How Modern Businesses Scale With Agile

This ebook isn't an introduction to Agile software development.

Nor is it a set of step-by-step instructions for how to move from being a rigid, inflexible company to being one that places customers - and Agile - at the heart of everything you do.

If only life was that simple.

Instead, think of it as a blueprint. We'll provide the outline on how to efficiently and effectively scale Agile across your company and walk through ways to remove many of the roadblocks that could halt you without proper planning.

We'll explain why it isn't enough to adopt a few Agile projects and declare yourself done. Just as with Agile software development, the end destination isn't something you'll be able to achieve from behind a desk or in a boardroom.

Customers are at the heart of everything that you do. It's their demands, their desires, that dictate what you produce. You might be thinking about the legendary Henry Ford quote: *"If I'd asked my customers what they wanted, they'd have said a faster horse."*

Famously, Ford interpreted what his customers wanted by putting them right at the center of his product vision: *"I will build a car for the great multitude,"* he wrote in My Life and Work.[1]

"It will be large enough for the family, but small enough for the individual to run and care for. It will be constructed of the best materials, by the best men to be hired, after the simplest designs that modern engineering can devise. But it will be so low in price that no man making a good salary will be unable to own one—and enjoy with his family the blessing of hours of pleasure in God's great open spaces."

Over a century later, Ford remains one of the world's most successful companies. While switching to an Agile approach is no guarantee of such success, all the evidence—as we'll show over the coming pages—suggests that the next Ford will have Agile methodologies at its heart.

[1] Henry Ford, "My Life and Work," 1923

What is an Agile culture?

The concept of Agile project management is well understood, but what do we mean when we boldly declare that modern companies need to embrace an Agile culture if they're to succeed? Is it simply a matter of shifting from a waterfall approach to project management to an Agile approach?

The simple answer to that is *"no,"*. While recent research from the Project Management Institute[2] has shown that the most successful companies—the *"Champions"*—are those that have embraced Agile methodologies, this isn't enough on its own.

To understand this, consider a typical project team. It's pulled together to meet a need, hopefully drawing people from across business divisions, and then they work on the project until it's completed to some level of maturity.

What happens next? The team members disperse back into their various divisions, and the product you've developed is put on the shelf with all the other *"mature"* projects, as the brightest brains in the organization move onto the next project. These products become orphans, forgotten about until a crisis hits and you realize they are no longer fit for purpose.

An Agile company thinks differently. Rather than define themselves as part of the HR, software development, project management or sales teams, employees are focused on the needs of the customer. How can they deliver something that the customer will value?

[2] Project Management Institute, "Pulse of the Profession 2017," February 2017, http://www.pmi.org/-/media/pmi/documents/public/pdf/learning/thought-leadership/pulse/pulse-of-theprofession-2017.pdf

The instant defensive response is to say, "*We already do that*." In reality, the traditional organizational structure shows the opposite—that of divisions within the company with strictly defined roles that rarely if ever converge—prevents putting customers at the center of what they do.

As an extreme example, consider the perhaps apocryphal story of a Soviet sunglasses factory that produced tens of thousands of sunglasses, which met all the criteria (guard against the sun, produce a thousand glasses per day, be sturdy) but failed in one crucial regard: buyers of the sunglasses couldn't actually see through them. Due to a manufacturing fault, the lenses blocked out all light.

Each faction within a company might say they fulfilled their task—*"I made sure the plastic was strong," "the UV layer I added protected the eyes," "we produced a thousand glasses per day"*—but the customer became a distant voice. Viewed in another way, the project's criteria became the focus rather than the product or the customer.

Organizational Change

Traditional — Agile

Customer Centric Change

Tradional — Agile

Customers
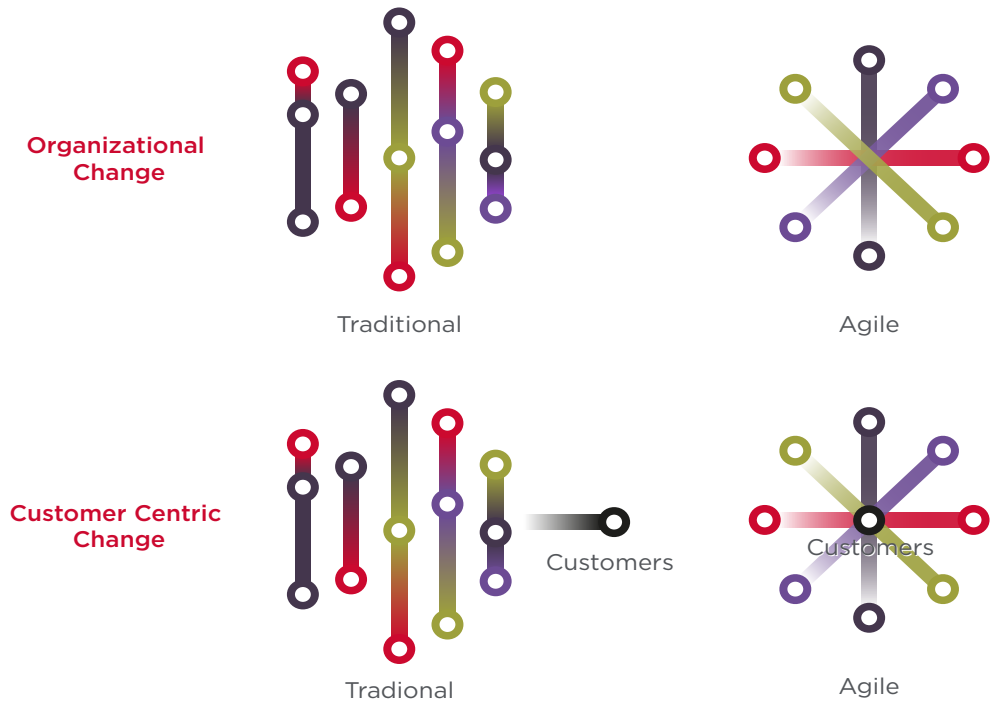
In traditional businesses, silos are created that find it difficult to work together. Moving to Agile means each silo still exists but there is a common ground – the project team – that draws expertise from each area. As is shown in the second diagram, customers become the central force in this new model: they are actively engaged in the development of new products, giving their feedback on each sprint.

So what kind of cultural changes need to happen to prevent this type of customer disconnect?

☑ No more command and control

The old approach of telling foot soldiers what to do doesn't work. In an Agile company, everyone has responsibility to make decisions that best serve the customer.

☑ Small teams, not big

Rather than have a vast team—whether it be sales people or software developers—an Agile company uses the collective power of small, individual teams. They will each be responsible for delivering a set of well-defined, customer-focused results.

☑ Open thinking

The senior management team will need to recognize that it doesn't have all the answers; it will need to delegate decision-making power to those who are closest to the customers.

☑ A different type of leadership

Allowing others to make decisions will make traditional leaders nervous: what, they may wonder, are they there for? At each level, though, someone needs to have an overview of what's happening and provide strategic guidance.

☑ Knowledge is no longer power

Traditional organizations have a habit of keeping knowledge in silos. Instead, you must be open so that everyone who needs access to information for them to do their job can do so (this isn't to be confused with opening up everything; not only will some commercial information be sensitive, but too much information can be confusing).

The roadblocks to enterprise-wide Agile adoption—and how to bypass them.

As we saw on the previous page, switching to an agile culture is no simple task. It takes a radical rethink of how you do business, and at first it may seem fool-ish for the leader of a successful business to implement such a radical change.

It helps, though, to consider what we mean by successful. Take PayPal for an example. Formed in 1998, by the end of 2011 it had over 106 million active accounts, an increase of 13 percent year on year, and was raking in billions of dollars.[3]

So by that measure it was successful. All, however, was not well. When Kirsten Wolberg joined PayPal as VP of Technology in 2012, there were 85 bottlenecks within the development process. In the space of 18 months, the company had rolled out just three products.[4]

If things had continued that way, it wouldn't have taken long for a usurper to come along with a new, disruptive product that better served PayPal's customers' needs. It needed to think nimble, to think Agile, and Wolberg forced this change through: in the six months after full-scale adoption of Agile methodologies, PayPal rolled out 58 new products and features.

[3] eBay, "eBay Inc. Reports Strong Fourth Quarter and Full Year 2011 Resultsv" January 2012, https://investors.ebayinc.com/releasedetail.cfm?releaseid=640656
[4] Otto Berkes, "Digitally Remastered: Building Software Into Your Business DNA," September 2016

How to fight resistance to change

We all know how hard it is to fight someone who is resistant to change. Excuses come thick and fast, whether it's "We've always done it this way" or *"We've tried that before and it didn't work"* or any of the myriad of alternatives.

The truth is that people fear change. They fear a loss of responsibility, losing their jobs or simply having to develop new skills when they're comfortable in their current position.

You won't always succeed in persuading people, but there are things you can do. One is to clearly explain the problems the current approach is facing, as in the PayPal example above.

Another is to pilot Agile projects and share their successes (after all, seeing is believing). You will also need to identify the "Change Champions" and "Change Agents" within your organization, as shown in the illustration opposite. We explore this in greater depth in *"How to Create Groundswell for an Agile Transformation."*[5]

Break the barriers

On the previous page we saw how a traditional organizational structure compares to an Agile one, with demarcated business divisions having to fight against the structure if they are to communicate. In an Agile business, you will create disparate teams that consist of people from around the business.

Each of those teams needs leaders that represent different areas of the business and who advocate and drive Agile adoption. It isn't enough to have support from the executive board alone: as Otto Berkes wrote in Digital Transformation, you need "Agile supporters in leadership positions across business, technology, organizational and personnel groups." [6]

Such champions, Berkes argues, are "critical when it comes to driving agile adoption in a grass-roots fashion. Agile is not a top-down methodology, and successful agile adoption can't be either."

[6] CA, "How to Create Groundswell for an Agile Transformation," July 2017

[7] Otto Berkes, "Digitally Remastered: Building Software Into Your Business DNA," September 2016

Change team dynamics

In an Agile company, big, unwieldy teams with a flat organizational structure don't exist. The collective power stems from small, individual teams. To ensure such teams work well together, and don't spend their time fighting one another for resources, the business leadership must introduce practices that coordinate the work between and among the teams.

This is one of the biggest challenges, but so long as you maintain transparency and keep a resolute focus on your goals—with number one being to deliver value to your customer—then you will succeed.

Evangelize, evangelize, evangelize

Scaling from a single Agile project to a fully Agile company will take time and you will hit numerous hurdles on the way. That's as it should be. You're not only attempting to change the way you work within your organization, but how you think.

For mass adoption, your Agile advocates will need to keep shouting about the value of Agile to your business and the benefits it's delivering to you and your customers. "*As more teams join the effort,*" wrote Berkes, "leaders will be able to create mindsets and behaviors that drive ongoing improvements. The Agile journey requires a belief in the fundamental value of Agile principles as well as an understanding that it's a journey that never ends."[7]

[7] Otto Berkes, "Digitally Remastered: Building Software Into Your Business DNA," September 2016

The support-resistance scale

Each person in your organization will be somewhere on the support-resistance scale, with passives sitting in the middle. If you can work out where people are on the spectrum, it will help you work out what you need to do to gain their support.

Champions

Vocal supporters that push for change and actively recruit other supporters. Key to success.

Change agents

Active and highly energetic supporters, committed to pushing the rock to the top of the hill.

Passives

Fence-sitters conserving energy. They wait until they see if it's worth the risk before they act.

Skeptics

Stubborn cynics, jaded by the failure of previous business transformations, who believe, *"It'll never work."*

Protesters

Energetic resisters that push against change; actively recruiting other protesters and skeptics.

How to scale Agile

Before we tackle the question of how to scale Agile, we should first answer this potential grenade of a question from a skeptical board member: "I can see the value of switching from waterfall project management to Agile, but why does the whole company need to become Agile?"

That's a fair question, and in some cases the answer may well be that you don't. But consider this: What draws customers to your company rather than a rival? If the answer is a product that requires any kind of software development, including the production of hardware or services, then you exist within a fast-moving marketplace.

"The case for scaling Agile practices is rooted in software's new and expanding place in the value chain," wrote Berkes in Digitally Remastered.[8] *"If the ability to deliver innovative experiences is a central determinant of competitive differentiation, then it stands to reason that your entire (business) needs to be optimized to deliver on that strategy."*

Berkes' reasoning is simple. The proven benefit of Agile project development is that it's a faster way to deliver better projects. Scale that up to be multiple projects, or a series of related projects, and you can see how the value to your customer will quickly grow. Take Agile even further and scale beyond your IT and dev teams for that extra value. By getting outside departments and teams on board with Agile adoption, more and more organizational roadblocks will cease to exist.

"We believe that agility could also be used in multiple ways—in everything we do. In fact, the world is changing very quickly around us, so much so that we cannot afford anymore to have projects taking two to five years to deliver, because, during this time, the initial requirements have changed."

— Philippe Husser, Senior Partner, Progress Direction, Michelin[9]

[8] Otto Berkes, "Digitally Remastered: Building Software Into Your Business DNA," September 2016

[9] Project Management Institute, "Pulse of the Profession 2017," February 2017, http://www.pmi.org/-/media/pmi/documents/ public/pdf/learning/thought-leadership/ pulse/pulse-of-theprofession- 2017.pdf

Think strategically

The cynic's answer to that may be, *"Let's do more Agile projects then."* That's fine to a degree, but no product or organization lives in its own self-contained world. You are likely to be delivering a number ofdifferent products at any one time, all of which link up to provide a competitive advantage for your business.

To put it in the plainest terms, the products must work well together and each provide a return to your business. By scaling Agile across your organization, you can identify gaps and include new requirements at a portfolio level rather than working on ad-hoc projects (which may end up conflicting with one another or duplicating efforts).

Scaling Agile need not simply mean product development. It could allow you to consider what your brand, as a whole, offers to your customers: what *"brand experience"* do you offer? Agile principles could extend well beyond software development and into areas such as finance and marketing.

If all this sounds like a different way of saying *"competitive advantage"* then that's no coincidence. Used right, introducing Agile at scale in your organization can deliver better ways of working, thinking and delivering value to your customers. In other words, competitive advantage**.**

Measuring success

Metrics, data and analysis must answer "why," not just "what" to ensure continuous improvement of customer experience. Why is a feature not being used? Why are some customers churning off an application? Why is a minor improvement driving a spike in adoption? As with Agile, prioritizing customer value through measurement requires both organizational and cultural transformation.

Here's a blueprint for starting that process:

Step 1: Focus on the questions

The questions you are working to answer must become your true north. Instrumentation, data collection and analytics are simply a means to an end. Technology is a powerful tool, but it can't tell you the questions that matter to your customers and your business. Importantly, make sure that the answers to your questions drive specific, meaningful action.

Step 2: Measure for insights

It will be tempting to over-instrument code and infrastructure, and to collect massive amounts of data that simply becomes another management headache. Resist the urge and start small instead, concentrating on a specific area to demonstrate value. Keep in mind that you won't always know what data will be valuable ahead of time and that you will need to be speculative. Don't be afraid to over collect strategically as long as doing so does not become an operational burden.

Step 3: Run experiments

Use analytics to guide ongoing experiments and to predict changes that will improve the customer experience. Armed with insights, you can then make changes to your service—or provide two different versions at the same time—and measure customer response to inform your product development. Analytics allows you to validate the results of proposed optimizations before adopting them at scale. You must not experiment at your customers' expense, but you can learn from your customers to improve the value and experience you give them.

Step 4: Optimize for the business

Ensure that your efforts are deeply integrated into the business. The insights gained from targeted instrumentation can inform your business, and your business needs should inform the insights you set out to obtain. Your digital channels are central to your ability to understand your customers who, in turn, help to shape the evolution of your products and business. Integrate customer-facing measures such as Net Promoter Score (NPS) to track your progress and to help guide the evolution of your applications and services.

Don't get distracted by data. Instrumentation and data collection are important but must be focused on answering questions that matter to the customer and to the business in a continuous feedback loop.

Five steps to agile success

Hopefully this guide has provided some useful thinking on the guiding principles for how to make your company Agile. For this last section, we'll concentrate on practical steps you can take. Note these are adapted from Otto Berkes' book, Digital Transformation, which covers the principles in much greater detail.

Step 1: Focus on velocity

Improving velocity is the heart of your Agile transformation. Get your software and technology teams finishing their deliverables—with quality—as quickly as possible by building stable Agile teams and delivery groups, and by reorienting people to thinking about delivering on shared outcomes. Improvements only matter if the organization delivers value all the way to the customer more effectively. Consider using metrics such as Net Promoter Score (NPS) to measure value, and be sure to track the number of releases delivered to customers per year to measure velocity. As you start to build velocity, you will be able to free up additional development resources and create a virtuous cycle of improved efficiency and value creation..

Step 2: Implement Agile planning and work sequencing

Choose the most valuable, smallest pieces of work to deliver rapidly to your customers. Think carefully about planning the sequence of work and being able to deploy work more consistently. Limit the amount of work in progress (WiP) across development and operations teams, and account and buffer for unplanned work.

Include design, development, operations, architecture, security, compliance, analytics and other relevant stakeholders in your delivery groups and in planning sessions. Provide all delivery teams visibility into each other's WiP using appropriate Agile tools, and share feedback openly from stakeholder and customer sessions.

Step 3: Apply Agile portfolio management

Evaluate the end-to-end cycle in delivering new value—from the moment you think about doing something, to the decision to proceed, to funding and allocating the right teams, to moving it through the development organization, to deploying it to customers and implementing it throughout the business.

Based on value, you must regularly decide which projects to start, keep going, or stop. Determining value requires a tight connection between the implementation organization and the business need. Eliminate the expectation of exact requirements tied to a precise budget delivering a perfect solution to help you strike the right balance between strategy and tactics.

Step 4: Optimize investments on an ongoing basis

Dynamically and intentionally reduce or amplify your investments through quarterly steering and release planning. On the other end, make sure you're getting the full value out of what you've invested—that you're delivering what your business needs and what your customers want, when, where and how they want it. Optimize what you build for the greatest impact.

Support this by emphasizing mindsets and skills of disciplined opportunity exploration (using methods such as Enterprise Lean Startup)[10] and by limiting organizational WiP. At the center of limiting WiP is a reduction in batch sizes enabled by short iterations, each of which is able to deliver a small portion of a larger segment of value.

[10]Gartner, "Why Big Companies Need Lean Startup Techniques," September 2016, http://www.gartner.com/smarterwithgartner/why-big-companies-need-lean-startup-techniques/

Step 5: Sense and respond with business agility

Articulate shared outcomes, demonstrate high trust leadership, and adopt a pragmatic, problem-solving mindset throughout your business. Cultivate organizational health by clearly expressing these same goals, establishing trust-based teams through regular and open communication, and by collaborating across as well as up and down flatter management structures.

Create what may at first feel like threatening levels of transparency, and delegate decision-making all the way down.

Establish structural flexibility with adaptable funding models, and understand how to flow work to shape your business on demand. Become able to sense new opportunities in the digital age by welcoming—in fact, expecting—innovation to come from everyone by giving every single employee a charter for disciplined exploration.

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