LEADING ORGANIZATIONAL SYSTEMS

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ABSTRACT

There are many different leadership styles which, depending on the leader, have varying levels of success. Using one type of leadership style does not necessarily work at all companies, and the traditional (command and control) style is prevalent in quite a few. Leaders should spend time developing networks to allow for collaboration and innovation. This review article offers a breakdown of systems theories and approaches that provide a discussion, comparison, and analysis on systems thinking, leadership, adaptation, and innovation.

Keywords: Systems Thinking, Leadership, Networking.

INTRODUCTION

Prosperous multinational companies are successful due to their strategic integration of interdependently woven business units and mastery of the synergy that generates *"added long term value for shareholders"* (Thompson et al., 2013). This short essay provides a breakdown of systems theories and approaches. Throughout the information provided, inferences to how companies might apply these theories will be offered as well. This review article is to provide a discussion, comparison, and analysis on systems thinking, leadership, adaptation, and innovation.

SYSTEMS THINKING

Systems theory and thinking diverges amongst researchers in relation and adaptation of meaning (Hammond, 2002). Traditional, or classical, school of thought is when the whole and the parts continually influence each other (Brønn & Brønn, 2017; Lee & Green, 2015; Skarzauskiene, 2010). Therefore, researchers try to separate the pieces and analyze the parts. Systems' thinking does not break out the parts for segmented analysis at the most fundamental level; instead it looks at how what is being studied affects the whole (Ackoff & Gharajedaghi, 1996; Brønn & Brønn, 2017; Lee & Green, 2015; Skarzauskiene, 2010). Systems' thinking is a disruptive paradigm shift, as typically we are consumed with analyzing and fixing the parts rather than addressing the whole approach (Ackoff & Gharajedaghi, 1996).

Skarzauskiene (2010) described traditional thought as when the whole and the parts continually influence each other. Systems' thinking allows researchers, or businesses, to look at the whole in place of traditional models analyzing just the broken or issues and fixing only those sections (Ackoff & Gharajedaghi, 1996; Lee & Green, 2015). The ability to see how systems' thinking pertains to complex organization and the development of new management concepts is enlightening (Goldberg, 2013; Segatto et al., 2013). Goldberg (2013) specifically likened the emergencies of natural disasters to those of corporate threats (i.e. security breaches and hacking). Seeing how system thinking can be applied to anything interconnected is innovative and exciting. System thinking's advantage is the ability to look at any element within a system. Whether it be a casual loop diagram, or applying it to the circular nature of the world we live in, systems thinking allows one to diagnose persistent problems as a whole (Goodman, 2018).

Mechanical

Leaders and managers see the business community the same traditional way they always have: mechanical (Stevenson, 2012). Mechanistic thinking likens businesses to machines that are developed and built to do the owners work (Ackoff, 1994). Stated differently, corporations are put on this planet to make the owners profit (Ackoff, 1994). Workers are replaceable, much like the parts of a machine, and everyone is a cog in the wheel designed to help the machine move forward (Ackoff, 1994). It is difficult for leaders to evolve into heightened levels of thinking because this linear thinking is well known and engrained (Stevenson, 2012). Breaking concepts into the key parts is the root of analysis (Aronson, 1998). Analyzing the parts to see how they operate (machine or business) is the root of mechanical thinking.

Systems thinking took the mechanical processes and asked how one could look at the process as a whole and make it work overall. Another way to look at mechanistic thinking and move it to systems thinking is the comparison of a computer as an electronic brain (Ing, 2013). In other words, our brains perform a series of patterns to function. One example is the basic act of brushing our hair. Whether the brain is processing the distinct difference between the tooth brush or hair brush, or how hard to pull through your locks of hair. The brain does it all at once, and in one thought process. Now, we have computers with artificial intelligence that allow a series of programmed processes to flow automatically. For example, a student, who missed a series of appointments with an instructor, would be able generate a report estimating the likelihood of graduation.

Organismic

Mechanical thinking led the way to the organismic view, as there was a more skilled workforce, a need for better compensation, unions, and increased working regulations (Ackoff, 1994). Organismic systems thinking held that organisms need to be studied as a whole. This included the workforce, as many were only looking within a company to see how a system ran. However, organismic system thinking applied system thinking theories to the social systems allowing companies to look at social viability before it was even implemented into a business. Adding another layer of system's into the research and development process.

Additionally, profit was no longer the primary motive. Making a profit was a means to keep the company going, but not the end product (Ackoff, 1994). A business had to become publicly owned to garner money to help stakeholders, as well as owners, stay profitable. Corporations have deeply embedded experiences that determine the beliefs of others and their understanding of events (Stevenson, 2012). Systems' thinking within the organism allows the shared lived experiences of the group to create a new paradigm. Sustainability has room to flourish and self-organizing teams have the ability to emerge (Stevenson, 2012). In other words, it became a living systems process of analysis (Banathy, 2013).

Social

Systems evolve beyond organismic into social systems when they take into account the purposes and interests of those that make up the system or group (Ackoff, 1994; Banathy, 2013). The more the individual people and groups, that are part of the larger organization, obtain an identity unto themselves, the more social the dynamic and complex the system becomes (Ackoff, 1994; Stevenson, 2012). The parts of the social system, along with the social collective, are

purposeful (Ackoff & Gharajedaghi, 1996; Ing, 2013). Characteristics of society are embedded into people and community and these traits filter into the work place (Banathy, 2013). Maslow's hierarchy of needs shows how belonging is needed in order for someone to thrive (McLeod, 2014). This is where social systems get the need for interconnectedness (i.e. people's need to belong) (Banathy, 2013).

Complex Adaptive System

"A paradigmatic shift is necessary to reconcile apparently divergent approach to management" (Thietart & Forgues, 1995). This statement resonates in Covey's (2004) writing about highly effective people and leaders, as he indicated that a paradigm shift is needed for our perceptions to change. Lee & Green (2015) stated systems thinking establishes a model for innovative thinking throughout a system as a whole, which serves a catalyst for the paradigmatic shift needed for businesses to see a more holistic approach to looking at systems and their complexities.

Evolution of a company achieved through complexity theory allows a leader to go beyond managerial rule and truly lead through evolution by creating a greater impact through the unknown (Schneider & Somers, 2006). Complex Adaptive Systems (CAS) is the application of complex theory and evolving things at the macro level (Schneider & Somers, 2006). CAS looks at the relationship and interdependencies to ensure success (Dougherty et al., 2017; Schneider & Somers, 2006). Likely patterns develop from chaos. The minutia might vary from project to project but patterns do exist (Schneider & Somers, 2006). Focused organizations with strong, but not prescriptive processes, will adapt and create order from chaos (Schneider & Somers, 2006).

Organizations are CAS social systems that are constantly evolving and moving forward, often in unpredictable ways (Alaa, 2009). Leaders need to balance on the edge of creativity and profitability to keep innovation moving forward and stay away from equilibrium (i.e. too ordered) (Glor, 2007; Osborn & Hunt, 2007). The *"edge of chaos"* works in conjunction with complexity theory to help self-organize to obtain a better *fit*, and help navigate uncertainty (Glor, 2007; Osborn & Hunt, 2007). The view from the *"edge of chaos"* also forces leaders to see the organization more holistically; since you must know where the organization is teetering and how to adjust for balance (Glor, 2007). The *"edge of chaos"* also allows for flexibility and change to help aide in the disruption and create innovation to allow for better fit (Alaa, 2009).

Network

Global leaders today must have a broad knowledge base, and be able to guide teams through ambiguity (Maznevski & DiStefano, 2000). To gather the knowledge of a corporation, or deal with the ambiguity, a leader needs to know what is occurring within the company (Ibarra & Hansen, 2011). One example in the Ibarra & Hansen (2011) article discussed Salesforce.com. Salesforce.com uses a company application called Chatter. Chatter allows for anyone in the organization to discuss what is going on as an internal stakeholder (Ibarra & Hanse, 2011). It gets away from command and control tendencies and allows collaboration. Collaboration is not only with like-minded, but unlike minded people as well. The key to innovation is collaborating with those whom are not of like mind and can offer differing opinions (Ibarra & Hansen, 2011). Kildruff & Brass (2010) started a line of thinking that organizations network research is rooted in the interchange of social relations. However, the thought of opening networks and changing how

those networks communicate and share data, for better or for worse, opens up receivers to innovative ideas. Growing systems socially may make it more complex, but it leads to greater innovation because the social constructs become more decisive and allow for network structures to affect higher and lower levels (Moliterno & Mahony, 2011). An idea shared on Chatter can spread like wildfire and allow an easy means for collaboration to grow, or on the opposite a bad idea to spread like a weed before necessarily a check or balance can be put into place.

Culture

Whether the culture within a corporation is strictly at the organization level, or the make up the surrounding societal norms, culture is the very definition of what we do and who we are (Schein, 1992). The reason culture is important to study is due to culture being a company's DNA (Kotter, 2012; Stomski & Leistein, 2015). Whether assessing culture or analyzing societal structures, leaders must assess critically to ensure congruent application of said culture (Hatch, 1993; LaPointe, 1998). Understanding how one belongs will help one communicate (Hatch, 1993; LaPointe, 1998). Cultural dynamics add another layer to culture in the most fundamental aspect of a company; it allows a company to assess what is going on and why, much like a root of a tree (Hatch, 1993).

Culture is the root and base of a company, beyond the individual/personnel element (Hatch, 1993; LaPointe, 1998; Stomski & Leistein, 2015). System's thinking forces leaders to look beyond the individuals. The group in the social system as a whole and allows application on how a group/system fits within the overall organization (e.g. the larger system; Hatch, 1993). Dynamic and interdependent changes are used to promote and advance the company, but it is done holistically with the whole organization in mind, and not just one role or individual (LaPointe, 1998).

LEADERSHIP

Osborn & Hunt (2007) stated there is not a single leadership theory for leadership effectiveness. There is an opportunity to develop this area of business literature. However, there still can be criteria and methods generalized from what is published. Changes in leadership theory and its effectiveness need a systematic force in order to see the logic and working relationship for change (Skarzauskiene, 2010). A logical leader is informed, infinitely sensitive, and rational (Cook et al., 2007). The decisions of a logical leader ensure a corporation acts as a singular unit. Meaning that as long as the head of the ship knows where it is going, then the whole vessel, including crew, will follow. Logic provides stability and direction, which is needed to lead a corporation (Cook et al., 2007). To be both logical and rational, and know where the ship should be pointed, a leader needs to begin with the end in mind (Covey, 2004).

Reed (2006) noted leaders should have a thoughtful application of rules and need to be informed to make decisions. However, he added that at times managers and leaders are too busy to have all the information needed, or time available, to assess and make a truly informed decision. The one principle of complexity theory that is the greatest challenge to traditional thought and application for leaders and managers is the darkness principle. The darkness principle states that no one person can know the entirety of the system (Richardson, 2004). Reed (2006) noted that a systems thinker would need to take a step back from the daily busy routines (mundane) to assess the full situation. Covey (2004) agreed that taking a step back and thinking of the outcome helps set up long-term success.

Reed (2006) stated that problems are *"rarely simple and clear-cut"*. Innovation is a key to obtaining different results (Christensen & Overdorf, 2000). Kildruff & Brass, (2010) stated organization network research is rooted in the interchange of social relations. Opening networks and changing how people communicate and share data, for better or for worse, opens up receivers to innovative ideas. Growing systems socially may make it more complex, but it leads to greater innovation because the social constructs become more decisive and allow for network structures to affect higher and lower levels (Moliterno & Mahony, 2011). A balance of stable and sustainable ideas is garnered by reviewing a range of organizational phenomena at multiple levels within an organization (Kildruff & Brass, 2010).

At the macro fit (intra-organizational) level, leaders are concerned with action-based strategies (Park et al., 2011). Leaders must garner information quickly and generate ideas that can be applied effectively and swiftly to maintain flexibility in a dynamic environment (Park et al., 2011). Micro-fit (inter-organizational) leaders work through the human (interpersonal) aspects and need to be more transformational than transactional (Park et al., 2011). Transformative leaders can keep their strong values intact and not dilute beliefs based upon populations or consensus (Day & Antonakis, 2011). By engaging and inspiring those around them, transformative leaders can lead a company into diverse markets and new opportunities that allow them to maintain a competitive advantage.

ADAPTATION

Due to the large diversity of an organization (i.e. comprised of more than a single person) no leader can control the entire organization and its outcomes (Geer-Frazier, 2014). Richardson (2004) pointed out that there are holes in the whole, and we will always have to look through the shadows. The business world is gray and unstable (Boisot & McKelvey, 2010). Boisot & McKelvey (2010) liken business to a kaleidoscope and how stability is elusive due to the human factor causing constant change, or movement in the patterns. Organizations that are complex and dynamic need to be prepared for when a dramatic change occurs (Robertson, 2004).

The response to dynamic environments is the ability to be more agile (Chenok, 2014). Leaders simply do not have enough time, or cannot make enough time, to assess every argument and lend credence to every voice. Leaders need to avoid oversimplification and indecision (Boisot & McKelvey, 2010). Both oversimplification and indecision come from predictability and can accidentally lead to inflexibility due to lack of acknowledgment of new or divergent information (Boisot & McKelvey, 2010).

Leadership and dynamic environments do not necessarily have to be hierarchical or top-down systems. Moliterno & Mahony (2011) noted that diverging opinions also help leaders and can influence those above and below (Moliterno & Mahony, 2011). Kildruff & Brass (2010) maintained that organizations must respond quickly and with a sound basis for the decision in order to obtain and maintain a competitive advantage in business (Kildruff & Brass, 2010; Gadman & Cooper, 2005).

CONCLUSION

There are many different leadership styles which, depending on the leader, have varying levels of success. Using one type of leadership style does not necessarily work at all companies, and the traditional (command and control) style is prevalent in quite a few (Evans, 2012). To deal with the fluidity of business, leaders should be versed in several theoretical frameworks that

allow logical and rational decisions to be made. Looking at the broader patterns, those can help to identify the events and details before they unfold (Skarzauskiene, 2010). The greater the complexity of an organization, the greater is the challenges to the leader of that organization (Brønn & Brønn, 2017). Leaders must be aware of the systems dynamic capabilities and, although not a straight forward process, able to influence change through interaction and adaptability. Leaders should spend time developing networks to allow for collaboration and innovation (Ibarra & Hansen, 2011). Systems' thinking is not linear and a divergence from the traditional cause and effect school of thought and business approach is required.

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