Established companies often struggle to develop and launch break-out ideas. Here are the essential capabilities for participating in the next billion-dollar growth market, including the potential of establishing a separate innovation track.
Executive Summary

Good management practices and healthy R&D budgets are no longer the only elements needed to compete in business today. As Clayton Christensen said two decades ago, responding to customer requests for new features – while necessary for success – is insufficient on its own. Even the world’s best-managed companies are doomed to stagnation, he warned, if they focus too narrowly on the core business.  

Fast-forward to today, and companies that fail to look beyond their current offerings don’t just stagnate; they die, displaced by newer companies with innovative products. Business and technology leaders in every industry recognize that they now compete on the basis of software.

Displacement typically unfolds this way: A start-up targets a niche market that the incumbent – often a market leader with virtually unlimited funds – doesn’t value or recognize. The first customers to try the new offering are satisfied with a “good-enough” version of the new product or service. As the technology matures, the market dynamics change, eventually flipping in favor of the challenger. The incumbent’s cost structure forces it to keep retreating further upmarket – until there’s nowhere left to go.

We’ve seen some semblance of this pattern repeat itself, with Sears vs. Amazon, BlackBerry vs. Apple, Blockbuster vs. Netflix, Yahoo vs. Google and many others. In each case, the incumbents had dominant market share in their core markets, as well as sufficient funds to hire the best talent to innovate or at least catch up. Yet all were toppled. What happens inside very successful companies that blinds them to overwhelming market threats?
In our work with clients around the world, we’ve identified a set of capabilities needed to compete successfully against start-ups that are unfettered by bureaucracy, inflexible processes and product fiefdoms. Key among these capabilities is the ability to:

1. **Develop a repeatable method** for gaining insights into what customers in adjacent new market segments want – before they express these needs.
2. **Identify promising technologies** and convert them into products with high growth potential.
3. **Establish an innovation-focused organization** that operates independently from the core business, shielding it from corporate politics.

This white paper sheds light on why innovative ideas fail to flourish in large organizations, and presents seven capabilities that incumbents need to successfully bring groundbreaking products to market. We also explore the importance of corporate culture and the idea that – for some companies – it’s best to establish the innovation function as a separate entity from the core organization.

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Why established companies can be blindsided by disruptive innovation

Established companies have typically achieved their success by focusing on sustainable innovation: continuous delivery of new features related to the core business. They shy away from disruptive innovation because products and services built with new technology are typically of lower quality and don’t produce the growth rates needed to satisfy shareholders. Salespeople deem the new products unworthy of their time.

What’s more, companies that do make bets on an innovative product often lose. The existing culture and organization can act like an immune system for the core business by protecting it from “pesky invaders” (new products that current customers don’t necessarily know they want) that steal resources or threaten to cannibalize the existing business. We saw this happen when a leading enterprise software company retired a flagship initiative to build a cloud service from scratch (see Quick Take, next page).

In many cases, enterprises stand in their own way when it comes to innovation by killing or stalling disruptive ideas out of loyalty to the core business.

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New success formulas needed to spur innovation success

In the early 2000s, SAP began building a new cloud-based enterprise resource planning (ERP) system targeted at small and medium businesses (SMBs). Hoping to replicate the success of its market-leading on-premise ERP solution, the company tapped some of the original developers for the older system.

These teams repeated the formula that had worked so well in the past, replicating the features of the existing, on-premise ERP system rather than addressing SMBs’ leaner requirements. From the start, the project was stymied by competing objectives, ever-changing scope and the ambition to do everything at once to meet revenue goals in the billions.

A few years and $4 billion later, the teams had built an ERP cloud application that neglected to address the shifted expectations of a new generation of cloud software users. The offering never took off, stunted by an incomplete understanding of how the software as a service (SaaS) model differs from on-premises approaches, a lack of attention to what SMB users really wanted, a lagging user experience (UX) and a go-to-market strategy and sales approach that had worked for large customers but was unsuited for the emerging SMB SaaS market.

SAP was not alone: an Oracle platform as a service (PaaS) offering also never really gained traction, for the same basic reasons.

Fortunately, over the ensuing 10 years, both companies learned from their experiences, shifted their technology and processes to support innovation, and have become leaders in the cloud software space.
Seven capabilities needed for innovation

For established companies to retain their market standing, Christensen proposed that they pursue the two types of innovation – sustainable and disruptive – in parallel. The disruptive innovation track involves beating upstarts at their own game by creating new products and services adjacent to the core business to find and win the next exponential growth market (see Figure 1).

Transitioning to the next S-curve

When incumbent products can only meet mainstream market requirements, growth tapers off. To achieve healthy growth rates, incumbents must find a way to shift to the next S-curve cycle.

The following are the seven capabilities that companies need to shape, design and successfully launch disruptive products.

1. Dig deep to the root of business change to find the opportunity

A company’s first clue that the market is changing is often a business metric, such as slowing revenue growth. The natural tendency is to ask a question from the company’s perspective, such as, “How can we improve sales?”
Companies need a repeatable approach to identifying innovations with high revenue potential. We recommend combining big data with field research on behaviors and emotions to gain a deep understanding of customers’ motivations and desires.

Finding the opportunity hidden in the problem starts with reframing the question in terms of the customer’s experience. In response to slowing revenue growth, the question might be, “What induces customers to leave their current provider?” Focusing on the customer experience leads to insights about new business models and digital products that reach new market segments.

Another example: Consider a company that wants to increase ad sales to SMBs. Rather than asking, “How can we become attractive to SMBs,” the company can set itself on the path to innovation by asking, “How do SMBs currently promote their business, and what challenges do they face?”

2. Ethnography: uncover customers’ motivations to make them the center of business decision-making

Trying to guess what customers want (or asking them what they think they want) rarely produces innovation. Without data, bad ideas – like Colgate’s ill-fated venture into selling lasagna frozen dinners – may move through the system, perhaps to avoid an awkward working relationship with the idea’s champion.

Companies need a repeatable approach to identifying innovations with high revenue potential. We recommend combining big data with field research on behaviors and emotions (sometimes called “thick data”) to gain a deep understanding of customers’ motivations and desires (see Quick Take, next page).

The goal of the field research is to assess the growth potential of the new product or service and how customers and their ecosystems use the products. Combining the ethnographic study results with big data provides better answers to questions traditionally answered by market research alone:

- Who is the customer?
- Which market segments are likely to contain high-value customers?
- What is the value proposition?
- What messages catch the customer’s attention?
'Thick data’ takes the guesswork out of understanding customer attitudes

With our partner ReD Associates, we worked with a medical devices company to improve its distribution methods, with the goal of increasing sales. We started by reframing the original request, from “How can we increase the likelihood of dealers choosing our products?” to “What kind of ordering and fulfillment experience do customers want?”

During a 14-week field study, ReD observed and interviewed patients, doctors, nurses and distributor sales representatives to gain a thorough understanding of the factors contributing to a positive patient experience during product ordering and fulfillment. Among our findings: patients were aggravated when the correct model wasn’t available or shipments were delayed or lost, and nurses didn’t have time to navigate the insurance reimbursement processes and learn the complicated criteria for selecting the right product model. The experience damaged the brand and depressed sales.

After synthesizing the ethnographic data, we recommended that the medical device maker move to a direct-to-consumer digital sales model to better meet patient needs.

Next, we validated the commercial potential of the direct-to-consumer sales model by conceiving and building a variety of digital services to help patients obtain the right product and gain peace of mind with reliable recurring shipments. The services were designed to:

- Reduce the effort required for the healthcare provider to prescribe the product.
- Make it easier for the provider to identify the right product for a given patient.
- Simplify logistics to improve delivery reliability and enable patients to check status.
- Improve post-sale support for patients.

After 14 weeks, we delivered a detailed recommendation and delivery model for the company’s developers and operations staff to work with our team in Agile pods. In this way, the company’s staff learned to use modern software engineering tools and processes so they could operate and iterate the solution in-house.

What started as an investigation to incrementally optimize medical device distribution through a direct sales force expanded into a brand-new, direct-to-consumer business model – engineered, conceived and designed to increase customer satisfaction and retention.
3. Design an experience that meets customers wherever they are

After the ethnographic study, design a user experience (UX) that matches the identified customer desires. UX designers should focus on the challenges customers want to solve and the events that trigger the customers’ use of the product. Keep in mind that today’s customers expect a consistent experience across all digital platforms: mobile, web and new channels such as voice-activated digital assistants if the company offers them.

4. Build a business case that would excite venture capitalists

Conduct market research to define the market and business so precisely that it could withstand the scrutiny of venture capitalists. This includes having ready answers to the following:

- Optimal product and market fit.
- Emerging target market and size.
- Current players, their activities and market share.
- Data-based evidence that the new product addresses a relevant revenue-generating market.
- Estimated time, training and resource requirements to operate the new service.
- A plan for bringing the new digital service to market.

5. Develop and implement a flexible product architecture that delivers rapid value and can be adapted quickly

Traditional product development release cycles take 18 to 24 months – far too slow to compete successfully with start-ups that use Agile development tools and processes. Aim for market launch in a few months and continuously faster deployment for successive releases. Today, a fully Agile development organization can release multiple times per day and commit code changes to production in less than an hour.

Based on our work with clients around the world, we recommend the following planning steps:

- **Identify current processes and IT systems that the new digital product might affect.** This will help product planners insert the new product in a way that minimizes impact on current value streams.

- **Use a microservices-based cloud architecture.** Microservices make it faster to integrate the new digital service with existing systems, as well as adapt the service quickly to address newly identified user needs. Keep in mind that microservices can be layered atop existing applications, which don’t need to be changed.

- **Build consumer-grade, enterprise-scale production code from the start.** By doing so, you can avoid the costs and delays of refactoring code for production. Adopt modern digital engineering tools and practices, including test-driven development, iterative software development, continuous integration/continuous delivery (CI/CD) and DevOps.
Launching to market exposes the digital service to real-world demands, forcing the team to behave like a real start-up, not a large-company prototyping team that faces little risk from failure.

1. **Form pods – self-sufficient teams of six to seven members** who possess the required technical and domain expertise, as well as expertise in user experience, visual design and quality assurance. This organization can scale because pods can share their knowledge with new pods.

2. **Develop a digital change management strategy.** Begin by assessing existing digital capabilities and change management maturity, and then plot a roadmap for executing the strategy. We recommend change management methodologies that recognize the importance of business agility.

6. **Baptism by fire: launch to market**

Launching to market exposes the digital service to real-world demands, forcing the team to behave like a real start-up, not a large-company prototyping team that faces little risk from failure. Rather than inserting the new digital product or service into the current sales and marketing organizations, consider creating a dedicated marketing team and a go-to-market approach tailored to the new market’s requirements.

7. **Turn operations and maintenance into an asset for continuous innovation**

With a microservices architecture and Agile processes in place, operations teams can monitor service uptake in real-time, detecting shifting market conditions in days instead of months. Some companies may want to conduct a cost-benefits analysis to decide whether to host, operate and maintain the solution internally or engage a partner. The latter approach has the advantage of freeing the innovation team to focus exclusively on new product development rather than support activities.
Culture: the vital ingredient

Implementing these recommendations isn’t easy, and many incumbents fail to replicate the success of start-ups. We’ve observed that a start-up’s smaller teams are generally better able to build an infrastructure and foster a culture that reacts swiftly to shifting market forces in emerging markets.

In contrast, existing teams in large incumbent organizations are typically too caught up with current products and business models to envision another way to function. Often, employees internalize the company’s expectations and processes to the degree that they are blind to its shortcomings – what the German’s call betriebsblind. Promising ideas that do emerge are shunted aside because the sales organization is tailored to existing core markets, and the structure and cost model are unable to adapt to the conditions of an emerging market.

Taking their cue from Silicon Valley, many companies have tried forming their own incubators. The notion is to bring together diverse teams to brainstorm and prototype several new products and then try to sell them through existing sales and marketing channels. However, corporate incubators face long odds, for several reasons:

I They’re underfunded because they’re perceived as expensive cost centers that divert talent from the core business, not as insurance for continued relevance in the future.
I They’re not designed to scale.
I They crumble under the pressure of overly ambitious revenue goals.
I Launch plans for version 1.0 products are derailed by continual new feature requests from sales and senior executives.
I When the going gets tough in the core business, the incubator is usually the first to go.
I Repeat successes are difficult to realize because the company rarely knows why a particular product was a winner. This insight requires gathering, processing and analyzing thick data, a skill that’s in scarce supply.

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An increasingly popular option is to collaborate on digital product innovation with an experienced partner that has a start-up culture and scalable organizational structure. IDC Worldwide reports that business leaders and directors will increase spending on digital strategy and agency services, from $24 billion in 2019 to $38.8 billion in 2022.\(^\text{12}\)

External digital product design and launch services provide capabilities and technology experience across geographies and industries. This leads to faster innovation at lower cost while also enabling the main business to focus on sustainable innovation. By working with a partner, businesses can circumvent organizational barriers to innovation, such as politics, bureaucracy, entrenched processes and a host of other reasons that good ideas wither on the vine and bad ones move forward.

**Looking ahead**

To avoid being displaced by upstarts, established companies need to get out of their own way. This means not allowing a cautious culture or rigid organizational structure to stifle innovation. For many companies, the practical approach to innovation is to engage an experienced partner with the ability to quickly ramp up a bespoke, seasoned team that can combine data science, human science and business acumen to conceive, build and bring new digital products to market at scale.
Endnotes


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Christian Busch leads the Cognizant Insight to Code Practice globally. His team helps clients identify, build and launch new strategic digital services and products with less risk and faster time to market. The practice marries world-class software product and service development with human sciences to obtain insight and implement optimal product and market fit. Christian joined Cognizant from SAP, where he turned emerging technologies like natural language processing, real-time analytics and the Internet of Things from ideas into successful, award-winning, multi-industry cloud solutions. He is also a mentor at Stanford Ignite (an entrepreneur program for post-grad scientists at the Stanford Graduate School of Business), German Accelerator Silicon Valley and Alchemist Accelerator San Francisco. Christian can be reached at Christian.Busch@cognizant.com or LinkedIn www.linkedin.com/in/cbusch/.
Cognizant Insight to Code

To avoid the risks inherent in trying as many ideas as people can think of or asking end customers what they think they want, Cognizant combines field research on actual behaviors and emotions (thick data) with big data to gain deep understanding of customers’ motivations and desires. Then, in 12 to 16 weeks, we build working consumer-grade, enterprise-scale code. Building working code from the start — not just prototypes — avoids the cost and delays of refactoring code for production. Modern digital engineering tools and practices include microservices architectures, Agile team pods, iterative software development, continuous integration/continuous delivery and DevOps. Using the insights from the market observation, we collaborate with clients to establish the optimal sales, marketing and support organization and jointly launch version 1.0 successfully to market. For more information, please visit www.cognizant.com/digitalengineering.

Cognizant Digital Engineering

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