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Thomas Kohntopp thomas.kohntopp@mail.waldenu.edu

J McCann Union College

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Virtual Leadership in Organizations: Potential Competitive Advantage?

Jack McCann, Union College Thomas Kohntopp, Walden University

Introduction

The present and future of virtual leadership is connected to the rise and direction of the digital economy, as new technologies and applications will change the way business connects internally and externally with stakeholders. Data are at the heart of the digital economy and its protection is critical. The digital economy is of great interest both domestically and internationally. Its development and future are at the heart of every country's economic competitiveness (U.S. Department of Commerce, 2017).

Hammonds (2006) discovered that the "Starbucks" effect is the hallmark of the global economy. It is the continuous emergence of new competitors with superior business models. It forces organizations to reconsider and question the viability of what they have always done. Capitalizing on continuous change has been the basis, in part, of the national competitive advantage. Competition creates pressure on the global organization to do more with less, to do it faster and cheaper, and that customers have choices. A successful global organization may utilize a competitive strategy concerned with production costs by making products in the lowest cost country and then exporting them to the global market. It may choose to license foreign

companies to act on its behalf or to franchise, and to create alliances and partnerships in order to strengthen its position in global markets.

An organization can gain a competitive advantage in global markets by exploiting and spreading its value chain functions among nations in the most efficient and effective manner. An additional way an organization can gain this advantage is to transfer competitively valuable competencies from its domestic base to foreign markets. A global organization may be able to deepen its strength and capabilities based on the fact it has more options than the domestic company. From a historical perspective, business activity of all types is moving in the direction of globalization (Acs & Preston, 1997).

Traditional models of leadership certainly have value to organization success. However, to remain competitive in a global perspective a modified view of leadership is required. The global corporation can reside any and everywhere, and this phenomenon produces challenges with respect to how traditional leadership is performed. The personal nature of traditional face-to-face interaction takes a different perspective, since face-to-face takes on a new meaning as proximity is expanded. Granted, technology

enables face-to-face via screens and calls in the virtual environment, but so much more interaction occurs asynchronously without face-to-face opportunities. Therefore, traditional leadership models that involve in-person meetings or informal conversations in office doorways are absent, or less effective, in the virtual or global world. Because of the expanding global organization, traditional leadership can be a disadvantage for companies that seek an international competitive advantage.

This paper will introduce the concept of a virtual organization and the role, responsibilities, and practices for leaders in these organizations. Most corporations operate globally. Small to medium sized companies residing in a single country still rely on international suppliers and markets, among other things. As technology improves, develops, and advances, globalization will become more pronounced for all companies. Considering this technological trend, the virtual structure will likely become more prevalent. This paper will also present leadership concepts and how practical and effective they can be in a virtual platform. Virtual organizations are highly suited to globalization and an international perspective will also be addressed along with recommendations to organizations.

Virtual Leadership and Its Context

E-Leadership was first coined in response to a new working environment where human interactions are mediated by information and communication technology. In this environment leaders lead organizations and projects from a distance (Avolio, Kahai, & Dodge, 2000). The transition to a global economy has required changes in organization and significant adaptation on the part of leadership (Avolio & Kahai, 2003), and a new leadership approach. E-Leadership is viewed as a necessary response and solution to global changes created by technological development. E-Leadership may also be a result of technological development of change due to global economy. These changes are creating virtual and flexible work options and they continue to evolve requiring employers to formalize their virtual work policies and better manage their virtual workforces (Leonard, 2011).

Innovations in information and communication technology, such as the internet and E-commerce, have revolutionized the way organizations operate today. Therefore, new forms of organizations (E-business or

virtual organizations) and a new form of leadership (E-leadership or virtual leadership) are taking place in the virtual business environment.

The main feature of E-leadership and virtual leadership is the manner of interaction and relationship between leaders and their followers. These leaders communicate via electronic media through the internet (Renu, 2014). Meyer (2010) found that virtual managers need a broader or more augmented skill set than managers working with co-located traditional teams. Virtual managers must have the ability to switch between skill sets, based on the diversity of their team members and the distance between them. The new virtual world of business requires managers who are especially flexible and embrace diversity to a greater degree.

According to Renu (2014), a virtual leader directs people from a distance to complete required work that accomplishes the mission and objectives of the organization. E-leaders or virtual leaders are primarily found in E-business. E-business means doing business through electronic medium, especially through internet. E-leadership is also called distance leadership or virtual leadership and can replace traditional leadership because of advancement in technology.

Lee (2014) postulates that leadership and communications are inseparable elements and the way we communicate has evolved. Today there are more global-virtual teams than ever before, and this trend continues to grow. Organizations must utilize virtual team member from across the globe to meet the challenges of a global economy. These teams must communicate virtually through videoconference, phone, and email to save money and time when resources are limited. This management challenge requires skills for running global-virtual teams that are different than what is needed for teams located in the same place.

Meyer (2010) presents four ways that the two modes of leadership differ. First, team leaders must formalize roles and responsibilities of employees along with their own. Traditional leadership does require formalization. Yet in a face-to-face environment there is opportunity for more immediate adjustments or modifications that reduces the need for a strict formalized context. Second, leaders of global teams must recognize that their styles of decision making may be deeply rooted in the cultures of teams. Global teams must develop detailed descriptions of how decisions will be made. Perhaps the best global team leader is one who is

willing to try different decision-making processes. In traditional organizations leaders often interact with employees who represent or identify with norms and perspectives that often match those of the leader. There is may be less heterogeneity in the team, too. Thirdly, trust is different in virtual teams than in a co-located team when measured in terms of reliability and familiarity. Leaders of virtual teams must create well-defined processes where team members must deliver specific results in a repeated sequence. Over time, cycles of behavior build trust. Traditional organizations and leadership embrace familiarity and frequent interaction. There is more opportunity for workers to experience the characteristics, behaviors, and nuances of the leader in a traditional organization. Fourth, the key to effective leadership is effective communication; the foundation to all success is effective communication. Virtual leaders who sit at a desk throughout a meeting may lose their ability to persuade or communicate interpersonally versus management by walking around. Enhanced communication encompasses more than an exchange of information. Traditional leaders function in the moment. It affords them time to adjust to the instantaneous change of ideas that take place in a traditional face-to-face conversation.

These four key elements are core to driving and positioning virtual organizations to succeed in the ever-increasing presence of virtual work. A strong concern for the human element combined with inspiration and motivation, trust, clear and frequent communication, and career enhancing training are leadership characteristics that define the successful virtual organization. These include employee productivity, employee retention, employee attendance, employee development, and employee promotions (Meyer, 2010). Key elements for successful virtual leadership are certainly relevant in the traditional work environment. However, being proficient with the key elements in a traditional environment may be achieved with less effort.

Critical Leadership Characteristics in the Virtual Workplace

Roy (2012) stated that leaders in today's virtual environment need to be strong in relationship building founded on trust, built to be sustainable, enhances team spirit, and motived by achieving form and functionality. Excellent leaders must also have well-developed technical skills along with

superior leadership skills. Furthermore, they must have empathy to handle the frustration faced by their staff members (Roy, 2012). According to Walker (2010), leadership is the key single factor that drives and determines the success of the organization. Gladys (2014) found research about frequently cited leadership characteristics needed for a successful virtual work environment. It is presented in Table 1.

Moving from Managing Traditional Organizations to Virtual Ones

Virtual organizations are generally comprised of teams or individuals that operate in separate locals with some degree of autonomy. A key component that enables productivity is technological connectivity, often asynchronous (Burma, 2014). Virtual organizations can certainly enhance a company's success. However, challenges with effective leadership may arise and employees can become disenfranchised when traditional levels of engagement erode.

Management must operate in a world shaped by globalization and the information revolution (Grove, 1995). Organizations downsize, rightsizing, outsource, reorganize, and reengineer to reduce the workforce size to adjust to an ever-changing business environment. Globalization demands the creation of more virtual work environments (Drew, 1994). It is necessary to move from managing the 20th century work environment to adapt to today's virtual, digital, and global work environment. Successful virtual managers are becoming more important and necessary to manage virtual human resources. A comparison of traditional teams and virtual teams is presented in Table 2.

Perry (2008) stated that in 2008 that nearly 80% of companies with more than 10,000 employees considered or employed digital forms of work collaboration. Considering the ongoing globalization and digitalization of work processes, collaborating in digital and virtual teams has become an important aspect of work in many organizations and in many occupations (Krumm, Kanthak, Hartmann, & Hertel, 2016). Society of Human Resource Management (2012) reported that 46% of human resource professionals from global organizations used some form of virtual teamwork.

Table 1. Leadership Characteristics and Elements of the Successful Virtual Organization

Productivity	Retention	Attendance	Development	Promotions
are more productive when acknowledged, empowered, and treated as individuals (Nauman, Khan, &	Virtual employees are more likely to remain with an organization when leadership respects and cares about their well-being (Fisher and Fisher, (2001).	Considering the virtual worker as an individual positively influences attendance (Solomon, 2000).	Development of virtual employees rests with leadership providing assignments that offer professional growth (Fisher & Fisher, 2001).	Leadership that cares about virtual employees creates an environment that is receptive to upward mobility in the organization (Clemons & Kroth, 2011).
Inspirational leadership is correlated with virtual employees' focus on achieving organizational goals (Joshi et al., 2009).	Leadership that is inspirational and motivational tends to result in commitment and loyalty from the employee (Bass, 1999, p. 11).	Emphasis on well-being in a virtual team influences the commitment demonstrated in areas such as attendance via technical connectivity (Hunton & Norman, 2010).	It is important to motivate virtual employees by assisting them to rise to their potential performance (Clemons & Kroth, 2011).	Inspiration and motivation of transformational leadership in virtual teams lays the groundwork for upward mobility (Kanter, 2001).
Leaders' trust is positively related to virtual team performance (Joshi et al., 2009).	It is incumbent upon leadership to foster relationships of trust to retain the virtual workers in the knowledge community (Morello & Burton, 2006).	The trust associated with teleworking results in a flexibility that leads to less absenteeism (Gibson et al., 2002).	A virtual leader must lead and build relationships of trust where everyone develops through shared ideas and expertise (Malhotra et al., 2007).	An attitude of trus on the part of the virtual leader needs to be aligned to ensure the empowerment and potential of virtual employees (Peters et al., 2010).
Virtual employees require extensive feedback and information to enhance productivity (Fisher and Fisher, (2001).	Communication feedback encourages virtual employees to feel a part of the organization and reinforces a connection to the organization (Leonard, 2011).	Virtual teams led with appropriate communication and fewer interruptions see productivity increases correlated with decreased in absenteeism (Gibson et al., 2002).	Informal communication with employees aids in development and overall expertise, (Cooper & Kurland, 2002).	Communication and inclusion in succession planning is critical so that employees see recognition for their work in the context of career advancement (Leonard, 2011).
A productive virtual organization requires a gap analysis of virtual employees is conducted for both IT and non-IT (Yu, 2008).	Leaders who ensure appropriate training to virtual employees experience long term retention of employees (Otfinoski, 2010).	Developing virtual employees via collaborative training is core to their engagement; this level of engagement influences attendance	Leadership must ensure virtual workers have opportunity to grow and thrive through virtual training and online communities of	Professional development and advancement of virtual employees is integral to change management and implementation of virtual
	Virtual employees are more productive when acknowledged, empowered, and treated as individuals (Nauman, Khan, & Ehsan, 2009). Inspirational leadership is correlated with virtual employees' focus on achieving organizational goals (Joshi et al., 2009). Leaders' trust is positively related to virtual team performance (Joshi et al., 2009). Virtual employees require extensive feedback and information to enhance productivity (Fisher and Fisher, (2001). A productive virtual employees is conducted for both IT and non-IT (Yu,	Virtual employees are more productive when acknowledged, empowered, and treated as individuals (Nauman, Khan, & Ehsan, 2009). Inspirational leadership is correlated with virtual employees' focus on achieving organizational goals (Joshi et al., 2009). Leaders' trust is positively related to virtual team performance (Joshi et al., 2009). Leaders' trust is positively related to virtual team performance (Joshi et al., 2009). Leaders' trust is positively related to virtual team performance (Joshi et al., 2009). Virtual employees require extensive feedback and information to enhance productivity (Fisher and Fisher, (2001). A productive virtual employees requires a gap analysis of virtual employees is conducted for both IT and non-IT (Yu, employees experience long term retention of employees	Virtual employees are more productive when acknowledged, empowered, and treated as individuals (Nauman, Khan, & Ehsan, 2009). Inspirational leadership is correlated with virtual employees' focus on achieving organizational goals (Joshi et al., 2009). Leaders' trust is positively related to virtual team performance (Joshi et al., 2009). Leaders' trust is positively related to virtual team performance (Joshi et al., 2009). Virtual employees require extensive feedback and information to enhance productivity (Fisher and Fisher, (2001). Virtual employees require extensive feedback and information to enhance productivity (Fisher and Fisher, (2001). A productive virtual organization requires a gap analysis of virtual employees is conducted for both IT and non-IT (Yu,	Virtual employees are more productive when acknowledged, empowered, and treated as individuals (Nauman, Khan, & Ehsan, 2009). Inspirational leadership is correlated with virtual employees' focus on achieving organizational goads (Joshi et al., 2009). Leadership that is inspirational and morganization and organization and performance (Joshi et al., 2009). Leaders' trust is positively related to virtual team performance (Joshi et al., 2009). Virtual employees require extensive feedback and information to enhance productivity (Fisher and Fisher, (2001). Virtual employees and feedback and information to enhance productivity (Fisher and Fisher, (2001). A productive virtual organization and reganization requires a gap analysis of virtual employees is conducted for both IT and non-IT (Yu, employees is conducted for both IT and non-IT (Yu, employees is conducted for both IT and non-IT (Yu, employees is conducted for both IT and non-IT (Yu, employees in erasing and information to employees is conducted for both IT and non-IT (Yu, employees to feel and polyees is conducted for both IT and non-IT (Yu, employees in full and organization and rorganization and rorganization and regain about their well-being influences individual positively influences individual positively influences and eave about their well-being (Solomon, 2000). Emphasis on well-being influences providing passignments that offer professional growth (Fisher & Fisher, 2001). Emphasis on well-being influences and virtual team influences a virtual employees and surfuration and rorganization and responsible to for professional positively influences individual positively influences and carea sabout their well-being (Solomon, 2000). Emphasis on well-being influences in influences a virtual employees in fluences of feed and virtual positively influences and carea shout and organization and rorganization and rorganization and rorganization and reganization and organization and responsible to the introduction feedback end information to end their wirtual em

Note. Reprinted from A Phenomenological Study of the Lived Experiences of Employees Who Work virtually and Their Perceptions of Leadership Behaviors that Create a Successful Virtual Organization (p. 42), Copyright (2014) by Ann Gladys. Published by ProQuest LLC (2014) UMI 3619351

Traditional teams Virtual teams

Team members are in same location (leader has opportunities for personal interaction)

All team members are in different locations (leader can benefit from perspectives in wide-ranging markets and from diverse customer bases)

Team members use face to face communication (leader maintains human interaction that can enhance meaning and understanding)

Team members use asynchronous communication (leader scheduling is simplified; information distribution can be instantaneous)

There is synchronous communication (leader can maintain real-time information exchange)

Tasks are very structured and certain (leader faces and addresses less ambiguity)

Team members coordinate the task (leader spends time facilitating, guiding, and encouraging the collective group)

Note. From Kratzer, Leenders, & Van Enelen, 2004, p. 2

Challenges of Leading Virtual of Organizations

Leadership is influencing others to successfully complete a collective undertaking (Yukl, 2006) and tends to fall into either a directive or participative approach in most organizations (Avolio & Kahai, 2003). Additionally, Bass (1997) discovered that true transformational leadership knows when to use behaviors from each dimension. Effective leadership is good for all organizational stakeholders, but ineffective leadership negatively impacts stakeholders making subordinates miserable, harming employee morale, lowering productivity, and irrevocably damaging the organization (Hogan & Kaiser, 2005; Padilla, Hogan, & Kaiser, 2007). In virtual organizations, technology accelerates leaders' positive or negative organizational impact locally as well as globally (Avolio & Kahai, 2003).

The complexities of leadership in virtual organizations result in several challenges that contribute to social influences making it difficult to successfully manage (Zofi, 2011; Barczak, McDonough, & Athanassiou, 2006). Language differences hinder effective communication along with variations in interpreting context in high-context cultures (e.g., Asian, Arabian, Southern European) compared to low-context cultures (e.g., Swiss, German, American, Australian). Differences in perceptions of what cannot be seen during virtual communications in the virtual

world result in team members only perceiving what is directly in front of them. In addition, there are differences in perceived status of a manager versus team member, namely hierarchy within the team membership. The cultural differences among different companies is impactful when working between global vendors or consultants, too. Confusion and consideration of time zone differences is challenging in virtual communication creating complexities in leading virtual organizations. Additionally, research found that communication is recurrent issue among the challenges encountered in virtual program and project management research (Hambley, O'Neill, & Kline's 2007; Eisenberg & Krishnan, 2018). The additional demands placed on leaders and employees to constantly interact and collaborate in a virtual organization increasingly overloads workers. Strategically managing these new challenges is essential (Cross, Taylor, & Zehner, 2018).

Virtual Leadership and Teams in the Global Economy Nigerian Construction Industry

Odubiyi and Oke (2016) examined virtual teams in the Nigerian construction industry from the perspective of virtual teams (VTs), using mixed-method research design. They determined that VT is a type of team where members operate from different geographical regions and function primarily with and through the aid of information and communications

technology media. Nigeria, as in other countries, primarily uses traditional teams (face-to-face team) in construction work, a common industry, and that research about virtual teams (VTs) is still in its nascent stages

Odubiyi and Oke (2016) found that communication among team members leading to flexibility of operation and decision making are key strengths of VT. The authors found weaknesses among VTs pertained to requirements for special training, a need to develop skills to manage conflict among team members, and adaptation to the needs of clients regarding the communication and structure of VTs. Improving efficiency through reduction in time-to-market, collaboration ability of team members, and delivery time of projects were found to be opportunities for VTs. Research also revealed that threats among VTs in the population studied included members' performance level and complexity of technical application. The study concluded that success of VTs depended on exploiting opportunities opened to them, such as VTs that supported an enhanced organization structure where reduced lines of authorities and hierarchies may exist, and rapidly sharing of information. This is different to what may be found with traditional team where informal discussions commonly provide for information sharing.

Trust, E-Leadership, and Organizational Commitment

Iriqat and Khalaf (2018) investigated the enhancing role of building trust and the impact it has on E-leadership and organizational commitment in virtual teams. The authors discovered that E-leadership is significantly related to building trust and organizational commitment of virtual teams situated in Islamic banks in Palestine. They also found that the three dimensions of E-leadership (engagement, execution, and elasticity) significantly predicted organizational commitment. Furthermore, they discovered that trust building enhances the impact of E-leadership on organizational commitment in these same banks. As a result of their research, Irigat and Khalaf (2018) recommend to banking management that they focus on developing the electronic abilities and skills of directors (i.e., vision, engagement, energizing, empowering, executing, and elasticity) to increase organizational commitment and the trust of employees in banking sectors.

Virtual Leadership and Distance Education Teams in Turkey

According to Kuscu and Hasan (2016), companies and universities have opened to the world and as a result of globalization many have developed a worldwide presence and global brand. Most companies and universities now provide distance learning classes and in-service training in virtual platforms via internet. These learning opportunities may be conducted in one country, projected, or recorded for specific or worldwide consumption. Individuals work in different time zones and environments as members of virtual teams, and the virtual leaders effectively manage their virtual teams. The authors examined virtual leadership perception of distance learning teams. For the purpose of the study, the virtual leader was any member of the team for academicians, manager for technical support team, and teacher for students.

The major findings of this research were about who the virtual leader was and what properties virtual leader should hold. Communication skills are the most important ability for a virtual leader. Virtual teams are indispensable in business and education. However, society has not moved beyond the conventional education concept to appreciate virtual education and many believe virtual leadership is a simple management concept. However, it is necessary to consider a virtual leader differently from conventional leaders (Kuscu & Hasan, 2016).

Kuscu and Hasan (2016) found that virtual environments were more challenging, since they are free-flowing and more difficult to follow environments in which organizational loyalty level varies. Thus, the most important duty of the virtual leader becomes motivating team members to achieve the mission of the organization. The virtual leader must establish an environment founded on confidence, one in which the job descriptions are clearly defined, and they must know their team well and identify their needs. The virtual leader's job can be more challenging than other leaders, but it also has its advantages as well. The leader may be able to access more people at a time and to offer a comfortable working environment. The virtual leadership characteristics of all three groups studied indicated that communication skills, ability to motivate, along with a functional level of technological competence were important. Another identified leadership skill was the ability to instill confidence and leading the team. The common factor discovered among these three groups was that they required

different skills as compared to other leadership approaches in conventional environments.

The Future of Virtual Leadership and Communication

According to the U.S. Department of Commerce (2017), the digital economy has become an integral part of the daily lives of most humans throughout the world. We use online tools and services to search for information, help with our children's homework, order household goods from our favorite retailer, along with many other uses from gaming to dating. Organizations throughout the globe use telecommunication and information technologies to solve problems, develop a product, or provide a service. Companies use these tools to find and connect with other businesses, connect internally between different business locations to share information, along with a myriad of other uses. These tools add value to the economy and collectively represent what is now known as the digital economy.

New technologies are at the forefront of delivering the digital economy and need for virtual leadership. According to AT&T (2019), for new technologies to be widely deployed, mobile and hard-wired networks must deliver "complex and wide-ranging network management capabilities for quality, performance, bandwidth, latency, and coverage," (para. 2). Wireless and video traffic has grown exponentially and 4G set the foundations for the gig economy, 5G will jumpstart the next wave of unforeseen innovation (AT&T, 2019). According to Segan (2018), 5G provides three new dimensions: greater speed (move more data faster), lower latency (responsiveness is improved), and the connectivity to more devices at one time is possible (improves performance of sensors and smart devices). The G in 5G means that it is a generation of wireless technology. Most generations (from 1G to 5G) have technically been defined by the speed of their data transmission; they are also highlighted by breakthroughs in encoding methods that are known as air-interfaces, making them incompatible with a previous generation.

Shin (2016) believes that advances in cloud services and videoconferencing technologies make it more common for leaders and their organizations to be virtual and enables teams to telecommunicate as needed for 100% of the time. This enables organizations to schedule employees more flexibly, part-time, freelance, and to allow teams and employees

to work when and where they are most effective. Organizations are enhancing their capabilities for networking internally and externally and for virtual companies to develop and grow their businesses. These companies are reporting increased employee productivity as a result of telecommuting and virtually opportunities. Virtual organizations can be as viable and professional as traditional onsite companies and may even have competitive advantages through creative collaboration, unique company culture, and improved and new processes.

Virtual teams are defined as groups of individuals working across time, space, and organizational boundaries, interacting mainly through electronic communication means (Minton-Eversole, 2012). A poll conducted by the Society for Human Resource Management found that almost half of organizations use virtual teams, according to survey results released July 13, 2012 (Minton-Eversole, 2012). This research also reported that organizations use virtual teams in order to include talent from different locations because their organizations are becoming more global in focus. In addition, managers identified the need to boost collaboration, reduce travel, and increase productivity throughout the organization as reasons for virtual teams.

Improved behaviors have also resulted in brainstorming for solutions, setting goals, and fostering team initiatives. Building team relations was one obstacle that prevented success. Challenges to virtual teams included time differences, distribution of work, cultural norms, leading virtual teams for projects, and developing plans for team initiatives or projects. This research also found that most organizations in the U.S. were likely to use virtual teams if they were multinational.

Tartell (2015) found that tools and technology currently available to leaders are WebEx, Lync, join. me, Facebook, Twitter, Yammer, instant messaging, Skype, and Facebook, to name a few. Virtual leaders must select the right tools to create the best possible connections and information with richness and scope of information as key factors. Richness is range and information of the medium and scope as the reach of the technology. Leader success is possible when they are proficient in the use of technology. Low technical proficiency leads to less than optimal results. Leaders of virtual teams must know the audience, know the technology, and be prepared for technology challenges and failures with back up plans. Leaders

must also understand that the richness of face-to-face communication is different in a virtual environment. Leaders must provide teams and individuals with more task-relevant information, offer increased communication frequency and regularity, and develop stronger personal relationships that support virtual performance.

Conclusions

Organizations like General Electric are becoming global networks as a result of technology and virtual networking. According to John Rice, vice chairman of GE and CEO of the GE Global Growth Organization, that GE's whole is greater than a sum of its parts, and their virtual and dynamic networking resulted in an exchange of ideas and solutions across GE, making performance improvements (Rice, 2017). Nearly 70% of their business is outside the U.S., so the networking exchange must reach across the entire organization of 300,000 employees operating in over 180 countries. Rice (2017) states that they do not have the perfect answer, but they continue to invest in the digital tools, training, and platforms for exchange for internal markets to work together to be part of ideas, inventions, and practices at GE. However, when things don't go well, he described things as a Game of Thrones with silos and fiefdoms. He notes that nothing changes without building the right culture, a new team culture for new ways of working. He states that the key insight from this initiative is that most people that the marketplace is external to the organization, but they are building value through internal exchanges finding the right combination of leadership and culture for their organization.

Earlier, Prokesch (2012) reported that GE identified leadership traits in its managers in order to develop innovation, create new business, and expand into new products, which are key for their successes. These characteristics were external focus-defining success through a customer's eyes; in tune with industry dynamics; seeing around corners; thinking clearly seeking simply solutions to complex problems; being decisive and focused; communicating clearly and consistently; and being a generator and creator of new ideas. In addition, they would take risks on people and ideas; display courage and tenacity; team player; respect ideas and contributions of others; create excitement; drive engagement; build loyalty and commitment; expertise and in-depth knowledge and credibility built on experience; and interest in

self-development and learning. These traits were those addressed when developing in current managers and used when hiring for leadership positions. Developing these traits in its managers and teams set the stage for its ability to harness the tools of virtual leadership.

According to DeRosa (2017), virtual organizations and their leadership are challenged by physical distance separation, and it can also be difficult to build trust, develop accountability, and united teams. Miscommunication can be greater in virtual organizations and many virtual teams are not as functional as needed. However, some organizations are getting it right. SAP, IBM, and GE are multinationals and examples of companies successfully meeting the virtual leadership and performance challenges. They are using technology tools to collaborate and support performance. They are training employees to utilize interactive tools and developing virtual leaders and teams to achieve their purposes. These high-performance organizations are overcoming virtual challenges and learning to adapt to issues as they occur. Multinational organizations, virtual organizations, and teams must embrace and learn from the successes and failure to earn competitive advantage in today's global economy. As with many perspectives and investigations of organization and management, further study of virtual leadership is encouraged. However, to supplement anecdotal observations, empirical research is encouraged and necessary to gain a better, more objective understanding of the value and challenges of virtual leadership.

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