Build the Right Thing

An excerpt from "Agile Business" by
Bob Gower and CA Technologies

Build the Right Thing

By Bob Gower

> *“It doesn’t matter how beautiful your theory is, it doesn’t matter how smart you are. If it doesn’t agree with experiment, it’s wrong.”*
>
> —Richard P. Feynman

Years ago when I worked in newspaper advertising, we would say that we knew half of our marketing efforts were working—just not which half. And when I became a software product manager, I found I was plagued by a similar uncertainty: I knew that our customers would use only about half of our features, but I had no idea which half.

If you’re in charge of a software product, you probably stay up at night worried about which features to spend your time and budget on. From my position as a consultant working with various teams on numerous applications, I recognize that the development of unused features is the single biggest waste of time and resources in the software industry. And it’s waste that has cascading effects that, if left unchecked, can bring a company to its knees.

Building the wrong thing not only wastes time and money, it demoralizes the creative, intelligent and in-demand team members who are working on the products, thus making hiring and retention more difficult. Here’s how this can happen:

Feature bloat, as we call it, ends up hiding the most useful features from customers in a forest of things they don’t want. Customers get frustrated and call your support people—who cost you money—and overwhelm them with requests. Finally, this overload of features makes the development of new capabilities more challenging, which again frustrates developers. And on we go in a vicious cycle that ends with a competitor stealing your market share because their product is cheaper, leaner, more elegantly designed and easier to use.

Apple, by contrast, has built the most valuable company on the planet by simplifying products, reducing features and creating applications and devices that are lean and useful. The company has found a way to consistently build the right thing.

The same opportunity exists at your company. While your product may not be as sexy as an iPad, it can still be simple, elegant, and beautiful if you’re willing to take the steps needed to put the customer and the customer's needs, at the center of your organization. This is the goal of the agile mindset: to remove waste by creating an organization that focuses on discovering customers' needs and meeting those needs quickly and affordably. This is why we're in business, after all: to provide value to our customers. And not just current customers—new customers in new markets as well.

Why, then, do our businesses so often lose their way?

The first step to creating a customer-centric organization is awareness that there's a problem. We need to realize that the way we've been doing things with large up front design and requirements documents is part of the problem. But what next? How do we begin to reform our systems to be more customer-focused? While there are several things we can do, there are three that stand out above all others.

Start with vision

Many products have plans but few have visions. We have endless lists of features and capabilities but no unifying vision that everyone is working toward. A product vision is a high–level view of the value you want to provide and an understanding of whom you want to provide it to. It's really that simple—in fact, the simpler the better.

I challenge you to poll five of your employees or co-workers at random and ask them what the vision of your product is. If yours is like most businesses, you'll get five different answers—perhaps wildly different. This is why many organizations are lost in internal struggles when employees should be collaborating to delight customers. Once you have a unified vision, however, it's relatively easy to decide on specific features, prioritize them against each other and begin pulling in the same direction.

When working on this book, we identified agile champions—people within companies who want to lead change in their organization—as the people we wanted to serve. The vision for this book was to create something they find so valuable that they'll be compelled to share it with everyone in their organization.

Through interviews and conversations with several active champions, we decided the most valuable thing we could provide would be a book that helps build understanding and consensus around agile transformation. Only once we had the vision locked in and a few hypotheses well-articulated, did we talk about specific content for the book and develop a plan for creating it.

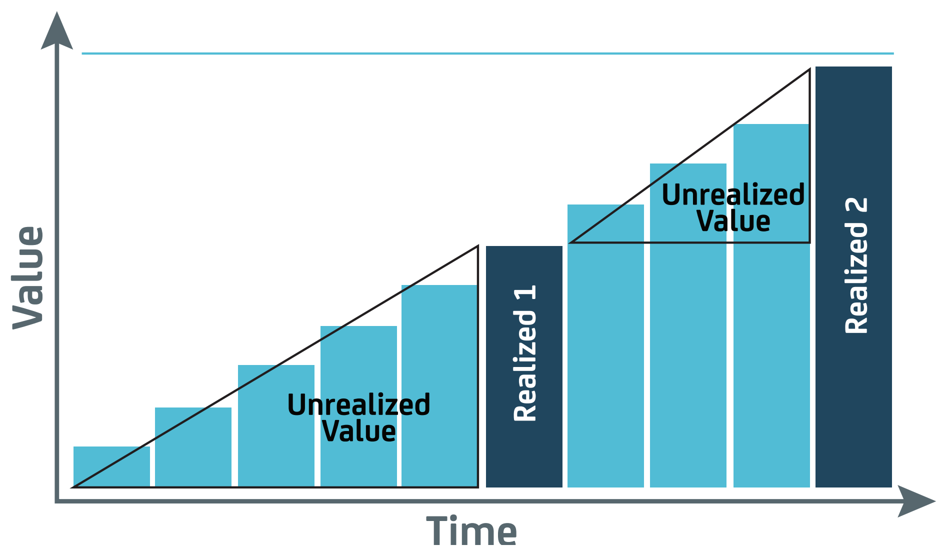
The vision came first.

In essence, you're creating the high-level metrics and values of your product—and the organization that makes it. Without an explicitly stated vision, you're shooting in the dark. You may think you have consensus, but like blind men touching an elephant, it's likely each person on your team has a radically different view of the thing you are creating.

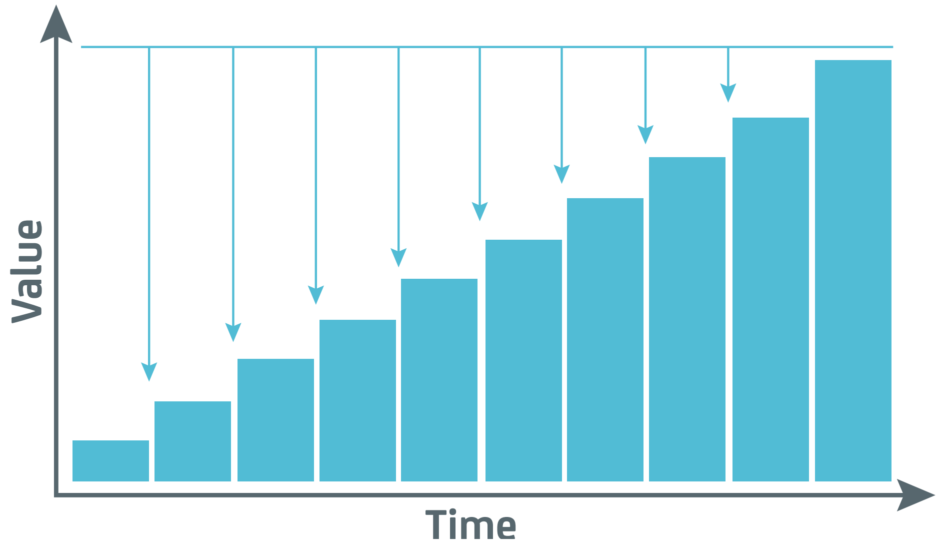
Go slowly and get this part right.

Release early and often

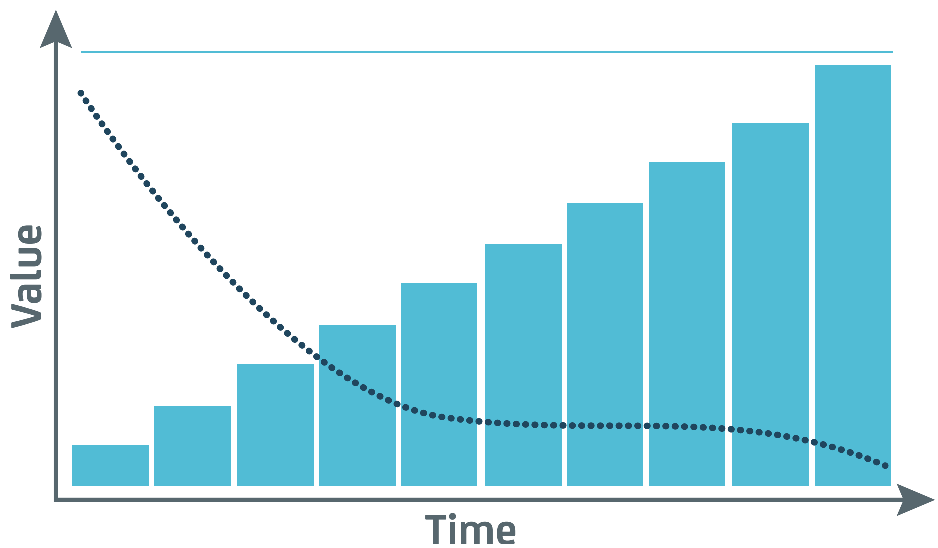
Whether we release features iteratively or use a continuous flow and deployment, it's important that we design our human processes and technical infrastructure so work can be done in steady, small increments of value.



In this chart you can see the money that's left on the table when we insist on infrequent, big-bang releases. Incremental release means we're able to realize revenue early, but that's not its only benefit.



Incremental release means that we’re able to observe early in the process how people are using our products and then incorporate what we learn into subsequent releases. This also means we experience a steady increase in what we know about our customers.



As our knowledge of the market increases, our risk goes down. Even if we are occasionally wrong, we can dynamically steer our product strategy, meaning even complete misses can have little impact on the bottom line, and over time will become increasingly rare.

Work with your customer

Management guru Peter Drucker frequently pointed out that "… doing the right thing is more important than doing things right." In order to do this, we need to develop empathy; we must be able to sit in our customers' chair and see the world through their eyes.

Agile design practices encourage us to test our ideas quickly using tools like rapid prototyping, and to see our products in their natural habitat. Something as easy as hosting a weekly, catered lunch during which your team watches customers actually use the product, can build team empathy and generate new ideas. I've never seen a team that does this enough.

Also, instituting the product owner role can have a far-reaching impact. A product owner is someone who sits on your development team and speaks for the customer, deciding what order features will be built in and whether or not a feature should actually be implemented—and if it is, what it needs to do in order to delight the customer. In some cases, a product owner can actually be a customer, but often this is just someone whose job it is to develop empathy and a keen sense of what's valuable. This single, wringable neck between customer and developer provides the focus essential to building the right thing.

By creating a solid vision, shipping frequent releases and engaging in an ongoing conversation with customers, you can begin to focus the collective attention of your organization on truly delighting your customer. While these few changes may seem relatively small, they will not only lead to better products but also to happier people and a healthier bottom line.

Agile and Innovation

By Ben Carey

A foundation of agility

So, you've done the work to improve speed, quality, collaboration and morale. You've got full automated test coverage and have eliminated cycles lost to technical debt, bugs and disagreement. But while you're confident you may be quickly building a high-quality product, one question still remains: are you sure you're building the right one?

While agile has proven itself over the past 10 years to be an effective method for building products, this benefit often reveals a gap in many companies' processes. Once we improve how we build products, we often discover that we must rethink the process behind how we decided to build the product in the first place. And it turns out that agile can help here, too.

As more organizations adopt agile, new ideas are being developed to improve planning, roadmapping and innovation. These pioneers are taking the process of building products to the next level through a deep understanding of the methods and principles of agile.

Because agile encourages information to flow both up and down the chain of command, it creates an opportunity to iterate not only the product but the underlying definition of what exactly is being built. Establishing a set of agile mental models gives us the foundation to explore new ways of approaching a host of activities—including innovation.

Models of agile innovation

Using common agile ways of thinking, such as value orientation, rapid iteration and cross-functional teams, we begin to create an environment that is well-prepared for innovation. In many ways, agile resembles the design thinking methods that have been pioneered in the last few decades, where diverse teams spend time developing empathy for the customer and then rapidly prototype possible solutions to iterate toward an ideal one.

If we have a foundation of agile mental models during the development stage, then adding these more agile practices to the specification isn’t much of a leap at all. When agile becomes more of a verb than a noun—when it becomes something we do rather than a defined process we apply—we know we’re on the right track. And when we understand Agile to be a way of thinking and not a specific set of instructions, we have the capability to achieve higher degrees of impact.

An alternative posture for building

The key to all of this is iteration. Iteration gives us a great delivery structure and approach for building, but it also helps us quickly discover alternatives for what and how we build.

Because we have the opportunity to see increments of our product in action, learn from user interaction and apply that learning to what we’re building, we not only get information about what works but also the opportunity to apply what we’ve learned to a change in direction and, perhaps, a new product.

Of course, all this iteration only makes sense if our deliverables are value-focused. Because we are delivering discrete chunks of the most valuable things, we are continually testing our hypotheses about what the market will actually use. When trial is cheap and error is knowledge, we gain the ability to progress our solutions to the problems we’re trying to solve—not just ship products out the door.

Using feedback in this way can open our eyes to horizons that we were unable to previously see. This is the heart of innovation. So, our view of building begins to shift from simple incremental construction to a method of high-bandwidth learning, which can have dramatic impacts on the way we build software.

What all this means is that over time, learning grows. We build better products and also gain a more sound understanding of the process behind how to build better products. The opportunity here is to develop organizations that can collaborate toward greatness and build beautiful businesses that create incredible products for grateful customers.

Sure, agile can be approached as a means of reducing defects and costs and shortening time to market, but there is also an opportunity to iterate toward beauty, greatness and impact. And we just happen to think that's something worth working toward.

The Role of the Product Owner

By Sean Heuer

In most organizations, there is a gaping void between the team building the product and the customers using it. This gap is exacerbated when organizations create multiple layers of interfaces between the customer and the development team. What's more, this seems to be the rule, not the exception, in business today.

What this means is that there's no voice close to the development team that truly represents the needs of the customer—and the economics of the business—with the authority to set or change the direction of the product. Needless to say, this dramatically reduces the organization's ability to innovate, adapt and deliver great products.

The product owner role is agile's solution to this pervasive problem. Let's take a look at this unique position and examine the part it plays in a healthy product development cycle.

What is a product owner?

The product owner works with the development team on a daily, if not hourly, basis. Most product owners actually sit in the same room with developers. Their primary role is to connect the team with people outside the room: the customer, the business stakeholders and sometimes other products and teams.

The product owner is responsible for managing the scope of the product or project and building empathy for the customer within the team. This means that he is responsible for delivering a product that meets the customer’s needs, for answering team members’ questions and helping them understand the customer’s needs and possibly most important, responsible to the organization to make the best economic decisions.

While the product owner is the single, wringable neck between the business and technology sides of the house, he or she isn’t there to prevent the team from contacting or interacting with the customer. In fact, great product owners encourage and enable frequent contact with the customer to build team empathy. However, they also know when it’s time to stop conversation and start the action. This eliminates decisions by committee, or worse\inaction and indecision.

Successful product owners embody similar characteristics:

- They’re great communicators.
- They have the ability to lead and motivate a group to pursue a vision, or they can take a back seat and listen with an open mind to customers and team members alike.
- They have domain knowledge in the areas being impacted by the product.
- They’re decisive and courageous.
- They’re collaborative while being capable negotiators.
- Lastly, and most important, they are trustworthy.

Story—the extraordinary product owner

Over the years working with agile teams, I’ve had the pleasure of knowing many great product owners. One in particular—I call him the extraordinary product owner—was particularly great at his job. He was paired with a somewhat dysfunctional team working on an unexciting accounting product. To make things worse, the project was under heavy scrutiny from every direction. Obviously, this was not the ideal assignment for an up-and-comer. What he did with the opportunity, however, brought him recognition from the highest levels of the organization.

The first thing I noticed about the extraordinary product owner was his enthusiasm and passion.

This was apparent in his first presentation to the team, when he presented the vision for the product. I've seen many such presentations, but his was the first I saw that tailored the message for the team and humanized the goal. He took the time to create more than a slide deck presenting the high-level scope and problem statement. He had video testimonials. He lined the walls with the personas of the key users. He did everything he could to put the team in the shoes of the customer. As it turned out, this presentation was only the beginning. He continued to work to bridge the gap between the team and the customer on a daily basis throughout the project.

The next thing I noticed was his ability to keep everyone in the loop. As I mentioned earlier, this project was under scrutiny from many stakeholders. If it weren't for the Extraordinary Product Owner's hard work to create, maintain and frequently share easily understood visuals that displayed the progress of the work and the forecasted deliveries, the team may have drowned in systematic "help" from the stakeholders.

Another observation I had while watching the extraordinary product owner was his ability to keep the team productive. He could balance the day-to-day work of answering team members' questions, clarifying customer needs and making scoping decisions while staying four weeks ahead of the team in detailing out customer requirements. By maintaining a bucket of four weeks' worth of work for the team, he gave them an opportunity to keep an eye on the future, balance dependencies between features and maintain an even flow of features to the customer.

The last observation I had was the extraordinary product owner's ability to negotiate with all parties to identify the best version of each feature, given the customer's needs and the constraints of the project and technology. This included trusting the process to evolve each feature into its best form, while being decisive enough to maintain momentum.

Through the acts of the extraordinary product owner, the team members delivered the product to the customer within the estimated timeline and under budget while earning the organization's highest customer satisfaction scores. This earned them a spot in the board of directors meeting, where they were greeted with applause and congratulations. Not bad for a gig nobody wanted.

There are many changes to the way teams approach the work in an agile environment, and the product owner plays a key role in shaping that approach. To enable the transition to an agile approach, you must invest in product owner competency that focuses on building empathy for the customer and managing product economics. Great code does not equal great products.

Without empathy for our users and economics to drive decisions, all that great code may end up being wasted solving the wrong problem.

The Gift of Meaningful Work

By Zach Nies

Have you ever been part of a company where it feels as though your value to the organization decreases as the organization grows? It seems that within growing companies, there comes a point where members of the original team leave (or are asked to leave) because the perception of their value seems to diminish.

I recently witnessed this at a highly successful tech company. When I joined, the founder was leading a product management group that was responsible for about $250 million in revenue. His product vision and ability to write software were key reasons why the company held its dominant position in the market. Repeatable, large-scale execution wasn’t his passion or gift, but like most technical founders, he was an amazing innovator.

About a year after the company went public, the founder was asked to step down from his position. In the maelstrom of execution as a public company, senior management considered him a risk. Why was this? While everyone else was focused on removing obstacles that got in the way of making quarterly numbers, his strength was on future-looking vision and innovation. Sadly, when companies place too much emphasis on quarterly and annual execution, futurelooking people and products become liabilities.

The innovator’s dilemma

To understand this notion, you must recognize the few key shifts that occur when a company’s first product goes mainstream and is the source of significant revenue:

- Innovation seems like speculative investment in the future and thus it decreases.
- The inertia of success tends to run over anything that can’t prove its value in the immediate quarter or quarters.
- The culture tends to shift from embracing uncertainty to embracing repeatable execution.
- More emphasis is put on executing what’s already working than on figuring out what’s going to work.

In effect, the company moves away from embracing ambiguity and innovation, and focuses instead on the steady, efficient execution of products that guarantee quarterly results. This may appear to be great—assuming that what has worked in the past continues to be effective—but most of the time it becomes deadly. As more companies continue to disrupt the market, the organizations that stay put—that stop innovating—will become less and less relevant.

A few years ago, two important books were published to help balance the tension between immediate portfolio execution and long-term innovation: “Escape Velocity”, by Moore and “The Lean Startup”, by Eric Ries. Geoffrey Moore offers guidance on how to manage three investment horizons to ensure your company’s future. A great complement to this view, Ries provides a framework for navigating the extreme uncertainty inherent in new product and new market development.

Both books give new product and market creators language for making future-looking business cases to execution-oriented people. They also create a compelling framework for portfolio planning. Their combined wisdom offers fantastic insight into the value of acting differently, thinking about portfolio steering in a new way and inviting innovation back into organizations.

Escaping the “pull of the past”

In “Escape Velocity”, for example, Moore introduces us to the McKinsey concept of three different time horizons for a business portfolio strategy. The horizons help us see past the common pitfalls of managing a portfolio by showing the relationship between investment and the time frame of return.

Horizon 1:

Investments are expected to contribute to material returns in the same fiscal year in which they are brought to market, thereby generating today’s cash flow.

Horizon 2:

Investments are expected to pay back significantly, but not in the year of their market launch. Typically, they are fast-growing from birth but come off a small base and need time to reach a material size, and so they demand patience.

Horizon 3:

Investments here are made in future businesses that will pay off for years beyond the current planning horizon. They’re not expected to appear in-market during the current planning year, and while they make claims against R&D budgets, they don’t affect the go-to-market operating plan.

Moore suggests that considering these horizons in the steering of your portfolio will enable you to “escape the pull of the past” and drive next-generation growth from new lines of business. I believe this is key to being a successful agile company, with both a future-growth product strategy and a strong culture of people who remain proud and engaged.

Horizons interpreted

A young startup working to put itself on the map lives mostly in Horizon 3. Here, it’s all about learning: what the customer looks like and what product or service will inspire them to get their wallet out. Planning is still important in this Horizon, but the emphasis should be put on learning instead of sticking steadfastly to a plan.

In Horizon 2, things are starting to work. A product is meeting a market need and has begun to generate some revenue, but it hasn’t hit a tipping point yet. There’s still a lot of opportunity to learn and even moments where it may seem as though the company is taking steps backward in the market. Horizon 2 performance is typically measured by some combination of internal milestones, market indicators of tipping points and revenue.

Horizon 1 is all about executing on the repeatable game plan developed in the previous two Horizons. The company has shown that by spending more, it can predict marginal increases in revenue. Success is now measured by typical performance metrics: planning and predicting future revenue and executing to results. This can be a scary place for people who have difficulty working this way, primarily innovators. It’s no wonder why many leave or are asked to leave during this Horizon.

Forward-looking work should be full of people who embrace and excel at uncertainty. Consider the original team who initially led the company through Horizon 3 and Horizon 2. These are great people to take off of Horizon 1 work and focus instead on the speculative work of inventing the future of the company.

Success and survival

Inventing the future isn’t easy or without its casualties. Research indicates that more than 90 percent of startups fail. But thanks to their significant foothold in existing markets, large companies generally have an advantage. Still, this advantage creates two big challenges:

- Horizon 2 and 3 work will be expected not to disrupt any current activity. This can be a hard pill to swallow.
- Horizon 2 and 3 work may be subjected to inappropriate measures of progress based on a skeptical Horizon 1 mindset. The skeptics may view new product development as an unmeasurable art and therefore far too risky an investment.

Historically, Horizon 2 and Horizon 3 portfolio investments have been made with a very fragile agreement that goes something like this:

> “Give us a chunk of money and an independent corner of the business to operate within and we will invent the future. Trust us.”

This isn’t fair to either side of the agreement. Ries Lean Startup process allows for a much healthier agreement across the Horizon 2 and 3 teams and the rest of the business. The conversation goes something like this:

> “Give us secure resources, we don’t need much. And give us the authority to run the team following the Lean Startup process using agile development techniques. In return, we will constantly report on our progress using the metrics of Innovation Accounting. You can see our process and measure our progress. Through our continuous transparency, we will create trust in your investment in our part of the portfolio.”

The key is making sure the execution side of the company understands the process you're following, because that's how they look at the world. They also need to value the new measures necessary to understand your progress.

Before Ries' book and the Lean Startup process, there wasn't great language to describe this shift in thinking. While most successful early entrepreneurs naturally understood this concept, they struggled to translate it into language that execution-oriented Horizon 1 people within larger organizations could appreciate. That's the brilliance of the Lean Startup: it works in early startups as well as within well-established companies.

A new way of thinking and acting

The inertia of success can run over anything. You may find yourself having to prove your portfolio investment value every quarter, or your culture may shift from embracing uncertainty to embracing repeatable execution. To ensure your future, you must create well-rounded teams across all Horizons.

Find a handful of your early employees and founders who may feel trapped executing the known playbook and focus their efforts on freeing your company from the pull of its past. Give them a sandbox where they can innovate and empower them with a personal stake in the outcome.

When you do this, you're not only giving these people the gift of meaningful work, you're investing in the future of your business.

How Large Organizations Can Act More Like Startups

By Ryan Martens

Over the years, we've found that large organizations can benefit greatly from much of the thinking emerging in the startup community. Tapping into the entrepreneurial mindset helps bigger companies eliminate waste and create the innovative solutions they need to stay competitive in today's markets. What's more, combining many of the processes often used in the startup community can create a powerful, whole solution.

Business Model Canvas, made popular by author and business advisor Alex Osterwalder and his team, is one such process. In his book "Business Model Generation", Osterwalder shows how this highly visual tool often serves as a replacement for business plans for many startups. The tool, which can be used for visualization, analysis, design and strategy, is quickly becoming common in large, established businesses as well.

Not only has the Business Model Canvas spurred a community of followers and innovators around the world, it has become an integral part of the Lean Startup movement—a concept developed by Eric Ries in 2011 as a way to bring continuous flow of innovation into an organization.

Lean Startup marries agile development with Silicon Valley entrepreneur Steve Blank’s customer development approach to test and expose the relative value of different business models and solutions on customer segments. It helps agile teams prioritize how to increment their way through a large problem space. For new business/development efforts, this is typically done through close measurement of customer acquisition costs, funnel conversions and revenue velocity.

The Business Model Canvas becomes the tool for managing the iterations of new business opportunities through a rapid, three-phase process: build, measure and learn. This disciplined, visible and agile approach has the power to help create high-impact and valuable solutions to businesses in all industries, not just for the software industry.