Market Orientation and Worker Type: Knowledge Workers vs. Talent Workers and Their Influence on the Organization

Dawn Mrozak Mueller\textsuperscript{1} & Pradeep Gopalakrishna\textsuperscript{2}

Abstract

Much information exists on market oriented organizations and their links to profitability and performance. There is a paucity of information on the composition of the workforce in market oriented organizations, specifically the ratio of “talent workers” to “knowledge workers.” This study analyzed the types of workers that comprise a market-oriented organization versus non-market-oriented organizations such as a federal government agency. A convenience sample of workers in a market oriented organization and non-market oriented organization were surveyed. The data supported the hypotheses that market-oriented organizations have a greater percentage of talent workers than knowledge workers; market-oriented organizations have a greater percentage of talent workers than non-market oriented organizations.

Keywords: market orientation, talent, knowledge, workers, marketing organization

1. Introduction

While certain business functions are precise in their areas of responsibility, such as finance or information technology, marketing and management are areas that operate across multiple functional areas. In the evolution of business and the ways in which business needs to operate, marketing is pervasive. Many organizations employ marketing initiatives to “assist” in launching new efforts to both internal and external audiences and weave marketing throughout as part of being “market oriented.” The primary motivation behind a market orientation is improvement of market performance, according to the literature. Narver and Slater (Narver and Slater 1990) developed a valid measure of market orientation, analyzed its effect on business profitability, and demonstrated that a market orientation is the business culture that most effectively and efficiently creates superior value for customers.

Market-orientation emphasizes the organization’s responsiveness towards customers’ changes in needs and wants (Kohli and Jaworski 1990). In the literature on market-orientation, the emphasis is on the structure of the organization, however there is little written on the composition of the workforce in market-oriented organizations. There is literature on workforce composition and different types of workers and this includes concepts of talent workers and knowledge workers (Chowdhury 2003) and HEROes (Bernoff 2010) but there is little to nothing on the type of workers employed by highly market-oriented organizations. The focus of this study is on the composition of the workforce in highly market-oriented organizations. The topic for exploration is on the very nature of the market-oriented structure, its culture and the people that culture attracts.

\textsuperscript{1} Fairleigh Dickinson University, 285 Madison Avenue, Madison, NJ 07940, USA. +1-201-321-6758, Fax: +1 866.829.6051
\textsuperscript{2} Pace University, 1 Pace Plaza, New York, NY 10038, USA.
Top talent is attracted to top-performing environments, of which market-oriented companies are identified as top performing, according to Narver and Slater et al. The best talents “flow to the best companies to work for” according to Chowdhury (2003). To grow and prosper, developed and developing societies must nurture, attract, connect, and retain “creative knowledge workers” also known as talent workers. The more market-oriented a company is, the more likely they are to attract and retain a greater number of talent workers relative to knowledge workers since the environment will be more suitable to their skills. “[Talents] are those individuals whose viewpoint, skill, motivation and need to succeed allow them to develop innovations of value. Creative work comes from individual’s of all colors, genders, locations and personal preferences. These must be respected and tapped if development is be sustained (Pitta, Wood et al. 2008).”

This study will examine whether highly market-oriented organizations have a higher number of talent workers than knowledge workers and if lesser or non-market-oriented organizations have more knowledge workers than talent workers. At this time, the study of talent workers and their presence is exogenous to the market-orientation philosophy and set of activities. The concept of knowledge workers was first coined by Drucker (1954) and has garnered attention in the media. There are many “imprecise definitions of knowledge work and knowledge workers,” however in spite of this, there are many in advanced countries (e.g. the United States and Europe) (Davenport 2005). It is estimated that at least 25 percent of the U.S. workforce are knowledge workers. A U.S. Department of Education report estimates that 25 percent of the U.S. workforce has the ability to process complex or moderately complex information in mathematical or verbal form and convert it into knowledge. Organizations with a high-degree and quality of knowledge work tend to be the fastest-growing and most profitable and growth industries are those with a greater proportion of knowledge workers.

“Within organizations, knowledge workers tend to be closely aligned with the organization’s growth prospects...and knowledge workers are critical to the success of any organization (Davenport 2005).” In Chowdhury’s observations on talent workers versus knowledge workers, knowledge workers are those who keep the organization running, adhere to processes and maintain the status quo. Talent workers are portrayed as more likely to break or bend the rules, question the way in which things are done and challenge the status quo. Bernoff and Schadler termed these talent workers, “HEROes: highly empowered and resourceful operatives. They attribute the ability for these workers to operate in ways that go beyond traditional roles to technological advancements and refer to them as knowledge workers for their capacity to use technology and information. For the purposes of this study the “HEROes” describes talent workers, and knowledge workers are those who help maintain the processes in an organization.

1.1. The Role of the Employee in Market-Oriented Organizations

Narver and Slater stated, “If a market orientation were simply a set of activities completely disassociated from the underlying belief system of an organization, than whatever the organization’s culture, a market orientation could be implanted by the organization at any time. But such is not what one observes. “There is a paucity of research on the attraction of talent workers and knowledge workers to market-oriented companies; however, discussion exists around knowledge workers being associated with specific industries and organizations that tend to be less hierarchical.

Ralston (2007) provides an overview of four types of talent workers using the suits in a deck of cards: Diamond Talents are the creatives that provide the spark for new products and services; Club Talents support the process to make the new ideas come to fruition; Spade Talents ensure projects are completed; Heart Talents keep relationships harmonious. The talents, HEROes, or creatives demonstrate consistent characteristics. The Snowflake 6 trait Model of Creative People (Perkins 1981) lists the characteristics of creative people as 1) Strong commitment to a personal aesthetic 2) ability to excel in finding problems 3) mental mobility 4) willingness to take risks 5) objectivity 6) inner motivation. The HEROes, talent workers, Snowflakes and Diamond Talents are the ones who support the essence of the market-oriented organization. They are the workers who will bend the rules, push the parameters, bring new ideas and challenge the status quo. While most workers are there to support the organization and its objectives, these talents further the collective mission of the company.
Exploring the ratio of talents and knowledge workers to determine if there is a correlation between the levels of market orientation requires inclusion of an organization that is not market oriented. For the purposes of this study, a government agency, which is highly regulated, governed and not market oriented by its very charter, will function as a control group. This will enable further correlations and inferences to be drawn to demonstrate the distinct difference between a non-markets oriented organization with those that are market oriented in varying degrees.

2. Literature Review

Levitt (1960) found that market-oriented firms will challenge existing assumptions about customers, products, and industry paradigms. Narver and Slater (1990) developed a measure of market orientation and analyzed its effect on business profitability. They identify a relationship between sustainable competitive advantage and market orientation and discuss market orientation as a business culture that is the most effective and efficient means to create superior value for customers. Sustainable competitive advantage (SCA) (Porter 1985; Aaker 1989) states that to achieve consistently above-normal market performance, there must be sustainable superior value for customers. Kumar et al (1998) found that there is a sustainable competitive advantage in market orientation and it is greater in firms that adopt a market orientation early. The basis of this study was longitudinal and focused on the performance of 261 organizations over a nine-year period, from 1997 to 2005.

The previous research demonstrates that organizations with a high degree of market orientation realize short-term improvements in sales growth and profitability, increased market share, new product success, customer satisfaction and return on assets when compared to those organizations that were not as highly market oriented (Deshpandé, Farley, and Webster 1993; Jaworski and Kohli 1993; Slater and Narver 1994).

Kohli and Jaworski (1990) define market orientation as “the generation and dissemination of market intelligence that is composed of information about customers’ current and future needs and exogenous factors that influence those needs (e.g. competition and government regulation).” They found that profitability was a part of market orientation rather than a consequence of it and the value of information is greater when shared cross-functionally within an organization, however the strategic orientation may be effected by several variables. For example, the competitive environment might act as a moderator and affect the market orientation/performance relationship and numerous studies find that certain strategic orientations are contingent upon the prevailing market dynamics (Day and Wensley 1988; Kohli and Jaworski 1990).

“The attitudes and behaviors of individuals form the collective attitudes and behaviors of the group. Viewed within our current knowledge of the market orientation – firm performance relationship, this individual contribution must play a role in determining organizational performance. Fundamentally, the actions of individuals comprise organizational market orientation, and indirectly influence firm performance through this collective market orientation(Schlosser 2005).” The literature has examples of the influence on market orientation by the individual at the organizational level and supports the premise that the individual worker can contribute to a market orientation structure. Support was found for the significance of the individual employee's disposition toward customers (Brown, Mowen et al. 2002; Kennedy, Lassk et al. 2002; Zhou, Brown et al. 2007). Frequent communication between a manager and subordinates that is not confrontational in nature fosters the development and sustainment of a market orientation (Harris 1999). Harris and Ogbonna (2001) found that a participative leadership style has an influential role in the development of a market orientation.

2.1. Characteristics of Talent Workers

Since the origin of the term knowledge worker, the definition has evolved and been refined. While a number of characteristics are associated with knowledge workers, their evolution has inspired a number of studies and literature on the topic. As each generation of knowledge workers evolves, different classes and the complexity associated continue to garner more fracturing among the topics (Dove 1998; Bogdanowicz and Bailey 2002; 2007; Avedisian and Bennet 2010; Calabrese 2010; Sandie 2011).
The literature on knowledge workers provides a take-away idea that all talents are knowledge workers, but not all knowledge workers are talents. “Knowledge workers may become talents through dedication and a well-defined goal, but most don’t make the transformation”. Knowledge workers take orders; “they are studious and obedient people.” But talents take initiative and under the right circumstances, the creative personality can emerge (Business Line (2004; Henard and McFadyen 2008; Dul, Ceylan et al. 2011). “With a wide access to knowledge, continuous involvement of higher learning could contribute to the creation of multi-tasking, talent workers and lifelong learning among the stakeholders (Habibah 2012).” The creative capability of individual and collective knowledge workers is the fuel that drives a company’s engine of innovation and sustainable competitive advantage (Henard and McFadyen 2008; Abbasi, Belhadjali et al. 2009). “Over-reliance on acquired knowledge dampens the creative process (Henard and McFadyen 2008).” Acquired knowledge is most associated with knowledge workers and unique knowledge ties to competitive advantage for an organization based on its workers. Talent workers are how sustainable competitive advantage is attained through their creative knowledge, which builds on acquired and unique knowledge.

High-talent workers were thought to have four fundamental needs which include: recognition, participation in decisions regarding their work, self-realization and predictability in their work and career. The expectation is that the degree to which an organization can address and satisfy these needs will dictate the degree to which it can motivate to peak performance as well as attract and retain top professionals (Nation’s Business(1959). “The reality is that talents have long ago looked for factors beyond financial. They know very well that if they choose to invest their future in one particular company then they want to make sure it is the most optimum platform for them to maximize their career potential. This is one consideration that mattered most to talent workers (Murphy 2010).

McCrimmon (1995) stated, “As leadership shifts from the organizational hierarchy to leading edge knowledge workers who are close to the market...The market will force it to accept the leadership of leading edge knowledge workers... A fully market-led organization should require such individuals to prove themselves continually through their performance in any case.” This may be interpreted as a trend toward segmenting the knowledge worker base with a faction falling under Chowdhury’s talent worker categorization. “Talents are the relatively few people who contribute the most to the organization who need to be recognized, nurtured, and leveraged to maximize the positive results only they can achieve. They are different. They are the stars, and they need to be treated like stars. They contribute more and they need to be compensated more than the knowledge workers(Chowdhury 2002 ).”

People with deep smarts have many characteristics of the expert, including “the ability to make rapid decisions on the basis of pattern recognition, to extrapolate from the known to the possible, and to make subtle distinctions that are invisible to the novice. They are also able to take a systems view of a product, organization or environment— and to predict interactions and interdependencies. In other words, possessors of deep smarts have the mental capability of a satellite: they can fly over the landscape, grasp the overall situation and then zoom in on critical details and potential problems (Hammer 2004).” This is consistent with Chowdhury’s description of talent workers.
2.2. Market Oriented Organizations and Talent Workers

The evolution of the new economy has come in phases. The most impactful was the disavowal by employers of “their obligation to employees with respect to job security and sent a loud and clear message that individuals must take personal responsibility for their own careers (Tulgan 2001).” According to Tulgan, in the current phase, this dynamic between employers and individuals is driving a change from a feudal relationship to one that is market driven.

While McCrimmon does not specifically state that knowledge workers will gravitate to market-oriented companies, the characteristics of the organizations in which they will be found parallel that of market-oriented companies. Top-performing environments attract top talent. Market oriented organizations are focused on results and profitability—organizations that focus on results achieved rather than elements such as time worked, tenure, ratings are more appealing to high-performers, the talents(Tulgan 2001). There is a view market orientation is a social learning process in which workers develop their individual-level market orientation through learned behavior from top managers. These workers then become formal and informal role models of individual-level market orientation behavior to frontline employees(Lam, Kraus et al. 2010).

“In the business context, talent may be defined as ‘capability applied to create value that is recognized and rewarded by primary stakeholders – owners, managers, and customers’ Talented people must know how their jobs fit within the value chain and not only perform the routine tasks well but also excel at the high-leverage components of their jobs(Chowdhury 2003).” Narver and Slater’s behavioral components of the organization can be applied to the characteristics of talent workers. The concept of the “Four Cs” in creating an environment in which talents will work clearly coordinate with the elements of market-orientation: Communication, Cooperation, Collaboration, Commitment(Chowdhury 2002 ). Collaboration and commitment are the strongest drivers for performance and collaboration generates passion for innovation, excellence and winning.

2.3. Differences between Talent Workers and Knowledge Workers

While all talents are knowledge workers but not all knowledge workers are talents; organizations need both to operate successfully. This study will explore whether the differences and the composition of the organization’s workforce will vary according to the degree of market orientation within the organization. There are six primary differences between knowledge workers and talent workers:

<table>
<thead>
<tr>
<th>Talent Workers</th>
<th>Knowledge Workers</th>
<th>Commentary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Talents make and break the rules</td>
<td>Knowledge workers conserve the rules</td>
<td>One need not be a genius to be a talent</td>
</tr>
<tr>
<td>Talents create</td>
<td>Knowledge workers implement</td>
<td>Talents are a source of ingenuity and creativity. They bring ideas into reality</td>
</tr>
<tr>
<td>Talents initiate change</td>
<td>Knowledge workers support change</td>
<td>Talents feel the need to initiate change in advance of the necessity to change</td>
</tr>
<tr>
<td>Talents innovate</td>
<td>Knowledge workers learn</td>
<td>Talents are the teachers and knowledge workers are the good students</td>
</tr>
<tr>
<td>Talents direct</td>
<td>Knowledge workers act</td>
<td>Talents direct knowledge workers to perform work</td>
</tr>
<tr>
<td>Talents inspire and lift people</td>
<td>Knowledge workers receive information and motivation</td>
<td>Talent workers are frustrated when people they are helping fail; knowledge workers don’t understand what talents are after</td>
</tr>
<tr>
<td>Talents make an immense contribution and create immense wealth</td>
<td>Knowledge workers share</td>
<td>Does not apply to money only; talents are inspired to make a difference or contribute to society and knowledge workers share in the joy of work and wealth talents create</td>
</tr>
</tbody>
</table>
2.4. Public Sector as a Control Variable

Nawab(Nawab, Ahmad et al. 2011) found that public sector workers are less extrinsically motivated than private sector workers and work motivation among public sector employees and managers differs greatly from those in the private sector. Public sector managers exhibit a motivational profile that is similar to private sector managers at a lower management level (Buelens and Van den Broeck 2007). Nawab et al. found different management approaches were required in public sector vs. private sector and that management techniques cannot be exported successfully from one sector to another because of differences in organizational environments, goals, structures and managerial values. Public organizations are more bureaucratic, public managers are less materialistic and have weaker organizational commitment than their private Sector counterparts and lack the incentives to perform as efficiently as private sector workers. Buelens et al found public sector workers worked significantly fewer hours than private sector workers and public servant workers were “less unconditionally committed” to work (Buelens and Van den Broeck 2007).

3. Methodology

A market-oriented organization and non-market oriented organization will be selected for evaluative purposes—a global, large, business to business, professional services firm and a government agency, respectively. The MARKOR scale (a widely used market orientation measure developed by Kohli et al.) will be used to gauge market orientation.

Chowdhury's Talent Scorecard will be used to assess the concentration of talent workers and composition of the workforce. For the purposes of this study, the different business units of a large, global professional services firm will provide the populations for highly market-oriented organizations and low market oriented organizations. The regulatory nature of the audit business does not allow for cross communication, promotion, customer orientation or inter-functional coordination and is essentially antithetical to a market orientation. The control for market orientation industries is the government and governmental workers.

To determine the presence of talent, an online and hardcopy survey will be administered to a cross-section of employees in both client delivery (those who provide the services to clients) and support services (those who support the professionals delivering services including marketing) in the professional services firm with the goal of 120 employees. The control group of a government agency will consist of 30 government employees, which is highly regulated and governed by many laws and policies, which prevent it from being market oriented.

Using the Talent Scorecard, this study will identify a representative sample of the talent workers in the professional services firm and in the government agency. Through this sample, the hypotheses will be tested.

3.1. Scoring

Chowdhury's recommendation for scoring the talent scorecard is to normalize the scores to a common scale (Chowdhury 2002). The general formula for normalization of scores to some scale range is:

\[
\text{Score} = \frac{\text{X Scale Range} \times \text{Position on Scale}}{\text{Maximum Count}}
\]
The normalized scores will then be plotted along a scale for each respective group using the following:

<table>
<thead>
<tr>
<th>Score</th>
<th>Talent Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>Super Talent</td>
</tr>
<tr>
<td>10</td>
<td>Strong Talent</td>
</tr>
<tr>
<td>9</td>
<td>Talent</td>
</tr>
<tr>
<td>8</td>
<td>Talent</td>
</tr>
<tr>
<td>7</td>
<td>Watch for Growth</td>
</tr>
<tr>
<td>6</td>
<td><strong>Average</strong></td>
</tr>
<tr>
<td>5</td>
<td>Watch for Improvement</td>
</tr>
<tr>
<td>4</td>
<td>Questionable Talent</td>
</tr>
<tr>
<td>3</td>
<td>Weak opportunity</td>
</tr>
<tr>
<td>2</td>
<td>Weak opportunity</td>
</tr>
<tr>
<td>1</td>
<td>No talent</td>
</tr>
</tbody>
</table>

An analysis of their intelligence generation and responsiveness with regard to the composition of talent workers and knowledge workers should support $H_1$.

3.2. Rationale

The literature is severely lacking in any information on the composition of workforce in a market-oriented organization. Certain organizations, such as the government and other hierarchical companies are unlikely to attract as many talent workers due the reduced degree of market orientation and the need to adhere to more strict policies and procedures.

4. Hypotheses

Top talent is attracted to top-performing environments, the best talents “flow to the best companies to work for (Chowdhury, 2003). The more market oriented company is the more likely they are to attract and retain a greater number of talent workers relative to knowledge workers since the environment will be more suitable to their skills. Market Orientation will be determined by use of the MARKOR Scale. For purposes of this study, a MARKOR score of 4.0 or greater indicates a degree of market orientation; a score below 3.0 indicates low market orientation.

$H_{1a}$: Highly market-oriented organizations have a greater ratio of talent workers to knowledge workers than lesser market oriented organizations

$H_{1b}$: Lesser and non-market-oriented organizations have a lower percentage of talent workers than more highly market oriented organizations

Nawab (Nawab, Ahmad et al. 2011) found that public sector workers are less extrinsically motivated than private sector workers and work motivation among public sector employees and managers differs greatly than those in the private sector. Public sector managers exhibit a motivational profile that is similar to private sector managers at a lower management level (Buelens and Van den Broeck 2007). Nawab et al. found different management approaches were required in public sector vs. private sector and that management techniques cannot be exported successfully from one sector to another because of differences in organizational environments, goals, structures and managerial values. Public organizations are more bureaucratic, public managers are less materialistic and have weaker organizational commitment than their private sector counterparts and lack the incentives to perform as efficiently as private sector workers. Buelens et al. found public sector workers worked significantly fewer hours than private sector workers and public servant workers were “less unconditionally committed” to work (Buelens and Van den Broeck 2007).
Using a government agency, which is highly regulated, governed and not market oriented by its very charter, as a control group, will enable further correlations and inferences to be drawn and demonstrate the distinct difference between a non-markets oriented organization with those that are market oriented in varying degrees. For the purposes of this study, an unnamed agency provides the control group and is compared with the different business units of the professional services firm.

H2: Professional services firms have a greater percentage of talent workers than government agencies. For analysis of the variables the following tests were run on the data:

<table>
<thead>
<tr>
<th>Market-Orientation</th>
<th># of talent workers</th>
<th># of knowledge workers</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Independent samples t-test</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Pearson chi-square</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Continuity Correction</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Likelihood Ratio</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Fisher's Exact Test</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Linear by Linear Association</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• N of Valid Cases</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Contingency coefficient</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Levene's Test for Equality of Variances</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Descriptive Statistics</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Crosstabs</td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5. Data Analysis

Statistics Package for Social Sciences (SPSS) 16 software was used in the analysis of the data gathered. The objective of this quantitative study was to determine the market orientation of worker type in organizations that were market-oriented and non-market-oriented. The government agency represented the non-market-oriented organizations. This study was guided by several hypotheses which are discussed. This chapter begins with the frequency and percentage summary of demographic information. This was followed by the results of the t-tests to address the research hypotheses presented.

5.1. Summary of Demographic Information

A total of 112 responses to the Talent Scorecard was received via the Qualitrics survey link. There were dropouts at various points with 103 fully complete surveys. Of the categorical questions, 49.1% of the respondents were male, 42.9% were female. Country of origin netted 67.9% of respondents were U.S. born. Length of tenure with the respondents’ respective organization was distributed across the range of less than one year (10.7%), one to three years (14.3%), three to five years (15.2%), five to eight years (13.4%), eight to 10 years (8%), 10 to 15 years (17%), and more than 15 years (13.4%) with little difference among the choices. Annual compensation was more concentrated with 30.4% of the respondents in the $100,001 to $124,000 range. The ages were also variable wherein the participants had age range of 25–50 years old (15.2%), 31 to 35 years old (11.6%), 36 to 40 years old (17.9%), 41 to 45 years old (17.9%), and 46 to 50 years old (11.6%) with somewhat equal distribution among the choices. Fifty-six percent of the respondents were married and 25% were single, never married. Education-wise, 65.2% of the respondents hold Bachelor's degrees and 22.3% achieved Master's degrees. Organizationally, 28.6% of the respondents support the Consulting function and 29.5% work for the government. Lastly, 83% were talent worker and 12.5% were knowledge worker.

Table 1 summarized the Median statistics of the demographic information of age, compensation, tenure, and level of education. The median value for age of the respondents was in the range of 36 to 45 years old (median =4). The median value for range of annual compensation of the respondents was in the range of $100,001 to $125,000 (median =4). The median value for range of tenure with organization of the respondents was in the range of 5 to 8 years (median =4).
Lastly, the median value for range of highest level of education accomplished of the respondents was Bachelor’s degree (median = 3).

Table 1: Demographic Information Profile Summary Median of Age, Compensation, Tenure, and Education Level.

<table>
<thead>
<tr>
<th></th>
<th>Age Range</th>
<th>Range of annual compensation</th>
<th>Tenure with organization</th>
<th>Highest level of education accomplished</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median</td>
<td>36 to 45 years</td>
<td>$100,001 to $125,000</td>
<td>5 to 8 years</td>
<td>Bachelor’s degree</td>
</tr>
</tbody>
</table>

Table 2 showed the mean comparison of the MARKOR scores of intelligence generation and responsiveness between the different classifications of organizations that respondents work/support. Intelligence generation was highest for respondents working in Financial Advisory (M = 4.17), the second highest for respondents working in consulting (M = 4.13), and the third highest for respondents working in Audit (M = 4.00). Respondents working in government (M = 2.17) had the lowest intelligence generation score. For responsiveness, respondents working in Financial Advisory (M = 4.50) had the highest responsiveness score and the second highest for respondents working in consulting (M = 4.19). Respondents working in government (M = 2.50) had the lowest responsiveness score.

Table 2: Descriptive Statistics of by MARKOR Scores Classification of Organization

<table>
<thead>
<tr>
<th>Classification of organization do you work/support</th>
<th>Intelligence Generation</th>
<th>Responsiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consulting</td>
<td>Mean: 4.13</td>
<td>Mean: 4.19</td>
</tr>
<tr>
<td>N</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>0.51</td>
<td>0.77</td>
</tr>
<tr>
<td>Tax</td>
<td>Mean: 2.72</td>
<td>Mean: 2.43</td>
</tr>
<tr>
<td>N</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>Audit</td>
<td>Mean: 4.00</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>.</td>
<td></td>
</tr>
<tr>
<td>Financial Advisory</td>
<td>Mean: 4.17</td>
<td>Mean: 4.50</td>
</tr>
<tr>
<td>N</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>Government</td>
<td>Mean: 2.17</td>
<td>Mean: 2.70</td>
</tr>
<tr>
<td>N</td>
<td>17</td>
<td>17</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>0.29</td>
<td>0.51</td>
</tr>
<tr>
<td>Total</td>
<td>Mean: 3.01</td>
<td>Mean: 3.30</td>
</tr>
<tr>
<td>N</td>
<td>31</td>
<td>30</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>1.04</td>
<td>0.97</td>
</tr>
</tbody>
</table>

6. Reliability Measure

The reliability of the results of the 26 Talent items was measured. The reliability was tested through the internal consistency of the survey response among the sample of principals to ensure the reliability of the instrument was established. The Cronbach’s Alpha statistic was computed as the reliability measure. Table 3 summarized the Cronbach’s Alpha reliability statistics for the talent score and the MARKOR scale scores for intelligence generation and responsiveness. Based from Table 3, it can be observed that all of the Cronbach’s Alpha statistics for the Talent Survey (α = 0.93), MARKOR scale scores for intelligence generation (α = 0.94), and responsiveness (α = 0.92) were greater than the minimum acceptable value of 0.7 implying that the measures of talent score and the scores for the MARKOR scale were acceptable reliably and internally consistent in measuring the study variables. In fact, the reliability measure was excellent since the Cronbach’s alpha value was greater than 0.9.
The Cronbach's Alpha of level of empowerment and level of resourcefulness cannot be computed since each of the variables were measured using one item only.

Table 3: Cronbach's Alpha Reliability Statistics

<table>
<thead>
<tr>
<th></th>
<th>Cronbach's Alpha</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Talent Score</td>
<td>0.93</td>
<td>26</td>
</tr>
<tr>
<td>Intelligence Generation (MARKOR Scale)</td>
<td>0.94</td>
<td>18</td>
</tr>
<tr>
<td>Responsiveness (MARKOR Scale)</td>
<td>0.92</td>
<td>14</td>
</tr>
</tbody>
</table>

5.2 Statistical Tests

The hypotheses posited that a market oriented organization would have different workforce composition than a non-market oriented organization. Specifically, a market oriented organization would have a greater percentage of talent workers than knowledge workers; a non-market oriented organization would have a lower percentage of talent workers compared to a market oriented organization and a professional services firm would have a higher percentage of talent workers than a government agency. An independent samples t-test was conducted to determine the statistical significance of the difference in the mean MARKORs cores between participants in “Government” organizations and for other types of organizations. The results were presented in Table 1. The Levene's test for equality of variance (LTEV) was first analyzed to determine if the variances are equal or not. The “assumed” row was used in the analysis of mean difference for the MARKOR score of intelligence generation (F (29) = 3.49, p = 0.07) and responsiveness (F (28) = 2.33, p = 0.14) since the p-values were greater than 0.05 to prove that the variances between groups were equal.

The resulting statistics of the independent sample t-test summarized in Table 2 showed that there was a statistically significant difference in the mean score of intelligence generation (t (29)= -11.53; p = 0.00) and responsiveness (t (28)= -5.42; p = 0.00) among those in “Government” organizations than for other types of organizations. The t-test results showed that intelligence generation score is lower for "Government“ organizations (M = 2.17) than for other types of organizations (M = 4.02). Also, the responsiveness score is lower for "Government" organizations (M = 2.70) than for other types of organizations (M = 4.08). In general, the t-test results showed that MARKOR scores were lower for "Government“ organizations than for other types of organization. The hypothesis, highly market-oriented organizations have a higher number of talent workers than lesser market oriented organizations was supported.

Table 1: Descriptive Statistics of MARKOR Scores by Type of Organization

<table>
<thead>
<tr>
<th></th>
<th>Organization</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intelligence Generation</td>
<td>Non-Market Oriented</td>
<td>17</td>
<td>2.17</td>
<td>0.29</td>
<td>0.07</td>
</tr>
<tr>
<td></td>
<td>Market Oriented</td>
<td>14</td>
<td>4.02</td>
<td>0.58</td>
<td>0.16</td>
</tr>
<tr>
<td>Responsiveness</td>
<td>Non-Market Oriented</td>
<td>17</td>
<td>2.70</td>
<td>0.51</td>
<td>0.12</td>
</tr>
<tr>
<td></td>
<td>Market Oriented</td>
<td>13</td>
<td>4.08</td>
<td>0.87</td>
<td>0.24</td>
</tr>
</tbody>
</table>
Table 2: Independent Samples Test Results of Difference of MARKOR Scores by Type of Organization

<table>
<thead>
<tr>
<th></th>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
<td>t</td>
</tr>
<tr>
<td>Intelligence</td>
<td>3.49</td>
<td>0.07</td>
<td>11.53</td>
</tr>
<tr>
<td>Generation</td>
<td>2.33</td>
<td>0.14</td>
<td>-5.42</td>
</tr>
</tbody>
</table>

The frequency and percentage breakdown of the number of knowledge workers and talent workers in “Government” organizations and other types of organization were presented in Table 3. The breakdown showed that there were 10 (30.3%) knowledge workers that were in “Government” organizations and 3 (4.6%) knowledge workers that were in other types of organizations. Also, there were 23 (69.7%) talent workers that were in “Government” organizations and 62 (95.4%) talent workers that were in other types of organizations. This supports the hypothesis of lesser and non-market-oriented organizations have fewer talent workers than more highly market oriented organizations.

Table 3: Crosstabs Summary of Knowledge Worker and Talent Worker by Type of Organization

<table>
<thead>
<tr>
<th>Organization Type</th>
<th>Non-Market Oriented</th>
<th>Market Oriented</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge Worker Count</td>
<td>10</td>
<td>3</td>
<td>13</td>
</tr>
<tr>
<td>% within Organization</td>
<td>30.3%</td>
<td>4.6%</td>
<td>13.3%</td>
</tr>
<tr>
<td>Talent Worker Count</td>
<td>23</td>
<td>62</td>
<td>85</td>
</tr>
<tr>
<td>% within Organization</td>
<td>69.7%</td>
<td>95.4%</td>
<td>86.7%</td>
</tr>
<tr>
<td>Total</td>
<td>33</td>
<td>65</td>
<td>98</td>
</tr>
<tr>
<td>% within Organization</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Further testing for the hypotheses of talent workers in market oriented and non-market oriented organizations was conducted. Symmetry measure test was conducted to determine whether the nominal data of the number of knowledge worker and talent worker between “Government” organizations and other types of organization was statistically significant correlated or not. The contingency coefficient was calculated. A level of significance of 0.05 was used in the statistic testing. Statistical correlation was observed if the p-value is less than the level of significance value of 0.05. The contingency coefficient measured was summarized in Table 4. The statistics showed that the number of knowledge workers and talent workers between “Government” organizations and other types of organizations were significantly correlated (Contingency Coefficient = 0.34; p < .01). This was because the p-value was less than 0.05. This means that the number of knowledge workers and talent workers was significantly different between “Government” organizations and other types of organizations. Thus, the results supported hypothesis one which was “Highly market-oriented organizations have a higher number of talent workers than lesser market oriented organizations.” This was because there were more talent workers in other types of organizations (95.4%) as compared to “Government” organizations (69.7%).
Chi-Square test was conducted to determine whether the percentage comparison of the number of knowledge workers and talent workers between “Government” organizations and other types of organizations was statistically significant or not. A level of significance of 0.05 was used in the statistical testing. Statistical difference was observed if the p-value is less than the level of significance value of 0.05. The Chi-square test result was summarized in Table 5. The statistics showed that the number of knowledge workers and talent workers between “Government” organizations and other types of organization was significantly different ($\chi^2 (1) = 12.55; p<.01$). This was because the p-value was less than 0.05. The results supported hypothesis one which was “Highly market-oriented organizations have a higher number of talent workers than lesser market oriented organizations” and hypothesis five, “Professional services firms have more talent workers than government agencies.” This was because there were more talent workers in other types of organizations (95.4%) as compared to “Government” organizations (69.7%) or approximately 50 percent more.

The mean comparison of the talent score between the knowledge workers and talent workers was presented in Table 6. The mean comparison showed that the talent workers ($M = 8.77$) had a higher talent score as compared to knowledge workers ($M = 6.36$).

6.1 Summary

The preceding discussed the summary of the demographic characteristics, the descriptive statistics, and the results of the statistical tests to address the research hypotheses. The model consists of market oriented and non-market oriented organizations and the workforce composition, specifically the ratio of talent workers to knowledge workers in a professional services firm and government agency.
The t-test results showed that MARKOR scores for intelligence generation, responsiveness and overall were lower for Government organizations than for other types of organizations. The chi-square results showed that there were significantly more talent workers in other types of organizations (95.4%) as compared to Government organizations (69.7%).

7. Discussion, Conclusions and Recommendations

The purpose of this study was to examine the relationship between high and low market oriented organizations and the prevalence of talent workers versus knowledge workers. The approach to investigation included a) determining market orientation through use of the MARKOR scale and b) identifying the number of talent workers versus knowledge workers within high and low market oriented organizations. The intention behind studying these aspects was to determine if there is a difference in the types of workers found in market oriented organizations versus lower market oriented organizations since there is a gap in the literature on types of workers and market orientation.

7.1. Results and Implications

The data showed the more highly market oriented organization (professional services firm) had 50 percent more talent workers than knowledge workers when compared to the lower market oriented organization (government). With a ratio of 3:2 talent workers for the professional services firm as compared to the government agency, the hypothesis relating to a prevalence of talent workers in more market oriented organizations than lesser market oriented organizations was supported. This is likely due to the competitive environment in which professional services firms operate as compared to the uncompetitive environment for the government.

The results also support lesser or non-market oriented organizations will have more knowledge workers than market oriented organizations. It is feasible that more market oriented organizations attract and retain employees with stronger attributes which are associated with talent workers and these employees support the market orientation of the organization. This is not to say that a non-market oriented organization lacks talent workers however it does imply the characteristics of talent workers may present challenges in an organization which requires less innovation and more adherence to regulations and policies. The results of the survey showed the professional services organization is more market oriented than the government agency. Being more market oriented is likely due to professional services firms depending on clients to procure services and clients have multiple vendors from which to select for consulting, tax, audit and financial services. The focus for these firms is on external clients and the competitive nature of the professional services environment requires a higher degree of market orientation, especially intelligence generation and responsiveness. The government organization may require less in terms of intelligence generation and responsiveness because there is no potential loss of customers due to the monopolistic nature of government and its lack of competitors.

Professional services firms were found to have more talent workers than government does. This is in part due to the degree of market orientation of the organizations. The percentage of talent workers was higher than anticipated for the government. This could be explained by the predominant number of respondents for the government being federal agents, which requires more flexibility and demonstration of characteristics associated with talent workers. Characteristics like dependability, ethics, honesty and trustworthiness, passion for winning, fact-based decision making, working hard and working smart were consistently given high marks by both the professional services firm and government.

7.2. Study Limitations

Several limitations exist for this study. A convenience sample was used which prevents making broad, sweeping generalizations. The samples size precludes sub-analyses from being conducted.
While the focus of this study is on market oriented organizations and the presence of talent workers as compared to knowledge workers, it would be beneficial to identify these ratios within the various businesses of the professional services organization and by level and tenure in the organizations. A larger sample where there is an equal balance of talent and knowledge workers would reveal more trends in the data and characteristics associated with talent workers. This study was limited to one government agency and one professional services firm. The second limitation is in the assessment of overall degree of market orientation. Further analysis of market orientation would provide a more expansive picture. This information could then be used to determine the aspects of market orientation that are more dominant and if there is a relationship between certain aspects and the ratio of talent workers.

7.3. Recommendations for Further Research

Opportunities for future research exist to address the limitations of this study. Business unit, level and tenure would provide deeper insight into the composition of the workers within the organizations. More in-depth analysis of market orientation would allow further exploration as to which types are stronger in an organization and their influence on the attraction and retention of talent workers. Country of origin should be explored further to determine if there is an association between country of origin, country of residence and their influence on talent workers versus knowledge workers.

References


