A Forrester Consulting N Thought Leadership Paper Commissioned By Jama Software

November 2013

The State Of Modern Product Delivery

Challenges And Trends Making Product Delivery Responsive, Iterative, And Collaborative In The Age Of The Customer





Table Of Contents

Executive Summary1
Modern Product Delivery Takes A Community2
Customer Needs Sometimes Elude Product Teams
Gaining Alignment Is Essential But Compounds Product Delivery Challenges4
Global Distribution Creates Both Opportunities And Obstacles5
Frequent Product Releases Increase The Need For Timely Decisions6
Delivering Great Products Does Not Begin And End With Development 8
Getting The Business On Board May Be The Biggest Challenge9
Key Recommendations10
Appendix A: Methodology11
Appendix B: Supplemental Material11

ABOUT FORRESTER CONSULTING

Forrester Consulting provides independent and objective research-based consulting to help leaders succeed in their organizations. Ranging in scope from a short strategy session to custom projects, Forrester's Consulting services connect you directly with research analysts who apply expert insight to your specific business challenges. For more information, visit forrester.com/consulting.

© 2013, Forrester Research, Inc. All rights reserved. Unauthorized reproduction is strictly prohibited. Information is based on best available resources. Opinions reflect judgment at the time and are subject to change. Forrester[®], Technographics[®], Forrester Wave, RoleView, TechRadar, and Total Economic Impact are trademarks of Forrester Research, Inc. All other trademarks are the property of their respective companies. For additional information, go to www.forrester.com. [1-MW2A8E]



Executive Summary

The challenge and reward of delivering great products has never been greater. Customers expect seamless experiences across devices, applications, and even organizations. Rising to this challenge is driving a more responsive and collaborative approach to product delivery. In today's multiplatform, multichannel world, everything must work together for customers to embrace the solution.

This collaboration, which crosses organizational boundaries and subcultures, runs counter to the way that organizations have evolved. Firms must consciously integrate isolated silos, with their singular perspectives, in order to deliver winning products.

Delivering winning products requires unprecedented collaboration across diverse roles, spanning the organization from executives to operations and from marketing to quality assurance.

Breaking down barriers to collaboration is hard. Companies must replace ingrained habits, isolated communities, and disconnected information networks with free-flowing crossorganization collaboration supported by transparent access to information. Old habits die hard — especially when they're reinforced by organizational processes.

In September 2013, Jama Software commissioned Forrester Consulting to examine how organizations deliver products and explore the challenges they face in meeting the needs of customers in a rapidly changing competitive environment. To accomplish this, Forrester developed a hypothesis that tested the assertion that delivering modern products is complex and requires a highly cross-functional and collaborative approach to delivering products.

FIVE KEY FINDINGS

Forrester's study, which conducted in-depth surveys with 150 senior business and IT professionals at enterprise organizations, yielded five key findings:

Product delivery has become critical to success and a competitive advantage for market leaders. Product delivery garners substantial executive attention, highlighting the strategic role that products hold in many organizations. It's a cross-functional activity that spans executive management, sales, marketing, services, support, and operations in addition to the traditional product management, development, QA, IT, and release management functions.

- Product teams often lack a clear understanding of customer needs. Unclear and changing requirements continue to plague product delivery. Not knowing what to build and not being able to get timely feedback on possible solutions results in delays and wasted time, effort, and money.
- Conflicting priorities caused by stakeholder disagreements put product delivery teams in an unfortunate bind. Lack of clarity about objectives, assumptions, and possible solutions leads to a lack of focus. Conflicting goals can derail the best of teams, leading to lackluster products. Without effective goal alignment, product delivery teams are caught in the middle without an effective way to resolve the conflict.
- Effective collaboration spans roles, teams, and geographies. Modern products are complex, requiring a wide variety of expertise to deliver successfully. The reality of the global marketplace means that colocated development is rare; globally distributed teams are increasingly commonplace.
- > Unnecessary handoffs and delayed decisions reduce speed and impair quality. Rapid delivery is increasingly a competitive differentiator. Any delay in making decisions or obtaining feedback needlessly hampers product delivery. Removing communication obstacles increases delivery speed, which improves a company's ability to meet customer needs.

Modern Product Delivery Takes A Community

Delivering great products requires participation across a wide range of competencies, from corner offices to customer support (see Figure 1). High levels of executive participation are a strong indicator of the importance that great products play in organizational success. Customers are unforgiving of disappointment, as fallen market leaders have learned painfully well. Building great products requires harmoniously integrating every aspect of the product life cycle, requiring unprecedented coordination and collaboration across a wide range of roles.

Successful products require coordination across product development, marketing, sales, support and operations. Customers don't know or care how you're organized — only how well you meet their needs. Great product experiences are reinforced and amplified by ease of doing business. Goodwill takes years to build but only moments to lose. Outstanding customer experiences are more than product-deep.

> Modern products are complex and multifaceted. Simple standalone products have given way to complex, multifaceted, smart products. Mobile apps are portals into other services, and consumers expect them to work together seamlessly. They also expect to have the same capabilities across mobile, cloud, and rich client platforms. Keeping it all in sync while driving innovation is a complex coordination challenge.

Product development is only part of the story. Great products don't become great until people use them. Building buzz is about reaching customers through traditional sales and marketing, but also through communities centered on social media. Delivering truly great products means bringing together people with diverse perspectives and skills who focus on delivering better customer experiences and outcomes — something that's easier said than done.

FIGURE 1

Product Delivery Collaboration Spans The Entire Organization

"What is your best estimate of how many people from each role collaborate on a product release?"

	One to five	Six to 20	21 to 50	51 to 99	100 c	or more N/A
				3% ₇ 1%		
Executive leadership			619	%	25%	7% 4%
Quality assurance		35%		32%	17%	7% 6% 3%
Sales and marketing		35%		35%	12% 5%	6 7% 5%
Project and program management		33%		34%	17%	9% 5% 1% _Γ 3%
Product management and business analysts		31% 35%		35%	19%	10% 2%
Release management and operations		30% 35%		19%	7% 4% 5%	
Vendors and suppliers		27%	28%	18%	9% 6%	
Developers, architects, and designers	20%		37%	19%	6 11%	8% 4%

Base: 150 business-side decision-makers in product development and product marketing (percentages may not total 100 because of rounding) Source: A commissioned study conducted by Forrester Consulting on behalf of Jama Software, September 2013



Customer Needs Sometimes Elude Product Teams

Satisfying customers is a huge challenge (see Figure 2). Lack of clarity about needs causes organizations to spend precious time, money, and resources creating solutions that don't fully meet customer needs. Even when they might be capable of meeting those needs, communication with customers is often so poor that they don't use the solution. Delivering great products requires more than giving customers what they ask for; it means listening and probing to uncover the need that underlies the requirement.

> What customers say they want isn't always what they really need. Behind every request hides the real need; uncovering that true need usually requires careful listening, thoughtful questioning, and proposing alternative solutions. Henry Ford is reported to have said, "If I'd asked people what they wanted, they would have asked for a faster horse." Innovative solutions require discovering these real needs and using novel solutions to deliver desired outcomes. The customer's not *always* right, but they're always happy when you can solve their problems — even problems they didn't know they had.

- Customers often don't know what they want, but they know what they don't want when they see it. Listening to customers is a good start, but great products go through a feedback cycle. The faster you can get a product into the hands of the consumer, the faster you will learn what they really need.
- Early feedback from stakeholders within the development cycle improves product quality. Even before you release to real customers, getting stakeholder feedback improves product quality and decreases cost by reducing rework. Even in cases where stakeholders were the source of the original requirements, seeing even partial solutions will often give rise to even better solutions. Innovation requires rapid feedback loops with customers and stakeholders, and the earlier the better.

FIGURE 2 Product Releases Sometimes Fail To Hit The Mark

"How would you characterize your company's ability to deliver innovative solutions?"



Base: 150 business-side decision-makers in product development and product marketing Source: A commissioned study conducted by Forrester Consulting on behalf of Jama Software, September 2013



Gaining Alignment Is Essential But Compounds Product Delivery Challenges

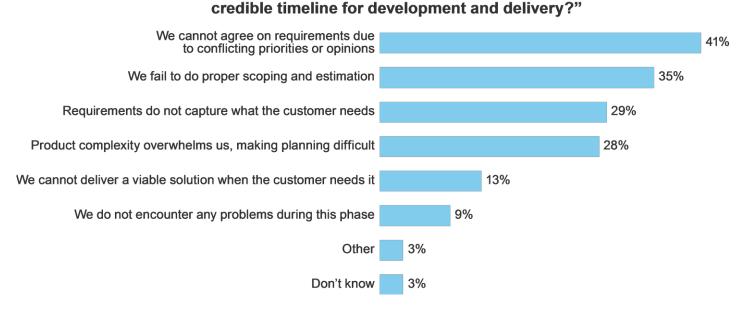
Product complexity mirrors organizational complexity. Like the parable of the blind men and the elephant, different roles see different aspects of the customer's needs. Everyone is partly right, but no one is completely right. Achieving alignment is essential to delivering the right solution, but is often overlooked in the rush to launch new products. When everyone shares the business context of "what" and "why," alignment can unlock the team's full potential to deliver great solutions.

Creative tension often leads to better products. Different stakeholders see the product differently — and that's healthy. Marketing sees the product in terms of branding and image. Sales sees it in terms of specific customer challenges. Development sees it in terms of bringing technology to bear on a problem. Bringing all of these perspectives together is sometimes contentious, but breakthrough products can emerge when the tension can be effectively channeled.

- Communicating decisions reduces wasted time and effort. Rework, delays, and low morale result when decisions are not effectively communicated. When decisions are made in isolation, discord can tear a product development effort apart. Just as important as the final decision itself is the rationale behind the decision; knowing why a decision was made is often more important than knowing the result. Keeping everyone in the loop is not just good manners; it drives better results.
- > Complex products lead to complex collaboration. Products spanning multiple devices, channels, and technologies are becoming the norm, not the exception. Orchestrating their delivery is exponentially more complex than for simple products. More stakeholders and perspectives multiply the communication challenges. Successful product organizations are able to keep this complexity in check.

FIGURE 3

Communication And Collaboration Complicate Product Delivery



"What problems commonly arise during the process of creating a

Base: 150 business-side decision-makers in product development and product marketing (multiple responses accepted) Source: A commissioned study conducted by Forrester Consulting on behalf of Jama Software, September 2013



Global Distribution Creates Both Opportunities And Obstacles

Advances in communication technology has led to a "flattening" of the world leading to products and product teams with global scope (see Figure 4). Collaboration challenges, significant at a single site, are exponentially amplified with each additional location and time zone. When colleagues are half a world away, even finding a common time for video- or teleconferences is a barrier to effective collaboration. Cultural differences amplify the challenges. Collaboration support technology is an important means of bridging location and time zone gaps.

Adapting products for other markets requires local knowledge. Local teams provide essential knowledge of local markets. Even when the product is identical across markets, local customs will drive sales and marketing efforts. To reach fast-growing global markets requires an extended global team.

- > Without effective coordination, distributing teams adds cost and complexity. Many organizations have distributed teams to take advantage of cost differentials, skill availability, or proximity to local markets. But these advantages quickly evaporate when distributed teams cannot effectively collaborate.
- Communication with distant teams must be asynchronous. When many time zones separate teams, synchronous face-to-face or virtual meetings are limited to shrinking availability windows. To overcome this, effective communication must include asynchronous interactions.

FIGURE 4 Modern Product Teams Are Globally Dispersed

"To what extent are team members and stakeholders geographically distributed?"



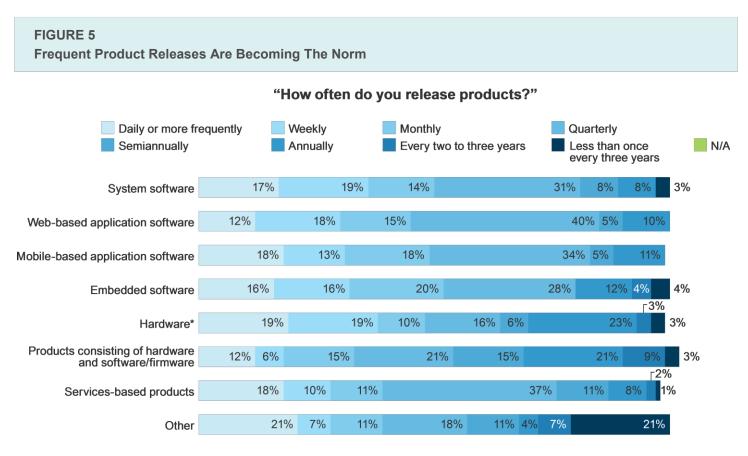


Frequent Product Releases Increase The Need For Timely Decisions

Release cycles are getting shorter. Forrester's study indicates that most organizations release at least quarterly, with many organizations releasing monthly or more frequently (see Figure 5). As customer expectations rise and competitors' release cycle times drop, organizations face mounting pressure to get solutions to market faster. This increases the importance of collaboration even as it reduces the time available to do so. Waiting for meetings to make decisions has become increasingly impractical, and the global nature of most organizations makes scheduling those meetings all but impossible.

 Mobile and web applications demand frequent releases, but other products have similar demands. Not surprisingly, hardware-based products have the lowest release frequency, but customer expectations of those products have also accelerated. Leading consumer electronics companies have conditioned consumers to expect at least yearly releases of new hardware, too. The complexity of modern products adds to the challenge of frequent releases.

Many products consist of hardware, software, and services. Consider a typical mobile banking application. The product isn't just the smartphone app; it's also the support services, the web application, and perhaps even a capability in an ATM. All of these must be coordinated in order to have happy customers. Today's connected world of social media means that an unhappy customer can have a very high cost — increasing the value of effective collaboration.



Base: 150 business-side decision-makers in product development and product marketing (percentages may not total 100 because of rounding) Source: A commissioned study conducted by Forrester Consulting on behalf of Jama Software, September 2013

*Hardware product with embedded software



While a lack of understanding of customers' real needs is a significant cause for delayed product releases, a lack of timely decisions plays a significant role as well (see Figure 6). Delays in making decisions and poor communication are at the root of many release delays.

- > Unclear requirements lead to quality issues. Lack of clear goals about customer needs affects more than just product development; it affects how the product is tested. Poor quality is not just caused by coding errors; it is also caused by poor fitness for purpose.
- Resource conflicts and coordination problems have poor communication at their heart. Team distribution makes resource visibility more challenging than in the past. Understanding resource commitments and anticipating conflicts gives time to respond without affecting release schedules.
- > The more complex the product, the more complex the collaboration. Products that span multiple devices, channels, and technologies are becoming the norm, not the exception. Orchestrating their definition and delivery is exponentially more complex than simple products; the number of stakeholders multiplies, and with it the degree of communication challenges. Successful product organizations are able to keep this complexity in check.
- Decision-makers need to know when they need to make a decision. This is often not clear. And once a decision is made, teams need to know when they can take action on it. Ineffective communication needlessly adds to delays. Sometimes the challenge is simply bringing everyone together to discuss the issues and make a decision. Traditional meeting-based processes simply can't keep up with the increasing speed of delivery.

FIGURE 6

Causes For Product Delays Center On Communication



"What is the most common reason for product delays?"

Base: 140 business-side decision-makers in product development and product marketing

Source: A commissioned study conducted by Forrester Consulting on behalf of Jama Software, September 2013



Delivering Great Products Does Not Begin And End With Development

Long before a product is released — and often before development has even started — organizations work with customers to understand their needs and set expectations about future product capabilities. The actual product release can be to great fanfare or deep disappointment, depending on how the company has managed these expectations. Visibility into product development is important for sales and marketing stakeholders. Expectations have a powerful effect on customer satisfaction, and companies must carefully manage them (see Figure 7).

Go-to-market plans require accurate and timely information about the value a release will deliver. Understanding the desired outcomes that the release will satisfy is essential to crafting go-to-market messages. If the value of a release can't be expressed in a compelling way that attracts users, no amount of technical excellence will make it a success.

- If salespeople don't understand it, they can't sell it. Many products have stumbled when organizations could not provide their sales force with a compelling way to express the value proposition to customers.
- If customers can't understand it, they won't buy it. When sales channels are direct to customer, the communication problem is more direct. Communication often flows both ways in social media, and awkward messaging goes viral faster than countermessaging can intercept it. Organizations have one chance to get it right, and early communication among stakeholders is the key to success.

FIGURE 7

Articulating The Value Of A Release Challenges Many Organizations

"What problems commonly arise when bringing the product to market?"



Base: 150 business-side decision-makers in product development and product marketing (multiple responses accepted) Source: A commissioned study conducted by Forrester Consulting on behalf of Jama Software, September 2013



Getting The Business On Board May Be The Biggest Challenge

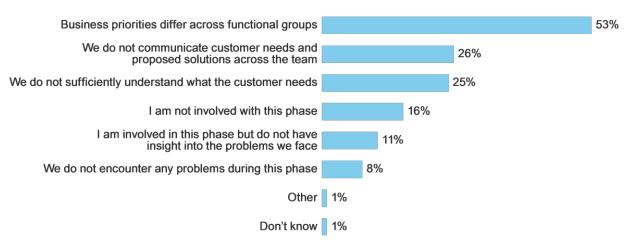
Diversity of opinion is good, except when it gets in the way. Differing priorities compound the difficulties of product development when they lead to conflicting signals. Product development teams often find themselves caught in the middle, negotiating uneasy compromises between parties that see the customer problem differently. As with most forms of counseling, getting the issues on the table and clearly communicating goals goes a long way toward resolving conflicts (see Figure 8).

- > The customer often lacks a consistent voice. Different functional groups will see the customer problem in different ways. None is completely correct, yet often each group sees its issues as the most important. The reality is that no product is complete until all perspectives are fairly represented. Getting the issues on the table to make the choices clear helps defuse the conflict and create healthy discussion.
- Executive leadership may need to arbitrate. One of the benefits of active executive participation in product development is that misalignments, once spotted, can be quickly resolved. Differing priorities are often the result of organizational misalignments that are beyond the scope of the typical product team. Engaging executives, on the right level and the right time, can resolve the conflict before it affects product delivery.
- Confused priorities lead to confusing products. Customers become frustrated with inconsistent solutions. When services or support offerings don't align with the product they have purchased, dissatisfaction sets in. Ensuring a consistent customer experience goes far beyond the product itself.

FIGURE 8

Conflicting Business Priorities Make Solving Customer Problems Challenging

"What problems arise during the process of capturing and assessing ideas that may turn into products?



Base: 150 business-side decision-makers in product development and product marketing (multiple responses accepted) Source: A commissioned study conducted by Forrester Consulting on behalf of Jama Software, September 2013



Key Recommendations

Product delivery has become a critical competency for most organizations. Emerging opportunities created by mobile, cloud, and the "Internet of Things" has caused organizations to have to step up their game in delivering new innovative products faster than they could have imagined a decade ago. The trend shows no sign of abating, only accelerating. Excellence in product delivery is increasingly separating the winners from the losers. Organizations lack the luxury to take a "wait and see" approach — the time for action has arrived. In order to improve your product development capability, you should start with these steps:

- > Take a holistic approach to product delivery. Successful products result from a shared understanding of the customer outcomes the product needs to deliver, and a singular focus on delivering those outcomes. Lack of alignment on these goals leads to poor customer satisfaction and product failure. Consistent alignment reduces waste, improves speed of delivery, and delivers consistent innovation.
- Iterate to innovate. Perfect plans and perfect requirements are a fiction of the past. Customers will tell you what works and what doesn't; the challenge is to deliver frequently enough to drive the customer feedback loop. This feedback goes beyond just product development; it encompasses the entire organization products, services, strategy, and execution. Customer feedback will tell you what's working and what's not, and what you need to do to fix it.
- > Embrace change; don't prevent it. Traditional organizations with static business models have given way to dynamic organizations whose customers and competitors change from year to year, if not month to month. Successful product delivery organizations don't prevent change; they look to leverage the disruption. When data tells you that something isn't working, pivot!
- > Streamline your decision-making process. Responding quickly means making quick decisions that stick, involving the right stakeholders and equipping them with the right information to move quickly. Once decisions are made, they need to be communicated quickly and consistently across the extended product team so that everyone's efforts are aligned with the new decision.
- > Build trust with transparency. Nothing derails product delivery faster than hidden agendas and confusing direction. Information must be shared freely and transparently to enable decisions to be made with full collaboration across the extended product delivery team. When everyone is aligned toward delivering great outcomes to customers, everyone wins.



Appendix A: Methodology

In this study, Forrester conducted an online survey of 150 organizations in the US to evaluate complex product development and delivery. Survey participants included decision-makers (manager level and above) in product development and product marketing. Questions provided to the participants asked about product teams, remote collaboration, metrics, delivery, and process challenges. The study began in September 2013 and was completed in September 2013.

Appendix B: Supplemental Material

RELATED FORRESTER RESEARCH

"Continuous Delivery Is Reshaping The Future Of ALM," Forrester Research, Inc., July 22, 2013

