Djurickovic (2011) highlighted that the quality of corporate knowledge and its location and systemization was critical for generating new ideas and the process of turning knowledge into a competitive advantage. Furthermore, there was the issue of measuring knowledge-worker productivity and net profit contribution from knowledge work. Kovacevic and Djurickovic offered the following differentiation of accrued benefits:

Efficiency

1. Improved products and services quality,
2. Better project management,
3. Better preparedness to external events,
4. Increased customer satisfaction,

Effectiveness

1. Reduced production costs relative to sales volume,

2. Shorter preparation of operation,
3. Faster decision making,
4. Faster delivery of products,

Innovation

1. Increased innovation of new products and services,
2. Larger number of patents per employee,
3. Increased knowledge value.

Using a literature review of research studies discussing KM processes, Anantatmula (2012) concluded that knowledge remained dormant and not useful if not reflected in the actions of the business. Anantatmula held firm to the view that process-related knowledge improved operational efficiency. The key to effective knowledge deployment was to gather an understanding of the business model needs before applying KM processes. The organization and flow of knowledge, and how learning takes place drove KM development (Anantatmula, 2012). Anantatmula concluded that the challenge was to use KM processes to enhance employee skills, with a focus on improving productivity, rather than just focusing on productivity.

Zonooz, Farzam, Satarifar, and Bakhshi (2011) added that the availability of complementary knowledge and prior related experience to back a necessary knowledge exchange affected knowledge transfer. Although the individual's desire and ability to share knowledge influenced the capability of knowledge and experience, this motivation helped model exchanges into clusters to reduce the cost of knowledge acquisition and provide opportunities for improved performance (Zonooz et al., 2011). Forming

communities of interest or knowledge clusters helped expedite knowledge development and transfer (Zonooz et al., 2011).

Transition and Summary

Section 1 of this qualitative single-case research study described the issues surrounding scripting as a business process practice in outsourced call center operations. The purpose of this qualitative single-case study was to research questions, limitations, delimitations, and assumptions identified to support this analysis. The literature review consisted of an exploration of scripting practices and a review of how they affected knowledge capture, knowledge transfer, and employee productivity. I used the literature review to refine the interview questions used in the qualitative phenomenological design.

Section 2 will describe the methodologies and strategies for the qualitative single-case research study. Section 2 will also address in detail; (a) the role of the researcher, (b) the participating frontline employees, (c) the research method and design, (d) the population, (e) the data-collection method, and (f) the data analysis techniques.

Section 2: The Project

The scripting of knowledge may not leverage the complex cognitive skills necessary to develop reflective learning and innovative solutions (Revere et al., 2012). Findings from this qualitative single-case research study provided insights on how scripting affected problem solving when call center employees interacted with customers and what managerial scripting process improvements were needed to improve call center performance. Call centers represented a significant realignment of the customer interface across the entire economy. The National Association of Software and Services Companies' Strategic Review (2012) forecasted that the outsourcing trend would continue as industry leaders learned about process rationalization and cost arbitrage. Slof et al. (2012) argued that using scripting to effect knowledge transfer had negatively affected the ability to deliver on business processes and had reduced net productivity due to the loss of ambient knowledge.

Purpose Statement

The purpose of this qualitative single-case research study was to explore scripting skills knowledge that managers needed to apply to frontline call center processes and employees to resolve customer problems. I used a qualitative open-ended interview process to gather insights and to leverage the perceptions of frontline call center employees in North America who have had the opportunity to use such practices (Torrönen, 2014). I explored whether the use of scripting in job design had created a panoptic effect by using surveillance and control of processes to limit the knowledge transfer needed to innovate and resolve ongoing business issues. I examined artifacts,

including but not limited to training documentation, job descriptions and applications, and Customer Relationship Management data. I hoped to reveal employee scripting perceptions as well as the efficacy of these scripting practices on resolving customer concerns. The objective was to advance the skills of scripting managers on how best to apply scripting processes to call center customer-problem resolution.

Role of the Researcher

My goal was to allow themes and meanings to emerge from the dialogue and to allow participating frontline employees to validate that the interpretations and meanings formulated reflected their viewpoints. Torronen (2014) maintained that participatory research is *a structure of viewpoints*, using the eyes of the participant to view reality. The accuracy of the qualitative research study was a function of my experience and my ability to draw conclusions from the data secured through the interview process (Bernard 2013).

I believe in advocacy and a participatory view where individuals, if empowered, could effect change within existing processes that exploit and marginalize their contribution (Torronen, 2014). Research was participatory, involving dialogue between participants and me as the researcher (Trickett, 2011). The intent of the research was to engage participants in a manner that allowed them to define and interpret their own reality while applying the findings to their own community (Trickett, 2011). I interviewed the participating frontline employees, analyzed the interview results, and provided an interpretation of the interview data. As discussed below, I provided care and attention to protocol to ensure that I maintained ethical standards in the management of the interview results and the processes involved.

Participants

The target population for this single-case research study was frontline call center employees in North America. The population was of interest because its members had experienced significant growth of the venue with the home sourcing of call center activities in recent years (van Vaarsveld & Zuberi, 2011). Using a single-case study model, I observed frontline staff, collected general policies related to scripting, and conducted semistructured interviews with 20 frontline call center employees (Yin, 2014). This population supported sample-size considerations established for qualitative studies (Griffith, 2013). A thematic data analysis technique facilitated a deeper understanding of the scripting practices by coding and categorizing interview data and identifying emerging themes (Yin, 2014). Theme saturation was evident when the findings from the interviews no longer added to the emerging themes.

Through direct outreach to senior call center managers, I sought permission to speak to their employees on the issue of scripting and how scripting had affected problem solving when interacting with customers. Upon receipt of a letter of cooperation (Appendix A), I contacted a pool of participating frontline employees within their community and informed them of the same process and procedures outlined in the consent form (Appendix B). In my letter, per the consent form in Appendix B, I highlighted the benefits of the research study and the potential use of its findings. I also discussed the research process and procedures. I screened each participant for a minimum of 1 year of call center scripting experience. The selection criterion helped ensure interview validity with exposure to and knowledge of scripting processes. Furthermore, I

ensured that the study complied with ethical standards and ensured both organizational and participant confidentiality throughout the study (Bozeman, Slade, & Hirsch, 2009).

Research Method and Design

I conducted this qualitative research study using a single-case study design and explored the scripting skills that managers needed to apply to frontline call center employees to enable them to resolve customer problems. Torronen (2014) noted that participatory analysis and interpretation were interactive forms of feedback and reflection that helped define the understanding of the researcher and the reality of participants. Yin (2014) discussed a multistep procedure for qualitative analysis and interpretation that used the complete transcript of each participant interview to arrive at the essence of the described experience.

This interpretive process began with a thorough review of the interview results to gain an initial understanding of the responses. I recorded and transcribed any journal and interview results to avoid any data loss in the process. The next step entailed organizing and coding the data and extracting key words and meaningful statements. The third step identified emerging themes and provided meaning to the data by clustering the themes involved. Theme saturation was evident when additional interviews no longer added to the emerging themes. The fourth step drew preliminary interpretations. I conducted additional discussions with the participating frontline employees to ensure the validity of my interpretations. During this review process, I made modifications or expanded upon the initial interpretations as needed. Next, I used the themes and meaning to form a holistic interpretation of the data. This analysis helped me to compile the results.

Method

The qualitative method aligned with an advocacy and participatory worldview that allowed people to voice their opinions on important issues (Yin, 2014). Open-ended questions facilitated an interactive interview process that mobilized a social-constructivist worldview; allowing me as the researcher to go further by advocating a potential action plan to help marginalized knowledge workers (Pringle et al., 2011). This methodology benefited the research study by allowing participants to share their own perceptions and derivative perspectives and meanings on the effects of scripting on problem solving when interacting with customers in North American call centers (Torronen, 2014). Pringle et al. (2011) maintained that qualitative researchers focus on the personal perceptions of human beings for their interpretations was important.

I examined and evaluated three different research methods for this research study. They included quantitative, qualitative, and mixed methods. Quantitative studies involve the testing of hypotheses about a set of relationships. They were an excellent venue for finalizing results of a study and have the ability to filter out external factors (Thomas, 2011). Although this research design had a high degree of reliability and was often factual in nature, I determined that I could not easily measure the effects of scripting on the knowledge processes or the involved behavioral patterns (Goldman, 2012). I could not establish the needed variables for such a design.

Qualitative methodology was more attune to probing employees' attitudes, beliefs, desires, experiences, perceptions, and the type of examination of the scripting phenomenon that I desired to perform (Villate, 2012; Yin, 2014). Mixed methods focus

on researching a specific problem using both qualitative and quantitative methods.

Utilizing the mixed method, researchers used quantitative data to provide focus to the issue for meaningful insights with a quantitative data collection instrument and a statistical validation of qualitative data. However, I did not select the mixed method, as I could not accommodate the necessary processes within the timeframes of this doctoral research study.

Research Design

Reiter, Stewart, and Bruce (2011) recommended an interpretive approach to research through structured interviews, facilitating the evolution of the qualitative design and its purpose. The core issue was the ability to generate rich and meaningful data. A qualitative, single-case study design was best suited for the research study because it sought to gather the collective understanding of scripting within the complexities of call center interactions with customers (Yin, 2014). The participants themselves became the true source of data, and the interview was the main means of data collection (Yin, 2014). Bright and Miller (2012) claimed qualitative research emphasized experiential knowledge and an appreciative inquiry of operational reality rather than abstract and theoretical knowledge. Therefore, a qualitative case study was a viable strategy for research from a social-constructivist worldview.

I have modeled my research design and strategy on the qualitative case studies of Nartea (2013) and Watson (2013). Nartea used a case study to explore how improved knowledge of participation in the farming market network of Virginia contributed to the success and survival of new farm businesses. Nartea interviewed 12 new farmers and

conducted a thematic analysis and to ascribe meaning to the participant responses. The shared perceptions led to a deeper understanding of the collaborative processes that fueled new farmers market opportunities and profitability. Watson (2011) used a case study to explore the capabilities of U.S. leaders to manage the global reduction of the supply of rare earth metals (REM) from China. Watson interviewed 20 geographical REM managers building an understanding of the business strategies U.S. business leaders would adopt in the face of supply chain shortages and what substitute products they use. Using NVivo 10[®] software, Watson further explored emerging themes and provided recommendations on how organizations could further adapt.

A qualitative case study design provided an effective tool for exploring the scripting skills that managers needed to apply to frontline call center employees to enable them to resolve customer problems. The semistructured, face-to-face interviews allowed me to gather direct insights that provided detail-rich and useful data for addressing the primary research question. This qualitative interpretative process provided meaning to the obtained feedback (Yin, 2014).

Although I considered using a phenomenological approach for the research study, the collective meaning of the scripting phenomena would be difficult to conclude with the various involved perspectives (Moustakas, 1994; Yin, 2014). Furthermore, the use of grounded theory would limit the interpretations to an abstract theory that would be difficult to transfer when the views of the participants and their emerging themes were still not solidified (Reiter et al., 2011). Furthermore, ethnography combined both

observation and interview data over a prolonged period, and it would be difficult to coordinate in the dynamic call center setting.

Population and Sampling

The target population was 20 frontline call center employees in North America. This population was of particular interest as it had experienced significant growth with the home sourcing of call center activities in recent years (van Jaarsveld & Zuberi, 2011). Isolation may play a larger role in how scripted practices affected such disparate workers. The intent was to gather additional insights on recent developments in scripting applied to the rationalization of business processes in these call centers. The purpose of this single-case research study was to explore the knowledge that enabled managers to apply scripting to frontline call center employees for effective customer problem solving. I did so by exploring the perceptions of the call centers' frontline employees with the effects of scripting on customer problem solving. I conducted semistructured interviews with 20 participating frontline employees selected from a call center in North America who used scripts in their customer dialogues and exchanges. Candidates were required to have a minimum level of one-year of scripting experience.

The goal was to select study participants because of the depth of experience the targeted participants would bring to the research study (Dennison, Moss-Morris, Yardley, Kirby, & Chandler, 2013). The original pool of potential participants was slightly larger to accommodate participants who chose not to participate in the interview process. The 20 frontline agent interviews supported sample-size considerations established for

qualitative studies where theme saturation existed when interviews no longer contributed to the emerging themes (Griffith, 2013).

Ethical Research

Data collection began after the Institutional Review Board (IRB) approved this research proposal, and after I secured a letter of cooperation (see Appendix A) from the target organization. The IRB ensured that the study was compliant with ethical standards and that I maintained participant confidentiality throughout the study (Bozeman, Slade, & Hirsch, 2009).

I informed the participating frontline employees in writing of the scope and intent of the research project, and I secured a letter of informed consent from each participant prior to the interview process. The consent form is in Appendix B. Participation was voluntary, and participating frontline employees could withdraw from the study at any time. Because of the voluntary nature of the study, I informed candidates that there would be no compensation or incentive for participating. I also gave participating frontline employees a copy of the signed consent form to keep for their records.

As the principal investigator, I ensured that I stored interview data in a safe place; I retained participant anonymity; and ensured that candidates would not suffer from the release of the research data. I secured data access through password protection and will discard all data after 5 years. Participating frontline employees reviewed the transcripts of the interviews to ensure that I accurately captured their responses. I identified processes for the management of conflicts and any required modifications. The research design addressed the following ethical considerations (a) ensuring that research participants

remained autonomous agents, (b) minimizing risks to subjects, (c) protecting the human rights of participants, (d) ensuring that participants benefitted from the research, and (e) avoiding bias and discrimination in the research (Bozeman et al., 2009).

Data Collection

Instruments

Qualitative research in its basic form involved the analysis of any unstructured data and open-ended responses based on a set of questions directed at an issue or set of experiences (Yin, 2014). I used face-to-face interviews to gather insights on front-line call center employees' perceptions with the use of scripting in problem solving when interacting with customers. I took additional notes to facilitate post interview interpretation. I transcribed each interview's data with NVivo 10[®]. NVivo 10[®] is proprietary software that researchers use to manage, shape, and interpret unstructured information (Franzosi, Doyle, McClelland, Putnam Rankin, & Vicari, 2013). In addition, researchers use the NVivo 10[®] software to identify emerging themes and have the ability to develop meaningful conclusions to data secured through the interview process (Leech & Onwuegbuzie, 2011).

Data Collection Technique

I used a set of semistructured questions to gather frontline call center employees' perceptions of the use of scripting to solve problems when interacting with customers. These open-ended questions, as defined in Appendix C, facilitated a dialogue and exchange on call center scripting issues (Yin, 2014). Torronen (2014) noted that

participatory analysis and interpretation were interactive forms of feedback and reflection that helped define the understanding of the researcher and the reality of participants.

I began each interview with an introduction of the stated objectives and data-collection methods. I verified that the participating frontline employees had signed a consent form and that I had addressed any questions or concerns. I reiterated the commitment to confidentiality during and after their participation in the study. I took additional notes and made separate personal observations to facilitate post interview interpretation. In addition, I reviewed operational manuals and conducted five additional observations to gather further insights on call center scripting procedures. I replaced participant names with numbers to protect the participants' identities and to ensure confidentiality. I transcribed each interview's data with NVivo 10[®] using a participant-coding scheme. I used NVivo 10[®] to identify emerging themes, insights, and to develop meaningful conclusions to the data collected during the interview process.

Data Organization Techniques

I collected and organized interview data into different files including any interview notes, and operational observations. I labeled these files so that the source of interview data remained anonymous. I transcribed all interview data into NVivo 10[®] using file password-protection to prevent inadvertent access. I retained a journal documenting the interview process and notes taken during the interviews. I employed regular file backups throughout the study to prevent loss of data or accidental erasures. I stored data in a secured off-site storage room to prevent any loss due to unforeseen

circumstances. Moreover, I will retain data for 5 years in case there is a need to verify consistency of data with the research method. I will destroy collected data after 5 years.

Data Analysis Technique

I used the following questions for the interview process with the frontline employees:

1. How does management use scripting skills to help you resolve customer problems?
2. How do you feel about your manager's scripting skills to solve customer problems?
3. How do you feel about your manager's scripting skills in providing you feedback on your use of scripts?
4. How do you feel about your manager's scripting skills in encouraging you on your use of scripts to resolve problems?
5. What scripting skills do you feel your management has?
6. What scripting skills do you feel your management should have?
7. How do you determine which script is most appropriate?
8. How do you feel customers perceive your use of scripts?
9. How does management provide you feedback on your use of scripts?
10. How do managers encourage your use of scripts to resolve problems?
11. How does management allow you to draft or modify your scripted responses to resolve a customer concern?
12. What would you improve in the deployment of scripts? Why?

I applied the thematic data analysis technique to the interview data. Yin (2014) identified the following steps to thematic data analysis: (a) preliminary grouping of phrases, statements, and expressions, (b) thematic grouping of expressions to those relevant to the research study, (c) clustering major themes-abstraction and grouping of expressions to secure an understanding of the phenomenon under study, and (d) textural descriptors-additional secondary data secured from participant feedback during interviews.

I used the NVivo 10[®] software to classify, sort, and examine responses to the open-ended interview questions as well as identify emerging themes and their meanings. I provided a descriptive analysis detailing emerging themes. The objective was to (a) cluster and reveal the core themes of the perceptions, (b) check for accompanying themes, (c) model the life-long perceptions, and (d) provide a textual description of the perceptions described (Hutchison, Johnston, & Breckon, 2010).

Reliability and Validity

Reliability

One can enhance the reliability of a qualitative study by ensuring a consistent use of the selected research method throughout the study and in a manner that was both transparent and repeatable (Thomas & Magilvy, 2011). To preclude any interviewer bias, and to ensure qualitative reliability and research dependability, I applied the interview questions in the same manner to each participant. Furthermore, I ensured that the results reported were those extracted from the interview process, and not viewpoints of others

outside this process (Kien et al., 2014). By using the NVivo 10[®] software platform, I ensured a consistent process and analysis to the interview data.

Validity

The validity of a study assured the method for addressing the research questions did not affect the outcome of the data collected (Andrews, 2013). By verifying the accuracy of the recordings and interpretations of the participants' responses through such means as member checking, I helped ensure credibility. Furthermore, I as the interviewer took appropriate actions to ensure that the sample and the context were representative of the examined population. I compared candidate characteristics to the target population to preclude any sampling bias and to ensure the candidates were representative of the targeted population that had at least 1 year of experience with scripted call center processes. The credibility of the study's findings and conclusions was reenforced by interviewing only those frontline employees who had experiences with scripting.

Torronen (2014) stated that the participant feedback from reviewing their scripted interviews would bring validity, reliability, and credibility to the interpretation process. Torronen (2014) identified the following benefits of participant feedback: (a) enabled participants to correct and challenge misrepresentations and misinterpretations, (b) reduced the possibility of participants' claims that the researcher misunderstood their information, (c) provided opportunities for the researcher to clarify what certain information means, (d) allowed for additional information gathering, (e) provided participants with the opportunity to confirm the accuracy of data, and (f) helped participants shape the research summary and conclusions. Torronen added that, on the

downside, some participants would want to please the researcher by agreeing with the researcher's conclusions and or what is culturally shared.

Thomas and Magilvy (2011) highlighted that researchers needed to explore the theoretical construct as a means of uncovering conditions that could affect the selected candidate sampling data. Thomas and Magilvy (2011) stressed that the sampling for heterogeneity could influence the results, based on certain background factors. Whitley (2012) argued that continued participant feedback checking, as a form of data triangulation, assumed the academic ability and continued interest of the participant to add to the interview content and not affect the possibly perceived results.

I reviewed the transcripts of the interview with the respective participating frontline employees to test the credibility of their responses. Each participant reviewed and confirmed the validity of my interpretations. This form of data triangulation contributed to the validity of the study by facilitating a better understanding of how scripting was used to solve business problems (Guion, Diehl, & McDonald, 2011). I also related research findings and conclusions to other theories and scholarly literature to ensure confirmability. I included a descriptive analysis and summary of my analysis detailing (a) the research context, (b) the conclusions reached, and (c) the potential transferability to other contexts or settings in the call center industry.

Transition and Summary

Section 2 presented a description of a qualitative single-case research study and included (a) the purpose of the research method and design, (b) the elements of the research design, (c) the rationale for the design approach chosen, and (d) my role as a

researcher. This qualitative single-case study explored the role of scripting on problem solving when interacting with customers in call centers with the intent of improving management's understanding in making the scripted processes effective. Section 3 will present (a) the results from the interviews and associated data analysis, (b) the application of the study results to scripting practices in North American call centers, (c) the research findings and conclusions to other theories and scholarly literature, (d) the implications for social change, and (e) recommendation for action and further research.

Section 3: Application to Professional Practice and Implications for Change

This section includes a detailed description of the results of the qualitative single-case study used to explore and investigate call center scripting and the effects on problem solving. I will present and discuss emerging themes and patterns relevant to the professional call center practice, the research questions presented on scripting, and the conceptual framework of the research. I will also include an overview of the study, presentation of the findings, application to professional practice, implications for social change, and recommendation for action. The section ends with recommendations for further research, reflections on the research experience, and study conclusions.

Overview of Study

The purpose of this qualitative study was to explore frontline call center perceptions of the effects of scripting on problem solving. I interviewed 20 frontline call center employees in a North American call center using 12 open-ended questions aligned to the research questions identified in the study (see Appendix C). I assigned each participating agent a number from P1 to P20 to help ensure that the source of interview data remained anonymous. I validated the transcribed interview results with the participating call center agents to confirm the accuracy and reliability of the data. In addition, I reviewed operational manuals and conducted five additional observations to gather insights on call center scripting procedures. Observing call center activity and analyzing data to determine emerging themes from this interview data provided insights into the effectiveness of scripted processes in call centers and its impact on problem solving.

This exploratory method aligned with a social-constructivist worldview that based its recommendations on core perceptions and operational experiences (Torronen, 2014). The analysis of the data collected from the participants' responses revealed that, although scripting had improved service quality and operational efficiency, management struggled to introduce a coherent scripted business model. As a result, it was my observation that employees introduced far too many customized scripts and local platforms to meet customer delivery challenges. I have documented these struggles and difficulties within 12 themes that emerged from the thematic analysis of the shared frontline call center experiences on the use of scripts within call centers. These emerging themes expanded on the literature review conducted earlier on call center practices, outsourcing, scripting, and knowledge transfer. These shared experiences informed current business leaders and stakeholders of the effects of scripting within their business process and any recommended improvements.

Presentation of the Findings

The goal of the research questions was to explore call center's employee perceptions of scripting on customer problem solving and the skills that managers needed to apply to effect process improvement. In this subsection, I discuss the participant responses and how the 12 emerging themes helped address the research question (see Appendix C).

Seven emerging themes dealt with call center practices and how frontline solution processes applied scripting. These themes included (a) coherent business model, (b) customer-perceived service quality, (c) service priorities, (d) scripted procedures, (e)

learning organization, (f) control paradigm, and (g) workflow integration. Five emerging themes addressed skills that managers applied to enhance customer problem-solving capabilities in the call center environment. These five themes included (a) knowledge sharing and exchange, (b) information repositories, (c) managers as active knowledge agents, (d) information sharing challenges, and (e) management controls.

Theme 1: Coherent Business Model

Klenhempel et al. (2010) highlighted that call center instruction sets needed to pursue a dialog that was more intuitive to the customer needs. It may not be possible to build an all-encompassing business model with an interrelated and standardized set of processes and templates that meet all customer needs. The tradeoff may be to develop an interim model that offered a standardized set of functionality that would expedite client introduction and basic call center capabilities. This “out of the box” approach, as discussed by Hassan, Sani, Abdul Aziz, Sulaiman, and Daud (2014), could accelerate the functional delivery of call center capabilities.

All participants affirmed that the current outsourcing model and approach to quality service had improved service quality and the organizations capability to solve customer issues. However, there was still significant improvement needed, for as P2 added, “although scripts pursued the desired business model, there were far too many customer specific differences that complicated any attempt to standardize business processes”. As a result, the call center has often mobilized customized solution sets that did not leverage available solution platforms or knowledge databases. P3 highlighted that “there seems to be a flexible cookie cutter approach to operationalizing needs”. Although

management had introduced a structured approach to problem handling, scripts seemed to vary because of Service Level Agreements (SLAs). The management team needed to pursue a standardized platform to lower costs and to sustain a competitive position in the call center industry. P4, P11, and P13 added that the internal Quality Program had standardized some call center processes, but the call center business models were still too diverse, making standardization across clients a challenge. P18 added, “the management team is not adequately pursuing ticket system opportunities and seemed to be doing only what the customer desired”. P19 highlighted “the call center processes that were built to address certain problems had excessive customization, and the knowledge databases were never up to date. Personalized wikis have emerged to help service the missing details”. There was a need to think outside the box and to pursue the concepts of object-oriented scripts that would focus on a results-oriented operational model.

Serrano, Hernantes, and Gallardo (2014) added that enterprise models were quickly evolving from silo-based applications to service-oriented architectures that offered flexibility and speed to market. Services were distinct pieces of software that delivered functional capabilities that one could reuse much like objects across multiple platforms. These architectures expose core system functionalities without the rework and complex functional integration imposed by customer business environments (Stubbings & Polovina, 2013). These service-ready platforms focused on leveraging the power of the Internet to deliver scalable services to its customers. Stubbings and Polovina (2013) highlighted that services still encapsulated core business logic and functionality, but

offered a different perspective to systems engineering that lowered the cost of process introduction.

Theme 2: Customer-Perceived Service Quality

Askin et al. (2007) highlighted that perceived call center service quality was a function of service time and the value that customers attributed to services rendered. Although scripting construed a process for consistent service delivery, customer expectations often fell outside the timeframes and scripting framework provided (Ashill et al., 2009). Ashill et al. confirmed that scripted customer interactions were a source of stress even if customer satisfaction ratings continued to be high.

Based on the interview results and observations, the personalized customer contact created by the new Quality Program within the call center had achieved its goal. P1, P2, and P4 highlighted that scripts within the Quality Program had facilitated a higher level of performance that better identified with the customer concerns. Over time, and as P7 indicated, the customer became better aware of the information requirements and processes involved, and this gave the call center a stronger professional perception. P11 added “customers like the quality focus; it personalizes the call and processes involved. But I often deal with irate customers that put process and template to the test”.

As P14 and P6 contrasted, some customers felt guided by the scripted models, and the repetitive nature of the dialogs annoyed these customers. As P15 added, “some customers even guessed at the information they provided” and this further complicated the solution process. P12 and P15 further offered that, perhaps, additional mechanized interfaces would help validate the information given or help bridge the information gap

that can occur. However, as P9 and P20 indicated, there was a feeling that scripts had become somewhat complex and needed review and fine-tuning. Having had the chance to listen to a customer exchange, I concluded that the customer often did not understand nor value the scripting complexity.

Yapp, Tanakinjal, and Sondoh (2014) found that perceived quality was one of the major aspects of success of any business. Moreover, personalization and trustworthiness were the most influential dimensions to this perceived service quality (Yapp et al., 2014). Victorino, Verma, and Wardell (2013) concluded that because predominately-scripted encounters lowered perceptions of customer service, verbal scripting became a key service design consideration for the call center. Victorino et al. highlighted the importance of understanding the dialog and intuitive nature of the service encounter and appropriately matching the level of scripting to the encounter that customers were anticipating.

Theme 3: Service Priorities

Kwon and van Jaarsveld (2013) examined how human-resource management shifted in response to outsource-strategies; it was interesting to observe how the target organization further used scripts to adjust business process strategies and team performance when threats to the SLA appeared. Hannif and Vo (2011) argued that managers in an outsourced environment had little control over call center strategies that shaped the quality of work-life experiences when weighed against the economic drivers of control, monitoring, and cost containment. The challenge was to embed a cultural

value and mission that enhanced performance, ownership, self-development and organizational learning (Cappelli et al., 2010).

P2, P15, and P21 highlighted that, although scripts helped to deliver on customer-centric solutions, call center staff continuously adjusted scripts to provide renewed delivery focus, and a means to gap management. It was my conclusion that the idea of an integrated solution set did not exist. Customers drove scripting changes in collaboration with call center staff and management on a daily basis. P3 indicated, “the manager walked a delicate balance between customer issue resolution and SLA targets”. Scripts varied due to the contractual commitments and the customer’s business model. The delicate balance between SLA’s and performance had become an issue especially when integrating new customers. P1, P14, and P18 added that, the manager did not seem to be in control of the business process as the customers set business priorities. This lack of control made for a very turbulent call center business where ongoing scripts were often in conflict with the desired long-term customer-centric business model.

Giebelhausen, Robinson, Sirianni, and Brady (2014) further examined the role of technology in service encounters and concluded that there was inherent incompatibility with technology and service objectives to the type of rapport that managers asked agents to construct. Customers still demanded a service priority and firms had to tailor a service relationship that met service expectations (Chi, Tsai, & Tseng, 2013). It was refreshing to observe how the call center regularly monitored the delivery of such customer expectations on an ongoing basis.

Theme 4: Scripted Procedures

North American call centers have adopted scripting strategies to contain costs and create uniform customer interaction (Kwon & van Jaarsfeld, 2013). Yet, as Davenport (2011) highlighted, unstructured knowledge work in a multitasking environment often led to lost time spent searching for knowledge and tool capabilities. Scripting had become a source of improvement and change for the organization (Linderman et al., 2010). However, scripted practices clearly undermined the use of team knowledge, and it limited the amount of information being shared (Slof et al., 2012).

Participants reinforced this thought as they concurred that they used scripts to leverage skills and the knowledge associated with the resolution of customer issues. P1 indicated, “scripts facilitated a higher level of performance that better identified with customer’s concerns”. It was interesting to observe that, although standardization was possible, there was limited effort to integrate business models and ticketing systems. This position did not maximize on the cost containment strategy. P1 further highlighted that “some agents have to use five different ticketing tools to deliver their service. Far too many knowledge databases complicate communication, and the way in which we introduce new business processes”. P2 added, “there were many discrete scripting knowledge database skills. Integration was a challenge. The call center would benefit from scripting standardization”. However, as P4 indicated, scripts were continuously being adapted to the managed relationship and SLA objectives. The standardization of process did not seem possible. As P6 highlighted, “scripts are part of templates that capture problem or issue details. These templates, in turn, are often part of a ticketing

system that standardized process”. P7 added, “it is not clear if management is fully aware of the processes involved or their impact”. These procedures were not familiar to some. As P6 further added, “managers use scripting to position exchange on a particular problem and yet scripts do not fix problems but rather sequence the questions that enable diagnosis”. As a result, many teams had developed personal in-house wikis to help them locate or apply solution sets. P12 added, “It is hard to determine which script is appropriate in this multi-service environment”. P13 further added, “Although templates should accommodate all teams involved, a shorter form may be more applicable to certain problems or issues”. It was hard to standardize templates when agents continually modified the processes that they applied. Along with the thoughts of P15, it was my observation that, although managers used scripts as method of doing business, agents often relinquished ticket control and passed on far too many tickets for resolution at a higher level. The problem resolution process needed a stronger first level resolution policy. Nonetheless, it was also my observation that the scripted routines and templates helped stabilize the operational environment.

Furthermore, as P9 and P10 indicated, scripting had introduced a structured approach to doing business, and as such, agents attempted to handle problems for an area of concern the same way across platforms even if not appropriate. Berkbighler and Dickinson (2014) highlighted that, although the goals and roles of the call center were evolving, the call center dynamics and the way of doing business had not. With scripting, workers had very little control in how they handled calls. In response, and as P14 and P16 indicated,

Subject matter experts (SMEs) emerged as process gatekeepers attempting to guide scripts usage and application, and organizational interventions (Arthur, Kyte, Villado, Morgan, & Roop, 2011). The alignment of scripting to a *community of practice* or subject matter expertise was indeed a first step to the creation and refinement of repeatable knowledge and expertise (Coyte et al., 2012). It was my observation that SMEs provided an opportunity for organization learning that went beyond the task orientation of scripts.

Theme 5: Learning Organization

Christopher and Tanwar (2012) proposed that people could empower people through robust knowledge exchange and learning. However, this form of learning required a culture and integrated platforms that promoted the collective sharing of ideas (Christopher & Tanwar, 2012). Salim and Sulaimann (2011) added that a firm must go beyond the standardization of routines or division of labor if it was to improve performance.

Although our target organization used a base of core scripts to elicit standardized approaches, the sharing of databases information and processes across platforms was an issue and limited innovation. Knowing how management applied available information could facilitate the evolution from SLA to process and knowledge management. P7 and P10 suggested, “management needed a better understanding of how agents applied their scripts, what information was available, and what has changed in the industry”. P1 added that, management did not adequately pursue generic opportunities that would better position the call center with a more competitive service and business model. P3 and P11,

however, concluded, “the call center had no incentive to look elsewhere as to how things were done”.

It was my observation that there were significant improvements made through team feedback mechanisms that promoted team learning despite the restrictions imposed by the multiple platforms and ways of doing business. Companies could no longer improve performance through the standardization of routines, division of labor, or management control (Salim & Sulaiman, 2011). Based on my observation and as highlighted by P1, “there is a need to think beyond the call center scripting guidelines putting people in a problem resolution mode that encourages initiative and innovation”. There was far too much effort on promoting scripts as a uniformed response mechanism.

P4 and P7 suggested that an integrated cloud-based solution sets could help the call center move away from the limits of existing silos and platforms, and help promote information exchange, issue ownership, and resolution. Also by participating in a community of practice, with different backgrounds and abilities, learners could learn through the collaboration of others on situated problem resolution (Jagasia, Baul & Mallik, 2015). The idea was to harness the processing capabilities of knowledge base repositories with the innovative and creative capabilities of the knowledge workers. Drawing on a case study at Ubisoft, a major firm in the video game industry, Harvey, Cohendet, Simon and Borzillo (2015) demonstrated that by leveraging knowing communities a company could nurture and promote from end innovation and problem resolution.

Theme 6: Control Paradigm

Call centers were no longer able to operate in a control paradigm, and needed to seek strategies that motivated customer engagement and involvement (Gardner, 2012). The call center lacked an effective process to handle impatient customers and a follow-up mechanism for abandoned calls (Jouini, Koole, & Roubos, 2013).

SLA and team performance continued to drive the manager's focus at the targeted call center. As P1 and P2 highlighted, the SLAs continued to drive script usage and modification, especially when there were spikes in service level concerns. P2 added, "although, managers provide feedback at a project level, the direction provided supports the operational needs and pressures of those sending feedback". P4 furthered "the management style impacts how scripts are used and applied to problem resolution". P1 added, "a client based dashboard would help the agents better understand ongoing priorities and changes in focus". P9 concluded with the thought "that managers use scripts to improve efficiency yet these processes have metrics that do not facilitate thinking outside the box. We solve problems the same way even if it is not appropriate. We seem to manage from crisis to crisis with a bottom line focus".

As P13 indicated, "although managers encourage the use of templates to solve ongoing business problems, agents do not equally share this focus and randomly apply changes to process to expedite matters". Some spoke of standardization while others demanded flexibility. P14 added, "the Statement of Work (SOW) and Service Level Agreement (SLA) drives the depth of resolution and applied business process". P18 added that although, "the manager drives the problem resolution process, it was the

coaches, who verified template application and decided on process integration”. The templates within the ticketing systems enforced methodology and operationalized issues (P10).

Management sought control and reduced role conflict within its structure and practices of dialog scripting (Hasle et al., 2012). The call center attempted to shape how people functioned and interacted with each other (Diugwu, 2011). This managed interaction appeared to work at an operation level; however, operational metrics reflected cost reduction strategies and did little to engage the employee or create real problem ownership (Ojha & Kasturi, 2005).

Theme 7: Workflow Integration

Goldman (2012) examined explicit scripting and explored how shared mental models bound people to the rationality of a problem context. Ashton et al. (2010) examined how global skill webs shaped skills and competencies to job requirements. Ashton et al. concluded that skill-web platforms rationalized knowledge work and shifted work from knowledge work to working the knowledge around functions that became globally transparent. This form of digital Taylorism moved knowledge away from being the property of an individual and closer to the concept of communities of practice (Ashton et al., 2010).

Our target organization offered an interesting comparison through its use of ticketing systems, operational managers, and coaches to disseminate knowledge and the processes that it wished its’ agents to pursue when resolving a customer issue.

Management had attempted to use scripts to standardize certain processes across the help

desk, but the coaches decided on process integration. Most scripts were knowledge components to existing ticketing systems templates. However, as P8 indicated, the processes were often client owned, and it became hard to enhance solutions with different process ownerships. As a result, ticketing tools had silos and often did not share scripts across the corporate business model level. There were far too many customer specific differences complicating any attempt to standardize processes. As P1 highlighted, “there is a need to improve problem resolution procedures on recurring situations. Knowledge needs to be better integrated, and its usefulness needs to be validated”. P9 added that, as a result, there was a lot of duplication of scripts and effort involved. P4, P11, and P12 added that lack of sharing these scripts made it difficult to determine which script was most appropriate in a multi-service environment, especially when they used and replicated client methodology and processes. It was my observation that there was a need to better document the ticketing systems and its implied solution sets for re-use and standardization. There was a need to better structure the tools for re-use across clients and platforms. P4 highlighted a need for a repository of base scripts. It was my observation that although the call center used standardized scripts to expedite solutions across platforms the operational environment needed to seek out new approaches to problem resolution on recurring situations.

Mou and Wang (2015) investigated the importance of functional boundaries and determined that although boundaries were important to spatial memory, people quickly learned to cross boundaries to perform data analysis. Their mechanism-independent model predicted better performance than in the across boundary model where navigation

relied heavily on path integration (Mou & Wang, 2015). Koukovini, Papagiannakopoulou, Lioudakis, Della, Kaklamani, and Venieris (2014) investigated a workflow framework guided by the flexibility of assets and the use of assets in the delivery of a task. This model integrated a semantic analysis that addressed both control and data flow and went beyond knowledge models that were typically data or knowledge centric.

Theme 8: Knowledge Sharing and Exchange

Linderman et al. (2010) concluded that shared mindsets enabled a group to overcome cultural barriers and better integrate knowledge when solving business problems. Establishing knowledge creation metrics positively influenced process improvements (Linderman et al., 2010). Reflective knowledge management still called for all team members to share information at the team level (Vo, 2012).

Unfortunately, the target call center did not have a consolidated base of scripts to share such information. Each customer silo had knowledge databases to address its troubleshooting concerns. P4 highlighted “managers needed to pare down the knowledge databases to make them more effective as the existing scripts are too broadly applied”. There could be value in developing a matrixed solution database that would help distribute knowledge and chronicle the instruments. However, P7 added, “knowledge transfer is complicated by the fact that processes are constantly revised to SLAs, and the mechanisms for distributing knowledge are not a focus when you are fighting fires and solving customer problems each day”. It was my observation that coaches and trainers needed to provide a more consistent approach to the application of the scripted

knowledge. The agents seemed to have the capacity to modify scripts to the desired relationship they wished to establish with a client. P9 added that the standardization of ticketing system design and content continued to be an issue. As P11 added, “managers need to put more people on the maintenance and update of knowledge databases so that ongoing scripts could better help manage SLAs”. P14 concluding remarks well summarized the data-sharing environment, highlighting “far too many agents adapt existing scripts to personal needs, and they do little to share these innovations or integrate them into the knowledge databases”.

As P16 highlighted, the silo processes did not readily support form exchange even though scripting was procedural and focused on the management side. P7 added, “although the management team has a lot of experience, they are removed from the daily operation by the team structure they have put in place; the managers need to better drive the integration of its team and solution sets”. P9 added that there was a need to modify key performance indicators (KPIs) to identify the amount of information shared if they were to innovate and improve the service model.

Anantatmula (2012) concluded that knowledge remained dormant and was not useful, if not reflected in the actions of the business. The challenge was to develop KM processes that enhanced employee skills, with a focus on improving productivity, rather than uniquely focusing on improving productivity. Zonooz et al. (2011) added that the availability of complimentary data and prior experience affected the quality of knowledge exchange. As it stood, and as P7 indicated, the crux was on SME’s and senior team members to pass process knowledge and problem resolution expertise. As P14 indicated,

“sharing still depends on the individual, and this needs to change if true process improvement can be achieved”.

Bresnen and Harty (2010) examined the concept of using objects to enable knowledge sharing and a solution management transformation. The object interpretative capability facilitated re-use from a group perspective that leveraged SME and senior team member expertise. Bresnen and Harty described the use of process maps, standardized forms, and procedures as a governance mechanism to solution construction that crossed the different organizations involved. Zhang, He, and Zhou (2013) further demonstrated that tacit knowledge sharing added to this project team capability by building networked connections to team member expertise and the team dynamic capabilities. The effective sharing of tactic knowledge could help improve the problem solution mechanisms.

Theme 9: Information Repositories

Ashton et al. (2010) highlighted that process repositories moved information away from being the property of an individual by creating a shared corporate competency. Krishnaveni and Sujatha (2012) identified the emergence of communities of practice that created a context for social interaction and knowledge transfer. Laha (2012) proposed a knowledge task platform that supported the granularity of information and knowledge involved with the interoperability of tasks across platforms.

As P1 highlighted, “there are far too many knowledge databases that complicate communication and how new business processes can be introduced. The information for resolving customer problems is in the knowledge databases, yet standardization across platforms is almost impossible”. P2 suggested, “joint meetings to discuss solution

alternatives could help promote issue ownership and resolution”. P3 added, “the ability to search knowledge databases by keywords could help reduce solution time and cross-training”. P4 also suggested, “managers should conduct boot camps on soft skills and emerging changes. Operational teams needed to pare down operational scripts and templates to generic process objects. It would be easier to integrate such objects into the multiple platforms involved”.

In contrast, P7 highlighted that, “with experience, an agent’s knowledge base drives the solution. However, knowledge was lost if additional knowledge was not captured”. It was my observation that the standardized solution set did not promote innovation. Agents needed to promote new ideas and leverage their experience base. Agents still escalated problem tickets to a more knowledgeable resource better suited to handle the problem, and this did little to develop expertise. This “catch and pass” strategy was often aligned to the performance indicators being pursued and did not deliver on a better understanding of how scripts and templates effected a problem resolution. P13 added, “management needs to be more familiar with the processes and templates. The information databases are almost irrelevant if the templates are not well done”.

It was my observation that many of the current templates and knowledge databases were not very helpful or had become heavy in content, and needed audit for consistency and refinement. For example, a knowledge database of 30 pages is far too long to read and still be effective at the time of problem resolution. P13 added, “a simplified form of a call script would also help customer dialog and help eliminate unnatural tendencies. We need to better categorize knowledge for search and retrieval”.

P14 suggested, “the use of Sharepoint to promote knowledge database sharing should be expanded”. It was obvious, from the received feedback, that a more frequent review of the knowledge databases and scripts was required to ensure that the information had not aged or was redundant. P15 suggested “the seniors and Subject Matter Experts (SMEs) still need to act as gatekeepers and drive improvements as they have a better handle of how solutions are applied”. P16 added that managers, however, “also need to better understand how scripts are used, as templates are often resolution driven and are not solution based”. From the feedback received in the observation process, the ticketing systems have indeed been changing, and it may be time for an outside perspective to help introduce process change and innovation.

It was my observation that the call center needed to restructure problem ticket resolution to how agents handled complex problems within the call center. The ticketing systems need improvement, as customized wikis had become a keyword stopgap workaround (P17). Other suggestions included screen pop-ups, putting the templates into the ticketing systems, and mechanized captures that would help provide a higher reliability on tracking the data being. The idea of creating a knowledge repository to what the client wanted did not align with the best of breed call center approaches. P18 added, “knowledge databases need a built-in search engine that can help extract the templates and scripted instruction sets”. P20 further added, “that was why SMEs were often the source of problem resolution instead of the knowledge databases”.

Liu and Lin (2012) further proposed the use of knowledge flows to understand the task-relevant knowledge needed to support problem resolution. However, these needs

would be different in a collaborative environment where tacit knowledge complemented and enhanced the level of expertise. By extracting knowledge nodes or objects from a base knowledge flow, organizations could generate a virtual knowledge flow that supported the knowledge processes needed to resolve a problem.

Theme 10: Managers as Active Knowledge Agents

Manley et al. (2014) proposed that a team should actively manage success through a combination of team knowledge, work processes, and management empowerment. Working together through shared objectives and approach, a collaborative solution process emerged (Manley et al., 2014). However, Slof et al. (2012) argued that scripting undermined the creative thought process and local innovation by enforcing a standardized approach to thought and resolution. Juceviciene and Mozuriuniene (2011) introduced the term *organizational knowing* and promoted the idea that a manager could make a difference if they promoted learning at all levels.

The thematic results of our interviews confirmed that management style did influence how teams applied scripting to resolve a particular problem. However, as P9 highlighted, “the call center managers are clearly behind the scenes as they have deliberately used coaches and team leaders to ensure process consistency”. It was my observation that the manager continued to drive the vision and the latitude that he/she gave employees did allow them to take ownership and leadership in problem resolution. This approach, however, alienated the manager from the daily operation. However, it did facilitate a stronger customer facing strategy. Although the manager was not deeply involved with the agents, he/she was clearly aware of the daily operational objectives and

team performance. The observed daily operational metrics supported this. However, P9 indicated, “there is a feeling that statistics may have blinded managers on operational issues, as customer surveys do not always reflect reality. The focus on opening and closing scripts needs to move to real customer issues that we deal with on a daily basis”. P11 highlighted “although the operational philosophy is to leave what is working in place and massage ongoing metrics towards, this is not how we were going to retain customers, in the long run”.

This focus on meeting numbers did not communicate employee support or the desire to improve the process. P11 suggested, “managers must get more hands on experience to see what agents must deal with on a daily basis. This approach could help improve process and scripts that re-enforce problem ownership and problem resolution capabilities. Not all managers have the same operational understanding or experience”. The monthly goal setting feedback on scores and performance did not suffice. P12 highlighted “more management time should be devoted to solving the problem the right way”. Furthermore, reactive procedures that are SLA driven do not synchronize with the knowledge database.

P13 added, “vocal clients and their feedback often drive change and the business focus for any given day”. P13, furthermore, felt that, “the manager was biased and did not have a fair perspective on all client needs. Sometimes SLA requirements solely drove his/her actions”. P13 furthered that, it is difficult to say what scripting skills his manager had, as he/she did not see the involvement at the operational level. P14 indicated, “changing management priorities seem to pull us in different directions each day”.

P15 furthered this concern by stating that, “although the manager provides ongoing feedback, customer escalations seem to send the team into a reactive mode that destabilizes the team”. The real involvement was at the coach and senior level as they reviewed escalations and listened to how agents managed calls on a daily basis. In summary, management did not contribute to the *organizational knowing* yet did create a structure to handle the daily operational issues, and this primarily focused on managing resources and SLA statistics.

Nag and Goia (2012) examined the role of managers as active knowledge agents and raised questions as to whether one should streamline knowledge to what is needed to perform a task or should knowledge be expanded to facilitate the generation of new ideas. The agents clearly did have a support structure in place to do either. P20’s perspective was that “there is a big disconnect between coaching and management. I rarely get feedback from the manager, but I always seem to be getting feedback from the coaching staff. When I do get feedback, it seems to be the result of an issue”. The feedback mechanisms for personal improvement needed to be re-examined if problem resolution ownership was to be improved. Beirne et al. (2004) argued that purposeful human agency could fuel participation and ownership despite the application of structure and panoptic methods such as call monitoring in the call center.

Theme 11: Information Sharing Challenges

Management needed to focus on double-loop learning to enhance and evolve existing processes (Antoaneta & Ileana, 2008). Scripting, as an instrument of adaptive learning, involved incremental learning, and was a system that managers effectively used

to transfer knowledge and expertise. However, Tahir et al. (2011) found that work practices were resistant to change, and that learning was distinct from work. Management had to create a learning environment that promoted experimentation and learning.

It was my observation that the newer agents found this base of scripted information a positive contribution to their initial effectiveness and performance. It was a source of reference. P3 highlighted “I am given time to develop and promote new innovative ideas”. P4 added, “the willingness to improve process, based on agent feedback, is both engaging and motivating”. Many felt empowered to effect change.

P7 added, “the management team has a lot of experience, and they use this experience to drive the team and its solutions. However, a lot of knowledge and experience is lost because of attrition and the fact that the ticketing system cannot adequately capture information to drive solutions across customer platforms”. P7 stressed, “the mechanisms for transferring information did not seem to be a priority. SLA pressures must be reduced, and agents must be given time to drive solutions”. Furthermore, P9 highlighted that, the SLA Ratchet Clause was a major hurdle as it allowed for contractual renegotiation should any major process improvement or enhancement be applied. As a result, there was no real incentive for change, and the ticketing system design will continue to be an issue.

What is interesting to note is that, much as at the call center, feedback stimulated improvement and its transferability to multiple tasks were limited because of the organizational silos and knowledge bases created (Rakestraw, 2014). Solution based teamwork had a significant impact on the emerging cognitive capabilities (Rakestraw,

2014). However, results from the research conducted by Chen et al. (2014) supported the premise that organization still had to consider the structure and strength of individual ties if they wanted to enhance performance through the transfer of information.

Theme 12: Management Controls

Bain and Taylor (2009) examined the effect of surveillance and control of labor processes and the use of scripting to organize labor and task performance. Sacanni (2013) highlighted that it was important to understand how the employee internalized control and aligned their contribution to the norms laid out by the organization. The attempt to compare the call center to an electronic panopticon may no longer be valid, as this did not recognize the role managers played structuring operational activities (Sacanni, 2013).

Participants supported the premise that SLAs continued to drive script usage. Moreover, as P2 has indicated that there is opportunity to modify and improve processes; however, process improvements could hurt the bottom line due to the retrenchment clauses that exist within the SLA. As a result, it was my observation that the managers constantly focused on team performance and threats to the SLA. Managers constantly adjusted activities to meet the SLAs. As P3 further indicated, “time has become a key element to any improvement process”. P4 highlighted “operational floor managers are SLA driven and constantly focus on key performance indicators”. P6 added, “the review of SLA and the associated statistics can be stressful for some agents”; creating a panopticon on both the human side and on leveraging the metrics towards a higher level of performance. However, the SLA focus did not facilitate problem resolution as agents sometimes pushed cases along to meet SLA requirements. It was my further observation

that SLAs drove the business focus, and it was not always to a first-call resolution. P9 highlighted “we exercised far too much catch and pass when SLAs get into trouble”. P14 added that the manager’s operational experience allowed for good feedback but that the key performance indicators needed to be better intertwined to the service being provided. The general feeling of the thematic feedback was that the SLAs often skewed the operational focus.

The contribution that the workers made to control was significant. Eisenberg, Johnson, and Pieterse (2015) proposed the use of performance dashboards to communicate the informational communication network that an organization wished to pursue, and the effectiveness achieved. Costa Oliveira (2014) further spoke of a balanced scorecard that would highlight the business model, its risks, and key success indicators. This scorecard could help employees better understand how key business drivers contributed to the success of the company.

Applications to Professional Practice

Informational processes and structures challenged the application of scripting. Furthermore, contractual commitments created a delicate balance between SLA and performance that dictated the integration of the business model and its scripted processes. I gathered new insights on how management could use scripting to improve business processes and performance. The value of this qualitative case study is that it extends the quantitative analysis of Mani et al. (2010) on the effects of scripting on customer problem solving.

Management should assure that the call center processes move beyond existing functional models. Management should map and identify knowledge capability that could facilitate solution management in the multi-platform environment. Management should understand its knowledge requirements to the solution of organizational issues. Bresnen and Harty (2010) examined the concept of using objects to enable knowledge and process sharing within this context. Bresnen and Harry described the use of process maps, standardized forms, and procedures as a governance mechanism to solution construction. Liu and Lin (2012) also proposed the use of knowledge flows to understand the task-relevant knowledge needed to support problem resolution. By extracting knowledge nodes or objects from a base knowledge flow, organizations could generate a virtual knowledge flow that better supported the problem resolution processes and the re-use of nodes across platforms. Ocasio, Lowenstein, and Ngam (2015) furthered linked this emergent knowledge flow to the distinct communicative events that agents deal when resolving issues with customers. Ocasio et al. (2015) identified the need for a map of institutional logics that consolidated an organization's understanding of the communication processes involved or required.

The customer business needs drive the design and flow of the call center processes. As P1 has highlighted, "using a customer service analysis methodology, we operationalize customer needs and support them with the proper skills at each level". Telephony and skills-based routing system directed calls to the appropriate expertise associated with the resolution of customer issue. P11 and P14 added that, skills-based routing had effectively standardized problem process management. It was my observation

that skills-based routing accelerated the matching of skills to potential problem areas but was ineffective at filtering the calls. Grey areas still exist within the sub-categorization of customer issues to available resources. However, there are substantial risks associated with making the selection process too complicated. Customers dropped calls when the technological interface became too complicated or impersonal. Customer handling is an area for significant productivity gain as it can accelerate solution delivery and the determination of which skill sets best to apply. The integration of scripts with ICT had also increased the worker's ability to telework or work from a remote location outside the conventional workplace (Callier, 2013). Telework presented a significant new business strategy to further decreasing costs and leverage remote skill sets available within a home-based environment (Callier, 2013).

Burnett (2012) concluded that the next generation of ICT would need to enable tacit knowledge, reducing the cost of representational knowledge and facilitating the flow of knowledge between communities of practice. Burnett (2012) discussed the use of narratives as a means of codifying knowledge and developing an understanding of communities of why players engage in the dialog process. This understanding could lead to the development of an internet-based narrative system where stakeholder actions and requirements drive knowledge processes (Stary, 2012).

Implications for Social Change

The implications for positive social change include the potential to promote virtual knowledge flow and the building of subject matter expertise. This object oriented approach proposes the use of workgroup structures that exploit communities of practice

and collective team knowledge sharing around knowledge objects of interest. This approach to knowledge sharing and process management evokes a higher level of process ownership, learning, and customer issue resolution. This approach will also leverage process knowledge and expertise, and its reuse across platforms. Call center processes would become knowledge centric.

Recommendations for Action

The recommendations for action are that the call center organization offer an integrated “out of the box” solution set to its customers so that it could improve performance and reduce the solution time. The employees at the service desk are dealing with so many different platforms that it is difficult to standardize the process or even promote issue ownership and resolution. There is a need for management to reposition the call center with a competitive service and business model that better positions functional capabilities for re-use and the sharing of expertise and knowledge that can help accelerate problem resolution. This standardized set of functionality could expedite client introduction and basic call center capabilities.

The management of the call center should better understand its informational requirements within problem resolution and create an integrated information map to better understand how to solve problems. Furthermore, management should align functional scripts to communities of practice or subject matter expertise that could help refine problem resolution capabilities. The communities of practice could create a context for social interaction and knowledge transfer that promote the development of solution

objects that can more easily be re-used. The sharing of tacit knowledge could also help improve the problem resolution mechanisms.

The management of the call center should pursue the next generation of ICT tools to better integrate knowledge improving problem-solving capabilities with informational requirements. Burnett (2012) proposed the use of narratives to guide problem resolution and the exchange itself. The results of this new method of coding knowledge through narrative scripting could drive the customer engagement and problem resolution process (Burnett, 2012). The management of the call center should pursue new semantic technologies that can leverage knowledge and content based on the context-specific need (Stary, 2012).

Recommendations for Further Study

This single-case study explored a North American call center. There is value in exploring additional call centers to determine if the structural and organizational concerns exist beyond the outsourcing model investigated. There is also value in exploring the effects of scripting on outsourced backroom processes of other industries.

The recommendation is that future researchers should further explore (a) how scripting has been used to solve business problems in a single client environment, (b) the influence of the multi-client environment, and (c) what call center processes support an object approach to service capability. This exploration should include further research into what scripted functions align with call center capabilities and how call centers can operationalize these functions for platform re-use. The findings of additional exploration can only add to the understanding of scripting in the call center environment and the

effects on problem solving. Finally, one could extend the study conducted by Mani et al. (2010) to include a mixed-method research that further explores the variables that contribute to call center organizational processes and knowledge exchange.

Reflections

The doctoral process has been both rewarding and challenging. The rewards came from the rich insights that the call center employees shared on how scripting had been used to solve and address customer issues in their organization. This interview experience was refreshing and I was surprised by the depth of organizational understanding that each agent possessed and expressed. The agent desire to contribute to the study was outstanding. There was an element of trust and a feeling that the interview feedback could make a difference. The thematic analysis added insights to how scripting has affected the call center problem solving capability and I was pleased by the depth of knowledge that I was able to extract with this doctoral study.

The challenge rested with process and an evolving doctoral model that needed constant revision and adaptation. Although, the review process was thorough and instrumental at catching these discrepancies, I could avoid some revisions and process recycling.

Summary and Study Conclusions

Although scripting had leveraged existing processes, it did not adequately address the capability needed to resolve the permutation of business problems that were present in a call center environment. Many different scripted platforms serviced this outsourced call center environment and this complicated problem solution resolution. These

customized needs and the service level agreements drove the solution sets. The current customer silos evoked substantial maintenance and a duplication of scripting effort. Furthermore, these scripts focused on a task and not on process expertise. Service level agreements further complicated this by constantly refocusing team priorities and objectives.

The management of the call center had a business need to accelerate customer introduction and integration. Customer specific data and process requirements complicated the potential service offering. The outsourcer had a need for a renewed platform that it could position as a competitive offering. The solution was not in adding more scripts but rested with solution models that went beyond process scripting replication. The research findings indicated that an object orientated model that uses workgroup structures could better exploit communities of practice and collective team knowledge sharing. This approach to knowledge sharing and scripted process management could evoke a higher level of process ownership, learning, and customer issue resolution. This approach could further leverage scripted process knowledge for re-use across platforms. Management of call center processes would become knowledge centric. SME's would be key to this renewed structure and its problem handling. Object-oriented functional capabilities would drive the desired process model, and SME's would need to re-examine current scripted models. Objects of interests would drive the Ticketing Systems and solution design.

In conclusion, the proposed problem solution model goes beyond process scripting replication. The new approach to process and knowledge management could

evoke a higher level of process ownership, learning, and customer issue resolution and would be more attune to process and knowledge re-use.

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Appendix A: Letter of Cooperation from a Community Research Partner

Letter of Cooperation from a Community Research Partner

9/23/2014

Dear Roman Dzuba,

Based on my review of your research proposal, I give permission for you to conduct a study entitled Call Center Business Scripting and the Effects on Problem Solving within the Service Desk area of

As part of this study, I authorize you to interview staff, collect data and perform member checking to secure the necessary research data. Individuals' participation will be voluntary and at their own discretion.

We understand that our organization's responsibilities will include a list of potential candidates, personnel, a room to facilitate the interviews, resources, and supervision that the partner will provide. We reserve the right to withdraw from the study at any time if our circumstances change.

I confirm that I am authorized to approve the research in this setting.

I understand that the data collected will remain entirely confidential and may not be provided to anyone outside of the research team without permission from the Walden University IRB.

Sincerely,

Walden University policy on electronic signatures: An electronic signature is just as valid as a written signature as long as both parties have agreed to conduct a transaction electronically. Electronic signatures are regulated by the Uniform Electronic Transactions Act. Electronic signatures are only valid when the signer is either (a) the sender of the email, or (b) copied on the email containing the signed document. Legally an "electronic signature" can be a person's typed name, their email address, or any other identifying marker. Walden University staff verify any electronic signatures that do not originate from a password-protected source (i.e., email address officially on file with Walden).

Appendix B: Consent Form

Employees with 1 year of experience with scripted call center processes are invited to participate in a research study concerning the effects of scripting on problem solving when interacting with customers. This form is part of a process called “informed consent” to allow you to understand this study before deciding to take part.

The study is being conducted by a researcher named Roman Dzuba, who is a doctoral student at Walden University.

Background Information

The purpose of this study is to explore call centers’ front-line employees’ perceptions of the effects of scripting on problem solving when interacting with customers.

Procedures

If you agree to be in this study, you will be asked to:

- Participate in an interview that should take no more than one hour of your time at a location convenient to you
- Answer 12 open ended questions that address your experience with scripting
- Allow the researcher to observe your operational activity with regards to:
 - how scripts are applied in problem solving,
 - how scripts are used to resolve customer issues,
 - how are scripts laid out to help employees resolve issues,
 - what management strategies are used to manage the use of scripts.

I will use the following questions for the interview process with the frontline employees:

1. How does management use scripting skills to help you resolve customer problems?
2. How do you feel about your manager’s scripting skills to solve customer problems?
3. How do you feel about your manager’s scripting skills in providing you feedback on your use of scripts?

4. How do you feel about your manager's scripting skills in encouraging you on your use of scripts to resolve problems?
5. What scripting skills do you feel your management has?
6. What scripting skills do you feel your management should have?
7. How do you determine which script is most appropriate?
8. How do you feel customers perceive your use of scripts?
9. How does management provide you feedback on scripts?
10. How do managers encourage your use of scripts to resolve problems?
11. How does management allow you to draft or modify your scripted responses to resolve a customer concern?
12. What would you improve in the deployment of scripts? Why?

Voluntary Nature of the Study

This study is voluntary. Everyone will respect your decision of whether or not you choose to be in the study. No one will treat you differently if you decide not to be in the study.

Risks and Benefits of Being in the Study:

Partaking within this study would pose no risk to your safety or wellbeing.

The benefit of this study could lead to a deeper understanding and more effective use of scripting in call center business practices.

Payment

Due to the nature of the study, there will be no compensation for participating in the study.

Privacy:

Any information you provide will be kept anonymous. The researcher does not have access to your personal information; therefore, this study will not use your personal information for any purpose outside of this research study. In addition, the researcher will not include your name or any other identifying factors in the study report. Data will be

kept secure by password protection. A digital copy of the raw data will remain with the researcher via password protected personal computer with a backup copy in a secured safe. Data will be kept for a period of at least 5 years as required by the university.

As a participant, please keep a copy of this consent form for your personal records.

Contacts and Questions

You may ask any questions you have now. Or if you have questions later, you may contact the researcher via email, roman.duba@waldenu.edu or phone, 954-564-7223. If you want to talk privately about your rights as a participant, you can call Dr. Leilani Endicott. She is the Walden University representative who can discuss this with you. Her phone number is 1-800-925-3368, extension 3121210. Walden University's approval number for this study is **11-05-14-0079130** and it expires on **November 4, 2015**.

Statement of Consent:

With the return of this email, I consent to participate in this study as indicated above. I confirm that I have read and understand the terms of this study and that I am 18 years of age at this time.

Signature _____

Date _____

Walden University policy on electronic signatures: An electronic signature is just as valid as a written signature as long as both parties have agreed to conduct a transaction electronically. Electronic signatures are regulated by the Uniform Electronic Transactions Act. Electronic signatures are only valid when the signer is either (a) the sender of the email, or (b) copied on the email containing the signed document. Legally an "electronic signature" can be a person's typed name, their email address, or any other identifying marker. Walden University staff verify any electronic signatures that do not originate from a password-protected source (i.e., email address officially on file with Walden).

Appendix C: Interview and Research Questions

I used an open-ended interview approach to observe and gather data, addressing the following research questions:

RQ1: What are the scripting skills managers need apply to call center frontline employees to enhance customer problem solving?

I used the following questions for the interview process with the frontline employees in relationship to RQ1:

1. How does management use scripting skills to help you resolve customer problems?
2. How do you feel about your manager's scripting skills to solve customer problems?
3. How do you feel about your manager's scripting skills in providing you feedback on your use of scripts?
4. How do you feel about your manager's scripting skills in encouraging you on your use of scripts to resolve problems?
5. What scripting skills do you feel your management has?
6. What scripting skills do you feel your management should have?

RQ2: How can managers apply scripting skills to call center frontline employees to enhance customer problem solving?

I used the following questions for the interview process with the frontline employees in relationship to RQ2:

7. How do you determine which script is most appropriate?

8. How do you feel customers perceive your use of scripts?
9. How does management provide you feedback on your use of scripts?
10. How do managers encourage your use of scripts to resolve problems?
11. How does management allow you to draft or modify your scripted responses to resolve a customer concern?
12. What would you improve in the deployment of scripts? Why?