Brief: The New Economics Of Experimentation

Sprint Uses Digital Experimentation To Drive Rapid, Customer-Centric Innovation

by Clay Richardson August 17, 2015

Why Read This Brief

Corporate leaders all agree that to excel in the digital economy, innovation must come from every nook and cranny of the enterprise. To deliver on this innovation imperative, enterprise architecture (EA) professionals are partnering more frequently with business stakeholders to experiment with introducing new products and services that engage customers. The challenge: Managing increasing volumes of experiments inevitably leads to a large number of failures, which can be costly. Facing this exact challenge, Sprint adapted lean startup techniques that provided the right guardrails for digital experimentation. These techniques enabled Sprint to guickly introduce "minimal investment" solutions to experiment with new digital ideas, allowing the company to fail small and learn fast.

Key Takeaways

Design Thinking Can Help Foster New Digital Ideas

Organizations of all types are facing the imperative to ramp up their innovation capability. Forrester sees enterprise architects embracing design thinking as a way to spark and fan the flames of entrepreneurial innovation across the enterprise.

Digital Experimentation Allows EA Teams To Fail Small

Enterprise architects struggle with the challenge of getting executive buy-in to fund a large number of small projects that are likely to fail. Sprint combined key aspects of design thinking and lean startup techniques to build a safety net for experimenting with ideas around new offerings.

EA Must Adapt Lean Startup For Enterprise Scale

While lean startup techniques can help provide a safety factor for digital experiments, teams will need to adapt the methodology to their specific environments. EA pros must actively manage stakeholders' expectations; introduce agile, low-cost technology platforms; and ensure enterprise learning.

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by Clay Richardson with Alex Cullen, Shaun McGovern, and Diane Lynch August 17, 2015

Digital Business Requires An Entrepreneurial Mindset

What's the secret to becoming a digital predator? If you take a close look at digital-native companies — such as Airbnb, Snapchat, and Uber — it arguably comes down to entrepreneurial DNA. In larger and well-established companies, this entrepreneurial phenotype is either nonexistent or limited to a small handful of executives. In a recent interview, Airbnb's CMO, Jonathan Mildenhall, highlighted the difference between entrepreneurial innovation and corporate innovation:

"Corporate innovation is usually driven by market research [. . .] that only leads to small, incremental innovation [...]; then you have entrepreneurial innovation. And entrepreneurs rarely use market research, market data, at all. What they do is, they come up with an idea, and they have an instinct that over time that idea will stick in the marketplace and become a huge disruptive idea."¹

But organizations of all types are facing the imperative to ramp up their innovation capability to avoid becoming digital prey, disenfranchised from their markets. As companies increase the focus on entrepreneurial — and intrapreneurial — innovation, enterprise architects must also embrace an entrepreneurial mindset to better support the relentless pace of fast-moving and ambiguous business requirements (see Figure 1).

Design Thinking Provides A Safety Net For Hatching New Digital Ideas

Beginning in 2013, through several research notes and case studies, Forrester highlighted how enterprise architects were adopting design-thinking practices as a way to shift to customer-centric problem-solving.² Forrester now sees enterprise architects embracing design thinking as a way to spark and fan the flames of entrepreneurial innovation across the enterprise. Design thinking helps remove the paralyzing fear of failure by:

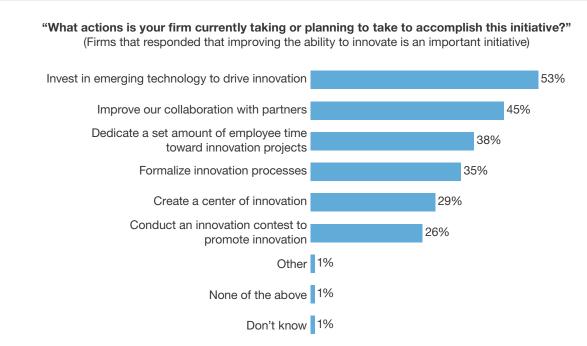
> Building empathy for the customer's context. A key principle of design thinking is to focus on the "whole customer" and what that customer is trying to do — the context. To address customer needs, enterprise architects must empathize with customers and their emotional states when scoping and designing new solutions and services. Persona modeling and customer journey mapping are key techniques for building greater empathy for customer emotional states.

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FIGURE 1 Companies Embrace Different Approaches To Drive Digital Experimentation

- > Focusing on improving individual customer touchpoints. Sometimes, launching a new solution or service can be daunting because it requires deep, end-to-end analysis of business processes, core systems, and functional capabilities. Instead of taking this deep, end-to-end view, design thinking zeroes in on a specific customer touchpoint that could benefit from redesign. This allows architects to focus their energies on scoping new digital services that will have the greatest impact on the customer's experience.
- Creating a portfolio of experiments to test ideas. Design thinking pushes teams to focus on imagining a future that does not yet exist, relying more on brainstorming and experimentation than on deductive logic or prior experience. This approach, commonly known as abductive logic, provides a safe space for brainstorming new ideas in response to "what if" scenarios. For example, one financial services CMO challenged his executive team to imagine what new products and services they would need to deliver if Apple decided overnight to move into the wealth management business. This type of brainstorming exercise provided the executives with a safe space to think through dozens of new ideas to experiment with and test out.



Base: 6,344 global business and technology influencers and decision-makers whose firms are likely to prioritize improving their ability to innovate over the next 12 months (multiple responses accepted)

Source: Forrester's Business Technographics® Global Priorities And Journey Survey, 2015

But Executives Don't Want To Fund Endless Digital Experimentation

Design thinking provides an impressive framework for hatching new digital ideas. But because design thinking anticipates a high level of failure when running experiments across a broad portfolio of ideas, many architects struggle with the challenge of getting executive buy-in to fund a large number of small projects that are likely to fail. One enterprise architect we spoke with put it bluntly: "How do I get my CEO to fund failure?" To move ideas from design thinking to design doing and gain executive buy-in, enterprise architects must:

- > Build a model for funding and monetizing experimentation. When it comes to experimentation, traditional technology management funding models aren't applicable. These models tend to be risk-averse and struggle to put a price tag on money saved as a result of learning what doesn't work.³ For example, the typical technology management funding model can't capture that a company avoided investing \$4 million in a doomed project as a result of conducting a small experiment that cost only \$10,000. While most funding models would call the \$10,000 investment a waste and the related project a failure, enterprise architects need to begin tracking and monetizing assigning value to lessons learned from digital experimentation.
- > Create a framework or process for idea execution. Running a large number of experiments isn't a marathon; it's more like a relay race. Teams need to pass the baton back and forth across different roles. For example, the chief architect for a private equity firm we interviewed pointed out that new ideas for digital services come in to his group from all over the organization. His team created a process for working with idea originators, bringing in other roles from different departments that could help, and then quickly iterated on experiments to test out the idea. The chief architect has a well-defined process that detailed handoffs and key decision points in the experimentation process.
- Support experimentation outside of centralized marketing and innovation teams. To conduct the best experiments and drive customer-centric innovation, enterprise architects will need to support innovation from all corners of the enterprise. This means moving beyond the typical focal points of innovation, which mostly center on marketing and small innovation teams that live inside or adjacent to traditional technology management organizations. For example, one EA leader we interviewed reported that his company fosters an enterprisewide Kickstarter-type campaign where anyone in the company can submit new ideas as candidates for funding and experimentation.

Sprint Provides The Right Guardrails For Digital Experimentation

Sprint is the third-largest wireless carrier in the United States, with a network of more than 57 million customers. In 2013, Sprint shifted to a strategy emphasizing the delivery of a compelling customer value proposition. Sprint believed that this new strategy would help it better compete in the market against its larger competitors, AT&T and Verizon Wireless.

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To move faster, Sprint's executives believed the company needed to increase its tolerance level for experimentation and failure. This also meant that Sprint's technology management organization had to change its processes and operating model to embrace faster delivery cycles and introduce new offerings to market that fell outside of normal budgeting and solution cycles. To accomplish this vision, Sprint's EA organization combined key aspects of design thinking and lean startup techniques that helped build a safety net for scoping and experimenting with ideas around new offerings. The EA organization instituted two critical practices: asking the right questions and failing small.

Ask The Right Questions To Create The Best Digital Experiments

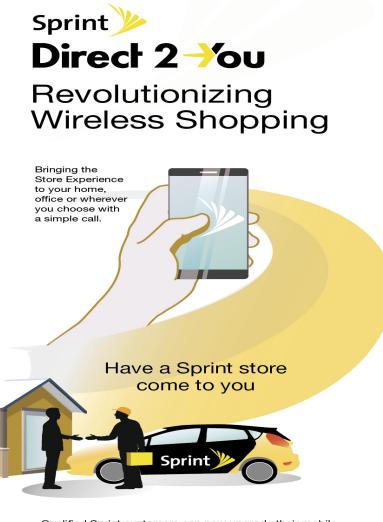
Ideas for new offerings often come out of the blue, after technology management has already allocated funding to larger and well-established projects. In many cases, stakeholders are looking to get rapid validation on new ideas, often looking to launch a new experiment around an offering within a 30-day window. Kathy Eichholz, director of enterprise architecture, refers to these as "minimal investment" solutions. The goal is to quickly deploy a minimum viable solution, based on currently available capabilities and nontraditional methods to tie the different pieces together.

One example of a minimal-investment solution led by Sprint's EA team was around a new offering for in-home delivery of smartphone upgrades for existing customers (see Figure 2). The team had only three weeks to build a minimum viable solution to test potential customer uptake around this new offering. To meet this tight timeline and scope the experiment for minimal cost, Sprint:

- > Framed the problem or challenge from the customer's perspective. Sprint launched this particular experiment by framing the problem from the customer's perspective. In this experiment, Sprint wanted to provide a great in-home experience for its customers. The company already offered on-site delivery and configuration of new devices for large business customers, but no wireless providers had yet to offer in-home delivery of devices to individual consumers. Since this was an industry first, Sprint had to focus on designing a brand new in-home delivery experience and had to think through all the details from the customer point of view.
- > Established a clear picture of the customer it needed to target. Next, Sprint worked with key stakeholders in marketing to get a clear picture and profile of the customer it planned to target for the experiment. In this experiment, Sprint focused on customers with expensive devices, such as iPhones and high-end Samsung phones. Sprint believed that these customers were more likely to be open to upgrading their phones to the latest model.
- > Created a hypothesis for the problem the customer was trying to solve. Sprint's assumption was that customers would be willing to give up their existing devices and get new devices if they received white-glove service. The assumption was that this approach would allow Sprint to get an earlier and higher take rate, or conversion rate. Specifically, there was a cost aspect: Sprint believed it could recover more assets (i.e., smartphones) earlier in the lives of the assets, generate additional value, and increase customer stickiness.

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FIGURE 2 Sprint's Direct 2 You Brings The Store Experience To Home, Office, Or Wherever Customers Need It



Qualified Sprint customers can now upgrade their mobile phone on-demand and have it delivered to their home, office, coffee shop or at the time and location they choose when they set up their appointment for FREE. The phone will arrive in a Sprint marked and wrapped car driven by an experienced technician who will hand deliver the device, set it up, transfer all the content including pictures, videos, apps and will perform a tutorial on the device.



Source: Sprint website

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Design Your Digital Experiments To Fail Small

Sprint realizes that the primary goal of each experiment is not success. For each experiment, the EA team focuses on helping business stakeholders increase their learning and understanding around customer problems and possible solutions. This is why Sprint scopes each minimum viable solution to fail small. In other words, it scopes each experiment around making the smallest initial investment necessary to validate whether a new offering will experience high uptake in the market. When scoping experiments, the EA team works with stakeholders to:

- > Establish success criteria beforehand. Sprint established success metrics around the customer take rate, which represented the percentage of customers that upgraded their smartphones through the service. When the company saw that customer interest in the original launch markets was significant, providing a clear signal that the service could pay for itself, it would expand the service and move the next round of the experiment to more cities.
- > Run experiments out in the field with real customers. Sprint had to launch this experiment in less than a month and didn't have time to build new infrastructure or hire new employees to deliver the service end-to-end. The company knew it had all the key pieces but didn't have them assembled in a way that would support the initiative. Sprint decided to short-circuit different parts of existing processes and use nontraditional methods to bind different services and external resources together.
- Capture key insights and monetize the value of lessons learned. Not all the experiments run by Sprint have ended in success; it shared one particular project that wasn't successful enough to merit further investment. This particular experiment focused on offering discounted service plans and tablets to eligible students as a method to drive incremental sales from their family members. Investment to verify student eligibility, track student details, and perform billing was nominal, with the understanding that further investment would be necessary if the project was a success. After running the experiment, Sprint found that the take rate was low. One of the key lessons was that what appears to be a good idea doesn't always translate into market success.

Recommendations

Calibrate Lean Startup For The Enterprise

While lean startup techniques can help provide a safety net for carrying out digital experiments, teams will have to adapt the methodology to their specific environments. Enterprise architects will need to adapt lean startup methodology to:

> Continuously monitor and manage stakeholder expectations. Many stakeholders will assume that their experiment will turn into a full-blown implementation. You'll need to manage stakeholders' expectations from the very beginning so they understand that results of the experiment will drive decisions around whether to pivot or persevere.

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- Adopt low-code platforms that can quickly deploy and scale experiments. Low-code development platforms help teams quickly build minimum viable solutions that can incorporate back-end data and systems of record. These platforms also provide a way to quickly scale out the initial solution if the experiment is successful.
- Create a portfolio of lessons learned to share across the enterprise. The key here is that compiling, tracking, and sharing lessons learned across all experiments allows the enterprise to gain deeper insights into customer problems and potential new ideas. Teams can cross-reference different experiments and results to identify new ideas and come at ideas from different angles.

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Supplemental Material

Survey Methodology

Forrester's Business Technographics® Global Priorities And Journey Survey, 2015 was fielded to 14,596 business and technology decision-makers located in Australia, Brazil, Canada, China, France, Germany, India, New Zealand, the UK, and the US from SMB and enterprise companies with two or more employees. This survey is part of Forrester's Business Technographics and was fielded from December 2014 to March 2015. ResearchNow fielded this survey on behalf of Forrester. Survey respondent incentives include points redeemable for gift certificates. We have provided exact sample sizes in this report on a question-by-question basis.

Forrester's Business Technographics provides demand-side insight into the priorities, investments, and customer journeys of business and technology decision-makers and the workforce across the globe. Forrester collects data insights from qualified respondents in 10 countries spanning the Americas, Europe, and Asia. Business Technographics uses only superior data sources and advanced datacleaning techniques to ensure the highest data quality.

Companies Interviewed For This Brief

Appian

Sprint

Endnotes

- ¹ Source: "Accomplishing business innovation: How Airbnb transformed an industry," Google for Work, June 2015 (https://atmosphere.withgoogle.com/live/atmosphere-live-2015-june/watch/keynote/cf9315).
- ² To learn more about how you can take an inside-out approach to embed critical design-thinking practices into day-today EA operations, see the "Design Thinking Reshapes EA For Dynamic Business" Forrester report.
- ³ To learn more about how you can build a portfolio of innovation investments in line with your organization's needs, see the "Innovation Creates Options For Future Business Value" Forrester report.

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