



The path to an agile operating model

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gility is critical to all successful businesses.

Many organisations pursuing digital transformation programs rely on agile methodologies, not only to accelerate software development but also to improve productivity and manage changing business priorities. Agility drives innovation, accelerates product delivered to the second of the sec

ery, and engages employees in a digital-first world. Industry Goliaths can no longer prevail through size and market might. Today, speed and agility are what it takes to adapt to an ever-changing business environment and rapidly evolving customer demands.

But while there is strong consensus among executives regarding the value of agile approaches, taking it to the next step—enterprise wide agility—is extremely difficult. First introduced in 2001 in the Manifesto for Agile Software Development (Agile Manifesto), agile began as a fast, iterative, and flexible approach to software development—a welcome departure from yesteryear's linear, do-everything-we-agreed-on (and a bit more) waterfall method.

However, as nimble start-ups and digitally native companies rise to disrupt traditional markets with digital offerings, implementing agility in legacy businesses (beyond the IT department) is becoming an imperative, with challenges that include change

The Agile Manifesto was created by 17 software practitioners, naming themselves The Agile Alliance.

The Alliance looked to uncover "better ways of developing software by doing it and helping others do it", and found consensus around four core values:

- Individuals and interactions over processes and tools
- Working software over comprehensive documentation
- · Customer collaboration over contract negotiation
- Responding to change over following a plan.

The Alliance used the "agile" label to describe the concept of: A set of methods and practices where solutions evolve through collaboration between self-organizing, cross-functional teams. Agile is the ability to create and respond to change. It is a way of dealing with, and ultimately succeeding in, an uncertain and turbulent environment ... [and being able to] figure out how you can adapt to that as you go along.

management, technology deployments, and cultural shifts. A roadmap for achieving organisational agility can address May | 2022

these challenges. By setting a strategy for mastering lean-agile approaches, organisations can implement new, digitally enabled business processes throughout the enterprise, and reap improved business outcomes.

The challenge of expanding agile beyond IT

Behind every successful digital transformation program is an agile team. But while these self-organising and empowered groups are well established inside IT organisations, they are rare in other areas of the business.

A 2018 survey of 1,300 IT and business leaders conducted by B2B software and IT consultancy CA Technologies found the adoption of agile is broad—most say they are using agile practices in their organisations—but shallow, with only 18% of respondents using agile approaches in their work (Harvard Business Review, 'Survey Data Shows That Many Companies Are Still Not Truly Agile', 22 March 2018).

The 13th State of Agile Report by software company VersionOne Inc. found that 83% of executives reported that their organisations have not yet reached a high level of competency with agile practices.

Tata Consultancy Services' TCS 2019 CMO Study: Reimagining the Brand Experience showed that bringing Agile to business functions such as marketing is still a work in progress. In the study, which surveyed 516 chief marketing officers and other marketing heads in North America, Germany, the Netherlands and the UK in 11 industries, B2C marketers are farther along than their B2B counterparts in using agile methods.

Twice as many B2C firms said their marketing teams use agile methods in running campaigns (85% of B2C compared to 43% of B2B). For example, 70% of B2C companies said their marketing teams regroup to adjust live marketing campaigns at least several times a week—much more than the 48% of B2B firms that follow this practice.

The study also found that leading marketers—those that are successful in generating leads and revenue in their digital marketing efforts—are more agile than the least-successful follower firms. Seventy-seven percent of the leaders companies said they use agile methods in updating their live marketing campaigns, compared to 60% of the follower firms.

Such results are not surprising because while many companies can assemble agile teams for IT projects, where IT teams have long embraced agile methodologies, they find it very difficult to propagate the approach throughout the organisation as a whole. Deeply entrenched, traditional ways of working, cultural stagnation, fear of accountability—they can all stand in the way of implementing more agile ways of working.

One of the greatest impediments to enterprise-wide agility is rigid, vertical organisational structures. A throwback to the industrial age, traditional decisionmaking, which involves multiple layers of managerial approval, was designed to minimise risk. But this process can be cumbersome, making it almost impossible for organisations to pivot when they need to most.

Indeed, the more gatekeepers, the more decision-makers, the harder it is to change, and the greater the potential for emerging tensions between leaders, managers,

Adopting an agile operating model

Embracing enterprise agility is challenging, but the payoff can be enormous. Quick, iterative design and production cycles can lead to the delivery of higher-quality products and services. And collaborative, autonomous teams make for happier and more loyal employees.

Enterprise agility allows a business to navigate shifting currents. As an analogy, rather than creating one large airliner to drive change and run the business, organisations can achieve agility by enacting many adjustments by launching a swarm of smaller, nimbler jets. The smaller jets have autonomy, and for good reason: If every pilot of a smaller jet has to wait for a master pilot to tell them how to act and when to change course, they will soon be travelling in different directions at different speeds. But when each smaller jet has a crew empowered to make adjustments to stay on a course pre-determined by the organisation, the fleet will be synchronised, travelling together toward its destination.

An agile operating model helps organisations create those self-adjusting teams in every part of the business. The model includes strategy design, execution, and a library of best practices.

But first, an organisation must determine which aspects of its operations—marketing, sales, or service need to become more agile. This requires defining and articulating an organisation's business strategy. It also means examining the relationship between IT and the business and assessing the impact of digital transformation on non-IT functions. It calls for a commitment to build agile capabilities and the technologies that support them.

The next step involves establishing clear, measurable goals that the entire organisation, from the C-suite to entry-level employees, can understand and work towards. A high-level roadmap can help teams see how the company is progressing in its agile journey and allow them to celebrate small but critical wins.

Milestones can vary. One large European bank decided to "be better, cheaper, faster, happier" through an agile approach. Its success measurements ranged from responding faster to client and business needs to accelerating go-to-market capabilities by a factor of three. Making customers happier determined priorities for changes in the business.

Finally, an agile strategy must test ideas before committing massive resources to them. Enterprise-wide agility is intended to encourage teams to experiment, fail fast, and move forward with winning proofs of concept.



The quote

The more gatekeepers, the more decisionmakers, the harder it is to change, and the greater the potential for emerging tensions between leaders, managers, and workers.



Srivastava, Tata Consultancy Services

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These experiments should solicit client feedback, understand their needs, and respond accordingly. Sometimes, this may mean cutting investments in projects that fail to hit the mark with customers. Other times, gauging consumer interest, even in minimally viable products, can speed time-to-market and drive revenue. This is what the European bank did as it tested new products and gave the go-ahead to those that performed best with customers.

The people, processes, and technologies that create an agile organisation

Shifting from traditional mindset to an agile one means investing in people and coaching everyone from top corporate leaders to entry-level employees. It means establishing technology capabilities that enable the fast and frequent release of new software products and seeing how customers like them. It means allowing people to experiment and fail, while learning from those failures.

Successful firms follow nine best practices to achieve organisational agility.

1. Develop clear strategy to guide actions

A strategy serves as the North Star for a company's transformation to an agile operating model. It includes the company's vision statement, its goals for achieving that vision statement, and a roadmap for achieving it.

Imagine a company determines that its strategy was to achieve full enterprise agility by the end of as designated year. The company could articulate a vision to pursue this strategy, the goals for measuring progress and the path to get there.

For example, a company could say: 'We will achieve enterprise agility by the end of 2023. We will do this in four ways. Our employees will practice agile. Our workplace, including technology infrastructure, will enable agile work. Internally, we will develop, deliver and sustain all our products and services using agile approaches. Externally, we will deliver products and services to customers using agile—even if the customer is not.'

The strategy lays the foundation for the following eight best practices that enable a company to pursue a roadmap for an agile operating model.

2. Create a product-centric organisational design

An agile operating model is built on the principle of the empowerment and autonomy of teams. But that does not remove the need for a robust organisational structure consisting of three main components.

Leadership roles that drive agility

Each business unit of an organisation should include two leadership functions:

- An Agile Transformation Management Office to prioritise, coordinate, govern and facilitate collaboration across the enterprise to deliver agile processes.
- An Agile Centre of Excellence with capabilities and expertise in defining the Agile Playbook for the organisation, coaching the teams in embracing Agile Ways of Working and supporting organisational change at all levels.

Product-centric teams

Lean-agile approaches call for teams that are organised around a product or issue, not a management hierarchy. This begins with em-

powering teams that align with key customer or business strategies, and continuously investing in their improvement. These teams are best organised as follows:

• *Pods or scrum teams:* These cross-functional teams deliver value by developing features and components. Members include experts in product development, user experience, the business environment and software architecture. Pods may select from a wide portfolio of products to work on, and report progress to product owners.

Note: 'Scrum' is defined by the Agile Alliance as "a process framework used to manage product development and other knowledge work".

- Business units: Leaders manage an organisation's collection of products, establish business priorities and set budgets.
- *Chapters*: These groups of engineers share deep expertise and are deployed across various pods.

Note: 'Chapter' is a term developed by agile practitioners at music and podcast streaming company Spotify.

Rationalised roles that divide stakeholders into three categories

- Management: Executive leaders, an IT manager, a business sponsor, a program manager, and a portfolio manager.
- Technology: Solution architect, digital architect, technical lead, automation engineer, developer, database architect, quality assurance leader, project manager, support engineer, and data scientists.
- Business: Domain expert and product manager.

In traditional hierarchical organisations, teams must gain approval from above before moving forward. The role rationalisation process flips this management pyramid on its head. The result: New roles, such as product owner, product specialist, agile coach and scrum master, which focus on business outcomes, self-management, and swift decision-making.

3. Establish agile ways of working

Organisations that compete successfully in a digital world embrace agile as a new way of working. Methods such as Scrum and scaling frameworks such as a Scaled Agile Framework (SAFe®) can prioritise projects that deliver the highest business value in the shortest amount of time.

Internal communication channels, such as social networks, can be used to champion agile ways of working. That is because these applications provide employees with valuable resources and background materials that emphasise the benefits of agility, driving adoption.

Techniques such as retrospectives also can help employees learn and improve through fast feedback cycles. Moreover, a solid technology infrastructure can move an organisation along the agile maturity curve.

As an organisation gains experience with agile ways of working and delivering results, it strives for continuous improvement through its technology infrastructure (including DevOps, that is, practices that amalgamate software development and IT operations), process, culture, and structure.

4. Implement a modern technology architecture

People and processes are not the only building blocks for agile work. Innovative tools and technologies play a key role in reducing deployment time for software products and increasing employee engagement.

For example, microservices enable the design of software applications as small packages of independently deployable services. By building these self-contained, modular components, as opposed to large, sprawling systems, teams can get innovative services to market faster, easier, and more affordably.

In addition, DevOps fosters a culture of collaboration in which developers and IT operations teams work together, pooling resources and taking equal ownership for an application's journey from design to deployment. By automating technical capabilities, DevOps can reduce time spent building, testing, integrating, and deploying new software products.

And then there is automation. As a critical component for maintaining agility, automation takes a Machine FirstTM approach to software testing, continuous integration, and the deployment of new products.

5. Secure funding for a portfolio of products

Lean-agile governance principles are key to driving effective decision-making and supporting a customer-focused agile culture.

To support enterprise-wide agility, successful organisations shift their focus from funding individual projects to funding teams. As budget adjustments are based on which teams are working on the most important products and value streams, a certain degree of trust in the decision-making process is essential. But there are some basic rules of thumb. For example, low-cost, high-return product features should attract more funding, as do products that garner favourable market feedback.

The second governance principle for making portfolio investment decisions involves measuring performance levels. Teams can be measured by sprint or product release. Portfolios and organisational levels should be reviewed monthly, quarterly and annually, and team-level performance will be gauged by product delivery cycles, and their impact on business value.

Lean thinking can also be applied to the management and funding of product portfolios. At the core of lean thinking is the notion that focus produces higher-quality work. For instance, a large Australian energy company, faced with mounting competition and changing business priorities, adopted agile across the enterprise with the goal of reducing time-to-market for new products. In the end, the company achieved a 90% reduction in software deployment time, and a 40% reduction in potentially disruptive incidents by reorganising the business and IT based on customer value streams.

6. Trust in location-independent agile teams

The originators of agile argued that its effectiveness required teams to meet in the same physical space. In today's global economy, that is not practical. Indeed, location-independent agility can foster greater collaboration across time zones, no matter where or when an employee is working. Letting agile team members work from different locations can deliver advantages in access to skills and knowledge in digital transformations.

The Agile Manifesto was written in 2001. We have come a long way since then—the technologies have evolved, and there are marked changes in the way organisations operate.

- Businesses have truly become global with their presence in markets throughout the world.
- Large enterprises have their talent base spread all over the globe.
- Collaboration technologies have advanced significantly since 2001. So today, if businesses want to become Enterprise Agile, they should harness the available abundance of talent across locations.

Co-location is likely to be a constraint in the quest for Enterprise Agility. TCS Location Independent AgileTM enables businesses to harness the talent that is available globally.

As an illustration, TCS Location Independent $Agile^{TM}$ is a TCS proprietary methodology consisting of processes, management structure, and the technology that enables enterprise-wide agile transformations without the location constraint.

TCS has three models, four enablers and five principles. The models are based on the natural time zone differences between the locations a team is spread across. Each model is supported by one or more enablers to make it efficient and effective.

7. Invest in people management

As leaders increasingly embrace agile methods, it is imperative for them to invest in their people, from recruitment to hiring. Once on board, the learning should start and never stop.

Agile organisations develop talent by investing in training and coaching to ensure employees can collaborate effectively. Roles-based training instructs team members—developers, business analysts, or product owners—to be self-organising as they adopt agile practices.

Other agile-specific roles, including scrum masters, and program managers, receive ongoing training to manage agile projects and empower teams.

Product owners and business stakeholders learn how agile reinvents workflows, how to manage the stream of product requirements and backlogs, and how to ensure IT alignment with the work of agile teams. Executives receive training in agile ways of working, including servant leadership, which emphasises listening before directing.

Agile organisations also provide training to all levels to encourage the delivery of fast feedback, including self-assessments, and rewards and recognitions based on team performance.

8. Apply agile principles to IT sourcing

Today's global and digital organisations work with vast networks of suppliers and buyers. Further, agile principles can help organisations build and sustain important partnerships with crucial IT service providers. Here's how:

- To boost value, source services around products and value streams rather than by technical capabilities.
- The organisation pays for the time and materials invested in vendor management; the scrum teams determine when to terminate a vendor contract.
- At regular intervals, gauge a vendor's value, and determine whether to tweak, sustain, or sever a relationship (e.g. adjust contracts for service delivery based on the fluctuating needs of agile teams).

9. Foster an agile-friendly culture

Traditional company cultures rarely translate into an agile environment. Agile enterprises are flatter, granting all employees a stake in success. This means fostering a culture that emphasises transparency, experimentation, relentless improvement, and the employee's continuous engagement with customers. Top executives can lead this cultural shift by encouraging teams to win while providing a safe environment for experimentation.

The agile mindset focuses on the incremental delivery of business value, minimises the size of projects, and commits to continuous improvement.



Finally, the triumvirate of trust, clarity and purpose at all levels of an organisation can ensure that the right people with the right knowledge and skills are afforded the opportunity to shape an agile enterprise.

Agility in the real world

What does an agile organisation look like? The experiences of two companies are instructive.

One, a US-based global professional services firm, adopted agile ways of working to better align IT with the business, thereby ensuring consistency in its business practices and accelerating time-to-market for its services.

By implementing agile methods, the company's time-to-market for new service offerings grew 40% faster. The firm saw a 70% reduction in software product and service defects. Moreover, its 3,800 employees reported being more engaged with their work.

At a large European bank, the goal was slightly different. In this case, leaders embarked on an agile transformation to respond faster and more effectively to customer needs to maintain its competitive edge.

The bank's goals included delivering services faster, with better features, and within budget, while maintaining employee and customer satisfaction. By upping its agile ante, the organisation experienced a 30% uptick in its time-to-market speed. It achieved a 95% customer satisfaction rate while strengthening its corporate culture.

Six steps for putting agility into action

There are six steps to the agile transformation process.

1. Initiation

The agile transformation begins when leaders are aligned on their vision for the process. They assess the organisation's existing capabilities, including what agile work has begun, and how ready the various parts of the enterprise are for adopting agile ways of working. Establishing an agile transformation management office enables the organisation to provide training and develop a communication plan for starting work on agile product development.

2. Training

All stakeholders, including leaders, scrum master, product owners, agile coaches and other team members are brought up to speed on agile methods, and then they begin planning for pilot projects to put the training into action.

3. Piloting

As pilot projects commence, coaches observe and guide.

4. Retrospection

The organisation analyses and measures the success of pilot tests, using the data from one set of tests to inform future tests. In this way, an organisation can leverage data to continuously improve.

5. Launch

Another continuous improvement process, the launch is when an agile organisation really takes shape and implements its agile transformation roadmap, including implementing agile ways of working that extend to budgeting and other decisions (about governance and technology architectures).

Communities of practice form as people with common business expertise and technical expertise share information and improve their skills. The agile culture takes hold, with teams working iteratively on products based on value. The organisation builds a location-independent agile capability. Coaching continues for all roles, and new agile-related career paths emerge for various roles.

6. Sustain

The company continues to assess progress, seeks to improve its agile practices including team member coaching and communities of practice, and, on the technical side, DevOps, development and technology operations. Sustaining the agile organisation also means monitoring and communicating outcomes (and value retrieved) to all teams.

Obstacles to avoid

For every organisation that succeeds in its enterprise-wide agile transformation efforts, another continues to struggle. Overcoming these 50% odds requires understanding potential roadblocks to agile transformation.

A tepid commitment to an agile approach can thwart adoption of agile techniques. Focused sessions at all levels of an organisation can help highlight the roles and responsibilities central to agile adoption, and how they can impact the organisation.

Poor leadership can also stall the march towards new ways of working. For this reason, leaders need to be aware of the impact of their actions—or inaction—on achieving organisational goals.

Training that neglects to include all stakeholders can cause some team members to question the value in achieving agility, and discourage cross-functional buy-in.

Failing to invest in infrastructure that supports DevOps is also a recipe for failure. DevOps involves understanding the current technology stacks for various applications, and identifying the tools needed to support the continuous delivery and automation of software development. Cultural changes also come into play, as convincing siloed teams to work together towards common goals can be challenging.

These obstacles can hinder many organisations from enterprisewide transformations, even as they adopt agile techniques and see gains in select pockets of the company.

Conclusion

It is time to bring the agile methods popularised by software development teams to the rest of the organisation. Obstacles will abound, including leadership hesitancy, employee resistance and hesitancy about committing the investment necessary to create a technology foundation that enables organisational agility. But the rewards of achieving enterprise-wide agility far surpass the risks of inaction in this era of digital transformation. **FS**