To Drive Great Business Results With Software, Close The CEO-CIO Gap

FORRESTER®

Table Of Contents

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.

FORRESTER®

Executive Summary

Delivering high-quality software — and delivering it quickly — is crucial to digital business success. Yet CEOs and CIOs (and software leaders) are not aligned on software goals, metrics, and strategies, preventing their organizations from realizing the full business benefits from their software development efforts.

In July 2019, Broadcom commissioned Forrester Consulting to evaluate how well CEOs, CIOs, and software leaders collaborate to foster the software capability their firms need to compete. Forrester conducted an online survey of 316 senior business executives (including CEOs) and senior technical leaders (including CIOs and software leaders) at global enterprises with more than 5,000 employees to explore this topic. We found that these three stakeholder groups have different priorities, expectations about modern development, and trust in one another.

Software leaders are 17 times more likely than CEOs to say lack of executive support is a major hurdle to software delivery.

More than half of firms do not track customer experience metrics for their custom software development efforts.

KEY FINDINGS

› **Business and technical leaders disagree about essentials, like how well software is tied to business outcomes, the importance of fast software delivery, and their biggest hurdles.** Eighty-five percent of software leaders say lack of executive support is a major hurdle to software delivery; they are 17 times more likely to identify this issue than CEOs. Meanwhile, software leaders overestimate compared to CEOs and CIOs how well their efforts are aligned to business value.

› **Businesses want the benefits of Agile, but don't support it.** Despite proclaiming the importance of Agile software development, most leaders prefer to use traditional waterfall methods of delivering software. Part of the problem: CEOs believe their organizations are more Agile than their CIOs and software leaders report they are.

› **Firms prioritize customer experience (CX) but struggle to quantify the impact of software development on CX.** Custom software development is critical for customer-facing operations, yet most firms do not have customer experience metrics in place for their custom software development efforts.

FORRESTER®

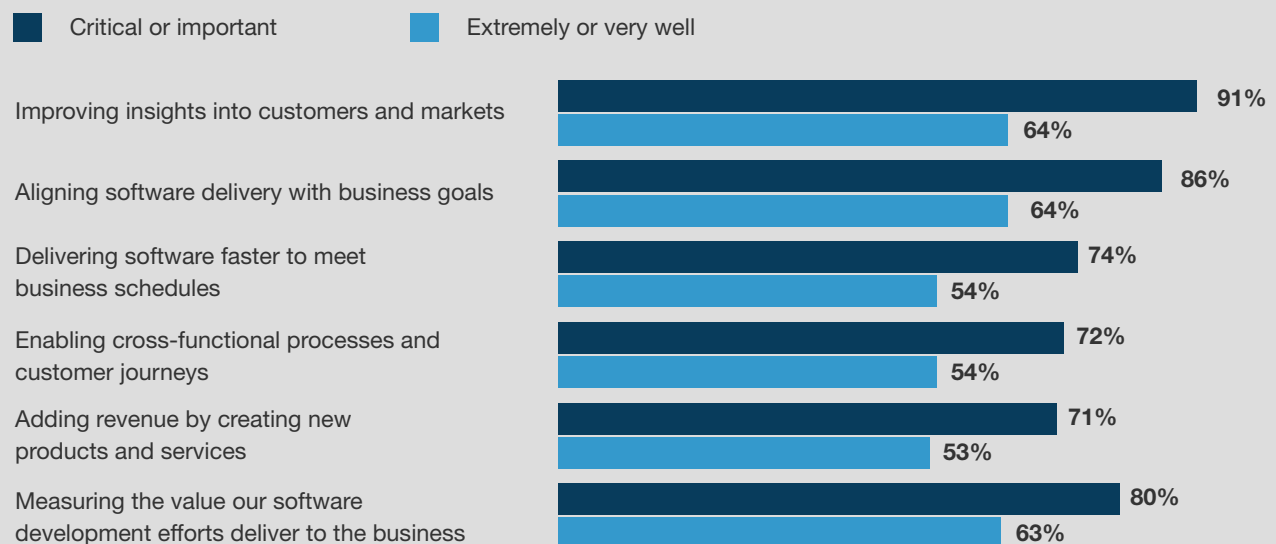# Misaligned Leadership Prevents The Software Delivery Digital Era Demands

CEOs, CIOs, and software leaders disagree about the basics, like how well software is tied to business outcomes, the importance of speedy software development, and the biggest challenges facing their organizations' software delivery efforts. In surveying 316 respondents from large enterprise companies, we found that:

› **Gaps between software priorities and effectiveness occur in areas that require measurement and transparency to solve.** For businesses to understand how to improve their software delivery efforts with speed and customer experience in mind, they must align on measurement to inform data-driven decisions. Eighty-six percent of respondents say aligning software delivery with business goals is critical or important, and 80% say measuring the value of software development efforts to the business is critical or important (see Figure 1); the rub is that less than half of respondents are tracking key metrics (see Figure 2).

Figure 1

"To what extent would you say the following competencies are critical to achieving your top business outcomes?"

"In reflecting on your current in-house software development efforts, to what extent do you feel your organization is delivering on these competencies?"

■ Critical or important   ■ Extremely or very well

Competency	Critical or important	Extremely or very well
Improving insights into customers and markets	91%	64%
Aligning software delivery with business goals	86%	64%
Delivering software faster to meet business schedules	74%	54%
Enabling cross-functional processes and customer journeys	72%	54%
Adding revenue by creating new products and services	71%	53%
Measuring the value our software development efforts deliver to the business	80%	63%

Base: 316 CEOs/senior business executives, CIOs or equivalent, and software leaders at global enterprises with more than 5,000 employees
Source: A commissioned study conducted by Forrester Consulting on behalf of Broadcom, August 2019

FORRESTER®

› **Business and technical leaders disagree on how well software delivery is aligned with business goals.** While 71% of software leaders believe their companies align software delivery with business goals either very well or extremely well, only 64% of CEOs and 56% of CIOs agree. CEOs are also twice as likely as software leaders to say that aligning software delivery with business goals is critical, suggesting that software leaders are not tuned in to companywide strategy (see Figure 3).

› **Business and technical leaders are misaligned on the need for speed.** CEOs see delivering software faster to meet business schedules as 2.3 times more important than software leaders (see Figure 3). This difference suggests that CEOs are not communicating the importance of faster time-to-value as key to strategy, while software leaders believe their delivery speed is sufficient.

› **Leaders play the blame game when it comes to software enablement success.** Business and technical leaders massively disagree on the barriers preventing software delivery success: 85% of software leaders claim they lack executive support, but only 5% of CEOs agree (see Figure 3). At the same time, CEOs are most likely to blame organizational silos for challenges in software delivery. With everyone pointing fingers, addressing underlying challenges becomes impossible.

Agility, Communication, And Speed Are The Missing Links To Innovation

Agile development has gained awareness and a following not just for frontline developers, but all the way up to the CIO. It is easy to see why: When done right, Agile methods enable quality innovation through software at speed and drive competitive distinction.[1] However, our survey finds that there is a massive difference between firms embracing Agile in theory and in practice:

› **Business and technical leaders support Agile, but their practices don't back it up.** Despite 82% of leaders (both C-suite and software leaders) claiming that Agile is important or critical to achieving business outcomes (see Figure 4), a large majority currently develop software requirements in a more traditional way — and even prefer it (see Figure 5). This gap is not surprising: In a Forrester survey of software development executives and professionals, respondents saw the lack of executive leadership on Agile transformation as a major obstacle.[2]

Figure 3

| CEO/SENIOR BIZ EXEC | CIO OR EQUIVALENT | SOFTWARE LEADER |

"In reflecting on your current in-house software development efforts, to what extent do you feel your organization is delivering on these competencies?" (Showing "Very well"/"Extremely well")

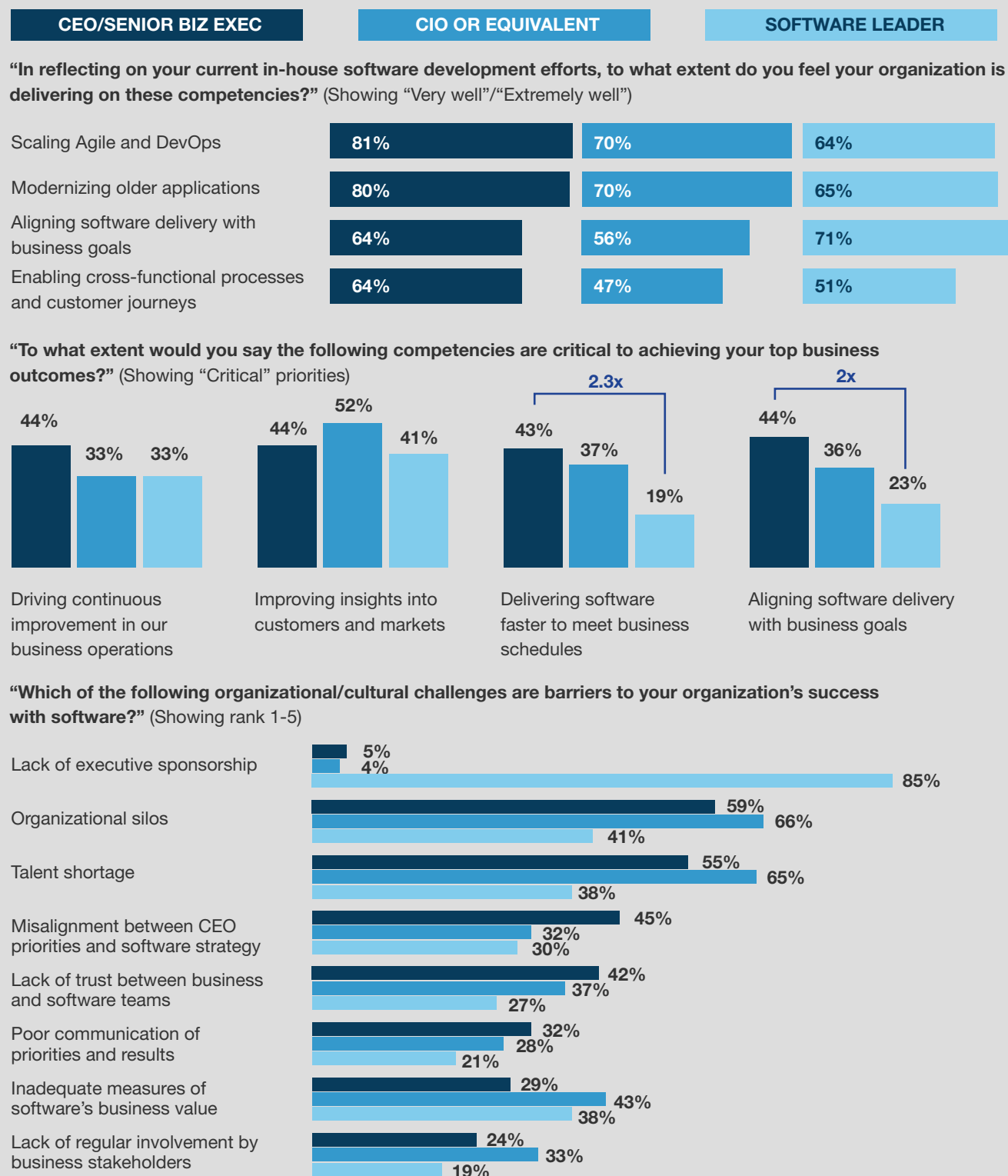|	CEO/Senior Biz Exec	CIO or Equivalent	Software Leader
Scaling Agile and DevOps	81%	70%	64%
Modernizing older applications	80%	70%	65%
Aligning software delivery with business goals	64%	56%	71%
Enabling cross-functional processes and customer journeys	64%	47%	51%

"To what extent would you say the following competencies are critical to achieving your top business outcomes?" (Showing "Critical" priorities)

	CEO/Senior Biz Exec	CIO or Equivalent	Software Leader
Driving continuous improvement in our business operations	44%	33%	33%
Improving insights into customers and markets	44%	52%	41%
Delivering software faster to meet business schedules (2.3x)	43%	37%	19%
Aligning software delivery with business goals (2x)	44%	36%	23%

"Which of the following organizational/cultural challenges are barriers to your organization's success with software?" (Showing rank 1-5)

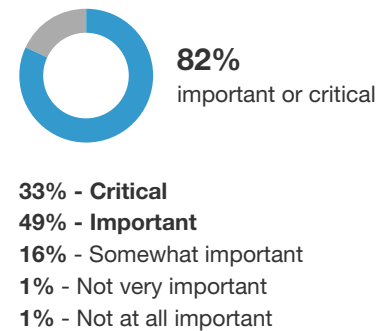|	CEO/Senior Biz Exec	CIO or Equivalent	Software Leader
Lack of executive sponsorship	5%	4%	85%
Organizational silos	59%	66%	41%
Talent shortage	55%	65%	38%
Misalignment between CEO priorities and software strategy	45%	32%	30%
Lack of trust between business and software teams	42%	37%	27%
Poor communication of priorities and results	32%	28%	21%
Inadequate measures of software's business value	29%	43%	38%
Lack of regular involvement by business stakeholders	24%	33%	19%

Base: 316 CEOs/senior business executives, CIOs or equivalent, and software leaders at global enterprises with more than 5,000 employees
Source: A commissioned study conducted by Forrester Consulting on behalf of Broadcom, August 2019

FORRESTER®

› **CEOs are overly optimistic about the state of Agile.** CEOs are 1.3 times as likely as software leaders to say their firms are scaling Agile and DevOps very or extremely well (see Figure 3). This finding suggests that CEOs don't understand the results of investment in Agile.

› **Communication and speed are the missing ingredients for software delivery.** Software leaders and CIOs agree that communicating business priorities is the top way CEOs could better support software development and delivery. CEOs want software leaders to deliver consistent software quality, faster (see Figure 6).

CEOs and CIOs have the power to lead behavioral change that will enable broader adoption of Agile practices and deliver business value faster, but first they must develop a deeper understanding of their software practice.
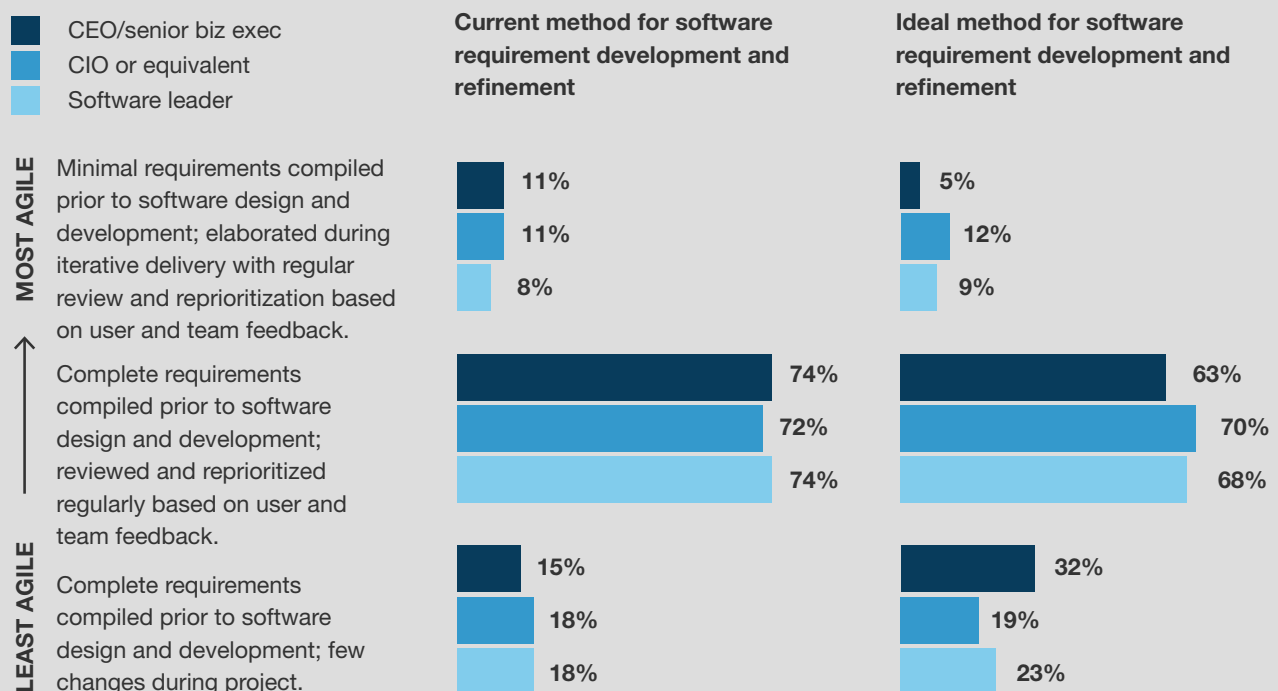
Figure 4

Importance of scaling Agile/DevOps to achieving top business outcomes

82% important or critical

33% - Critical
49% - Important
16% - Somewhat important
1% - Not very important
1% - Not at all important

Base: 316 CEOs/senior business executives, CIOs or equivalent, and software leaders at global enterprises with more than 5,000 employees
Source: A commissioned study conducted by Forrester Consulting on behalf of
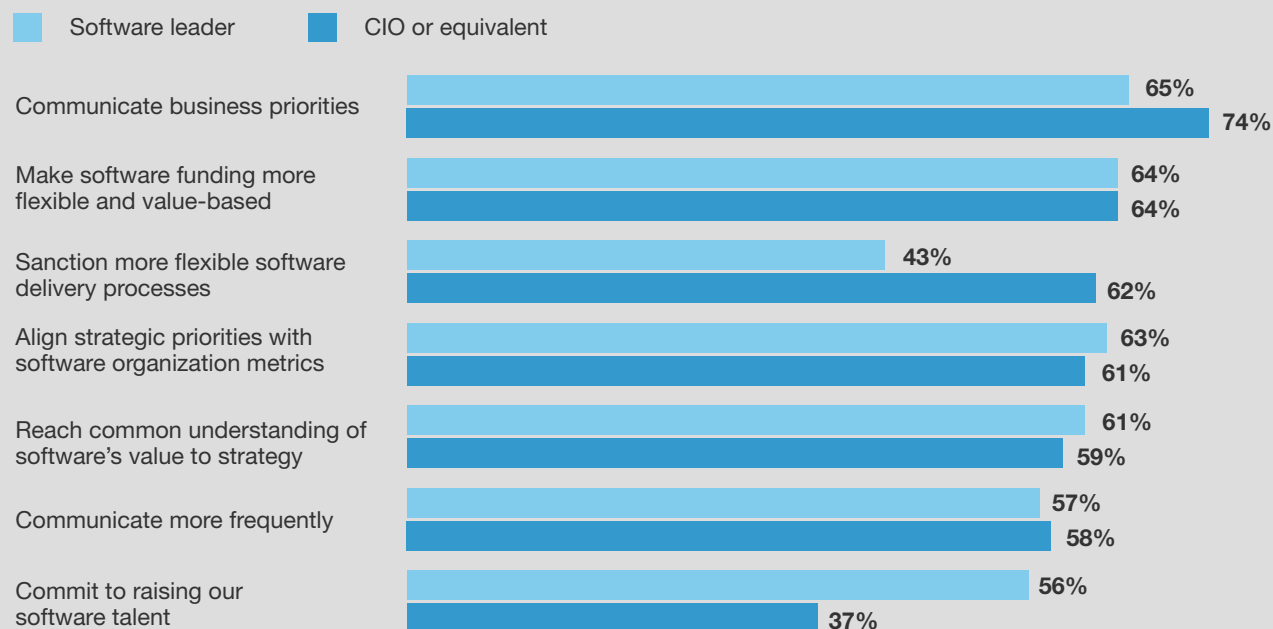
Figure 5

■ CEO/senior biz exec
■ CIO or equivalent
■ Software leader

MOST AGILE

Minimal requirements compiled prior to software design and development; elaborated during iterative delivery with regular review and reprioritization based on user and team feedback.

Complete requirements compiled prior to software design and development; reviewed and reprioritized regularly based on user and team feedback.

LEAST AGILE

Complete requirements compiled prior to software design and development; few changes during project.

Current method for software requirement development and refinement

11%	
11%	
8%	
74%	
72%	
74%	
15%	
18%	
18%	

Ideal method for software requirement development and refinement

5%	
12%	
9%	
63%	
70%	
68%	
32%	
19%	
23%	

Base: 316 CEOs/senior business executives, CIOs or equivalent, and software leaders at global enterprises with more than 5,000 employees
Note: Percentages may not total 100 because of rounding.
Source: A commissioned study conducted by Forrester Consulting on behalf of Broadcom, August 2019

FORRESTER®

Figure 6

"What could the CEO or other senior business executives do to better support software development and delivery?"

■ Software leader   ■ CIO or equivalent

Communicate business priorities	65% / 74%
Make software funding more flexible and value-based	64% / 64%
Sanction more flexible software delivery processes	43% / 62%
Align strategic priorities with software organization metrics	63% / 61%
Reach common understanding of software's value to strategy	61% / 59%
Communicate more frequently	57% / 58%
Commit to raising our software talent	56% / 37%

"What one thing could your organization's software leader do to better support the business overall?"*

■ CEO/senior biz exec

Deliver consistent software quality	79%
Deliver software value faster	78%
Improve alignment of the software organization with the business	68%
Earn my trust with aligned, on-budget, on-time delivery	63%
Measure return on software investments in business terms	58%
Give me meaningful visibility into software activities	57%
Help me understand how to value software	52%

Base: 201 CIOs or equivalent and software leaders at global enterprises with more than 5,000 employees
*Base: 115 CEOs/senior business executives at global enterprises with more than 5,000 employees
Source: A commissioned study conducted by Forrester Consulting on behalf of Broadcom, August 2019

FORRESTER®

Transforming Customer Experience Is Top Of Mind, But Difficult To Quantify

Firms are laser focused on customer experience: Respondents rank it as their top business priority over the next 12 months (see Figure 7). With custom software development being far more important for customer-facing operations than for other aspects of the business, custom development is on the critical path of customer success. In practice, businesses struggle to identify how each function impacts customer experience and to put tactical metrics in place that assess and identify areas for improvement. We found that:

› **Firms want to own and customize software for customer-facing activities.** Firms are also more likely to develop software for customer-facing activities in-house rather than to use third-party solutions, with 50% developed either entirely or mostly in-house and 50% with at least some in-house development (see Figure 8).

› **Software leaders and CEOs/CIOs diverge on the importance of customer experience.** CEOs are 20% more likely than software leaders to rank improving customer experience as a top priority. Fifty-eight percent of CEOs and 61% of CIOs ranked improving customer experience as a top priority, compared to only 48% of software leaders (see Figure 7). This finding suggests that the C-suite is not effectively identifying or communicating down to their organization how IT is linked to top-line strategy.

› **Firms are focused on customer experience metrics, but an operational gap still exists.** Despite ranking "improving customer experience" as the top priority, fewer than half of respondents are tracking related metrics. This gap suggests that they are flying blind without a feedback loop of customer input (see Figure 9).

Figure 8

How firms develop software for customer-facing activities

50%
entirely or mostly in-house
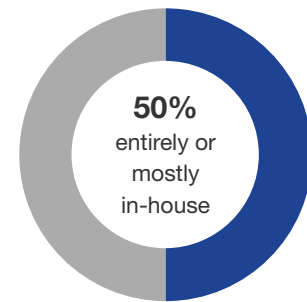
7% - Entirely in-house
43% - Mostly in-house
50% - Some in-house
1% - Entirely third-party

Base: 316 CEOs/senior business executives, CIOs or equivalent, and software leaders at global enterprises with more than 5,000 employees
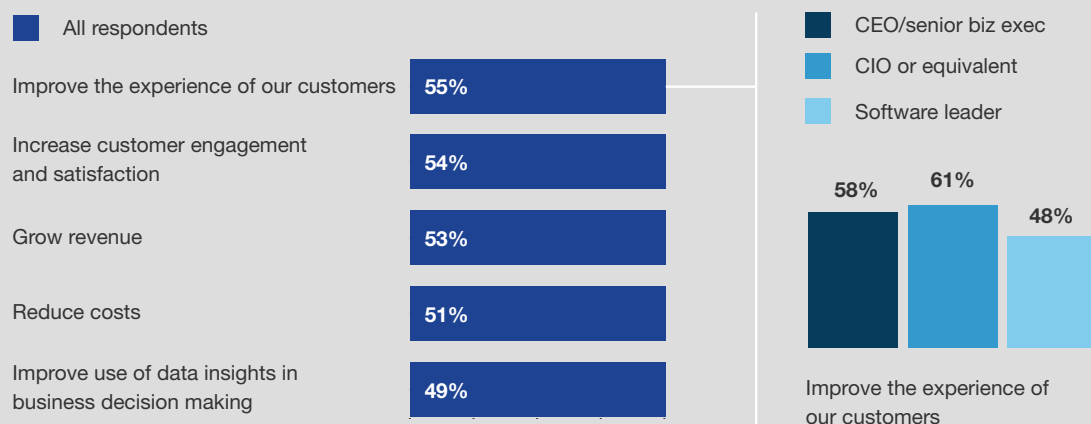Note: Percentages do not total 100 because of rounding.
Source: A commissioned study conducted by Forrester Consulting on behalf of Broadcom, August 2019

Figure 7

"What would you say are your organization's top business priorities over the next 12 months?"
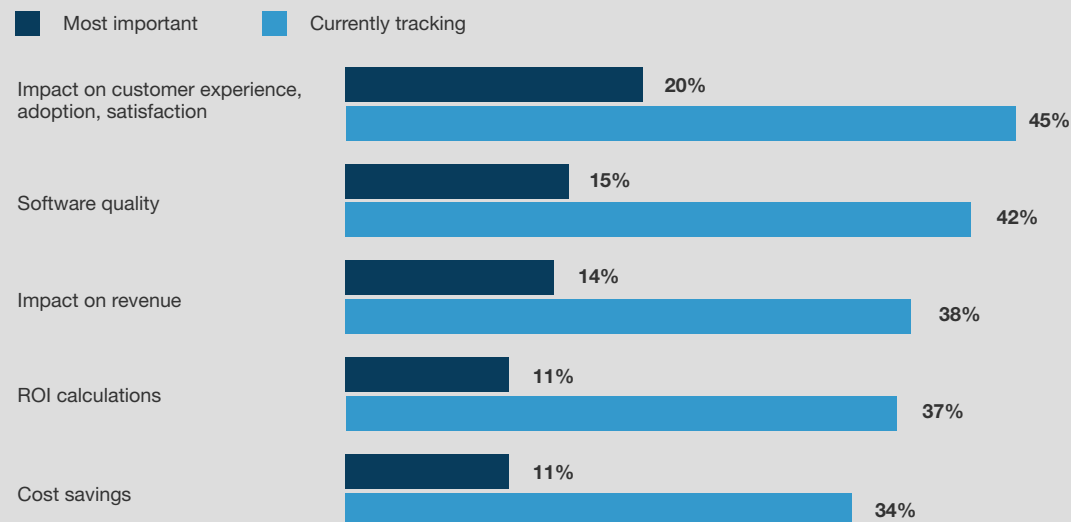(Showing top five; ranks 1-5)

■ All respondents

			CEO/senior biz exec
			CIO or equivalent
			Software leader

Improve the experience of our customers **55%**

Increase customer engagement and satisfaction **54%**

Grow revenue **53%**

Reduce costs **51%**

Improve use of data insights in business decision making **49%**

58% **61%** **48%**

Improve the experience of our customers

Base: 316 CEOs/senior business executives, CIOs or equivalent, and software leaders at global enterprises with more than 5,000 employees
Source: A commissioned study conducted by Forrester Consulting on behalf of Broadcom, August 2019

Figure 9

"Which of the following metrics do you track to determine effectiveness of software projects or packages?"

■ Most important   ■ Currently tracking

Impact on customer experience, adoption, satisfaction
20%
45%

Software quality
15%
42%

Impact on revenue
14%
38%

ROI calculations
11%
37%

Cost savings
11%
34%

Base: 316 CEOs/senior business executives, CIOs or equivalent, and software leaders at global enterprises with more than 5,000 employees
Source: A commissioned study conducted by Forrester Consulting on behalf of Broadcom, August 2019

FORRESTER®

Key Recommendations

Forrester's in-depth survey of 316 senior business and technical leaders about in-house software development starkly outlines the gaps in goals, expectations, and metrics between CEOs, CIOs, and software leaders. These gaps will compromise IT's ability to satisfy business leaders' demands for more software more quickly to drive their operations. Constantly evolving software is the lifeblood of a digital business's operations. To fill the gaps, CEOs, CIOs, and software leaders should:

Adopt practices that align business and software strategies. Top of this list should be a continual assessment of the value that custom software provides to the business strategy. Our finding that CEOs, CIOs, and software leaders are misaligned on software's importance to customer success is a symptom of a larger disagreement. What is more important than customer success? Documents, meetings, research, and other practices will foster agreement on software's value, business goals, schedules, cost, quality expectations, people and organizations, and metrics.

Make realistic investments in Agile software practices. "Agile" describes the key team practices and development processes required to deliver quality software quickly. Our survey raises a red flag: CEOs don't understand the results of investments in Agile, and they should — or risk funding a fig leaf for ineffective custom software organizations. Part of the responsibility rests with CIOs and their ability to communicate the results achieved by Agile investments. CIOs must also convey the difficult reality that Agile is a long-term journey with moments of high uncertainty and/or failure.
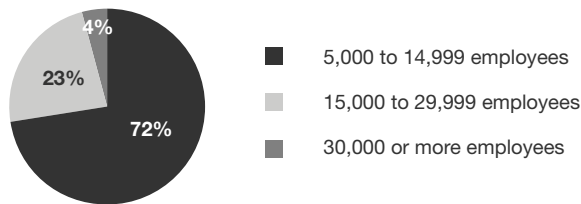
Implement the metrics that matter — business measures. Without metrics CEOs can use to measure the return on software investments, business-technology alignment is impossible. The traditional measures of software success — reduced operations costs — are still sometimes relevant and readily calculated. Even more relevant for most software efforts are business measures that are far more difficult to calculate. These metrics include time-to-market with new products and/or offers, market-share gains, and customer satisfaction, in addition to growth and profitability. Don't overthink these metrics; design one or two simple metrics that are good enough and then refine them with experience.
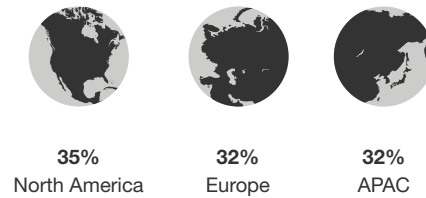
FORRESTER®

Appendix A: Methodology

In this study, Forrester conducted a survey of 316 CEOs and senior business executives, CIOs or equivalent, and software leaders at global enterprises with more than 5,000 employees to evaluate how effectively the CEOs, CIOs, and software leaders collaborate to drive business results. Respondents were offered a small incentive as a thank you for time spent on the survey. The study began in July 2019 and was completed in August 2019.
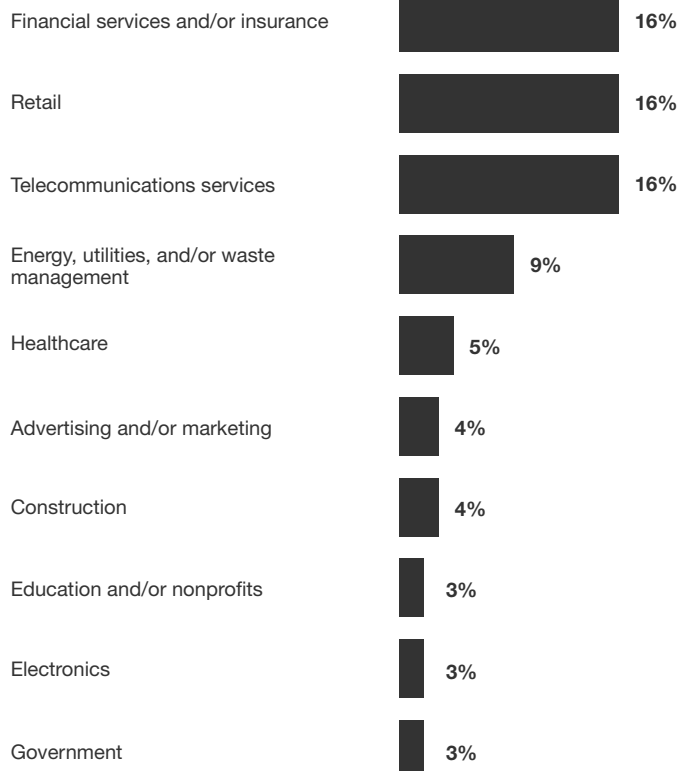
Appendix B: Demographics/Data

COMPANY SIZE

4%
23%
72%
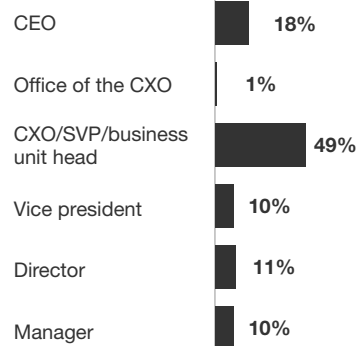
■ 5,000 to 14,999 employees
▫ 15,000 to 29,999 employees
▪ 30,000 or more employees

REGION

35% North America
32% Europe
32% APAC

INDUSTRY
(Showing top 10)

Industry	
Financial services and/or insurance	16%
Retail	16%
Telecommunications services	16%
Energy, utilities, and/or waste management	9%
Healthcare	5%
Advertising and/or marketing	4%
Construction	4%
Education and/or nonprofits	3%
Electronics	3%
Government	3%

RESPONDENT LEVEL

Level	
CEO	18%
Office of the CXO	1%
CXO/SVP/business unit head	49%
Vice president	10%
Director	11%
Manager	10%

Base: 316 CEOs/senior business executives, CIOs or equivalent, and software leaders at global enterprises with more than 5,000 employees
Note: Percentages do not total 100 because of rounding.
Source: A commissioned study conducted by Forrester Consulting on behalf of Broadcom, August 2019

FORRESTER®

Appendix C: Supplemental Material

"CEOs: Foster The Software Teams And Talents Your Firm Needs," Forrester Research, Inc., February 21, 2019.

"CIOs At Firms With Great CX Are Different," Forrester Research, Inc., March 8, 2018.

"Dare To Disrupt with Technology-Driven Innovation," Forrester Research, Inc., July 19, 2019.

Appendix D: Endnotes

[1] Source: "Agile And DevOps Adoption Drives Digital Business Success," Forrester Research, Inc., October 23, 2018.

[2] Source: "The State Of Agile 2017: Agile At Scale," Forrester Research, Inc., December 14, 2017.