THE DISTRIBUTION OF LEADERSHIP SKILLS ACROSS A SINGLE-FOCUS COMPANY, A MULTI-FOCUS COMPANY, AND AN INDUSTRY: THREE CASE STUDIES

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ABSTRACT

Strategic resources are critical for the survival of organizations. One such critical strategic resource is the quality of leadership found within an organization. The competitive advantage provided by any intangible resource like leadership is predicated upon two bases – an adequate level of skill and the skill’s relative rarity in the market. Just how rare are patterns of leadership skills within an organization, a multi-foci organization or even an industry? Leadership skills are assessed for these three contexts. We find great similarity of patterns within each type of entity and across all three contexts. This argues that some leadership

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patterns may indeed be effective in a variety of contexts but may not be the only strategic resource contributing to the competitive advantage of an organization since on their own they are not rare.

INTRODUCTION

Intangible resources are recognized to hold the potential to lead to a competitive advantage. The resource based view (RBV) prescribes a network of resources leading to a competitive advantage that are valuable, rare, hard to copy, and utilizable by the company (Barney, 1991; Black & Boal, 1994). Following the decision tree for competitive advantage provided by Black and Boal (1994), we can see that a skill-based intangible resource’s ability to provide a competitive advantage is predicated upon two bases – an adequate level of skill and the skill’s relative rarity in the market. After a resource has been determined to provide a competitive advantage, one can then evaluate how long that advantage can be maintained. Sanchez and Heene (1997) argued for the importance of the deployment of that skill which fits into the utilization of the skill assessment.

Leadership is one such skill-based intangible resource that has been identified as strategically important (Boal & Hooijberg, 2001). However, leadership, in general, is not rare since each firm potentially will have multiple leaders. Thus, for leadership to be an intangible resource that leads to a competitive advantage, one must assess the skill level of leadership present in an industry and determine the degree of “rareness” of either patterns of leadership skills or very high levels of leadership skills (Barney, 1991; Reed & DeFillippi, 1990).

To assess the level and scope of leadership skills found at various sites requires that we define the set of leadership skills. After having a set of skills to consider, we need to then understand the pattern of skills present at a firm or industry. Assessment of each circumstance would then follow. This paper begins with a short review of the leadership literature and the choice of a particular set of leadership skills to use. Hypotheses will be developed with regards to the criteria required by RBV. In the Methods section, the two organizational sites and the industry to be examined will be presented along with our data collection efforts. The results of the study will then be presented. The paper will conclude with implications for research, practitioners, practitioners in this industry, and future directions of research.
Leadership research has addressed a range of definitions (see for example: Howell & Costley, 2004; Yukl, 1989). Indeed, there has been an ongoing discussion between what is leadership versus what is management (Howell & Costley, 2004). While these issues can be very interesting theoretically, pragmatically, organizations are interested in people who can lead towards the future while maintaining or improving current levels of performance. This is particularly important given the impact of executive leadership on organizational performance (Waldman, Javidan, & Varella, 2004). Leadership is very context sensitive (Humphrey, 2003; Howell & Costley, 2004), and some researchers have addressed this problem of context sensitivity by examining each organization on a case-by-case basis using qualitative research methodologies (Hunt & Ropo, 1992; Gronn, 1999; Mumford, Dansereau, & Yammarino, 2000; Mumford & Van Doom, 2001). Such research is limited in application beyond the cases depicted. Recent studies of leadership have begun to include specifics about the context in their models and to address the need of leaders to vary their actions in differing contexts (Howell & Costley, 2004; Graeff, 1997; Hersey, Blanchard, & Johnson, 1996). Other research has focused on the social networks, their impact on and demographics of strategic leaders (Gulati & Westphal, 1999; Carpenter & Westphal, 2001; Westphal & Milton, 2000). Thus like many strategic resources, the network or set of resources in use matters (Black & Boal, 1994).

For this paper, we needed to include a set of leadership skills that is not necessarily industry-specific but which were considered necessary for successful organizations. Our goal is not to take one side or another on the divisions between management skills and leadership skills (McLean, 2005), but rather to be inclusive of both sets of skills. Quinn, while calling such a balanced view a “Master Manager” (Quinn, Faerman, Thompson, & McGrath, 2003), has a set of skills that combine both those found when discussing leaders and those found when discussing managers (Black, Oliver, Howell, & King, 2006). Although other broadly based approaches exist (see Antonakis, Avolio, & Sivasuramaniam, 2003; Yukl, 2003), we chose to use the competing values framework (CVF) set of leadership skills since it was inclusive of both managerial and leadership skills. The competing values framework was also valued because it addressed specific sets of skills promoted by the set of different schools of management focused on by researchers over the years (Quinn et al., 2003).
Quinn's Competing Values Framework

Quinn and associates have developed an approach to analyzing and viewing effective management from a competing value perspective (Quinn & Cameron, 1983; Quinn, Spreitzer, & Hart, 1992; Denison, Hooijberg, & Quinn, 1995; Quinn et al., 2003). Their model, which integrates four major historical models of efficient organizations (Quinn et al., 2003), identifies four general competing values and associated roles (see Fig. 1.). Control Value Systems compete with Flexibility Value Systems. Internal Focused Values Systems compete with External Focused Value systems.

These competing values require a leader to take on different roles with attendant different behaviors – Mentor, Facilitator, Monitor, Coordinator, Innovator, Broker, Producer, and Director. The roles are composed of leadership skills. The skills are complementary to the skills of the other role within a single quadrant and contrast directly with the roles in the opposite quadrant (Fig. 1: The four quadrants are connected by solid lines.). Ability levels in these skills will collectively reflect the leader’s pattern of leadership skills or profile and are associated with the roles (Bullis, 1992; Hart & Quinn, 1993; Hooijberg, 1996).

The complementary roles of Mentor and Facilitator are in the Internal-Flexibility Quadrant. The Mentoring role’s set of behaviors consists of understanding yourself and others, being able to communicate effectively and being able to develop your followers. The Facilitator role behaviors

Fig. 1. Quinn’s Competing Values & Roles.
include building teams, using participative decision making, and being able to manage conflict.

Competing roles are found in the External-Control quadrant. The Complementary roles in this quadrant are the Producer and Director. The Producer role behaviors include working productively and being able to manage time and stress while fostering a productive work environment. The Director role behaviors require a manager to design and organize the work including delegating effectively while being able to envision where the organization is going and planning how the organization will get there. It also includes being able to set goals.

In the Internal-Control quadrant are the complementary roles of Monitor and Coordinator. The Monitor role’s set of behaviors includes managing collective and organizational performance, as well as monitoring individual performance. The Coordinator role behaviors mean being able to manage projects and design work processes including managing across functional areas.

Competing roles to the Internal-Control quadrant roles are found in the External-Flexibility quadrant. The complementary roles in this quadrant are the Innovator and Broker roles. In the Innovator role, skills include being able to live with and create change that also requires thinking creatively. The Broker role competencies include being able to build and maintain a power base, being able to present ideas, and being able to negotiate agreement and commitment.

Quinn and associates have detailed some leader profiles (or patterns of leadership skills in use) and designated some as effective and others as ineffective (Quinn et al., 2003). The ineffective profiles are Chaotic Adaptors (relatively strong in facilitating, mentoring, and innovating and weaker elsewhere), Abrasive Coordinators (relatively strong in monitoring and coordinating and weak elsewhere), Drowning Workaholics (weak everywhere but stronger in producing), and Extreme Unproductives (again weak everywhere but slightly stronger in mentoring and weakest in producing). These ineffective profiles reveal that the leader has low ability levels in one or more of the roles and that the leader is unbalanced by not having at least minimally useful ability levels in all roles.

The effective profiles are: the Aggressive Achiever (slightly weaker in facilitating and stronger in producing), the Conceptual Producer (weaker in monitoring and coordinating), the Peaceful Team Builder (weaker in producing and brokering), and the Master Manager (balanced ability levels of skills in all roles). All of these effective profiles have at least minimally effective ability levels in the roles, and the differences in competing role levels are not as pronounced as is found in the ineffective
profiles. The Master Manager leader is one who can manage across all roles and accurately use the needed behavior for a given context (Hooijberg & Quinn, 1992; Hooijberg, 1996). Such action is called behavioral complexity (Hooijberg & Quinn, 1992).

The Resource-Based View

Resource Based View (RBV) recognizes that there is economic value in things that are rare and which can be used in ways that provide value (Barney, 1991). From the late 1960s and early 1970s (Kaczka & Kirk, 1967; Fiedler, 1972), intangible resources such as the skill and effectiveness of leaders were considered a good candidate for being a strategic resource. Such resources were considered to be bundles of embedded resources and not just bundles but rather groups of resources with specific relationships between them (Black & Boal, 1994). It is the combinations of resources, skills, capabilities, and competences present within an organization that provide competitive advantage according to the competence-based perspective (Sanchez & Heene, 2005).

Hypotheses

To contribute to a sustainable competitive advantage requires that a resource be valuable, rare, inimitable, and that the organization be utilizing that resource (Barney, 1991). With regards to leadership skills, all organizations are assumed to be utilizing their leaders. One issue with this resource-based orientation is that it is circular: a resource is valuable if successful in the industry, which is also the definition of the outcome. By noting that leadership skills have certain ability levels apart from any industry understanding (i.e. you can either be a good mentor or not), using Quinn’s CVF Leadership roles helps to untangle the causality issues. Thus a leadership skill is valuable if there is a basic ability level in that particular skill. So the real issue for leadership becomes, “How rare is any one pattern of leadership skills?”

This focus on the patterns of leadership skills within a company (single or multi-focused) or across an industry allows us to focus on the basic issue of whether or not leadership can lead to a competitive advantage. If we find that a particular type of leadership pattern is present within a single focus organization, we may have to look closer to determine just what about
leadership is rare. If on the other hand a pattern is not spread across a single
organization, then perhaps that leadership pattern may be rare. The
same would be true if we find a predominant pattern in the industry. If it is
not rare, is leadership alone really capable of providing a competitive
advantage? Because we are interested in whether or not there is pattern of
leadership skills present and not generalizability to all conditions, case
studies are appropriate and we do not need to hold any one contextual
factor constant (i.e. we do not need to hold the single focus organization,
multi-focus organization, or industry constant). However, from Quinn’s
work, we know that a certain minimal ability level of leadership skills is
necessary. Our first hypothesis addresses the presence of that minimal level
of skills, but we do not anticipate that this minimal level would meet the
requirements of being rare.

Our research questions then are “What is the average ability level of
these leadership skills present in an organization or industry?” and “What
is the pattern of ‘profiles’ present?” (Recall that a profile is simply a
particular pattern of leadership skills as defined by Quinn.) As discussed
earlier, the presence of a particular leadership profile within an organization
may matter. Thus we will examine separate types of organizations to
determine if patterns of leadership profiles exist. Two cases will be used,
that of a single focus organization and that of a multi-focus firm. These
two cases allow us to examine the context that one could argue would call
for a relative homogeneous set of profiles, the single focus firm and a context
that one could argue would call for a relative heterogeneous set of profiles,
the multi-focus firm. The third case to be examined is that of a single
industry.

Given that there exists a minimum ability level of skill required for leaders
of at least 3 on a Likert scale ranging from 1 to 7 (Quinn et al., 2003), we
expect that the average leadership present for either an organization or a
firm to be at least that level of 3. We expect that this will hold true for all
three contexts. Thus,

**Hypothesis 1A.** The average ability level across all leadership skills within
a single focus organization will be at or above 3.

**Hypothesis 1B.** The average ability level across all leadership skills within
a multi-focus organization will be at or above 3.

**Hypothesis 1C.** The average ability level across all leadership skills within
an industry will be at or above 3.
We expect that the pattern of ability levels present may be rare. Patterned ability levels of leadership skills are presented as leadership profiles by Quinn (Quinn et al., 2003). Thus, the second question for leadership regarding the pattern of leadership present within an organization or industry is really about the presence of predominant profiles. Quinn had eight profiles ranging from a highly effective Master Manager to an extremely ineffective Extreme Unproductive. Given a single focus organization (i.e. one operating in a single market), we would expect the pattern of hiring and training would result in a narrow range of patterns. If the organization has survived long enough we would expect that pattern to be similar to one of the effective profiles suggested by Quinn. Following work done on organizational failures, where the average age at failure was very wide across industries at early ages and very low and similar by age 10 (Nucci, 1999) with an average age across all industries of 9.5 (Fredland & Morris, 1976) and which appears to be stable across time (Toftoy & Chatterjee, 2004), we chose to examine organizations of at least 10 years of age. Thus, we would expect to see a predominance of effective leadership profiles present in a single focus organization at least 10 years old.

**Hypothesis 2A.** The majority of leadership profiles in a single-focus organization at least 10 years old will be effective leadership profiles.

For a multi-focus organization, we would expect a greater range of leadership profiles since there are a variety of organizational foci. This case reflects a context which relaxes the assumption that an organization is operating in only one market or industry. We expect this due to the literature on the contextual sensitivity of effective leadership (Black et al., 2006; Yun, Faraj, & Sims, 2005; Justis, 1975; Fiedler, 1972). Thus,

**Hypothesis 2B.** No single pattern of leadership profiles will be dominate in a multi-focus organization at least 10 years old.

Since industries have a range of successful firms, we would again anticipate that there would be a range of leadership profiles present. In other words, we would not expect any one leadership profile to be dominant within an industry.

**Hypothesis 2C.** No single pattern of effective or ineffective leadership profiles will be dominant in an industry.

Since we are interested in the use of leadership as a strategic resource, we will also examine the number of leaders who respond who have high to very high ability levels in their leadership profiles. Recall that Quinn and his...
colleagues argue that there is a profile which is best – the Master Manager. We expect that there will be relatively few Master Manager profiles since this requires higher ability levels on all leadership skills; however, one can also argue that if leadership has been used as a competition point in the past that there may be a higher ability level of skill required simply for competitive parity (Powell, 2003). To control for the use of leadership as a competition point, we will examine the overall ability levels of leadership skills found in the industry and preclude using an industry where this is greater than six.

As mentioned earlier, there are eight archetypical profiles presented by Quinn. If we assume that each of these leadership profiles is equally represented across all industries and individuals, we would expect profiles from the industry to match up with an archetypical profile about 1/8th or 12.5% of the time. However, given that it is difficult to gain expertise in roles which are displayed opposite to each other on Fig. 1; it should be the most difficult to attain the Master Manager profile. To allow for this, we would adjust our expectations of the percent of leaders to have a Master Manager profile to 10%. From RBV, at less than 10% the Master Manager profile becomes “rare” and can potentially provide a competitive advantage. Thus,

**Hypothesis 3.** In an industry, there will be less than 10% of the leader profiles which are closest to a Master Manager profile.

**METHODOLOGY**

This study combines Yin’s (2004) critical case approach with survey research methodology. We find specific cases of interest and administer the questionnaires to the leaders involved in those cases. The three critical case sites chosen were a single focus organization, a multi-focus organization, and an industry. The single focus case held industry/market and organizational factors constant. In the multi-focus case, we held the organizational factors constant but allowed the industry/market influences to vary. In the industry case, we held the industry/market factors constant and allowed organizational factors to vary. We cannot hold the industry constant for each boundary case condition, since by definition the multi-focus organization will be in multiple industries. Each case then is a stand-alone example of its particular condition. While each case is a stand-alone assessment of the conditions of interest, finding things in common across these conditions allows us to argue for a more robust finding that may be generalizable.
beyond these particular cases. The diversity of industries, organizations, and markets helps strengthen the robustness claims. The questionnaires, sites, and data acquisition processes are detailed next.

The Questionnaire

Quinn and his colleagues had already developed a questionnaire to determine self-reported ability levels associated with leadership skill associated with their competing roles. Questionnaires were developed to help diagnose an individual’s leadership style (profile of behaviors used) by assessing the level of skill for behaviors associated with the roles and the frequency that each behavior is used. The CVF questionnaire has demonstrated discriminant, convergent, and nomological validity (Denison et al., 1995). Quinn and his colleagues (Faerman, Quinn, & Thompson, 1987; Quinn et al., 1992) have used these questionnaires to link roles to specific leader behaviors (Faerman et al., 1987). Because leadership skills are considered contextually sensitive, the choice of sites was important. To hold constant outside influences all organizations and industries were chosen from the southwestern part of the United States. Further site boundaries are given next.

The Successful Single Focus Organization

The long-time single focus organization chosen for this case is one that has been in business providing service since 1921. It was a hospital located in a large multi-hospital city in the region. The nursing staff of the hospital was chosen as a typical example of the people involved at the hospital. Granted with only information from a professional job category, it may be difficult to expand this to other non-professional areas. The containment over the years of the hospital to just being a hospital meets the long-time single focus organization requirements.

The Multi-Focus Organization

As mentioned earlier, the three case sites do not need to be constrained to a single industry but rather must meet the case criteria. Thus the next case criteria is that of an organization with multiple foci, or in other words, is
engaged in activities in multiple markets. An example of market categories is that of service and manufacturing. Thus having an organization that is engaged in both manufacturing activities and in service activities is necessary for this next case.

The purpose of examining a long-time multi-focus organization was to allow for a context which had a wide range of market influences and thus potentially a wide range of leadership profiles while holding constant the organizational influences. To ensure that there is diversity among the foci of the organization, a multi-focus organization site was chosen where there was present a wide range of both product production and service production. Furthermore, a comprehensive assessment of all leaders in the organization needed to be feasible. A county government was chosen since it met the two preceding criteria.

The Industry

The third case is one that rather than focusing in on the organization focuses across organizations. We choose to identify an industry that has multiple foci to enable as broad a set of effective leadership skills as possible. This factor along with the potential of a variety of ages of firms in an industry provides stronger support for a particular leadership profile being critical for the industry, if we find a single leadership profile prevalent in this context.

Both manufacturing and service industries have found these leadership skills useful (Quinn et al., 2003). When assessing an industry, it is important not only to examine competitors but also to include as many of the drivers of performance as possible (Porter, 1980). Thus, it would be valuable to identify an industry that was relatively small but which had both service and manufacturing components and was geographically bound. We chose for our industry the hydrology system along a section of a river.

The hydrology system is comprised of those organizations concerned with the acquisition, treatment, distribution, and collection of waste water, and the treatment and redistribution of water. There are both service and “manufacturing” components. The service is in the distribution of water and the manufacturing is in the extraction, collection, and treatment of water. Other key industry competition drivers are various local, state, and federal agencies who regulate, monitor, or research water issues. Some water acquisition, treatment, and distribution systems are public and some are private. Thus we needed to collect data from the following categories of
organizations: public water organizations, private water organizations, local and county governmental agencies, state governmental agencies, federal governmental agencies, and educational/research organizations.

The Data Collection Process

Questionnaires were made available as paper copies or online. The organizations in the industry were contacted via email or phone and invited to respond. The two organizational sites had letters of support from top management but employees were allowed to respond or not.

The Single-Focus Organization Site
Eight leaders from the General Surgery and Obstetrics departments responded. These eight leaders will be treated as one type: nursing professional leaders. This was not a large proportion of the total population of all leaders.

The Multi-Focus Organization
There were four basic categories into which the various county agencies and departments were assigned: Detention (Service – which included running the county jail); Sheriff (Service – which included all deputies and county sheriff responsibilities); Transportation (Product – which included all road maintenance and traffic light maintenance) and General (Service – which included all other county departments and agencies). There were 11 Detention leaders, 13 Sheriff leaders, 12 Transportation leaders, and 23 General leaders. About two-thirds (67%) of all potential respondents participated.

The Industry Site
Organizations in each of the categories mentioned above were contacted both to respond to the questionnaires and to attend a workshop on high performance organizations. Nineteen organizations were originally contacted to participate. Responses were obtained from nine organizations and 20 leaders for a response rate of 47%. We received an average of two responses from each organization. There were responses in each category of organization. The average skill level across all roles and leaders needed to be assessed to be sure that it is below 6. The average across all roles and leaders for this industry was 5.06 which allowed us to proceed.
THE RESULTS

The score for the ability levels in each of the roles’ skills was calculated for each of the respondents. Then simple averages across respondents for each category were then calculated. The resulting scores were compiled (individual, organizational category, summary) and the profiles displayed. To determine similarity to Quinn’s profiles, values for each of Quinn’s profiles were extrapolated from Quinn et al. (2001) and these values were then used in difference calculations. Similarity to a particular profile was determined by the total of the absolute value of the differences for each of the roles. The smallest difference across all roles was determined to be the archetype profile type. Each hypothesis is discussed next.

Hypothesis 1. Hypothesis 1 is that the average ability level across all leadership skills will be at or above 3. Recall that the leadership skills are grouped into roles by Quinn. To examine this hypothesis the average profile was graphed on a radiogram (See Figs. 2a,b,c).

Hypothesis 1A. For this hypothesis, we examine the summary chart for all eight nursing supervisors who responded. The summary radiogram is presented in Fig. 2a. From the figure it is evident that for all of the roles, the hospital nursing supervisory staff has an average ability level of at least 3. The weakest area for these leaders is in the producer role and they are well balanced in all of the other roles.

Hypothesis 1B. For this hypothesis, we examine the summary chart of all 59 leaders at the county. A summary of the average profile of the leaders present at the county appears in Fig. 2b. From the figure it is evident that all of the roles have ability levels of at least 3. These leaders are the weakest in coordinating and highest in mentoring.

Hypothesis 1C. The average profile of leadership skills in the industry shows a relatively balanced profile (see Fig. 2c). From the figure it is evident that all of the roles have ability levels greater than 3. The lowest ability level in this industry is in the role of being a Director. The highest ability levels are found in the Facilitator and Broker roles. Thus, given that all three components of Hypothesis 1 have support separately, Hypothesis 1 is supported.
Fig. 2.  (a) Hypothesis 1A: Nurses; (b) Hypothesis 1B: County; (c) Hypothesis 1A: Industry.
Hypothesis 2. Hypothesis 2 regards the pattern of leadership profiles present across leaders in an organization or in an industry. There is expected to be some variation in patterns. To examine these hypotheses requires that each responding profile be compared to and categorized into Quinn’s archetypical profiles. Categorization (see Table 1) was done by examining the average absolute difference between Quinn’s archetype profiles and the focal leader’s profile. The leader’s profile was categorized as the profile with the smallest overall difference.

Hypothesis 2A. Since the single-focus organization is known for being long lived, we anticipate a pattern of effective profiles present; otherwise we expect there to be no real discernable pattern of profiles present. That is we expect the number of effective profiles to be larger than the number of ineffective profiles. Examining Table 1 indicated that there are 6 profiles closest to the Master Manager and 1 profile closest to the Conceptual Producer for a total of 7 effective profiles. Only one ineffective profile was present and that one was closest to an Extreme Unproductive profile. This supports Hypothesis 2A.

Hypothesis 2B. For the multi-focus organization, we did not expect to have any discernable pattern between effective or ineffective profiles. Thus, we expect the total effective profiles to be roughly equal to the ineffective profiles. Again examining Table 1 reveals that there were 48 effective profiles and 8 ineffective profiles. This does not

Table 1. Categorization of Profiles.

<table>
<thead>
<tr>
<th>Archetype Profile</th>
<th>Number of Profiles in Single-Focus Organization</th>
<th>Number of Profiles in Multi-Focus Organization</th>
<th>Number of Leader Profiles in Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggressive Achiever</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Conceptual Producer</td>
<td>1</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>Peaceful Teambuilder</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Master Manager</td>
<td>6</td>
<td>35</td>
<td>11</td>
</tr>
<tr>
<td>Chaotic Adapter</td>
<td>0</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Abrasive Coordinator</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Drowning Workaholics</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Extreme Unproductives</td>
<td>1</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>
support the hypothesis of there being no predominant pattern in the multi-focus organization.

**Hypothesis 2C.** In this last hypothesis, we expected that no single pattern of leadership skill levels or that no single leadership profile will dominate in an industry. Table 1 shows the results of this categorization. From this table, we can see that a majority of the profiles were similar to one archetype, the 
Master Manager, and/or were effective profiles (18 out of 20). Thus, Hypothesis 2C is not supported.

In looking at the results for Hypothesis 2, we found contrary to our hypothesis that it is not only the long-lived single focus organization which has a pattern of effective leadership profiles, but that all three cases have such an overall pattern. What we do notice is that the variation available is highest in the multi-focus organization with multiple industry/market involvements.

**Hypothesis 3.** Hypothesis 3 called for less than 10% of the leader profiles in the industry to be similar to a Master Manager profile so that the use of that profile as a strategic resource would be “rare,” enabling strategic competitive advantage to some firms over other firms. Again examining Table 1, for this hypothesis not to be rejected we would need to have no more than 2 (10% of 20 leaders) closest to the Master Manager profile in the industry column. That is not the case. There are 11 or over half of the leaders had profiles most similar to the Master Manager profile by simple distance measures. However, a secondary quality of the Master Manager profile was having equivalent ability levels in opposing skill areas. To check this refined definition of the Master Manager, we limit the difference to no more than the smallest difference between competing values that is not zero (a difference of no more than .2). When we examine the profiles for this attribute as well, 5 of the profiles remain categorized as Master Managers and the remaining 6 are approaching the Master Manager profile but are not there yet. This amount is still more than 2. Thus from both criteria, Hypothesis 3 is not supported.

**CONCLUSIONS AND IMPLICATIONS**

In this region, for firms which have some history, most of their existing leaders exhibit effective leadership profiles most similar to the most effective
leader profile suggested by Quinn. Thus, high ability levels in leadership skills do not appear to be rare in either firms or industries. However, their dispersal through both firms and the industry studied argues that for this particular group of firms, leadership skills add value in the marketplace.

This predominant leadership skill pattern, the Master Manager, occurs at the level of a single focus organization, multi-focus organization, or even an industry. The context diversity implies that profile is widely effective. Thus it would be valuable but not be something that would lead to a competitive advantage. However, since the industry was screened an average ability level below that of a level 6 and the Master Manager definition begins with a balanced set of skills at a level of 5; it may be that marginal Master Managers are fairly prolific but high ability level Master Managers are rare. Future research is needed to determine if that is the case.

**Implications for Practitioners**

Since the predominant profile present for each case was the Master Manager profile, it appears to be important to leverage leadership skills through acquiring and retaining leaders with not only effective leadership profiles, but the best leadership profiles no matter the focus orientation of your firm or where in the industry your firm lies (large market share, small market share, etc.).

Given the predominance of the Master Manager profiles at this single case of a long-lived single focus firm, it appears that this profile is the most valuable effective profile. However, this study drew upon the supervisors of professional staff, and for other non-professional occupations other profiles may be more predominant. Another point to be acknowledged is that relatively few leaders responded to the invitation to participate. It may be that only the Master Manager leaders responded. Research in other areas and/or other service organizations may help to clarify this point. Furthermore, given that this organization is a service organization, the study also needs to be duplicated in a manufacturing firm to verify that the Master Manager is also appropriate in the long term there as well. Since this was a long-lived firm, once could also argue that the firm had grown more bureaucratic over time. If that were the case, the presence of the Master Manager may simply reflect that bureaucratic nature. Again, additional studies will help us to better understand why the Master Manager profile was so prolific in this single focus environment. Thus, managers of professionally oriented service organizations may want to strive for the
Master Manager pattern of skills, but managers in other types of service organizations and in manufacturing organizations will need to be cautious about applying the results from only this portion of the study. Despite that caution, since the multi-focus organization also had a dominant Master Manager pattern, our concerns on the limited applicability of our findings may be overstated.

The widest range of leader profiles present was in the multi-focus organization. Since this is a single case, it is difficult to determine if this is due to the multi-focused part of the organization (i.e. having both service and manufacturing components) or simply unique to this particular organization. However, since even though there was a wide range of styles present, the predominance of the Master Manager even in this environment would argue that reducing the variation among leaders present within an organization to that of the Master Manager may be a competence that could lead to strategic competitive advantage. That is, it may be a needed organizational level competence of a relatively narrow range of leadership profiles present or of obtaining or developing leaders to have a Master Manager profile that could lead to a competitive advantage.

On average in this industry, leaders have effective ability levels of leadership skills. There are more effective leader profiles than not and the profile with the largest number of leaders is the Master Manager. Although some Master Managers are still balancing out their skill levels across the roles, over half of the industry has leaders with skills high enough and balanced enough to be considered Master Managers. This implies that leadership in this industry may already have been a competition point and that pure leadership skill levels may no longer be a competition point. For leadership in this industry to be a source of competitive advantage, it may require leaders to also know when to take action as well as what action to take and their skill in taking that action.

It may also be that this industry, the hydrology system, has faced such changes and turbulence in the past that leaders had to acquire a high level of the each of the competing roles simply to remain in a leadership position. Additional work examining the historical context of this industry is needed to determine if it was competitive action or turbulence due to some other elements that drove a specific pattern of leadership profiles to be present. Examining other geographically bound hydrology systems may help us to understand if it is the hydrology industry in general or simply this particular one that has such a strong pattern of Master Managers present.
Implications for Research

Future work includes extending the assessment to more single focus firms. This would include firms that are still in the entrepreneurial stage (less than ten years). It would be good to examine this for small firms (those with very few leaders, as well as for those classified as successful, and those that are merely surviving). This expansion would enable us to determine if the use of effective leader profiles is something that firms are actively building or simply acquiring.

The same expansion for multi-focus organizations would reveal if this organization is relatively in a stronger competitive position or not. An expansion into other industries across competing firms would provide more information into the use of leadership skills for competitive parity or if fine-tuned differences such as the variation of skills present within a firm might make a difference in the firms’ effective competing. All of the above also need to be duplicated in another region to determine if the predominance of the Master Manager profile is region or country specific. Future research could also examine the relative skill levels of leadership present in a firm by firm basis for the industry since relative skill differentials could enable transitory competitive advantage.

Thus from these case studies further extension research along other potentially critical boundaries is required to enable us to have more robust conclusions about single focus organizations, multi-focus organizations, and industries regarding if leadership skill levels in the competing roles is a source of competitive advantage. This expansion would reveal if leadership skill profile patterns are sensitive to the region, successful single focus firms, or the industry context, or if all firms need more effective leaders simply to stay in the game.

With regards to illuminating research done using a resource-based view of the firm, this project illustrates how value can be determined separately from success in an industry. By evaluating leadership skills using existing questionnaires which reflect skill ability levels and not market success as the basis for value, we are able to disentangle the causality web that early researchers stumbled over. This set of case studies reveals that it is possible to assess “absolute” quality of a strategic resource while it is deployed in an organization. Furthermore, the distribution of higher ability levels throughout firms and markets implies that there is also value creation happening in the marketplace. Further work is needed, however, to determine if this particular resource would be a stand-alone strategic resource or must be coupled with one or more other resources to provide competitive advantage.
Given that our strategic resource is leadership skills, we suggest that it is very reasonable to conclude that it indeed only brings competitive advantage when coupled with other strategic resources available to a firm.

CONCLUSION

The Master Manager profile is a pattern of leadership skills that appears to be effective across a wide range of conditions. Whether a minimal ability level is sufficient for competitive parity, if high ability levels can lead to competitive advantage on leadership alone, or if a relative advantage in leadership skills can enable a competitive advantage remains to be determined. An alternative explanation for the widely distributed Master Manager profile is that leadership by itself cannot provide competitive advantage but rather it is that leadership profile in conjunction with the rest of the resources, skills, competencies, and competences of the firm that provide the competitive advantage.

REFERENCES


Distribution of Leadership Skills


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