

# Discover the Benefits of Agile: The Business Case for a New Way to Work



## Deliver At the New Speed of Business

You're operating in a world that's global, responsive, customer-focused and technology-driven. With software as the key driver of growth, innovation, efficiency and productivity, how you deliver software says a lot about how you'll compete in this world. A world written by software spells opportunities for those who capitalize on it and risks for those who don't. The companies that survive—and thrive—in this world will be agile companies: those able to quickly and confidently respond to change, deliver value faster than the competition and build high-quality products that customers really want.

## Why Agile

The agile approach to developing software—and managing work in general—is your passport to success in the application economy. Agile promises a range of benefits: faster time to market, increased productivity, fewer defects, cost savings and better employee engagement.

- The companies that are deploying agile at scale have accelerated their innovation by up to 80 percent.<sup>1</sup>
- A summary of research on project management methods found that agile approaches yielded 29 percent better cost, 91 percent better schedule, 97 percent better productivity, 50 percent better quality, 400 percent better satisfaction and 470 percent better ROI than the least effective traditional methods.<sup>2</sup>

Agile methods help you build and deliver products incrementally, get value to customers quickly and keep development work aligned with business needs. Agile approaches emphasize these tenets:

- Disciplined project management to minimize waste and deliver on schedule.
- Self-organizing, cross-functional, and collaborative teams.
- Customer satisfaction through delivery of software in short, frequent cycles.
- Frequent inspect-and-adapt sessions for continuous improvement.

**Here are some of the results you can expect to see when you adopt agile approaches:**

### Get to market faster

Anyone with a smartphone knows we're living in an app economy: customers expect to see product updates and improvements on a regular basis. When you get your releases out the door on an agile cadence, you'll not only deliver value to customers faster than your competition, you'll get revenue in the door sooner too.

### Build high-quality products that customers value

Agile's user-centric approach—which delivers value in short cycles so customer feedback can be integrated into the development process—means you can align your strategy and development work around building what customers want most. Agile approaches also integrate testing into the development process, which improves quality and helps identify defects prior to release.

### Reduce risk and eliminate waste

Traditional software development required long planning, design and development phases resulting in infrequent, big-bang releases that risked delivering the wrong thing, too late. By delivering value to customers more frequently and integrating their feedback, agile approaches help you respond more effectively to the market reducing the risk of expensive market misses.

### Collaborate better

Self-organizing, cross-functional teams are the foundation of successful agile practices. These empowered teams don't just produce better products and services: they also produce more engaged employees. According to a study by Coleman Parkes, organizations can increase employee productivity by 22 percent by adopting advanced agile principles.<sup>3</sup>

### Gain an edge on the future

A report from Accenture found that high-performing organizations are six times more likely than other organizations to have adopted agile methodologies.<sup>4</sup> And Computer Economics' "IT Spending and Staffing Benchmarks" study estimates that 83 percent of businesses plan to implement agile (up from 59 percent previously).

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## Agile Foundations

Agile approaches have been around for decades but were codified in 2001 with the Agile Manifesto,<sup>5</sup> a lightweight set of values for managing software development projects which include:

**Individuals and interactions over processes and tools.**

**Working software over comprehensive documentation.**

**Customer collaboration over contract negotiation.**

**Responding to change over following a plan.**

Agile is an umbrella term for a variety of work-management approaches that share common principles—among them cross-functional collaboration, a focus on customer value, iterative and incremental delivery (early and often), pulling quality forward, limiting work in progress (WiP), and continuous improvement.

Once considered a fad, agile has matured into a popular and respected set of development methods. In fact, agile has expanded outside of software development and IT into sectors like banking, management consulting, automotive manufacturing and healthcare. Companies are moving to agile methods because the global marketplace demands they bring products that better reflect their customers' needs to market faster. The traditional waterfall approach—with its sequential phases and heavy investment in large-scale, upfront design—lacks the flexibility to help organizations respond swiftly to changing markets. Agile approaches offer faster delivery, higher quality and an engaged development team that can deliver on its commitments.

### It’s about more than just software

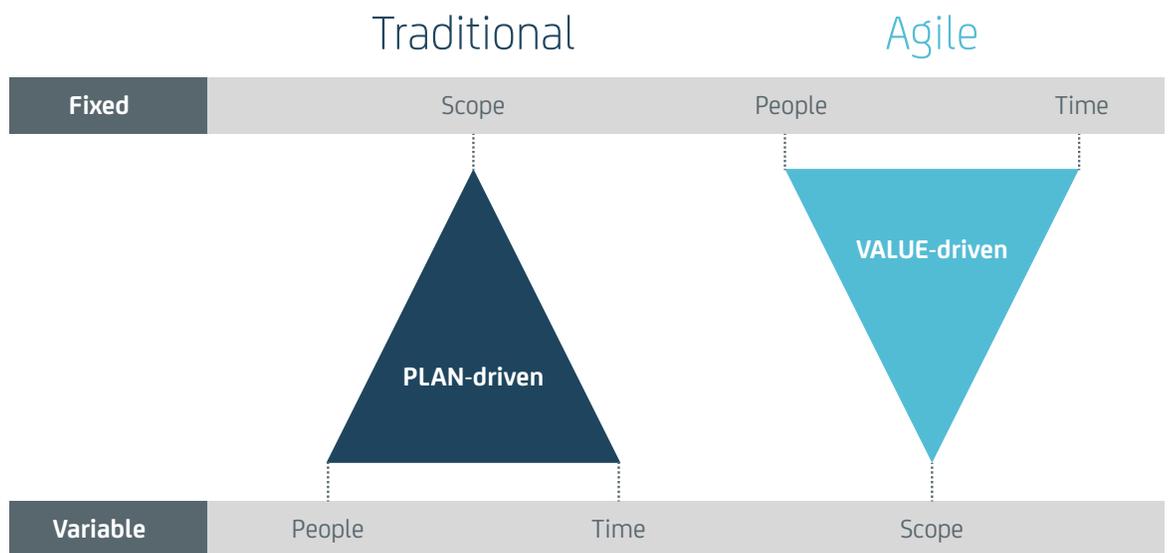
Agile isn’t just a software development methodology. To deliver customer value faster, organizations need to be agile in their organizational structure, processes, ceremonies and culture. What started as a movement around software teams is now an enterprise-scale business approach, applied across teams in distributed office locations—and it’s an operational model in which companies use their business agility (agile execution, adaptive portfolio management and disciplined innovation) as a competitive advantage.

### How agile is different

All projects need to be managed within common constraints: scope, people (resources) and time. Traditional project failures include exploding costs and schedules, often caused by scope changes. Traditional or waterfall methods attempt to lock down scope so that time and resources can be planned and controlled. Agile assumes resources and time are fixed and sees scope as variable.

Traditional Development	Agile Development
Plan-driven	Value-driven
Fixed scope	Variable scope
Variable resources	Fixed resources
Variable time	Fixed time

In fast-changing environments, a variable-scope approach allows you to adapt to changes, risks, dependencies and feedback while still delivering working software on schedule. You manage risk by ensuring the teams always work on the highest-value features first. When the unexpected happens—as it always does—and you run out of time or money, you’ll still have delivered the highest-value features.



## Agile Methodologies

Scrum has become the most prevalent agile approach due to its simplicity and application to a wide variety of work. Lean is borrowed from Japanese manufacturing approaches (think Toyota) and focuses on eliminating waste while improving flow along an entire value stream. Kanban, which developed from lean manufacturing approaches, is quickly being adopted as useful method to facilitate flow, eliminate waste, continuously improve and make the status of work progress more visible. XP (eXtreme Programming) provides important guidance on the technical practices that enable rapid, incremental development. Emerging flavors of agile—including test-driven development, behavior-driven development and set-based engineering—address the specialized needs of the broad range of users now employing agile approaches.

### Scrum

Borrowed from the game of rugby, Scrum is the name of a project management framework in which self-organizing, cross-functional teams deliver shippable, working software in a set time period called a sprint. In each sprint (typically between one week and one month and commonly two weeks), team members plan the work they can commit to finishing in that timebox, build a backlog of features broken down into user stories, gather for a daily standup (a fifteen-minute meeting in which they share daily progress and any blocks), complete each story from idea to functional, production-level code, demo working software to stakeholders to collect feedback and perform a retrospective, during which they review the sprint and commit to improving process and product.

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“Delivering high-quality end products quickly requires new ways of working, including agile development, rapid release cycles, automated testing and deployment and a ‘test and learn’ approach to changes.”

Source: McKinsey<sup>6</sup>

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### Agile roles

Agile teams (often known as the Scrum team or delivery team) comprise the engine that powers agile’s success. Research has shown that the optimal team size is seven, plus or minus two members, and that stable teams (in which members aren’t frequently reassigned) produce the best results.

**Scrum Masters** help the teams become high-performing. They facilitate team members’ relationships with outside stakeholders, remove obstacles to progress and run efficient standups and other collaborative meetings. Scrum Masters are servant leaders, rather than project managers. Instead of command-and-control management tactics, they use collaboration and facilitation to help teams focus on making and meeting commitments with quality, and they clear the obstacles in the teams’ way.

**Product owners** own the vision of the product. They represent the needs of the user or customer by deciding what work goes into the backlog, how it's prioritized, how changes are integrated and when the work is "done." Product owners ensure teams understand the business value of their work.

**Team members** contribute to the team's completion of its work by planning and finishing user stories. Team members may be developers, testers, user experience researchers, engineering specialists, marketers or other discipline-specific roles, but they work cross-functionally to build and deliver a product.

**Manager roles** (such as engineering director, IT director, portfolio manager, program manager, business development manager and executive-level leaders) perform a range of important functions, especially for those doing agile at scale. They provide budget and cost inputs, instill trust and transparency, manage external stakeholders, coordinate multiple teams, facilitate career development, own issues or risks and manage vendor contracts.

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## Agile at Scale

Scaling agile, especially in large, enterprise companies, isn't just about adding more agile teams. Agile at scale requires integrating agile principles into your organizational structure, company culture, process, operations and strategic thinking. For the best results, you'll scale horizontally (coordinating and aligning teams of teams) and vertically (connecting development work to company strategy and portfolio initiatives).

Agile approaches may seem simple, but scaling agile isn't easy. It requires coordination, a willingness to transform, lots of practice and commitment to the tenets of collaboration, visibility and continuous improvement. However, scaling agile across your organization yields agility, flexibility and organizational health. This is where you really see the promise of agile in delivering four-times results in speed, productivity, time to market and—ultimately—your bottom line.

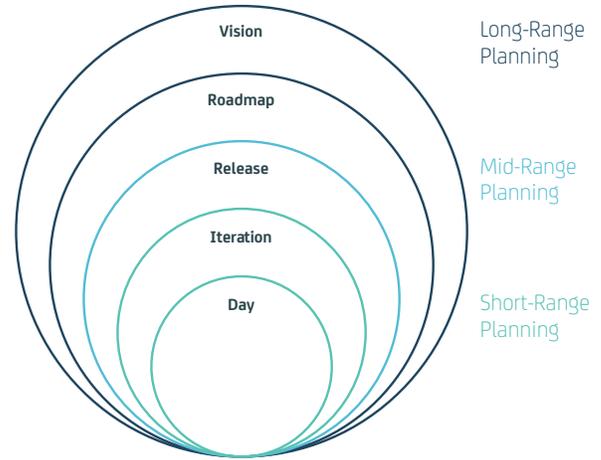
If Scrum and team-level agile help you establish cadence and synchronization, then agile at scale means taking that cadence and synchronization to the next level. If you're considering agile at scale, then consider how you'd answer these questions:

- How does work flow to your teams?
- How far into the future do you plan?
- Do you include people from outside IT or engineering in your planning?
- What happens if the world changes after you plan?

### Cadence

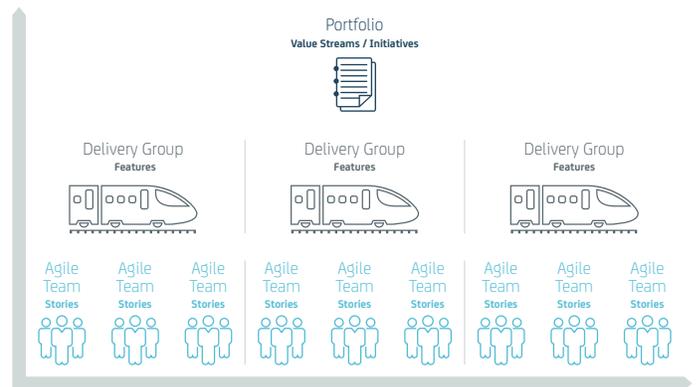
Enterprise scale agile requires longer-range planning and vision: a strategy or company vision feeds into the creation of a product roadmap, which is then broken into releases, which contain multiple iterations (or sprints).

In addition to their daily and iteration planning, agile teams need to come together regularly to plan their releases. In this, they're joined by other members of the business responsible for delivering value to customers, such as engineering leaders, portfolio directors, managers and executives who hold the company vision.



### Synchronization

Organizing multiple agile teams around a synchronized cadence is imperative to building a high-performing agile execution engine. Multiple teams working toward a common release objective are often referred to as a delivery group or release train. The team timeboxes (iterations) should be synchronized with the program timebox (release).



### Scaling agile frameworks

Establishing successful scaled synchronization and cadence within a large company is no small feat, but many of the best practices for scaling agile already have been identified and codified. The most well-known of these is the Scaled Agile Framework®, or SAFe®; others include Disciplined Agile Development (DAD), Large-Scale Scrum (LeSS) and Nexus. Regardless of which one you choose, you'll want to assemble a transformation steering group of business and technology executives—supported by a cross-functional agile working group of leaders—dedicated to implementing agile practices at scale and focused on helping the company work through obstacles and resistance.

## Release planning

Whereas sprint planning is done approximately every two weeks or at the start of each iteration, release planning (also called program increment planning or big room planning) is done several times per year (commonly every 10 to 12 weeks). Release planning serves as a way to bring the company vision and product roadmap into the same room with the people who will be executing on it. At an enterprise company, release planning may involve several hundred people connected to a particular value stream, working across two days to identify risks, make adjustments and finalize a delivery plan.

This event typically has four key parts:

- An executive sets the vision and context for the work to be done, so that those doing it understand the business drivers for its importance.
- During team breakouts, the delivery teams plan and prioritize their feature backlogs, slotting stories into sprints according to the work they believe they can commit to finishing within the release.
- Scrum Masters, product owners and leaders help surface and resolve any needed adjustments, risks and dependencies when the teams reassemble.
- Everyone involved votes on their commitment to the plan for the work to come.

Release planning represents a very different approach for many companies that traditionally perform planning as an annual, management-only meeting that's disconnected from those who will actually do the work. Yet this planning ceremony is the crux of successful agile at scale—it directly maps your company's business strategy to your execution engine.

Some companies balk at the expense of assembling all these people together, many of whom may not even work on the same continent and are taking time out from their day-to-day activities, to engage in this event. Yet when these companies factor in the run rate for a development organization (not to mention the risks of not doing such considered, mitigated planning), they find release planning to be an investment that quickly pays for itself.

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“Organizations that move from basic to advanced agile adoption can increase business growth by up to 33 percent.”

Source: Colemand Parkes research commissioned by CA Technologies<sup>7</sup>

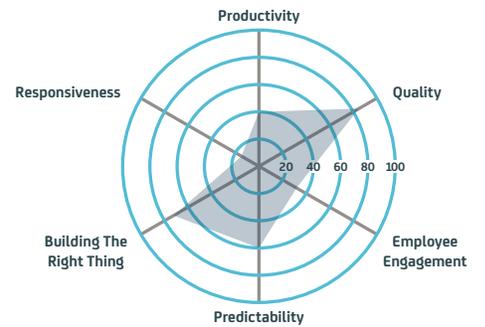
## Building an Agile Business

As the pace of change accelerates and disruption becomes the norm, the most successful companies are differentiating themselves by sensing market opportunities and responding more quickly and confidently than the competition. Organizational agility of this order requires architecting your whole business system for speed, adaptation and opportunity. It means breaking down silos between departments and engaging marketing, sales, finance, operations and the executive suite, so you can steer the entire company in the right direction.

### Agile organizations practice three types of agility:

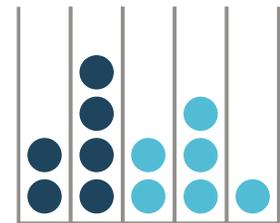
#### Delivery agility

High-performing agile teams are the foundation for an agile business with speed and performance forming a competitive advantage. Speed helps you monetize incremental value and realize revenue sooner. It taps the voice of the customer early and often, so you can build the right thing. Agile organizations also build the thing right by delivering with quality and predictability.



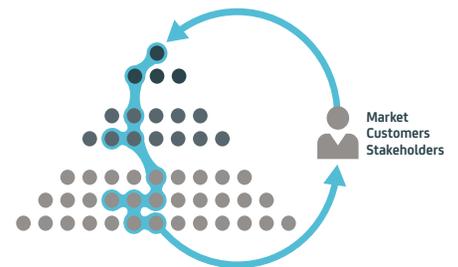
#### Portfolio agility

When applied to portfolio management, agile practices can help you implement your strategic vision, make informed trade-off decisions and optimize how you allocate available resources. Performance gains from delivery agility free up resources for growth and innovation. Agile organizations use these dividends to create opportunities, with focus and insight into the highest-value initiatives. A responsive planning and funding cadence reduces risky investments and keeps you aligned to your highest business priorities.



#### Business agility

The highest level of agility requires organizing people around creating value. This doesn't mean reorg; it means connecting agility throughout your organization by breaking down internal silos and forming value-focused teams. By aligning people and teams around customer value and taking a disciplined approach to managing change, you build responsiveness into your DNA and are able to pursue innovative ideas. With a deliberate approach to investing in innovation and growth, you can create change within your market and become the disruptor, instead of the disrupted.



## Get Started With Agile

Does your company suffer from any of these symptoms?

- Unrealistic plans
- Frequent pivots
- Customer dissatisfaction
- Lack of commitment
- Quality or technical debt issues
- Risks that explode
- Delayed delivery
- Dependencies that block
- Unstaffed priorities
- Low developer morale

If so, then it might be time for you to consider a new way to work. Now is the time to get started with agile.

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“To succeed in the digital age, digital business professionals must redefine how they deliver value to their customers and how they realign their people, processes, and technology for agility.”

Source: Forrester Research<sup>9</sup>

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Whether you're just learning about agile or want to improve what you're already doing, we can help.

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