## SECOND ANNUAL

State of

Æ

Transformative insights and growing trends from over 2,200 global IT Trailblazers salesforce research

1

## **About This Report**

For the second annual "State of IT" report, Salesforce Research surveyed more than 2,200 IT leaders worldwide to discover:

- The changing role of IT in a customer-driven era
- How technologies like artificial intelligence (AI) are advancing business
- Which traits divide top IT teams from the rest

In this report, high-performing IT teams are defined as those that rated both their IT performance and performance versus competitors as excellent. See page 3 for detailed performance information.

Data in this report is from a blind survey fielded January–February, 2017, that generated responses from 2,263 full-time IT leaders (not limited to Salesforce customers) in the U.S., Canada, U.K./ Ireland, France, Germany, Netherlands, Japan, and Australia/New Zealand. All respondents are third-party panelists. Due to rounding, not all percentage totals in this report equal 100%. All comparison calculations are made from total numbers (not rounded numbers).





Salesforce Research provides data-driven insights to help businesses transform how they drive customer success. Browse all reports at <u>salesforce.com/research</u>.

## About This Report

#### A Closer Look at IT Performance Categories

High-performing IT teams represent 15% of the overall survey population. For additional demographics, please refer to page 46.



## Table of Contents

Introduction: IT Enters a Customer-Driven Era	)	6
<b>01</b> Lines Blur between IT and Business Ur	nits	9
<b>02</b> The Innovation Imperative Tips the Sc	ales	13
<b>03</b> IT Tackles the Struggle for Speed		19
<b>04</b> IT Prepares for the Flood of Artificial Ir	itelligence	22
Last Look: Priorities of Top IT Teams		25
Country Profiles		26
Appendices		35
Survey Demographics		

### **Executive Summary** Four Key Takeaways

As companies increasingly adopt customer-centric models, IT stands at the crossroads of change. Business units like sales, customer service, and marketing turn to IT as a strategic partner.

Meanwhile, IT juggles the shift toward digital transformation and customer experience initiatives, pushing to deliver deeper levels of engagement, connection, and innovation.

### Lines Blur between IT and Business Units

(See page 9)

Most IT leaders agree that the industry is experiencing the biggest historical shift of its role. IT is changing from a cost center focused on infrastructure to a value-based service brokerage enabling business transformation. Today, IT is the central nervous system driving business success, partnering with departments to orchestrate experiences with connected data sources and new capabilities.

### 02

04

01

## The Innovation Imperative Tips the Scales (See page 13)

The battle between innovating and "keeping the lights on" is nothing new for IT leaders, yet the business' appetite for innovation grows stronger by the minute. Top teams are more likely to say it's a critical priority to innovate not only for differentiation but for industry disruption. At the same time, tech leaders are faced with critical skill gaps among staff in nearly every area of IT.

#### IT Tackles the Struggle for Speed 03

(See page 19)

Speed is a huge factor for IT teams; it's cited among top priorities, key performance indicators, and challenges. To improve speed, IT leaders are exploring low-code solutions (high performers even more so) - but hesitate to put business users in the driver's seat due to security concerns and insufficient governance or training. Still, most IT leaders plan to give business users some app-building capabilities, even if only on a limited basis.

### IT Prepares for the Flood of Artificial Intelligence

(See page 22)

Customers and employees alike have big expectations for the impact of intelligent technologies. However, not all IT teams are equal when it comes to their sense of urgency - or preparedness - for AI-related tech transformations. High performers plan to take advantage of these capabilities sooner than their underperforming peers and implement them across the business. Sales has an even more aggressive stance on implementing AI – indicating that IT may need to play catch-up to some of their counterparts when it comes to the impact of these technologies.

## **Introduction** IT Enters a Customer-Driven Era

IT has entered a new era transformed by customer expectations. Seventy percent of consumers say technology has made it easier than ever to take their business elsewhere, and 58% agree that tech has significantly changed their expectations of how companies should interact with them.<sup>1</sup> These shifts put pressure on IT teams to not only improve customer-facing tech, but transform it. Related sales, service, and marketing studies in the past year have shown macro-realignment around changing customer expectations and the ensuing competitive landscape.<sup>2</sup>

93% of high-performing IT leaders see themselves as the primary enabler of customer experience initiatives, versus 64% of underperformers.

As the *enabler* of customer experience, IT plays a critical partnership role for other business units. Without IT as the backbone, these departments fall flat on powering crucial customer experience initiatives.

### IT Makes a Big Move Toward the Customer Experience

With sales, service, and marketing units pushing hard on customer experience initiatives, IT is keenly aware of the shift toward customer-centric operations.



#### State of IT 7

## **Introduction** IT Enters a Customer-Driven Era

While much of IT's work happens behind the scenes, their efforts are at the forefront of customer interactions – for instance, improving data management capabilities to enable proactive customer engagement. Some IT teams are content to merely improve customerfacing tech, but high-performing teams take a greater interest in transforming it – which could mean introducing new capabilities, overhauling systems, or connecting systems of record with systems of engagement.

While 81% of all IT organizations are leading the business in digital transformation (up from 75% in 2016), high-performing teams are 2.8x more likely than underperformers to say transforming customer-facing technology is a critical priority.

### **Top IT Teams Focus on Transforming Customer Tech**

Customers' first interactions with companies often happen via some form of technology, whether web or mobile. Top IT teams are hyperfocused on transforming tech to provide the best possible experiences.



## **Spotlight** Employee Tech Is a Rising Priority

Customers aren't the only ones with heightened expectations. The consumer demand for mobilefirst, connected, and personalized experiences is seeping over into what employees want from their workplaces. **Seventy-one percent of employees want their companies to provide them with the same level of technology as they use in their personal lives.**<sup>3</sup>

A majority of IT teams say employee satisfaction scores are a very important success metric. They've also seen a rising level of importance placed on the employee experience over the past two years.

This trend is even more apparent among top teams. High-performing IT teams are 2.8x more likely than underperformers to strongly agree that digital employee experience-related projects are a higher priority compared to two years ago.

### **Employee Satisfaction Gathers Steam as a KPI**

A majority of teams take employee satisfaction scores into account when measuring their success. Additionally, they're looking beyond satisfaction on their own teams to ensure better digital experiences for employees across the business.

of IT leaders say that employee satisfaction scores are a critically or very important KPI 78%

of IT leaders say that projects related to **digital employee experience** are a higher priority compared to two years ago

# 01 Lines Blur between IT and Business Units

In the customer-driven era, IT can no longer function separately from business strategy and execution. IT has become the central nervous system driving business success, playing a key role in how business units leverage customer data and streamline cross-departmental processes (e.g., service teams upselling, sales and marketing collaborating, etc.).

As such, the role of CIO is fundamentally changing to the role of business leader.

75% of technology leaders say IT is currently in the midst of the biggest historical shift of its role.

Instead of being viewed as a cost center, IT is emerging as a value-based service brokerage. That is, the old model of IT as a maintainer of the status quo infrastructure is giving way to a new mindset, in which IT adds innovative capabilities that bring a competitive edge to the business. Seventy-four percent of IT leaders say the business teams they partner with believe IT is the biggest driver of business success.

### IT Takes the Center Stage of Company Strategy

Most agree that IT is changing from cost center to value-based service brokerage, serving as a key partner for business units to execute on customer-centric strategies.



#### Top Challenges for IT Teams Transitioning into a Value-Based Service Brokerage

Legacy infrastructure and platforms

Lack of staff skills/expertise to become value-based service providers

# 01 Lines Blur between IT and Business Units

One of the primary ways that IT teams are measuring success as service brokerages is based on business satisfaction scores. Despite 74% of IT leaders identifying business satisfaction scores as a leading key performance indicator (KPI), IT teams are only able to deliver on 56% of customer-facing business initiatives, on average. In other words, nearly half of these requests fielded by IT teams go unfulfilled.

To identify and prioritize the projects with the biggest business impact, IT teams are focusing on alignment across the organization. **Sixty-seven percent of IT teams say improving their collaboration with other lines of business is a high priority,** making it the second highest ranked in the category (second only to improving security policies and practices).

### **IT Now Functions as an Extension of Business Units**

To succeed in the customer-driven era, IT teams are partnering with business units to both unify and accelerate efforts.

of IT leaders believe IT functions as an extension/

partner of business units rather than as a separate function

## 01 Lines Blur between IT and Business Units

No matter how many business units exist within a company, customers see only one organization. They want all of their interactions – whether with sales, service, or marketing – to be consistent. That's why IT must consolidate customer data into a single source of truth. **Sixty-one percent of IT leaders say providing a single view of the customer is a high priority over the next 12–18 months; high performers are 3.2x more likely than underperformers to rate this as a critical priority.** 

High-performing IT teams are also at least 3.6x more likely than underperformers to rate the strength of their partnerships (with service, marketing, and sales) as excellent.

### Aligning Priorities across Business Units Helps IT Excel

While there's a substantial divide between the share of high-performing and underperforming IT teams that excel at cross-departmental priority alignment, there's room still for top tech leaders to get on the same page as their business unit partners.

## Percentage of IT Leaders Who Excel at Aligning Strategic Priorities across Business Units





## **Spotlight** Challenges Hinder a Single View of the Customer

Despite the fact that having a single view of the customer is a high priority for so many IT leaders, only 29% say they've integrated 75% or more of their data sources.

This is likely due to the highly distributed nature of customer data. With data housed in multiple legacy systems and lacking a consistent security model, it's difficult for IT to gain visibility in a consistent way.

The top inhibitors to gaining a shared single view of the customer are security/privacy concerns, hard-to-integrate legacy systems, and lack of visibility into where data is stored. IT leaders on average say they don't directly control 42% of enterprise technology. Technology that exists outside of IT's governance is a key factor contributing to lack of data visibility.

Improving security policies and practices remains the top critical priority for IT teams over the next 12–18 months, unsurprisingly, since this is foundational to customer trust and building deeper relationships.

### Lack of Data Visibility Inhibits IT Teams

As IT teams try to bring data together for a shared single view of the customer, they're hindered by hard-to-integrate legacy systems and lack of data visibility.

Top Inhibitors IT Organizations Face When Trying to Integrate Data Sources for a Shared Single View of Customer Data\*

1	Security/privacy concerns
2	Hard-to-integrate legacy systems
3	Lack of visibility into where data is stored

\* Partial list of responses.

With IT's increased focus on business value, it's no surprise that innovation is a top priority for tech leaders. But while 65% of IT teams say innovation for competitive differentiation is a high priority, **innovating for the business is the number one challenge for IT teams to meeting their strategic objectives.** 

The battle between innovating and "keeping the lights on" is nothing new for IT leaders, yet the business' appetite for better, more differentiated capabilities grows stronger by the minute. Fifty-seven percent of consumers say it's absolutely critical or very important for companies they purchase from to be innovative."

Top teams say it's even more vital to innovate for industry disruption, pushing the boundaries of change for radical solutions.

### **IT Leaders Innovate to Compete**

In an era when a majority of consumers say it's very important for companies they purchase from to be innovative, IT teams likewise feel they're competing on the basis of innovation.



High Performers vs. Underperformers **3.5**X more likely to say innovation for industry disruption is a critical priority

Even with all the talk of prioritizing innovation, IT leaders still spend more time on tasks that keep the lights on (54% of their time, on average). A majority of IT leaders are moving to automate routine tasks so their teams have more time to innovate.

Legacy technology and critical skill gaps also contribute to IT's innovation deficit (see page 18 for more). **More than half** (52%) of IT leaders cite legacy technology as a major challenge to meeting their strategic objectives.

### **IT Carves Out Time for Innovation**

IT leaders recognize that their teams need more time to innovate. Many are putting systems and processes in place to automate basic tasks, giving their teams the time that's required for innovative thinking.



While IT leaders grapple with legacy technology today, they're looking ahead to the technologies with potential to transform business in the near term. The top three technologies expected to have the most transformational business impact by 2020 are cloud computing, AI, and mobile technologies for customers.

Zeroing in on cloud computing, 83% of IT leaders say they feel more comfortable with their knowledge of cloud security than they did five years ago. Another 65% plan on increasing data stored in the cloud over the next 12–18 months.

### Cloud, AI, and Mobile Ranked as Most Likely to Reinvent Business

The top three technologies expected to have the most transformational business impact by 2020 are cloud computing, artificial intelligence (AI), and mobile technologies for customers.

#### Top Technologies Expected to Have a Transformational Impact on Business by 2020\*

Cloud computing
Artificial intelligence
Mobile technologies for customers

Partial list of responses. For the complete list, see page 43.

Salesforce Research

State of IT 15

In a service brokerage model, success depends on a thorough understanding of business units' needs. IT teams see that the business units they partner with are prioritizing technologies that aid in three primary areas:

- Intelligence
- Speed
- Agility (see page 17)

Top IT teams see that business units are moving beyond the basics of cloud. These teams display a keen interest in newer areas of tech – from IoT and AI to low-code development.

Although AI is a relative newcomer, it's considered a critical/high priority by nearly as many top IT teams as cloud computing, making it a hot topic for high performers.

### Business Units Seek Tech for Intelligence, Speed, and Agility

The biggest differences emerge between high performers and low performers around high-impact tech like AI and low-code development. Continued on page 17.



High Performers vs. Underperformers



In addition to prioritizing intelligence and speed, business units turn to IT for solutions to improve their agility in order to keep up with customer expectations.

Top teams are more interested in mobile tech for employees and customers, as well as collaboration technologies to improve their real-time communication.

It seems companies are relying on IT more than ever to deliver faster, smarter experiences for customers and employees alike.

### Business Units Seek Tech for Intelligence, Speed, and Agility (Cont.)

Core technologies like cloud, mobile, and analytics remain a high priority for all teams.



## **Spotlight** IT Faces Critical Skill Gaps in Nearly Every Area

IT organizations are facing critical skill gaps in nearly every domain. This not only contributes to their challenges around innovation, but also to their difficulties meeting day-to-day demands of the business.

The current gaps – highest in the areas of mobile development and security – already pose problems for IT teams. The projected outlook trends in an unfortunate direction, with anticipated skill gaps growing larger across the board.

Over the next two years, IT leaders have growing concerns about the skill gaps widening in fullstack development, IoT, data science, and mobile. While the rapid rise of AI and connected devices creates gaps around IoT and data science skills, mobile skills are also anticipated to lag behind in the mobile-native era.

Even the area that ranks highest for "no skill gap" is considerably low; only 22% say there's no gap in business domain knowledge.

### **Skill Gaps Loom for IT Leaders**

IT leaders are already dealing with the impact of the skills gap. Looking ahead, many expect these gaps will only increase over the next two years.

## Percentage of IT Organizations That Are Currently Experiencing or Anticipate Skill Gaps in the Following Areas

Internet of Things (IoT)/connected devices	26%	22%	35%	_
Data science	26%	20%	35%	
Mobile development	27%	21%	33%	
Full-stack development	23%	21%	37%	
' Application programming interfaces (APIs)/ systems integration	25%	20%	35%	
Development operations (DevOps)	23%	21%	35%	
Security	27%	20%	32%	
Business domain knowledge	22%	21%	34%	
	Current s	hort-term skill gap	Current skill gap that is also anticipated to continue	
Not current skill gap, but anticipated within two years				sforce Research

# 03 IT Tackles the Struggle for Speed

The topic of speed is everywhere for IT teams. It not only appears in top priorities (improving the speed of development cycles) and KPIs (speed of application/project delivery), but also ranks among the top challenges (the speed at which IT can complete projects). While IT teams strive for faster development and delivery, they haven't cracked the code just yet.

Only 45% of IT leaders can design/prototype an app per business requirements in under a month, and 47% can deploy an app in under a month. While such timelines may have been lofty goals a few years ago, they increasingly represent targets for IT teams to hit in order to meet customers' constantly evolving expectations.

### **Improving Speed Is a High Priority**

While speed of development and delivery is a high priority and important KPI, IT teams say the speed at which they can complete projects is the second biggest challenge to meeting strategic objectives.



## 03 IT Tackles the Struggle for Speed

Because of the demands for speed, relatively few IT organizations plan to increase time- and resource-intensive full-stack development (49% over the next 12–18 months). Instead, more teams are exploring low-code solutions. Nearly nine out of 10 IT leaders (88%) are already using or plan to use low-code solutions over the next 12–18 months.<sup>5</sup> IT leaders agree that low-code development will help not only with speed but also productivity, allowing tech staff to concentrate on more strategic initiatives and innovations.

High-performing IT teams especially understand the importance of improving the speed of development lifecycles; they're 2.9x more likely to say it's a critical priority over the next 12–18 months.

### Low-Code Lightens the Load for IT Developers

IT leaders see low-code development as a means of allowing tech staff to concentrate on more strategic initiatives and innovations.



Low-Code Snapshot Survey, Salesforce Research, February 2017.

## **Spotlight** Citizen Developers' Potential Grows

IT is beginning to explore citizen development (i.e., business users creating apps using IT-sanctioned development environments) as another means of improving productivity and accelerating development. But before citizen developers can reach their full potential, there are deployment considerations to address. IT leaders express concerns about IT governance and adequate training programs for business users and other nondevelopers. Only 24% strongly agree they have IT governance processes in place for nondevelopers to build apps, and 29% strongly agree they have adequate training programs in place.<sup>6</sup>

Still, most IT leaders plan to give business users some app-building opportunities, even if on a limited basis.

74% of IT leaders plan to increasingly shift some applicationbuilding responsibilities to business users over the next 12–18 months.

#### IT Sees Citizen Development as a Way to Improve Speed

IT leaders are looking to citizen developers as a way to increase staff productivity and improve development speed.

Top Factors Influencing IT's Plan to Provide Business Users with the Tools to Build Apps Themselves\*



\* Partial list of responses.

## 04 IT Prepares for the Flood of Artificial Intelligence

Customers and employees alike have big expectations for the impact of AI. Three-quarters of business buyers (and 51% of consumers) expect that by 2020, companies will anticipate their needs and make relevant suggestions before they contact them. Among employees, 65% agree that AI automating or assisting in workrelated activities will have a major or moderate impact on daily work life at their organization by 2020.<sup>7</sup>

While they're well aware of the rapid rise in AI interest, IT teams aren't fully prepared for its role in their organizations. Only 20% of IT leaders say that their technology plans regarding AI are comprehensively defined, and 23% say the same for their AI business plans.

### **IT Defines AI Plans in Response to Growing Demand**

As the AI wave continues to gain momentum, IT teams begin to solidify their plans for implementation. While many tech teams are actively defining AI plans, less than a quarter have comprehensively mapped their path forward.

State of IT 22

## Percentage of IT Leaders Who Say Their Plans for Artificial Intelligence Are Comprehensively Defined



High Performers vs. Underperformers

**2.9**X more likely to strongly agree they have a comprehensive plan for the business strategy around the use of emerging technologies

<sup>7</sup> "State of the Connected Customer," Salesforce Research, October 2016.

## IT Prepares for the Flood of Artificial Intelligence

Over the next 12-18 months, IT plans to primarily implement AI on a departmental scale. With this strategy, IT can see what works on a limited basis before rolling out across the business. For instance, they may test an AI component within the sales department's customer relationship management system before extending it to other business units.

In a separate survey of sales, service, and marketing leadership, the top three data sources ranked as critically or very important to their company's AI strategy were CRM systems, data warehouses, and social platforms. But confidence in implementation is lacking; only 25% feel completely confident in the technical skillset of employees to execute an AI business strategy.<sup>®</sup>

### **AI Plans Begin to Turn into Actions**

Among IT leaders who say they're using or piloting AI, 37% are implementing or planning to implement AI on a departmental level over the next 12-18 months.

#### Extent to Which Companies Using or Planning to Use AI Will Implement It over the next 18 Months



#### **High Performers vs. Underperformers**

X more likely to have already implemented or plan on broadly implementing AI across the enterprise over the next 12–18 months

## 04 IT Prepares for the Flood of Artificial Intelligence

All this adds up to IT teams anticipating 30% growth in AI use over the next 12–18 months. However, some of IT's partner business units have an even greater appetite for AI. Sales teams, for example, have a more aggressive stance on AI implementation, indicating that IT may need to play catch-up to some of their counterparts when it comes to the impact of intelligent technologies.

This gap in anticipated growth underscores the importance of IT becoming more aligned with business units, particularly during this transition into an intelligent era.

### IT and Sales Teams Both Expect Near-Term AI Growth

IT teams, looking to the broadest applications of AI across the business, expect AI use to jump 30%. Sales teams have an even more aggressive view on the anticipated use of AI in their department, emphasizing the need for alignment with IT.

#### Anticipated Growth in AI Usage by Each Department over the next 12-36 Months.<sup>9</sup>



Sales teams anticipate 139%

growth in AI that automatically recommends products to customers based on their preferences within 36 months

### Last Look Priorities of Top IT Teams

This report highlights many ways in which high-performing IT teams are operating differently from the pack. Our research revealed that these top teams have a trifecta of critical priorities – creating an overlapping relationship between innovating for disruption, gaining a single view of their customers, and improving the employee experience.



# Country Profiles

## **Country Profile** United States (500 IT professionals)



### **Country Profile** Canada (253 IT professionals)



### **Country Profile** France (250 IT professionals)



## **Country Profile** Germany (254 IT professionals)



## **Country Profile** Netherlands (250 IT professionals)



## **Country Profile** United Kingdom/Ireland (251 IT professionals)



## **Country Profile** Australia/New Zealand (250 IT professionals)



## **Country Profile** Japan (255 IT professionals)



Appendix

## Appendix IT Enters a Customer-Driven Era

A majority (84%) of IT leaders say they have a clear understanding of changing customer expectations; however, underperformers struggle to lead their organizations in this effort. Top IT teams are 1.4x more likely than underperformers to say IT is the primary enabler of customer experience initiatives and is leading the business in digital transformation.


## **Appendix** IT Enters a Customer-Driven Era

**The highest-performing teams understand that success starts from within.** High-performing IT teams are 1.4x more likely than underperformers to say employee satisfaction scores are a critically or very important KPI.



## Appendix Lines Blur between IT and Business Units

Legacy infrastructure and platforms is the top challenge IT teams face in transitioning from a technology-providing cost center to a value-based service brokerage. Top IT teams are 1.4x more likely than underperformers to say they're making the shift over the next 12–18 months.



## Appendix Lines Blur between IT and Business Units

**A successful IT strategy depends on alignment and collaboration.** High-performing IT teams are 1.9x more likely than underperformers to rate their alignment across lines of business as excellent or above average.



## **Appendix** Lines Blur between IT and Business Units

**Top teams see the importance of partnerships.** *High-performing IT organizations have stronger relationships with their service, sales, and marketing counterparts.* 



## **Appendix** The Innovation Imperative Tips the Scales

**Innovation matters.** High-performing IT teams are more likely to innovate to stand apart from the competition and to disrupt their industry.



State of IT 41

## **Appendix** The Innovation Imperative Tips the Scales

**IT leaders are turning to automation.** In order to improve efficiencies and make more time for their teams to innovate, IT leaders will ramp up automation.



## **Appendix** The Innovation Imperative Tips the Scales

**IT leaders believe cloud computing will have the most transformational impact on their business and operations by 2020.** Sixty-four percent of IT leaders say cloud computing is prioritized as the top technology by lines of business; however, only 31% say their plans for cloud computing are comprehensively defined.

Ranking of Technologies That Will Have a Transformational Impact on Business/Operations by 2020



## Appendix IT Tackles the Struggle for Speed

Across the board, IT leaders understand that the inability to deliver timely projects impacts the business' bottom line.

IT organizations continue to struggle with meeting their commitments, rating it the second biggest challenge to reaching strategic objectives. Meanwhile, underperformers also don't see a strong desire from lines of business to prioritize low-code development.



## **Appendix** IT Prepares for the Flood of Artificial Intelligence

**Top IT teams have more defined plans for AI.** High performers' use of AI over the next 18 months is more likely to be on a company-wide or departmental basis.



#### Extent to Which Companies Are Implementing or Plan to Implement Artificial Intelligence over the next 18 Months



# Survey Demographics

## **Survey Demographics**

#### Industry

High tech Manufacturing and wholesale	
Financial services	
Consumer products and retail	
Professional services	
Healthcare and life sciences	6%
Engineering, construction, real estate	6%
Communications	5%
Education	
Energy	
Public sector	
Automotive	
Media and entertainment	
Hospitality, travel, transportation	
Agriculture and mining	
Other	

#### **Company Size**

Small (1-100 employees)	17%
Medium (101-3,500 employees)	67%
Enterprise (3,501+ employees)	16%

#### Generation

Baby Boomers/traditionalists	10%
Gen Xers	
Millennials	39%

#### Country

United States	22%
United Kingdom/Ireland	11%
Germany	
Canada	
France	11%
Japan	11%
Netherlands	
Australia/New Zealand	11%

#### Region

EMEA	
NAM	
APAC	

#### **Apps Being Developed**

Employee-facing productivity apps	.40%
Partner-facing productivity apps	.27%
Customer-facing commercial apps	

#### **AppDev Environment\***

In-house, licensed tech platform	78%
In-house, open source tools	46%
Outsource to service provider/partners	41%
In-house, no licensed tech	4%

#### **Role Within IT**

Director, manager, or equivalent	38%
SVP or VP of tech or equivalent	
CIO, CDO, CTO, or other tech exec	
CEO, owner, or equivalent	17%

#### **Functional Area Overseen\***

Software/app development	56%
Software/app testing	47%
Network engineering/admin	
Development operations	
Security	38%
Systems administrator	
Systems analysis	
Product management	33%
Business analysis	
Enterprise architecture	



Browse all reports at <u>salesforce.com/research</u>.