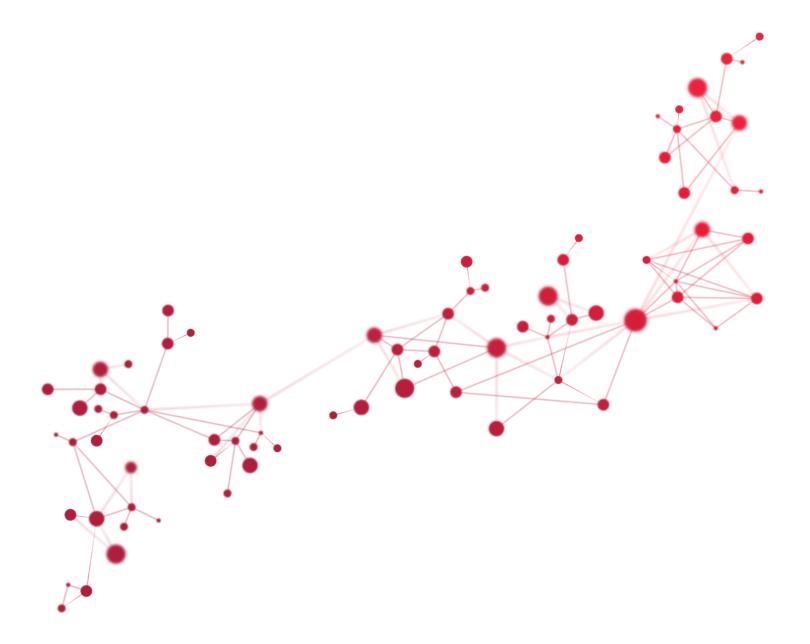




Table of contents

1.0	Business case for enterprise agile	1
2.0	Barriers to enterprise agile adoption	2
3.0	Building an enterprise agile culture	3
4.0	Conclusion	5



Three key takeaways from this paper

- 1. Agile is *extremely* powerful. But, creating a corporate agile culture is extremely hard.
- 2. Agile is the perfect catalyst for reshaping organizational processes, tools and business/IT relationships to improve corporate performance.
- 3. Creating an "agile friendly" culture requires a firm vision, senior business and IT executive support, strong governance and a clear roadmap.

1.0 Business case for enterprise agile

Today's rapidly changing, digitally infused markets and the intensifying fight for customers demand that organizations execute with unprecedented speed and agility. To address this reality, enterprises are looking for an edge; and, for many, that edge is embracing agile software development practices.

The promise of agile centers on transitioning from traditional, overly regimented and slow software development practices and "enablers" to a more iterative, flexible approach that enables organizations to quickly respond to changing business requirements and new emerging technologies. Agile methods, such as scrum, extreme programming, adaptive software development, etc., emphasize continual requirements definition, close team collaboration, testing early and often, and the delivery of software in short, rapid iterations. For firms that have adopted agile, the overwhelming result across industries has been improved quality, increased agility and faster delivery of minimum viable products (MVPs) and subsequent product releases to customers.

Transitioning from traditional software development approaches and enablers to agile and continuous integration, continuous delivery (CICD) has been challenging for many reasons, not the least of which is **strong organizational cultural resistance**.

However, for many organizations the promise of agile has proven elusive. Although agile software development emerged in 2001, many organizations have struggled to achieve its full value, and others have downright failed. Transitioning from traditional software development approaches and enablers to agile and continuous integration, continuous delivery (CICD) has been challenging for many reasons, not the least of which is strong organizational cultural resistance.

Despite these challenges, agile development has become a business imperative as customer expectations continue to increase in the digital world. When a large enterprise first starts down the agile path, it often hires a consulting partner with experienced agile coaches and scrum masters. At first, things seem to go well; new co-location, collaboration, prioritization, retrospective, and other agile-based practices begin to show results.

However, after several pilot sprints, progress hits a brick wall, as the organizational culture pushes back. Entrenched corporate practices, processes, toolsets, organizational structures and controls typically are not conducive to agile. Code needs to be put into production, requiring gates and strict testing policies to be cleared. Additional funding also needs to be secured, with all costs clearly identified and allocated; and, the challenges go on and on. It is ironic that the controls (people, processes and tools) implemented over the past few decades to ensure customer quality (and all that goes with it) thwart new agile delivery programs implemented to increase customer quality.

For agile initiatives to thrive, a strategic cultural change program is required. Organizations need to change and/or supplement existing organizational practices (i.e., people, processes and tools) to create an environment where agile initiatives can be implemented and succeed.

A great analogy from one of our client executives is that, at the beginning of the agile journey, agile projects are "delicate flowers" and if they are not protected, they will get crushed by the organization. At the beginning of the agile journey, pilot or "lighthouse" projects and agile initiatives need special support and protection until the organization is ready to embrace end-to-end agile delivery.

The prize of this "agile cultural journey" is much more than the combined results of the agile projects. The cultural change created through an enterprise agile transformation program also delivers the power of CICD, true business/ IT alignment and significant efficiencies through the reshaping of legacy tools, people and processes.

Agile plays a key role in helping organizations drive business transformation.

Every year, as part of CGI's Voice of Our Clients program, we conduct in-depth, face-to-face interviews with senior business and technology leaders across the industries we serve to get their perspectives on the trends impacting their organizations and how they plan to address the challenges and opportunities through their business and IT priorities and plans. The results of the 1,000 C-level conversations held demonstrate that while digital transformation initiatives are a top priority for executives, they are challenged in finding ways to drive these "cultural change" activities.

In 2016, as part of CGI's Voice of Our Clients program, we spoke with more than 1,000 leaders across 10 industries and 20 countries. The resulting Global 1000 insights affirmed that organizations remain focused on becoming digital organizations and are quickly evolving from investigating and experimenting with discrete digital projects to focusing on initiatives that connect legacy and digital to execute enterprise-wide transformation.

Top IT priorities identified from these interviews include the following and demonstrate the need for and value of agile:

- 1. Generate customer and business insights for better and faster decision making
- 2. Develop real-time, end-to-end digital processing
- 3. Protect the organization from cyber and other threats
- 4. Rationalize and modernize IT to reduce the costs of running the organization
- Adopt new delivery models (e.g., SaaS, PaaS, cloud, outsourcing)

Agile development has become a key motivation and "lightening rod" for organizational cultural reform. This type of cultural reform is necessary if organizations want transformational business activity to outweigh the evergrowing "run the business" costs and efforts.

Before we discuss *how* to achieve the promises of agile through cultural change, let's review the some of the key barriers to agile and *why* its promises have proven to be so elusive for many companies.

2.0 Barriers to agile adoption

The adoption of agile development continues to increase. Ninety-four percent of all organizations surveyed in VersionOne's 9th Annual State of Agile Survey practice agile. And, the percentage of respondents with distributed agile teams jumped from 35 percent to 80 percent from 2012 to 2014. Despite the high adoption, however, many organizations struggle with high agile project failure rates.

Respondents in the 9th Annual State of Agile Survey cited the following as the leading causes of failed agile projects:

- Lack of experience with agile methods (44%)
- Company philosophy or culture at odds with core agile values (42%)
- Lack of management support (38%)
- External pressure to follow traditional waterfall processes (37%)
- Lack of support for cultural transition (36%)
- A broader organizational or communications problem (33%)
- Unwillingness of team to follow agile (33%)
- Insufficient training (30%)

Two of the top five reasons relate directly to culture while the other reasons relate indirectly. This survey and other research reveal the criticality of culture in succeeding with agile. The failure to overcome cultural resistance and build an agile-ready organization is the number one barrier to successful enterprise agile adoption.

Another reason why cultural change is critical to ongoing successful corporate agile adoption is that agile must often co-exist with traditional development approaches. Many large organizations rely on mission-critical legacy systems that are decades old. These systems are entrenched within their operations and have significant controls embedded within them and around them.



The agile approach can be difficult to embrace not only in a culture that depends heavily on legacy systems and processes, but also in a culture that is driven by control.

The agile approach can be difficult to embrace not only in a culture that depends heavily on legacy systems and processes, but also in a culture that is driven by control. Agile development requires empowerment. It works only if you empower your development teams to work collaboratively and entrepreneurially. This is one of the reasons why top-down cultural adoption is critical to corporate agile transformation success.

Overall, an organization's culture is the end product of its tools, processes and control mechanisms. Therefore, to successfully change its culture, an organization needs to change, among other things, its tools, processes and control mechanisms.

Despite these barriers, agile development drives value for any type of organization and should be considered—not as a silver bullet for all delivery solutions—but in situations where it makes business sense. Digitalization, customer onboarding solutions or any initiative requiring a faster response to changing customer expectations are strong candidates for agile delivery. To help ensure ongoing agile project delivery success, organizations need to build an agile-ready culture.

3.0 Building an agile culture

How do large, complex organizations successfully transition to agile? How do they change their culture? How do they overcome past agile failures and ensure future agile successes? Below are key success factors for building an agile culture.

Business and IT leadership engagement

Agile projects and programs will not survive in large hierarchical organizations that have traditional command and control cultures without C-level support—period. The decision and drive to change how the organization operates has to come from the top down. It also must involve both business and technology operations, as most operational areas need to change for Agile to take root.

IT can't implement agile alone. A close relationship and close collaboration between business and IT leadership is crucial. Enterprise agile must be co-owned.

Organizational readiness

Most organizations cannot go "all agile" at once. Instead, they need a transitional roadmap that provides the right amount of support based on the organization's readiness. A purist approach to agile—where traditional development is completely replaced in one fell swoop—results in failure for many organizations, especially those that rely on tight controls, rigid structures and cost-benefit analysis. To build an effective change strategy, you must understand where the organization is at and define transitional phases in line with its maturity and readiness.

A purist approach to agile—where traditional development is completely replaced in one fell swoop—results in failure for many organizations, especially those that rely on tight controls, rigid structures and cost-benefit analysis.





Team empowerment

In addition, agile requires strong team empowerment. IT teams must work differently when implementing agile. In a traditional waterfall environment, teams align themselves to a specific function such as development or testing, relying on processes and templates, and without a big picture view. They also often work in silos. Agile requires flexibility and close collaboration with teams who align to focus on the successful outcome of the initiative, regardless of function. Agile also provides teams with a great deal of transparency into the business objectives behind their work.

Working this way requires top-to-bottom change management that leads to a "learn and change" culture. In this kind of a culture, teams are empowered to innovate and create based on an understanding of where the business is headed and with the autonomy to act independently and collaboratively. We repeatedly see pockets of middle management actively or covertly pushing back on the agile transformation. This is understandable because, when we empower the worker, we don't need as many layers of management. Swift, firm action from executives is required to address pushback from non-conformers. The organization needs to know that agile transformation is here to stay.

Transitional transformation

Building the right transitional plan to agile requires bringing together people, processes and technologies and identifying where it makes business sense to implement agile. As we noted above, agile is not a silver bullet. An assessment of the areas where agile would work best is required, which will then guide the transition. Many organizations start doing agile iterations right away, which can be too difficult. A well-defined transitional approach is required.

Agile program

Transitioning to agile can't be done in an agile way for many organizations. An effective program for managing the transition and driving cultural change is required. Three key program requirements include the following:

- Communication: This is the most critical requirement. Clear and consistent communication between the business
 and IT sides and among IT teams creates the level of engagement, understanding and collaboration required for agile
 success.
- **Buy-in from the top down**: A bottom up approach to agile adoption needs to be supported from the top in order to be successful. Buy-in needs to cascade from the top down.
- Ongoing business and IT collaboration: As discussed previously, IT cannot implement agile alone. Business
 leadership needs to be involved from the outset and remained involved, providing ongoing input into business
 direction and objectives to guide the agile development.

Experienced agile partner

Transitioning successfully to agile also requires an experienced partner to provide the right guidance and support. Look for a partner committed to the following:

- · Working closely with your senior leaders to drive the necessary cultural change
- Talking honestly and realistically about the pros and cons of agile development, without trying to sell it or present it as
 a silver bullet
- Explaining where and how agile development can work within your organization
- Demonstrating how agile development can drive value



Align standardized build

Define lighthouse Build recruitment team & strategy team Define performance & Determine role Recruit strategy ent strategy rate card HR Determine onboarding structure Establish Establish Establish Establish Establish executive training Determine Training Include policies & regulations required Define time tracking training partner Define team Define role Define project descriptions approval process Finance Audit PMO COE Build Outline training Build site Define sprint 0 Perfrom health check artefacts Create Build feedback loop Acquire real for continuous Define criteria for location & resources agile projects Real estate Align COE to Define scales Acquire executive Establish COE Define real sponsorship core team estate strategy Form architecture program lead core team Architecture Define technology Current state Define standards Identify required APIs/services stack Establish DevOps options DevOps Processes Perform dev & test Code Build Release Deploy Operate Define tech Tools

Agile Transformation Roadmap

CGI has developed and refined this roadmap through numerous engagements with large firms to help organizations to successfully transition to agile.

Version contro

infrastructure

Configure tools, build standard

Manage

configuration

Orchestrate 8

automate

Standardize the

platform

4.0 Conclusion

training program

Determine infrastructure

to support tools

Infrastructure

Agile development is empowering organizations across industries to deliver software faster and better to meet evolving market and business demands. Despite its advantages, many organizations struggle to successfully transition to agile, leading to an unnecessarily high agile project failure rate. While there are several common causes for this failure rate, one of the top causes—if not the leading cause—is the lack of an agile-ready culture. Investing in the change management required to build an agile culture is the key to making a successful transition to agile and experiencing all of the competitive advantages it affords. Through this investment, your business leadership, IT leadership and IT teams can align, collaborate and deliver quality solutions for customers, as well as drive organizational transformation - both today and into the future.



ABOUT CGI

Founded in 1976, CGI is one of the largest IT and business process services providers in the world, delivering high-quality business consulting, systems integration and managed services. We combine innovative services and solutions with a disciplined delivery approach that has resulted in an industry-leading track record of delivering 95% of projects on time and within budget. As a demonstration of our commitment, our average client satisfaction score consistently measures 9 out of 10.

CG delivers enterprise agile solutions to clients across a wide range of industries, with a special focus on banking, government and telecommunications. Our agile experts, including more than 1,000 scrum masters, and state-of-the art global delivery centers located across the globe support clients in building agile-ready cultures and transitioning to enterprise agile processes to drive tangible improvements throughout their software development life cycles and measurable business outcomes.

Learn more at cgi.com

