

# Adopt Agile And DevOps To Drive Digital Business Success

## Executive Overview: The Modern Application Delivery Playbook

by Christopher Condo and Diego Lo Giudice  
January 7, 2020

### Why Read This Report

Every business is now a digital business. Companies are scrambling to respond to higher consumer expectations and nimbler competitors. Application development and delivery (AD&D) organizations are leading this response, transforming their processes and skills to deliver high-quality, innovative software solutions that delight customers and outpace competitors. This report introduces Forrester's modern application delivery playbook, which lays out the crucial imperatives for AD&D leaders navigating this transition.

This is an update of a previously published report; Forrester reviews and updates it periodically for continued relevance and accuracy.

### Key Takeaways

#### **Agile And DevOps Practices Enable Innovation, Quality, And Speed**

Leading AD&D organizations pave the way for digital transformation by developing the tools, processes, and organizational approaches that enable companies to quickly deliver software that creates high-quality customer experiences (CX).

#### **Agile And DevOps Practices Let You Have It All: Faster, Better, And With Lower Risk**

Faster delivery used to put quality at risk. But leading organizations have shown that applying Agile and DevOps practices enables faster delivery, higher quality, and lower risk.

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## Customers Demand Application Innovation With Speed And Quality

Customers are impatient and inconstant, shifting their loyalty to whichever supplier best meets their needs at the moment. The ubiquity and convenience of mobile devices and the internet have made software the primary means by which organizations deliver differentiating experiences to customers. Improving CX is good for the bottom line (see Figure 1).<sup>1</sup> Being able to quickly deliver truly great CX separates great companies from the merely good. Software is the magic that enables organizations to bring products, services, and CX alive, and developers get it. Global developers who we surveyed in 2019 most often listed improving their firm's products and services, improving CX, growing revenue, and improving their ability to innovate as top business priorities for their firm in the coming 12 months.<sup>2</sup> The race for customers is on, and the company that delivers that great experience first usually wins.

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**FIGURE 1** Improving Customer Experience Improves Business Results**The revenue impact of a 1-point improvement in CX Index™ score:**

	Annual incremental revenue per customer*	x	Average number of customers per company†	=	Total revenue
 Auto manufacturers (mass market)	<b>\$58.51</b>	x	<b>18 million</b>	=	<b>\$1.1 billion</b>
 Retailers (general retail)	<b>\$4.96</b>	x	<b>100 million</b>	=	<b>\$496 million</b>
 Wireless service providers	<b>\$4.74</b>	x	<b>82 million</b>	=	<b>\$388 million</b>
 Hotels (upscale)	<b>\$8.07</b>	x	<b>44 million</b>	=	<b>\$355 million</b>
 Auto/home insurers	<b>\$14.36</b>	x	<b>15 million</b>	=	<b>\$215 million</b>
 Airlines	<b>\$3.77</b>	x	<b>48 million</b>	=	<b>\$181 million</b>
 Hotels (midscale)	<b>\$3.89</b>	x	<b>30 million</b>	=	<b>\$117 million</b>
 Banks (multichannel)	<b>\$7.15</b>	x	<b>15 million</b>	=	<b>\$107 million</b>
 Rental cars	<b>\$2.29</b>	x	<b>40 million</b>	=	<b>\$92 million</b>
 Auto manufacturers (luxury)	<b>\$128.75</b>	x	<b>350,000</b>	=	<b>\$45 million</b>
 Credit card issuers	<b>\$0.57</b>	x	<b>61 million</b>	=	<b>\$35 million</b>
 Banks (direct)	<b>\$8.20</b>	x	<b>3 million</b>	=	<b>\$25 million</b>

Base: 101,341 US online consumers (18+) who interacted with a specific brand within the past 12 months

Source: Forrester Analytics Customer Experience Index Online Survey, US Consumers 2019

\*The effect on revenue potential of increasing CX Index scores by 1 point from the average score of the largest brands in the industry. Curves for individual brands differ from that of their industry. For brands without a linear relationship between CX and revenue, the revenue effect of improving CX by 1 point will vary greatly depending on the CX Index score that serves as the starting point for this analysis.

†The number of customers represents that of a big player in the industry based on data from Forrester Analytics Consumer Technographics® surveys, Forrester analysts, and publicly available industry sources.

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**FIGURE 1** Improving Customer Experience Improves Business Results (Cont.)

**The impact on assets under management of a 1-point improvement in CX Index™ score:**

	Annual incremental assets per customer‡	x	Average number of customers per company†	=	Total assets under management
 Investment firms	<b>\$476.30</b>	x	<b>31 million</b>	=	<b>\$14.8 billion</b>
 Direct brokerages	<b>\$444.32</b>	x	<b>15 million</b>	=	<b>\$6.7 billion</b>

**The impact on the customer base of a 1-point improvement in CX Index score:**

	Annual customer base growth per customer‡	x	Average number of customers per company†	=	Total growth in customers
 Health insurers	<b>0.007</b>	x	<b>20 million</b>	=	<b>145,000 customers</b>

Base: 101,341 US online consumers (18+) who interacted with a specific brand within the past 12 months  
Source: Forrester Analytics Customer Experience Index Online Survey, US Consumers 2019

†The number of customers represents that of a big player in the industry based on data from Forrester Analytics Consumer Technographics® surveys, Forrester analysts, and publicly available industry sources.

‡The effect on growth potential of increasing CX Index scores by 1 point from the average score of the largest brands in the industry. Curves for individual brands differ from that of their industry. For brands without a linear relationship between CX and growth, the growth effect of improving CX by 1 point will vary greatly depending on the CX Index score that serves as the starting point for this analysis.

### Agile And DevOps Practices Enable Software Innovation, Quality, And Speed

Companies pave the way for digital transformation by deploying processes, tools, and organizational approaches that enable them to quickly deliver applications that codify high-quality CX. Forrester has long experience working with firms that deliver high-quality applications rapidly. The modern application delivery (MAD) playbook guides AD&D leaders through the “dev transformation” that underpins digital transformation and helps them replicate the success of leaders while avoiding the painful learning experiences of early adopters.

We organize the playbook reports into four phases: discover, plan, act, and optimize:

- › **Discover: Improved application delivery drives competitive differentiation.** The line between traditional incumbents and digital upstarts is blurring. Financial service firms are sick and tired of watching technology companies like Apple, Moneyfarm, PayPal, and Square steal their customers,

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so they are remaking themselves to look more like those digital competitors by offering new digital products and services and extending traditional products into digital channels.<sup>3</sup> Software is driving business innovation, and modern AD&D practices like Agile and DevOps drive software innovation.

- › **Plan: Delivering faster is not a one-and-done project; it's a multiyear journey.** Most companies start their journey to modern software practices with a single product in a single line of business and iterate, learning from experience and building on success over a period of years. They begin by assessing the gaps between goals and performance and then take deliberate steps to close those gaps over time. They go deeper on Agile and DevOps practices and embrace continuous improvement, advancing in small but deliberate and consistent steps. Techniques like developing in small batches, employing continuous integration and API-driven testing, pairing up programmers, and automating application deployment enable organizations to deliver faster and more reliably.
- › **Act: The transformation spans three dimensions — people, processes, and tools.** To deliver faster, firms break down silos and organize teams around customer solutions led by a product manager. They eliminate handoffs and wait time created by spreading people across too many initiatives and improve consistency by streamlining, standardizing, and automating processes. This new organization is flat and fleet: It is organized around empowered, cross-functional delivery teams; supported by new teaming, sourcing, and partnering models; and features new ways of engaging and integrating with the business. Tools enable teams to automate, manage, and deploy software continuously.
- › **Optimize: Modern application delivery embraces continuous improvement.** The most important lesson that companies adopting Agile and DevOps practices learn is that the journey has no end; to remain leaders, they must improve continuously. Customers always expect more, and competitors will always be there to deliver if you don't do it first. To remain a leader, you must adapt to customer feedback, continually improve products and practices, know when to pivot, and define new metrics to measure and manage improvement and the value delivered.

## Modern Application Delivery's Goal: More Business Value Faster

Businesses face an existential threat: Deliver more value to customers faster than competitors or risk extinction. In the past, AD&D leaders faced a dilemma: Deliver faster with lower quality and higher technical risk, or choose the slower path, with higher quality and lower technical risk, but greater business risk. Now, successfully applying Agile and DevOps practices provides a third, more attractive, option: Deliver faster with higher quality and lower both business and technical risk. What these firms have shown, and others are now learning, is that:

- › **Standardization with automation reduces risk and improves speed and quality.** Inconsistency causes risk. Manual activities, especially done quickly, create inconsistencies that lead to low quality and even failures. Automated tools have matured to the point where firms can automate large portions of their application delivery processes to improve speed and quality while reducing cost and rework. This has smashed the old speed/quality tradeoff.

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- › **Fewer handoffs reduces waiting and increases speed but requires reorganizing.** Siloed organizations often measure success in terms of utilization and unit labor cost. By ignoring value delivered, they miss the point. Eliminating handoffs and wait time makes people more productive overall, leading to better business results by focusing on value delivered to customers. The old silos are collapsing, and companies are structuring themselves around customer value streams, not functional areas.
- › **Improving delivery speed and quality also reduces cost, but it's not the main goal.** Companies that focus on reducing waste, wait time, and overall time-to-market also reduce cost — but they don't start with a goal of cost reduction. Standardizing and automating processes and organizing to eliminate wait time also eliminate waste and cost, but winning, serving, and retaining customers is the primary goal.
- › **Continuous improvement requires continuous customer feedback and insights.** Being customer-obsessed means identifying customers' needs and placing them at the center of your application strategy. AD&D pros need to use instrumentation, A/B testing, and analytics to determine not only how customers use their applications but also what their intentions are. They then need to turn these insights into features and release them continuously via an automated software delivery pipeline that constantly measures and improves itself.

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## Supplemental Material

### Survey Methodology

The Forrester Analytics Global Business Technographics® Developer Survey, 2019, was fielded in January and February 2019. This online survey included 3,294 respondents in Australia, Canada, China, France, Germany, India, the UK, and the US.

Forrester Analytics' Business Technographics ensures that the final survey population contains only those with significant involvement in the planning, funding, and purchasing of business and technology products and services. Dynata fielded this survey on behalf of Forrester. Survey respondent incentives include points redeemable for gift certificates.

Please note that the brand questions included in this survey should not be used to measure market share. The purpose of Forrester Analytics' Business Technographics brand questions is to show usage of a brand by a specific target audience at one point in time.

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**How To Get Access To Forrester's CX Index Data Analysis And Insight**

Forrester's Customer Experience Index (CX Index™) helps companies do three things. It: 1) arms you with a deep and actionable understanding of the quality of your customer experience; 2) provides competitive benchmark data so you know how you stack up against your peers; and 3) enables the ability to model which improvements will have the biggest impact on revenue and other key business metrics.

Forrester collects CX Index data on almost 600 brands in 20 industries across seven key markets (Australia, Canada, France, India, Singapore, the UK, and the US). If you wish to find out more regarding Forrester's CX Index data and services or how you can leverage the methodology, please contact your account manager or [data@forrester.com](mailto:data@forrester.com).

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**Endnotes**

<sup>1</sup> For more information on the relationship between CX and revenue, see the Forrester report "[How Customer Experience Drives Business Growth, 2018.](#)"

<sup>2</sup> Software is central: It powers processes, represents the brand in customer-facing applications, and enhances product functionality as an embedded component. In the old development model, infrequent releases and varying quality limited the role of software. But modern software practices — continuous delivery, loosely coupled architectures, and agile organizational models — drive rapid innovation and have created a new kind of enterprise: the software-powered business. See the Forrester report "[The Software-Powered Business.](#)"

Source: Forrester Analytics Global Business Technographics Developer Survey, 2019.

<sup>3</sup> For more information, see the Forrester report "[Digital Rewrites The Rules Of Business.](#)"

We work with business and technology leaders to develop customer-obsessed strategies that drive growth.

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