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DIGITAL LEADERSHIP FOR DIGITAL TRANSFORMATION

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Abstract

The Digital Era, an era in which digital revolution strongly influenced the societies and economies, and reinvented marketplaces. According to Collin (2015), digital transformation has been disruptively and fundamentally changing the existing businesses. It has been considered as a major challenge for today's business leaders. Emerging researches show that this technological phenomenon requires persistent Digital Leadership at top levels of companies. This article discusses the digital leadership concept, summarizes best practices in terms of a set of competences derived from a broad scholar literature and practical business cases. It analyzes leadership in the context of digital transformation.

Keywords: digital leadership, digital competences, digital transformation

JEL classification: M,O

Introduction

The speed of change and the society's reliance on technology has demanded an evolution of leadership practices. However, this paradigm of leadership that arose around a decade ago is still a new concept. There is no agreed and coherent concept of digital leadership. Scholars argue that the aim of leadership has not changed through ages, however, the digital tools support and reinforce leading by "highlighting the purpose and steering people into right direction" (Ducheyne, 2017). Furthermore, Orlikowski (1992, p. 409) explains that there is a strong relationship between technology and human agents which is influenced by technology software or hardware, experiences or motivation of individuals, as well as the context of usage, design, task assignment, social relations, and resource allocation. Toomey (2013) states that digital leadership uses technology to reinvent businesses, to grow and disrupt the markets. Companies need digital leadership in order to ensure successful use of digitalization within an organization (Bennis, 2013). Annunzio (2001) distinguishes the factors of the new leadership:

“honesty, responsiveness, vigilance, willingness to learn and re-learn, a sense of adventure, vision, and altruism”. Rouse and Ritter (2017) add that the digital leader successfully takes advantage of the company’s digital assets to gain and maintain a competitive advantage. Today’s companies need digital leadership in order to ensure successful use of digitalization within an organization.

1. Digital leadership

In the Infonomics Letter presented on July 2013, Toomey predicates: “Digital Leaders do not necessarily have a deep technical knowledge of IT. Rather, they have the ability to conceive new models of business that exploit new capabilities in IT and new ways of using IT. They appreciate the speed and imagination of the market and respond to it. They orchestrate and deliver organizational change at a speed and of a scope previously unimagined. They engage and inspire IT specialists as they engage and inspire professionals in other disciplines, and they bring these disciplines together to create new products, services, markets, operating models, opportunity, and value. They create, nurture, and adopt new disciplines through which people and organizations create value (we have already seen emergence of such disciplines in Social Media and Search Engine Optimization) [...] Digital Leaders do all this in a constantly-changing environment where ideas and initiatives morph in ways never imagined, and where another organization’s new idea can render a carefully developed plan useless or, just as significantly, open a seam of rich opportunity that demands immediate attention (Toomey, 2013).

Avalio Kahai, Dodge (2000) noted that digital revolution had created a new context for leadership. “Key characteristics of an AIT-enabled economy are real-time information availability, greater knowledge sharing with stakeholders and the use of this information and knowledge to build “customized” relationships. These customized relationships are putting pressure on organizations and their leaders to be more responsive to their stakeholders. Accompanying these dramatic changes is the global nature of organizational relationships fuelled by the ease with which information exchange is enabled across national borders”. Their research study emphasizes that consistency between the leadership’s spirit and digital technology character is important, and it may determine how successful or even unsuccessful the implementation of new technology will be in a company. The same study emphasizes how advanced technology effects leadership.

Furthermore, leadership and technology affect and transform each other at the same time. Avolio et al. (2000) argue: “With the introduction of AIT, access to a broader array of information can challenge pre-existing beliefs of what constitutes followership, as well as what constitutes a full range of appropriate leadership behaviour. New technology can enable relationships to exist within and between networks where greater levels of collaboration can also spontaneously emerge. Access to new information and development of knowledge can transform what was once considered acceptable and unacceptable behaviours by followers, as well as by leaders, resulting in a rethinking of how each should work together to accomplish their goals and the organization’s goals”. Kissler, through analyzing such companies as British Airways, Citigroup, Cisco or Walmart, summed up its research by identifying some leadership characteristics: ability to keep ones’ head in the midst of disorder and ambiguity, cognitive skills, flexibility, experience from several fields, education, quick adaptability to change and transfer ideas and entrepreneurialism.

E. Scheninger, a thought leader on the concept of digital leadership, explains: “What started out as a personal use of technology has become systemic to every facet of leadership. Digital leadership can thus be defined as establishing direction, influencing others, initiating sustainable change through the access of information, and establishing relationships in order

to anticipate changes pivotal to school success in the future. It requires a dynamic combination of mindset, behaviours, and skills that are employed to change and/or enhance school culture through the assistance of technology. Digital leadership takes into account recent changes such as ubiquitous connectivity, open-source technology, mobile devices, and personalization (The Community Toolbox, 2017)".

Leadership is regarded as the central element in embracing and creating company's competitive advantage, whereas the role of digital leadership has become an important determinant of innovation. Deschamps (2005) mentions six characteristics of successful innovation leaders:

1. They combine creativity with process discipline from the start to the end of a project.
2. They have the courage to start projects and also stop them when they do not work out well.
3. They are aware of and accept that failure, risk, and uncertainty are part of a project.
4. They are open to new ideas and technologies that lead to experimentation.
5. Leaders have a passion for innovation and commitment which they share with employees.
6. They have a talent for creating innovative teams and motivating employees, even in difficult times.

Transformational leading is described as a combination of positive behavioural characteristics recognized as improving innovation and performance among the followers in a company (Jung, 2001). The researches Dougherty and Hardy noticed that transformational leadership was also more open to the facilitation of uncommon and innovative thinking, and working processes that may result in discovering new knowledge and technology, which are basic pillar for the company's innovation (Dougherty & Hardy, 1996).

All presented research studies on digital leadership concept emphasize the usage and adoption of digital technologies by a leader, awareness of technological innovation, and quick responsiveness as well as the ability to build technological opportunities within the company, as main components, and differentiating factors for today's leadership.

2. Challenges of today's leadership and aspects of digital transformation

In the leadership-thematic literature, it has been noted that due to inter-connected world and new technologies immersion, the companies reshape from pyramid-structured to more decentralized, where the line between the leader and follower is blurred. Molinsky, Davenport, Iyer and Davidson [n.d] emphasize: "this new environment has flattened organizational hierarchies, which increases the value of building and influencing networks; therefore managers acting in this environment must develop". J. Boss and his article *The top Leadership Challenges for 2016* points out the particular issues: creating a shared purpose, measuring the ROI of soft skills development or identifying and communicating what success looks like in the world where technology constantly advances, as well as lack of urgency and the ability to create the right direction.

In addition, leaders in the 21st century are challenged with the changing employee mindsets; technology legacies; too much prioritization of innovation; organizational politics; or struggles with measuring KPIs. An MIT survey of 2015 concludes with those challenges between leadership and digital transformation: lack of urgency in pursuing digital transformation; creating the right direction; old mindsets that consider the technology as a threat; legacy technology: issues arising from old IT systems that require lots of effort and money to be updated or replaced; innovation as too prioritized; politics – fear of losing power in the company.

The companies are keenly aware of the need for digital transformation because they have to conform in order to succeed in the competitive business environment. Therefore, the leadership must implement strategies that make the business and workplace more agile, and thus able to harness the power of new technologies more quickly. In addition, they should not only be satisfied with capitalizing on new technologies, but also constantly size up opportunities and threats that future technological advances may bring upon their business.

3. Digital competencies

There are many models and frameworks to define the most crucial digital competencies. Business practitioners explain in depth: "(...) using real-time social media tools like Twitter to read the public mood - is fast becoming a key way to gain immediate insights into rapidly evolving customer preferences. Harnessing the potential it offers requires streamlined, nimble processes, and a willingness to experiment" - Sieber et al. (2013). Prof. Káganer from IESE Business School in the article for *Forbes Magazine*, advises: "(the leaders need to) embrace the loss of control and start fostering new mutually beneficial relationships with the customers and employees that are empowered through digital today (Sieber et al., 2013)". Accordingly, Prof. Zamor sums up: "digital leaders need to understand the shifts (behavioural, economic, social) those new technology drivers are creating: like mobile, social networks, cloud, and big data. Leaders must then, translate these key fundamental shifts into business impacts at the industry, organization, and individual level (Sieber et al., 2013)".

3.1 Models of digital competencies

Ferrari (2012) finds that digital competency integrates soft and hard skills. Hard skills include information management, evaluation, technical operations, and the creation of content and knowledge while soft skills include collaboration, communication and sharing, and ethics and responsibility. The European Commission developed a framework that identifies five competence areas, including: information, communication, content creation, safety, and problem solving, and includes a set of 21 competences (DG Connect, 2014). Information includes browsing, effective searching, filtering, evaluating, storing content, and retrieving information. Communication involves interacting using various digital devices, understanding the appropriate ways of communicating, sharing the location and context of information with others, as well as the way it can be used to build up the current body of knowledge, and engaging in online citizenship. It also means that an individual uses netiquette (behavioural norms expected to be used in online communications), and manages an efficient digital identity. Another competency is content creation, which involves developing content using various digital formats and technologies, integrating and modifying existing resources to create new and relevant content, as well as understanding copyright law concerning the use of content and information. It also includes using developing software and applications effectively in order to create quality content.

The European e-Competence Framework also enables individuals to understand the competencies needed from the specific ICT (Information and Technology) organizations and professions, and to provide those that are necessary to prepare an organization for digitization. Dyer et al. (2008) found that an innovative entrepreneur creates a business that offers an original and unique value proposition as compared to the incumbents. In addition, such entrepreneurs use questioning, observing, experimenting, and idea networking in order to acquire information. By using digital technologies, those entrepreneurs find new ways of accessing, acknowledging, and processing information in order to exploit their social networks.

Rossano and Hill's (2015) research for the European Commission further provides a framework for soft digital leadership skills. The framework demonstrates that e-leadership skills use digital tools to identify potential win-win opportunities for the company, to evaluate the effectiveness and efficiency of the overall process, stimulates others intellectually, and builds the efficacy and self-confidence of subordinates. E-team working skills enable effective collaboration with diverse individuals. Such skills enable a leader to delegate tasks and manage team member contribution appropriately, and to assist in communication of the enterprise principles and objectives to the teams.

Rossano and Hill's (2015) framework also lists e-communication skills. This entails the ability to convey thoughts and information about a project clearly and confidently to the relevant parties, and to compose, document and catalogue the critical processes and procedures. It also includes the ability to communicate the value, risks, and opportunities derived from an Information Systems strategy, and also communicating both good and bad news effectively so as to avoid surprises. Entrepreneurial and innovation soft skills enable the organization to engage in innovative ideas to enhance business opportunities. The leader will foster a positive and open environment, sense new market needs and market potential, make connections across teams, and create a value proposition.

E-trust building soft skills include the ability to generate and sustain trust using digital tools, set an open space for transparent communications across teams, customers and establish realistic expectations that will support the development of mutual trust. In addition, it involves reinforcing the organization's values through role modelling, rewards, and punishments, and communications about ethics, in order to establish an effective moral tone for the organization. On the other hand, e-lifelong learning skills enable leaders to learn from experience, find solutions to the problems, analyze the costs and benefits of business changes, as well as the company's critical assets, and identify potential threats or weaknesses that can be attacked.

This overview by Rossano and Hill's (2015) demonstrates the link between the technical and soft skills that leaders need in order to succeed and to successfully manage the company in today's digitalized economy. Besides knowledge on what opportunities the digital technology brings to the company and new business models, formulating and communicating a vision and a mission on where to take the company, and guide talented workforce, still remains crucial. Leaders must be able to optimize the usage of social networks in new innovative ways and for communication purposes.

4. Implications of digital leadership in business

Digital transformation requires intensive planning and management in order to ensure success in an organization. Therefore, digital leaders must set up and implement strategies to recruit and develop highly skilled and talented persons, motivate employees to engage in digital transformation activities, adopt organizational values to the changing business world, and use digital tools effectively and efficiently across all business departments.

Managing digital transformation is not an easy task for leaders. To be prepared for industry disruption is one of the biggest challenges for today's leadership. A mix of social, mobile, analytic, cloud and internet of things digital technologies, creates a great value by building excellent customer service, grows revenue and drives cost efficiency. Deloitte found that: "Most companies are constrained by a lack of resources, a lack of talent, and the pull of other priorities, leaving executives to manage digital initiatives that either take the form of projects or are limited to activities within a given division, function, or channel" (Kane et al., 2015). Adopting specific leadership principles may secure the benefits of every digital transformation. Nowadays, the leaders may already benefit from many contemporary research studies or

set of business best practices in order to foster digitalization along with business strength, growth, and proper leadership. Those studies are the most relevant for today's rapidly changing and disrupting business environment and leadership practices.

Beginning with the recent article in the MIT Sloan Management Review, the writers highlight implications for digital transformation initiatives for leadership across the industries in six bullet points. There are three meaningful strategies that the leaders should consider:

1. Reward those who deliver results differently and better: Instead of striving to change organizational cultures top-down, leaders should strongly support and reward particular departments for delivering results differently and better. It will act as a catalyst for change.
2. Adapt organizational values and goals to the changing world, not just changing mission statements: They should focus on being nimble and adaptive to achieve agreed outcome. Delivering results differently and better will ultimately transform organizational cultures.
3. Encourage everyone across the organization to be positive change agents: Meaningful change happens across an organization when everyone realizes that anyone can become a change agent. There should be no need to be formally approved as an agent of change (Bray, 2017).

On the other hand, some risks should be considered and monitored. For instance:

1. Avoid creating a transformation office unconnected to the rest of the organization: This will only create a culture of "cool kids" isolated from the rest of the workforce; also avoid dismissing individuals already doing valuable transformation work elsewhere in the organization.
2. Avoid digitizing processes without rethinking the organization's business model: Focusing solely on IT misses the point. A rapidly changing world requires new business models. Meaningful improvement must include transforming the way the organization operates, not just digitizing existing processes.
3. Avoid simply hiring one "chief-officer": This pins the entire hopes of the organization on one individual. The reality is that organizational transformation is everyone's responsibility.

Deloitte proposes implications on building digital DNA. "Digital Leadership is needed to provide constant challenge and tension for the organization to adapt (Guest, 2014)". The report drawn up in 2016 builds characteristics of a good digital leader:

1. Being hyper-connected, a digital-savvy leader capitalises the opportunities new technologies bring to the business and to the followers.

2. Provides real-time interactive feedback and coaching to its savvy tech team of Millennials as they understand that the digital savvy workforce is used to socialising and interacting via new technologies and social networks.
3. Thrives on working in a networked, matrix environment.
4. Fosters a culture of knowledge, content e-sharing and role model values such as integrity, openness, and transparency.
5. As power shifts to the digital knowledge workers, organisations flatten and boundaries blur, the digital leaders need to create individual loyalty and engagement by considering and accommodating employees' individual requirements and interests. This creates a self-directed, empowered, and agile workforce.
6. Leverages on 'T-shaped' talent to create diversity in high-performing and dynamic teams.
7. The digital leader has the ability to make informed decisions on strategic issues based on data-driven insights. Being flexible, adaptable, and collaborative.

Guest (2017) suggests that organizations should develop digital leadership so as to provide constant challenges and tension for an organization. Curran et al. (2017) notes that "executives should exploit technologies by listening to those on the bleeding edge, learning the true impact of these technologies, sharing results from pilot projects and quickly scaling by implementing them throughout the enterprise". In addition, the leader should create a team responsible for emerging tech scouting and experimenting on how those technologies may solve business problems. Prototyping is essential. If any of those technologies are considered as side projects, it is less likely to have any lasting impact on the company's business success. Every business should engage employees in service of the organization's digital aims. That engagement is the function of two critical components of strategy execution: culture and leadership. The mentioned research studies show the significant value of digital leadership for the purpose of conducting a successful transformation within a company. Going further, it is not the technologies that transform a business; it is rather a leadership and skilful usage of digital tools.

Conclusion

The digital era has strongly impacted businesses and communities, forcing organizations to reinvent their vision in order to remain competitive in the new business environment. Therefore, digital leadership is required in order to ensure that companies are capable of creating and implementing digital strategies that will promote the company's development, and also provide customer value and satisfaction. Digital leaders find ways of motivating employees, creating effective teams, establishing directions, influencing others, and initiating sustainable change in a way that exploits the strengths of the organization and employees, while mitigating the weaknesses and risks. As such, a digital leader is responsible for steering his team in the right direction, so as to make sure that the company remains relevant in the dynamic and competitive business environment. To run a successful business today, the leaders need to integrate soft and hard digital leadership skills that will help them to develop the company in a dynamic business environment. Citing G. Westerman (2011): "Whether using new or traditional technologies, the key to digital transformation is re-envisioning and driving change in

how the company operates. That's a management and people challenge, not just a technology one".

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