

Creating and Sustaining an Agile Organization: The Impact of the Digital Economy

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Abstract

The Digital economy is here to stay. Digitization innovations are disruptive to current business models, creating new business opportunities and challenging long-standing business beliefs. An MIT Center for Information Systems Research study revealed that 32% of Board Members surveyed believe that their firm's revenue is at risk from digitalization within the next five years.¹ The study also revealed that "challenging the status quo" is the second most important Board activity. Digitization is already pushing the status quo. However, some organizations are not entirely ready for the impending disruption partly because technological innovations require knowledge that is not present or not mature.² The knowledge gap impacts many types of organizations. This article discusses the case for an agile organization, the intersection of IT and business communities enterprise-wide and, leadership requirements to achieve enterprise agility for the next generation of growth in the digital era.

IT and Business Management Come Together

Organizations large and small, business-to-business and business-to-customer are faced with the need to integrate IT infrastructure, services and business strategies to meet rapid technological advances some of which are disrupting business, as we know it. The case for organizational agility is clear. What was once a methodology confined to IT software development for manufacturing is now ubiquitous. At the center of the advancement is the new digital economy and it is relevant to all business types, B2B or B2C, in stable industries and highly volatile ones. The New Digital Economy is defined as mobile technologies, Internet access, cloud computing, cloud software development and data storage.³

Cloud based services have availed users to more than one billion gigabytes of data through mobile devices.⁴ The massive abundance of data means that businesses must be ready to analyze it and use it wisely to make informed decisions, stimulate innovations and respond to rapidly shifting, well-informed client demands. According to Brown and Camrass, fifth generation mobile infrastructure standards will change business models even further.⁵ They state, “Cisco predicts that by 2020, 5 billion people and 50 billion devices will be connected.”⁶ Ubiquitous access to massive amounts of data will push business processes to become more flexible and responsive. This means that workforce practices in IT and end-user communities must be rapidly responsive and flexible to changing business processes, technological innovation disruptions and fluid client demands. These requirements are characteristic of the Agile Organization and are the best defense against digital era realities. The agile organization and workforce must be capable of processing, analyzing and responding to data flows, constant innovation, problem solving and decision making at lower organizational levels.

The Agile Organization

Much has been written about agility recently in business management literature as a construct required for the next generation of strategic growth in the digital economy. The agile organization can be thought of as the intersection of business management (business process agility) information technology (IT agility) and human resource agility (skills, knowledge and competencies).⁷ Agile first appeared in IT literature as a methodology that would take businesses into the 21st century. It applied to manufacturing, and gained popularity in 1991 mainly to make companies more flexible and responsive to market changes.⁸ The methodology was adopted by software development and project management functions industry wide and has migrated into business management.⁹ The agile methodology was centered on the notion that business complexity would increase rapidly and IT software development should be redesigned to keep up with the pace of change.

Historically, IT software development was plagued by cost overruns, project delays and functionality gaps as a result of back and forth hand-off repetition between end-users and IT professionals. The inability to respond to end-users changing requirements seemed insurmountable.¹⁰ Agile and its multiple methods such as SCRUM and XP (rapid programming) were touted as the solution to this decades old problem. Agile concepts then migrated to business and strategic management.¹¹ According to Weill, Subramani & Broadbent, “Strategic agility is defined as a set of business initiatives that an organization can readily implement.”¹² Many elements contribute to agility

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including customer base, brand, core competencies, infrastructure and employee's ability to change" although company performance benefits are still unclear. The one thing that is crystal clear is that the business community has learned a lot from decades of IT agility experience and related methodologies. Specifically, team flexibility, decentralized decision making, maximum permissible autonomy and collaborative mindset and processes have contributed to successful end user system satisfaction.¹³ The new agile teams have replaced the more centralized, "decide and announce" manager controlled structures of the industrial era.

Based on the rapid pace of client interaction: mobile data access, rapid knowledge transfer, IT structures and processes were forced to change. That said it would be illogical to assume that what worked for IT development structures will work for any business management process or structure. However, businesses today are being pushed to find the best and most flexible processes in existence to stay ahead of competition characterized by rapidly changing client demands, rapid product and service innovation and utility expansion.

Adopting an agile strategy, although necessary in the digital era, could shake many organizations to their core especially those with historically stable environments.

The new digital economy is both a major driver and enabler of the agile philosophy and methodology. According to VanArk, only a small number of firms in the UK, USA and Germany have made full transitions to the digital economy.¹⁴ Most businesses are still in the installation phase characterized by "the advancement and acquisition of new technology and, the breakdown of archaic processes" carried over from the last industrial revolution but a new one is upon us.¹⁵

The Fourth Industrial Revolution

The digital economy has been dubbed "The Fourth Industrial Revolution."^{16,17} According to Schwab, CEO's are fascinated by the rapid pace of innovation and disruption spawned by the digital age.¹⁸ The digital age technology has both demand and supply side components.

On the demand side, customers are accessing and using data in new ways with mobile devices, Internet access and huge amount of accessible real-time data. Customers are able to provide product and service feedback in the moment. For example, L'Oreal of Paris, considered to be at the forefront of the digital economy, launched several mobile applications that allow their R&D functions to gather data on customer preferences immediately. In the B2B space, customers have access to big data that will enhance pattern recognition, market trends and customer preferences.¹⁹ Bange et al.

characterize Big Data as “the methods and technologies for the highly scalable loading, storage and analysis of structured data. Big data technology helps companies manage large data volumes, analyze and integrate data from a variety of sources.”²⁰

On the supply side, innovations are producing better and faster data access to more clients regardless of location. The Internet and mobile technology are erasing traditional boundaries that were once entry barriers to some businesses. Trust in new technology is also a significant driver of demand side impact.

The trust factor is increasing with customer mobile technology. Today, over 90% of US Internet users bank online and 80% make purchases online.²¹ According to Villarreal, Minister of Economy, Mexico, in the last decade we have moved from the *Internet of People* to *Internet of Things* because there are now more connected devices than connected people. Villarreal asserts that the digital economy is revolutionizing how we work and that by 2022, 65% of today’s children will have jobs that are not yet invented. The digital economy and technological advances are shaping the work we do, how we interact with clients, how we process value-added, non-value added and routine work, how we lead, attract and retain a workforce capable of interacting and responding to clients and the technology that will play a larger role in every day work.

The pace of technology innovation that supports new business processes will reshape workforce dynamics, as we know them. Agility is at the center of the digital economy. Agility should be thought of as an enterprise philosophy that will shape organization culture, client interaction, workforce interaction dynamics, leadership roles, competencies and behaviors. Slow and hierarchical processes must be revisited and replaced with decentralized, flexible and fluid ones to survive and prosper in the digital world. Historically, business processes usually followed a cycle: (1) build, (2) test, (3) implement, (4) scale and (4) prefect. This process was built on the premise that scalability, consistency and error-free replication would minimize deviations and ensure quality. Errors were dealt with on an exception basis and pushed up the hierarchy for resolution. Industrial era job specialization designs created well-differentiated roles, narrow expertise and limited knowledge that resulted in decision-making and problem-solving dependency on the management hierarchy.

However, with consistency comes certainty and trust in established norms that are the basis for performance feedback and remuneration schemes. The digital economy changes all of these current structures. It will force new, higher skill and knowledge levels that hopefully most employees

can achieve but surely, some may require retraining and development to succeed in an agile organization.

The implications and requirements for an agile workforce, enterprise-wide requirements and leadership competencies are discussed next.

The Case For An Agile Workforce

The digital transformation is pushing businesses to shape an agile workforce. Technology innovations move data to customers at record speed and are built for rapid response to shifting customer data demands, interpretation and access capability. The transformation process involves both IT and business management who together have a positive impact on agility.²² According to Tallon, market volatility may play a role on the extent to which firms prepare for and move toward an agile organization.²³ Companies in more stable markets may make the shift as a competitive advantage whereas firms in volatile markets are more likely to already have IT infrastructure enabled agile capabilities. Either way, this knowledge and data driven economy will entail new competencies, skills and knowledge for successful adaptation and human performance.

The shift requires mindset and behavior changes in order to react to a rapidly changing external environment. Success in the digital age requires reshaping organization culture, leadership behaviors, competencies and strengthening psychological safety.²⁴

A 2016 McKinsey study revealed that 33% of CEO respondents see culture and behavior change as a dominant barrier to agility and digital effectiveness.²⁵ Agility is defined as flexibility, nimbleness and openness to new ideas and change. It is an equally important managerial issue as it is an IT services and infrastructure issue.²⁶ Rigidity is the antithesis of agility and it is characterized as business processes designed for accuracy, stability and reliability supported by a less flexible IT infrastructure. For example, old legacy systems architectures were slow to respond to changing user demands. As a result, rigid processes became the norm in many organizations, which frustrated end users who required rapid response to shifting client and business demands. Existing processes may be reliable and stable and the transformation to a new paradigm could be perceived as a threat to the employee and management cultures.

As businesses move forward in the digital economy, assess and implement new IT services and business process capabilities, the employee culture may respond with a reliance on old knowledge and processes as a way to self-protect. This reaction may cause leaders to respond defensively with more formalized communication and centralized decision making which can increase employee speculation of the unknown causing stress levels to rise.

Organizations can alleviate this stress by staying connected to the employee culture.

The Leaders Role

It is recommended that leaders inform employees by providing the maximum amount of information as soon as possible versus doing so on (the perception of) an “as needed” basis. The executive leadership team should construct a communication strategy for the enterprise. Middle level management should also have a communication strategy for their group and for each direct report.

This communication process should cascade down to the individual contributor levels. The overarching goal is to reduce the stress associated with uncertainty of moving to the digital era where high skill and knowledge levels are required for success in an agile organization. In addition to high stress consequences, turnover could become an issue. Transformation processes can launch turnover scripts among employees. Turnover scripts are characterized as self-talk used to assess one’s employment options. According to the US Department of Labor, the average quit rate across industries is 24%. Research shows the mere mention of an organizational restructure can cause an average 11% rise in voluntary turnover. The first restructure move accelerates voluntary turnover to 36%.²⁷ Organizations can intervene by designing career planning and development strategies to prepare employees for restructuring and work transformations.

The digital economy will place more reliance on high-skill and knowledge level work. Companies should therefore pay close attention to career development processes. Low skill, low knowledge workers could in fact possess the competencies (flexibility, openness, cooperation) required for success in the agile workplace. They should be supported with developmental transition resources to avoid unnecessary displacement and socially constructed toxic worry.²⁸ Routine, non-value added work will most likely be replaced by machine intelligence. Herein lies a sociological issue of massive displaced workers. Companies with significant employee populations should consider how to effectively deal with this issue however, it is beyond the scope of this article.

As more businesses move further into the installation phase of the digital economy, there will be a struggle to protect the products, services and processes in place while concurrently reinventing them for the new age. This concurrent path is known as a strategic contradiction.²⁹ The ambidextrous organization is capable of reinventing its processes and innovating while simultaneously exploiting what currently exists. This duality can be thought as “Both A and B” versus “Either A or B”. For example, Sal Palmisano, IBM

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CEO, defined the IBM values as both “Striving for dedication to every client’s success” and “innovation that matters for the company and the world.”^{30,31} As leaders wrestle with the balancing act of shaping an agile organization in the new digital economy while keeping a steady rudder, they will face strategic contradictions.^{32,33} Strategic contradictions are not inherently bad. Weber and Glynn argue that they can send the signal to the employee culture that there is a new and better way of running the business and achieving desired results.³⁴ However, not every employee will move through the transformation at the same pace. For example, leaders commonly make attributions such as, “*they are not team players,*” “*they are resistant to change,*” or “*they just don’t get it.*” These leadership responses to the employee sensemaking process are not helpful because they don’t address the root cause of individual level transformation dynamics.³⁵

The Culture Component

The management culture must be patient and refrain from naive attribution when some team members appear slow to accept and commit to the new way of working.³⁶ To help shape and sustain an agile organization, leaders should embrace two enterprise wide issues: (1) psychological safety and (2) organizational culture.

Psychological safety is the ability of employees to show their true selves at work without fear of retribution.^{37,38} Psychological safety is important for an agile workforce because it promotes an environment for initiating innovation, service or product improvements, rapid and appropriately autonomous problem solving. The employee culture must know for certain that the environment supports and encourages their viewpoints, input and actions in the agile organization.

Organizational culture is another pillar of the agile workforce. Basically, this is the unwritten rules of the road. Culture defines how things actually get done in an organization and the employee population pays strict attention to explicit and implicit messages it receives from management, who ultimately define the culture. It does so in a constant quest to stay safe in the current environment.³⁹ Two culture types are relevant and influential for an agile workforce: a Culture of Voice and Culture of Silence. These two cultures are not necessarily mutually exclusive. For example, a culture of voice can exist in one division while another can have a culture of silence.

A Culture of Voice is defined as one where employees willfully disclose important work related information and offer ideas and viewpoints upward in the organization. Different ideas and viewpoints are important in an agile organization where innovation, rapid problem solving and client interaction are key success metrics. In a Culture of Voice employees speak up because

they are certain that disclosure is respected and encouraged by management. They know for certain that management has a positive and healthy attitude for divergent thinking. Tolerance for divergent thinking is a personality trait characterized by openness to new ideas and a curiosity for new and different views.⁴⁰

Conversely, a Culture of Silence exists when employees willfully withhold important work related information.^{41,42} A Culture of Silence is difficult to see. It can be measured but it is typically not visible in the workplace. The four main causes for silence are: (1) perception of egregious leadership practices (defensive silence), (2) perceived injustice as a result of contributions made and inadequate or no credit given (offensive silence), (3) futility and (4) social silence (the desire to protect others). Defensive silence is rooted in fear because employees perceive a leader's behavior as egregious or threatening and silence is used as a defense mechanism, a way to stay safe. Offensive silence is rooted in retaliation and justice (theory).⁴³ For example, if an employee experiences an injustice as a result of offering an idea or a solution and no credit is given, they can withhold contributions in the future as a way of leveling the playing field. Futility silence is rooted in apathy. For example, when employees have offered ideas, suggestions and valuable information in the past and it is not acknowledged or acted upon, employees can withhold offering contributions in the future. Social silence is rooted in protectionism. For example, employees are unlikely to disclose information that will put a friend at work in jeopardy.

Management often misinterprets the signs of silence until it's too late. For example, in Q3, 2017 alone, fines and penalties paid for phantom retail bank account creation and data security breaches at two public companies amounted to \$173 million. Both well-publicized negative corporate events were rooted in cultures of silence. It is hard to know how prevalent Cultures of Silence are. However, a recent study of 400 middle managers revealed the following:⁴⁴

- 44% of respondents were “*unwilling to speak up about necessary work changes*”
- 54% said that “*it is futile to offer new ideas to management*”
- 32% “*feel it is too threatening to offer contrary or different ideas*”
- 47% “*did not get credit for their ideas*” and as result
 - 32% “*will hesitate to offer ideas in the future*”

A successful agile organization must shape and sustain a Culture of Voice. Leaders at all levels must be equipped with the beliefs, values and behaviors that encourage voice and, minimize silence to support an agile workforce.

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It is frequently said that the “tone starts at the top.” If true, senior leaders must be prepared to demonstrate the same competencies, beliefs, values and practices that they expect the entire agile organization to embrace and demonstrate. Agile workforce success depends on this demonstration. All managers should be developed to support and encourage appropriate, autonomous decision-making, encourage voice, recognize and eliminate behaviors that elicit silence. This may be a major shift for some managers who have succeeded in a stable, hierarchical environment. The agile organization depends on IT and business leadership cooperation and agility. Leadership success in an agile organization will require several core human characteristics, including:

- Teamwork and Cooperation
- Tolerance for Divergent Thinking
- Openness and Curiosity
- Positive Influence and Impact
- Initiative and Ownership

The agile organization cannot succeed if it adheres to constrained, unnecessary; non-value added processes that slow decision-making, stifle divergent thinking and innovation. Employees must be equipped with the behavioral competencies, knowledge and skill level and managerial support to make (appropriate) decisions autonomously. They must (consistently) see that there is no consequence for taking initiative, speaking up or sharing different views and opinions with management.

Where to Begin?

The agile organization should start with a current state workforce assessment to determine the employee and management readiness. Readiness is characterized as the Gap between the required knowledge, skills, competencies and culture required for a successful agile organization and the current state. An IT infrastructure and IT services assessment can also identify the technological readiness and capability exposure and it is beyond the scope of this article.

The tone starts from the top and the senior leadership team must agree on the values and beliefs that will guide the company to an agile state.

These values and beliefs should be declared, demonstrated, encouraged and integrated into the formal performance management process as a start.

The formal performance management process should also include a career development strategy to support employees who require remediation, guidance and development to succeed in the new agile organization. A

culture assessment can identify the level of voice and silence in the workplace and the output should be used to formulate a culture shaping strategy.

The digital economy is at our front door. The pace of technological innovation and inevitable disruption will push our thinking and business models to different places very quickly. The agile organization is the best way to achieve unwavering, sustainable competitive advantage.

Author

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