ACHIEVING HR-FIRM PERFORMANCE LINKAGE THROUGH

ORGANIZATIONAL STRATEGY IMPLEMENTATION:

QUALITATIVE CASE STUDIES OF FOUR U.S. BASED FIRMS

A Dissertation

by

MEERA ALAGARAJA

Submitted to the Office of Graduate Studies of
Texas A&M University
in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

December 2010

Major Subject: Educational Human Resource Development

Achieving HR-Firm Performance Linkage Through Organizational Strategy

Implementation: Qualitative Case Studies of Four U.S. Based Firms

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Approved by:

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ABSTRACT

Achieving HR-Firm Performance Linkage through Organizational Strategy

Implementation: Qualitative Case Studies of Four U.S. Based Firms. (December 2010)

Meera Alagaraja, B.Sc.; Mahatma Gandhi University; M.A, Mahatma Gandhi

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Dr. Larry McCoy Dooley

Several empirical studies have investigated and established the effect of HR practices

and systems on organizational performance. However, there has been little or no focus

on the effect of the HR function on organizational performance in both human resource

development (HRD) and human resource management (HRM) literature. The term human

resource development and management (HRM&D) is utilized to represent scholarly and

pragmatic considerations of both fields in representing the HR function. This study

elaborates on ways in which organizations achieve the HR-firm performance linkage

using the resource-based view of the firm as a theoretical framework. In order to do so,

the study examined HRM&D function involvement in lean and quality strategy (LQS)

implementation in four U.S. based distribution companies. A qualitative case study

approach was utilized to answer the following research issues: 1) the role; 2) the extent

of HRM&D involvement in LQS implementation and; 3) the effect on organizational

performance. A total of 51 executives participated in the study. Qualitative analysis of

data using the constant comparative method helped in understanding the distinctive ways

firms achieved the HRM&D-firm performance linkage. Five interrelated components are macro-conditions, strategy (LQS), structure, cross functional performance, and organizational performance affecting HRM&D involvement in LQS implementation. The results suggest that organizations leverage external and internal resources for sustaining competitive advantage, thereby enhancing organizational performance. Further, it was found that the extent of HRM&D involvement in LQS was dependent on functional engagement between the Operations and HRM&D functions. Finally, based on empirical data gathered and verification, the following results emerged: (1) three distinctive levels of cross functional performance; interactions, alignment and integration between Operations and HRM&D illustrated the manner in which HRM&D functions are utilized by organizations espousing LQS; (2) stronger HRM&D-firm performance linkages are created by socially complex relationships influenced by environment and internal factors such as leadership, culture, strategy and structure, (3) strategic relevance of the HRM&D role increased involvement in organizational strategy implementation and, (4) potential resource based advantages for HRM&D function in achieving business partner status were isolated. The implications of the study are outlined.

DEDICATION

To all teachers: past, present and future;

Especially to my parents, brother and sister.

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NOMENCLATURE

LQS	Lean and Quality Strategy
HRM&D	Human Resource Management & Development
C1	Company 1 (Industrial Distributor)
C2	Company 2 (Electronics Distributor)
C3	Company 3 (Automotive Distributor)
C4	Company 4 (Chemical Distributor)

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CHAPTER I

INTRODUCTION

Senior executives readily acknowledge the importance of people in organizations. Yet, few perceive a significant role for the human resource (HR) function in the development and management of people (Barney and Wright, 1998). Organizations place far greater emphasis on achieving business priorities. Nevertheless, the impact of talent acquisition, development and retention systems is an area attracting increasing interest from management scholars and practitioners. Research has established that a high level of investment in human resource practices and systems influences organizational level outcomes such as labor productivity, turnover, profitability, sales growth and quality. But, top managers do not value HR departments (Barney & Wright, 1998).

Traditionally organizations have relied on human resource (HR) departments for leveraging employees' skills, abilities and knowledge as a source of competitive advantage. However, HR departments are often unrepresented at senior levels of the organization where key business and people related decisions are deliberated and made (Becker & Huselid, 2009). In contrast, other strategic business priorities such as LQS involving processes, products, and services continue to occupy senior executive time (Becker & Huselid, 2009). To date, a majority of organizations focus on economic value addition as the primary performance indicator (Haggerty & Wright, 2009). Transforming "people are our most valued assets" rhetoric into organizational reality is by far,

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This dissertation follows the style of *Human Resource Development Quarterly.*

the most difficult challenge facing organizations today. In this research, I posit

that linking strategic objectives with the HR function has an effect on performance

at the level of the organization.

Activities surrounding the "people" aspect of the business have received

attention from scholars from distinct fields of human resource development (HRD),

human resource management (HRM), organization development (OD), and industrial

and labor relations (Kauffman, 2001; Ruona & Gibson, 2004). The reality of work in

organizations is such that HR practices represent a mix or a blend of HRD and HRM

perspectives and assumptions; their application is contingent upon the organizational

context. In order to address the central questions—what is the perceived 1) role and 2)

extent of HRM&D involvement in LQS implementation and, 3) effect on organizational

performance in four US-based distribution companies. Both HRD and HRM literature

were reviewed to develop a more complete understanding of HR and Operations

function and their linkage to firm performance. A new term *human resource*

management and development (HRM&D) is utilized in this dissertation to creatively

manage the definitions, disciplinary perspectives, application and management of human

resource in HRD and HRM fields.

Purpose of the Study

The overarching purpose of the study was to examine the manner in which HR as a

function advanced and hindered LQS implementation in selected organizations.

Organizations from the distribution industry espousing to be LQS oriented were

identified for the study. The researcher set out to understand the role of HR function and involvement in LQS implementation. Ways by which participating LQS organizations demonstrated evidence of sharing or shared responsibility over cross functional metrics between HR and Operation's departments established the HR-firm performance linkage. How do organizations achieve the HR-firm performance linkage was the driving question.

Theoretical Framework

The resource-based view (RBV) is useful for analyzing firms' tangible and intangible resources (Wernerfelt, 1984). Situated as a broader framework in economics and determinants of firm performance, valuable, rare, imperfectly imitable, non-substitutable resources, capabilities unique to an organization (managerial resources such as management skills, organizational routines, and leadership) highlight new strategic options as a source of competitive advantage (Barney, Wright & Ketchen, 2001; Castanias & Helfat, 2001; Barney, 1991; Wernerfelt, 1984). Thus, RBV offers a rich body of theoretical tools to analyze firm level resources. RBV has been applied in different ways in other fields such as human resource management, economics and finance, entrepreneurship, marketing, and international business (Barney, Wright & Ketchen, 2001).

RBV can be positioned relative to firms' human resources. The intersection of strategy and human resource issues helps define and determine HR systems and practices as a source of competitive advantage (Wright, Dunford & Snell, 2001). Wright

et al. (2001) emphasized firms' human capital systems and routines over human resource practices and policies that are imitable. Interrelated components of the HR system, work practices, and policies continually reconfigure an organization's competitive advantage, although as environmental factors change rapidly, these capabilities may no longer remain valuable (Wright et al. 2001). In addition, institutional and environment factors also impact firms strategic priorities; and as a consequence, the firms' human resources. The role of RBV, therefore, in acquisition of necessary resources through joint venture, alliances, and technology has important implications for organizations (Hitt, Dacin, Levitas, Arregle & Borza, 2000; Hoskisson, Eden, Lau & Wright, 2000). In particular, institutional (organizational culture, structure and leadership) and environmental factors from the RBV theory were employed to develop macro level insights into the selection and choice of LQS as an appropriate strategy in the selected organizations.

The application and implications of RBV in business strategy has, over time, led to increased convergence between strategic management and strategic human resource management (Snell, Shadur & Wright, 2001; Wright, Dunford & Snell, 2001). This aspect of the RBV theory was used to identify and frame potential themes in this study: the impact of LQS implementation in emphasizing a quality mindset, assessment of cross functional performance between operations and HR functions in realizing LQS objectives, and the creation of a trained workforce. Cross functional performance can be viewed as a micro-organizational process investigating how necessary resources are acquired and developed in the achievement of organizational level strategies, offering

insights into organizational behavior and unique resource creation (Podsakoff, MacKenzie, Paine & Bacharach, 2000).

Greater understanding regarding organizational factors that hinder or advance HR role and involvement in LQS implementation is needed. Cappelli and Singh (1992) argued that RBV provides a theoretical rationale for why HR, as a system, has implications for organization-wide strategy formulation and implementation. Barney and Wright (1998) emphasized the necessity of paying attention to HR as a system of practices. In understanding and application of RBV in SHRM research, they focus on the role of people management systems in developing core competencies and capabilities of firms. According to Barney and Wright (1998), HR systems contribute in "creating cultures or mindsets that enable the maintenance of unique competencies" (p. 9); "promote and maintain socially complex relationships characterized by trust, knowledge sharing, and teamwork" (p. 10) resulting "in the creation of a high quality human capital pool that cannot be easily imitated" (p. 10). However, further research on the implementability of the suggested strategies (Wernerfelt, 1984) is needed.

In the context of HR-related firm interests, the resource based view (RBV) of the firm focused on the strategic orientation of HRM practices as socially complex and a source of competitive advantage: rare, specialized, valuable, difficult to imitate and hard to substitute (Barney, 1991; Ferris, Hochwarter, Buckley, Harrell-Cook, & Frink, 1999). The knowledge, skills and behavior of employees offer unique strategic value creation thus becoming a source of competitive advantage in organizations. In addition, "inimitability" of organizational competencies contributes towards sustained value

creation. Inimitability due to historical events and cultural norms also create intangible assets because of their unique "social complexity/interconnectedness" (Colakoglu, Hong, & Lepak, 2009, p. 37). Thus, RBV theory provides theoretical and conceptual grounding in understanding how competitive advantage is created two levels. At the macro level, institutional and environmental factors, strategy, and structure affect the choice and selection of organizational strategies. At the micro level, organizational social capital, (i.e., internal/external relationships) highlight ambiguity, social complexity in knowledge exchange in the creation of human capital resources (Barney, 1991) that in effect, translate and affect the quality of strategy implementation.

Research Question

In order to investigate the role and extent of HR involvement in LQS implementation, the central research question was developed: what is the perceived 1) role and 2) extent of HRM&D involvement in LQS implementation and, 3) how does the role and extent of such involvement impact organizational performance in four US-based distribution companies? The overarching purpose of the study was to better understand the manner in which HRM&D and Operation functions were integrated by organizations espousing to be LQS oriented. The researcher set out to understand the ways in which LQS oriented organizations viewed and engage HRM&D functions toward organization success.

Research Design

Investigators in organizational research have increasingly begun to propose alternative approaches more appropriate to the study of meaning in context (Delbridge, 1998). The use of the general qualitative approach for examination of organizational factors in four U.S based companies provided a rich detailed storyline primarily answering the "how" and "why" questions. Yin (1994) observed case study as an appropriate methodology for gaining understanding of a specific phenomenon under study, providing a detailed contextual analysis through the observation of a limited number of events and conditions and the interacting relationships between them. Case study research brings a tight focus on the phenomenon and understanding of complex real-life situations (Soy, 1996).

  Selection of Case Organizations. Companies volunteered for the study were seeking to copy best practices for strategically expanding and positioning the HR function. So that their identities would be confidential, each organization was provided an identifier C1, C2, C3, and C4. HR and Operations professionals in each organization acknowledged existing gaps in fully leveraging HR systems for enhancing organizational level performance outcomes. The overall selection of cases was focused on the distribution industry. Three of the case companies were located in Texas while the fourth company was located on the East Coast of the United States. A sample of five Vice President's in Operations function (including the following departments – operations, IT, marketing, sales, lean, and quality functions) and three from HR function from each company were invited to participate in the study. The only exception was with

C2 where access to the HRM leadership was denied. Employees reporting to the functional heads were also interviewed as additional sources of evidence.

Collection of the Data. Initially, interviews were utilized as the sole method for data collection. Due to the nature of this study, the researcher moved from one case to another upon completion of data collection. Transcribing of interviews was an ongoing process and the interview data were stored for later retrieval. Organizing set categories for sorting and managing data (Gall et al., 1996) evolved as interviews were progressively completed for each case company. Schedules were worked with interviewees across companies. Weekly meetings with the primary dissertation advisor helped refine interview questions, ability to interpret answers, correct problematic areas, improving and refining subsequent data collection process. Research notes were also taken in the field during interviews, transcription and analysis of strong positive and negative feelings in the form of brief comments to help readers better understand the findings (Gall et al., 1996).

Selection of Interview Participants. It was mutually agreed with the primary dissertation advisor that completion of atleast eight interviews, five with Operations and three with HR function executives in each company would ensure emergence of regularities central and relevant to the study Lincoln and Guba (1985). Representatives from each company agreed to the data collection guidelines set by the primary advisor of the dissertation research. Time, budget and company demands for the final report prompted the decision to end data collection (Gall et al., 1996)

Analysis of the Data. The data analysis process included steps and methods commonly recommended by scholars of qualitative case study research (Gall et al., 1996; Lincoln & Guba, 1995; Miles & Huberman, 1994) including: coding and comparing data through the constant comparative method, refining the categories, developing a conceptual model and establishing validity and trustworthiness. Multiple case designs allow for integration of constructs and themes across cases (Yin, 1994). Causal patterns emerged where the analysis of data revealed: a) patterns common across the cases and were inherent in documents and interviews; b) reflective aspects of the case reports relied on the researcher's training, personal experiences, observations, intuition and judgment (Dooley, 2002). Additional interviews that were short and targeted were conducted at different stages of data collection and analysis. The case study findings were checked with original informants, reviewing for overstatements or errors during formal presentations. These peer debriefer meetings ensured member checking on the validity of themes and, the organizing framework. Other company executives not involved with the study also participated in suggesting some corrections and elaborations to the original analysis. During the process of data collection and analysis, major themes developed were refined and modified as more data was accumulated. The major themes emerged as constructs or variables with clear interconnections and flow between them.

Findings from the Study. Company representatives also reviewed case reports to ensure clarity and validation of the findings. Member checking from original

interviews and research presentations with executives at the end of the study were conducted as part of extension of trustworthiness, verifiability and utility of the research.

Significance of the Study

The selection of four organizations espousing LQS as a dominant organizational strategy within the distribution industry offers scope for comparing the different ways in which resource attributes, firm characteristics and economic performance at a broad level are utilized. The effectiveness of LQS implementation can be better investigated as the selected organizations offer greater homogeneity in terms of available firm resources. As each organization represents a different distribution channel (from industrial, electronics, automotive and chemical), they jointly shared and yet differentiate firm and HR specific characteristics. Thus organizations situate HRM&D differently in the cases offering a balance of similarity and differences in leveraging available resources from the external environment and internal context.

Organizations need to develop a greater understanding of HRM&D as a system with clearly defined performance expectations and outcomes (Colakoglu, Hong & Lepak, 2009). Effective HRM&D systems integration with operational aspects of business is thus imperative for the performance and improvement of individuals, processes and the organization as a whole (Becker & Hueslid, 2009; Guest, 1987). This exploratory research makes a first attempt at building a comprehensive model of organizational alignment, examining the extent to which strategy, structure and culture create an environment that facilitates the integration of HRD initiatives with company

operations for the achievement of business goals. Although there is a strong call for adopting RBV theory as the research rationale, empirical studies typically have ended up examining HRM systems as a set of practices and their associated linkage with firm performance (Barney & Wright, 2001). Human resource value creation was theorized as a complex process, yet, features of HRM practices necessary to facilitate these linkages have not been well demonstrated. Examining organizational, social and human as proposed by RBV is still an underexplored area. This study, therefore, has significant implications for HRD and HRM research and practice in the application of RBV.

Research in the examination of HRM&D linkages and level of alignment/ integration with operational functions and subsequent impact on firm/unit level performance has remained empirically under explored. There has been a lack of common agreement about core characteristics that constitute *best* HRM&D practices (HRM&D practices associated with performance on some dimension). While the strength of such a HRM&D system is contingent upon contextual features such as industry or firm size, operational strategies and policies delineate different variables mediate and moderate the HRM&D-firm performance linkage. For example, lean manufacturing policies (McDuffie, 1995) demands multi-skilling of workers, increasing team work, autonomy and control over work. A strong operational strategy strengthens the process and content of the HRM system. Alignment of HRM&D-Operations functions become a source of competitive advantage. A strong HRM&D-Operations functional alignment creates a mechanism for 1) measuring HRM&D system outcomes at the organizational level and, 2) stronger linkage with firm performance. Therefore, this study has the potential to

provide empirical support towards understanding the role of HR in advancing

organizational strategy implementation and effect on organizational performance.

Definition of Key Terms

      Distribution Industry. Business services involved with delivery of merchandise,

products and or services to customers from the manufacturer or wholesaler, including

retailers and transportation companies (NAW website, 2010)

      Human Resources (HR). An organizational function responsible for all of the

programs, policies, and practices that firms use to manage their human resources.

      Human Resource Development (HRD). HRD is a process of developing and

unleashing expertise for the purpose of improving individual, team, work process, and

organizational system performance (Swanson & Holton, 2009)

      Human Resource Management (HRM). The design and management of human

resource systems based on employment policy, comprising of a set of policies designed

to maximize organizational integration, employee commitment, flexibility and quality of

work (Guest, 1987; Hendry & Pettigrew, 1990).

      HRM&D Function. HRM&D function is a field of practice involving the

management and development of human resources in organizations. HRM&D function

includes human capital management and development at the individual level

(knowledge, skills and abilities); social networks and relationships (social capital) and

organizational capital that support human resource systems and structures.

Lean and Quality Strategies (LQS). Organizational strategies specifically designed to improve and eliminate waste in processes and products with the goal of enhancing operational and organizational performance (Womack & Jones, 1996).

Organizational Alignment. Organizational alignment is a descriptive concept referring to the extent to which the strategy, structure, and culture of the organization combine to create a synergistic whole that makes it possible to achieve the goals laid out in the organization's strategy (Semler, 1997).

Operations Function. The coordination and planning of the following activities: a) manufacturing, b) transportation, c) sales, in order to provide services to external customers was defined as the Operations function.

Supply Chain. A set of three or more entities (organizations or individuals) directly involved with the upstream and downstream flows of products, services and finances and/or information from a source to a customer (Mentzer, DeWitt, Keebler, Min, Nix, Smith & Zacharia, 2001)

Limitations of the Study

As with any research, this study has limitations. The scope of the study is limited within the context of the individual case organizations and the distribution industry. First, the researcher restricted the focus to top managers. Employee perceptions would have also provided valuable insights on the role and extent of HR involvement in LQS implementation. The interview participants were selected through a nomination process by senior executives and managers. Although the interview participants were senior

executives and managers from Operations and HR functions, they served in different capacities either at corporate or at the unit. Their perspectives and access to information differed accordingly. The interview sites were chosen based on their adoption of LQS as a formal strategy. Therefore, the findings are more representative of LQS implementation at those sites and not of the entire organization. The analysis is also somewhat limited in descriptive and explanatory power, because on site interview data were collected together at one sitting. Data collection from one site was exclusively accomplished via phone interviews and did not involve any site visit (C4, Toronto operations). Subjective interpretation of data, relationships among variables as well as the time consuming nature of qualitative study design were other limitations of the study. Complex interactions between elements of organizational culture, leadership, strategy emerged from the data analysis. Representing the relationships among these and other components was in some measure achieved through the development of a case model. The development of interrelated components and their relationships were organized in a linear fashion and imply directionality in how organizational performance was achieved. There is far more structure and linearity implied in the case models than what the qualitative data analysis lends itself to. The case models at best are moderately representative of the complex organizational interactions among people, processes and structure.

Assumptions of the Study

The following assumptions guided the study. Participants in the study were able to understand the interview questions and were honest and forthcoming in their responses. As with any data, there is a possibility of difference between perceptions and actual effectiveness of LQS, HR involvement in the implementation and effect on organizational performance. The researcher did not initially realize the extent to which LQS implementation had differing values, assumptions, and vocabularies across each company. The researcher also assumed that the HR function was fully involved in LQS implementation, although this was not the case.

Summary

I have provided an introduction to the study followed by a description of the problem. Next, the purpose of study and the research question were presented. In order to examine ways in which the HRM&D function affected organizational performance, I investigated the role and extent of HRM&D involvement in LQS implementation. The RBV theory of the firm framed the foundation of the study regarding the manner in which high performing distribution organizations espousing LQS implemented related strategies. Using the qualitative case method, interviews with Operations and HR executives was conducted. The definition of key terms, limitations and assumptions of the study design was then discussed. The findings have significant implications for HR and Operations executives and the academic fields of HRD and HRM. In Chapter II, the study's theoretical framework will be presented along with review of literature in three

main areas: HRM&D, organizational performance and LQS. RBV provides a

framework for connecting the three main areas.

CHAPTER II

REVIEW OF LITERATURE

While empirical support for the impact of human resources on organizational performance is well established, the actual role of the human resource (HR) function has been largely left out Haggerty & Wright (2009). In addition, the value added by the HR function in the organization is a matter of much debate. The goal of the investigation was to gain an understanding of how HR-Firm performance linkage was achieved in select organizations. In order to do so, the study focuses on the role and extent of human resource and development (HRM&D) function involvement in organizational strategy implementation, specifically, lean-quality strategy (LQS) and effect on organizational performance. To achieve the research goal, the literature review focused in three independent areas: HRM&D, organizational performance and LQS. An overview of the procedures involved in the selection, coding and summarizing of the literature review are provided.

A review and critique of research relevant to: (1) HRM&D and firm performance linkage, (2) organizational performance variables commonly used in HRD and HRM literature (3) Resource-based view (RBV) of the firm, (4) LQS implementation, (5) role of the HRM&D function in LQS, and (6) strategic LQS-HRM&D implications and effect on organizational performance are presented. The theoretical framework for the study is used to connect two key sections of the literature review, namely, HRM&D function and LQS.

The Literature Review Process

The literature review process involved searching and selection of articles relevant to the key areas of the study. The articles were summarized in a tabular format. Initially, the search focused on two areas: (1) HRM&D-Organizational performance, and (2) LQS-Organizational performance. It became apparent, from the beginning, that the availability of studies examining HRM&D role in LQS implementation was very limited. Review of articles pertaining to HRM&D functions was, therefore, broadened to include the role of HRM&D in a variety of organizational implementation contexts. Empirical studies examining factors facilitating and or hindering LQS implementation were reviewed in the second area. The final list of articles was then coded separately for the two areas, and categorized under major themes. The search parameter was for articles published within the last five years, from January 2005 to January 2010. Three databases were used to search for related articles: Google Scholar, ERIC-EBSCO and CSA-Illumine. All were accessed through the Texas A&M University online library resources. The key search terms used for the study and number of search results are provided below:

1. Lean quality strategy implementation supporting/facilitating factors (121)

2. Lean quality strategy implementation hindering/inhibiting factors (49)

3. Human resource and organizational/firm performance (719)

4. Human resource and lean quality (8)

The last step in the literature review process was to synthesize information from the summary of articles. In order to manage the review in both areas, greater weight

was given towards empirical research studies that examined factors that contributed towards LQS implementation success and failures. As a result, the HRM&D-Organizational performance area yielded 98 articles. Since international HR literature is a distinct area of inquiry, the review of articles considered only U.S. based studies,-thereby bringing the review to 30 articles and books. In the LQS area, the focus on empirical studies also helped reduce the articles to 39 articles and books. The coding of the literature review resulted in the development of broad categories, which were then parsed for further clarity and distinctive classification of factors facilitating and hindering LQS implementation. The empirical articles identified for the study guided the initial development of coding and category development in developing the literature review. Figure 1 represents three major areas of literature that were reviewed to address the research questions. RBV provided the theoretical grounding for the study.
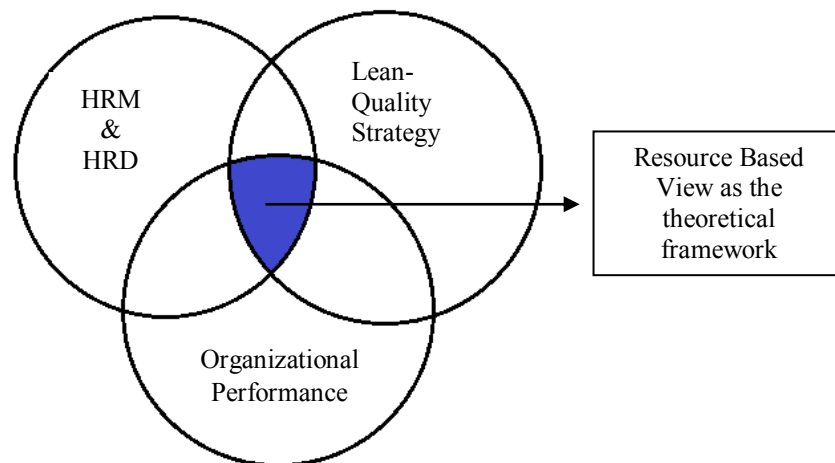
Figure 1. Areas of Literature Review.

The overlapping intersections between the three areas directed the focus of literature search. Specific research contributions addressing these overlapping areas guided the literature review.

HRM&D and Organizational Performance

The HRM&D literature search yielded two distinctive sub-areas of research establishing the HRM&D and firm performance linkage. In the first sub-area, the effect of individual or combined set HR practices on organizational performance was examined. The effect of HRM&D system on organizational performance comprised the second subarea. A summative analysis of the two areas revealed organizational performance measures as a common area of interest for HRM&D scholars.

HRM&D Practices and Effect on Organizational Performance. Two established scholarly research streams investigated the effect of HRM&D practices on organization performance. The first research stream involved examination of single HRM practices (such as training, performance appraisal) and effect of such practices on firm performance (e.g., Delaney & Huselid, 1996; Delery & Doty, 1996). Closely following these developments, the second stream of research underscored the combined effect of interrelated HRM practices rather than any specific practice, such as training or compensation impacted organizational performance (Arthur, 1994; Delaney & Huselid, 1996; Huselid, 1995; Huselid, Jackson & Schuler, 1995; Ichniowski, Shaw & Prennushi; 1997; MacDuffie, 1995). Identified empirical research on HRM practices tended to examine the impact of single or a combination of practice on firm level performances at

a macro level. Examining human and social capital relationships from micro level perspectives proposed by RBV theory in organizations is still an underexplored area.

HRM&D Systems and Effect on Organizational Performance. In recent years, several scholars have recognized and identified mediating constructs that enable or inhibit HRM&D system impact on organizational performance. Becker, Huselid, Pickus and Spratt (1997) recommended HR departments direct their interest on macro level business outputs and develop a systemic perspective. According to them, traditional HR role expectations appear to have no apparent connection to organizational performance. Their HR-Firm performance linkage model identified employee skills, motivation, job design and work structures and discretionary effort as intermediary linkages between HR system and firm performance. In Guest's (1997) HR model, two intervening constructs: HR outcomes (commitment, quality and flexibility) and behavioral outcomes (effort/motivation, co-operation, involvement and organizational citizenship) linked HR strategy and practices to firm level performance outcomes. While developing a HR-firm performance model for software companies, Paul and Anantharaman (2003, p.1249) defined a set of intervening variables: "employee competence, teamwork, organizational commitment and customer orientation" to render causal linkages of HR practices and a firm's performance (operational and financial). Patterson, West, Lawthom and Nickell (1997) examined the impact of people management practices on organizational performance in 67 UK manufacturing firms. Two HRM factors: acquisition and development of skills and job design were significantly associated with change in profits and productivity. Other identified HRM

factors such as quality improvement teams, communication, harmonization, comparative pay and incentive compensation systems' showed no significant associations.

While no single HR practice was found to have a direct causal connection with financial performance, several HR practices such as training, job design, compensation and incentives directly affected operational performance measures namely employee retention, employee productivity, product quality, speed of delivery and operating cost. Of these, operational measures, employee retention and, to some extent, employee productivity have been traditionally associated as HRM&D system outcomes although these and a few individual HRM&D practices (job design, work environment) are dependent on enterprise level dimensions such as organizational strategy and business orientation.

HRM&D structure and design is determined by the organization's business and strategic initiatives (Becker & Huselid, 1999). As a formal system, HRM&D provides an important foundational support for organizational learning and performance. While the quality of HRM&D system and outcomes is dependent on organizational level business initiatives, scholars have taken the approach that HRM&D as a system is an important component that can help an organization become more effective and achieve a competitive advantage (Becker & Huselid, 1998). A related perspective has framed HRM&D system-Firm performance linkage *as a process* through which a set of intervening variables are generally associated or *aligned* in ways to ensure that the HRM&D system is a source for competitive advantage (e.g., Becker & Gerhart, 1996; Wright, McMahan & McWilliams, 1994).

Wright and Snell (1998) linked HRM practices to strategy demonstrating a case for sustainable "fit" of HRM practices with company strategy. HRM practices aligned closely with organizational strategy reported higher financial outcomes (Delery & Doty, 1996; Huselid, 1995; Youndt et al., 1996). There is a lack of consensus of what constitutes HR systems, practices or models and how these individually or as a combination define the construct of HRM&D (Paauwe & Boselie, 2005). Different themes emerging from the literature review emphasize the case for HRM&D as best practices (Pfeffer, 1994; Delery and Doty, 1996) versus internal fit (Gerhart, 2004). While Boxall and Purcell (2003) argue the case of emphasizing both best practices and internal fit approach; Wood (1999) noted internal, organizational, environmental and strategic as four different types of fits that consider different linkages in establishing HR contribution to firm performance. In the next section, organizational performance variables are reviewed to discern ways in which firm performance is measured.

Organizational Performance Measures in HRM&D

 Different HRM&D models (Becker, et al. 1997; Guest, 1997; Paul & Anantharaman, 2003) indicated the interplay of individual, group and organizational level attributes. Several measures have been utilized to study the impact of HR practices and systems and their effect on organizational performance. There is rich diversity of individual, group and organizational level constructs from HR-firm performance linkage studies. Since the central research questions revolve around organizational performance, these measures are selected for further review and analysis. One outcome of this review

reveals a lack of uniformity in the use of organizational performance measures. In the

following section, a synthesis of research studies (Wright & Boswell, 2002) reporting

organizational measures affected by HRM&D performance is presented. These

summatively describe the different ways HRM&D as a function, system, or a set of

practices impact different aspects of the organization. The HRM&D literature reveals the

following most frequently used organizational performance measures: organizational

and employee productivity, perceptual measure of organizational and market

performance, organizational turnover, corporate financial performance, profitability,

sales growth and quality. The measures are consistently quantitative in nature capturing

macro level performance metrics.

Productivity. Two measures of productivity: (1) employee and, (2)

organizational level were used by several scholars to capture organizational performance

measures and are described separately. However, the studies did not use a combination

of both indicators as a measure of performance. Employee productivity was measured

labor efficiency in terms of dollar output spent on labor (Capelli & Neumark, 2000).

Other scholars (d'Arcimoles, 1999; Bae, & Lawler, 2000; Koch & McGrath, 1996;

Wright, Gardner, Moynihan, & Allen, 2003) also used labor productivity in similar

terms to measure the efficiency of the labor force. Richard and Johnson (2001) evaluated

the net income per employee. MacDuffie (1995) measured labor productivity, but

adjusted for absenteeism. Organizational productivity was measured in terms of sales per

employee (Huselid, 1995; Huselid, Schuler, & Jackson, 1997; Ichniowski & Shaw,

1999; Konrad & Mangel, 2000).

Perceptual Measures of Organizational and Market Performance. Measures

examined under the organizational and market performance constructs were composed

of interchangeable survey items asking respondents to evaluate and compare the

performance of their organizations with competitors. Diverse organizational and market

performance measures were utilized. According to Delaney and Huselid (1996),

perceptual organizational performance measures addressed product quality, customer

satisfaction and new product development. Harel and Tzafrir (1999) also covered similar

aspects and included employee acquisition and retention. Perry-Smith and Blum (2000)

in addition to the aforementioned measures, incorporated employee-management

relations. Financial and operational performance measures such as change of business

results, forecasts and estimated changes in the market share were compared by

Lahteenmaki, Storey and Vanhala (1998). Perry-Smith and Blum (2000) assessed

perceived market performance relative to that of other firms in terms of marketing and

market share. Parallel to the earlier study of Delaney and Huselid (1996), Harel and

Tzafrir (1999) paid attention to economic terms such as profitability and market share,

and accounting for product price and sales increase. In all these studies, researchers

asked respondents to evaluate the performance of their organization in comparison to

their competitors over a period of time. Some scholars measured market performance in

purely economic terms such as profitability and market share (Delaney & Huselid, 1996;

Harel & Tzafrir, 1999) while others measured the performance on process outcomes. For

example, public image and goodwill were also measured by Bae and Lawler (2000),

while Montemayor (1996) assessed market performance in terms of product/service quality, customer satisfaction and customer retention.

Organizational Turnover. Huselid (1995) included two measures of turnover separately for exempt and non-exempt employees. The average annual turnover included both voluntary and involuntary departures. Richard and Johnson (2001) collected annual turnover measures for non-exempt employees as a measure of organizational turnover. Industry specific turnover measures were analyzed by Shaw, Delery, Jenkins & Gupta (1998). For example, measures of driver turnover as a percentage of total firm employment were reported separately for both voluntary and involuntary separations.

Corporate Financial Performance. Standard market based measures of short-term (annual) profitability—gross rate of return on assets (GRATE)—were utilized as measures of organizational performance (Bae & Lawler, 2000; Huselid, 1995; Huselid, Schuler & Jackson, 1997). Traditional measures of accounting profits such as the return on assets and return on equity were calculated (d' Arcimoles, 1997; Delery & Doty, 1996; Lam & White, 1998; Lee & Chee, 1996; Lee & Miller, 1999). Return on equity, the ultimate measure of the financial strength of the institution, was included in some studies (Delery & Doty, 1996; Lee & Chee, 1996; Richard & Johnson, 2001). Two research studies also measured stock performance by the extent to which firms maximized shareholder value by assessing the annual growth rate of organization's stock market value (Collins & Clark, 2003; Lam & White; 1998).

Profitability. Increased firm profitability over a period was another organizational performance measure utilized in identified literature (Bae & Lawler,

2000; Banker, Lee, Srinivasan, & Potter, 1996). Several studies included both profitability and sales growth as a combination to assess organizational performance (Perry-Smith & Blum, 2000; Terpstra & Rozell, 1993; Wright, Gardner & Moynihan, 2003). Simons, Pelled and Smith (1999) conceived top management performance in terms of increased firm profitability and sales. Wright, Gardner and Moynihan (2003) also incorporated operating expenses as an organizational performance measure.

Sales Growth. Another important measure of organizational performance was calculating the average annual growth in sales for a specific period. This measure was used to indicate the extent to which customers accepted the firm's products and services (Bae & Lawler, 2000; Collins & Clark, 2003; Lam & White, 1998; Lee & Chee, 1996; Simmons, Pelled & Smith, 1999). In another study, individual average monthly sales were developed to assess sales productivity (Batt, 1999).

Quality. Self-reported measures of quality were reported by respondents indicating their work group's service quality as well as product and service quality improvements, according to Bae and Lawler (2000) and Batt (1999). McDuffie (1995) and Wright, Gardner and Moynihan (2003) measured the number of defects or errors per pieces of the vehicles emphasizing fit and finish of the final product. Shaw, Gupta and Delery (2001) capture quality as a ratio of out of service percentage due to driver fault to the total number of inspections. Montemayor (1996) also added effort performance as a measure to estimate the percent of employee who manifested extra-role behavior that improved the overall quality performance of the organization. Customer satisfaction data utilized to capture long-term performance data (Banker, Lee, Srinivasan & Potter, 1996).

In addition, the ratio of workers compensation expenses to sales (Wright, Gardner & Moynihan, 2003) and accident frequency ratio (Shaw, Gupta & Delery, 2001) were other quality related measures adopted as a measure of organizational performance.

Empirical studies involving HR linkage to organizational performance provide a list of frequently measured organizational level performance indicators. These quantitative indicators allow for comparisons between functions that target organizational performance improvement and effectiveness. However, the intangible quality of HR service delivery makes the explication of HR contribution more challenging. In order to understand and explain the HR-firm performance linkage further, it is necessary to study the linkage between organizational strategic objectives and HR performance.

Resource-based View of the Firm

The resource-based view (RBV) is useful for analyzing firms' tangible and intangible resources (Barney, 1991; Wernerfelt, 1984). Initially situated as a theory in economics, valuable, rare, imperfectly imitable, non-substitutable firm resources (such as management skills, organizational routines, and leadership) were identified as potential sources of competitive advantage (Barney, 1991; Barney, Wright & Kertchen, 2001; Castanias & Helfat, 2001; Wernerfelt, 1984). Thus, RBV offers a rich body of theoretical tools to analyze firm level resources. RBV has been applied in different ways in other fields such as human resource management, economics and finance, entrepreneurship, marketing, and international business (Barney, Wright & Kertchen,

2001). For example, RBV theory lays the foundational framework for understanding acquisition of necessary resources through joint venture, alliances, and technology at the organizational level (Hitt, Dacin, Levitas, Arregle & Borza, 2000; Hoskisson, Eden, Lau & Wright 2000). According to Hart (1995), RBV has generated a productive dialogue among isolated perspectives drawing together relationships of the firm resources and capabilities in the creation of a unique competitive advantage.

RBV theory shifts organizational focus from a traditional outside-in approach (Porter, 1981) to an inside-out approach where emphasis is laid on internal contexts within the organization rather than external analysis of strength and weaknesses (Boselie & Paauwe, 2009). The within organizational focus of RBV theory has been criticized (Priem & Butler, 2001). What is needed is an approach that places emphasis on internal and external focus as this is a closer approximation of the reality in organizations. Cruz-Denz and Saa-Perez (2003) also criticize the RBV approach, highlighting the need for institutional alignment and unique linkages of external- to-internal environment.

Barney (1991) discussed the implications of RBV application in organizations as the intimate integration of physical, organizational and human capital resources for sustained competitive advantage. Barnett, Grieve and Park (1994), Godfrey and Hill (1995), Henderson and Cockburn (1994) pursued empirical investigations of firm's resources and capabilities and effect on organizational performance (as cited in Barney, 1996). The RBV theory has also received scholarly attention interested in theory development (Conner, 1991; Kogut & Zander, 1992). Barney (1991) presented a resource-based model connecting internal and external analysis of the organization. The

relationship was described using the attributes of traditional strength-weaknesses-opportunities-threat (SWOT) analysis. Both internal (strengths-weaknesses) and external analyses (opportunities-threats) have received some attention in the literature (Porter, 1980, 1985). The RBV theory of the firm provides a framework for evaluating whether or not particular firm resources can be sources of competitive advantage, thus effecting organizational performance.

Several scholars have recommended the application of Barney's RBV in HRM emphasizing the human resource advantage creation at the employee level (Marchington et al. 2003; Wright et al., 1994). Individual skills with respect to job performance are emphasized by this approach. The scope of application however, reinforces the difficulties faced in linking individual employee performances and discretionary behaviors (Appelbaum et al. 2000) to organizational performance. The diversity of organizational performance variables also exacerbates the HR-firm performance connection. The usefulness of RBV in quantifying HR contribution to firm performance at the employee level is therefore, difficult. In order to address this challenge, there is a need to expand the notions of the human resources construct and contribution to competitive advantage within organizations. The combination of social complexity, causal ambiguity and how HR value is accrued over time is a commonly accepted theme in the HR-RBV topic. The theory is intuitively appealing in making the connection that human resources are non-substitutable, valuable, rare and imperfectly imitable (Barney, 1991). However, these concepts draw attention to the "intangible" quality of HR efforts, again difficult to measure. The usefulness of RBV comes in establishing the

effectiveness of organizational performance as dependent on the organization's ability to link human resources to its strategic objectives. RBV helps in identifying the "intricate linkages between firms' patterns and sequence of actions and how these constitute building blocks for HR capabilities (Kamoche, 1996).

Theoretical Framework of the Study

The RBV framework is used in this study to examine: a) the impact of firm's external environment on the selection and choice of LQS as a formal strategy and, b) extend the value chain logic for discussing how possible external and internal organizational attributes effect HRM&D functioning (adapted from Barney, 1991; Porter, 1980). Based on the work of Barney (1991), three central concepts – firm resources, competitive advantage and sustained competitive advantage and application to the study, are discussed. Three conveniently categorized set of firm resources: physical capital resources (Williamson, 1975), human capital resources (Becker, 1964) and organizational capital resources (Tomer, 1987) enable firms to control all assets, capabilities, organizational processes, information and knowledge for improved efficiency and effectiveness (Daft, 1983). For the study, LQS utilizes firm's physical resources (equipment, location, access to materials), human capital (training, judgment, experience, relationships) and organizational capital (reporting structure, informal relations among groups within and outside the firm). LQS is conceived of and implemented for improving firm's efficiency and effectiveness. RBV theory helps to

specify conditions under which the HRM&D function is a strategically relevant resource enabler, and thus contribute to organizational performance LQS.

Competitive advantage is assumed "when a firm is implementing a value creating strategy not being implemented simultaneously by current or future competitors" (Barney, 1991, p. 102). Sustained competitive advantage is assumed when in addition to the above, other firms are unable to duplicate the strategy. The adoption of LQS cannot be assumed as an exclusive value creating strategy. However, the application of RBV theory, because of its focus on effective strategy implementation, creates unique resource capability that cannot be easily duplicated by other firms. In addition, the utilization of human capital resources (including training, managerial skills, experience and not just HRM&D practices which may be duplicated), further implies the inability of current and potential competitors to duplicate the efforts. Apart from these three central concepts, resource homogeneity (Porter, 1980), mobility/entry barriers (Bain, 1956; Caves & Porter, 1977; Porter, 1980) and first mover advantages (Lieberman & Montgomery, 1988) offer potential sources of sustained competitive advantage (as cited in Barney, 1991). Since the focus of the study remains within the firm's internal context, these are not examined.

Barney (1991) identified four empirical indicators of the firm to generate sustained competitive advantage – value, rareness, imitability, and substitutability. These are expanded to present RBV as the study framework for how firms hold the potential of sustained competitive advantage. Valuable resources enable a firm to exploit strengths, and neutralize weaknesses in the environment. Rare resources imply that a bundle of, or

particular mix of valuable resources contribute towards sustained competitive advantage. Imperfectly imitable resources are caused by unique historical events. The exploitation of resources depends on the place and time (e.g., geographic location, new management team, organizational culture). Since resources are socially complex and interdependent, numerous explanations are plausible in understanding resources and firm performance linkage leading to causal ambiguity (Barney, 1991, p. 110). The last indicator, substitutability is a matter of the degree to which rare and imitable resources are impossible to substitute by current and future competitors. The RBV framework enables a firm to recognize and exploit some or all of its resources either individually or in combination to generate competitive advantage.

An effective LQS implementation strategy is a valuable resource. LQS exploits opportunities within the organization and neutralizes threats by improving efficiency and effectiveness of customer service. Thus, managers who are able to implement effective LQS become a rare resource. In addition, the historical uniqueness of firms, the interdependent mix of social, physical and organizational resources, generate imperfectly imitable and non-substitutable resources. With the focus on strategy implementation, the RBV convey the importance to the context and content of firm strategies (Barney & Zajac, 1994). Extending this approach, examining the HRM&D function and effect on organizational performance independent of the content and context of organizational strategy would be inappropriate.

The assumption in the RBV approach is that managers are limited in their ability to manipulate all resource capabilities of their firms (Barney & Tyler, 1991). Some

authors have suggested that firms cannot be expected to buy competitive advantages in open markets (Barney, 1988; Wernerfelt, 1989). Recognizing and maximizing firm's resource capabilities are necessary skills for senior executives. In fact, rare, imperfectly imitable, and non-substitutable resources must be leveraged from already existing firm resources. Indeed, a firm's strength is truly its human capital.

RBV Theory of the Firm and HRM&D Function. RBV theory of the firm is positioned to explain how unique resources and capabilities can be related to organizational human resources. The intersection of strategy and human resource issues helps define and determine HR systems and practices as a source of competitive advantage (Wright et al., 2001). The authors asserted the non- imitability of firms' human capital systems and routines, in contrast to individual human resource practices that may be imitable. Interrelated components of the HR system, individual practices, and human capital continually reconfigure an organization's competitive advantage, although as environmental factors change rapidly, these capabilities may no longer remain valuable (Wright et al., 2001). Institutional and environment factors impact firms strategic priorities and as a consequence, the firms' human resources.

HRM&D Function and Internal Fit. Understanding organizational factors that hinder or advance HR role and involvement in LQS implementation is explained through RBV theory. Cappelli and Singh (1992) argue that RBV provided a theoretical rationale for why HR as a system could have implications for strategy formulation and implementation. Barney and Wright (1998) state the necessity of paying attention to the HR as a system of practices. In understanding and application of RBV in SHRM

research, the authors focus on the role of people management systems in developing the core competencies and capabilities of firms. According to Barney and Wright (1998), HR systems contribute in "creating cultures or mindsets that enable the maintenance of unique competencies" (p. 9); "promote and maintain socially complex relationships characterized by trust, knowledge sharing, and teamwork…" resulting in "…the creation of a high quality human capital pool that cannot be easily imitated" (p. 10). Thus, HR function as a system of practices can communicate, support and sustain unique organizational competencies. Strong alignment and integration of HR systems with LQS or other organizational strategies will only strengthen strategic and structural fit within the organization. However, more research is needed on the implementability of the suggested strategies (Wernerfelt, 1984). The resource based view (RBV) of the firm focused on the strategic orientation of HRM practices as socially complex and a source of competitive advantage: rare, specialized, valuable, difficult to imitate and hard to substitute (Barney, 1991; Ferris, Hochwarter, Buckley, Harrell-Cook & Frink, 1999). The knowledge, skills and behavior of employees offer unique strategic value creation thus becoming a source of competitive advantage in organizations. In addition, "inimitability" of organizational competencies contributes towards sustained value creation.

HRM&D Function and External Fit. Apart from RBV as a theoretical framework, I also draw from the strategic balance theory proposed by Deephouse (1999) to include the influence of external environment. As a result, each organization develops unique linkages, resources, and capabilities that provide opportunities for sustaining

significant competitive advantage. Inimitability due to industry structure, markets, historical events, and national cultural norms also create intangible assets because of their unique "social complexity/ interconnectedness" (Colakoglu, Hong & Lepak, 2009, p. 37). Limited research exploring the impact of the external environment on HRM&D function in the literature limits further elucidation in this area.

HRM&D Function and Adaptation Fit. Drawing on the work of Boon et al. (2007) and organizational alignment theory of Semler (1997), the RBV theory is extended to include both internal and external fit in the creation of unique HRM&D resource capabilities. Boon et al. (2007) adopted the term adaptation fit referring to strategic fit at the organizational level and internal HRM system fit for leveraging the dynamic capabilities of the organization. Semler (1997) proposed a theory of organizational alignment as a foundational framework accounting for six aspects of alignment. They are: (1) structural aspects concerning goal alignment between individuals, teams, departments, and organization, (2) reward systems, (3) cultural aspects involving norms, (4) organizational values, (5) performance related to actual operational directed goal behavior of the system, and, (6) environmental aspects of strategic fit with organization's mission and goals However, research studies examining SHRD issues are empirically rare.

Anderson (2009) provided empirical support by identifying two components of alignment: as process and outcomes for understanding the effect of HR value creation on the organization. The main focus of Anderson's study was on the organization's internal context. The qualitative study involving paired comparison of senior line and HRD

managers from 12 organizations, both public and private sector companies. The study examined "the meanings and understandings attached to alignment and the extent to which they are affected by contextual factors" such as industry and organizational size (p. 263).

Boselie and Paauwe (2009) highlight the potential for unique HR value chain creation where unique combination of external environment and internal resources create and sustain HRM&D linkages with organizational performance. This would involve multiple stakeholders from different organizational levels. According to Boselie and Paauwe (2009), the goals would include:

> Strategic alignment between business strategy and HR strategy, HR design and policy development, HR implementation by both HR-managers and front line managers, perception of HRM interventions by employees, employees reactions in terms of attitudes, behaviors and cognitive elements to HR practices, firm performance (productivity, flexibility and social legitimacy) and finally superior firm performance (p. 431).

Therefore, simply examining the relationship between individual HR practice, or a set of practices and connection with overall firm performance can lead to misleading conclusions with regard to organizational performance. RBV theory provides both theoretical and conceptual grounding in understanding how competitive advantage is created at the macro level through interactions, alignment and integration of institutional and environmental factors (industry, market), strategy, structure and processes on the one hand (organizational capital resources). At the micro level, social capital, (i.e.,

internal/external relationships) and knowledge exchange highlight the ambiguity and social complexity in the creation of human capital resources (Barney, 1991). Although there is a strong call for adopting RBV theory as the research rationale, empirical studies typically have ended up examining HRM systems as a set of practices and their associated linkage with firm performance (Priem & Butler, 2000). Human resource value creation theorized as a complex process has not been extensively researched and well demonstrated.

LQS and Organizational Performance

Ray, Barney and Muhanna (2004) argue that adopting effectiveness of business processes as a more appropriate dependent variable than firm performance. Their study demonstrated the relationship between RBV characteristics (resources & capabilities) and business processes (including functional/organizational activities & routines). Process level resources and capabilities were not necessarily reflected in firm performance outcomes. Organizations often adopt LQS in order to enhance the business process flow, eliminate wasteful procedures and improve organizational performance. LQS exploits different resources and capabilities within the organization that are tangible (e.g., technology) and intangible (e.g., culture, leadership, structure). Business processes that exploit intangible resources as more likely to be sources of competitive advantage than those that do not because they are path dependent, socially complex, and causally ambiguous (Barney, 1991; Itami, 1987). Intangible resources are costly and difficult to imitate. But as Ray, Barney and Muhanna (2004) suggest, this does not mean

that firms should not invest in tangible resources. Rather, the investment in technology and infrastructure may provide for competitive parity, and not be a source of competitive advantage. In order to investigate the LQS-RBV linkage and effect on organizational performance, literature in the areas of LQS and the organizational performance will be reviewed.

A review of literature in this area reveals a lack of empirical studies explicitly connecting LQS implementation with organizational level performance measures. Instead, many researchers documented the application of various LQS principles and practices (Adler, 1993; Liker, 1998; Sobek et al., 1998; Spear & Bowen, 1999; Womack & Jones, 1998). In reviewing the application of LQS, it appeared that several factors facilitated and or hindered the implementation of LQS in different ways across LQS related studies. The next section identifies facilitating and hindering factors in LQS implementation and their effect on organizational performance. The application of RBV provides insights and learning in the level and quality of LQS implementation and implications for the HR function.

Factors That Facilitate and Hinder LQS Implementation

Based on review of literature, factors facilitating and/or hindering LQS implementation in organizations were examined (e.g., Achanga, Shehab, Roy, & Nelder, 2006; Bhasin & Burcher, 2005; Brau, Fawcett & Morgan, 2007; Botti & Bonazzi, 1995; Helper & Kiehl, 2004; Lifvergrenm et al., 2010; Mahapatra & Mohanty, 2006; Motwani, Kumar & Antony, 2004; Peircy & Rich, 2004; Soderquist & Motwani , 1999; Punasvaran et al,

2009; Riis, Mikeelsen & Andersen, 2008; Valerdi, Nightingale & Blackburn, 2008; White, Ojha, Kuo, 2009). Seven major factors facilitating LQS implementation were identified from the literature. These factors: necessary conditions, mechanisms, tools and practices, partnerships, long-term focus and communication (including training) successfully supported tactical, operational and strategic aspects of LQS. Four factors hindering LQS implementation were identified: lack of communication skills, short term focus, lack of crucial knowledge, and exclusion of key stakeholders. Conditions facilitating LQS implementation will be first reviewed from the literature in the following section.

Factors That Facilitate LQS Implementation. Antecedent conditions necessary for LQS implementation, cited and reviewed in identified literature, are explored in the section. The fishbone diagram below provides a visual representation of the emerging themes. The seven major factors identified from literature emerged from coding for facilitating factors in the LQS area were necessary conditions, mechanisms, long term focus, tools, communication (including training) and partnerships (internal and external). A fishbone diagram provides a visual representation of all factors facilitating LQS implementation and is illustrated below in Figure 2.

Necessary Conditions. The presence of certain conditions set the context for smooth LQS implementation. The emerging theme under this area of the literature review was labeled.

Tools   Long term focus   Necessary conditions

Training

Factors facilitating LQS implementation

Communication   Internal partnerships   External partnerships   Mechanisms
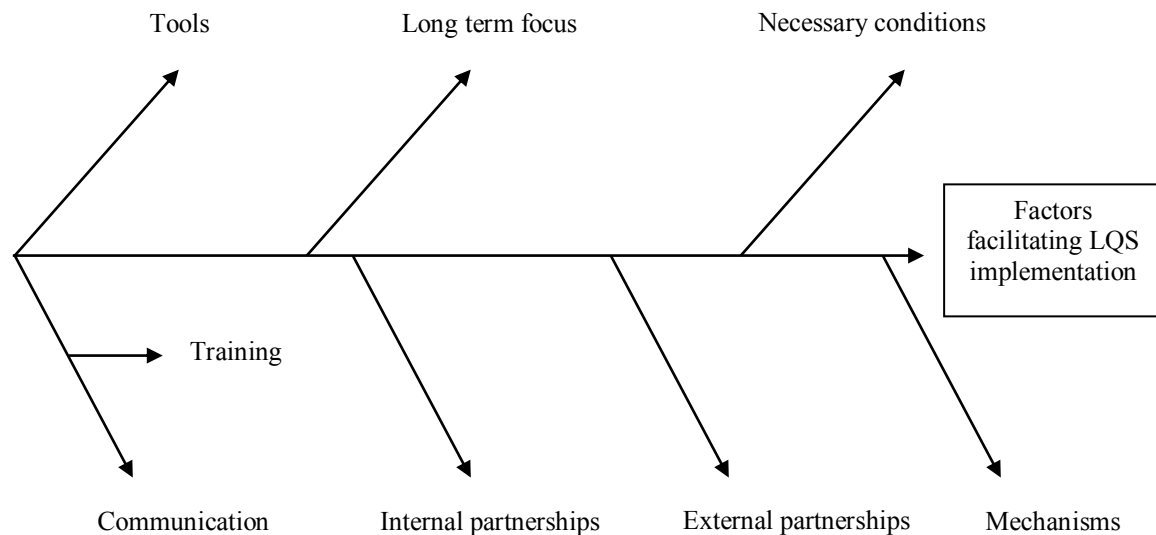
Figure 2. Factors That Facilitate LQS Implementation.

"Necessary conditions" represent embedded ecological characteristics existing in the organization. For example, environmental conditions external to the organization, significantly influence the selection and choice of LQS. The presence of competitors, market structure and demanding customers often set the "right" context for the adoption of LQS. Industry factors such as number of competitors, supply chain partners and demanding customers hastened LQS adoption according to Mahapatra and Mohanty (2006). Sohal and Eggleston (1994), stated: "two-thirds of the companies said that a strategic advantage had been generated (due to customer demand) with the greatest improvements stemming from market competitive positioning, customer relationships and quality constraints" (as quoted by Mahapatra & Mohanty, 2006, p. 6). Internal necessary conditions such as leadership, business capabilities (including financial,

structural, processes and products), presence of cross- functional teams, and job security on the other hand represent those characteristics were embedded within the internal context. These were conditions were also deemed necessary for LQS.

Leadership. Gaining support for company mission and vision through world class quality performance, timeliness, innovation, cost, commitment to change, inspiring the workforce have been noted by several scholars as important leadership traits necessary for successful LQS execution (Achanga, Shehab, Roy & Nelder, 2006; Terziovski, Sohal & Samson, 1996). Leadership is, by itself, a significant necessary condition for successful LQS. The extant literature has distinguished management commitment to LQS separately from leadership. Further, Achanga, Shehab, Roy and Nelder (2006) emphasized leadership traits observed from successful exemplars including, fostering knowledge and skill enhancement in workforce, tactful management know-how to negotiate resources availability, willingness to learn, and acquisition of new ideas for organizational competitiveness as important.

Business Capabilities. Organizational financial capabilities, in terms of capital investment, were cited by Achanga, Shehab, Roy and Nelder (2006) as a necessary LQS support condition. LQS implementers needed financial support for maintaining long-term focus in the implementation process; otherwise market and internal pressures for immediate returns would easily override and undermine LQS progress. In addition, LQS philosophy stems from long term vision and focus on the best interests of the organization. In terms of tactical support, strong financial capabilities also allowed for recruiting external LQS consultants, developing LQS related training for applying the

techniques and importantly, support for temporarily pulling the workforce from the production line for training.

The concept of *focused factory* underscores inherent business capabilities associated with processes, products (technological) and people that sustain LQS implementation. A focused factory draws attention towards simplifying organizational structure, reducing number of products and processes, and minimizing complexities of physical constraints (White, Ojha & Kuo, 2009). The focused factory reduces structural and technological constraints, strengthening the connection of tactical metrics with crucial enterprise level concerns (Valerdi, Nightingale & Blackburn, 2008).

Cross-functional Teams and Job Security. In terms of workforce related issues, the presence of cross-functional teams (Chutimai & Kaewin, 2007); workforce participation and involvement (Mahapatra & Mohanty, 2009) and job security (Mathaisel & Comm, 2000) ensure necessary conditions for a high return on LQS investments. Two subcategories emerged from the literature review under the 'necessary conditions' label: mindsets and management commitment. These sub categories identified important subsets of prevailing "organizational conditions" whose presence are fundamental to successful LQS implementation. Without these conditions, the chances of LQS success were considered remote.

Mindsets. Continuous improvement efforts help in realizing high level of LQS (Punasvaran et al., 2009). The core of LQS is driven by continuous improvement efforts. Consequently, a supportive culture, continuous improvement, and adaptiveness to local conditions were essential towards developing an LQS mindset. The cultural

transformation of the organization through management's ability to operate in diverse environments, acceptance to change within the workforce and long-term focus on roles make the continuous improvement mindset easy to achieve (Achanga, Shehab, Roy & Nelder, 2006, Bhasin & Burcher, 2005). Acceptance to change within the workforce requires gaining union agreement and support. Union agreements were cited by Mathaisel and Comm (2000) and Terziovski, Sohal and Samson (1996) as important for assuring quality improvement on the shop floor. According to the authors, formalizing union agreements that linked quality improvement to industrial productivity, individual acquisition, use of skills and knowledge were crucial in the development of a continuous improvement mindset. Job security was considered important to ensure union agreement and maintain a long-term focus on shop floor improvements. Job security was viewed as an internal management decision supported a continuous improvement mindset.

The continual pursuit of improvements in quality, cost, delivery and design eventually lead to continuous improvement across the supply chain (van Hoek, Harrison & Christopher, 2001). Several authors (Hall, 1995; Lathin, 2001) argued that comprehensive LQS change programs can be successfully implemented when companies implement both organizational and technological aspects of quality management (as cited by Bhasin & Burcher, 2005). Further, the transformation of embedded attitudes (Helper & Kiehl, 2004), a significant factor in upgrading systematic production capabilities, is a complex technical and behavioral task. Adopting an enterprise context (Valerdi, Nightingale & Blackburn, 2008) involves examining continuous improvement issues across the supply chain. The effects of cultural transformation, union agreements,

and long-term job security, in the context of the enterprise affect everyone in the organization, especially when it comes to process improvement. Sustaining the continuous improvement process is an important aspect of the LQS mindset for achieving success.

Management Commitment. In the earlier sections of the literature review, quality leadership was identified as a necessary condition for attaining LQS. Puvanasvaran et al. (2009) advocated quality leadership to improve the top managerial commitment. In their study, quality leadership also contributed to general visual management on the shop floor. The top management support for quality leadership was a crucial factor for carrying out continuous improvement efforts in the organization. Management commitment and involvement in LQS were also cited by Scherrrer-Rathje, Boyle and Deflorin (2009) and Taylor (1996). Without top management commitment, employees would not see the necessity for allocating time or resources on LQS related projects.

Visible management commitment also helped employee motivation, sharing of ideas and problem solving within the organization (Scherrrer-Rathje, Boyle & Deflorin, 2009). In presenting the case study involving two Lean implementations in the company, one decade apart from each other, the authors emphasized the need for visible management commitment and involvement in LQS implementation. Management commitment ensured that employees realized not only the importance of Lean, but also the interconnections of Lean with other organizational initiatives. Management involvement provided Lean implementers access to resources and support structures that preventing lengthy decision-making and communication breakdowns. In addition,

employees felt more supported dealing with work issues because they knew LQS was a top priority for the management. Soderquist and Motwani (1999) also recommended adaptation of support structures such as the quality function to suit operational needs. Management commitment also implies changing and adapting existing organizational structures for increasing customer value. As a support function, the quality department plays an important role disseminating LQS tools, methods and techniques to operational functions. This in turn helps in the creation of customer value.

In order to realize the benefits of LQS, it is imperative that organizations develop sound applications of the principles and philosophies of LQS. Applications of Lean principles in organizations are contextually dependent taking many forms, or, what the researcher describes as mechanisms. These mechanisms are ways of delivering Lean principles and philosophy in practice and will be described in the next section.

Mechanisms. Three categories of mechanisms emerged from the literature based on their impact on the individual, team and organization. These are discussed separately under each of the categories below (impact on individual, team and organization) to emphasize different equirements in the organization. At the individual level, formal mechanisms ensuring employee autonomy in decision making, demonstrating the benefits of LQS early on, through a pilot project implementation. Evidence of long term sustainability of Lean efforts were significant success factors identified from the literature.

Impact on Individuals. Employee autonomy is an important factor in LQS implementation. Employee autonomy ensures that employees are involved and support

work place changes. Autonomy in employee decision making necessitates management support in two ways: a) approving employee suggestions that are critical for Lean success, and b) reducing the length of time in approving process improvement changes (Scherrrer-Rathje, Boyle & Deflorin, 2009). These authors advocate formal support for implementing critical Lean practices. Formal mechanisms provided a sense of ownership over the change processes and significantly increased buy-in from employees. Consultative mechanisms enable employee autonomy, provide greater opportunity for productivity gains and continued support for Lean improvement initiatives.

LQS implementation mechanisms ensured the need to provide shared communication of both initial performance and long-term sustainability of change efforts to the workforce. Demonstrating and communicating evidences of early benefits of Lean through a pilot project was a case in point (Scherrrer-Rathje, Boyle & Deflorin, 2009). Complementing these efforts, the authors propose structural alterations, implementing interdisciplinary teams, assigning employees who actively promote Lean full time, supporting experimentation without fear of failure as evidence of long-term sustainability of Lean efforts. These systemic improvements prevented employees from reverting to their pre-lean implementation behaviors.

Impact on Teams. Institutionalizing teamwork, structure and responsibilities was another significant factor in LQS implementation. White, Ojha & Kuo (2009) declare the importance of quality circles by placing this intervention as the first step towards successful JIT implementation. Employee involvement in the early stages lays the foundation for the success of all other Lean and quality related initiatives. Teams are

also responsible for all tasks, direct and indirect in their area of material flow as well as problem solving (Ahlstrom, 1998).

Impact on Organizations. A number of organizational level mechanisms were reported by scholars from total quality management, JIT and Lean related literature (Ahlstorm, 1998; Piercy & Rich, 2004; Scherrrer-Rathje, Boyle & Deflorin, 2009; White, Ojha & Kuo, 2009). The deployment of an enterprise process model and documentation of processes formally through the organization have been stated as important for putting LQS into practice. As an extension, the identification of process owners and implementation of process in LQS deployment is an important extension of LQS execution (Piercy & Rich 2004). A systems level perspective also aids in the improvement of non-value added performance across the organizational value chain (White, Ojha, Kuo, 2009). The authors suggest identifying and implementing related quality practices in a sequential manner. These practices offer improvement of non-value added performance across different levels and functions in the organization. In other words, the implementation of quality systems in a holistic manner was a significant factor in enhancing implementation efforts. Although White, Ojha and Kuo's (2009) study focused on JIT systems, the quality related practices were found to be closely tied to Lean practices.

Continual evaluation during the Lean efforts is a critical organizational level mechanism impacting LQS application. Addressing mistakes right away through periodic evaluations ensured that the LQS implementation stayed on track. Full disclosure to employees and managers of information regarding the current state of

progress toward strategic and tactical goals was also important. Evaluation efforts institutionalize a learning culture through constant reflection and continuous improvement. The use of external consultants provided validation and evaluation of progress in meeting Lean objectives (Scherrrer-Rathje, Boyle & Deflorin, 2009).

The efficiency of single departments or the units to maximize results can be addressed by continual evaluation. However, these may not directly contribute towards value creation across the organizational supply chain. Valerdi, Nightingale and Blackburn (2008) offer capacity utilization as an example of a metric that improves the efficiency of a single department with no direct relationship to corresponding vertical or horizontal departments or processes within the organization. Instead, optimizing flexibility of operations and resource utilization amongst other factors offered synergistic impact to the enterprise to maximize results. Long-term focus was significant in achieving systems level change. Long-term results emerge from long-term vision and commitment to systems level change and behavior modification. The steadfast adherence to LQS principles demands long term focus and is explained in the next section.

Long-term Focus. Long-term focus emerged as another factor in advancing LQS implementation in organizations from the review of literature. Long-term focus offers a *context* for enterprise thinking (systems level) instead of localized plant/unit/branch level perspectives. Valerdi, Nightingale and Blackburn (2008) strongly emphasize enterprise thinking at all levels in the organization. They strongly advocated enterprise thinking as a *context* for guiding decision making that was not limited to executives alone. This *context* offers long-term focus in measuring and evaluating LQS implementation

progress. Their research suggests that balancing non-financial and financial metrics offers expanded scope in measuring efficient and value added performance measures at the enterprise level. Bhasin and Burcher (2006) also recommend the usage of indices such as training hours/employee as a measure of nurturing learning a environment.

Long-term focus also provides an operational guide for planning and execution of several strategic initiatives in a gradual and appropriately sequenced manner. White, Ojha and Kuo (2009) studied the comprehensive implementation of JIT (Just-in-time) systems and its effect on organizational capability building. They recommended implementation of quality related conformance capabilities through employee involvement first, as these provided the foundation for building other capabilities such as delivery reliability, volume flexibility and low cost. Long-term focus prevented the typical trial-and error approaches that often marred implementation, prioritization of initial capability building within the organization rather than outside. These initial capability-building efforts focus on both process flow as well as developing relationships. Further, Helper and Kiehl (2004) develop the notion of "systematic production capabilities" for achieving high quality and production performances that involve not only streamlining the work processes, but also changing attitudes (values and culture), incentives (structure), and relationships, both internal and external (suppliers and customers) to the organization.

Different notions of what constitutes long-term focus were examined in this section. LQS implementation benefits from systems level sense making and long-term orientation focus. Long-term focus plays a key role in sustainable improvements in terms

of cumulative, systemic capacity and capability building in the achievement of current and future organizational outcomes. In order to sustain the long-term focus, the introduction of several Lean tools were deemed necessary to sustain value creation of single or multiple processes, thus, enhancing the value stream (Abdulmalek & Rajagopal, 2007; Storch & Lim, 1999). The application of the right combination of tools at the shop floor enabled employees to experience the benefits of Lean.

Tools. Quality management tools continue to find their application in the implementation of LQS. Several research studies examined their use and effect on operational and strategic performance at different levels and functions of the organization (Brau, Fawcett & Morgan, 2007; Soderquist & Motwani, 1999; White, Ojha & Kuo, 2009). Scholars offered various different implementation approaches in the application of LQS tools and techniques. For instance, White, Ojha and Kuo (2009) examined several tools, grouping their application based on their utility and impact on different aspects of operational and strategic performance. TQC (Total Quality Control) was viewed as strategic top management initiative driving continuous improvement. As a conformance quality related practice, this tool reduced variation in the production process and was recommended as the first tool for application in the LQS implementation sequence. Group technology, uniform workload and TPM (Total Productive Maintenance) improved workflow of the manufacturing system and overall delivery reliability practices. Reduced set up times and Kanban (for running an efficient production schedule) enabled the manufacturing system to mirror and match supply with customer demands. These were grouped under volume flexibility related practices. The

authors recommended implementing the last two categories of quality practices after

TQC. JIT purchasing was recommended for application towards the end of the

implementation sequence.

In contrast, Soderquist and Motwani (1999) recommended integration and

consistency in the tool applications without specifying a gradual, sequential

implementation plan. In similar lines, Bhasin and Burcher (2005) suggested the

simultaneous implementation of multiple technical tools as did Brau, Fawcett and

Morgan (2007) with regard to investment in superior technology. It appears that the

operational context conditions the application and implementation of tools, although it is

clear that their application 1) as a bundle of interrelated practices and 2) introduction in a

gradual and sequential manner distinctively facilitate LQS implementation.

Communication. Several studies reported communication as a significant factor

in enhancing LQS implementation (Scherrrer-Rathje, Boyle & Deflorin, 2009;

Soderquist & Motwani, 1999). The explicit communication of LQS goals and objectives

was important for declaring management commitment, addressing potential employee

concerns regarding their role, responsibilities and implicit changes to work flow

accompanying the implementation. Scherrrer-Rathje, Boyle and Deflorin (2009)

interviewed senior management, middle and tactical managers and shop floor employees

undergoing Lean to compare two Lean implementation projects with contrasting

outcomes. While the first Lean project was a failure, another Lean project implemented

after nine years reported success. Gaining initial support from employees over the extent

of anticipated LQS related changes including the overall vision contributed to the

success of the second Lean project. Through communication, the management team

reduced resistance to change, dispelling rumors and doubts regarding future job security.

Transparent communication of mid- to long-term Lean goals was thus an important

factor. Soderquist and Motwani (1999) recommend explicit communication of quality

objectives through general meetings, memos, notes and training to communicate overall

LQS objectives and goals.

Wider representation of LQS across functions, sharing how the implementation

affected different business units and providing detailed information about these issues

enhanced information transparency of Lean goals. Communication of early Lean wins

from the outset increased support from employees and managers, as the entire workforce

gained better understanding of the benefits. Additionally, there was greater buy-in for

extending application of LQS to other parts of the organization (Scherrrer-Rathje, Boyle

& Deflorin, 2009). Top management support for communicating LQS practices was

critical to the implementation. Soderquist and Motwani (1999) found that balancing top-

down approach in terms of communication of the initiatives with bottom up information

exchange ensured "comprehensive analysis of operation situations" (p. 1120) based on

employee feedback and top down information diffusion. As a result, communication of

management vision through concrete interventions provided the means of

communicating management's commitment towards quality as well as dissemination of

tools and methods to all employees.

Training. In essence, core Lean quality strategies demand employees with high

skill levels and expertise (Achanga, Shehab, Roy & Nelder, 2006). Access to multi

skilled employees at the shop floor enhances effective organization of the workplace. Multifunction workers and employees are required for ensuring uninterrupted operations flow. Examples offered by White, Ojha and Kuo (2009) suggest that investment in multifunction workers at the shop floor enabled the effective response to turnover and absenteeism and increasing customer demand. In addition, multifunction employees in purchase and materials management maintained continuity of supplier relationships. Consequently, multifunction workers and employees "support supply chain-wide cost reduction efforts" (p. 10) in maintaining continuity of workflow, strengthening problem solving capabilities and effectively responding to turnover and absenteeism challenges. There is an overall streamlining of labor requirements through multi skilling (Mahapatra & Mohanty, 2006)

Botti and Bonazzi (1995) view the process and outcomes associated with multi skilling as a way of "increasing more responsible ways of working" (p. 411) within the workforce. The adoption of quality not only provides more meaning to work; it also sensitizes employees towards quality and the interdependent nature of tasks and processes. As a result, the problem solving capabilities within employee groups are enhanced (Punasvaran et al., 2009). Multi skilling enhances problem-solving capabilities of the entire team. The breadth of job and skills training permits employees to problem solve quality related issues, and skills to operate all jobs in their cell. Through technical, analytical, planning and interpersonal training, employees are then able to apply a necessary depth of understanding to work processes through multi-skilled training.

However, in order to realize the true potential of multi-skilling at the workplace, upper management also needs training for changing entrenched work practices. A professional approach (through knowledge and understanding) by upper management is needed to support and enable empowerment of multi-skilled employees without fear of losing control (Mahapatra & Mohanty, 2006). LQS demands the development of greater understanding among key stakeholders. Since the goal is enterprise level improvement, gaining buy-in from key internal stakeholders cannot be overstated. The role of internal partnerships is described in the next section.

Internal Partnerships. Evolving nature of trust among stakeholders is a key factor permitting the firm's transition to lean production. Zucker (1986) used the term trust production between stakeholders to show this construct as a prerequisite for developing diverse patterns of reciprocity and obligation in a bicultural study involving Japanese management and an Italian workforce (as cited by Botti & Bonazzi, 1995). The concept has relevance to the dissertation topic as it highlights an often-ignored social structure within organizations that characterize successful change management programs and interventions. Trust production on the basis of professional competence plays a major role in organizational change processes and when produced "through interaction and over time" develop reputation for credibility.

Another area of strengthening internal partnerships was improving the marketing-operations interface. This resulted in company effectiveness and increased customer value, according to Sawhney and Piper (2002) as cited by Piercy and Rich (2004). Accumulation of knowledge through cross-functional interface was crucial to

organizational learning and performance. Riis, Mikeelsen and Andersen (2008) recommend developing interdependencies across disciplines and functions as well as across improvement initiatives as high level LQS implementation requires contribution from different functions in the organization. In addition, improvement initiatives also need to be integrated for creating an appropriate degree of synergy within and between functions. Moreover, learning from project failures and successes enhanced the learning capacity of the organization (Motwani, Kumar, & Antony, 2004). From the LQS implementation perspective, projects that had not been successful were reported among the most valuable for the organization (Lifvergrenm, Gremyer, Hellstrom, Chakhunashvili & Bergman, 2010). Constant reframing and matching Lean implementers with other stakeholder concerns reinforces stakeholder coalitions and internal partnerships. The ultimate goal is to integrate diverse organizational processes, people and systems to provide customer value. Therefore, organizations also need to simultaneously develop their external partnerships with customers and suppliers.

External Partnerships. In order to create a smooth value stream, the quality of supplier partnerships was an important factor (Soderquist & Motwani, 1999). Strong external partnership positively influenced integration and consistency in the manufacturing process. Suppliers play an important role providing components, spare parts and services ensuring the organization maintains a steady flow of products and services to customer markets. Both customer and supplier development are important considerations for enhancing the quality of LQS implementation in organizations. According to Brau, Fawcett and Morgan (2007), supplier and customer development,

channel alignment, and integration initiatives were viewed as resource and power dependent activities. Alliances with suppliers and customers provide access to inter organizational skills and resources. They not only improve information flows, but also stabilize demand patterns, improve organizational efficiency, effectiveness, productivity and quality.

Soderquist and Motwani (1999) believe that close personalized contacts with customers and suppliers benefit the strategic positioning of the organization. Chutimai and Kaewin (2007) report the benefits of inter-organizational processes and partnerships with external suppliers. When suppliers and customers jointly address performance issues, measurements and improvement plans, there is greater benefit and value across the entire supply chain spanning several firms. Womack and Jones (1994, 1996) also recommend the conduct of joint audits and in both directions (suppliers and customers) with the organization based on their case studies with premier automotive industry based organizations.

A systemic perspective of the organizational resources and capabilities is imperative for the success of LQS implementation. LQS practitioners are often unaware of organizational factors that facilitate LQS implementation. Knowledge and the application of these factors will help practitioners leverage existing sources of organizational strength while at the same time developing their weak areas. Often, organizations lose their focus or choose the wrong interventions leading to LQS failures. The review of the literature documenting LQS implementation failures was very limited and will be presented in the next section.

Factors That Hinder LQS Implementation. Scholarly attention has focused on researching LQS implementation success rather than failures. Therefore, fewer factors hindering LQS emerged from the literature review. They are: lack of communication skills, exclusion of key stakeholders, lack of crucial knowledge, and short term focus. These factors were identified in several cases where LQS implementation experiences were compared and contrasted. These factors also bring attention to a bias in scholarly research to report LQS failures. The manner in which TQM faded as an unsuccessful implementation strategy during the 1980s in large part was due to the unwillingness in organizations to examine systemic causes leading to implementation failure. Figure 3 describes these factors.

Lack of Communication Skills. The absence of formal and informal channels facilitating organizational communication involving LQS was often cited as a significant factor hindering implementation progress (Helper & Kiehl, 2004). The lack of organizational communication, and interest in LQS reflected a lack of management commitment. Organizations also suffer from competing LQS projects that are underway at the same time (Scherrrer-Rathje, Boyle & Deflorin, 2009). Due to lack of communication, different parts of the organization were unaware of improvement initiatives, their progress and outcomes. The lack of collaboration also contributed towards the overall lack of communication in the organization (Helper & Kiehl, 2004). According to the authors, producing "pragmatic collaboration" (p. 90) involving buyers and suppliers was an ongoing process. In Lean implementation, these collaborations

were deemed necessary for enhancing efficiency, advancing shared knowledge and combating opportunism between departments.

Exclusion of key
stakeholders

Lack of crucial
knowledge

Factors hindering
LQS
implementation

Lack of communication skills

Short term focus
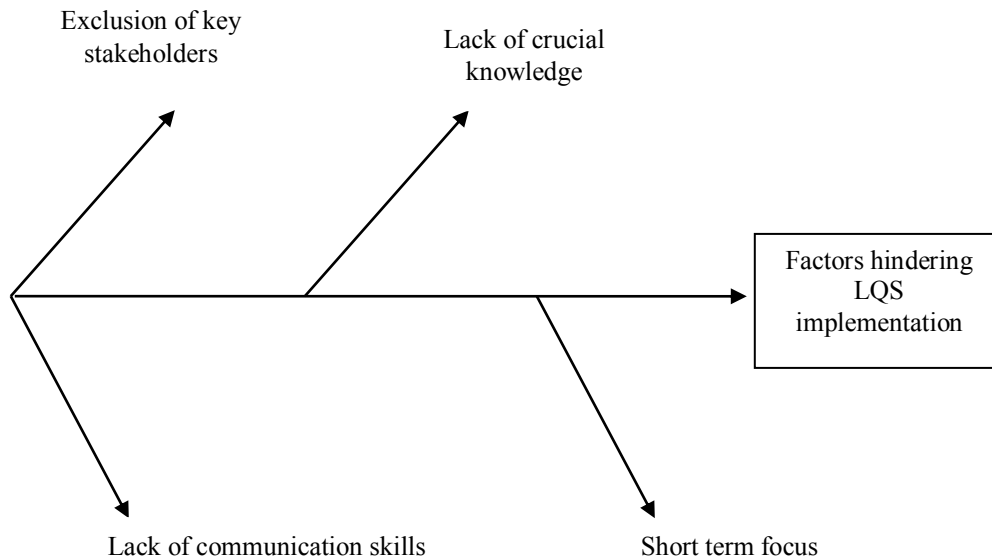
Figure 3. Factors That Hinder LQS Implementation.

Suppliers and Customers. Improving such collaborations was a challenge under constant market pressures and customer demands. Botti and Bonazzi (1995) describe significant problems arising out of asymmetric expectations among stakeholders. Although their study involved bi-national cultural conflicts between Japanese managers and an Italian work force, the findings are certainly applicable in other contexts as well. Significant problems can arise between different functions regarding restructuring, resource allocation, and prioritization of improvement initiatives in the organization.

Lack of team autonomy (Scherrrer-Rathje, Boyle & Deflorin, 2009) negatively contributed towards employee frustration and delayed decision-making processes. Moreover, progress was also affected by the presence of a unionized work force (Shah &

Ward, 2003). Team autonomy along with involved workforce was necessary for implementing a cross-functional workforce, a critical success factor in LQS implementation.

Exclusion of Key Stakeholders. Several stakeholder groups identified in the literature determined the success or failure of LQS implementation. Senior management, workforce and employee groups were considered main stakeholder groups. The lack of senior management commitment was the biggest factor affecting quality of LQS implementation. Lack of senior management commitment in LQS, in turn, affected workforce participation, thus, hindering LQS efforts. The exclusion of senior management and other employee groups has different effects in the implementation and will be described separately.

Lack of senior management commitment and interest in LQS is often cited as a hindering factor (Scherrrer-Rathje, Boyle & Deflorin, 2009). Lack of senior commitment led to lesser investment and allocation of firm level resources towards training of LQS tools and processes and, communication of the benefits. In addition, improvement initiatives and the benefits and were not shared with the rest of the organization in a consistent manner. Lack of senior management commitment also greatly reduced the decision-making authority in ensuring success of Lean related projects. As a result, projects experienced delay in completion and had limited access to resources.

Scherrrer-Rathje, Boyle and Deflorin (2009) cited lack of management commitment as the number one cause for failure LQS projects. In their first case study, LQS projects utilizing a bottom-up implementation approach were studied. They found

that too many resources were needed to achieve LQS goals. Also, when LQS goals were attained, they often went unnoticed in the organization. The successes were localized and did not spread to other parts of the organization. Inclusion of senior management would have assisted in gaining access to resources and communication of LQS success. In addition, success stories would have helped gain greater credibility across the organization and potentially opened doors for more resources. The failure to engage top level management to drive implementation success (Brown, 1998) hindered LQS success.

Lack of employee involvement (Helper & Kiehl, 2004) also undermined LQS implementation success. The authors cited different reasons for lack of employee involvement. In one case study, the authors highlight the lack of union support for LQS initiatives. Once it became clear to the unions that the company had already decided divestment in the manufacturing plant, they became disinterested in employee engagement initiatives. In another case, short term focus on results prevented investment in employee involvement programs by the management itself. Despite management's rhetoric of the importance of team work, employee reluctance and support of LQS implementation was weak.

Short-Term Focus. The strategic aspect of overall value creation has been overlooked by organizations due to a focus on short term gains (Hines, Holweg & Rich, 2000). The lack of properly understanding and prioritizing strategic and operational level goals is often lacking in organizations. For example, strategic level goals such as understanding value creation and customer value need to be addressed differently. On

the other hand, the applications of Lean tools for waste elimination are best suited at the shop floor. Organizations often wrongly applied tools while addressing organizational objectives, resulting in mixed results.

Hines, Holweg and Rich (2000) also suggest wrong assumptions about quality, cost and delivery equal customer value as a hindering factor. Myopic outlook in shop floor process optimization often do not improve quality, delivery, cost or create value for the organization. Many shop floor interventions focused on improving quality, delivery, or cost do not necessarily add value for the customer. Organizations often miss the strategic aspects of LQS by focusing on shop floor improvements instead of improving organizational processes that create customer value

In addition, financial constraints also prevent firms from investing in training. For example, firms often are under stress of meeting production deadlines as a result of which they are unwilling to pull workers off production work for training. Customer pressures also undermine long term capability building in smaller firms. The firms are unprepared to stop the production line for solving product defects. Long-term skills necessary for building systematic process capability through training or problem solving tend to be overlooked. All these factors hinder Lean production and undermine LQS success (Helper & Kiehl, 2004).

Lack of Crucial Knowledge. Lack of knowledge crucial for LQS implementation will be addressed in this section. LQS implementation knowledge is very different from LQS related training that is associated with imparting skills specific related to LQS tools and practices. Strategy implementation involves higher order executive skills in

managing process, people and resources. Often, competing interests, stakeholders and resources within the organization need to be managed. LQS implementation knowledge on one hand deals with recognition of implementation risks as well as awareness of implementation procedures (Rothenburg et al., 2001). Lack of recognition of implementation risks occurred when enthusiastic Lean implementers often failed to negotiate a give and take relationship with key stakeholders. Gaining senior management support was important, not only for introducing LQS—but also in the implementation process. Lack of awareness in the implementation procedures delayed successful project completion.

The four key hindering factors sum up to a large extent the causes of LQS failure in organizations. Collectively, these factors provide a description of barriers that LQS implementers and senior executives need to do overcome in order to achieve LQS success. LQS is a long-term developmental process requiring the active contribution of all key stakeholders including employees in the organization. Therefore, strong organizational communication, sharing of crucial knowledge, inclusion of all stakeholders and long term focus are critical. Moving away from short term focus gives the organization and its people the confidence to carry out their work in accordance to LQS philosophy and values.

Factors That Facilitate and/or Hinder LQS Implementation

Four factors that were critical to LQS implementation, shared facilitating and hindering characteristics. These dynamic factors supported and impeded LQS depending on the context. The first common factor, partnerships was identified as a facilitating factor for LQS while the inadvertent or deliberate exclusion of key stakeholders slowed down the implementation process. Secondly, long term (facilitating factor) versus short term focus (hindrance) and communication (facilitating factor) versus the lack thereof (hindrance) point to the importance of the organizational context. Their presence and appropriate utilization determined partial/full success and or delayed/ full failure of LQS efforts. In addition, another facilitating sub factor–training also contrasted with the lack of crucial knowledge (hindrance). Regardless of the factors that facilitate and/or hinder, the organizational context determined by plant size, unionization and plant age, also matter with regard to implementation of LQS although not all aspects matter to the same extent (Shah & Ward, 2003).

LQS Implications for HRM&D

Several of the above factors have significant implications for the human resource function although the HR connection to LQS has not been empirically well established. Several areas with key implications for HR surfaced from the literature review. Workforce related issues such as formalized union agreements linking LQS implementation and productivity improvement, cross functional teams, job security, multi-skilling, individual acquisition of knowledge, skills and attitudes through training belong to the HR function in the organization. Addressing these critical areas is crucial

for operational strategy execution. There is paucity of scholarly attention investigating organizational strategy with regards to specific aspects of HRM&D and LQS.

Ignoring HR implications of lean implementation (Pascale & Athos, 1981; Piercy & Rich, 2004; Storey, 1994) was identified as a key hindering factor in LQS implementation. LQS implementation impacts several aspects of human resources. The involvement of HR in encouraging higher levels of LQS training and providing problem solving skills was perceived as valuable. More importantly, HR policies can appropriately target worker commitment, skill, and motivation that are critical to operational success. Recruitment, training, enabling team autonomy, linking performance with skills acquisition and reducing barriers between managers and workers (Pil & MacDuffie, 1999) contribute towards optimization of the workforce. However, as authority and responsibility get pushed down to lower levels of the organization through process deployment, a delayering (or flattening) of hierarchical levels occurs in the organization (Ahlstorm, 1998). Managers are reluctant in accepting the erosion of authority and control due to organizational de-layering (Terziovski, Sohal & Samson, 1996). It is important to involve middle management in the LQS change process. Tackling middle management resistance to LQS change is equally important, as much as handling employee reluctance to change. Therefore, ignoring HR implications of lean implementation could easily derail LQS implementation progress.

The adoption of LQS as the more dependent variable helps in the investigation of the kinds of resources and capabilities that create and sustain competitive advantage in the organization. Instances in organizations where LQS implementation has provided

only competitive parity; or has not even been a source of competitive advantage are innumerable. The singular case of Toyota, however, suggests that LQS enhances operational process effectiveness and can be a source of sustained competitive advantage. Effective implementation of LQS can effect overall firm performance. Thus, LQS in Toyota is a source of competitive advantage. In other words, Toyota has been able to realize the full competitive potential of its resources and capabilities by organizing its operations efficiently and effectively around LQS. Effectively implementing LQS thus creates unique capabilities in the organization. Organizations that have failed to realize the benefits of LQS need to closely examine hindering factors that have resulted in not improving operational processes, thus adversely impacting organizational performance.

Operations and HRM&D Functions

Haggerty and Wright (2009) provide a number of organizational factors: size, strategy, environment complexity, technology, workforce profile, task complexity as factors influencing HRM&D strategy. In addition, structure and relational aspects of organization's hierarchical arrangements were examined to understand how functional engagement within and between functions was achieved. Importantly, they focus on the use of organizational structure, frequency and quality of interactions with line management, existing HRM practices and processes to correlate employee behaviors and firm performance. They suggest scrutinizing the total HR system in the context of the business and highlight the need for capable practitioners and demanding line managers

for maximizing HRM&D impact on firm performance. The conceptualization of HRM&D as a practice or set of practices has led the HR function to focus on these as its functional contribution to organizational performance and in the context of outsourcing, with little to do in organizations. Thus, examining HR system, structure and line management expectations build, legitimate and help HR achieve "business partner status" (p. 102). Becker and Huselid (2009) explicitly state the power of line managers and senior executive officers in strategizing HRM&D. From both perspectives, the influence of line managers and the Operations function in implementing HRM&D strategy cannot be ignored. Few empirical studies effectively establish the link between HRM&D and operational strategy implementation and effect on firm performance.

Integrating HRM&D, LQS and Organizational Performance

Based on the RBV framework, this study integrates LQS, HRM&D and organizational performance. LQS as an *operational strategy* influences job design, work structure, climate, as well as individual employee level outcomes namely attitudes, behaviors and satisfaction (Ferris et al., 1998). LQS as an *organizational strategy* also focuses on higher-order social interactive constructs impacting organizational structure and culture (Bowen & Ostroff, 2004; Ferris et al., 1998). In terms of organizational performance, LQS contributes towards improved customer satisfaction, total quality management outcomes, financial performance and organizational effectiveness (Ostroff & Schmitt, 1993; Schneider & Bowen, 1985). The RBV theoretical framework highlights LQS implementation as a firm level resource, providing possible explanation for the

"moderating effects of human resource activities such as pay, training, communications, and staffing" (Boudreau, Hopp, McClain & Thomas, 2003, p. 179).

Any attempt to systematically review literature impact of HRM&D and LQS implementation and effect on organizational performance must contend with several inherent difficulties. Apart from traditional firm level measures that utilize financial indicators for emphasizing company performance, there is a need to use a greater range of outcome measures. It is clear that greater understanding and integration of LQS within the organization not only leads to improved operational performance, it also affects the design of HRM&D system, practices and outcomes. In addition, it would enhance greater alignment and integration of Operational-HRM&D measures, leading to organizational level performance improvement.

Research in the examination of SHRM linkage and level of alignment or integration with Operations function, and subsequent impact on firm/unit level performance has remained empirically underexplored (Becker & Huselid, 2009). In addition, there has also been a lack of common agreement about core characteristics that constitute best SHRM practices. A missing puzzle to the HRM–LQS implementation performance piece is also adopting appropriate research methodologies (discussed in Chapter III) to develop micro level perspectives of organizational strategy, structure and process outcomes in organizations. Bowen and Ostroff (2004) suggest organizational structure and organizational culture as examples of variables that function both as antecedent to the HRM&D system and as a mediating factor in linking HRM&D function and firm performance. Colbert (2004) emphasized complex relationships and

interactions among individuals and systems level perspectives. Haggerty and Wright (2009) also concur that the power is in the process level. A new focus on key intermediate outcomes and strategy implementation is required. Therefore, more within industry studies (e.g., MacDuffie, 1995) that focus on strategic business and functional processes are needed.

Several empirical studies have investigated the impact of HR practices such as training and development, performance appraisal and their impact on individuals and teams. Any focus on high level constructs at the organizational level has established indirectly association with organizational performance (for example, organizational learning). Further, organizational performance improvement is a complex and multi dimensional concept that is difficult to operationalize and measure. RBV as a theoretical framework, aids in the understanding and linking of organizational strategic objectives (LQS implementation) to HRM&D function. The accruing benefits of such a linkage is sought to establish HRM&D contribution to firm performance. LQS implementation involves Operations function. Thus, Operations and HRM&D functional engagement become a source of value creation, through which common organizational level measures are arrived at for achieving of performance improvement and effectiveness at the firm level.

Conclusions

Becker and Huselid (2009) call for future research studies in the implementation of SHRM theory. According to them, strategy implementation is an equally important area

of study as SHRM theory development. Other notable empirical research gaps from the literature call for identifying key intermediate outcomes in accomplishing strategy implementation (Doorewaard & Steeneveld, 1999) and, increased within industry studies (such as Doorewaard & Steeneveld, 1999; MacDuffie, 1995). These scholars suggest the need for balanced perceptions towards understanding HR performance, taking into account multiple stakeholder expectations. Haggerty and Wright (2009) contend that the strength of HR system contributes to desired organizational level performance and recommend future research in this area. These are complex constructs that need in depth understanding of the interacting dynamics between organizational culture, structure, strategy and context.

LQS implementation studies also need to shift their scholarly focus from examining application of lean and quality related tools and impact on performance to higher order strategic, structural and cultural impact in the organization. For example, there is a need to address organizational member's concerns over LQS related change. Empirical studies exploring the quality, success and failures of strategy implementation whether HRM or Operational (LQS) using micro level approaches are required. Line and HR manager relationships have generally been unobserved (Guest, 1987) that otherwise would have provided evidence for research in LQS-HRM strategy implementation success and failures. Adopting micro level organizational approaches such as, for example, the use of qualitative methodologies would support the study of system-structure-culture-context interactions.

RBV lays the foundation for examining HR functional value in the context of LQS implementation. RBV helps in the examination of characteristics such as context, strategy, structure, and of organizations as socially complex systems (Lado & Wilson, 1994). The interaction, alignment and integration of context, strategy, structure and culture creates value, rareness, non-substitutability of organizational resources that are virtually impossible to imitate. RBV theory also enables us to investigate the creation of organizational support mechanisms that sustain and strengthen organizational social capital that were under explored in earlier HRM&D-Organizational performance linkage studies. Together, organizational capital and social capital provide sustainable competitive advantage through the interactions, alignment and integration of context, strategy, structure, systems, culture and human capital.

Important common ground between RBV and organizational alignment perspectives and the connection to LQS implementation and HRM&D function are emphasized in the current study. Resources and capabilities need to be executed to effect organizational performance. The effectiveness of LQS implementation is chosen as the more dependent variable demonstrating the relationship between RBV characteristics (organizational resources and capabilities), operational process capabilities and human resource value creation.

Understanding RBV theory of the firm in the context of LQS implementation is particularly fruitful for understanding organizational alignment (internal fit). Although the study used the resource-based theory as the theoretical foundation of the study, external environment factors were also considered in understanding competitive

advantage creation as suggested by Barney (2001) and Boxall (1998). Thus, theoretical

integration of RBV theory of the firm, environmental factors (external fit),

organizational alignment (internal fit), strategy (LQS) are investigated to understand

how firms generate competitive advantages, identify and redesign critical resources and

capabilities.

Summary

In Chapter II, research relating to the two areas involved in the study: HRM&D-Firm

performance linkage and factors supporting and or hindering LQS were summarized.

First, the impact of specific HRM&D practices and systems and effect on organizational

performance were reviewed. As a result, HRM&D practices (as single or a set) and

systems research affecting performance were classified. Given the diversity of studies

examining HRM&D practices at the micro and macro levels, performance measures

affected at the organizational level were aggregated separately. Then, LQS research at

the organizational level was reviewed. The examination revealed several organizational

factors facilitating and/or hindering implementation. RBV of the firm was proposed as

the theoretical framework of the study connecting HRM&D organizational performance

and LQS literature at the micro and macro level of the organization. The framework

explicates the relationship between human resource function, organizational strategy

implementation and firm performance. In Chapter III, an outline of the research

methodology is provided. Specifically, data collection method, the instrument, and the

data analysis techniques used in the study are discussed. Methodological considerations

in the selection of qualitative method as the appropriate methodology are described.

CHAPTER III

RESEARCH METHOD

The goal of this investigation was to gain an understanding of how HR-Firm performance linkage was achieved in selected organizations. Since uncertainty still exists on the direct connection of HR and firm performance, the role of human resource function (HR) involvement in lean and quality strategy (LQS) implementation at four U.S. based organizations was the focus of this dissertation. Therefore, the study examined the role and extent of HR involvement LQS implementation and effect on organizational performance. The methodology adopted for this study was descriptive and qualitative with the intent to identify and compare Operations and HR perspectives. The following components were addressed: a) research design, b) data collection, c) data analysis, and d) verifiability and trustworthiness. A discussion of the methodological considerations in the selection of adopting a general qualitative approach as the primary research strategy is presented first. The main research design: case study methodology (Dooley, 2002; Yin, 1994) guided the data collection, analysis and reporting. Additionally, analytic techniques from Miles and Huberman (1994) and those utilized by grounded theory scholars (Glaser & Strauss, 1967; Strauss & Corbin, 1988) for data analysis assisted in the case study building, model development and organization of research outcomes.

Methodological Considerations

An examination of the literature reveals few research studies investigating HR role in LQS implementation. As a result, the focus shifted to include empirical studies examining HR effect on organizational performance in both HRM (Human Resource Management) and HRD (Human Resource Development) disciplines—HRM and HRD are combined herein as HRM&D. The scholarly literature review in both fields reveal methodological limitations in the design of these studies. While the HRM discipline revealed extensive utilization of quantitative methods for establishing the HR-firm performance linkage, HRD reported no organizational level studies that examined the HR-Firm performance relationship.

Several studies established empirical support linking HRM practices and firm performance (Bae & Lawler, 2000; Delery & Doty, 1996; Huselid, 1995; MacDuffie, 1995; Shaw et al., 1998). The quantitative approaches utilized in some studies relied on single member responses for gathering organizational level firm performance and HR practices data (Patterson, West, & Toby, 2004). These studies utilized cross-sectional data collection methods involving multiple firms, across or within particular industry sectors; enabling generalization of findings. In contrast, fewer longitudinal studies (Cappelli & Nuemark, 2001; Huselid, 1995) investigated HRM and firm performance relationship. When they did, a retrospective research design requiring respondents to report HR practices data preceding survey administration (Guthrie, 2001; Ichniowski, Shaw & Prennushi, 1997) was observed. Longitudinal data collection within single company/unit contexts also demanded sustained management involvement and support

for research over time, not always guaranteed. The limitations in shoring HR-firm performance linkage through quantitative research design highlight the complexity of categorizing, locating, extricating and explaining interrelated constructs.

The HR-firm performance linkage has been dominated by research utilizing quantitative approaches. Earlier HR-firm linkage research studies focused on explicating the business case for HRM&D and therefore important within the organization's functional hierarchy. Accumulation of research evidence for HR-firm performance linkages made a strong case for HRM&D function in the struggle for organizational resources.

The findings from quantitative based designs have resulted in findings far above the "ground", offering snap shots and high level analysis of HR-firm performance linkage (Miles and Huberman, 1994). The qualitative methodology on the other hand offers a different line of approach in addressing the HR-firm performance linkage. For one, access to multiple respondents from each company assisted in obtaining a wider variety of perspectives and data that was "locally grounded, rich in detail, giving the researcher a strong handle on what real life was like" (Miles & Huberman, 1994, p.10). The qualitative approach was suitable in developing a better understanding of how HR-Firm performance linkage was achieved in companies. As Miles and Huberman (1994) suggest, qualitative data goes beyond the how many. Thus, the qualitative approach offers a new means for exploring the HR-firm performance linkage. In addition, more evidence is needed regarding the context in which the HR-firm performance linkage is created and sustained in organizations.

By focusing on the influences of local contexts on organizational members: their "perceptions, assumptions, prejudgments, presuppositions" (van Manen, 1977), the qualitative approach is well suited for examining how the HRM&D function supports and or inhibits operational strategy implementation, and as an extension, firm performance. This is an underexplored area of research. Utilizing the qualitative approach is also helpful for developing hypotheses, validating quantitative findings in similar settings and vice versa. Building cumulative evidence from a variety of research designs, methodologies and data collection sites will strengthen scholarship and credibility for HRM&D function in organizational practice.

General Qualitative Method. The qualitative approach to organizational research is most often an "interpretive process" (van Manen, 1990, p .26), and the role of researcher is to "mediate" between different meanings. The goal here was to understand organizational members' unique and shared experiences in order to develop HRM&D practices and policies that would further the understanding, managing and design of LQS implementation.

The qualitative method is particularly suited for identifying intangible factors, providing textual descriptions of organizational members' understanding of HRM&D role, actions and interactions and experiences involved with LQS implementation. The flexibility afforded by the qualitative approach aide elaboration regarding the variation in the different contextual conditions influencing the choice and selection of LQS in the four companies. The HRM&D role in LQS implementation was examined from the individual experiences of Operations and HRM&D functional groups. Multiple sources

of data collection from each organization including interviews, observations, extended site visits, review of website content and company presentations were employed in this study. The general qualitative method allows for the examination of external factors influencing Operations and HRM&D performance in companies. The qualitative methodology provides a more complete elaboration of interactions that enable and inhibit HRM&D role in the implementation of LQS. Further, the findings provide considerable evidence of how HR-Firm performance linkage is achieved in selected organizations.

Research Design

The use of the general qualitative approach for examination of organizational factors in four U.S based companies provided a rich detailed storyline primarily answering the "how" and "why" questions. Case study research was viewed as a good methodological fit for framing and writing individual case reports. According to Yin (1994), case study enables description of "a rich detailed story" answering the what, where, when and how questions of a situation or event. Case study research adds strength to what is already known of a specific phenomenon under study. Citing Yin (1994), Dooley (2002) observed case study as an appropriate methodology for gaining understanding of a specific phenomenon under study, providing a detailed contextual analysis through the observation of a limited number of events and conditions and the interacting relationships between them (p. 336). Case study research is able to bring a tight focus on the phenomenon and understanding of complex real-life situations (Soy, 1996).

Use of qualitative case study procedures across the four cases revealed several common categories and many more sub categories, conditions, actions/interactions and consequences of interest supplying in-depth perspectives in relation to the central research question (Strauss & Corbin, 1988). Multiple sources of evidence such as interviews, documents, site observations and formal company presentations enabled triangulation of data. The data collection was conducted through interviews of company executives involved with LQS implementation, many who were directly responsible for its success. Review of literature on HRM&D and effect on organizational performance also provided ample theoretical propositions to guide research design, data collection and analysis.

Single Case versus Multiple Case Designs. Dyer and Wilkins strongly emphasized the power of single case design (Whyte, 1958; Dalton, 1959) which not only generate the capacity for elaborating on phenomena under investigation, but also describe the creation of constructs and their ascribed meaning and related actions within the organizational context. These comparisons "within the same organizational context" (p. 614) enable researchers to get as close as possible to the phenomena under investigation. Eisenhardt (1991) presented multiple case designs as an equally suitable approach permitting replication of constructs developed within a single case study to others. Furthermore, she outlined procedures that enabled researchers to develop and extend insights that resulted in a more "comparative multiple-case logic" (p. 627).

As a research strategy, case study accomplishes methodological rigor through six elements (Dooley, 2002), briefly explained below, that guided the study. The six

elements are as follows: (1) determine and define research questions, (2) select cases and determine data collection and analysis, (3) prepare and collect data, (4) collect data in the field, (5) evaluate and analyze the data, and (6) prepare the report.

Determine and Define Research Questions. By answering *why* and *how* questions, the researcher targeted an important event – LQS implementation to locate and develop an understanding of the factors supporting and inhibiting HRM&D role and performance in the organization. The literature review further refined the research questions adding face validity to the project. The questions: what is the 1) role and 2) extent of HRM&D involvement in LQS implementation and 3) how does the role and extent of HRM&D involvement effect on organizational performance in four US-based distribution companies? The theoretical framework was informed by the resource-based view of the firm.

Select Cases and Determine Data Collection and Analysis. Companies volunteered for the study clearly seeking opportunities to better understand the manner in which their HRM&D functions were currently being utilized and the extent to which, with new insights provided, they could strategically expand and better position their HR function within the organization. Both HRM&D and Operations executives acknowledged scope in leveraging HRM&D systems for enhancing organizational level performance outcomes. All the participating organizations were in the distribution industry. Three of the case companies were located in Texas while the fourth company was located in the East Coast of the United States. A sample of five Vice President's in Operations function (including the following departments – operations, IT, marketing,

sales, lean, quality functions) and three from HRM&D function from each company were invited to participate for the study. The only exception was with C2 where access to the HRM department members was not provided. In this instance, only two HR executives were interviewed. Employees reporting to the functional heads were also interviewed as additional sources of evidence.

Prepare and Collect Data. Initially interviews were utilized as the sole method for data collection. Due to the nature of this study, the researcher moved from one case to another, sometimes back and forth between companies for completing interviews. Transcribing of interviews was an ongoing process and the interview data were stored for later retrieval.

Organizing set categories for sorting and managing data evolved as interviews were progressively completed for each case company. Schedules were worked with interviewees across companies. Weekly meetings with the main advisor helped refine interview questions, ability to interpret answers and to correct problematic areas improving and refining subsequent data collection process. Research notes were also taken during (in the field) interviews, transcribing and analysis of strong positive and negative feelings in the form of brief comments to help readers better understand the findings (Gall et al., 1996).

Collect Data in the Field. It was mutually agreed with primary advisor that completion of five interviews with Operations and three HR interviews, for each company, would be sufficient for saturation of categories, emergence of regularities central and relevant to study, as suggested by Lincoln and Guba (1985). Time and

budgeting constraints and participant company's demands for final report also prompted

decision to end data collection stage (Gall et al., 1996).

Evaluate and Analyze the Data. Multiple case designs allow for generalizability

of constructs and themes across cases. Causal patterns emerged where the analysis of

data revealed two areas: the structural area identified organizational level patterns that

were common across the cases and were inherent in documents and interviews.

Additional interviews that were short in duration were conducted specifically for

clarification at different stages of data collection and analysis.

During the process of data collection and analysis, major themes emerged. These

themes were further refined and modified as more interviews and data was collected.

The major themes emerged as constructs or variables with clear interconnections and

flow between them. The researcher collected and analyzed the data, and returned "again

and again to the data to check the depictions of the experience to determine whether the

qualities of constituents that have been derived from the data embrace the necessary and

sufficient meanings" (Moustakas, 1990, p. 33). Thus, facilitating "the process of

achieving a valid depiction of the experience being investigated" (p. 33). In addition,

trustworthiness was established by demonstrating four characteristics: credibility,

transferability, dependability and, confirmability (Erlandson et al., 1993; Lincoln &

Guba, 1985). In order to establish *credibility*, prolonged engagement, persistent

observation (one-hour interviews, follow up emails to ensure accuracy of data)

triangulation (interviews, initial company presentations made to the researcher and other

materials), peer debriefing (members of supply chain system laboratory at Texas A&M),

and member checks were conducted to reduced potential bias in the data analysis, interpretation and study findings. The purposive sampling included senior executives in Operations and HRM&D function, from four distinct channels of distribution. Thus, fifty one participants allowed for maximizing the potential for common and divergent data enhancing the transferability of the findings to other contexts. Detailed interview notes, presentation and other material enhanced the dependability of the study if it were to be replicated with similar subjects and contexts (Lincoln & Guba, 1985). Member checking was conducted at two different times of the research project. Interview transcripts were sent to interviewees for verification and accuracy of the data. The study findings were presented to confirm and verify the data analysis.

Prepare the Report. Sections of the case analysis leaned towards analytic reporting where the researcher's voice was subdued; the report was presented within a conventional organization for the purpose of meeting dissertation committee and company expectations. Company interviewees and representatives central to support and completion of study and primary stakeholder reviewed report to ensure clarity and competitiveness.

Case Selection

The study involved four participant organizations at different stages of LQS implementation. The study, therefore, also lends itself to variation within case as well as across cases at two levels. First, the extent of LQS implementation surfaced variation of factors supporting and impeding HRM&D support within each case. Secondly, the

interplay of LQS with organizational structure (HR function) provided additional perspectives and descriptions of both contextual and local conditions influence the degree of HR involvement in LQS implementation. The study employed qualitative-case study approach to elicit new understanding of the impact of HR function on Lean strategy as well as developing an organizing framework of how companies implement, discuss and thus validate success of the Lean approach towards enhancing organizational performance. The final selection of companies and units were chosen based on similarities in the choice and selection of Lean-Quality as *the* espoused business strategy as well as operational strategy for the locations under study.

In each organization, the researcher established a participant-researcher relationship with key informants' responsible LQS implementation and HRM&D function. The researcher was able to observe LQS phenomena over multiple settings. The case study research was accomplished using qualitative research and employing various data collection processes, the primary means was interviews and site visits. The interview protocol and questions underwent slight modifications as interview data was collected across the four case organizations.

Each organization selected for research met two criteria to increase homogeneity among the case companies: 1) the participating firms belonged to the distribution industry and 2) were involved in LQS for streamlining operational processes. Each company, however, was involved with different channel of distribution. Company 1 was involved with industrial distribution (C1); company 2 with electronics (C2); company 3 with automotive (C3) and company 4 (C4) with chemical distribution industry. As

representatives of different channels of distribution, the companies offered industry specific contexts and variation providing richness of detail and complexity in the data analysis. Table 1 provides pseudonyms and some descriptive statistics of case company participants.

Table 1

Description of Case Companies

Firms	Number of employees	Distribution Channel	Organizational Age in years	Number of Informants
C1	2400	Industrial	86	8
C2	2000+	Electronics	36	7
C3	3000	Automotive	28	21
C4	10000	Chemical	130	15

Research Informants

Organizations self-selected the research sites whether it was the Corporate or the Unit location in terms of suitability of providing data that would support and maximize research efforts.

The executives who provided access to the researcher were heads of operations and quality in all companies, except C2. In terms of research access, this was unique. Two issues emerged from the researcher's efforts in collecting data. Gaining access to organizations was one; the other was obtaining a high degree of support during the data

collection process and analysis. When the operations and quality functional heads

facilitated the initial point of entry for the researcher, the extent of support and interest in

project findings was high. The researcher had easier access and was able to locate more

participants as data collection proceeded. The research experience was quite different

when HR was the initial point of contact in part due to the research topic that was

considered to be the domain of operations and quality. In the case of C1, the VP for

Quality facilitated data collection. The researcher was able to conduct interviews at the

corporate office and the distribution center in order to interview Operations leaders and

HR staff. In the case of C1, Corporate and Unit HR staffs were interviewed provided a

wider range of HR perspectives and understanding of HR role. Table 2 provides the role

of research participants at C1.

Table 2

Research Participants at C1

No.	Role of Interviewees in company
1	Director – Energy Sales
2	Director – Energy Operations
3	Director – HR
4	Director – Quality
5	Manager – HR (Distribution Center)
6	Manager – HR (Distribution Center)
7	Quality Assurance Specialist
8	Quality Supervisor

In the case of C2, the VP-HRD facilitated interview access. The role of VP for

HRD was unique in comparison to other case companies; HR function was empowered

to develop talent development and acquisition systems. HR was not just a support function; it enjoyed equal status with Operations and other direct functions. Table 3 describes the role of each interview participant at C2.

Table 3

Research Participants at C2

No.	Role of interviewees at C2
1	VP Marketing and Sales Excellence
2	VP Global Operations
3	VP Human Resource Development
4	Manager Human Resources
5	VP IT
6	Manager IT
7	VP Quality

C3 offered additional perspectives in that the researcher was provided extensive access to the executives at the VPC (Vehicle Processing Center). The corporate access was negligible. Establishing boundaries for this case was clear and easy. LQS implementation was underway only at the VPC; other parts of the company did not share the level of commitment that the VPC had undertaken towards achieving LQS milestones. Table 4 provides a list of research participants at C3.

Table 4

Research participants at C3

No.	Role of Interviewees in company
1	Vice President – VPC
2	Director –VPC
3	Senior Manager – Logistics
4	Project Manager – Business Transformation Integration Team
5	Senior Manager – Operations
6	Manager – Quality Assurance
7	Manager – Process Design
8	Manager Planning
9	Planning Engineer
10	Continuous Process Improvement Engineer
11	Shift Manager
12	Quality Assurance Engineer
13	Team Leader
14	Team Leader – Leather Department
15	Accessory Installation Supervisor
16	Human Resources Representative
17	Human Resources Consultant
18	Human Resources Consultant
19	Human Resources Consultant
20	Human Resources Consultant
21	Transformation Project Consultant

In the case of C4, the point of contact (Vice Presidents for HR and Market Development) shared that the role of HR at the distribution facilities were not particularly strong or sophisticated in their organization. Two regional facilities (Canada and Mid-South operations, United States) considered to best examples of HR in the North American operations were suggested for research. Table 5 provides the role of research participants at C4.

Table 5

Research Participants at C4

No.	Role of Interviewees in company
Corporate	
1	VP Human Resources
2	VP Market Development
Mid-South	
3	Director Human Resources
4	District Operations Manager
5	VP Operations
6	Sales Training and Automation Manager
7	Director Material Management
8	Business Unit Co-coordinator
9	Operations Manager
10	Customer Service
Canada	
11	Director HR & Communications
12	Manager Human Resources
13	VP Operations and Logistics
14	Manager Corporate Compliance
15	Operations Manager – Ontario

Data Collection

Interviews with participants were the primary means of data collection. Fifty-one

executives were interviewed across four companies for understanding the HR role in

LQS implementation. Interviewing is often the most important source of data collection

in qualitative research (Merriam, 1998). A semi-structured interview protocol was

developed for the purpose of data collection. This was guided by a list of questions the

researcher and participant organizations wanted to explore. The interview guide

underwent refinement as the research progressed. The researcher also experienced

fatigue, travelling to various sites and locations back and forth in order to complete the

data collection process. Due to geographical distances, it was not possible to go revisit the sites for follow-up questions or more interviews. The initial round of member checking was completed via email. The transcribed interviews were sent to the executives for checking the accuracy of the data. Once the researcher felt that "theoretical saturation" based on Glaser and Strauss (1967) had been achieved, no further interviewing was conducted as it became apparent that similar themes began to emerge regularly on a consistent basis across the four cases. Thirteen HR executives and 38 Operations executives were interviewed for the study.

The manner in which interviewees were contacted was influenced by the primary corporate contact and study sponsor representing each company. In three of the four participating organizations, respondents were selected using the snowball sampling technique. Executives were typically recommended by peer interviewees within the same company. The case of C3 was different from the others in that, a formal email was sent to the entire executive staff providing a background for the study. Executives were provided a sign- up sheet to record the times and dates of their availability. In all other cases, the interviewees were recommended by the initial points of contact in the company. The interviews were conducted onsite. Ten interviews were conducted over the phone.

Interview Protocol. An interview protocol was developed based on literature review, specifically with regard to the role of HR function in the implementation of Lean and Quality strategies. Since the literature in this area was limited, the researcher developed the protocol with industry experts in both HR and Lean-Quality (LQ)

functions before finalizing the interview questions. The established goal for the researcher was to interview at least five informants in Operations and three in HR. Typical interview lasted 45 minutes, but the length varied from 30 minutes to an hour. The interviews were recorded and transcribed.

Individuals from HR, lean, quality, operations, marketing, sales, and logistics were asked probing questions to gather descriptive data. For example the question: "What do you think is a big difference with the HR department here in comparison to earlier experiences in another job or at a different location in the company?" was not originally listed in the interview protocol, but had to be included to ask for more description and details of the HR department. The interviews were semi-structured. Each interview began with a brief explanation of the reason for the meeting. The researcher followed a list of preset questions deviating only with the order depending on the answers elicited from previous questions. The initial interviews reflected the researcher's own understanding of LQS implementation. Starting from interview number three, the questions came to reflect diversity of definitions, terminology associated with LQS terminologies from practice as well. Interview questions have been included in Appendix 1.

Detailed descriptions of each case setting, context and surroundings were elicited from key informants of each organization. As a consequence some informants were interviewed more than once. A majority of the interviews were conducted on site and scheduled back to back. It was not possible to review interview transcripts for differences in patterns and explanations. Interviews were conducted in person, recorded

and transcribed. Handwritten notes for all interviews and site observations were taken as supplemental data. Each interview was reviewed for clarity and coded for significant events or statements.

Trustworthiness. Trustworthiness was done throughout the interview by asking for verification or clarification of the information. Initial drafts of case reports were shared with companies. A final presentation of the case report was made to key executives from the participating organizations. Feedback and comments were included and the analysis was revised accordingly.

Triangulation. Triangulation of data was achieved by asking each interviewee the same set of interview questions where the researcher was able to corroborate events, strategies and decision making associated with LQS. Research informants shared perspectives of success of LQS initiatives; what would success look like, and what they prioritized as important outcomes for achieving perceived levels of LQS success. The researcher, however, did not ask them how LQS implementation failure would appear. This would have helped clarify not only the research study, but also senior executives own understanding of LQS outcomes. As Kanter (1997, p.397) put it: "each source of data, each informant served as a check against the data received from other sources noting for consistency tendencies" (as cited in Eisenhardt, 1991). In addition to interviews/field notes, some additional documents were also reviewed for better understanding the context of the study.

Data Analysis

The constant comparative method was used for the data analysis (Lincoln & Guba, 1985, pp. 339-344) that includes four stages: 1) comparing incidents applicable to each category, 2) integrating categories and their properties, 3) delimiting the construction, and 4) writing up the construction. For the first stage, the researcher used interview transcripts and field notes to determine trends in the data from Operations and HR perspectives. Nvivo software was used to code each idea (unit) before placement into categories. The coding was then sorted into larger categories for each transcript. Responses in each category were labeled to identify the respondent. Comparisons were made between the responses to determine which responses corroborated or contradicted each other. The researcher's prior experience in HR and LQ implementation helped in making these initial judgments for early category formulation. To differentiate respondent themes so that data would remain in context, the emerging categories were color coded to provide visual indications. The data collected from each company was treated separately to develop categories applicable for the specific case. The constant comparative method was used to code LQS implementation perspectives from HR and Operations executives.

> The first rule of the constant comparative method is that while coding an incident for a category; compare it with the previous incidents in the same and different groups coded in the same category. This constant comparison of the incidents very soon starts to generate theoretical properties of the category..Thus, the process of constant

comparison stimulates thought that leads to both descriptive and explanatory

categories. (Lincoln & Guba, 1985, p. 341)

Categories were first established within each case and then across the entire data set of

four cases. Once the categories emerged, fewer modifications were required. As the data

sources became saturated the categories became more refined. Linkages and

relationships between the categories were determined through patterns, the contextual

consideration of the company, functional expertise of the participants, and knowledge of

existing research and literature. The researcher began to draw from earlier experiences

when analyzing data since categories did not exactly fit from what was available from

literature.

Core categories were discovered from coding each individual case. It became

apparent that core categories identified in the first two cases could be extended for

successive cases. Several conceptual categories were taken from respondents own

description of the events referred to as "in vivo" codes by Glaser and Strauss (1967) (as

cited by Strauss & Corbin, 1998).The construction of the categories represented the

"voices of many" (Strauss & Corbin, 1998, p.145). The details (properties and

dimensions) under each category and sub category bring out differences and variations

within case.

Grounded Theory as an Analytic Tool. The researcher developed a common

framework to sort and organize the categories. Each case "story" was displayed using

this framework where the researcher explored the relationships between categories.

Using grounded theory (Egan, 2002; Strauss & Corbin, 1998) as an analytic scheme, the

researcher traced events and accompanying decision making process to examine the nature of association among categories to each other, to action and to consequences. The analytic scheme brought "greater explanatory power" (p. 125) to the case. The researcher applied the conditional/consequential matrix to identify the interplay between process and structure. As Egan (2002) recommended, it was possible to extricate more credible explanations in support of the organizing framework using grounded theory. As a result a major theoretical process-structure interaction was identified in understanding the impact of organizational level factors on LQS implementation process and organizational structure represented by Operations-HR functions. These in turn impacted organizational performance. These indicators interact in complex ways that current financial indicators of performance fail to fully capture.

Conceptual reordering took place over several iterations of model development. Properties and dimensions of categories and their elucidation did not tie with an a priori model that the researcher had initially developed from the literature. Although making comparisons is an essential component, as Strauss and Corbin (1998) point out "it is not possible to discern all possible connections among conditions, actions/interactions and consequences" (p.188) due to limitations of securing access and time from senior executives. How organizations go about communicating decisions involving extent of LQS implementation and executive involvement gave the researcher a better understanding of constructs such as environment and industry; leadership and organizational culture interplay to produce a different display of LQS implementation journey and degree of functional engagement for each company. These constructs also

set the context for a more organized assessment of the extent of HR involvement in LQS implementation. They also speeded up and facilitated the analysis.

Focusing and Bounding the Data Analysis. Initial conceptual frameworks evolved and were developed during the fieldwork making the theoretical assumptions more explicit (Miles & Huberman, 1994). Although early conceptual development would have sharpened the focus of data collection, this did not happen until the researcher was at the final stages of data collection. The refining and recasting of the conceptual framework however continued well into the writing stages of the case reports as the researcher adopted a more grounded approach (Corbin & Strauss, 1998) in "feeling the way to a set of relationships that accounted for important pieces of what was being seen and heard" (Miles & Huberman, 1994, p. 62).

Building the Causal Model. Associations between the constructs were integrated to develop meaningful explanatory model as suggested by Miles and Huberman (1994). The individual case models were ordered *temporally* first, placing organizational level constructs at the beginning. Interviews and field notes were relied to cross check and verify participant explanations. Microsoft Visio software was used to develop the configurations and connections between the variables. The researcher checked back with original case report findings to verify "examples that supported the causal connections and no examples of disconfirmations" (p. 226). The causal model was subjected to final verifications with other graduate students from different disciplines to clarify assumptions and possible rival explanations.

Summary

The researcher investigated and described the role of human resources function (HR) in the implementation of LQS (Lean Quality Strategies). The goal of the investigation was to examine the role of HR function, its current as well as potential contribution towards LQS implementation and the factors that influenced the extent HR involvement. The methodology adopted for this study was descriptive and qualitative with the intent to identify and compare the functional perspectives of Operations and HR executives. An individual causal model for each company was developed. Case reports are written presented in the next chapter followed by findings.

CHAPTER IV

LEAN JOURNEY AT C1: CHANGE OR?

The case narrative was developed from recorded interviews with C1 executives, on-site

observations, review of company literature, presentations and website information. Eight

Operations and three human resource (HR) executives were interviewed at C1. Although

data collection initially began at C1, obtaining access to HR executives proved more

difficult. The interviews were completed over a one year period at the company, by

which time three new companies had been recruited and data collected for research.

While HR interviews encompassed both corporate and unit executives located at the

distribution center (D.C.), Operation function (including operations, Quality and

Marketing) participants were located at the corporate office. Corporate perspectives on

lean and quality strategy (LQS) implementation largely dominated C1 analysis and

presentation of findings. The HR role in LQS implementation in contrast offered both

corporate and unit perspectives, making the C1narrative a unique case offering unlike

other case company (C2, C3, C4) studies. The research findings were presented to

company executives. Their feedback and suggestions assisted in updating research data

and have been incorporated in the narrative.

The analysis and presentation of the case study for C1 is structured as follows.

First, I present the case narrative, which provides a brief description and background of

key issues challenging C1. Next, the organizing framework of the study and the key

relationships among major categories is developed from the data analysis. The constructs

are then expanded further with supporting quotes from the participants. Finally conclusions about the HR-Firm performance linkage in C1 will be presented.

Case Narrative

As a supply chain solutions company, C1 provides downstream value-added services for energy and industrial markets through a distribution network of more than 250 locations across North America and Europe (company website). C1 stocks more than 90,000 diverse products for customer markets providing them with maintenance, repair and operations (MRO) products and has been in the business for almost 100 years (company website). The company's commitment to quality has ensured that C1's distribution centers maintain International Organization for Standardization (ISO) certification standards and ensure top quality and service to customers.

Reasons for C1 Adoption of LQS. While the focus on quality was not new at C1, one event galvanized Lean introduction. Two major customers demanded alignment of C1 operations through the use of LQS improvement programs. Failure to adopt LQS initiatives could have damaged C1's relationships and reputation with key customers. To the extent possible, C1 mirrored customer LQS efforts even incorporating similar language surrounding the initiatives. For example, one major customer preferred not to label the improvement initiatives as Lean. Depending on customer preferences, C1 customized training material, communication and orientation for branches serving the key customers. The incorporation of Lean program components led to the formation of a Lean Six Sigma (LSS) steering committee at C1. Where the data is specific to Lean

related programs, LSS terminology is used in the case study. Otherwise, the term LQS is used to more accurately describe and include already existing International Standard Organization (ISO) related quality systems and the more recently introduced Lean Six Sigma initiatives.

Benefits and New Challenges for C1. The benefits experienced by C1 as a result of adopting LQS included overall process improvement, documentation, superior service quality, and exceeding ISO specifications. As LSS change initiatives began to roll out, new challenges were experience by C1with respect to communicating LSS success, energizing companywide commitment and sustaining the momentum for change. The LSS approach thus presented many benefits and new challenges for C1.

Challenges of Adopting LQS. A cost leadership style influenced executive decision making. The CEO emphasized cost as the important consideration with respect to all major investments including LQS. Consequently, LSS introduction assumed a step by step approach. The largest division of the company, the Energy division which served the two key customers decided to undergo the LSS program at the time of data collection. The quality department was charged with the overall responsibility for LSS roll out. Four interview participants (Director – Energy sales, Director – Energy Operations, Director- Quality and Quality assurance specialist) were members of the LSS steering committee.

Given the step by step approach adopted for LSS roll out, any major setbacks (heavy financial investment in LSS and/or inability to satisfy key customers) could have derailed LSS implementation, although this was not the case. In addition, the rationale

for LSS introduction, primarily as a customer engagement measure helped C1 override apprehensions that came from failed management efforts associated with companywide total quality management (TQM) implementation in the late 1980s and early 1990s. Gaining companywide buy-in for the LSS improvement program was thus, not an initial LSS program goal, although the LSS steering committee expressed hope that in time the program would receive support for companywide implementation.

C1 customized LSS program initiatives to meet key customer requirements and internal company considerations (emphasizing cost reduction, achieving quality and productivity improvements). The overall LQS strategy emphasizing small wins was contextually appropriate for C1. LQS became *one of the strategies* transforming C1's existing business practices. With such a deliberate selection and implementation plan, LQS has increased opportunities for successfully transforming C1's business practices.

HR Role in LQS Implementation. LQS necessitated greater alignment between Operations and other support functions, including HR. For example, Operations recommended increased strategic HR involvement in the following areas: 1) provide structure for training initiatives related to LSS implementation, 2) robust rewards and recognition programs linked to LSS goal achievement and 3) organizational change management efforts aimed at improving customer engagement efforts. Despite increased Operations demand for strategic HR involvement with LQS, several factors hindered HR role in LQS. In what follows, the researcher develops an organizing framework for understanding Operations and HR functional engagement and contribution towards organizational performance.

Organizing Framework for Cross Functional Performance in C1

Major themes emerging from the data were analyzed and organized into a framework representing a Cross Functional Performance model for C1. The organizing framework illustrates the directionality and strength (thick, thin and dotted) of connections between the constructs. Two types of connections: contributing and constraining connections were identified in the study and described in the narrative. For example, organizational culture has a strong constraining effect on LQS implementation at C1, slowing the pace of implementation. There was a high turnover culture in the organization especially for new recruits. All other connections in the figure were identified as contributing connections, with significant variation in their strength, given the complexity of interconnections between the constructs and shifting nature of organizational priorities.

The five emerging themes from the study: 1) Macro conditions, 2) Company strategy, 3) Organizational structure, 4) Cross functional performance and, 5) Organizational performance were organized in a linear fashion. Three organizational level factors, broad in scope and impact: 1) environment and industry, 2) leadership and 3) organization culture were identified as macro conditions. These macro conditions provide contextual description of external and internal organizational factors behind C1's selection of LQS as an appropriate strategy. Interviewees reported LQS as having the greatest impact on the Operations function. Branches applying LQS, reported improvements in key performance indicators (KPI's), greater alignment of systems, lowered incidences of errors and increased customer engagement.

There was general agreement that the HR involvement in LQS was weak. A weak cross functional engagement between HR and Operations was inferred. The strength of Operations-HR cross functional performance also reflected the extent of HR involvement in LQS and linkage to organizational performance. Employee relations type issues were the most prominent aspect of functional engagement between Operations and HR. These routine responsibilities prevented effective delivery of *developmental* related HR services (such as training and new hire orientation). The *development* aspect of the HR function overlooked as HR staff was fully involved in resolving employee grievances and disciplinary issues. Employee relations aspect of HR, (terms and conditions of employment, employee-supervisor relationships, employee attendance and productivity) describe the full extent of Operations-HR cross functional engagement at C1. Traditional HR-Operations interactions were limited to recruitment, hiring, and employee relations handling. From the data it appears that the employee relations variable shaped content and quality of HR and Operations cross functional performance. This measure of cross functional performance labeled, *interactions* portray the employee relations role as the most important aspect of HR and Operations engagement at C1. With introduction of LQS, strategic opportunities for HR involvement become more apparent in delivering training and communicating Lean success. Higher order cross functional performance indicators such as utilizing employee engagement data to inform senior executive decision making, reduction in turnover were called for by Operations. Interview data indicate that these areas as critical for improving HR service delivery, strengthening the HR-firm performance linkage and enhancing perceptions of HR

effectiveness in C1. Figure 4 presents the organizing framework for C1. In the figure, key relationships with strong directionality are illustrated with thicker connections. The nature of these relationships (positive or negative) was found to facilitate and/or hinder LQS implementation and the full achievement of HR-Firm performance linkage in the organization.

The association with the oil industry has benefited C1's organizational performance. The impact of leadership and organizational culture has rendered challenges for a smooth implementation of LQS. Strong functional silos also affected the extent of cross functional performance between Operations and HR, and weakened the HR-firm performance linkage. However the weak HR-firm performance linkage achieved in C1 is not a significant cause for concern, as environment, industry and other external factors combine in unique ways to enhance Operational performance, supporting C1's position as a leading provider of industrial distribution services. The unique ways firm level capabilities are leveraged to achieve competitive advantage in the case of C1 imply that, softer and perhaps more difficult challenges associated with management and development of people are relegated to secondary status in the pursuit of business priorities.
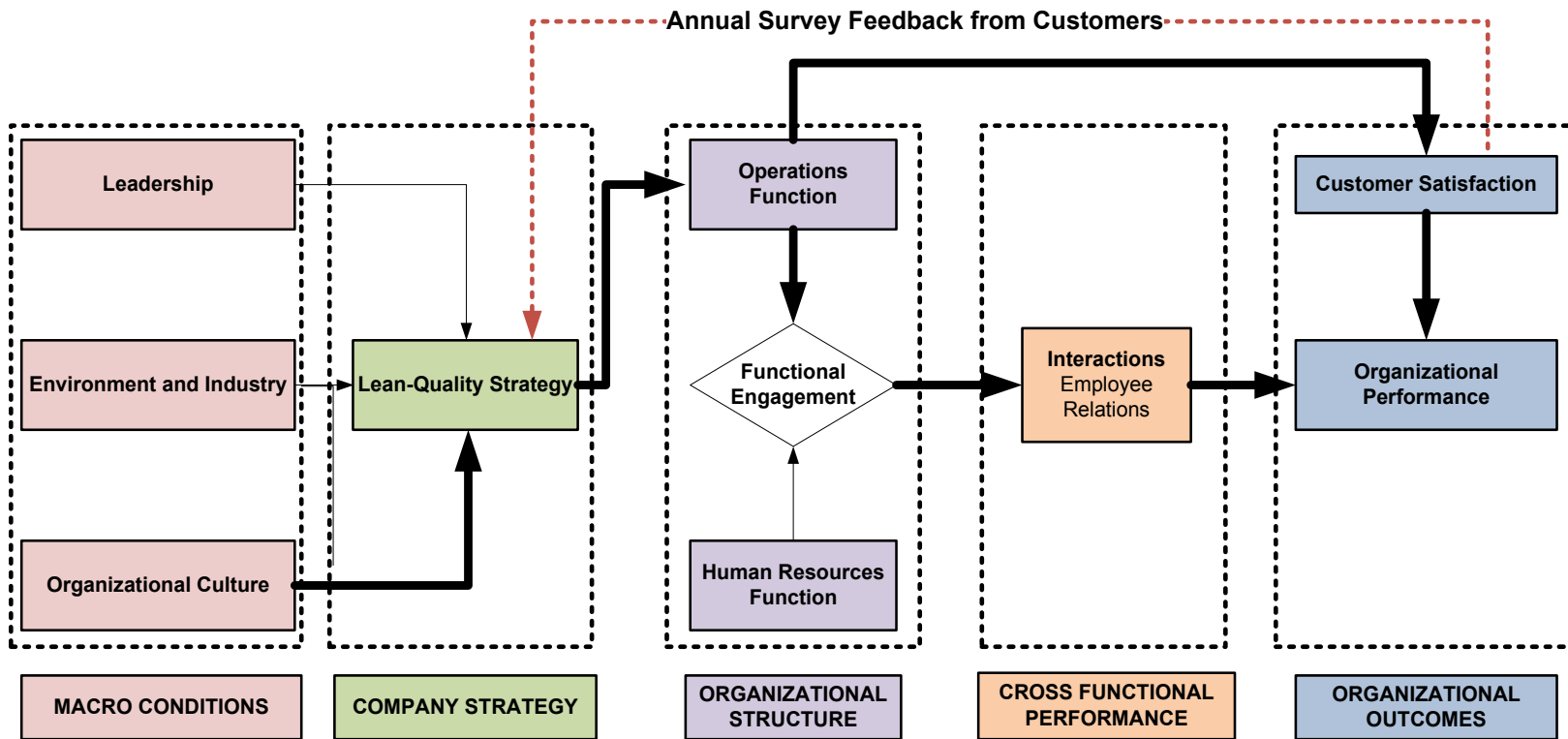
Figure 4. Cross Functional Performance Model for C1.

Theme 1: Role of HR Function in C1

A "traditional" role described the HR function at C1. Strategic and administrative

aspects were enacted at the corporate office. The administrative aspects involving policy,

procedures, employee relations dominated the HR function. At the corporate, there were

opportunities for enhanced HR strategic role and involvement. For example, recruitment

and training initiatives were directed by corporate HR. The Unit HR role was enacted at

the main distribution center (D.C.) which supported sales offices across the country.

Based on geographic locations of the sales office, HR staffs were assigned to different

divisional Vice Presidents. HR staff aligned their services in line with divisional goals

and expectations.

On employee related issues, HR staff reported directly to regional and divisional

managers responsible for the branch offices.

The HR leadership was provided by the Director –HR who was responsible for

introducing and expanding a traditional HR role into a more strategic one. The HR

Director looked upon her role "as a policeman, also as a business partner with the senior

management, making decisions regarding opening a branch, and with regards to current

jobs and other jobs in the future." Reflecting on the evolving and expanding HR role,

two HR managers commented on the Director – HR role:

She did have a different team and HR's role in C1 had been primarily administrative

and she really worked hard to change that perception of HR to a true business partner.

She worked really hard in trying to change the executive mentality about why HR was

actually here and the fact that, you know, we are not just clerical staff. We actually

have some pretty important knowledge that can help Operations and, help the

company. She really did a good job.

Supporting this view the HR manager added:

I mean, that is new for a HR director, though there are a lot of processes that we are

trying to revamp. Any performance issues, all HR issues directly linked to the

Operations is addressed by the Director-HR, and of course she's the strategic HR

point of reference.

Effective leadership is necessary for HR to enact an expanded and strategic role in the

company.

Theme 2: HR Involvement in LQS Implementation

Figure 5 describes Operations and HR perspectives on the HR role in relation to LSS

implementation. Five emerging themes from the interview data highlight differences and

similarities of functional perspectives on the HR role in relation to LQS implementation.

They also informed the researcher's observations and developing recommendations for

each area. There was a general consensus that LSS initiatives had not been

communicated well in all levels of the organization.

HR Has a Full Plate. The Director- HR felt HR involvement with LSS was

constrained by lack of time "If you had the time that would be a luxury". HR plate was

already full, limiting involvement in LSS roll out. The Quality Supervisor also

corroborated the lack of HR involvement in LSS stating:

Many areas I can see at this point are increasing awareness of the business

involvement with Lean and Six Sigma. It is compartmentalized in the company, there

is not much communication since HR is involved in other things, like employee

related issues.

HR was pressed for time, managing day to day employee relation issues, to afford

involvement in LQS initiatives. The Operations function hoped for greater HR

involvement in the later stages of LQS implementation. Commenting on HR's limited

participation the Director –Operations said, "We're actually taking the lead within our

company on the lean program and at this time we don't have HR involved in it yet".

Instead of placing blame on other functions, the Director – Energy sales highlighted

organizational culture related issues as a contributing factor towards uneven

participation from other parts of the organization:

I think as a company…every company has silos. It [LSS] is well accepted by some

departments, there are other departments that have resisted and so I'm not happy, I

feel like we don't have a 100% score as far as taking it across the company. I am

happy at this speed in some of the departments, not happy with how fast it is moving

across other departments.

The organizational culture impeded integration of strategic objectives between

Operations and HR, thus constraining strategic engagement opportunities. For example,

employee relations issues dominated HR time. These transactional routines were further

escalated by the turnover culture within new hires. As a result, HR time was primarily

allocated to recruitment and selection to manage turnover. These two areas: employee

relations issues and turnover culture intensified the imbalance between transactional and strategic priorities within the HR function, and cross functional performance between Operations and HR in C1.

Applying LQS in HR. Developing rewards and recognition programs was noted by Operations as an area for HR involvement in LQS initiatives. Adapting HR reward systems enhance the execution of LQS in the company. HR staff suggested the application of LQS approach for improving three important HR related practices: recruitment, promotion of the "right" people and employee-supervisor relationships. According to the HR manager:

My own personal perspective of supporting the quality department is by making sure that we have the right people. I put together some developmental plans for each one of those people because we know that they are appraised and, they have identified some areas for improvement.

Operations perspectives also recommended strategic opportunities for an expanded HR role in organizational development and change management efforts. Institutionalizing LQS philosophy and practices necessitate change management efforts at both strategic and operational levels of the organization. The Energy division as an internal customer expected HR support LQS efforts in the hiring, selection and design of recognition programs for achieving LQS goals. In fact, the full impact of LQS program and accompanying benefits called for involvement of the entire organization. The steering committee members had not anticipated the extent of support and buy-in LQS required from departments other than the Operations function. This lack of crucial

knowledge caused challenges in gaining buy-in from HR. The Operations function failed to comprehend the importance of involving HR early into the LQS implementation process.

Gaining HR Buy-in. C1, like other organizations, faced a reluctant mindset from HR in terms of LQS involvement. The VP – Energy sales added:

They have not really been involved yet. The VP [HR] has not really embraced the concepts. Do I have an opportunity for Lean or Quality to really help my department and then do I have spend money and time on the initiatives, off from something else. So I think the bottom line is they haven't embraced the idea, jumped into the bus.

The Operations function tried hard to gain HR buy-in as LQS rolled out in the various branch locations of the Energy Division. The inclusion of HR during the initial stages of LQS selection would have encouraged a reciprocal relationship between the two functions. The HR executive staff agreed with Operations on their lack of involvement with LQS, but for different reasons. On the one hand, Operations attributed lack of interest in HR to support LQS. HR, on the other hand

Emerging Themes	HR has a full plate	Applying LQS in HR	Gaining HR buy-in	Marketing LQS communications	Demand for strategic HR
OPERATIONS PERSPECTIVES	HR is involved especially in employee relations type issues and has not been involved with LQS	LQS is an organizational change management effort that touches HR issues	HR has not embraced Lean concepts and related ideas	Communication of LQS should be HR's job	HR involvement is required in designing rewards and recognition for green belt project achievers
HR PERSPECTIVES	HR plate already full, given current responsibilities	HR role in relation to quality would be to focus on hiring, selection and promotion of the "right" kind of people	HR has no idea of Lean quality strategy in the company	Communication of LSS is Operations' job	HR can provide a non-operations perspective to LQS implementation
				Scope for improved communication of early success of LSS	
Researcher's Observations	*Organizational culture makes it hard for Operations and HR to be flexible and open about sharing responsibilities for strategic organizational improvement issues*	*HR has to be aware of changing Operational priorities to recognize and reward successful LQS implementers: "promotion of the right kind of people"*	*Operations must involve HR from early stages for enhancing the quality of LQS implementation*	*Confusion over ownership of LQS communication exists between HR and Operations function*	*HR and Operations have different views and perceptions about the **impact of LQS** in C1*
Researcher's Recommendations	**Develop strategies for quantifying "Employee Relations" impact on business** **Recognize turnover as a critical performance issue for operation and HR functions**	**Include prior LQS experience as additional criteria for hiring, selection and promotion procedures**	**Operations must place value on gaining buy in for LQS implementation from functional peers (HR) as much as they do from Operations managers and employees.**	**Clarify ownership of LQS communication between HR and Operations**	**Operations must identify and communicate HR issues that benefit from LQS implementation** **(provide a cohesive structure for training)**

Figure 5. HR Role in LQS Implementation.

cited different reasons. Two of the interview participants clearly had no idea of the overall quality strategy in the company. Representative statements include the following: "With regard to the overall [LQS] initiative nothing. Umm we [HR] are not having an impact." "I don't know what the quality strategy is".

HR managers at the DC were unaware of LSS roll out plan. LSS was still very much a corporate initiative according to HR staff at the DC. The implementation roll out had not moved beyond Operations function. The HR manager shared:

I would need to get a better understanding from them [Quality] what their needs are, what do they need to do and how can I help [them] with their strategy or with processes. From an HR perspective I would need to know that from LC (Director – Quality) what she needs. I know she has had some audits, and they made several recommendations [at the D.C].

The HR staff had limited knowledge of the LQS initiatives. HR also viewed LQS as an Operations initiative and not as an organizational intervention with benefits for both HR and Operations. Lack of informal and open channels of communication between Operations and HR further complicated the confusion. Operations function has not been successful in selling LQS as a change process among their functional peers. Marketing LQS communication across the organization required planned and coordinated efforts.

Marketing LQS Initiatives. Responsibility for communicating LQS initiatives was a grey area between HR and Quality function. Each function suggested the other accept responsibility for coordinating the initiatives. LQS communication efforts clearly call for a) greater outreach efforts as well as, b) marketing the change process to gain

buy-in from all parts of the organization. Given the full plate of responsibilities, any involvement in the co-ordination and communication of LQS initiatives was outside the scope of HR. Operations on the other hand wanted to leverage HR expertise in organizational outreach. The HR department was responsible for several organizational communication dissemination efforts (newsletter, employee programs etc). Their suggestions for greater HR involvement in marketing LQS initiatives were intended to utilize already existing communication channels in the company. The confusion over which function would undertake responsibility for the communication efforts and unwillingness of HR support were caused by the interacting effects of earlier themes (full plate of HR responsibilities and lack of buy-in).

Demand for Strategic HR. Operations executives called for strategic HR involvement in LQS implementation. The Director – Quality for example suggested LSS initiatives as an "organizational change management effort that touches personnel". She also felt HR could set training and hiring expectations, be involved in Lean from their own standpoint of continuous improvements in HR department." While this was a practical suggestion, it was difficult for HR and other functions in the organization that were not fully aware of LQS initiatives and application. From the HR standpoint, it was essential that Operations shared information relating to Green Belt and other LSS projects "some place where it can be accessed so that all employees, so that we know what type of projects are going on." These views bring to light the prevailing reluctance of many parts of the company in becoming involved with LQS. The HR director reluctantly offered "I mean there would be an opportunity from having a fresh

perspective, having a non-Operations perspective [that] would certainly help in any situation I think."

Operations function demanded strategic and transactional involvement from HR. The transactional HR involvement in operational issues were linked to employee relation type issues as well hiring and recruiting practices. The more strategic requirements from HR are associated with developing internal alignment with the customer (Operations function) goals and needs. For example, promotion based on achieving LQS milestones, tying rewards and recognition to strategic Operations functional milestone call for strategic HR.

The Director –Quality also suggested HR involvement with green belt projects already in progress related to personnel issues:

So, that's where HR needs to make a decision…for example, you want to be a manager, we will see the green belt projects completed, you must have the incentive and bonus you can use, career track for promotion, that's where HR could play a role and be supportive and then that would mean we are serious about it [LSS initiatives] and people would take it seriously.

The emerging themes are distinct, yet closely interconnected to one another. They underline the intricate interconnections within organizational functions and its members. Analyses of both perspectives indicate the need for understanding larger contextual and systemic issues in C1, to fully engage and achieve LQS implementation success. Turnover culture especially among new hires reflects aspects of organizational culture that call for higher order engagement between Operations and HR. HR service

capacity is seen to be guided by specific macro level factors company leadership and organizational culture. These factors affect initial sources of HR's competitive advantage like involvement in organizational strategy (LQS) and HR service delivery. The micro level perspectives (employee relations, recruitment, selection etc) reflect the larger macro level factors at work which need commitment from the executive leadership team. HR function alone cannot find interventions for the high turnover or performance issues due to poor supervisory-employee relations. Lack of crucial knowledge regarding the source of organizational level challenges, would better serve C1 instead of resorting to a blame-game culture. Cross functional performance (CFP) serves as a good indicator on the extent to which the organization's sources of social capital are fully leveraged to create and sustain competitive advantage. In the case of C1, weak CFP, hindered LQS implementation and also explained the weak HR-firm performance linkage.

Theme 3: Perceptions of HR Functional Effectiveness

Several factors constrained HR participation and strategic involvement in LQS. These factors impacted perceptions of HR effectiveness in C1. Two HR executives voiced concerns about maintaining balance between day to day HR routines and collaborating with Operations on long term strategic priorities. Within HR, the turnover of new recruits caused issues of continuity (loss of experience, delay in filling vacant positions, insufficient on boarding time of new recruits). These affected success of strategic and routine HR initiatives. The turnover culture within and across HR in C1 contributed towards perceived ineffectiveness of HR functional performance. For example, the

Operations account of HR performance suggested HR staff as lacking knowledge of policies and procedures, although the root cause for this was high turnover of new recruits across the company, including the HR function:

> I think being in HR…we need people who know the jobs, are a source of knowledge and a lot of times when they haven't been as knowledgeable as they should have been – so timeliness and knowledge. Generally, I expect HR to know what all the policies are. Sometimes I expect HR to know a little more, understand all the nuances.

Operations had very little understanding of HR goals and priorities associated with day to day functioning at C1. Their perceptions of HR performance reflected this lack of awareness. The following quote underscores conflicting functional priorities between HR and Operations. The Director for Energy Sales urged HR to play a leadership role; and be willing to take up salary and compensation issues with top management stating, "I just don't agree with that [fiscal conservative aspect], I think it is a part of the company culture but yeah, they (HR) could resist that part of the culture. We have fought battles on competitive salaries much more than I have ever had before." Operations demanded strong and effective HR leadership in resisting aspects of company culture that were detrimental to employee retention. On the other hand, HR functional performance was evaluated on the basis of maintaining salary outflow at lower levels as desired by the CEO. These opposing functional priorities (increased salaries for talent retention for Operations versus minimize salary costs for HR) created friction thus affecting the quality of Operations-HR engagement.

Historically, HR has been perceived as a support staff function; its effectiveness often called to question. HR goals and priorities had neither been communicated clearly, nor well represented by HR staff during Operations and HR meetings. The present HR staff had to develop specific ways to counteract and create a more positive image and value for HR services. One of the HR managers who was a recent recruit put it this way: "I think we are going to have to build that trust, they're [Operations] going to have to trust us, they have to have confidence in us and we have to prove ourselves...we have to first get the respect and confidence and that is going to take time. And that is what our challenge is."

To summarize, key HR issues were identified in the areas of communication, consistency in service delivery, timeliness of response, knowledge of policies and practices, developing employee related metrics; developing needs based structured training and lastly developing shared understanding with Operations over retention and turnover related issues. The scope for strategic HR performance improvement is a new opportunity for the HR function to become fully "parallel" and "aligned" with their internal customers – the Operations function.

There was general agreement among HR and Operations on the tremendous impact employee relations issues had on the company bottom line. Employee relations strategies were tied most closely to Operations-HR interactions, with tangible benefits for improved operational performance and thus organizational performance. The HR manager provided an example, "when an employee is making derogatory remarks to another employee, it does turn into a disciplinary action or into a legal action. And if it

turns into a legal action you're talking about a half $1 million-$1 million and of course that has a tremendous impact on the bottom line because it takes away from the bottom line".

The VP – Energy sales offered Operations perspectives:

Well, let us say that I have an employee issue. I have heard discrimination issue with an employee. I need to have somebody who knows how to handle that because it is not something that comes up every day. So, those are the things I need to make sure there is somebody on the HR side that can help me deal with the issue, either directly or as a support to the supervisor or manager.

Employee relation issues were the most important HR service demanded by the organization. Operation executives suggested this to be an area for improvement. However the extent of engagement was limited to interactions over employee and supervisor related incidences. Operations viewed this to be a major role for the HR function.

Compensation created a lot of friction between HR and Operations. Several Operations managers were critical of HR's role. On the other hand, the HR Director shared her concerns stating that promoters of C1 were – "striven to goals that are financial constantly on their mind" and very little room for independent decision making. We "pretty much work to determine what the merit pay is going to be for the following year and finance determines what the end impact is going to be for the year. But we primarily get the financial approval in place, we work with the compensation

department and SI (Parent company)…to put together, and make adjustments to the table if necessary."

The Director – Energy sales, on the other hand expressed his dissatisfaction at not being able to compensate his employees at market rates,

I continue to battle a lot of the time saying, you know I need to be paying these people an awful lot more, some additional compensation and I believe that HR is much more conservative in the company than it requires to be. I said, you need to give additional reasons, and a good story of why you need it to be really low. I don't think she [Director – HR] has a good answer for the questions.

Operations expected HR leadership to support and communicate compensation related policies and procedures with executive leadership and the CEO. "Who better to explain compensation, the benefit packages than HR? Here they are the benefits expert. So that is one [area] I would say they didn't do a good job". Continuing, he summarized the dissatisfaction with HRM&D in regard to compensation, stating:

They [HR] say they have to compare our salaries and normalize it with other group companies. Having spent so many years in group companies I can call certain people and do my own survey and have my own answer. I believe they can put some more effort in that area. I believe I should have a little more latitude. They don't say it's because the President wants to keep the salary down; they say …this is our finding and analysis. And I just don't agree with that, and I don't think that is a reflection of the company culture.

The HR function has continuously evolved with changing organizational demands. The function is moving towards greater automation of procedures and information retrieval, developing systems for training aimed at enhancing leadership, reducing turnover and employee relations issues. LQS implementation has brought greater attention to HR-Operations engagement: identifying gaps, challenges as well areas of partnerships that enhance overall organizational performance. In the next section, content, quality and impact of Operations-HR functional engagement on organizational performance is described.

Theme 4: Operations-HR Cross Functional Performance in C1

A weak HR-Operations engagement emerged as the outcome of HR and Operations collaboration. An evaluation of cross functional performance in C1 indicate *interactions* as the extent of engagement between Operations and HR. Employee relations issues significantly define the content and quality of interactions between the two functions. While LQS impact on Operations function independently impacts organizational performance, it is the strength of HR-Operations interactions that maximizes full impact of customer engagement and employee relations initiatives. Given the challenge of employee relations issues in C1, HR and Operations interactions on employee relations issues is also a service drain for operations, taking time and focus away from customer issues. The strength of interactions on this HR area holds the greatest promise for improvement and, demonstrates the financial impact of turnover and retention in the

long term, individually for both functions, as well as the organization. In the next section, factors hindering cross functional performance (CFP) at C1 will be discussed.

Manual versus Automated HR Systems. Many HR processes still operated manually causing delay and increased incidence of errors, be it salary preparation, granting leave etc. This was problematic and had a bearing on HR's performance effectiveness in the eyes of its internal customers. One operations manager commented on a recurring HR problem:

I would think making sure every paycheck is free of error. I'm surprised how often there are errors from the payroll. I always get 10 calls about mistakes in the checks that were mailed to the post office.

Getting routine activities relatively error free consumed HR service time. It was challenging to expend the remaining time and energy for strategic initiatives that would have truly enhanced HR role as a business partner.

Understaffed and Overworked HR Staff. A general view shared by HR members was that they were understaffed and overworked. In addition to corporate, administrative and regional roles, the unmet expectations for involvement in LQS initiatives diminished HR functional capacity. This further aggravated Operations complaints on perceived HR failures. For example, one of the operation's managers complained of not receiving sufficient reporting on turnover: "They do not give us turnover reports, data of why people are leaving us. Are they leaving for more money or are they leaving us because they are convinced they have no career here or do we need to spend more time on training because they're not able to do their job or because in

today's world maybe people will look for companies so that they can learn more than just do what they're expected to do, day in and day out."

The reduced functional service capacity prevented HR from analyzing crucial employee related data. Again, the lack of crucial knowledge in informing senior executive decision making constrained strategic HR performance. In contrast, the HR manager offered a different explanation as to why turnover reports, slicing and dicing of that data were not considered important. According to her, "Turnover reports that is fine, that is wonderful. But it is not the type of data that I would want in order to know that I am being effective in my role as your HR resource."

HR staff had a different set of priorities for initiatives that were considered important and strategic for their performance. HR and Operations had different ideas and notions about initiatives important for HR and how these were being prioritized.

Onboarding Process. C1 lacked a systematic and formal new hire orientation process. The role of HR was restricted to providing policy and procedural information. While not extremely robust, on boarding process has still come a long way. One HR manager spoke of her initial experience at the company stating:

It took about 2 to 3 weeks for me to get computer access, I felt like I was bored I did not have anything to do and I just kept thinking when they knew I was coming why were they not prepared for this? But now I know why. But it was not a very good first impression as new hire.

However, other recent hires with Operations did not share similar experiences at the time of entry. The Quality Supervisors had a more systematic on boarding process that had

been developed by Director – Quality for that department. The Quality Supervisor shared her initial experience with C1:

I was the first person who did not have a background in the industry. They brought me on initially to do the simple basic tasks and once my relationship with my supervisor was established, once we got to know each other better, she increased my responsibilities and my role, and helping me get the background necessary to do the tasks.

HR systems and practices were not robust in many areas in the organization, including HR function. The high turnover especially among the new hires caused breakdowns in process and service quality thus affecting performance. For example, high turnover culture in Operations affected operational performance which in turn impacted external customer satisfaction. High turnover in HR and other service functions contributed toward poor internal service quality. The impact of macro level factors strongly affected performance at the level of the departments. These in turn, affected functional performance of HR and Operations. HR function was held accountable for the perceived low quality of service. In reality, the combined interaction of organizational culture and leadership contributed towards perceptions of ineffective performance of HR. At the level of the department, the macro level factors conditionally moderated the extent of cross functional engagement. The consequences of a weak CFP on organizational performance are addressed next.

Theme 5: Achieving HR-Firm Performance Linkage in C1

A weak Operations-HR cross functional performance suggests scope for improving the effectiveness of HR performance. For one, HR function needs to appropriately match and balance the changing demands of two types of customers: a) internal customers (Operations function) and b) individual employees. At C1, the HR function lacked resource advantage for involvement in LQS. The effectiveness of HR department was also dependent on the degree of goal alignment with Operations. For example, sustaining LQS for the long term also demands that employees are rewarded and recognized for change efforts. This was a serious consideration that the steering committee was unable to get HR involved in. The lack of HR involvement delayed the development of rewards and recognition program, thus, affecting the quality of LQS implementation. This was a lost organizational improvement opportunity for both Operations and HR. By leveraging an important operational and organizational strategic goal (LQS), HR could have integrated managerial competency development initiatives it was independently developing with those of LQS. In fact, the HR initiative of competency development had gained little traction with the rest of the organization. So, opportunities for aligning LQS initiatives with career development, training and development initiatives were not pursued. Cross functional goal misalignment strengthened perceptions of internal customer dissatisfaction in compensation, employee relations issues. However, ineffective HR performance cannot be solely attributed to the performance of individual HR members. With regard to employee relations issues, the HR role is critical for operational performance. Employee and supervisory relation issues also contribute

significantly to the hidden costs of turnover and absenteeism in the workplace (Philips, 2008). Disrespectful behavior and incivility at the workplace are issues requiring skillful HR intervention. Additionally, when HR front line staff experience turnover, their ability to provide continuity and consistency of services is hampered. The lack of new hire orientation for the front line staff affects HR *and* Operational performance.

As a distribution industry, serving employees and customers is the key for providing service both inside and outside the organization. In this context C1 should consider tying customer and employee engagement data for those branches serving key customers and involved in LQS implementation. For example, monitoring and reducing turnover data for key job groups in the Energy division would be a good place to begin Operations-HR engagement. High turnover is reflective of the influencing nature of both contextual factors. The executive leadership is responsible for instituting a productive work culture. While functional leadership is strong within each of the functions (both HR and Operations have strong leaders) it is not necessarily a sufficient condition for enabling higher order cross-functional performance between the functions.

Traditionally the company has functioned in silos. With the introduction of the LSS as a major initiative, several parts of the company (divisions and departments) began collaborating. As the company heads towards a full implementation of Lean, there are greater opportunities for higher order CFP. Inevitably HR-Operations engagement will no longer be confined to interactions relating to traditional activities such as employee relations, procedural and policy related activities. Both functions will be required to align and integrate initiatives on key metrics such as turnover and employee

retention. Thus, greater integration among the two functions would support stronger engagement internally and externally for the company.

Challenging aspects of C1 such as turnover culture, strong functional silos, and employee relations type issues are problematic areas hindering LQS implementation. The introduction and positioning of LQS, in response as a response to customers demand explains why C1 continues to progress towards a full implementation of LQS, despite inhibiting factors such as high employee turnover. Gaining company wide support for the initiatives, by extending implementation responsibility and sharing success with other departments continue to be mission critical. Otherwise LQS could very well remain a divisional initiative relevant only to the Energy division outcomes.

Conclusions

The high performing oil industry and related markets ensure steady growth for C1. Evidence of weak HR-Operations interactions caused primarily by silo functioning culture and turnover may not appear problematic in the backdrop of such strong company performance. But it remains to be seen if C1 can continue to absorb the hidden costs due to high turnover and low retention. Unless the top management gets wholeheartedly behind LQS initiatives, systemic improvement across functions may not come through LQS initiatives. The outcomes of LQS initiatives in this case may head in the same direction as the TQM program of the early 80's.

The extent of Lean success in the Energy division may be hindered by lack of response and support from HR. Increased HR involvement will require more support

from senior management for investment in employee development and employee engagement initiatives. HR support is required for communication of Lean initiatives, offering training support and recognition of LQS success. Both HR and Operations need to co-own turnover metrics. HR needs to ramp up new hire orientation for its own staff, carefully monitoring turnover data for newly hired HR staff and building a strong employee engagement culture. Investment in training, new hire orientation will have to remain a top priority, and as an investment for the long term success of the company. To this end, HR needs to gain the support of the CEO, whose cost leadership style has restricted the strategic contributions of HR. Adoption of ROI approach for evaluating success of HR interventions will also go a long way in strengthening perceptions of HR effectiveness, enhance HR-Operations engagement, improve CFP and thus organizational performance.

CHAPTER V

STRATEGIC HRD AT C2: A SOURCE OF SUCCESS?

Five operations and two human resource (HR) executives were interviewed for the study. In the case of C2, IT and HR performed strongly in support and strategic functional roles unlike other cases (C1, C3 and C4). The research informants were identified using the snowballing technique. Initial interview access was facilitated by the vice president – human resource development (VP-HRD). The VP-HRD was interviewed several times over a one year period for regular updates on the status of strategic HRD interventions at C2. Operations, marketing, sales, quality and IT functions constituted the Operations function. The IT function played an important role, aiding the establishment of C2's corporate university, even though IT like HR is traditionally perceived as a support function. This case narrative heavily draws on the strategic and development aspects of the HR function (under VP-HRD). Several requests for interview with VP-HRM (responsible for HR management function) were declined by the VP-HRD. Although access to VP-HRM would have contributed to the overall quality of case narrative, perspectives of the HR management function were obtained from the HR manager and VP-Operations.

Case Narrative

After being taken over by a prominent investor in 2006, C2 recruited several leaders (five vice presidents) at the senior executive level to accelerate operational and overall organizational performance in order to maintain its preeminent position as a global

electronics distributor. A vast majority of the company's workforce had been recruited at the time of C2's inception in the early 1970s. With a wave of expected baby boomer retirements in the workforce, the loss of C2's deep business and tacit knowledge was imminent. Until 2006, the organization's repository of functional expertise and job experience had never been formally captured and still resided with individual employees, cliques and informal networks. The repository of product and industry knowledge was localized within these networks. To continue its preeminent position as a top electrical distributor in the U.S., it was imperative for C2 to systematically develop talent and capture business knowledge through formal systems. With the addition of a VP- HRD, the human resource function began to play a pivotal role in companywide strategic alignment efforts.

Strategic Alignment Efforts through HRM&D. The new VP (HRD) was tasked with effectively aligning and implementing several strategic human resource development (SHRD) interventions. The strategic aspects of HR function achieved early success in the creation of an emerging alignment strategy involving all departments. Support service functions such as IT, finance, legal departments also participated. Gaining initial support for SHRD interventions strengthened HR service capacity and delivery, enhancing the function's credibility. As a result, the new human resource function with a strong development orientation (HRM&D function) added business value in tangible and visible ways. The term HRM&D is used in the case of C2 to highlight the structure of HR function which included human resource management (HRM) and human resource development (HRD) positions at the senior executive level.

Three measures of cross functional performance were illustrated in the case of C2: *interactions*, *alignment* and *integration* of strategic operational priorities with the HRM&D function.

Evidences of Strong HRM&D-Operations Cross Functional Performance. HRM&D's awareness of Operational priorities, enhancement of HRM&D systems (e.g., applicant tracking software), revised and updated policies (hiring) and procedures (employee attendance, overtime) strengthened overall HRM&D-Operations cross functional performance.

Evidences of Misalignment. The internal company culture continued to undermine communication and strategic HRM&D efforts. The incumbent leadership viewed the introduction of greater transparency in systems and procedures, professional working culture with suspicion. To make matters worse, the new executive leadership was introduced as the future of the company. In the face of strong opposition, the new leaders inculcated a sense of "bonding" as they continued to figure successful ways of navigating the culture and overcoming reluctance to change. The physical proximity of their offices and their "newness" to the company in comparison to the rest of the company also led them to form and be viewed as the new cohort of leadership. Internal integration within functions (for example HRM and HRD) and developing consensus across departments (operations and quality) underscore the incumbent versus cohort leadership dynamic posing serious organizational level challenges for C2.

Organizing Framework for Cross Functional Performance in C2

The C2 narrative analysis is presented through an organizing framework for the purpose of describing and explaining the interrelationships between five emerging constructs namely: 1) macro conditions, 2) company strategy (leadership), 3) organizational structure, 4) cross functional performance and 5) organizational performance. Relationships between the five constructs and within construct variables emerged from the analysis of interview data, site visits, company literature, and presentations. An overarching cross functional performance model is presented below in Figure 6, comprising of the five constructs. The first construct identifies two variables – a) industry and environment factors, b) organizational culture as macro conditions influencing the selection of leadership as core business strategy. The second construct examined leadership as core business strategy and effect on organizational structure. The interaction of leadership as strategy with organizational structure created a conditional context for functional engagement between HRM&D and Operations. The extent of functional engagement between HRM&D and Operations is then examined. This served as a mediating-moderating factor termed cross functional performance, established the effect of HR function on organizational performance.

The takeover of C2 by a leading investor in 2006 ushered many organizational changes. The introduction of new executive leadership to the senior management team was the single most visible and significant strategy. The new leadership cohort faced organizational reluctance to new ideas, changes in policies and procedures. The culture of C2 confined access and control of tacit knowledge based upon function, job and

informal network in-groups. Corporate culture change has been slow and difficult. Introduction of new leadership at the executive level has seen increased cross functional interaction and alignment in the organization for functions under the new executive leadership cohort. Strong leadership in key organizational functions such as operations, supply chain management, HRM&D, sales and marketing has resulted in changes in organizational structure and processes, albeit with mixed success. Two leadership groups: out-group (new leadership) and in-group (incumbent leadership) developed in C2. Achieving within department alignment was a challenge. Operations and HR departments for example were both challenged by cohort versus incumbent leadership (VP – Operations and VP-Quality; VP- HRD and VP-HRM) within their own function for control, power, status and influence within the organization. Functional alignment within Operations function faced a similar challenge. At C2, LQS served as a departmental strategy. This does not mean that LQS was relegated as a secondary organizational strategy. Rather, the quality strategy has been a part of the organization's history for more than two decades. ISO systems and procedures had become well integrated into the operational performance of the company. The nature of the industry (Electronics) implied the inherent necessity for six sigma levels in quality and service delivery. Therefore, LQS as a strategy was extremely important. Given the circumstances under which the new leadership was brought into the company, leadership emerged as the dominant strategy at the organizational level. The new leadership cohort was introduced primarily for accelerating organizational processes, procedures and performance.
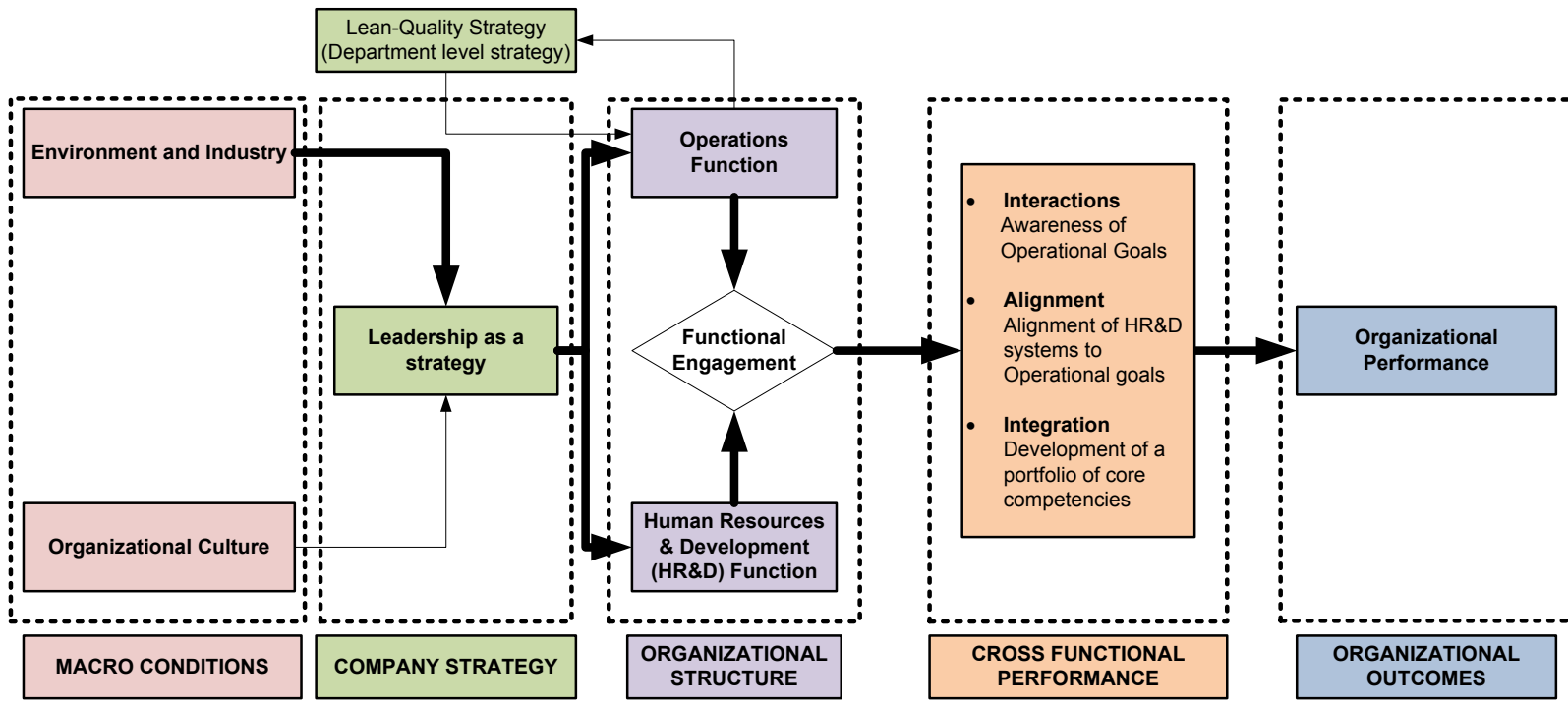
Figure 6. Cross Functional Performance Model for C2.

For example, interactions of new operations VP with the VP of quality function (older and tenured C2 employee) revealed difficulties in the integration of functional objectives and has been detrimental to organizational performance. These challenges will be expanded in later sections of the narrative. Leadership as a core strategy affected the organizational structure of Operations and HR function. Strong resistance from incumbent middle and senior level executives to the new leadership style and management hindered the "change" process. Leadership (as a construct) in turn, became a macro condition, setting the context for change management efforts within C2. The HRM&D function has a strong "development" orientation where newly introduced strategic HR initiatives laid the foundations for systematic design, development of talent acquisition, retention and career development systems. Existing HR administrative routines necessary for everyday organizational functioning were improved for efficiency and responsiveness. Contribution of HR as a management function while necessary was not a sufficient condition for HRM&D-Operations integration; an associative linkage best describes the contribution to overall HRM&D function. On the other hand, "development" related programs and interventions initiated by the VP-HRD, improved returns on HR service delivery. HRM&D-Operations cross functional performance at C2 showed high evidence of alignment and integration over critical people related metrics (example – turnover and hiring practices). This positively impacted the HRM&D-Operations integration dynamic, thus contributing to the overall organizational performance.

The macro level factors especially environment and industry led to the introduction of new leadership as a strategy in C2. The organization leveraged "newly" acquired social capital to build and improve its competitive advantage. Organizational culture was an inhibiting factor in the company's progress as the in and out group dynamics caused friction over control of resources and formal authority systems. Work facilitation by the two leadership groups was counterproductive, because it failed to integrate the new ideas, abilities fully to the benefit of the company. However, the Operations function under the new VP established strong functional engagement with HRM&D (both HRM and HRD). The organization was thus, in parts, able to fully leverage CFP through constructive transactions. The resultant CFP exchanges were of high quality, directed towards achieving the strategic goals of the organization, rather than HR and Operations goals alone. A mature partnership was evident where a high degree of reciprocity characterized Operation-HRM&D exchanges. Interactions, alignment and integration of strategic objectives of the organization with HRM&D initiatives produced positive outcomes for operational and organizational performance. CFP went beyond traditionally hierarchical ways of relating between Operations and the HRM&D function. This strengthened the HRM&D –firm performance linkage.

Theme 1: Role of HRM&D Function in C2

A new leadership position in HRD brought a fresh and different approach towards talent acquisition, development and retention at C2. For the Senior VP (Business and Sales Excellence), the addition of the VP-HRD position enabled a "collaborative approach

with Human Resources where, ultimately, they are responsible for assisting in selection and succession planning and prior to VP (HRD)'s arrival we were not as disciplined or structured." The emphasis on strategic HRD signaled the shift in organizational priorities, expanding the traditional HR function, placing more emphasis on the strategic aspects of human resource development. The VP-HRD introduced several strategic HRD initiatives.

From Operations perspective, HRM&D was considered "very important in terms of helping us get the right resources to do the job". According to VP – Global Operations it is imperative to "involve HR operationally in staff meetings and planning meetings were goals are discussed and reviewed. I couldn't imagine HR operational goals not being in sync. I really couldn't. What I have found is that the more each group is aware what is important or what is going on, for me it is all about awareness. If we can dial up the level of awareness and making sure we let people know what we're working on what is super important to us, I think it is going to be a benefit for everybody."

VP – HRM Role. Description of the VP-HRM role was based on two interviews – one from the HR manager and the other from VP – Operations. The VP-HRM was not accessible for interviews during the period of the study. The VP-HRD provided organizational access for other members of the organization. While this reduces the understanding of how HRM and HRD components co-exist independently and as a combination, contribute to the effective functioning of an overall HRM&D function. Each component interacts independently and together in different ways with Operational function.

Employee relations formed a major component of HRM role at C2. Major initiatives include: refining job descriptions 'to truly capture the work element, and the work content which was not done until recently'; benchmarking local wage and benefits; providing additional resources for logistical support for on site recruiting; allocating resources (internal or external) for meeting internal customer expectations (ex. Recruiting assistance on the field or at corporate). The HRM sub-function was headed by VP-HRM. A clear demarcation of *administrative-maintenance* versus *process-development* areas of responsibilities of HRM&D function supported the company strategy, although this has also caused challenges in functioning between the new VP-HRD and existing VP-HRM.

VP – HRD Role. HRD role in strategic development of C2 would be incomplete without a short description of the role of VP-HRD. As a new recruit (2006), the VP-HRD was a single person *team.* She effectively demonstrated leadership by gaining internal resources and support for SHRD initiatives. The people development initiatives focused on – "which ones to hire or promote and when; how to train and develop people to their fullest potential; how to organize people, and the systems around them to maximize their collective potential." She has been effective in aligning other functions in implementing several SHRD interventions. The strategic HRD vision was shared by the new management team of C2. The management team bought into HRD's strategic initiatives, sharing a common approach and implementation plan for revamping hiring, selection, training and other developmental opportunities. The end result has been high visibility and positioning of strategic HRM&D efforts at the organizational level.

Developing a Portfolio of Core Competencies. One of the core strategic HRD efforts involved developing a portfolio of core competencies in the company. A third party provider offered basic structure and template, tailor able tools and processes enabling C2 to quickly build a portfolio of core competencies for 95% of the management positions across functions. The VP of HRD herself underwent initial training on competency development and profiling. She was able to rapidly customize the tools and processes for different departments. Competency profiling laid the groundwork for creating a systematic HRD approach, taking employee related developmental issues head on. One goal of the company was to complete competency profiling for all employees, to include both supervisory and non managerial positions. The company has completed competency profiling in all functions, except Sales at the time of data collection.

This approach has been especially beneficial for newly hired positions. Team members of each department reached consensus on skills, task behaviors and job description for new hires. An interview template was developed, detailing required qualifications, experience, performance expectations and industry background for the position in consideration. Analysis of desirable job behaviors through this process helped improve the quality of hiring new employee. In the process, the selected hires also provided comprehensive data regarding potential areas for improvement. For example, skills assessed at the time of interview provided the company relatively more "objective" data to identify possible training needs at initial hiring stages itself. The competency profiling was then effectively utilized in drawing up development plans

once the on boarding process was completed. The executive management team fully supported strategic HRD initiatives. Apart from the focus on new hires, strategic HRD initiatives also targeted the developmental needs of existing employees. Certain challenges remained in terms of articulating and gaining buy-in from the founding (incumbent) leadership team with regard to strategic human resource development (SHRD) initiatives. In fact, these initiatives were viewed as detrimental to the career advancement of incumbent leaders.

On the other hand, there was a need for bringing in talent for all types of positions, starting from entry level to senior executives. Specifically in regard to entry level positions, developing career paths and competency profiling for entry level positions with defined career paths had always been challenging at C2, as the culture placed a premium on experience. Many C2 employees enjoyed long tenures, gained experience and "tribal knowledge" that made the company one of the top specialty distributors in the world. Retention of newly hired employees was, therefore, considered important in the new set-up for two reasons. First, the company was anticipating unavoidable turnover through the retirements of the baby boomer generation. It was imperative that the tacit knowledge and expertise be transferred to new employees. Second, a pipeline of future leaders needed to be nurtured and developed to ensure smooth transition of strategic, technical, and functional expertise. Additionally retention of non-exempt employees was also considered important HRM&D goal for the company. The return of investment (ROI) of this strategic HRD intervention was tangible; greatly enhancing selection and hiring procedures of the company. The early

success of building a portfolio of competencies has led to a co-creation of an emerging

HRD strategy, aligned with goals relevant to other functions.

Theme 2: HRM&D Involvement in Strategy Implementation

Building learning capabilities at multiple levels of the organization emerged as the

HRM&D strategy for C2. All members of the leadership team interviewed for this study

welcomed HR's inclusion at the Executive Board level. The VP – Sales Excellence

noted: "Human resource is represented at the executive staff level, they have a seat at the

table and it's not reporting to the VP Sales or some sort. Human resource sits at the

table."

Competency building was foundational in developing formal systems that

captured the organization's repository of intellectual and processual knowledge. The

goal was to identify, document and share deep technical and tacit competence or "tribal

knowledge" in a structured and disciplined manner across functions. One outcome of

building core competency portfolio has been fostering excellence in hiring and career

advancement process. Through the competency development model, departments and

teams reached consensus in developing tasks and job descriptions for vacant positions.

Competency profiling process also led to greater ownership of departments, functions

and team members to develop shared understanding and prioritizing of competencies

specific to functional roles and responsibilities in the company.

The SHRD interventions impacted C2 at the organizational,

departmental/functional and individual levels. Company specific capabilities, position

and job specific capabilities were redefined and documented through the introduction of a formal core competency profiling system. The analysis of data revealed an evolving archetype of C2 as an organization. The value, benefits and satisfaction derived from the competency profiling system from the individual and functional level are presented next. The introduction of the system was made possible by achieving buy-in across the organization. The participation and voice of senior executive leaders, functional leaders, teams and individual employees supported the implementation process and success of the system. The VP-HRD became an energetic champion of the process, exercising credibility and political skills. Her unique role and performance facilitated the change management process. The role of the VP-HRD is assessed in this context. Ultimately, evidences of SHRD impact at all levels indicate that HRD interventions have been well worth the initial investments made by C2.

Evolving Archetype for C2: Organizational Level Impact. At this point, it is important to gain an overview of the underlying model of core competence building in C2 (Figure 7). At the organizational level, it enhances systemic learning capabilities of the organization. Internal efficiency is strengthened as commonly accepted views of required competence for various positions are documented, captured and made explicit within the company. Deriving more efficiency from clear pay/performance attributes also helps reduce job costs. Internal recruiting panel members became more aware of new position-specific responsibilities, as clear pathways detail selection and hiring of candidates, overall enhancing the quality, know-how and capabilities of new hires that in turn provide a higher level of value to customers. As a consequence, external customer

efficiency is enhanced, with increased probability to better manage the company's external value chain.
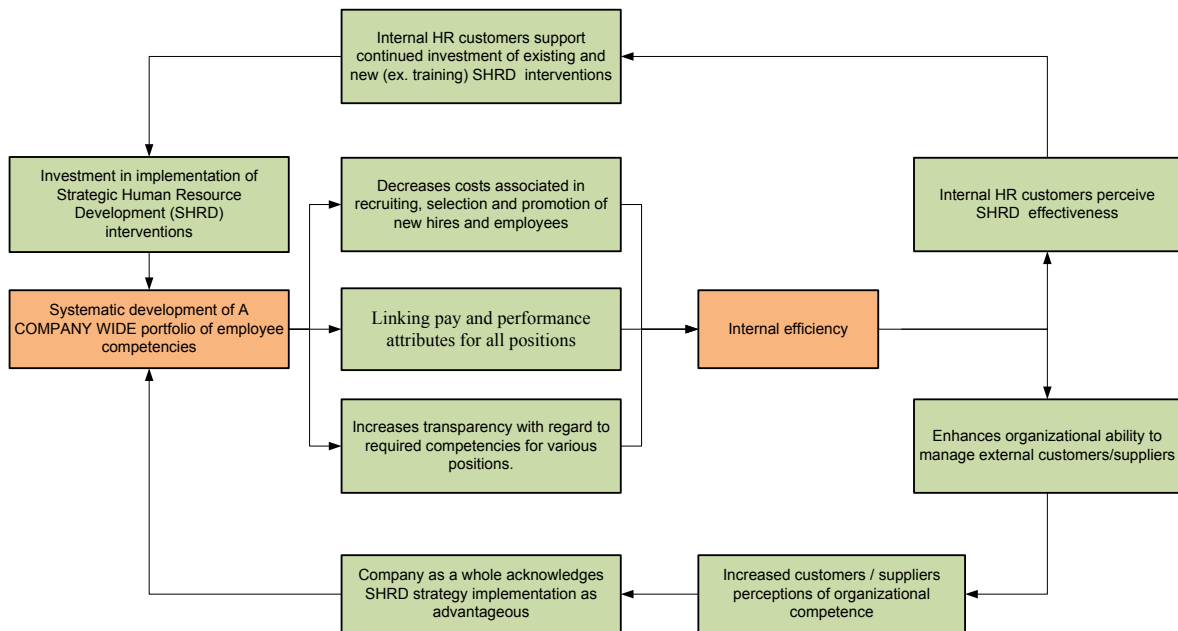

Figure 7. Investment in SHRD Interventions.

Clearly two organizational level gains can be attributed to SHRD interventions:

o Improved perception in selection and hiring sustains overall reduction in job costs leading to internal efficiency

o Perceived competence enhancement positively impacts company image with customers, suppliers, and potential hires

Theme 3: Perceptions of HRM&D Functional Effectiveness

Positive perceptions of HRD initiatives generated initial support for other HRD interventions as well. Collaborative arrangements with other departments (HRM&D's internal customers) have become easier with greater buy-in and acceptance of SHRD interventions. The initial SHRD success was shared among teams and departmental functions and paid off handsomely further legitimized the new HRD role and performance, and produced internal customer demand for other SHRD interventions. As a result, there is ample support for SHRD interventions from satisfied internal customers and stakeholders. This is evidenced from inputs and feedback from internal customers to SHRD initiatives during meetings, greatly improving the quality of SHRD initiatives as they evolve. Because of departmental and/or functional buy-in, there has been a rapid building portfolio of competencies across functions; the end result of all these influences has created more positive feedback loops than negative, further strengthening SHRD value in the organization. Building a portfolio of competencies has also created enormous opportunities to serve C2's markets. A supporting quote is offered to corroborate the argument presented above.

> The hiring practices have improved over the years especially over the last year. So, the kind of people we are bringing in, we are very selective. We are bringing in better employees... It's just because the techniques are better now. So, all those are adding to our ability to meet our mission. HR plays an incredibly important role in making sure that bringing new people into the organization for us to do the final interviews with are a good fit for the company and the culture (VP – Quality).

However, important questions of how C2 proposes to consolidate apply and translate this portfolio of core competency building and deliver value for all existing and new positions remain to be fully answered. One major step in this direction has been the creation and development of LMS (Learner Management System) to provide training and development content based on the skill gap assessment elicited from the competency profiling process. C2 has invested in developing a virtual LMS.

Impact at the Individual Level. The introduction of SHRD interventions impacted multiple levels of the organization. Figure 8 below illustrates the impact at the individual level for existing employees and new hires.

ORGANIZATIONAL LEVEL

INDIVIDUAL LEVEL

Introduction of SHRD initiatives

Facilitating Individual performance and capture of tacit knowledge

Training needs systematically identified for positions at point of hiring

Comprehensive view of competence building at individual level

Design structured career paths for new and existing employees
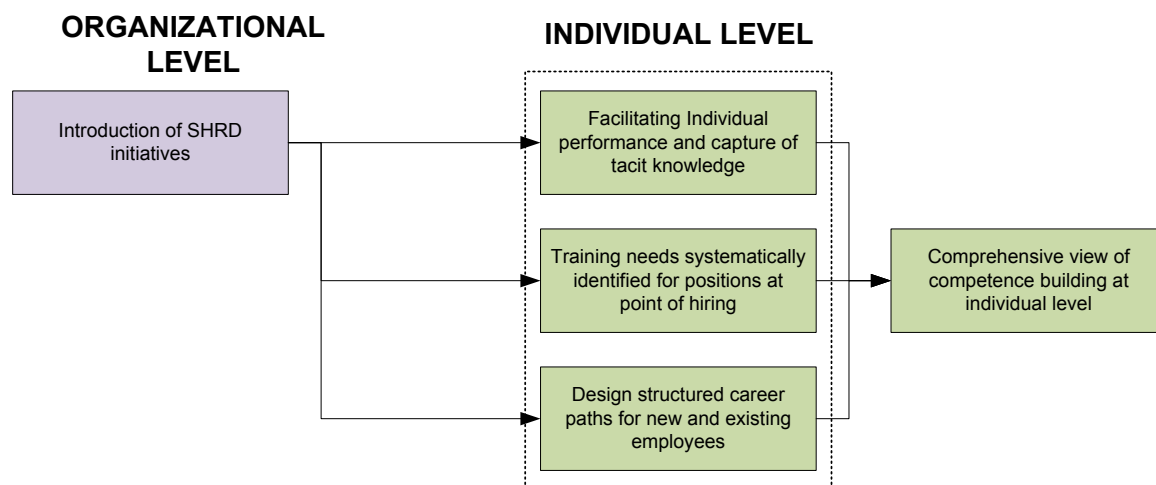
Figure 8. Systematic Development of Individual Level Competencies.

Specifically for new hires, competency profiling systems captured training needs from the point of hiring itself. For existing employees, the benefits include documentation of

role performance against a standardized set of position and job responsibilities, contributing to transparency in performance appraisal, and career advancement communications and decision making. Overall, the results support competency building at the individual level in the organization

Departmental/Functional Level Impact. At the departmental level, this visible intervention has raised expectations that errors due bias, distortion or subjectivity that often mar performance appraisal and other HR processes may be minimized because of greater transparency and involvement of employees in the process. Figure 9 describes the overall impact of SHRD initiatives both at individual and departmental level. There has been a coherent blending of disparate functional expertise in an explicit and shared manner for building C2's intellectual capital, clearly enhancing competitive advantage at multiple levels of the company. The VP for HRD repositioned HRD role, demonstrated and articulated a broader perspective of what "HRD" can do and "should" do; in the process improved HRD image within the company by demonstrating value and contribution to other functions. Cases relating to employee performance and developmental issues require skillful HRD interventions. Employees need to be handled with a lot of sensitivity. Effective HRD interventions need to account for sensitive handling of people, situations and culture of the company. Balancing confidentiality and credibility of HRD function and maintaining employee morale and motivation is required to maintain the organization's delicate ecosystem. The VP (HRD) recalled:

Traditionally in this organization, we do an annual performance review, you know is

kind of a joke. So, that's why I said, let me give you a tool, you can use for this…and

talk around competencies. Let us look at this collaboratively. This is a developmental

area, what can we do from a developmental standpoint? So then they [managers]

send it to me and I do these private consultations with people [employees] and we

say: There is this committee that is forming and this would give you an opportunity

to practice your project management skills. Let me make sure that you get selected

for that committee to work on this project which is a little bit outside off your current

job responsibilities but I'm sure your manager would see that this would be a good

developmental opportunity. So, then I go and talk to the manager and the manager

says yeah I want him to work on this. All of a sudden you begin to break silos and

you have people cross functionally working. So, there is a method to my madness

but a lot of times I don't tell people the whole thing because they might resist it and

after it is done with they go 'Oh boy that was great!

The new HRM&D function now had resources and talent to expand strategic influence

and continue to sustain day-to-day routines. Supporting the strategic HRD role

performance was the unique background experience of VP (HRD). As Senior VP (Sales

Excellence) observed:

It was not only her educational background, but also the fact that she rose in sales and

had a very successful career. So, when she talks about things that the sales

organization needs, they listen. And that is another perspective that the organization

has [benefited] because she has done it. A lot of value that she brings to the program

comes from her doctoral study, and so because she is a teacher and she has a unique

skill set as HR, that she is doing a lot of teaching through the company.

Lunch and learn sessions, management and supervisory skills training additionally support SHRD intervention efforts. From a training stand point, Sales and Operation functions continue to design and deliver function specific technical training. This aspect of company training subculture has remained unchanged. All other training associated with soft skill development, performance and career management fall within the purview of SHRD initiatives. Redefining core competency, establishing job behaviors for existing

or newly created positions continue to dictate HRD initiatives at C2. Clearly, the HRD role at C2 has focused on the development of people. Figure 9 displays organizational, departmental and individual capability building through the HRM&D function.

The strategic HRD initiatives have enhanced perceptions of effectiveness of the overall HRM&D function. Operations demand for effective HRM&D systems created were met through the able IT support for implementing HRM&D activities.

Hiring Practices. Although competency building process targeted senior level positions to begin with, HRM&D-Operations integration ensured that day-to-day routines involving hiring practices of non-exempt employees also improved. According to VP (Operations):

The first one I would say [is], part of the initial interview process. If you went to see the ladies desk that does a lot of the initial interviews she would have examples of the type of materials that we handle. She would have examples of the various labels that are on products and we also have a computer-based testing system that can very quickly determine: can this person understand the optimum number of characters; it's

in the subject basically-Math, English. We didn't always have that in the past and that

has been phenomenal in terms of the value it has provided.

Detailed job descriptions had been developed for non exempt employee interviews. Task

behaviors and job descriptions for exempt employees have already been developed

through the competency development process.

Operations perceptions of HRM&D role and performance indicate perceived

improvement in quality of hiring in a timely manner at all levels. HRM&D has been able

to ensure the quality of new hire recruits. The recruiting process; starting with initial

interview process – candidate's first point of contact to final selection has been mapped

and documented. Overall, Operations functional strategies have benefited from improved

hiring practices since last two years. In the next section of the case study, the extent of

HRM-Operations and HRD-Operations engagement is elaborated to gain insights on

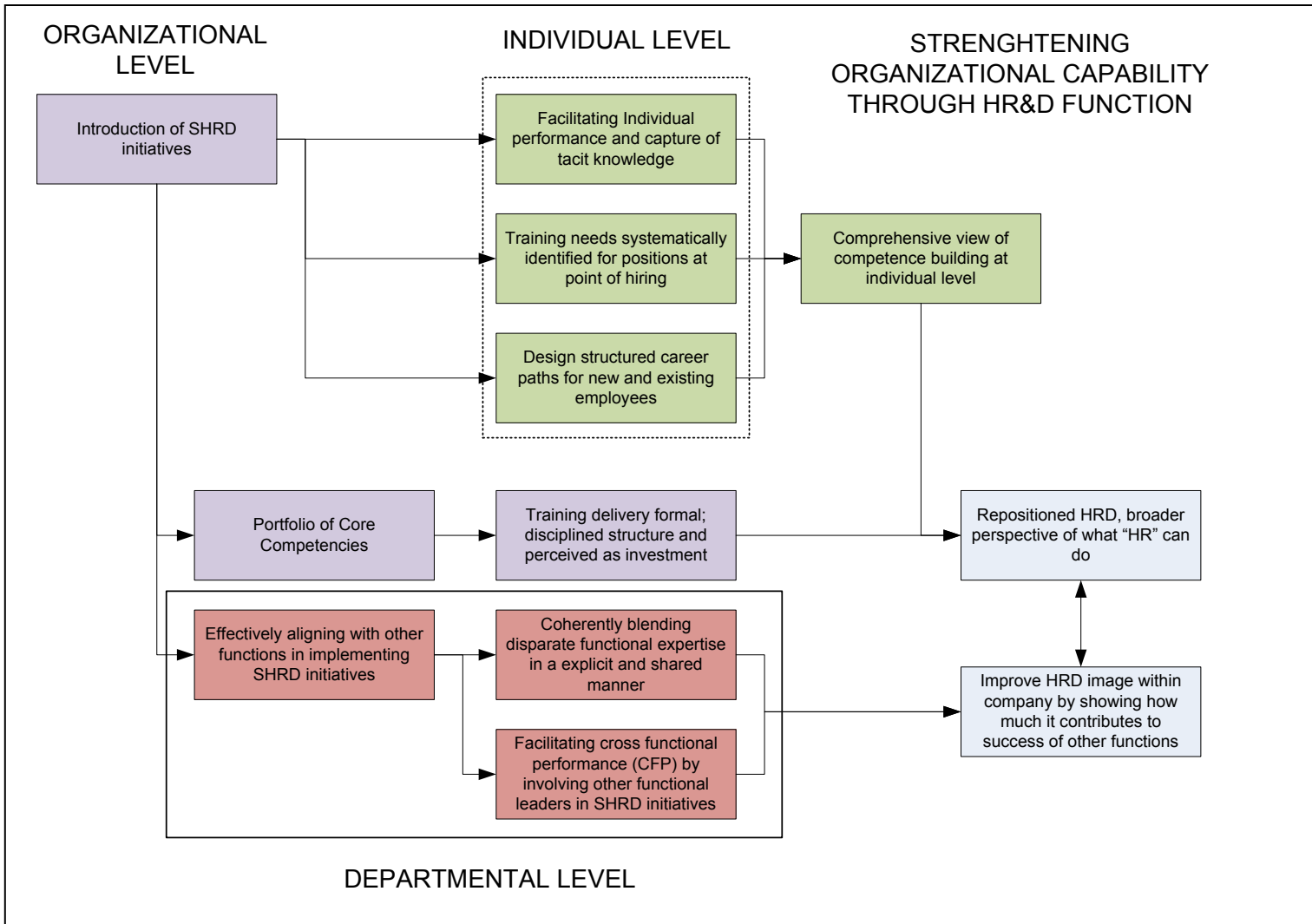cross functional performance between HRM&D and Operations function.

Figure 9. Strengthening Organizational Capability through HR&D Function.

Theme 4: Operations-HR Cross Functional Performance in C2

Two patterns emerge from investigating the impact of leadership strategy on Operations and HR function. Firstly, at the organizational level, leadership as a *process* created strategic integration and goal alignment across functions. Secondly at the functional level, it provided a *structural* context for purposeful interactions that resulted in strong cross functional performance.

Unlike the case of C1, C2 effectively leveraged HRM&D function to support Operations function at the operational (short term) and strategic level (long term). This element helps differentiate Operations-HRM&D linkage in one more respect from C1. The Operations-HRM&D linkage in the case of C2, defined and emphasized the degree of HR involvement, support and interface with Operations function. The extent of cross functional performance for selected Operations-HRM&D initiatives were unbundled and reveal evidence of all three levels of indicators: interactions, alignment and integration. Specific examples for each cross functional performance indicator are provided in the figure below. Areas of successful Operations-HRM&D functional engagement were explored to gain understanding of HRM&D-Operations cross functional performance. This emerging component is specific to C2 because it reveals all three cross functional performance indicators. HRM and HRD interfaced with Operations, establishing at least one of these types of linkages with Operations. The ideal goal for any Operations-HRM&D function would be achieving integration in all initiatives. The three indicators reveal the evolving nature involved with all organizational initiatives. With time and effort, the initiatives, through stages of development, move from interactions to

alignment and integration, increasing the effectiveness for Operations and HRM&D functions as a whole. Integration of Operations and HRM&D function is a means for improving overall organizational performance at C2.

HRM&D-Operations interactions: Cross functional interface issues were discussed, functions reported increased awareness level in HR and Operations goals. These initiatives enhanced and improved quality of HRM and HRD performance. Overall, this level of cross functional performance reduced ambiguity in understanding Operations and HR goals. The focus of interactions was at the departmental level. HRM&D-Operations alignment: This level of cross functional performance indicator revealed enhanced and improved quality of HRM&D-Operations outcomes such as technology integration (attendance recording system). HRM&D-Operations integration: Cross functional performance at this level is indicative of enhanced and improved quality of organizational performance of the two functions at the systemic level. At this level, the functions co-own organizational level metrics such as turnover and human capital development initiatives and, undertake joint responsibility for implementation and achievement of these goals. In the next section, each indicator is explained in great detail.

HRM&D-Operations Interactions. Awareness of Operational goals direct HRM&D support to particular areas of collaboration and within specific time frames. Shared understanding of operational goals facilitated cross functional alignment and strengthened opportunities to generate a consistent level of internal customer responsiveness from the HRM&D function. The inclusion of HR in management review

meetings has enhanced goal alignment of Operations and HRM&D functions. Continued HRM&D presence at Operations meetings, gaining greater understanding of business and operational needs have facilitated HRM&D in identifying, prioritizing and allocation of resources towards the achievement of HR and Operational goals.

From the Operations perspective, the VP-Operations shared:

> We try to involve HR in everything we do operationally in staff meetings and planning meetings from these things [hiring and turnover for example] were discussed and reviewed. Because again for me, it is all about awareness, it is all about linkage and they really appreciated it. The HR group is included in those things, they weren't always included. So, I think that the more they are aware of what we're working on, I think everyone will benefit.

Sharing her perceptions, the HR manager believed this inclusion offered more effective ways of HRM&D role enactment and performance:

> Over the years I have grown in my ability to be more effective because I'm learning more about the business and so I can contribute more in that way. There were several times when I would have a manager talking to me about doing something in the organization, because I now understand it better I can say, have you thought about doing this; instead can you move this person here, this person could go here and that would contribute to, you know make this person, and Susie needs to grow. Gosh I think knowing all about that [Operational priorities], that is a good idea. It is only through the building of relationships and understanding, getting a better understanding of the business that I can contribute.

The VP (Operations) who chaired these meetings remarked:

At our quarterly results review meetings [with] our management team together, HR is there as well. We go through things like customer service, budget, through our cost performance. If there are special projects, initiatives we're working on again HR are very much integrated in everything we do.

Employee Relations. Handling of employees learning and reliable performance was another challenge for Operations. HRM&D performance and experience in handling employee situations ensured minimum involvement from Ooperations. As a result, Operations was able to concentrate on other pressing business priorities. For example:

If there was a situation where an employee had to go to HR specialist and say I have an issue with this. I feel if HR is fully aware of what we're doing and why it is so important than a lot of times they can address whatever that issue immediately, and not in getting us involved. (VP – Operations)

HRM&D-Operations Alignment. This level of cross functional performance indicator revealed enhanced and improved quality of HRM&D-Operations outcomes through alignment of systems.

Strength of HRD Systems. The introduction HRM&D software system has strengthened overall functional performance: eliminating time and intermediate procedures. The company has also been open enough to change employee related policies to create more efficient integration of existing employee related practices with HRM&D system tools. By strengthening internal HRM&D systems (integrating employee related work practices and formal HRM&D policies), there was an overall

impact improving software efficiencies for reporting data on attendance, punctuality etc (for non-exempt employees).

> In general, we tried to, but we didn't always utilize the full depth and breadth of what HR could do, perhaps we weren't integrated a few well. We weren't in sync. What I believe now is we have a much better sync or connection or if you will or connectivity. For example, I'll give you another one. It is software called Chronos. What we have been able to do is basically link some of the power of the system if you will. So, what we tried to do is take the approach [and be willing to] engineer a HR policy for example late punching. If someone is late one minute, two minute, six minutes or whatever; when we can't have it to do is to basically get back and modify some of our HR policies so the system can easily support those; monitor measured and report without any special costs associated with it. And, that has been a win-win for everyone. VP (Operations)

Combined Performance of Strategic and Routine HRM&D Initiatives.

Increasing the value and consistency of HRM&D function is a matter of great importance that contributed towards strategic goal alignment, thus, enhancing organizational performance. For example, it is imperative to conduct regular local wage benefit analysis, develop systems for attracting and retaining talent, develop marketing tools for recruiting the right talent, and useful retention strategies. The combined effects of these practices contributed to reduction of turnover and simultaneously increase the value of HRM&D function. In addition to hiring and turnover, HRM&D function was also invested in providing rapidly-tailored, web-facilitated training through the LMS to

meet internal client's needs more quickly, effectively and support these with targeted, cost-effective training consulting services. There was also a felt need from Operations function for legal and compliance training (such as harassment training). Overall, study informants from Operations function firmly believed SHRD initiatives needed acknowledgment; successful organizational changes had to be more often celebrated in the company.

HRM&D-Operations Integration. Higher order cross functional performance was established between the two functions. Several initiatives were addressed through the involvement of Operations and HRM&D function and will be described in the following section.

Turnover Data. Evidence of Operations-HRM&D integration revealed a great degree of departmental interface on issues with direct impact on C2's bottom-line. By placing a premium on reducing employee turnover percentages (both exempt and non-exempt) the executive leadership mandated tangible Operations-HRM&D outcomes that called for integrated efforts; targets that could only be achieved when both departments strategized over common goals that were significant to each department individually and also for the company. With common employee turnover goals, HRM&D-Operations integration cascaded to fuel further improvements and stronger linkages of other HRM&D processes such as hiring and exit process; targeted marketing for new recruits; investment in applicant tracking system software; and analysis of exit interviews.

Evidences of Misalignment and Weak Integration. Despite strong advances and improvement in several HRM&D processes, there have been evidences of slow

manifestation of strategic outcomes. The cultural push back on some of the initiatives

describes some of the challenges facing C2. The HR Manager, who had 8 years'

experience with the company, observed:

It takes time and change isn't easy. It just is not. Culturally it is one in which it

happens very slowly. Usually as an organization, we always get to the right place, it

takes a while to do it (laughs)… C2 is an organization there are a lot of changes, it is

evolutionary, it is not revolutionary, you know what that means and you just have to

be patient and work on it.

The VP (HRD), a relative "newcomer" having spent four years at C2, attributed

the reluctance to change to:

The tribal knowledge plus the long tenure …creates blind spots and resistance to

change. People don't recognize when something in the external environment is

changing. Because they have been doing the same things for 30 years, you know out

there [things are] different. Things have changed in 30 years.

Clan Culture. Strong tribal knowledge, expertise and experience reside within

heads of employees that have been difficult to translate and share. Describing the clan

culture, the VP (HRD) made the following observations:

And the clan culture, it finally is cooperative but there are sometimes, those of us who

have not been in the company for a long, there is a secret handshake that no one will

teach you. And, what people in the group, they also have a lot of water cooler

meetings, and they talk behind…you know there is biting. People can be so negative;

on the surface they are positive. And, I said there is an undercurrent of negativity but

you have to really keep your ear to the ground to catch it. So, it is interesting, interesting.

Challenging Company Leadership. The new leadership cohort was not welcomed by the incumbent leadership. The new leaders, all at the Vice President level experienced difficulty in navigating the cultural terrain of the organization. The culture of the company was inhibited improvement efforts. According to the VP (HRD):

This organization has done things that that when someone comes in and tells them that they are doing wrong, they start discrediting the person who is telling them that they are doing wrong. And, it is a hoot, it is a hoot! Sometimes, I sit back and watch it and say [to myself], "I've got to say something." But, I've got to figure a way out of say it in a positive way.

Impact of Strategic HRD initiatives: What Could Go Wrong? Consequences of examining the extent of success or failure of SHRD efforts could provide a more nuanced understanding of how organizational culture was adapting, challenging and interfacing with new leadership initiatives.

Sharing her concerns about SHRD implementation, the VP (HRD) noted:

That is where competency modeling came in making that hires a double edged sword. They are good from the standpoint that typically people would not recommend or refer a friend or a colleague that shares different values than they do. The problem that this does is they go ahead and introduce more people like them. So, we can walk around here and outside of the warehouse you're not going to see very much diversity…we are a little more split in terms of gender diversity but when it comes to

ethnic diversity we don't have much doing. But for a company headquartered here it's not surprising end if you were to look at for instance for senior staff, our Chairman and CEO.

Cross Functional Performance: Mixed Success. Departmental initiatives were still hampered by the silo functioning style between departments. Several informants observed that the organization as a whole could probably do a better job of aligning all departments.

We continued to the silo-ed in different areas and that's that I think if C2 could improve upon that it would go a long way to furthering in meeting our goals and mission. It happens in other organizations as well. We have got a combination of new people long-term tenure employees and its back to the changes that you see and all that. I think that is the biggest area that I think it needs improvement with the alignment.

With new strategic HRD interventions, training has come to be viewed as an investment. Additionally the VP (HRD) was also clear about maximizing return on investment on all SHRD interventions. She stated:

I don't want to waste training dollars, I don't want to drive turnover, I want… to be able to use training as an opportunity to link higher-level objectives to the job that they do day in and day out because that is how you engage your employees.

As a result management commitment to training has become more pronounced, leading to increased allocation of resources and time.

Reducing Turnover: Work in Progress. While the company had well established procedures for slicing and dicing data, thus reducing non-exempt employee turnover, the company was also witnessing high exempt employee turnover in key departments such as Sales and Business Development. The VP-HRD was already thinking of steps to reduce the turnover.

> That is why it is so important to spend all this time on leadership pipeline, competency modeling and the development piece…They all expect that they should be the next level, but have greater gaps in terms of competencies required, and there has got to be a way to give them that feedback. You don't want to lose these folks because we have got a whole lot of folks that are first level vice presidents or directors.

Quality Department: Part of the Problem, Not Solution. Quality has also been so deeply influenced by organizational culture that it had become a bureaucratic set up like the rest of the company. External auditors had been asking for improvements based on their audit findings for the last twenty years and yet the quality department had been slow to respond. The VP-HRD shared this incident:

> We had a quality audit for ISO last month. These external auditors have been auditing us for two years. They were singing his [VP-Operations] praises. I mean he has tripled Mezzanine size of our warehouse, our quality has gone up and he has done some incredible things and continues to do really, really good things. And, the quality department does not like it. He has done some things that will lead to higher levels of customer satisfaction and higher levels of quality.

Now, he [VP – Operations] has even added some people onto his staff responsible for monitoring quality…My friends in quality department, this is the hard part (lowers her voice), were not happy.

The auditor said, "You do understand why these groups have developed their own quality function because you're clearly 20 years behind in time. I have been telling you the same things every audit, you continue to ignore them, you don't change anything, there is no accountability and, quite honestly, I don't know why you haven't been fired. The Quality Director took vacation that day. He leaves his next in charge to review the results who says we have two major findings which we have dismissed because we did not really know what he was talking about and we have just these two minor things which we are already working on.

The patterns of conflict between incumbent and new leadership illustrate the larger cultural dynamic of the organization. The founding leadership values are deeply ingrained and embedded in the organizational culture of the company. In contrast, the new leadership strategy and initiatives represent change efforts in bringing transparency and structure to decision-making. The espoused values of the new leadership are more a reflection of prevailing mainstream corporate culture in the United States. However, at C2, introducing a professional working culture continued to be resisted. Unless the new executive leadership gained buy-in from employees, cultural conflicts will undermine SHRD efforts in the company.

The scope and impact of leadership strategy and organizational culture provided the backdrop for examining the strength of CFP between Operations and HRM&D.

Cultural challenges remain, and reluctance to change is a significant issue hindering execution of leadership strategy as envisioned by the company. The evolving misalignment/alignment within each function reveals the cultural conflict within the organization

Theme 5: Achieving HR-Firm Performance Linkage in C2

The theoretical framing (RBV) helps in the examination of how macro and micro level resources were realigned, improved and strengthened in the company. Inclusion of HR in major operations decision making processes was a first step in strengthening HRM&D-Operational outcomes. The leadership in each function supported development and execution of several cross functional initiatives. The Operations functional leadership impacted several micro level processes through social capital building, aligning of systems and sharing ownership of organizational level metrics with HRM&D function. Strong Operational leadership enabled identification of resource opportunities at the micro level: 1) Operations-HRM&D interaction (inclusion in Operations review meeting, employee relations), 2) Operations-HRM&DM alignment (functional collaboration, strength of technology systems) and, 3) Operations-HRM integration (turnover, hiring procedures).

Strong HRD leadership enabled and strengthened macro level organizational processes at the following levels: 1) Organizational level alignment: building human capital systems, transparency in HRM&D practices and policies, 2) Organizational level integration: Development and institutionalization of systems to integrate portfolio of

competencies at all levels of organization and, 3) Development of core competencies for all positions at the *individual level*: supporting individual career development and growth, performance assessment, training; at the *team level*: matching skills and competencies for effective performance; and, at the *function/department level*: performance appraisal and feedback, superior hiring and selection process for exempt employees.

HRM&D-Operations (interdepartmental) interaction, alignment and integration have been strengthened, supported and enabled by strong Operations leadership. "Outside" experience is valuable considering both leaders ability to interact and align their functional goals with other departments in the organization thus accomplishing organizational priorities.

The VP-HRD additionally also has a sales background, apart from experience and knowledge of HRD. Functional knowledge and know-how outside of one's traditional domain is an asset that the VP has skillfully leveraged for advancing HRM&D strategy within the company. A deeper understanding of another function's priorities, metrics, common issues and challenges enhances the ability to systemically think through a larger set of competing functional priorities.

HRM&D-Operations Integration highlights interactive complexities between micro and macro level organizational processes affecting HR structure and role in ways not previously discussed by scholars. HRM&D-Operations integration is a dynamic process: both its design and execution is an outcome of relatively stable network of

relationships (HRM&D, Operations) and strong leadership among quite diverse elements

establishing the HRM&D function and organizational performance linkage.

Conclusions

A new strategic HRD role was introduced in the company; the strategic elements of the

HR function became more dominant in terms of visibility, and most importantly gaining

support of the top management. Administrative HR function continued to maintain a

supporting role within the new HRM&D function. The new Operations VP expanded the

"traditional" Operational leadership role, taking over certain aspects of quality

department responsibilities. The Quality function role and value to the organization was

relegated to a supporting role further complicating the Operations –Quality function

"turf" battle, also highlighting a tug of war between "old" and "new" set of leaders.

Leadership is the most influencing category in the organizing framework.

Prevailing environmental and industry factors and organizational culture set in motion

the decision to adopt leadership as a core strategy. Leadership has influenced every

category in the organizing framework. The strength of leadership has impacted

organizational, functional and individual level outcomes. The extent of the Leadership

strategy on organizational performance is significant enough that an inverse association

of Leadership with Organizational culture and Industry and environmental factors holds

true.

There is strong support for change management from the senior management

team. In the case of C2, a new team of leaders with "outside" experience were brought

in. With expertise and successful experience these innovative leaders brought about change in leadership style and work culture. The case of C2 at heart is about change management. The success of leadership strategy is tied to organizational culture change, and the role for the VP Strategic HRD is critical. As a newly introduced role in the company, the VP-HRD represents the "future" of the company.

LQS is taken seriously in the operational strategy. Battles over turf, constituents, procedures and resources highlight differences of old and new leadership styles, the challenge for old leaders in HRM&D and Operation functions was being open to a professional style of functioning, placing premium on job performance, due diligence in following standard operating procedures instead of relying group networks and cliques for accomplishing tasks. More structure and transparency in decision making and greater acceptance of formal HRD interventions such as career planning and performance management is necessary for "old" leadership style to effectively adapt to change.

While top management support is crucial factor in success of new leaders, the responsibility of bringing about culture change within each function rests with them. Successful leaders ("old" or "new") will be ones who gain early support within their function, teams and are able to sustain initiatives over time. The future of C2 belongs to leaders that have an effective management style that not only enhances functional performance but also organizational performance; and are able to improve and reinforce a more productive and professional work culture. Interview data from more of the "old"

leaders would have provided richness and detail to the study. For example access to interview the VP-HRM would have given a more complete story.

Instead of LQS directing the changes in the structure of this case study, leadership strategy is the driving force behind change for several functions. Leadership retention is critical in transforming the culture of C2. The macro factors in this case are different from the previous case. Operational leadership aligned not only with strategic HRD, but also with administrative aspects of the HRM&D function. However, strategic and routine HR roles need to be kept separate; intertwining both roles as in the case of C1 would not helped C2. Immediate pressing day to day occurrences would have taken precedence over strategic HR responsibilities in C2, had the two responsibilities been combined as one.

HRM&D integration was possible because both HR and Operational leaders' strong belief about HR's value addition to the business. Not only was HR convinced of its role, status, influence and impact on operational performance, so was Operations. Inclusion in review and strategy meetings helped improving the quality of HR interaction with Operations, in terms of knowledge and awareness of Operational metrics and vice versa. In addition, belief of Operations managers about HR involvement in the achievement of strategic organizational goals aided HRM&D-Operations integration. For example, turnover of hourly associates was a line owned and managed metric with involvement and support from HR. Executives retention was function owned and managed metric with involvement and support from HR.

Organizational level metrics such as turnover and retention facilitate HR-Operations integration.

The strategic HRD role is pivotal in transforming the culture of C2 and success of SHRD interventions would be a strong indicator of culture change. Developing an ROI approach for documenting and evaluating success of SHRD interventions was critical for C2. However, strategic HRD needs to move towards greater alignment with Administrative aspects of HR in order to enhance HRM&D function performance. Gaining the support of rank and file employees and executive is vital for the continued success of SHRD interventions. Overcoming the reluctance to change was commonly noticeable challenge facing all the case companies regardless of the nature of change programs per se. At C2, the context of change was different from the case experiences of C1. Reluctance to change continues to challenge companies and leaders across all the case studies.

CHAPTER VI

GROWTH THROUGH EXPANSION: CASE OF C3

Five human resource executives and 17 operation executives were interviewed at the

vehicle processing unit (VPC). The interviews covered all senior executives of the

company located at the VPC. A good mix of old and newly recruited executives

provided a range of perspectives regarding the extent and full impact of Lean-Quality

strategy (LQS) at the VPC. The scope of the case study covered the VPC site but did not

include other divisions such as Sales, Marketing and support functions located at the

corporate office. This study offers unit level perspectives for both Operations and HR.

Access to research informants was facilitated by the vice-president (VP) at the VPC. The

HR staff at the VPC scheduled the interviews on site. The initial list of interviews more

than doubled as face to face interactions with senior executives helped the researcher

gain access to other executives on location.

An organizing framework was developed to capture interactions between

emerging themes that were further refined and categorized into components/constructs.

These components were identified as 1) macro conditions, 2) company strategy, 3)

organizational structure, 4) cross functional performance and 5) organizational

performance. The study highlights the unique nature of LQS as a strategy in enhancing

the extent of cross functional performance between HR and Operations. The case

analysis provides accumulated evidence towards expanding our understanding of the

mediating and moderating role of Operations-HR cross functional performance on

organizational performance. The analysis and presentation of C3 will begin with the case narrative.

Case Narrative

Exclusive distributorship rights with Toyota, the company regarded for world class LQS initiatives placed C3 in a unique position. The VPC had been formally engaged with LQS implementation for about four years. The relative delay in the formal adoption of Lean methodology at the VPC was a surprising discovery not only for the researcher, but for several of the newly hired senior operations executives. Other suppliers and distributors of Toyota had long been held to exacting LQS performance standards. The adoption of Lean methodology was a necessary consideration for continued business association.

Senior operations leaders with extensive Lean experience in auto and manufacturing environments were recently hired at the VPC. The injection of new functional heads in Operations established initial implementation and early success of LQS. At the VPC, LQS was consciously crafted as a philosophy, strategy and espoused performance culture. The VPC soon emerged as one of the best performing Toyota distributors in the U.S. External quality audit scores improved to such an extent that the VPC was outdoing Toyota's internal audit scores. These dramatic performance improvements led to profitability and phenomenal growth based upon which two significant decisions were taken: 1) investment in an extensive LQS transformation project of existing processes at the VPC and, 2) expansion of C3 capacity by designing a

another VPC at a different site, in order to meet increasing market demands. A major outcome of the strategy was identifying and mapping VPC business capabilities, where direct and indirect functional processes (including HR) were mapped. All existing processes and outcomes were outlined and documented. The process capabilitiy mapping helped identified, defined and prioritized HR processes that were important to the overall performance of the VPC. Initiatives at the individual, team (departments/ functions) and organizational level were introduced to reinforce greater support for LQS and improve aspects of organizational culture.

Operational leadership was responsible for facilitating HR involvement in LQS. HR process capabilities were identified and connected with the rest of the organization. Several LQS initiatives highlight strategic value from strong CFP outcomes in C3. The potential for full achievement of HR-Operations integration in all HR initiatives, programs, and interventions was highest in C3. HR and Operations function continue to negotiate and develop better understanding in sharing cross functional responsibilities for the achievement of key organizational metrics.

Organizing Framework for Cross Functional Performance in C3

Macro conditions, company strategy, organizational structure, cross functional performance and organizational performance were abstracted from the data to clarify and isolate resource based capabilities that enabled and strengthened HR-firm performance linkage. The role of HR in development of "Lean prototype" at the current VPC and site 2 (here after termed as VPC 2) positively affected cross functional performance between

HR and Operations. The high degree of functional engagement between HR-Operations enhanced and delivered HR-Operations integration at C3. Several joint initiatives between the two functions yielded improved levels of organizational performance. Figure 10 below displays the cross functional performance at C3. CFP creation was largely directed by Operations who provided strategic leadership. CFP was not a partnership between Operations and HR function. Rather, the HR role and involvement in LQS was scripted by Operations, characterized by a one-way influence. The lack of strategic HR contributions contributed to the greater Operations involvement in HR initiatives both strategic and operations.
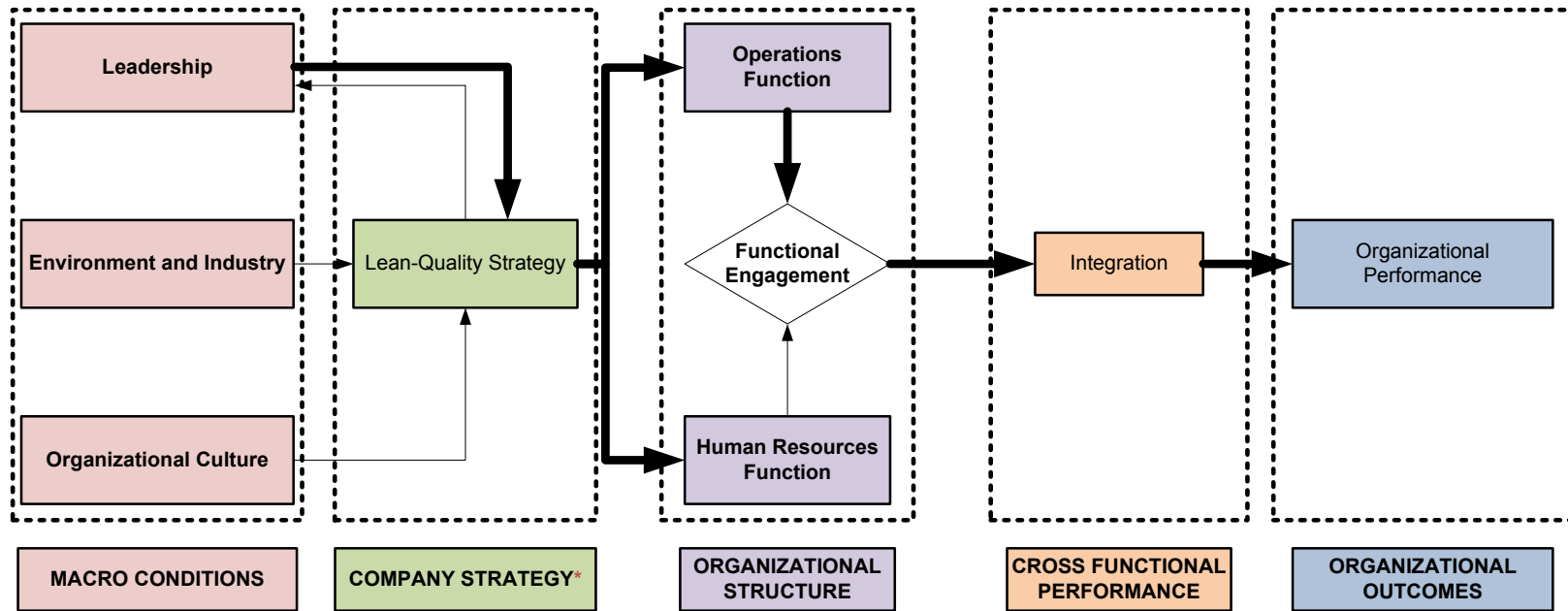
Figure 10. Cross Functional Performance Model for C3.

Theme 1: Role of HRM&D Function in C3

The strong *development* orientation and high degree of HR involvement in LQS

implementation define the HR function at C3. Accordingly, the HR function was labeled

as the HRM&D function to bring equal focus on the *development* orientation and

maintenance orientation of the function. The HRM&D function was constituted by

location specific teams: unit HR (located at the VPC) and corporate HR team (operated

from the corporate office). An additional OD (Organizational Development) team

supported the initiatives as well. The unit HR team was responsible for HRM activities

at the VPC; HRD responsibilities were associated with corporate HR. However, certain

HRD initiatives such as new employee orientation, and development of technical

training for associates were organized by the unit HR team. Corporate HR sustained OD

related initiatives (climate surveys, functional accountability processes, communication

support for transformation related initiatives). Career development and training and

development for managerial staff were also the responsibility of corporate HR role.

However the demarcation of strategic (corporate) and routine (unit) HR responsibilities

was not always clear. Unit HR also undertook certain strategic responsibilities such as

developing TWI (Training within Industry) initiatives for implementation at the unit.

Corporate and unit HR function were independently involved in LQS

implementation at C3. The roles of strategic and routine responsibilities locate the HR

function as a source of cultural change at the VPC. The interplay of the two HR

subcategories HRM (unit level) and HRD (corporate level) provides a holistic set of

HRM&D programs at the VPC. Every aspect of HRM&D interventions had been customized and aligned with LQS philosophy and principles.

Theme 2: HRM&D Involvement in LQS Implementation

LQS shaped, defined and identified Operations and HR functional priorities Operations and HR began to co-develop and co-own cross functional responsibilities over organizational level metrics. However, the nature of the initiatives, and accompanying implementation challenges led to: a) ambiguity in HR and Operations understanding of each other's responsibilities, b) different assumptions of HR role and, c) notions of what constituted effective HR performance. In the context of LQS implementation, Operations and HR functional perspectives reveal gaps in understanding HR role, responsibilities, service capacity, performance expectations and constraints that hinder greater involvement and integration of HR objectives with LQS implementation. In Figure 11 below, HR and Operations perspectives were developed into three major areas: 1) deploying functional responsibility for employee relations; 2) increasing HR time and value; and 3) developing cross functional responsibility for achieving organizational metrics. The researcher's observations and recommendations suggest improvement action items for further enhancing functional engagement between Operations and HR function. Supplemental quotes from interview data support the analysis.

   Clarifying Functional Responsibility for Employee Relations. From the Operations perspective the burden of investigating complaints regarding work, sexual

harassment and other issues were "*distractions*" according to the senior manager – site transformation. HR, on the other hand, was keen on handing over employee relations responsibilities (adherence to attendance, guideline and policies) over to operational functions. The devolution of "traditional" HR responsibilities was not effective. Several inconsistencies in policy adherence were noted by HR.

> We have a very structured attendance. Our guidelines and policies, for whatever reason, are not consistent throughout the facility in dayshift and night shift. And where, in the past HR, would have been all over, even delivering them ourselves. We are stepping back and letting them [Operations] know they are going to address it. We want to be consistent but, a lot of times they fall by the wayside. It is ultimately their responsibility. (HR consultant – Onsite at VPC)

Improving HR Value. Both Operations and HR felt the need for HR Staff to spend time on the shop floor with associates: "that you are not afraid to get dirty; sometimes I drive around, sometimes just walk, they are out there every day so just being a part of it, it is required that we spend more time on the shop floor." [HR consultant]

The need for a shop floor embedded HR was to improve HR "understanding of day to day business, and the day to day culture, that they become more efficient, useful for the unit, rather than driving from somewhere and fixing problems."

HR staff also sensed the need for building relationships and trust to increase effectiveness and value for supporting Operations. According to the HR – Specialist, it

EXAMINING THE ROLE OF HR FUNCTION IN THE IMPLEMENTATION OF LQS: PERSPECTIVES FROM HR AND OPERATIONS FUNCTIONS

	Clarifying functional responsibility for Employee Relations		Increasing HR value	Developing cross functional responsibility for organizational metrics	
OPERATIONS PERSPECTIVES	Relieve Operations of the "burden" of people management (investigating complaints, harassment etc)	HR should scan for and communicate the LQS message to make sure there is no fear (change process)	HR to spend more time in shop floor (don't want a HR person who spends 80% of time in their office)	HR should improve recruitment response time and provide detail breakdown of Turnover	Corporate, Unit & OD teams need tighter integration when implementing people initiatives
		HR to work on those initiatives which flare the LQS culture (conflict, negativity, external environment)	HR team should be embedded in the Unit and inject themselves in the business process	Eliminating unnecessary steps in processing HR transactions	
			HR measured on the extent of employee traffic in their offices ; and extent of and time allocated in shop floor	Acquisition of leaders at all levels should be an important organizational priority	
HR PERSPECTIVES	HR keen on handing over employee relations "type" role to Operations	Employee relations is ultimately Operations responsibility	Building relationships and trust with Operations to increase HR effectiveness	Turnover is an Operations function metric.	HR metrics understood in terms of percentage completion of goals (benefits enrollment etc)
Researcher's Observations	*Employee relations issues are highly critical, time consuming challenges.*		*Both HR and Operations understand the need for HR to spend time at the shop floor*	*1. Operations and HR have different notions of how to measure HR effectiveness* *2. Internal customer (Operations) expectations of HR role and performance in not clear to HR function* *3. HR's functional priorities are sometimes in conflict with Operations*	
Researcher's Recommendations	Employee relations must be the joint responsibility, concerted cross functional efforts required from Operations and HR,	Delegation of authority and decision making in dealing with Employee Relations needs clarity between HR and Operations	Time spent in the shop floor by HR should be measured	Internal customer satisfaction measures need to be established and quantified	HR should ask internal customers (Operations) to evaluate and provide feedback on performance

Figure 11. HR Role in LQS Implementation.

was important and necessary to: "meet the other party [Operations] having the information and being upfront about what the parameters are; having an honest and candid conversation and just building those relationships, before you have to utilize them, before you can depend on it, sometimes there is a strain there because they feel like HR is dictating this and that."

Developing Cross Functional Responsibility for Organizational Metrics. Both Operations and HR agreed upon the need for developing systematic, training and standardization of content and delivery. Representative from both functional groups interviewed were consistent in their statements on developing training modules based on the foundations of Lean and TWI: "train employees effectively on how they are doing their job, standardize knowledge, standardize work, and standardize transfer of knowledge" in a structured way to explicitly formalize the tribal knowledge in the company. Operations were concerned with the bigger picture: talent acquisition for not only hourly associates but for leadership positions at all levels in the company.

With greater allocation of employee relation responsibilities to shop floor managers, HR time was freed up for greater support at the shop floor on developmental related aspects such as job shadowing, design and delivery of robust training models etc. "Now they spend time on the floor, both shifts, supporting them, be present on the floor, show presence, that's a lot to ask for but they give it to us now. I won't say there isn't more they can do to help us". [Senior Manager – Logistics]

HR saw their role in relation to LQS as assisting in design of job descriptions, conduct of comprehensive job analysis, improved employee morale, involvement in

Kaizen through work standardization as well as successfully executing recruiting and hiring strategies. In contrast, Operations perceived HR role in relation to Lean differently: that HR folks first needed to understand the language of Lean and Six Sigma. The mapping of process capabilities from a systems perspective interconnected each and every HR capability with the overall business process. The immediate impact of a HR capability when ineffectively enacted became tangibly evident for all stakeholders of that capability. HR capabilities become more amenable to prioritization based on the strength of HR capability connection with Operations and linkage to business performance. The perceptions of HR effectiveness were no longer left to the interpretation of HR and Operations executives, which often differed.

Measuring the effectiveness of HR capabilities in a language that made sense to both Operations and HR was obviously powerful. Until now, the ambiguity surrounding the development of a solid ROI case had been due HR's inability to quantify transactional cost-benefit ratios accompanying each capability and connection with internal customers. LQS set the context and conditions for advancing the HR-Operations CFP and establishing strong HR-firm performance linkage.

Theme 3: Perceptions of HRM&D Effectiveness

HR initiatives from corporate, unit and the organizational development (OD) group reveal scope for tighter integration for HRM&D initiatives at the VPC. Owning head count metric as a HR&D metric, being a part of the transformation planning and providing more support on the OD were other strategic Operations expectations.

Recruitment. Certain positions were identified as "harder to fill": for example electronic installers who performed different installations. Skilled positions required technical, mechanical skills and abilities to retain procedures for hundred different installations for different vehicles.

> So, that is one of our positions that are harder to recruit. We get a lot of referrals; we are constantly going through applications or outsourcing, going to local college. We can get people to help us fill positions at entry level status, but the more skilled ones, take more time. It just depends on the candidates that we get. (HR consultant)

Several Senior Managers underscored the need for applying lean tools to improve the effectiveness of the hiring process. Lean process was not nearly as ingrained into hiring process as it could be. A strong feedback was elicited from SM (Transformation Project) on effectiveness of HR recruiting strategies –

> They could a better job of qualifying applicants before I get to the process of reviewing. That seems, sometimes, its quantity over quality (laughs) and which will waste some of my time, going through all these [application materials].

However hiring procedures for senior level positions drew lot of praise. Evidence of due diligence in recruitment and retention strategies was reported for higher executive level positions. The Senior Manager – Operations shared his experience:

> It was an interesting process for me. The process was very diligent for me in making sure that the company was a right fit for me and then on their side making sure that I was the right fit for them because it is not just about the experience level, it is about the values and culture and that all of them tie well together. So, it was fantastic to go

through that process, like interviewing two or three times before we got to talking

about the position and about my entry point. It is a key position in the organization, so

a lot of diligence went over that process for making sure that it was the right person

for the position. I was supported very well in the company and I have been well

supported after being here.

Given the VPC's drive for Lean initiatives implementation, it was apparent there was a

lot of opportunity to mould new hires upfront, at all levels: "That's the reality of it, not

forcing anyone out, but when we have a replacement that will be a part of the HR

process as we will let in the people with strong Lean backgrounds."

Operations were quick to recognize certain drawbacks in the hiring process that

constrained HR effectiveness. For example, job description related documentation was

not specific and hence communicating minimum position requirements to HR was not

completed: "We may not always identify exactly, we may not give them information

they need to execute what I ask for, (laughs) so it's another thing. We may not just do

our job in communicate exactly what the minimum requirements are."

Employee Relations. HR came in for high praise from Operations on key areas

of performance management, human resources planning as well handling employee

relations. Remarked SM –Quality:

They are extremely thorough, if we are going to terminate somebody we are going to

absolutely sure that we are doing, we have got everything we need given the

individual the opportunity to correct the issue that's it's not in some way company has

not failed the individual and is not resourcing them or not putting them in the right

job, that sort of thing. They do a very, very good job there.

The overall perception of HR performance effectiveness has been positive.

Operations acknowledge receiving adequate support from HR in operational issues. In

terms of other traditional roles, employee termination, exit and employee relations HR

came in for consistent praise for thoroughness from Operations on execution of these

processes. In the strategic aspects of head count planning, reducing turnover and

absenteeism, HR came in for strong recommendations for involvement from Operations.

Theme 4: Operations-HR Cross Functional Performance in C3

The quality of HRM&D performance revealed strong ties with Operations; a high degree

of CF integration was evidenced as a contributing factor for establishing the HR-firm

performance linkage.

Factors Supporting HRM&D-Operations Integration. The HR aspects of

Lean were a high priority for the executive leadership. The VP elaborated on two

important HR aspects. The first aspect dealt with employee training: "in depth training

of the people, co-coordinating with human resource side of the business, to start to teach

a language to the people who knew nothing about Lean, like some simple terms like

Kaizen." The second HR element related to hiring practices was injecting new "Lean"

talent into the business:

"Talent that had a more sophisticated approach to blend people who had the

operational knowledge but maybe didn't know higher level data mining

activities. So, that they could say what does the data really tell me and how do I analyze to get the real message of how the business is running, and all of that. And, we really worked hard for a year to do those things, and obviously continue to learn from the last four years." VP (VPC)

Hiring Innovative New Comers at the Senior Level. Another way to quickly get access to the right kind of Lean expertise was the hiring of several senior level managers who had certification, expertise and experience in successfully implementing LQS at other businesses. The newly acquired senior level managers were exposed to LQS in other businesses, where they had already experienced the benefits of LQS. The Senior Manager – Transformation Project corroborated:

> The good part about is they are bringing on people with Six sigma experience. There are four other people beside me from the GE facility at Houston area that are Green belt, Black belt and Master Black belt certified. So, when I say change in culture, you start to infuse current culture with knowledge of how to implement these things. So, people like me and others in the organization who are certified, with experience have been able to start helping people understand how to use the methodologies, and implement programs. So, the shop floor is really good at the foundations of Lean which is 5S, but the advanced techniques of Lean, we are just starting that journey. And that's the very beginning stages of our journey.

In addition, HR had to work with Operations to bring in resources (people) that had technical competence to take employees through various Kaizen events or re-engineering processes; train employees to view improvements and fix it better.

LQS affected Operations and HRM&D functions. Figure 12 displays the effect of several HR (Corporate and Unit) and Operations interventions that have resulted in the development of a Lean performance culture at the VPC. Several of HRM&D processes facilitated by corporate HR such as 360 degree appraisal, team accountability, and communications strategy were introduced in the company. Unit HR was responsible for developing and facilitating new hire orientation, TWI related training and Q12 survey captured employee engagement level data. The overall HR functional initiatives have supported LQS focused "people" processes. As a consequence, the organizational culture has been impacted as well, as LQS values become more ingrained in the awareness and actions of employees.

Two factors supported the development of a Lean performance culture at C3. One was the continuous improvement and methods of collecting people related information. Capturing employee engagement related data, monthly rallies, team accountability and formal communication initiatives from corporate supported the collection of additional measures of people related data. This collection of data provided the management with close to real time data that supported executive decision making in the unit. The second factor was Operations understanding of the systemic challenges of HR systems and initiatives. For instance, exit interview systems were linked to turnover data, new hire orientation program effectiveness and the development of systematic and standardized training initiatives. Improvement of all these HR initiatives simultaneously helped in systemic improvements of HR function and contribution to LQS and

organizational performance. The outcomes have impacted LQS performance and learning culture at C3.

Organizational level metrics are important indicators for assessing the extent of CFP in organizations. Turnover and absenteeism, key organizational metrics, require some degree of interface between HR and other functions. The degree of sharing and ownership of organizational level metrics enables us to compare the extent of HR-Operations CFP in C3. Two separate activities delineated the degree of sharing and ownership of organizational level metrics. 1) Identification and documentation of data related to organizational level metrics, and 2) ownership of the metric: i.e. which function/s is/are responsible for success/failure of achieving the metric in consideration?

Operations stressed turnover as a key metric for important reasons: Turnover is a key metric we are looking at…We did lose a lot of people last year, so that hurts us, [including:] our ability to maintain continuity, and of process understanding, quality and productivity, and any of the other metrics associated with it.

New Hire Turnover. The SM-Operations believed it was vital that new hourly were introduced to Lean concepts, encouraged to participate and quickly get on board with Lean implementation. When it was suggested that perhaps as new hires this group would be more open to change initiatives, he was of the opinion that because this group had prior working experiences from different industries, picking work habits from other places that they did

not come with an entirely open mind. This led to high turnover rates in this group. As a

consequence, it was hard to perpetuate a Lean environment where people cycled in and

out of the organization:

> Once you create that culture, if you have heavy turnover, and you can't fill those
>
> positions quickly, then you have to re-create that culture all the time. But, if you don't
>
> have that problem, it is much easier to maintain that culture. So, I really do believe
>
> that it is a key piece of how they support the Lean culture.

HR however viewed important metrics in terms of benefits enrollment, simple numbers

that captured the extent of HR program reach with individual employees. Softer issues

such as the quality of employee relations were difficult to measure according to HR

staff. Operations were clear about interconnecting HR capabilities such as employee

relations with turnover, absenteeism and effectiveness of new hire orientation programs.

This interlinking of several organizational level metrics with principal HR functional
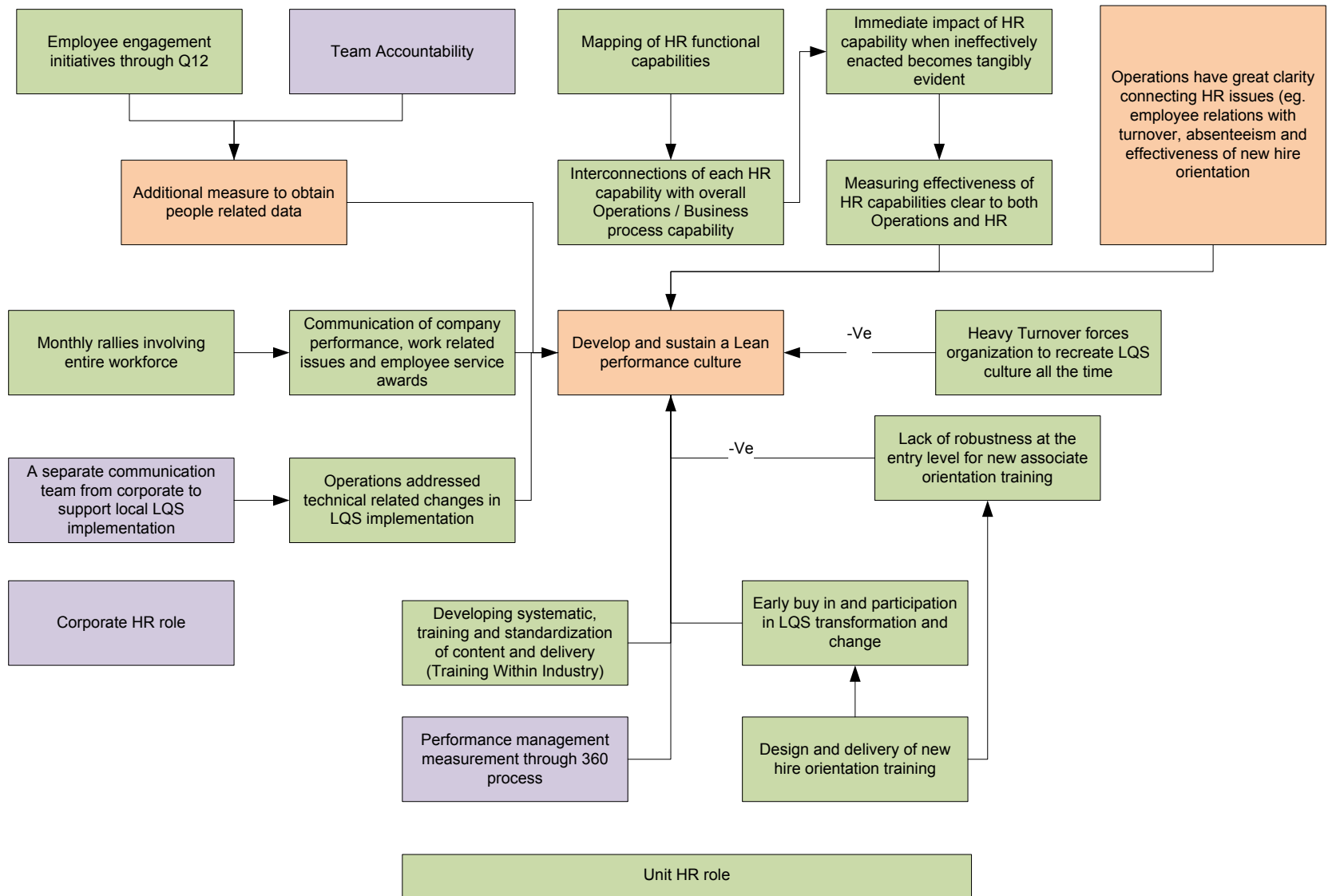
Figure 12. Developing a LQS Performance and Learning Culture.

responsibilities was not at all evident from HR interviewees. HR related organizational level metrics need to be examined, understood and disseminated among functional groups but first and foremost within the HRM&D function at C3. Another aspect Operations felt that HR needed to be measured was ensuring employees experienced a sense of security related to their job. HR also needed to be measured based upon the extent of employee traffic at their offices, and time allocated on the shop floor. The operations head was clear he did not want a "HR person who spends 80% of time in their office."

Operations function reduced a 77% turnover rate to a 15%. Operations also expected HR to provide detailed documentation of turnover and ensure appropriate actions were taken. The Senior Manager – Operations commented:

And, becoming really more detailed into what is creating turnover. Detailing and documenting that and breaking it down, not just by the VPC, but breaking it down by area. So, we can see if it is a leader impacted, or if it is job impacted, or if it is climate impacted. I have seen some information at a higher level, but they should have that same information available at an area level.

However, HR did not share similar perspectives in tracking and documenting turnover related data. Major challenges, identified by HR as detrimental for the overall VPC, were absenteeism and turnover. These were also recognized by Operations as important metrics. One of the reasons for high turnover, according to Operations, was the new hire orientation anchored by the HR function. Operations interviews reveal the importance for developing systematic new hire orientation as a form of Lean process to reduce

turnover that also provided new hires with a basic understanding of Lean concepts. The Senior Manager –Operations revealed yet another insight:

> The new people we get on board that leave are much higher; I think a big part of that is we don't have a robust entry training program, understanding of how we do business, a full explanation of what we expect from them. There is a lack of robustness there at the entry level process for new Associates; it creates unnecessary turn over. It is an opportunity that we have in the business.

Operations also felt that newly hired employees had to be serviced more: To make sure that they are settling in right. Because it is very disturbing when leaders do not have a situational management skill set, to where they are managing individuals, they are managing them as if everybody has been here 10 years, and knows what they are doing, that's easiest way to make a new person leave. Without HR helping us figure out what managers are good with new employees, who is not, I think it's a little tough to keep the retention. These views were not shared by HR staffs who were more concerned with transactional processes such as maintaining employee relations. Both functions recognized that HR processes and procedures provided plenty of "LQS" improvement opportunities.

For HRM&D staff, metrics were associated and measured in terms of percentage completion against established goals (e.g., benefits enrollment), and response time to claims settlement. For development initiatives like measuring Q12 survey metrics it was to "make sure that 100% of the people had gone through and had the opportunity to take the survey." These metrics alone are not sufficient to impact organizational level

performance. Instead metrics of this nature make it all the more difficult for HRM&D to claim a seat or role at the business table. They fail to adequately address the complexity and connectivity to business and operational level goals. HR as a function needs to first understand its role; design appropriate measures for evaluating performance and developing a match between its performance and operational expectations. HR does have a greater role in communications: being the spokesperson and employee advocate, ensuring consistency in communication of policy and procedures. The HR function was undergoing transition; routine attendance and disciplinary issues were being delegated to Operations.

While LQS has helped create great synergy among operational functions and performance measures were becoming integrated, these were yet to be adapted for HR function. Operations-HRM&D integration at the VPC has shown strong evidence for fully achieving its potential in part because of strong Operations interest and leadership role in developing and laying out the interconnections of HR and Operations. The development of HR-Operations capabilities was achieved due to the transformation project whose primary and main goal was to develop "Lean" processes for all of the VPC functions. The expertise to develop functional capabilities matrix lay with Operations, and was an important factor for achieving Operations-HR integration at C3. LQS was responsible for systemic tightening of organizational level processes, leading to Operations-HRM&D integration.

Theme 5: Achieving HR-Firm Performance Linkage in C3

The business association with Toyota carried C3 and the VPC into an extended period of prosperity since the beginning of the company's operations. Business and brand association with Toyota easily attracted LQS talent from other companies into the VPC. LQS implementation triggered talent acquisition that was not restricted only to the executive level. The influence of Toyota cannot be overlooked in the prevalence of a strong associate centered culture at C3 and in the selection and choice of LQS as a companywide strategy. Environment and industry (automotive) factors therefore played an important role in contextualizing senior management's decision to adopt and aggressively implement LQS. At C3, the quality department played a day to day role in monitoring and maintaining quality while LQS, as a strategy, took complete precedence over all functional goals at the VPC. LQS was a unique solution for a unique problem – challenges for C3 were atypical. Growth was a "nice problem to have", and to meet the challenge, the VPC was committed to LQS transformation.

The Lean-Quality strategy was espoused and enacted strongly; a very narrow gap separated the rhetoric and reality of LQS philosophy and implementation at the VPC. HR staff involved in the transformation project were exposed to Operations and thus gained valuable business perspectives. The transformation project offered great potential for HRM&D function to identify functional capabilities and examine connections with internal customers.

The entire unit's processes were value streamed, mapped, and metrics developed to measure key activities. Greater areas for functional integration were also identified.

The Operations function greatly enhanced its capabilities through LQS. Thus, Operations-HRM&D performance became more closely aligned as common metrics and measures for organizational effectiveness were recognized and negotiated. LQS increased opportunities for HRM&D–Operations functional integration thereby leading to greater understanding of unit/functional level metrics that were now visibly connected as a system. Each functional metric and objective had to be achieved to achieve overall growth of the firm.

Of all the cases, a complete LQS implementation was in progress at C3. LQS acted as the philosophy, driving business and operational strategy for the VPC. C3 provides the best example of Operations-HRM&D integration in this study. The full extent of LQS implementation at C3 has facilitated a high degree of Operations-HRM&D integration. A strong integration of work flow, processes and departments through LQS implies a greater understanding of each function—of not only their goals, but also the connection of departmental goals with those of others. Greater integration between Operations and HRM&D established strong HR-firm performance linkage.

Conclusions

Overall, C3 has the talent and experience of becoming another "Toyota" by instituting a LQS performance culture, system and processes. A close to ideal implementation of Lean as recommended by the literature and practitioners was observed at the VPC. The unit was undergoing change at the structural (physical plant) and process level. Work teams were regrouped according to LQS flow. All functions,

both direct and support were involved with LQS implementation. HRM&D support was more visible in the case of C3 under the direction and leadership of the VPC Vice President. It is clear from the case of C3, that when LQS initiatives are owned by senior management, gaining support and acceptance from the rest of the organization is relatively easy to achieve; and reluctance to change more easily managed.

Operations typically understood the need for cross functional effectiveness, and the underlying premise of systemic integration of organizational processes as demanded by LQS. For example, addressing the problem of high turnover was Operations led initiative, right from understanding the full impact of turnover, identifying root causes in hourly associates, and developing sensible solutions. When turnover was recognized by senior management as a serious problem, identification and implementation of potential solutions was relatively easy in C3 unlike other case companies (especially C1 and C4). While HRM&D justifiably enacted a supporting role by providing turnover data, there is potential for the function to enact a more strategic role by developing, delivering interventions such as new hire orientation for reducing turnover. Monitoring and reduction of turnover need not necessarily be an Operations responsibility.

The degree of HR involvement in LQS was high in the case of C3 mainly due to the Operations management team. Operational leadership's belief in the value of HR in supporting LQS was a major factor in HR involvement with LQS. Operations expectations of HR involvement in LQS were important for HRM&D function. These expectations forced HR to think out of the box in terms of designing HR interventions: training, performance management, recruitment focused on utilizing and maximizing

LQS implementation goals. In terms of goal alignment, functional processes were all mapped to determine core service competencies for internal and external customers. Mapping of HR processes was another example of applying LQS goals. Routine and strategic HR capabilities were mapped laying out the interconnections of HR services with internal customers facilitating the accurate measurement of HR performance where before it was not as easy.

The core of LQS implementation is establishing a performance management process and system for products and people. Goal alignment at all levels: organizational, team, process and finally the employee level become more fully developed and shared across functions. The influence of executive demographic homogeneity in LQS implementation must be mentioned as a critical factor. Several new hires had prior background black belt certification, while others had extensive experience in LQS having worked together at other auto manufacturing companies. This socially well defined homogenous group effectively executed LQS implementation in the company.

The industry and environment setting was unique in that LQS concepts, philosophy and principles originated in the automotive industry. Although LQS application in C3 was to be expected, this was not the case. Toyota's influence was near absent until the new leadership began seriously engaging in LQS. The case offers variation in the interplay of macro conditions that facilitate introduction of LQS in companies. In the area of Operations-HRM&D integration, this case offers examples of HRM&D and Operations goal alignment because strategic objectives of LQS demand extensive functional alignment and integration. Key components of a successful HR-

Operations integration were tracked, measured, and assessed for organizational improvement. However HRM&D function needs to take more initiative in all areas of HRM&D to establish expertise and tangibly add value. Both corporate and unit HR need to proactively move towards high quality interactions, alignment and integration with Operations.

CHAPTER VII

CULTURE OF RELIABLE PERFORMANCE: CASE OF C4

Senior operations and human resource (HR) executives from two locations: Toronto, Canada and the mid south regional facility in the United States were interviewed for the case study. Three human resource and 12 operations personnel (comprising operations, marketing, quality, purchase and customer service functions) provided the data. The Canadian interviews were done via phone. The researcher visited the mid-south regional facility for a week to record interviews and site observations. The initial contact and access for the interviews was granted by Vice President – Market Development and Vice President – HR, who were located at corporate headquarters in U.S. Once permission was granted, the HR directors at Toronto and mid-south regions coordinated the interview schedule. Unlike other case companies (C1, C2 and C3), corporate and unit perspectives from both operations and HR were obtained for this case.

Data obtained from recorded interviews was analyzed and helped develop the case study. The findings were presented to company representatives; their feedback and suggestions were incorporated in the case study. The organizing framework developed from previous case company analyses also informs the study. A close approximation of the essential components emergent from earlier cases was applied. However, the final model however remains close to the C4 experience as reported by participants. As in previous cases, the analysis and presentation of the case study for C4 begins with a case narrative. A brief outline of the company, unique resources and capabilities leveraged to create and sustain competitive advantage relevant to the study's investigation will be

presented in the following section. The emergent organizing framework of the study and the key relationships among major categories was developed from the data analysis of C4 interviews. The constructs are then expanded further with supporting quotes from the interview participants. Finally conclusions of the findings for C4 for fully achieving the HR-Firm performance linkage are presented.

Case Narrative

A chemical distributor in existence for more than 100 years, C4 (pseudonym) has grown into a global company. In the early 1980s, the company expanded further into North America with acquisition of several regional chemical distributors. Today, C4 has become one of the largest chemical distributors in the world. Given the nature of products and industry association, maintenance of quality, safety as well as supply chain security over all product lines is the number one priority for the organization. Therefore, sustaining a quality culture at C4 is a significant business priority for organizational effectiveness. As an extension, well defined and articulated quality strategy that ensures safety, health and environmental standards contributes to the well being of employees, customers and public at large. Compliance of International Standard Organization (ISO) certification standards, audit procedures, operational process, and performance control formed the core of C4 operations across North America. Quality systems and procedures also identified training needs in the general areas of safety, inspection and function specific skill development. Over time, the quality strategy, ISO procedures and training became embedded in the company culture.

Unlike the cases of C1 and C3, LQS (Lean-Quality Strategy) was a regional specific business strategy at C4, reflecting a decentralized organizational structure and decision-making process. The mid-south regional leadership was responsible for LQS adoption. The LQS initiatives in mid-south and quality initiatives in Toronto shared similar aims concerning waste elimination and creating smooth workflow. The overall Operations function (including operations, safety, quality, purchase and marketing/sales functions) experienced significant business process improvements. New hire orientation, quality and safety related training as well as function specific training was mandated by ISO certification standards and C4's quality system. While individual departments were responsible for their new hire orientation and function specific training, quality and safety related training services were facilitated by Quality and Safety departments. LQS initiatives strongly affected operational learning and performance. In contrast, LQS impact on HR function was minimal.

The HR role in relation to LQS was weak. HR was limited in a sense to a traditional role focused on transactions and compliance. Interview data revealed HR involvement in training as 'sporadic'. HR service capacity was utilized in handling employee relations and routine administrative issues with little room for strategic demands. A traditional HR presence and minimal involvement in operations initiatives however did not contribute towards negative perceptions of HR performance as in the case of C1. Perspectives from operations indicate a high degree of satisfaction with regard to HR service quality.

The apparent lack of formal HR development initiatives was offset by informal practices indicating a supportive organizational culture. Several informants reported informally scripted career development practices such as tuition reimbursement and on the job training support. Long term employment and career stability was the company norm. Employee turnover was relatively low unlike other case companies. As a result, high retention reduced HR service drain as hiring and terminations were no longer pressing challenges (as in C1). Organizational culture thus contributed towards effective performance restoring a sense of balance despite the apparent lack of formal developmental initiatives and a small HR team.

Another factor promoting perceptions of effective HR function was a well developed understanding of HR role, responsibilities and performance constraints. Operations interviews revealed perceptiveness in recognizing HR constraints. While HR continued to offer administrative support services, the development aspect of HR in a sense was supported by Operations function (training) and the organizational culture (informal HR practices). The HR involvement for example with new hire orientation was limited to scheduling. This freeing of HR service time permitted HR staff to manage performance constraints such as being understaffed, unlike the case of C1. In the case of C4, despite limited HR role (in a traditional capacity), quality driven systems and organizational culture became a tacit source of alignment and effectiveness. Quality systems not only determined and stipulated identification of training needs for specific functional related training, but also contributed towards overall Operations functional effectiveness.

Different parts of organization have taken responsibility for important aspects of HR function such as training, on boarding process, informal policy support for career growth opportunities. From the study of C4, it appears that a strong HR involvement in quality strategy and implementation is not a necessary condition for strengthening HR-Operations functional engagement. The data collected for this case represents both corporate and unit level perspectives of Operations and HR functions. Where ever possible initiatives specific to the location (U.S or Canada) will be mentioned to highlight differences in organizational priorities between locations.

Organizing Framework for Cross Functional Performance in C4

Interviews with senior executives revealed two dominant company strategies: quality and mergers and acquisitions (M&A). In addition to being a company level strategy, quality strategy also served as everyday operational strategy and was foundational to operational performance. The M&A strategy on the other hand impacted both operations and HR functions, demanding collaboration between the two functions. The resulting degree of engagement between the functions yielded cross functional performance (CFP) outcomes that have been unbundled into two distinct indicators: interactions and integration. CFP outcomes provide the missing link connecting HR and organizational performance. The overarching CFP model was partitioned into five components to assist in the presentation, argument and "story" of C4. Figure 13 presents the CFP model. Environment and industry, organizational culture and leadership were identified as macro conditions that contextualized organizational decisions and choices, allowing

members to make meaning of their actions. Company strategy explored quality and M&A strategies and their impact on organizational structure (HR and operations). Cross functional performance (CFP) assessment and identification of CFP indicators provided an assessment of the HR role in relation to LQS and established the HR-firm performance linkage in new ways. The case model highlights ways in which rare, valuable, non-substitutable and non-imitable resources are utilized to create unique capabilities for the organization. For example, M&A and Quality strategy combine in unique ways to create opportunities for cross functional performance between Operations and HR function. The HR function performed a "traditional" role in the company. Yet, perceptions of HR effectiveness were consistently rated highly by Operations function, largely due to effective matching of Operations expectations and HR performance. HR function can enact an "only traditional" role and still contribute to the organizational performance by tightly integrating its initiatives with those of Operations. The strength of CFP underscores the strength of functional engagement between Operations and HR and effect on organizational performance.
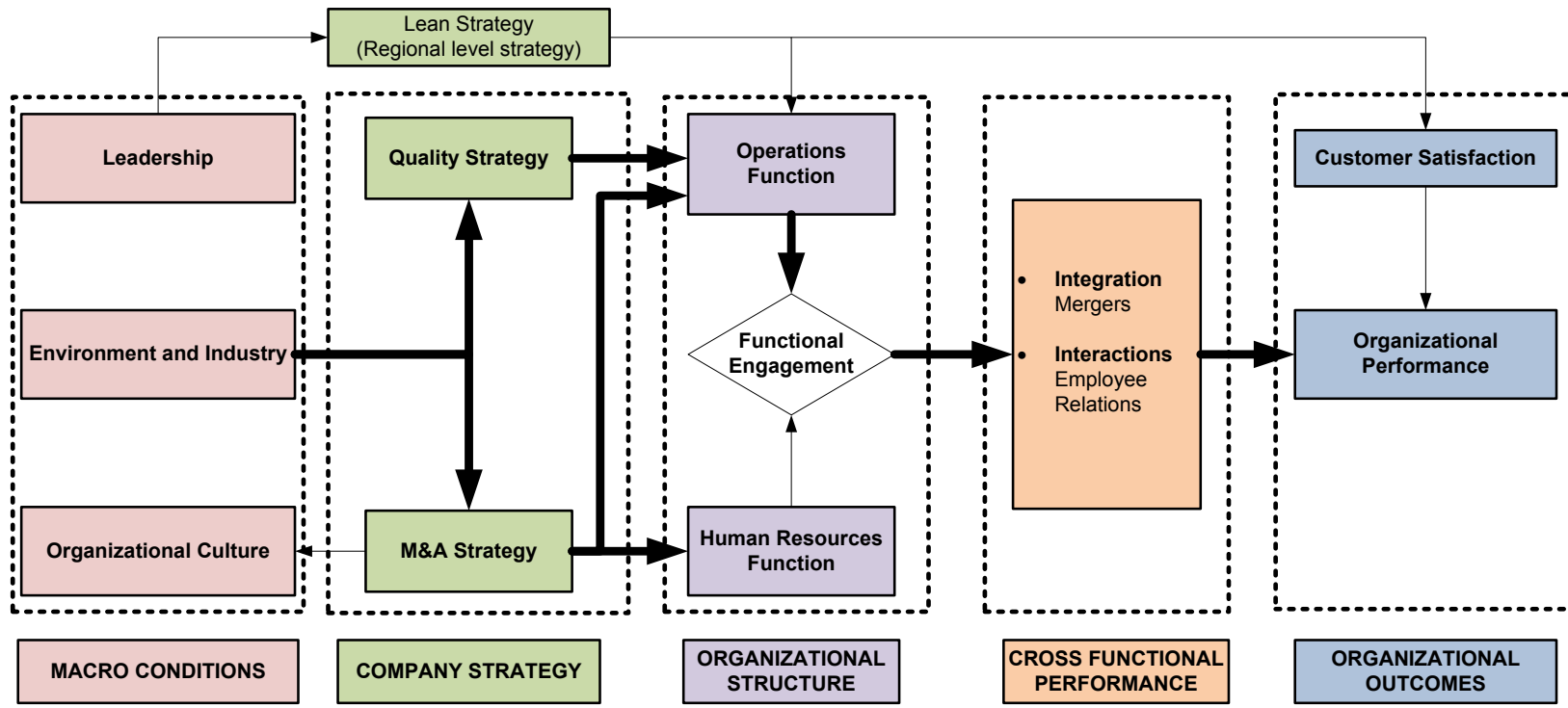
Figure 13. Cross Functional Performance Model for C4.

Theme 1: Role of HR Function in C4

The interviews with HR staff reveal employee relations and, hiring strategies as most important responsibilities for the HR function. Communication was not considered as pivotal because the HR function at Mid-south Region was more localized in terms of geographical coverage, unlike the Toronto Operations. A four member HR team supported the Canadian Operations (about 500 employees). The HR department was a centralized function located at the corporate office. A formal HR role had been developed within the last ten years. The current head of HR was responsible for introducing formal processes in terms of policies and procedures communication, hiring, training and employee relations. Recruitment and retention of people continued to challenge Canadian operations. A separate Corporate HR function for the U.S operations was located in the East Coast and was responsible for providing overall guidance for implementing policy related issues. The HR team of three served about 500 employees at the main location and several other branches in the mid-south region. HR was responsible for 20 locations and facilities falling under mid-south region. Unlike the Canadian HR function, HR was not responsible for quality related communication initiatives. HR was focused more on providing unit level support to the mid-south region.

  Communications. Communicating policies and procedures in a timely fashion was a core component of HR role in Canada. For example, Job Seven roll out plan was delivered by HR as a part of their communication responsibility. HR in Canada saw value in the promotion and assistance in communication on these initiatives "in that

people know where get more information, whether it would be a manager on site, on the intranet, maybe a document, a letter from the President announcement." Additionally, documentation was also made available in orientation packages to ensure that employees were fully trained: "on everything they needed to know about quality initiatives that are in place right now or being rolled out and not just communication of what is happening but how it should happen". (Director –HR)

The C4 intranet was a valuable resource for both HR functions in communication of policies and procedures to all employees. New mergers and acquisitions necessitated a strong communication role for HR for integrating new employees and related employment and legal aspects into C4. With a number of locations, it was imperative to continue developing common HR system of policies and procedures. "I think people are doing some things right but, again we got challenges. We have 26 locations [mid-south region], how do we get everybody doing the same thing. I would rather have a little bit more contact with employees."

Employee Relations. Operation interviews revealed positive experiences of HR in terms of receiving support in working with resolutions and negotiations. Absenteeism at the units was seen more as an operations "type" issue. HR role according to HR interviews was primarily in relation to speaking and assisting managers in developing some language in dealing with employee relation issues. Many of the traditional HR components were either devolved to Operations or outsourced at both locations. HR role was significantly narrowed to managing legal issues concerning individual employment contracts. "Staying legal" was a primary concern shared by the Heads of HR function

both at Canada and Mid-south regions. Emphasizing legal aspects with respect of employee issues, the Head of HR visited locations to ensure branch managers and supervisors adhered to legal protocols. "So, it is not like I go to each branch and handle termination myself. I am just keeping it legal; try to prevent any kind of lawsuits." The demand for strategic HR services as a whole was minimal at both locations.

Hiring. Both Canada and Mid-south shared common challenges in hiring and employee relations for the HR function. Additionally, offering systematic training for managers, development of supervisory related training were areas for expanding HR visibility and impact. The main HR support at C4 was providing guidance on disciplinary related issues and ensure employment routines were completed promptly. Although hiring had been outsourced, it continued to challenge the function.

The HR-to-employee service ratio was low (1:200). For example, one HR staff was responsible for an average of 200 employees at each location greatly reducing opportunities for HR interaction with plant operators and branch employees. HR had a dotted line reporting relationship with Operations/Branch managers and provided guidance for handling HR related issues. Any form of HR-Operations functional engagement and support was dominated by interactions concerning hiring and employee relations. Despite a small staff strength and service dominated by transactions and compliance type issues, a high degree of HR service satisfaction was evidenced. This has been made possible because of several reasons. Employee relations, communication and hiring comprised routine HR responsibilities. These subcategories provide maximum

interaction with Operations and influence Operations view of HR performance and are discussed in the forthcoming section of the case study.

Theme 2: HR Involvement in LQS Implementation

The HR role in relation to quality was developed using representative statements of HR and Operations stakeholder interviews. Both functional perspectives were in agreement of a weak HR role in relation to quality, although they offered different reasons. Emerging themes from HR and Operations perspectives were analyzed to develop the display in figure 14. Operations function suggested increased HRD role in relation to quality in terms of a) achieving organizational level targets set by the company for HR, b) effective communication in the organization; when things are improved that they are recognized and communicated c) facilitate intrinsic motivation process by letting employees know that they have done a great job and, d) and communicating successes about achievements of the organization, various successes of teams, departments and work groups. HR respondents emphasized that their function could add more value to quality initiatives by providing consistency in communication. Communication of organizational level initiatives and HR support in understanding and implementation of employee related policies and procedures were identified by both HR and Operations as necessary components that enhanced HR role in relation to quality. Quotes from Operations and HR perspectives serve to support the individual themes. Four themes emerge from the interview data. They are: a) optimizing HR time and value, b) demand

for transactional type HR services, c) communicating LQS priorities, and d) demand for strategic HR.

Optimizing HR Time and Value. Operations were unaware of organizational level HR metrics. Among the different Operations functions (Sales, Operations, Quality, etc.) there was great clarity and awareness of functional metrics. The Director of Marketing wondered if HR had a mission statement similar to the Sales mission statement. On questions about HR role in relation to quality, Operations typically responded saying "You will have to ask HR" underscoring a lack of awareness of HR goals and metrics. These were typical statements from operations on HR metrics, procedures etc. This was evidenced at both Canadian and Mid-south Operations. Performance evaluations were cited as an example where Operations expected more HR involvement in performance evaluations of employees.

Communicating LQS Perspectives. HR was involved in promoting and communicating C4 as a quality conscious company. Communicating policies and procedures in a timely fashion was seen by HR as the most important role in relation to promoting quality consciousness at C4 (Toronto). Additional responsibility of Job Seven roll out plan was delivered by HR as a part of their communication responsibility in Canada. Documentation related to quality was made available in new employee orientation packages to ensure that all employees were fully trained on all areas they needed to know about quality initiatives that were in place or being rolled out.

Specifically, in relation to HR involvement in relation to Lean implementation at Mid-south, Operations managers were appreciative of HR role in providing an

"outsider" perspective: "Human Resources would give us an outside view of what we were doing—a different set of eyes looking at our process. [Our HR manager] provided that outside perspective in our team, gave us a different view of things. Operations acknowledged the presence of HR support for Lean initiatives but the support was not clearly defined. Instead vague statements such as "providing us help in whatever way they can" described HR support for Lean initiatives.

Demand for Transactional HR Services. Employee relations issues concerning individual performance defined the extent of Operations and HR interactions at C4. Operation function interviewees therefore had difficulty considering a role for the HR function outside of this area. The District Operations manager observed: "Conversation never happens between Operations and HR other than when you're looking at an individual [performance] for a specific reason."

Given the way HR was structured as one department located at the corporate level, with responsibilities for the entire region (Canada or mid-south) it was clear that HR had too much on their plate. The structure of HR function did not permit a great degree of engagement that demanded higher order CFP indicators such as alignment and integration. Operations offered a systemic perspective of factors that limited HR role in quality. The structure of HR function, at the unit level and low level of HR and Operations everyday interactions indicate a limited HR role in quality. Systemic issues detract HR role in relation to quality.

EXAMINING HR ROLE IN LQS IMPLEMENTATION: PERSPECTIVES FROM SENIOR OPERATION AND HR EXECUTIVES				
Emerging themes	**Optimizing HR time and value**	**Communicating LQS priorities**	**Demand for transactional HR services**	**Demand for strategic HR services**
OPERATIONS PERSPECTIVES	With respect to quality, getting the right people is a critical step for HR	HR can play an important role in communicating successes related to Quality and providing access to information to employees/ departments/regions	HR personnel do the best they can considering they are both the corporate and Unit facility for everything in the whole region.	HR can improve their role by facilitating intrinsic motivation; letting people know that they have done a great job.
	HR could improve their response times on issues related to recruitment: specifically in relation to timely completion of background checks	HR can help promote C4 as a quality conscious company	Conversation never happens between Operations and HR other than when discussing employee specific performance issues.	HR effectively supports Operations in combining policies and procedures for newly acquired companies
				HR - Operations interaction happens at corporate level. M&A activities define strategic collaboration of HR and Operations
HR PERSPECTIVES	Develop "recruitment evaluation system" with managers through various stages of recruitment: "in how can we do things better, more efficiently? Where can we provide quality and value within limited time. Where does that quality and value need to be?	Ensuring that communication (Quality initiatives; policies and procedure) is being provided to employees in a timely fashion.	Updating HR policies and procedures is an important role	HR role is limited to handling performance appraisal related paperwork
		Documentation of quality initiatives has been made available in orientation packages.	Unit HR role is focused on handling employee relations.	
Researcher's Observations	*There is scope for improvement in Recruitment response times for positions that are critical to Operations*	*There is a common consensus between Operations and HR about the important role of HR plays in communicating quality initiatives, strategy, policies and procedures*	*There is a strong consensus between HR and Operations. that Employee relations issues dominate any HR-Operations interactions at the Unit.* *There is a need for developing systematic training module within HR function (ex. Supervisory skills training)*	*There is scope for increased HR role in performance evaluation and feedback* *HR is providing support in combining policies and procedures for newly acquired companies. HR is supporting M&A (Mergers and Acquisitions) and that enhances Operations-HR integration*
Researcher's Recommendations	**The HR function must identify tools and techniques for strengthening hiring and interviewing processes.** **HR needs to increase its role in communicating individual employee performance**	**Communication should continue to be an important aspect of HR role in relation to quality.** **There is a need for effective communication across regions for recognizing and sharing organizational success**	**Developing strategies for documenting patterns of grievance/disciplinary issues with regard to employee relations** **HR must continue to provide guidance to Operational managers on disciplinary issues**	**Best case example of HR-Operations integration is evidenced in M&A activities. C4 must continue this best practice for successful implementation of M&A strategy.** **HR must provide in house training for managers to conduct performance reviews.**

Figure 14. Role of HR in LQS Implementation.

One Operations manager observed:

> Now, if each site had their HR facility or their HR manager that handled everything or
> an office manager may be that would be one thing. But, the way they are structured
> with one corporate office and one HR apartment in the entire region, I don't foresee
> them being able to cross over into anything as far as LQS processes concerned.

Demand for Strategic HR. As one Operations manager stated: "With respect to
quality getting the right people in the job is a critical step and HR does a very good job of
helping us find the people." The Director – HR, Canadian Operations remarked: "Maybe
from a planning perspective we should be more involved in ensuring that the right kind of
training is taking place so that everybody does understand the role is whether it is in Job
Seven or whether it is working in our QSI software program or following up on non-
conformance is."

Interestingly only Operations recognized recruitment as a critical important
component of HR role in relation to quality. While HR recognized Operations
expectations of improved timeliness to complete just-in-time recruitments, several
environment related aspects (regional labor markets; local wages, and salaries, nature of
job in the plant/location) prevented HR from effectively contributing to improved
recruiting strategies. While HR chose to address contribution to quality in terms of
improving response time, communication and training delivery; Operations noted HR
involvement towards quality in the areas of recruitment and M&A activities. Functional
perspectives reveal a weak role for HR in relation to quality. Greater role of HR in
quality is possible with additional manpower in the HR function. Operations felt that the

structure of HR function not only limited its role in relation to quality, but also defined

HR priorities and boundaries. Given HR responsibilities for the entire Mid-south and

Canada, employee relation issues primarily took all of HR time. Employee relation

issues were the dominant area of HR-Operations interaction at C4.

Theme 3: Perceptions of HR Functional Effectiveness

Strong emphasis on documentation and implementation observed with Quality

Systems and protocols were not evidenced in HR related policies and procedures. Unlike

Quality Systems, "HR" practices were embedded in the organizational culture and

viewed as a set of "good" employee supporting practices. Well defined quality systems

formally provided structure and support for sustaining a robust quality culture, HR

practices were more informal and very much a part of "standard" practice, the way things

were done. Substantiating other respondents' view of the people supporting culture at C4,

the Head of Materials Management indicated:

> I think it is the culture of the company, I think people care about each other. They care
>
> about whether customers perceive the service they should and also internally that
>
> people are treated as they should be. I think most of us would want our children to
>
> work for this company. I think that says a lot.

Culturally Embedded HR Practices. Several respondents shared the lack of

formal written down policies viewing more as a part of the cultural make up of C4 and

less as an improvement area for HRD system. Yet, people practices are very HR oriented

and supportive of operational strategy. Communication strategy is a major means by

which HR policies and practices are shared and communicated across the company. Another supporting enabler – organizational culture, promoted career development and employment retention in the company. This was viewed as a source of strength for the company. Greater turnover was noted in the Sales force than other departments.

Career Support Systems. Employees typically develop long term relationships with colleagues and peers. During moments of transition, these networks formed an informal support system ensuring little disruption in workflow. A representative statement is provided:

I was very involved in how instead of just pulling me from one department and sticking me into another, we tried to make it as smooth as it could possibly be. That way it was kind of seamless in the Lab and then as I was transferring to the customer service department. So, the rate they were transitioning me into customer service and transitioning me out to the lab wasn't like a big disruption.

One way of sustaining a culture of reliable performance was to promote internally, such that over a period of time employees:

Know our company and, culturally, they know our business. I think the strongest thing about C4 is to promote internally. There is a lot of room for growth. Now it is limited in certain positions because I can tell you the length of stay for our employees is very long. I get to a point in the ladder where I will have to wait for somebody to retire because people do stay in the company for long. But once I get to a certain level I will be waiting for someone to retire which is fine because I can see that most people will mentor you, and you can learn so much from those people. So once they

do retire the next generation steps into those positions I think we're going to be very well prepared.

Challenges for New Hires. Given the length of employee tenure, a particularly challenging aspect for new employees at C4 was dealing with "insularity". Too much company "*insideness*" was not a positive strength.

Only two of the research participants were newcomers from C4. Both shared frustrations dealing with delay and reluctance of employees to change or be open to new ideas. These participants experienced some sort of initial reluctance as newcomers when they proposed ideas in the company. The Director –Operations in Canada observed:

Not everybody in the organization understands or sees that you know and that often creates a situation for opportunities to improve but also educate and help people understand and grow. Of course, at some point, it is frustrating because not everybody necessarily wants to understand that either. It's always tough for everybody because you have to learn the business and the culture of the company. And, I like to think that I have brought some interesting ways and new ways of doing things for the company: new ways of doing things with accountability that were in place before.

An opposing view was shared by the Head of HR, who had more recently joined the company (four year tenure). Although a relative newcomer to the organization, experience with superior level of HR systems from three other companies had provided her with requisite variety of HR practices and systems as well as quality efforts: "You talk about training; they left that previous HR manager with me for five months, probably four-and-a-half months too long. It says of my experience with HR".

One aspect that prevented insularity in C4 was the company's aggressive M&A growth strategy. C4 adopted a high level of initiative with regard to the environment, with opportunities to outgrow and outsell competition. Although the company's long history suggested a strong inclination to follow past precedent, the growth strategy permitted the organization to expand significantly. Grappling with challenges that come along with newly acquired companies, helped C4 solidify and share core values with newer parts of the company. At the same time older, existing parts of the company continued to adapt and accommodate new additions.

The interviews with Operations and HR stakeholders in Canada reveal a wider gap in understanding HR role in relation to quality and in perceptions of "effective" HR performance. For example, HR had introduced an employee engagement survey and thought the process had been highly successful with 80% of employee participation in the survey. Operations on the other hand viewed the exercise as ineffective because HR had delayed and not communicated the survey results in a timely manner. HR and Operations had a different take on performance measures related to HR initiatives. Greater differences in perception of effective HR performance among HR and Operations indicate weak HR-Operations alignment. Even at the level of HR-Operations interactions, it is clear that there is a lack of clarity and consistency in evaluating success of HR related initiatives.

Theme 4: Operations-HR Cross Functional Performance in C4

What makes the case of C4 compelling is the fact that despite HR preoccupation with traditional employee relation issues, strong CFP indicators were evident, greatly enhancing organizational level performance at C4. An important area that supported HR-Operations integration occurred during acquisitions. Several factors contribute to HR-Operations integration at C4. C4 performed a "traditional" role (payroll, policy routines, hiring practices, employee relations). Operational expectations of HR were grounded in pragmatic considerations of HR constraints such as having a small number of HR staff. Several Operational interviews revealed the need for a more strategic role for HR in terms of providing systematic recruiting process, support for newly promoted employees into managerial positions, and other related areas. HR and Operations have not articulated or discussed these differing expectations and perceptions of "effective" performance. Lack of time was cited as a major reason for need based functional collaboration between the two functions. Given these reasons, HR-Operations Cross Functional Performance (CFP) would appear weak. However, this does not appear to the case in C4. Other organizational level factors contributed to a strong HR-Operations CFP.

M&A Strategy Strengthens HR-Operations Integration. Handling acquisitions was unmistakably an important HR competency apparent from HR and Operational interviews. To ensure smooth transition for the newly acquired employees into C4, restructuring positions and roles in the acquired company and communication with newly acquired departments were major activities for HR. During and following the acquisition, both Operations and HR felt the need for a great amount of time and interaction between

departments. For example, the HR manager felt: "before the deal is finalized, each function gets the information relevant to their department. Long, long hours of working with operations were needed to ensure the transition and change processes were handled well. Functional collaboration among HR and Operations reveal a positive experience.

> The whole acquisition went really well. We were there for employee meetings, went over the benefits, had roundtable discussions where we discussed and asked questions. We were open with them. It was not an overnight thing. We let them settle into, gave them an advance notice. We gave them time to work the changes; it wasn't like we came in and changed everything overnight. We kept going by their hiring rules, their rules of conduct and so forth and then be gradually went in and by the first year we changed everything. It was like a nine-month process.

> We had a recent acquisition of a company. So L [HR manager] and I spent a lot of time putting together, going over comparing their policies and procedures with ours and combining benefits and differences of their pay versus ours and how we were going to smooth that playing field. She did get involved in a lot of that and in dealing with the operations people.

HR's communication strategy was an important support system for enabling smooth transition for newly acquired companies into the C4 family. For instance the HR manager reported: "Well I think the whole acquisition [process] went really well. I think the way we communicated with them, I have been to all the locations for their employee meetings, went over the benefits etc." Acquisition helped bring people, technology (IT), products and processes together. A greater degree of functional collaboration was

established as a result of acquisitions. At C4, HR-Operations alignment is strengthened with episodes of mergers and acquisitions.

LQS Supports Greater Functional Engagement. The implementation of LQS in the mid-south region provided greater opportunities for functional collaboration at the facility. LQS initiatives were a source of benefit for all Operations at mid-south. Addressing the effectiveness of Lean initiatives and its impact in the Mid-south region the DOM recalled the experience:

The things that we have come up with as far as major [Lean] ideas on the table is to get those completed because it not only helps us, it helps our region. We are a site facility and a supply hub, for 30 or so areas in the region. It allows us to facilitate more overflows from them, and we have the capability of handling that in a more effective manner. [Lean] already helps us, but it also helps other sites.

Training: A Departmental Responsibility. The strength of C4 quality systems ensured HR activities had long been the responsibility of other functions. For example, Operations had their own training matrix, Sales training, IT training, and other departments training was localized at those departments. Strong ISO systems ensured commitment to training by individual departments. As far as the role of HR was concerned, it was limited to scheduling and coordination of new employee induction program in conjunction with other departments. Training according to the HR manager was "sporadic". Citing lack of resources, the HR manager revealed: "The training is sporadic, for lack of a better word. That is why I have this assistant HR manager, that person I hope can do more on the supervisory training. We had some but not nearly

enough." Much of the training was also available on the company intranet. For example, a set of training modules that customer service representative go through as part of their development and tested was available on the intranet. The customer service representatives had to achieve a certain level on the test and then were able to move on to the next module. There is, as a part of the training program certain criteria that they had to meet before they could advance into the next stage.

Organizational Culture as a Strong Enabler of HR-Operations Alignment. Career paths and opportunities were fully supported at C4. Although opportunities for senior level positions were harder to come by, interviewees attributed strong people oriented practices as a reason for long employee tenures. Organizational culture of C4 served a substitute for the seeming lack of formal systems of fast track career ladders.

People are treated fairly and the opportunities to move up in the company, if they want to do that. They have the opportunity to work in any geography, if they want to. There are lots of opportunities and, going back, we care about people. It makes a big difference.

The company's organic growth and acquisition strategy continued to keep opportunities opened up for those willing to relocate or advance within the company. Culture strengthened implementation of good people related practices. Scholarly literature (Swanson & Holton, 2001) places considerable emphasis on the need establishing career development (CD) systems in addition to training and development (T&D) and organizational development (OD). At C4, CD, T&D and OD systems are enabled by a combining synergy of organizational culture, industry factors (stipulating

Quality systems) and business strategy (M&A). This combining synergy strengthens CFP indicators at the organizational level, contributing to enhanced organizational level performance even though at a functional level HR-Operations CFP is not clearly as strong.

Turnover and Employee Tenure. Sales force and customer service representatives work groups faced turnover with sales force experiencing greatest turnover among all departments. Overall, the company experienced lower levels of turnover. For example:

> Our plant facility here is a stable company. Our production manager has been here 27 years and has never seen a layoff. Even when the economy gets low, and you have all types of economic issues that are going on in the company and worldwide, we don't lay people off. This company has stabilized itself as a major competitor in the distribution chemical market, because we are a stabilized company we don't see a lot of turnover.

The Director of Materials Management suggested turnover as an important metric for Human Resources. He also emphasized the need to understand causes of turnover—and the extent to which it was related to job structure and expectations:

> We are always concerned about that and the reason why people don't stay with us. I think we use HR in that regard, to try and understand people are having a consistent turnover. Is it a particular job? Is the job just not established properly? Is it too much work in that particular job? We don't have a really big issue with that in this department. But, I think some other departments do so. We probably don't use them as

much as we should. I think a lot of that is thinking we are too busy; we probably need
to have those discussions more.

Theme 5: Achieving HR-Firm Performance Linkage in C4

The HR-firm performance linkage is not explicit in the case of C4. Embedded HR and
informal people practices in the organization's ecosystem enabled and established HR
practices-firm performance linkage that makes C4 a unique case study. The resource-
based view of the firm was helpful in isolating the core capabilities of the organization.
The case of C4 highlights the need for understanding systemic issues of the company;
including, recognizing variables, identifying constructs that enable effective HR role
delivery and performance. Figure 15 displays important organizational factors such as
organizational culture; structure; quality systems and industry contexts enable and
support effective HR functioning irrespective of the presence or absence of the so called
"sophisticated" HR practices and systems. High performing "people" practices—when
they are informally embedded or institutionalized explicitly in the culture, traditions and
values of the company—contribute to organizational performance. The strength of HR-
Operations alignment does not depend only on the interactions, alignment and integration
of HR and Operations functions. The strength of the organizational ecosystem is a strong
enabler for HR and Operations CFP even when the extent of functional engagement is
weak at the unit level.

The analysis reveals three important organizational factors that strengthen C4's
ecosystem. Mergers and Acquisitions as a strategy have helped C4 adapt to newer

cultures, organizations, culture and systems, essentially permitting inflow of new ideas,

process of continuous adaptation, (2) organizational culture supported employee tenure,

provided employment stability thereby enabling the accumulation of organizational

memory of quality related incidences and stories which in turn strengthened the

effectiveness of quality systems, documentation and procedures and, (3) quality systems

supported the implementation of Job Seven initiatives, provided a common structure and

communication system across locations and company cultures. The above three factors

helped in establishing strong HR-Operations CFP. Systemically these factors support

strong HR-Operations CFP organically in a manner not observable in other companies.

As observed from C4 interviews, it is clear that CFP-like outcomes were enabled.

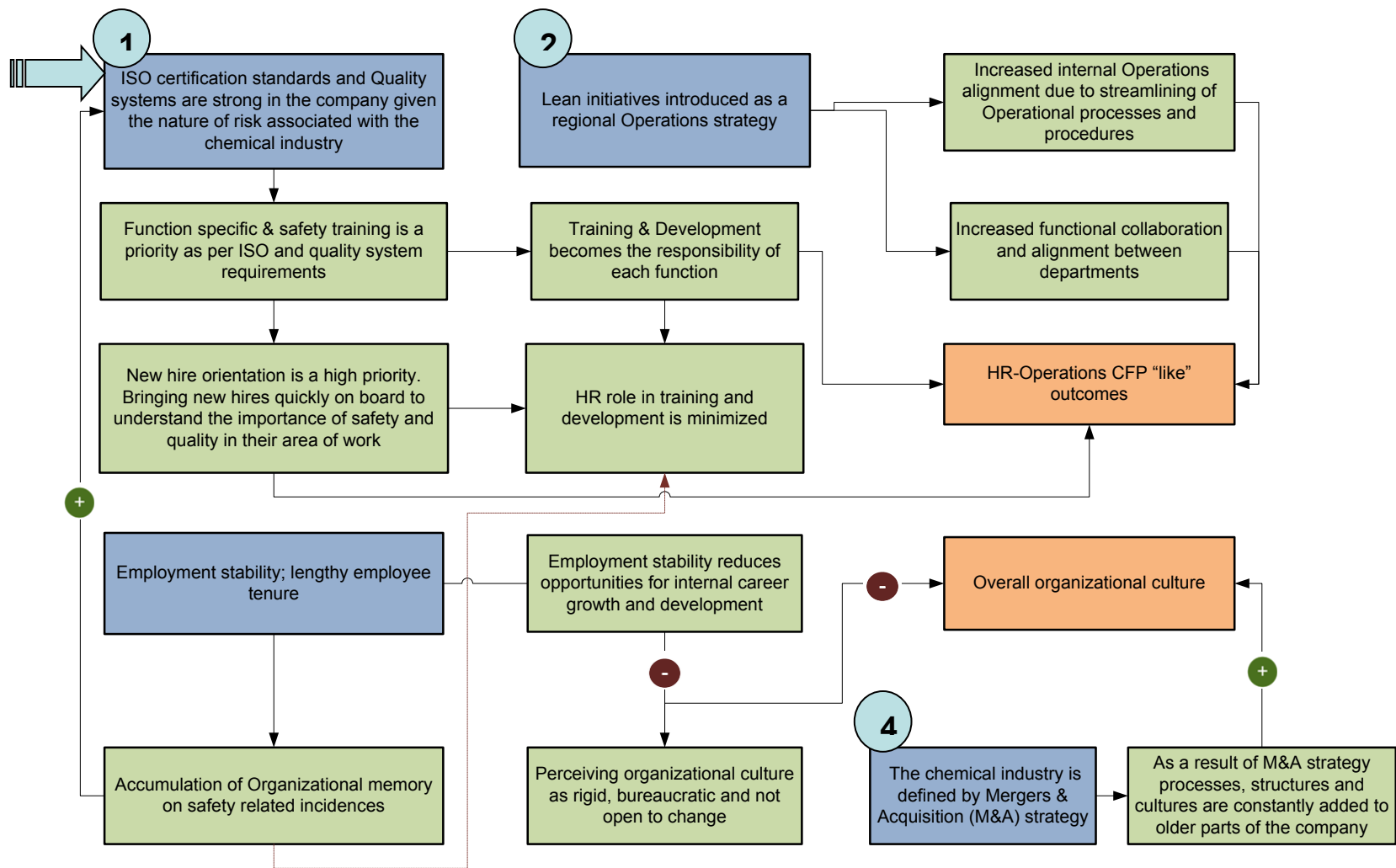Systemic structures and processes in the organization were well aligned and

Figure 15. Effect of Macro and Micro Level Factors on HR Effectiveness.

work towards creating positive synergy for the company thus contributing to firm performance.

Conclusions

Industry and environmental regulations stipulate quality consciousness at C4; organizational and quality culture derived strength from this contextual factor, more than any other case company. LQS was a supplementary addition to the already established quality system in the company. LQS was not a widespread practice; and was implemented only at the mid-south region. Quality systems through Job Seven formed the central core of the company across all operations in North America.

LQS strengthened HR-Operations CFP, even though HR involvement in the implementation was recognized as weak and HR performance a traditional role. New hire orientation and functional training were well established initiatives in accordance to ISO requirements and benefited HR performance. Company history and culture, aggressive M&A industry strategy make C4 a compelling study in advancing notions of how people practices support and strengthen organizational performance. Certain aspects of the company culture and strategy (employee tenure, shared collective organizational memory) ensured strong HR-Operations CFP.

An understaffed HR function, day-to-day occurrences of employee relations issues, processing routine policy, and administrative paper work, overemphasize the routine HR responsibilities at C4. In addition, Operations traditionally viewed HR as a support function with little expectation and demand for strategic HR. HR played a

"traditional" role thus meeting Operations expectations. Congruency between Operational expectations and HR performance lead to perceptions of HR effectiveness. Operations perceived HR performance as effective. This perception of HR effectiveness is interesting, especially if the role and responsibilities of HR were compared across the cases. The HR function performed routine activities. Two factors explain reasons for positive perception of HR performance. One, as explained before, was the close match of operations expectation and actual HR performance. The other factor was strong HR leadership. HR provided a strong presence and leadership in introducing HR interventions such as automated attendance system that greatly improved efficiency in the shop floor. In the recent past, the new HR leader had established a peer level relationship with Accounts and the rest of departments and reported to the Head of Mid-south region. Also, firm Operational beliefs about HR function adding value to the organization also significantly impact perceptions of HR performance effectiveness. Firmer the belief, stronger is the HR-Operations CFP as observed in the cases of C2 and C3. Sometimes, lowered expectations support the perceptions of effective performance, although, this is not a recommended solution!

With C4, it is apparent that when any organizational level strategies (such as M&A) are identified, articulated and pursued as core business strategy, conditional context and opportunities are created for HR-Operations CFP. Both HR and Operations interview data reveal this as the greatest opportunity for enhancing the quality of cross-functional Operations and HR goal alignment in companies. Again, the case of C4 brings attention to the scope and possible impact of LQS on HR-Operations CFP. When

implemented well, LQS creates internal Operations alignment and greater alignment

within direct and support functions.

CHAPTER VIII

CONCLUSIONS

The study examined four firms implementing LQS in the distribution industry. Rich conceptualizations of the interacting dynamisms between organizational strategy implementation and HRM&D function were developed from the study. The qualitative research design was an appropriate fit for a study of this nature. First, unique combinations of organizational, social and human capital in the development of idiosyncratic firm specific resources were elaborated. These elaborations captured interacting dynamics between HR and Operation functions, mirroring organizational life. Within function dynamics also provided rich details. What constituted sustained competitive advantage, and the process by which it was achieved highlight unique ways by which firms utilized internal and external resources. The development of an organizing framework (see figure below) from the qualitative analysis in essence describes 'social complexity', 'causal ambiguity' and 'path-dependent' nature in how firms create value. The interactions between key components in the organizing framework explain how superior performances are produced in some contexts, more than others. The models provide various combinations of how internal and external resources create competitive advantage.

A review of the literature and the experiences of the participants in this study, revealed a great deal about how the HR function contributes towards organizational performance, and the potential for achieving business partner status in organizations. The process of lean and quality strategy (LQS) implementation allowed these

organizations to capitalize on the benefits of functional engagement between Operations and the HR function. From a strategic human resources point of view, the HR function in the model is utilized (by the organization) and itself utilizes a variety of approaches in deploying human resource capital. There is a lot that managers can do to consciously invest in HR practices and systems. Companies (C3 and C2) that were successfully implementing LQS were also successful in utilizing human capital at the level of the firm or unit. The HR function (including practices, policies and systems) significantly involved in strategy implementation, thus, positively effecting organizational performance.

Resource-based View of the Firm

The connection between RBV on strategy and HRM has been established by the earlier works of Koch and McGrath (1996). Although the study used the resource-based theory as the theoretical foundation of the study, external environment factors were also considered in understanding competitive advantage creation as suggested by Barney (2001) and Boxall (1998). For example, industry and environment factors significantly determined organizational effectiveness at the macro level especially for C1 and C3. At the micro level, the strength of CFP between Operations and HR established organizationally relevant outcomes and priorities for the HR function. CFP was useful in evaluating the functional capacity and capabilities of the HR function as an internal service provider. Connecting the HR function to organizationally relevant outcomes that were also considered important by internal customers was achieved through CFP. A

dynamic linkage based on the integrative relationship (Teo, 2002) between HR and Operations was evident in key organizational events such as M&A (C4) and development of strategic HR interventions at C2.

The potential sources of sustained competitive advantage as illustrated in the case models of C1, C2, C3 and C4 reveal heterogeneity of firm resources and capabilities. To realize the potential, Barney (1991) suggested characterizing firm resources on the basis of four attributes: (a) the resources must be valuable, (b) rare, (c) imperfectly imitable, and (d) non-substitutable. For example, unique historical conditions in the case of C3 due to distributor ties with Toyota and as a result, exposure to LQS, allowed it to acquire and exploit LQS resources. In the instance of C2, introduction of the new management team was an important determinant of the company's long term performance. The unique historical conditions influenced past choices of the firm's strategy and also put bounds around future opportunities available to the firms. For instance, geographic proximity towards rail transportation allowed for greater control of the firm resources. In addition, the precise nature and mix of external and internal resources that provide competitive advantage are unique to each firm. For example, C4 leveraged organizational resources such as culture and reporting towards building sustained competitive advantage over time (Barney, 1991), even though the HR role and involvement in organizational strategy (M&A, Quality, LQS) implementation was limited. Table 6 displays resource based capabilities that strengthen and sustain HR-firm performance linkage across the case firms.

Resource Based Capabilities	C1 Weak HR-Firm performance linkage	C2 Strong HR-Firm performance linkage	C3 Strong HR-Firm performance linkage	C4 Strong HR-Firm performance linkage
RARE RESOURCES (Organizational assets not shared by a majority of competitors)	Context dependent (environment and industry) factors that contribute to organizational performance	Strategic value flow from strong CFP outcomes under the direction of HRM&D function	Strategic and Operational value flow from strong CFP outcomes under the direction of Operations	Constant realignment of new and old parts of the organization through the effective implementation of M&A strategy
VALUABLE RESOURCES (Resources that improve efficiency and effectiveness of strategy implementation)	Selection and choice of LQS due to key customer demand	Acquisition of senior executive leadership team SHRD initiatives Strategizing HRD and HRM as separate functions Quality as a company strategy	Acquisition of LQS talent Reduction of turnover among new recruits	Quality as a company strategy Job Seven and supporting technology systems
NON-SUBSTITUTABLE RESOURCES (No equivalent resources are available to implement organizational strategies)	-	HRM&D function as a reputational asset Excellence in Operational performance HR and Operations beliefs about positive HR effect on firm performance	Senior leadership beliefs and commitment to LQS implementation Operations beliefs about the positive role of HR and effect on firm performance	Reputational effectiveness of the HR function. Culturally embedded informal HR practices High retention levels among exempt and non exempt employees
IMPERFECTLY IMITABLE RESOURCES (Causally ambiguous and socially complex resources arising out of unique historical conditions)	-	Execution of leadership as a core organizational strategy Managing within functional conflict	Execution of LQS as the core organizational strategy Developing a LQS learning and performance culture	Organizational culture Social construction of effective HR performance

ACHIEVING HR-FIRM PERFORMANCE LINKAGE THROUGH ORGANIZATIONAL STRATEGY IMPLEMENTATION

According to Porter (1990), the role of the HRM&D function will be to assist managers in isolating potential resource based advantages for their organizations. Although the HR function is a valuable resource, its practices and systems are common firm resources. If firms are to improve HR functional performance, they must exploit opportunities or neutralize internal organizational threats for the function. While HR practices and systems may be duplicated by competitors, higher-order CFP capabilities (alignment and integration) developed through socially complex, causally ambiguous network of external and internal factors in diverse ways are unique, rare, non-substitutable and imperfectly imitable. Cross-functional performance exploits opportunities between functions to generate sustained competitive advantage. Implementing LQS enables the exploitation of informal, socially complex cross functional opportunities in the organization. As CFP improves and evolves between Operations and the HRM&D function, they generate strategic insights that most current and potential competitors find hard to imitate.

Similar to Doorewaard and Meihuizen's (2000) study, notions of organizational context, and organizational culture as important determinants of HR functional effectiveness were noted in the study. The CFP model incorporates key elements of the RBV approach and allows for a better understanding of how HR-firm performance is actually achieved in organizations. The model provides a better understanding of HR function, practices and systems embedded as they are, in the organizational context. Most importantly, the notion of path dependency emphasized by the RBV approach has been conclusively established through the development of the CFP model. Managing

human resources is much more than a set of best HR practices and systems. The relevance of the external environment (Way, 2002), the unique combination of external, internal factors and HR practices (Paauwe, 2004; Wood, 1999) emerged from the study. RBV as the theoretical framework integrated conceptual and empirical knowledge and in doing so builds upon the theoretical foundations of Bowen and Ostroff, (2004), Wright et al. (1994), and Barney (1991). The strength of cross functional performance emphasizes the distinction and necessity of integrating human process advantage (human capital pool) and organizational process advantage (LQS) so that the accrued benefits such as learning and cooperation established over time contribute towards organizational performance (Marchington et al. 2003).

Effective Strategy Implementation

The findings related to LQS implementation were organized around facilitating and/or hindering factors. From the analysis, it was apparent that the initial impact of LQS had different consequences in each firm. The organizing framework suggests that the effects of industry, leadership and organizational culture strongly affect the role and involvement of HR function in organizational strategy implementation. Koch and McGrath (1996) offer two interacting dynamics for understanding why HRM makes a potential contribution to firm performance. The first is that the ways in which organizations use and combine their resources are fundamentally heterogeneous (p.336). The four organizations differed in the ways LQS was created, utilized and sustained as a strategic asset. For example, three of the case firms (C2, C3 and C4) reported greater

success in organizational strategy implementation (LQS in the case of C2 and C3; M&A in case of C4). In the case of C4, the nature of the industry (chemical) had a powerful effect on mergers and acquisition as a central strategy. Further, organizations that were able to fully implement LQS were also able to maximize human capital development and experience superior performance as evidenced in C3 and to a lesser extent C2. The second interacting dynamic highlights the imperfectly imitable aspect proposed by resource-based theory: routines and path dependence. In the context of LQS implementation, new routines were established to improve operational and organizational performance. New processes were established in all the four companies as a result of which organizational and human capital resources were reassigned and combined to create unique sets of outputs. Those organizations that were able to sustain new procedural routines (for example: C2 and C3), were also more successful in linking strategic objectives with the HR function and, improving HR policies and practices. The quality of hiring decisions was significantly improved to achieve the strategic objectives of the company in both the firms. Simultaneously, talent acquisition, management and retention systems were implemented to strengthen the firm's competitive position. As a result, the HR function role and involvement in strategy implementation was enhanced. In the case of C2, the HR function was perceived as a valuable and strategic asset.

LQS Implementation. The interplay among macro conditions influenced the choice, selection and scope of LQS implementation. These factors set contextual conditions favorable to selection and choice of LQS or M&A as the appropriate strategy at the level of the organization. As a result, certain aspects of processes and procedures

were more emphasized than others (e.g. safety, quality, M&A in chemical distribution).

External drivers such as customer demand for LQS were other important considerations

in the selection and choice of LQS as a key strategy. Marchington et al., (2003) used a

modified version of RBV to consider forces that promoted similarities rather than unique

resource creation for within industry firms. Thus, external forces such as customer

demands for LQS and competitors lead to selection and choice of LQS as a formal

organizational strategy. Another force – the pursuit of industry leadership was a major

objective in the choice of LQS in all the four case firms.

Lean and quality initiatives, regardless of the extent of their perceived success,

promote and necessitate some level of functional collaboration. For overall

organizational improvement, it is imperative to have some degree of functional

engagement between functions. Factors that affect (advance, support and/or hinder) LQS

implementation play a part in defining the extent of HR involvement in LQS. For

example, leadership (C2 and C3) and organization culture (C3 and C4) enhanced the

quality, scope and impact of LQS and M&A implementation. In contrast, organizational

culture hindered the execution of strategy implementation in C1 and C2. C1 found it

hard to maintain continuity of LQS knowledge especially among new hires given high

turnover rates within that employee group. Another facilitating condition was internal

alignment of LQS with organizational values. The "Toyota Way" exemplifies this, in

that the culture and embedded values align and integrate well with LQS values. And, in

turn, this afforded greater integration of social mechanisms (HR leadership) with

strategy, horizontal and vertical integration of the organizational structure leading to organizational performance.

In the case of the C2 organization, although organizational culture and values were strongly contested with two groups (acquired and incumbent leaders), there were opportunities for greater cross-functional collaboration within the newly acquired leadership cohort. Thus, corporate level cross-functional engagement promised greater degree of interactions, alignment and integration more specifically on strategic issues. The enactment of leadership was found to be an important factor ensuring strength of cross functional engagement between different functions. This was particularly evident in C2 and C3.

The top management commitment reported in C3, was a contributing factor in achieving full LQS implementation. In contrast, top management commitment at C1 was restricted to the leadership in the Energy Division. Gaining buy-in from other functions including HR function was not successful, and slowed the pace of strategy implementation. The role of LQS as both a business and operational strategy provided several advantages. For example, through LQS, the organizations were commonly focused on improving quality standards, operational performance, and customer satisfaction and employee engagement.

The degree of top management involvement defined the extent of LQS implementation in the organizations. This finding is in agreement with the literature. For example, in C3, the high level of top management commitment ensured full implementation of LQS initiatives. The communication of the initiatives to even hourly

associates, resource allocation in HR for revising and restructuring hiring, rewards and recognition processes also indicate a very high level of top management commitment. As reported in the literature, LQS was a top down initiative. The cohesive strategy developed in C3 made LQS and organizational performance linkage explicit and strongly evident. The hindering factors: lack of CEO commitment and communication reported in the case of C1 is also in agreement with the literature. LQS was not even a familiar concept even among senior firm executives. When LQS initiatives involved HR and other support functions either formally or informally, there were increased opportunities for achieving LQS objectives. This was clearly evident in the case of C3. In C1, the HR function was not familiar with corporate LQS initiatives and, due to lack of CEO commitment, was not supportive of the initiatives as well.

The opposite case was observed in C3 where CEO commitment and communication of LQS was strategized for maximum outreach and benefits. In addition, employees discerned a lack of consensus, and lack of clarity of purpose between different functions. As a result, the importance of LQS was unclear to the rest of the organization. The lack of shared perceptions between Operations and HR over rewards and recognition for LQS efforts was also a hindering factor. The adoption of LQS as a means of gaining *"customer legitimation or worth"* (Mueller, 1996) successfully helped in overriding employee and managerial reluctance to the introduction of LQS.

Customer demand must drive and stipulate the extent of LQS (limited or full) implementation at units, divisions or across the entire company. Two clear typologies of LQS implementation are observed across the cases. I labeled C1, C2 and C3 as full LQS

implementers. In these cases, LQS served as the organizational strategy although LQS at C1 was restricted in scope. In the case of C4 (Canada and Mid-south), LQS served as the operational strategy, with limited implementation impact. The differences between the two typologies will be described in the next section.

Full and Partial LQS Implementation. Full implementation of LQS requires CEO/unit head commitment. In addition, gaining Operations leadership (all departments) buy-in is equally important. C3 and C4 (Mid-south) were able to accomplish buy-in at the senior executive level. These firms also reported best case examples of full LQS implementation, although C4 discontinued LQS implementation during the acquisition of a local company. Both firms showed evidence of senior executive expertise (C3) and familiarity (C4) in the use of LQS terminologies. In C3, LQS had permeated across all employee groups including hourly associates.

Limited LQS implementers had challenges gaining CEO buy-in. This was evident from C1 interviews. The Operations leadership gained buy-in for LQS implementation only within the Energy division. As a result, company executives belonging to Operations in other divisions were unfamiliar with LQS language, except for the lone implementing division. This in turn made the implementation of changes to processes and procedure difficult. Gaining support from all divisions and employee groups was the biggest challenge. The LQS implementers at C1's Energy Division had therefore, repeated negotiations with other functions for gaining support and involvement in LQS in addition to actual implementation. Although buy-in from the CEO and other support functions (such as, accounts, HRM&D, and IT) was imperative

for Operations at C1, organization-wide commitment was not achieved. Thus, LQS became the sole responsibility of one division and the quality function, thus limiting the scope and extent of implementation. In the case of C2, LQS historically, was the responsibility of the quality department. With new leadership in Operations, the responsibility for operational improvements shifted from Quality to Operations. The overall responsibility remained within the Operations function (including quality and operations). In the case of C4 (Canada), the quality department anchored LQS implementation initiatives. In C2 and C4, LQS primarily served as an operational strategy.

HRM&D Function

Organizational contingencies influenced HR policies and practices. When HR practices were tied closely or tightly to competitive strategy, the effect significantly contributed to performance at the firm level. Training and development interventions, when paired with interpersonal communication or team building, yield better results (Holton & Yamkovenko, 2008). In a similar fashion, LQS related training and communication were linked to HR systems and practices, as in the case of C2, C3 and C4 (mid-south region), LQS implementation yielded better results in terms of improved internal processes, development and sustenance of employee competencies. The willingness to *proactively* (Koch & McGrath, 1999) invest in HRM&D policies and practices in hiring, reducing turnover, training, team building, employee engagement practices contributed to perceptions of improved HR performance at the level of the firm in C2 and C3. In

contrast, in C1 and C4, the HR function was in a reactive mode and tended to perceive as less performance oriented. These conclusions find support in the literature.

When HR enacted a support function role (versus being part of a system-wide LQS culture) as in C1, C3 and C4; the extent of involvement with LQS was limited to and directed by Operations demands. A full development and maximization of HR-Operations engagement leading to alignment and integration like outcomes was possible when a reciprocal and interdependent relationship was established between HR and Operations function. Peer level reporting relationship between HR and Operations at the corporate level and unit level increased opportunities for maximizing HR-Operations alignment and integration. This was evident even when HR was called upon to simultaneously manage strategic and administrative HR. There was stronger evidence of higher order CFP outcomes (alignment and integration) documented in the case of C4 and C2. At the level of the unit, peer level reporting relationships between HR and Operations leadership (C3, C4), enhanced all CFP outcomes (interactions, alignment and integration).

Effective enactment of strategic human resource (SHR) in organizations was best evidenced in C2. The nature of the electronics industry emphasized premium quality and six sigma product expectations as routine industry standards. The establishment of SHR practices and investment in employee development (core competency building) in the case of C2 was an outcome of the company's business needs. Secondly, the VP of HR also had a previous background in sales and marketing in the electronics industry. The additional functional experience helped HRM&D achieve business partner status in the

company. Knowledge and experience in other functions is not only desirable but a requirement for HRM&D to obtain a seat at the executive table.

Achieving Business Partner Status. Effectively balancing transactional and strategic demands were crucial for effective HR performance and achieving business partner status. Except in C2, none of the other HR leaders had organizational support mechanisms to position HR as a true business partner. In addition, operational leaders in other case companies did not perceive the HR role to be anything but a support function. The possibility of HR being a true business partner simply did not exist. Perceptions of HR functional performance and value differed among Operations and HR executives across all cases. For example, the lack of awareness and knowledge of HRM&D level organizational metrics at senior leadership levels was common in all cases. I had assumed, at least at that level, there would be a greater need for knowledge about metrics across all functions.

Becker and Huselid (2006) suggest lack of knowledge, managerial competence and inability to execute as the reasons for wide variances in HR functional service capacity and delivery. Haggerty and Wright (2009) recommend examining the principles and processes of the organization through which HRM&D is enacted. It was clearly evident from the cases that HR practices and systems, in terms of content alone, do not significantly affect organizational performance. Rather, the execution of the practices and systems defined HR effectiveness and capacity to deliver quality services within the organization.

Leadership

Figure 16 below underscores the impact of leadership across the organizational value chain. The quality of organizational strategy implementation was found to be dependent on leadership, skills, knowledge and abilities. Effective LQS implementation as in the case of C3 was largely due to the strong leadership at the Unit. Strong leadership support for cross functional performance between Operations and HR led to improved HR practices, policies and systems and effect on organizational performance. The outcome of these initiatives resulted in C3 having an effective HR function with strong linkage to organizational performance.

Leadership emerged as the most influencing component in the organizing framework. Study findings indicate the strength of leadership impacts at the level of the organization. Strong leadership enabled support for HR related initiatives, stipulated adoption of ROI approach in measuring metrics, and acquiring capable HR professionals in the case of C3 and C2. Strong leadership contexts coordinated and integrated data for decision making from different functions and, emphasized long-term focus on strategic level organizational performance issues. This finding is well supported in the LQS implementation literature. Strategic choices linking LQS objectives and HR function was a common finding in the two companies (C2 and C3).

Executive leadership was a strong enabler in the close strategy-HR connection.

A formalized strategy for leadership acquisition, retention and succession process was a key factor in creating explicit LQS-HRM&D linkage at C3 and C2. These findings support the findings of Boxall (1996) and Boxall and Steeneveld (1999). Unlike Boxall

and Steeneveld (1999), the findings from the study extend the notion that effective execution of HRM&D strategy involves utilizing contextual and cross functional resource capabilities, it is not be the sole responsibility of the HR function.

CEO/Unit Level Leadership. The extent of involvement by CEOs and unit level leaders in participating organizations was important factor. Senior executive and managerial responsibility for LQS metrics, implementation roll out plan and other key elements was a significant factor facilitating LQS. Higher order CFP (HRM&D-Operations integration) was evident in C3. For example, organizational culture related issues had as much priority as operational performance related issues.

HRM&D Leadership. The administrative aspects of HR function were handled similarly in the organizations. One striking likeness was that all HRM&D heads had established a direct reporting relationship with the company or unit CEO. They also had a peer level relationship with other functional heads as members of the executive team.

Except in the case of C2, other heads of HRM&D did not have background and experience, in other functions. Their understanding of the organization's business processes and procedures were in many ways limited. For example, their knowledge of operational level performance metrics was limited. This affected HR leadership role and involvement in organizational strategy with the exception of C2. The HR function experienced difficulty in establishing a reciprocal and interdependent relationship (Teo, 2002) with Operations. When it came to gaining buy-in for strategic HR initiatives such as management training, it was difficult.
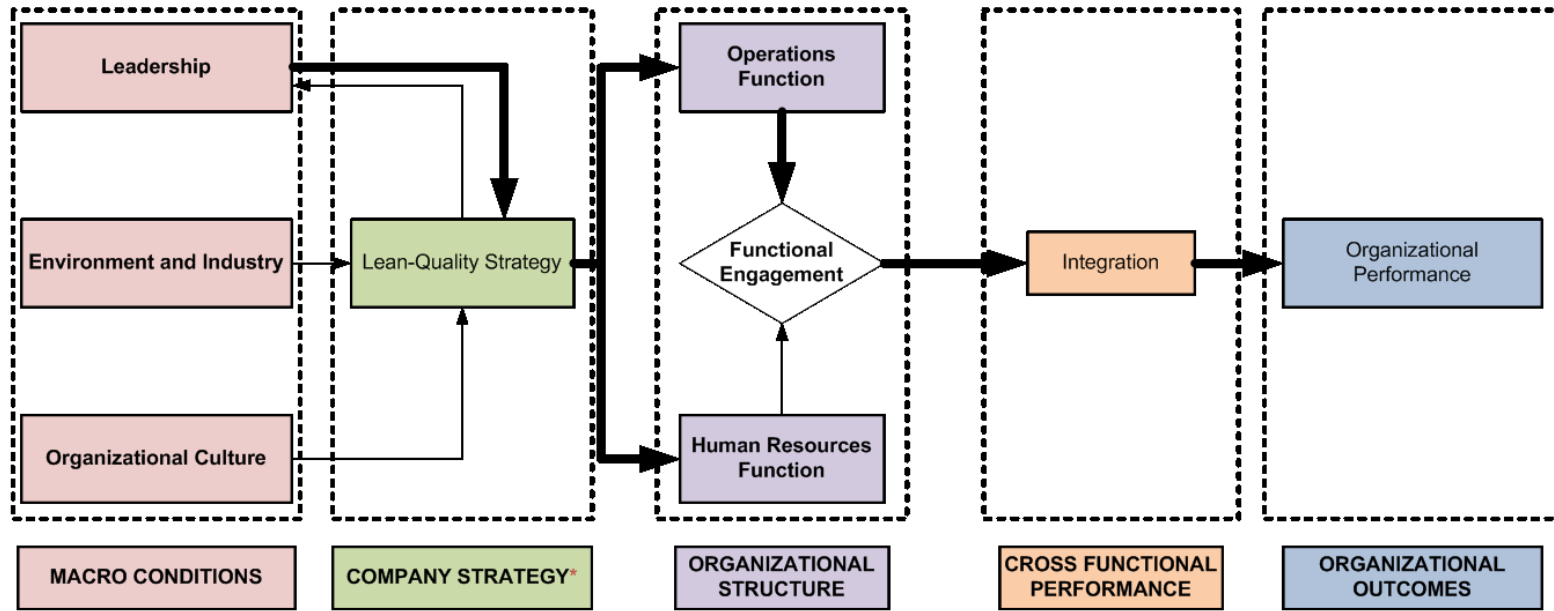
| MACRO CONDITIONS | COMPANY STRATEGY* | ORGANIZATIONAL STRUCTURE | CROSS FUNCTIONAL PERFORMANCE | ORGANIZATIONAL OUTCOMES |

Figure 16. Effect of Leadership on Strategy Implementation and Performance.

Operations Leadership. Across the participating organizations, all operational leaders had a direct reporting relationship with the CEO. In the case of units (C3 and C4), these leaders also acted as the Unit CEO's. The degree of involvement with HR-Operations alignment initiatives; understanding of the interconnectedness of HRM&D metrics with division/function metrics and support HR-Operations integration (turnover and retention metrics) was limited in C1 and C4. In the case of C2, there was effective demonstration of cross functional collaboration between Operations and HR. In the case of C3, peer level relationship with other functional heads and knowledge of other functional performance metrics was evident from the emphasis on the LQS approach. Again, strong HR and Operations leadership was pivotal in ensuring the extent of engagement was not limited to just-in-time interactions between HR and other functions.

People related practices require the close attention of company leadership. The study emphasizes the role of company leadership including those charged with HR to ensure the practices, policies and systems development of people take top priority and are closely tied to competitive strategy. Enacting HRM&D practices and policies in organizations is the responsibility of both Operations and HR function. From a strategic HRM&D perspective, strong leadership affected the execution of HR policy and practices. The quality of leadership determined superior bundling of mutually reinforcing work systems and human resource practices, generating unique organizational advantage (Wright et al., 1994; Boxall & Steeneveld, 1999).

Operations-HR Cross Functional Performance

The choice and selection of LQS involves streamlining, restructuring and strengthening complex work systems. Strategic perspective taking by executive leaders offers opportunities to leverage unique capability building in organizations. In this context, functional engagement between Operations and HRM&D function provides mechanisms through which resources and capabilities are utilized uniquely, efficiently and effectively to generate competitive advantage. The level of engagement caused differences in the manner in which organizational resources and capabilities are leveraged and will be described in the next section.

Significant cross functional engagement between HR and Operations (interactions, alignment and integration) is described by the cross functional performance construct. The emergence of cross functional performance (CFP) as a critical component in the framework has not been well supported in the literature with the exception of Boxall (1996). Boxall (1996) stressed on cross-departmental co-operation as one of the difficult-to-imitate processes. He explored the notion of cross-departmental co-operation as a subset of the HR function, he did not lay emphasis on the inclusion of other functions in the co-creation of this highly evolved process. One explanation for the strong emergence of CFP could also be the importance it holds in LQS implementation. As noted earlier (Mueller, 1996), cross functional performance between HR and Operations is a key processual factor underpinning the HRM&D (as a concept) contribution in the firm. Processual performance is also central to LQS success. The creation of CFP offers a unique approach in the evaluation and assessment and

involvement of key stakeholders in the organization, not limited HR and Operations functions, as described in the study. Effective CFP creates an organizational capability that is unique, valuable, imperfectly imitable and non-substitutable, thus offering sustained competitive advantage over other competitors. Leadership, environment, industry and organizational culture were factors that also impacted the level of CFP in the company. Thus, the strength of CFP is not solely dependent on the level of engagement and commitment between Operations and HR function alone.

CFP describes the diverse ways in which human resources utilization and allocation are accomplished in organizations. CFP allows us to draw inferences about the role and involvement of the HR function and the need to align with strategic organizational issues. Every organization relies on some form of CFP, for the achievement of short term and long term strategic planning initiatives. CFP can therefore, be a potential source of competitive advantage. CFP is a complex, socially constructed resource. Different CFP configurations within a single organization are possible. At the firm level, CFP can be developed and deployed strategically. The logic of CFP for improved performance effectiveness of the HR function is as follows: HR function should base its decisions of service delivery on the degree to which its initiatives contribute to the core capabilities of the firm. Instead of focusing on cost/benefit transactions that the HR function is typically associated with, the RBV approach emphasizes a shift towards examining HR service capacity and delivery and the function's contribution relative to Operation functions' value creation.

The Operations function also needed to internalize the value of the HR function and contribution to improved organizational performance. The Operations function, across all cases, needed to improve their knowledge of HRM&D level performance metrics. Inquiry into their beliefs and assumptions about the HRM&D value to organization and actions that derived from these beliefs was another area of exploration for Operations.

HRM&D-Operations Alignment and Integration. Firm beliefs about HRM&D value and contribution to the organization significantly impacted the strength of HRM&D-Operations alignment. Firmer the belief, the stronger was the HRM&D-Operations alignment (C2 and C3). LQS demands organizational development interventions, brings attention to systemic issues, essentially highlighting the need for HRM&D-Operations integration. For example, organizational culture issues caused high turnover in the case of C1. High turnover implies hidden costs for the organization. The high turnover also negatively hampered LQS implementation progress. The assessment and development of interventions such as turnover reduction would greatly benefit from HRM&D-Operations alignment and integration.

Culture, strategy, structure, leadership and, context affect HRM&D performance in organizations. Therefore, the role of HRM&D function and performance cannot be evaluated in isolation. Organizational level HRM&D metrics require assessing the involvement of other functions in defining what and how the measures were executed. Turnover, absenteeism, and retention related metrics are not the sole responsibility of

any function, let alone HR. Data analysis of case organizations suggest that these metrics were often relegated exclusively to the HR function.

Creating strong HR-Operations alignment and integration situations can impact organizational performance, operational strategy implementation and reduce important inhibiting elements of organizational culture such as turnover. When CFP was demanded by Operations leadership, potentially two types of CFP paths were created. First, a one way linkage between Operations and HR was created where Operations took a more active role in selecting intervention areas and performance expectations in the HR role (C3). The second and stronger CFP trajectory was created when a "reciprocal and interdependent relationship" (Teo, 2002) was established between HR and Operations (C2, C4 specifically during M&A). Through the achievement of HR-Operations alignment and integration, stronger HR-Firm performance outcomes were determined.

It is not possible to isolate the HRM&D contribution to firm performance without considering, and evaluating the specifics in developing key HRM&D interventions, and their execution. Developing ROI approach in the assessment of HRM&D initiatives and interventions are difficult for this reason. Firms also followed certain CFP trajectories, identified and utilized resources to achieve competitive advantage. In a traditional capacity, the role, performance and assessment of HRM&D function as a stand-alone support function limits the influence, status and most importantly the quality of service delivery at the level of the organization. In these circumstances, HR can at best be viewed as an effective support function and at worst, as a cost center. Operations-HR alignment and integration are key paths towards firm level

competence and capability development. In the next section, the application of resource-based view of the firm in establishing the HR-firm performance linkage is presented. The theoretical framework brings attention on the role of external environment, internal contexts, and socially complex network of relationships. Difficult-to-imitate competencies are thus created. The firm specific resources and capabilities were utilized to achieve the HRM&D-Firm performance linkage.

Organizational Performance

Organizational performance is a result of interactions, alignment and integration of interdependent functions, processes, work systems and HRM&D policies and practices. The combination of functional capabilities, and not just their mere possession as suggested by Fernandez et al, and cited by Deniz-Deniz (2003) constitutes resource-based capability. In all the case firms, the functional capabilities of the HRM&D function were excellent especially in terms of HR talent. HR leadership was strong and performed to the best of its ability. My observations of HR members across the four companies did not show any major difference in terms of knowledge, skills and abilities. However, perceptions of HR functional performance varied across the four case organizations. For example, in C1, the Operations function was critical of HR role in employee engagement initiatives as the results from the study had been disseminated to one division and not to the rest of the organization. The HR function was held responsible and blamed for organizational politics that had prevented from the dissemination of the findings. The tradeoffs between managing organizational

expectations, providing adequate peer functional support to Operations function and individual employee demands was a challenge. As reported in the earlier study by Teo (2002), the level of conflict between HR and Operations continued to impact the status and influence of the HR function. At C1, the level of conflict resulted in weak alignment and as a result, Operations' perceived weak linkages in the HR contribution to firm performance. The reputational effectiveness of the HR function was affected by Operations' perceptions (Teo, 2002). This was in contrast to the reputational effectiveness of HR at C2, C3 and C4 (mid-south region).

I argue that achieving business partner status as implied by Ulrich (1997) is not a viable option for the HR function in the organization. His recommendation that all the four roles be included over emphasizes the HR status and influence without considering organizational realities. The role of HR function requires maintaining a high level of organizational performance. Being a strong employee advocate at the same time could be a potential source of tension (Peccei, 2004). The case of C1 highlights questions of trade-offs that challenge HR practitioners in organizations. HR practitioners are caught between service demands at the organizational level and individual employee level. Strategic and administrative responsibilities were combined into the HR function. At times of pressing organizational demands, administrative responsibilities took precedence over long term strategic responsibilities. Therefore, separating strategic and administrative HR responsibilities as in the case of C2, C3 and C4, supported strong enactment of the management and development aspects of the HRM&D function. Effectiveness of HR role at 3 levels: strategic level (human resource planning etc),

functional level (recruitment, selection, training and development) and administrative (processing paperwork, sick leave etc) can be achieved through functional engagement with Operations function. CFP generates higher order organizational competencies whose strategic value is realizable to the extent they are linked to the organizational strategy. My model offers a re-conceptualization of the HRM&D function, examining functional service capacity and suggestions for improving the quality of service delivery in the organization. In doing so, the model highlights mutually reinforcing interactions between external environment, leadership, culture, strategy and structure.

Implications for HRM&D Theory, Research and Practice

The study established the importance of human resource issues in the successful implementation of LQS, improved operational performance and organizational performance. Different firms acquire and utilize different capabilities for achieving their organizational objectives. In each of the case studies, it was apparent that when organizational capital (structure, strategy, processes) was tightly aligned to social capital (leadership, cross functional exchanges, internal/external relationships and networks) and human capital (skills, training and development opportunities), establishing the HR-firm performance linkage was easy.

The study has important implications for HRM&D theory, research and practice. Although RBV has been adopted as a theoretical framework in strategy and the management literature, there have been very few scholarly contributions in HRM and HRD. In these two fields, the theoretical contributions have far outweighed empirical

research using the RBV as the central framework. The empirical studies have also leaned towards more quantitative approaches in making their case. By utilizing a qualitative methodology, this study isolates resource based advantages that strengthen the HR-firm performance linkage. The study helped in identifying key sources of organizational and functional capabilities that the case firms leveraged for the successful implementation of LQS. Factors that facilitate and/or hinder the execution of LQS, also affect the performance patterns of Operations and HR. In other words, these factors affect the firms' system, structure and social capital, albeit in different ways. Managerial capabilities that leverage organizational core capabilities in successfully implementing LQS were also critical in the creation of a high degree of cross functional performance, in turn contributing to overall organizational performance. More theory in the area of strategy execution and implications for functional and organizational performance is needed, including Operations, HR and other functions.

In addition, the methodology has been particularly appropriate in addressing the question: how do organizations achieve the HR-firm performance linkage. This leads us to examine the implications the study has in the area of research. The HR-firm performance linkage has seen extensive research from HRM scholars with a strong methodological bias towards quantitative designs. The study offers micro level perspectives from the day to day interactions of senior executives, in understanding the complex networks of relationships that hinder and or support strategy implementation and, effect of HR function on organizational performance. Aligning organizational

systems, structure and processes with HRM&D initiatives amplified and extended the role, status and influence of the HR function (Wright et al. 2001) in the case firms. The development of a generic case model, with similar components across the four cases, highlights the path dependence nature of value creation. The identification of five key components also lends itself to further investigation using quantitative methods. More research in how cross functional performance enables capability building within the organization is needed across all functions, not just Operations and HR.

The implications for practice are as follows. HR executives need to market and position their function for greater involvement in the strategic business priorities of the organization. Gaining Operations support and buy-in for talent acquisition, development and retention strategies cannot be the sole responsibility of the HR function in organizations. When Operations and HR executives shared similar expectations on the HRM&D role and performance, the function was perceived to be more effective (C2 and C4). Integrating external and internal customer service strategies is useful in bridging organizational and operational strategies with HR initiatives. For example, employee satisfaction and customer satisfaction data were collected regularly in all the four case companies. Integration of both data sets would offer greater synergy in improving external and internal service delivery. Operations executives also need to internalize the value of the HR function as a source of value creation.

Line managers must also co-own turnover and retention metrics with the HR function. The role of the HR function in this aspect would be to regularly update employee related data. HR also must connect with Operation function outcomes to

achieve business partner status. For example, turnover as a performance metric in terms of loss of LQS knowledge and experience would enable greater the HR role and involvement in LQS issues. HR function must continue to link its strategy and priorities with Operations. Otherwise SHRM&D initiatives may move out the hands of HR managers into Operations (Becker & Huselid, 2009). They point out that while "HR executives will have a role to play, they may not be taking the lead" (p.374). In order to take the lead and achieve business partner status, HRM&D function must adopt a systems orientation that closely links HRM&D goals with those of Operations and strategic goals of the organization.

Summary

This dissertation research examines issues relating to HR involvement in Lean and Quality strategy (LQS) implementation with a focus on Operations and HR engagement. The study provides an assessment of the extent of engagement; presents examples of successful HR and Operations cross functional engagement practices; and develops a Cross Functional Performance index to improve returns on HR service delivery in organizations. The research addressed the following challenges faced by large organizations: a) HR and Operations operate in functional silos, undermining organizational effectiveness; b) lack of ownership for key organizational level metrics such as turnover and improving employee engagement outcomes specifically - *high annualized turnover within different job groups (sales reps, new hires etc.) and real time employee related data collected but not utilized to inform senior executive decision*

making and, c) strategic value adding opportunities passed up by HR function due to lack of expertise and staffing.

The case study research design developed cross-company analysis of 4 individual case studies. High performing distribution companies implementing Lean and Quality strategy (LQS) were selected. Multiple sources of evidence reveal a generic and replicable process for assessing cross functional engagement practices involving HR and Operations. Participant organizations reported high Cross Functional Performance in certain HR-Operations initiatives although the quality of reporting varied greatly. Highly engaged HR-Operations initiatives display strong evidences of integrated value creation, contributing towards bottom line performance.

1. Strong Operations-HR cross functional engagement plays a key role in LQS implementation success.

   a. Joint ownership of key metrics: turnover, internal and external customer satisfaction scores

   b. Moving away from 'China' pricing with regard to HR costs

2. Increased transparency in communicating functional priorities significantly affects quality of LQS implementation.

   a. Integration of HR performance measures and value to the business

It appears that cross functional performance will increasingly become a central approach for improving functional service capacity and delivery within organizations.

Recommendations for Future Research

In terms of the methodological design, there is a need for equal emphasis on qualitative research for examining organizational performance that has until now largely been defined by quantitative indicators. The notions of performance are dependent on perceptions, attributions and as a result, accompanying behaviors that can also be examined through qualitative data collection, analysis and interpretation. Specifically, in examining the variables that effect the reputational effectiveness of the HR function in the organization, more qualitative studies utilizing broader range of HR stakeholders (including employee groups) would provide an in depth picture. Future studies in this area would benefit greatly from utilizing qualitative research designs.

The development of a generic and replicable case model from the four individual case studies also presents an opportunity for examining the five constructs using quantitative studies. Development of a survey instrument would greatly assist in the development of a cross functional performance instrument that can extend the generalizablity of the study. The study presents opportunities for future research in this area. Utilizing both qualitative and quantitative methods in the development of the cross functional performance model would contribute significantly in assessing the HR-firm performance linkage for each company and across different companies.

The assessment of customer and employee engagement surveys would make a strong case for importance of establishing the HR-firm performance linkage. Future research in this area promises exciting opportunities for scholars and practitioners in HR and other functional stakeholders in organizations. This research would also benefit from

inviting a wider range of organizations to assess how cross functional performance

involving HR and Operations managers may be improved. Organizations within a supply

chain can improve cross functional performance of different functions with increased

benefits to the supply chain.

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APPENDIX A

INTRODUCTION

Organizations who are at different levels adopt various types of operational related strategies that are sometimes called Quality / Lean initiatives. Participating companies may not be involved systematically in implementing Quality / Lean strategy but may have arrived towards a Lean / Quality strategy that have potential or actual involvement with Lean. Depending on the participation in Lean /Quality strategy, some or all questions will be asked.

Interview Questions

1. How do you address Lean/Quality strategy in the company?

2. Have you observed Lean/Quality practices in the company? How is it being implemented in the company?

3. If some one asked you, how would you describe your company's approach to Lean/Quality?

4. How do you implement Lean/Quality relative to your job?

5. How did you document the effects of Lean/ Quality improvement efforts during the past year? [Some early lessons in Lean/Quality implementation shared within the company]

6. Do you think initially there was some sort of resistance in the company? How was it [Lean/Quality strategy] absorbed in the rest of the company?

7. What does HR do in your company? How do HR processes currently interface

with the rest of the organizational functions?

8. What are some HR related issues you have encountered since joining the company, [in your job, in your role in the team or with people reporting to you?

9. What is the HR role in relation to Lean/Quality? What are they doing that supports lean?

10. What *should* HR be doing to support Lean/Quality? What HR processes must be widely interspersed across the company for successful implementation of Lean/Quality initiatives?

11. How do you measure HR efforts? What metrics do you use?

12. Are there exemplars that have success in implementing HR practices with Lean/Quality improvement efforts?

13. What is your current role? What was your most recent involvement with Lean/Quality?

14. How many do you have reporting to you, and how big is your team (direct and indirect reports)?

15. When did this whole Lean/Quality strategy begin? (Tenure - How long have you been with the company?) Did it begin with you…?

16. What do you think is working well for you in your current role? How do you see your role in the next two years, what would change?

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