To Recover From The Pandemic, Automate Operations To Free Budget For Innovation

COVID-19 Recontact Results From The March 2020 Thought Leadership Paper, "Improving Customer Experience And Revenue Starts With The App Portfolio"
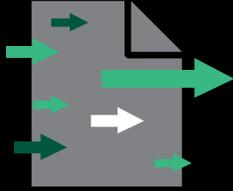
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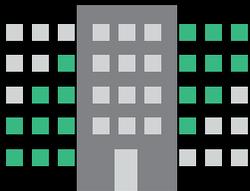
Introduction

The global COVID-19 pandemic has impacted nearly every aspect of our lives and businesses. The way executives are modernizing their application portfolios is no exception. Many enterprises and executives are suddenly shifting their software priorities, moving some projects to the front of the queue and pushing others back. Executives who remain positive and continue to experiment with new technologies and processes will learn the most from this crisis and position their companies to stay ahead of the curve. Conversely, executives who hunker down to avoid risk by sticking with older tools, technologies, and processes will find their businesses further behind than when the crisis started.[1]

Prior to the pandemic, VMware commissioned Forrester Consulting to evaluate executive sentiments about the state of their current application portfolios, their ability to create terrific end customer experiences, and the connection between the two. Forrester conducted an online survey of 614 respondents and six interviews with CIOs and SVPs from global enterprises across six industries to explore these sentiments.

In July 2020, VMware commissioned Forrester Consulting to evaluate how the pandemic has impacted those same executives and their ability to modernize their application portfolios. Forrester conducted an online recontact survey of 204 respondents from the original. We found that rapidly changing business and customer demands have had a significant impact on executives' priorities. In the original study, we saw that executives found customer experience (CX) to be critical; the pandemic has forced these executives to take a narrower focus and find the specific problems impacting CX and transform them.

KEY FINDINGS

> **The pandemic has forced executives to accelerate their innovation efforts.** The pandemic has created huge new populations of home/remote workers, led to budget cuts, and ramped up the digital demands placed on businesses by customers. Executives who can accelerate innovation to quickly meet these new customer demands will build customer trust that will outlast the pandemic.

> **Executives must reduce infrastructure costs to free up budget for innovation.** This finding is consistent with the pre-pandemic research: Executives were already spending too much time and too many resources maintaining legacy infrastructure. Automation is now even more critical. Through infrastructure automation and consolidation, decision makers must free up budget to apply directly to innovation.

> **It is time to reskill your remaining talent pool.** Most enterprises are experiencing a hiring freeze or a staff reduction. Executives can turn this potential negative into a positive by providing training and reskilling to their remaining staff to stay competitive during recovery. Leaders must 1) create a culture of continuous learning and personal growth to encourage agile thinking and a more fluid team structure and 2) leverage free training wherever they can.

Since the pandemic hit businesses, 54% of executives report it takes weeks to deploy apps to production. Read the pre-pandemic study here.

Half of executives say having too many different development environments or tools has become more challenging during the pandemic.

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The Pandemic Pressures Executives To Innovate

The pandemic has led to a rapid increase in customer demands. CX was already a key priority for executives before the pandemic, but now they must do more with less budget and less staff. Executives are now under face intense stress and pressure to innovate. We found that:

› **The pandemic has reordered business priorities.** Every executive must rethink his or her business priorities. A key change from the pre-pandemic study is a higher prioritization on changing company business models. The pandemic has highlighted to executives that their old business models cannot keep up with customer and market demands, which are changing at a never-before-seen pace.

Executives cannot allow the pandemic to bring their business to a halt; instead, senior leaders must look for opportunities to meet new customer needs. For example, retail execs who can expand their "buy-online, pick-up-in-store" capabilities and improve their online and in-store inventory management to offer contactless curbside pickup or delivery will delight customers and build trust. Healthcare executives have a similar opportunity for improvement; the pandemic has highlighted the need for improved inventory management at healthcare enterprises. Healthcare executives must drive improvements to quickly locate and manage their critical medical equipment to facilitate faster and more comprehensive customer care.

› **The pandemic has sped up innovation efforts.** Pre-pandemic, we found that 54% of executives considered their companies' ability to innovate (try new things, experiment with new technologies, explore new business models) average to poor. Executives face a difficult challenge here. Fifty-five percent of executives have seen their budgets decrease since the pandemic hit. Executives are looking for any opportunity to cut costs and reduce budgets.

As executives look to reduce infrastructure and operations costs, they must turn those cost savings around and spend them directly on innovation to meet their customers' needs. This requires executives to rethink their budgets. It is not an easy challenge to overcome, but executives who can be creative and improve innovation will see long-term wins.

› **Automation is now a must-have to meet new IT priorities.** Fifty-five percent of executives expect their IT budgets to be reduced in the next 12 months. This means that reducing infrastructure and IT operations costs can't wait, and automation is the only way forward. To reduce costs but keep infrastructure always on and always up to date, executives must automate every IT operations procedure, as fast as possible (see Figure 1).

The pandemic has created a new urgency: Processes that are critical to day-to-day operations but assume that workers and forms/files are in the same place crumble when most or all employees are working from home. While companies have long supported home knowledge workers, widespread home administrative workers are new. With little to no time to prepare, creating new processes to automate operations is essential to keep any business running.[2]

A key change from the pre-pandemic study is a higher prioritization on changing company business models.
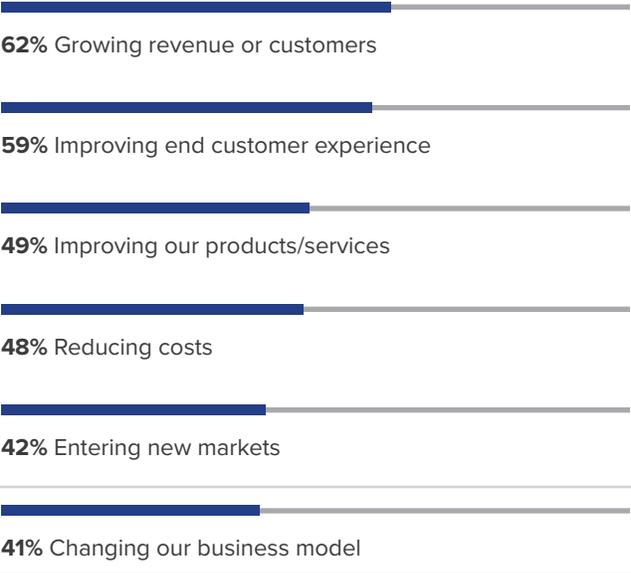
As a result of the pandemic, execs are **accelerating innovation efforts**:

- 61% to support employees working remotely.

- 56% to overcome revenue losses.

- 45% to meet new digital demands.

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Forward-thinking executives must also refocus their staff investments toward innovation. Part of that innovation investment must include reskilling and training — expanding resource investments in areas such as platform architects, platform delivery teams, and cloud platforms and services and maintaining investments in most other roles.[3]
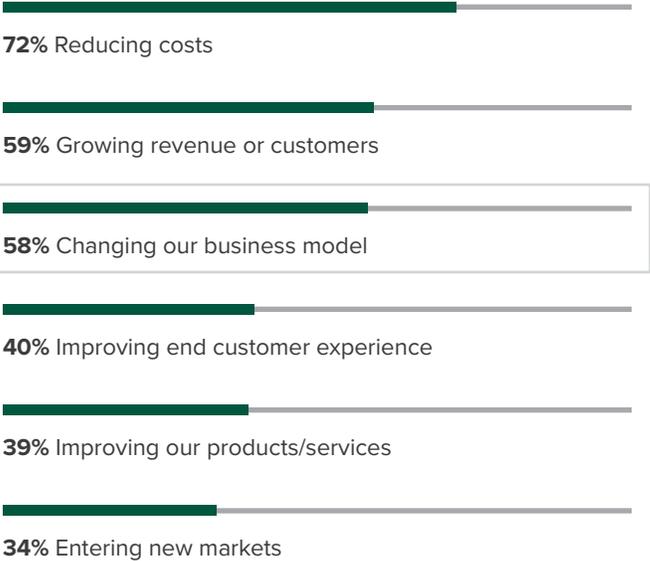
Figure 1

Original study: "Thinking about your entire business, please rank the following business priorities today in order of importance." (Top three rank shown)

62% Growing revenue or customers

59% Improving end customer experience

49% Improving our products/services

48% Reducing costs

42% Entering new markets

41% Changing our business model

Base: 614 CIOs and SVPs at enterprises in NA, EMEA, and APAC
Source: A commissioned study conducted by Forrester Consulting on behalf of VMware, October 2019

Recontact study: "Thinking about the impact of the COVID-19 pandemic on your entire business, please rank the following business priorities today in order of importance." (Top three rank shown)

72% Reducing costs

59% Growing revenue or customers

58% Changing our business model

40% Improving end customer experience

39% Improving our products/services

34% Entering new markets

Base: 204 CIOs and SVPs at enterprises in NA, EMEA, and APAC
Source: A commissioned study conducted by Forrester Consulting on behalf of VMware, July 2020

The Pandemic Necessitates Fast, Agile Software Delivery

The pandemic has brought into focus the real challenges executive face when improving software applications. As budgets and staff sizes dwindle, executives must abandon underperforming processes and focus on speeding up software enhancements that most directly and deeply impact CX. Key challenges to executives include:

› **A lack of DevOps culture impedes business growth.** As executives recover from the pandemic, their business challenges have changed to securing funding, aligning their strategy across multiple departments and teams, securing buy-in across the company, and a lack of DevOps culture and processes (see Figure 2). Compare these to the top business challenges IT executives/leaders faced pre-pandemic: proving the impact on CX, internal resistance to change, and meeting compliance requirements. This shift in top challenges reveals that as funds decrease, it is more critical than ever to have consensus across the company and to pool resources and skills.

Embracing DevOps automations solves a lot of the challenges executives face. DevOps practices ensure alignment across departments and teams and secure buy-in from leadership. DevOps practices allow for more agility and can create a culture where firms can fail fast and cheap. If executives react out of fear during pandemic recovery, they may perceive new DevOps operating model changes (e.g., moving from project to product teams) as too risky. They may even seek to reverse such changes. However, the safer response is to fall forward into the product team model. Siloed teams perform even worse when everything is remote. Distance further compounds the friction of work handoffs.[4]

› **Developers still struggle with development tool sprawl.** A top application environment challenge that has become increasingly difficult as a result of the pandemic is an overabundance of development environments and tools. Many executives are paralyzed by the uncertainty of how to modernize their apps.

Forrester has identified five approaches to app modernization: replatform (lift and shift), move then modernize, modernize then move, replace with software as a service (SaaS), or rebuild.[5] Commit to a modernization path and address this complexity quickly to ensure good CX.

Providing a consistent development environment is critical to overcoming security, speed, stability, scalability, and even cost challenges. As budgets and staff sizes decrease, automation is more important than ever to modernize applications with the speed and agility of rapidly expanding customer demands.

42% of executives have implemented a hiring freeze since the pandemic.

Figure 2

"Due to the impact of the COVID-19 pandemic, are the following business challenges more, less, or equally challenging as you improve your software applications compared to times before the pandemic?"

■ More challenging

60% Securing funding

56% Aligning strategy across multiple departments and teams

50% Securing buy-in across business leadership

48% Lack of DevOps culture and processes

38% Lack of skilled talent

36% Investment in legacy systems

34% Ineffective IT organizational structure

25% Meeting compliance requirements

21% Overcoming business silos

20% Proving the impact on end customer experience

17% Resistance to change from internal IT teams

Automation, Innovation, And Reskilling Staff Will Drive Faster Recovery

The pandemic's impacts are not going away anytime soon. This is a critical time for executives to empower their teams to sunset projects that aren't delivering. Utilize the time and budget from those projects to innovate. Team members and leaders are both feeling overwhelmed and isolated. Find the right balance between reacting to changing customer and business demands and models. But do not react out of fear; stay nimble and strategic during pandemic recovery. Recover faster by:

› **Reskilling employees during hiring freezes.** Only 21% of executives report they are still hiring. To match the speed of innovation needed to meet customer demands and overcome revenue loss, executives must reskill existing employees. Many partners and vendors are available to help with reskilling, but free courses and online training can help keep costs low. While 56% of execs say they are investing in training, only 23% strongly agree that the investment is needed — that number should be higher. And executives shouldn't forget to invest in culture, org structure, and sourcing skills either; breaking down those silos between IT and the business allows developers to focus on delivering customer value.[6]

› **Abandoning projects that do not directly improve CX.** Since the pandemic, executives have prioritized cloud migration and application modernization projects as a way of responding more quickly to new customer demands. Sixty-seven percent have canceled projects that do not have any immediate benefit to their business (see Figure 3). Leaders no longer see pet projects without a measurable impact on CX as high enough of a priority as budgets and staff sizes decrease.

To identify which projects to drop or postpone, look closely at the metrics you are measuring to ensure you are correctly measuring CX and meeting your current and future goals.
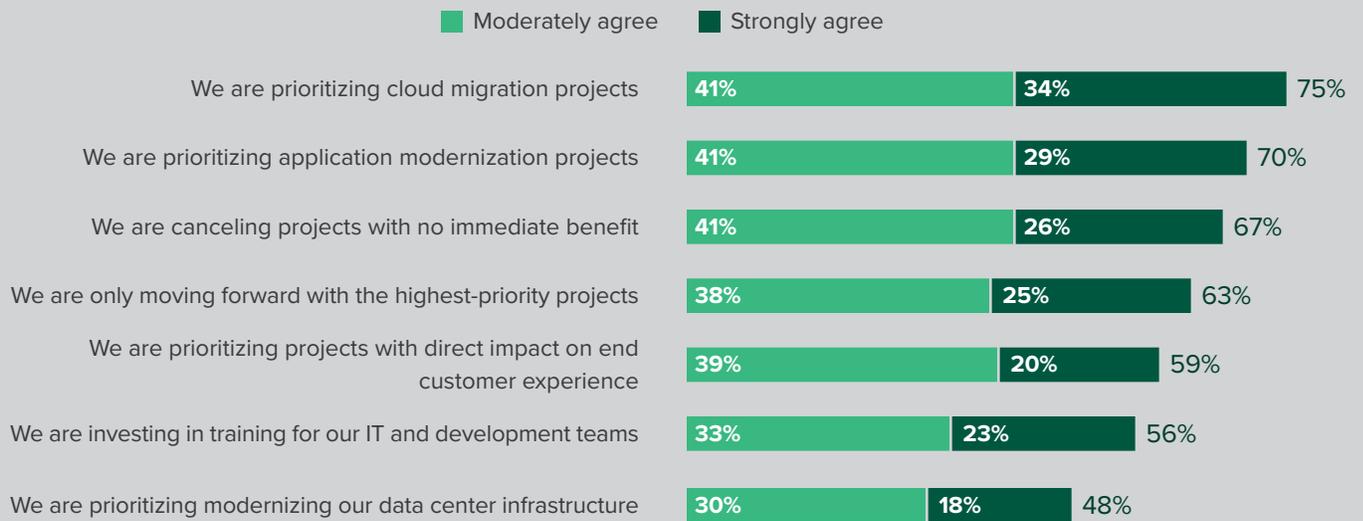
› **Simplifying complex application environments.** Knowing what applications are the most important to modernize is not always easy. Start with an application portfolio rationalization. Turn to your business stakeholders who are closest to your customers to understand what is most important (see Figure 4).

Once you've assessed your application readiness for modernization, turn to partners for help where you need it. In addition to traditional system integrators, IT vendors are offering migration and modernization services that include staff augmentation.

These professional services and training partners can help you decide which of the modernization approaches is best for each app. Partners may help you identify a new approach that works best for your cloud-native applications (e.g., the application was built/runs on the cloud). Partners can help identify an app's cloud-native readiness and recommend the best modernization approach (e.g., replatform, move and modernize).
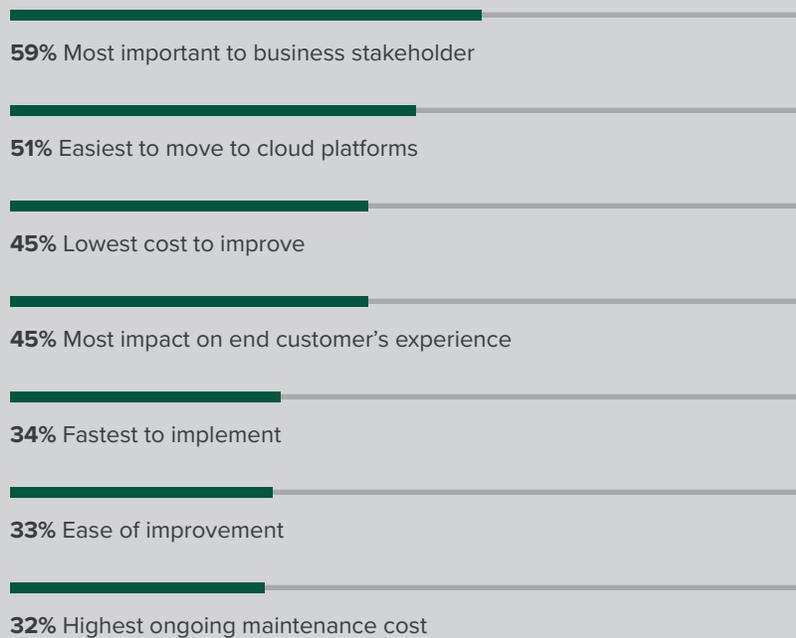
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Figure 3

"How much do you agree with the following statements about how the COVID-19 pandemic has impacted your project portfolio?"

■ Moderately agree ■ Strongly agree

Statement	Moderately	Strongly	Total
We are prioritizing cloud migration projects	41%	34%	75%
We are prioritizing application modernization projects	41%	29%	70%
We are canceling projects with no immediate benefit	41%	26%	67%
We are only moving forward with the highest-priority projects	38%	25%	63%
We are prioritizing projects with direct impact on end customer experience	39%	20%	59%
We are investing in training for our IT and development teams	33%	23%	56%
We are prioritizing modernizing our data center infrastructure	30%	18%	48%

Base: 204 CIOs and SVPs at enterprises in NA, EMEA, and APAC
Source: A commissioned study conducted by Forrester Consulting on behalf of VMware, July 2020

Figure 4

"As a result of shifting priorities due to the COVID-19 pandemic, which of following are most important when deciding which applications in your portfolio to improve first?" (Select top three)

59% Most important to business stakeholder

51% Easiest to move to cloud platforms

45% Lowest cost to improve

45% Most impact on end customer's experience

34% Fastest to implement

33% Ease of improvement

32% Highest ongoing maintenance cost

Base: 204 CIOs and SVPs at enterprises in NA, EMEA, and APAC
Source: A commissioned study conducted by Forrester Consulting on behalf of VMware, July 2020

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Key Recommendations

Pandemic recovery will take months to years, but executives who stay customer focused, agile, responsive, and willing to adapt in real time will be best positioned to recover the most quickly. Use this time as an opportunity to both narrow your focus and broaden your options to match your specific barriers to innovation with the best strategy for overcoming them.

Forrester's in-depth survey recontacting over 200 global executives about how the pandemic has impacted their priorities and businesses yielded several important recommendations:

Reduce infrastructure and operations costs to fund innovation. Facing budget cuts in the pandemic, savvy executives are making automation "job one." Drive out as much process inefficiency as possible from IT operations, and work with your hardware providers to add flexibility and pay-as-you-go options to your cloud and on-premises infrastructure contracts. Adopt infrastructure as code everywhere and empower your own IT automation "strike team."[7] Track all cost savings and reallocate them directly to innovation.

Don't underfund retraining and reskilling initiatives. Now is not the time to cancel training courses or certification programs. Add training and skills development to every tech manager's and developer's goals for 2020. Every dollar spent teaching your remaining staff how to automate software development, testing, and deployment; how to use the cloud and your cloud-native development platforms more effectively; and how to measure the impact of every app on customer experience will pay back in improved productivity, faster time-to-market, and better CX.[8] Also, encourage self-directed learning and experimentation by giving employees both time and permission to explore new technologies that spark their interest and help them become innovators themselves.
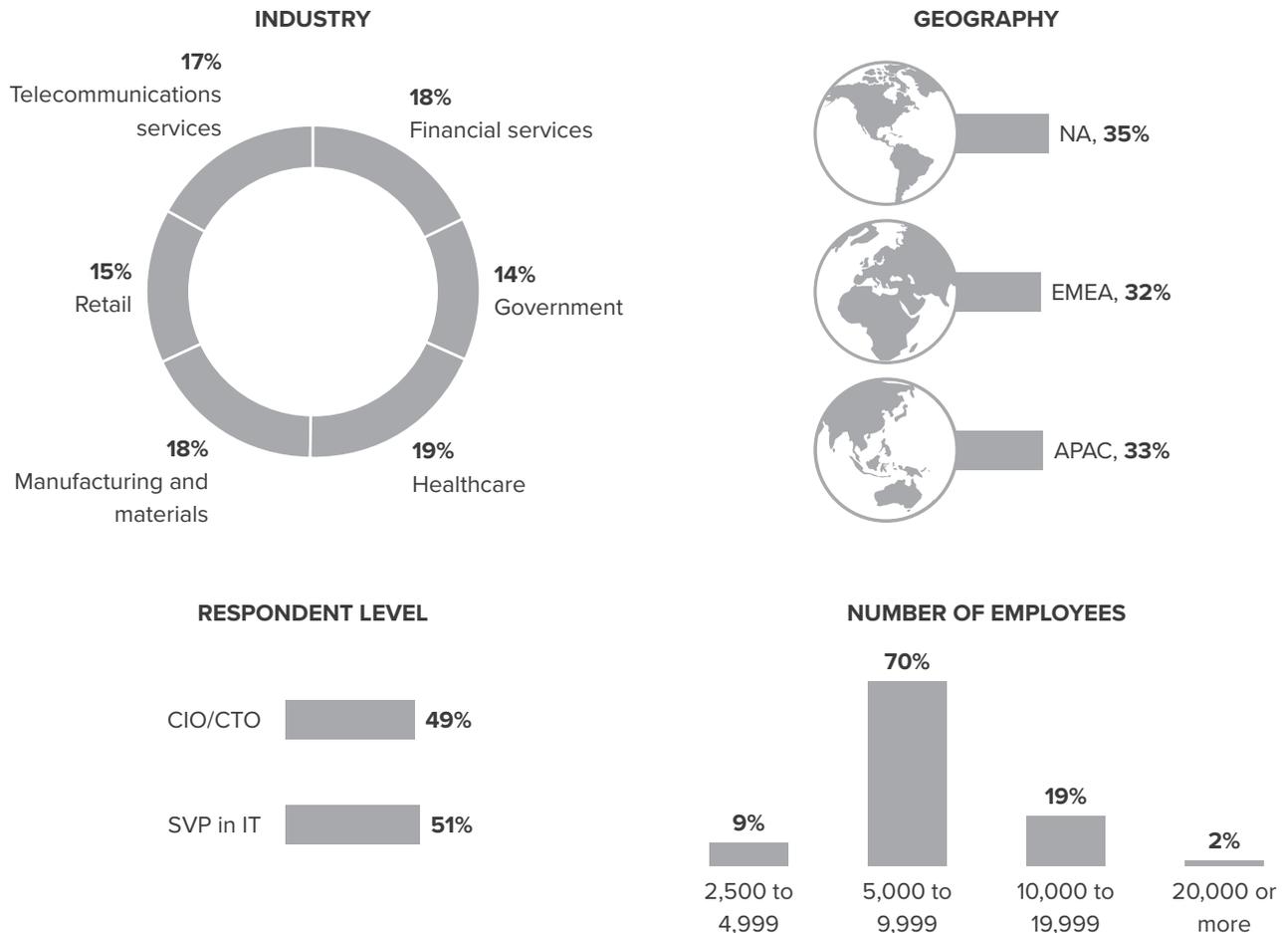
Simplify your application and development environments. Identify redundant or underused operational tooling and eliminate duplicates. Defund development projects that don't have a direct impact on customer experience that can be measured in months. Encourage developers, architects, and tech managers to narrow their focus to a smaller set of target platforms and toolchains. Also, leverage native monitoring, security, and performance management tools that are part of your primary development and cloud platforms before adding too many additional one-off tools; now is the time to sweat the assets you've invested in already.[9]

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Appendix A: Methodology

In this study, Forrester conducted an online survey recontacting 204 of the 614 original respondents and six interviews with CIOs and SVPs from global enterprises across retail, financial services, telecommunications, government, healthcare, and manufacturing industries to evaluate the state of their current application portfolios, their ability to create terrific end customer experiences, and the connection between the two. Questions provided to the participants asked about their challenges with improving application, the connection between application and CX, and their use of partners and emerging technology. The original study completed in October 2019. The recontact study completed in July 2020.

Appendix B: Demographics

INDUSTRY

- **17%** Telecommunications services
- **18%** Financial services
- **15%** Retail
- **14%** Government
- **18%** Manufacturing and materials
- **19%** Healthcare

GEOGRAPHY

- NA, **35%**
- EMEA, **32%**
- APAC, **33%**

RESPONDENT LEVEL

- CIO/CTO **49%**
- SVP in IT **51%**

NUMBER OF EMPLOYEES

- 2,500 to 4,999 — **9%**
- 5,000 to 9,999 — **70%**
- 10,000 to 19,999 — **19%**
- 20,000 or more — **2%**

Base: 204 CIOs and SVPs at enterprises in NA, EMEA, and APAC
Note: Percentages may not total 100 because of rounding.
Source: A commissioned study conducted by Forrester Consulting on behalf of VMware, July 2020

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Appendix C

ENDNOTES

[1] Source: "The Coronavirus Crisis Increases The Demands On Software And Developers," Forrester Research, Inc., May 20, 2020.

[2] Source: "COVID-19 Remote Work Just Broke Your Processes: Here's What To Do About It," Forrester Research, Inc., April 23, 2020.

[3] Source: "Where To Adjust Tech Budgets In The Pandemic Recession," Forrester Research, Inc., May 19, 2020.

[4] Source: "Agile, DevOps, And COVID-19," Forrester Research, Inc., March 23, 2020.

[5] Source: "Modernize Core Applications With Cloud," Forrester Research, Inc., August 5, 2019.

[6] Source: "Digital Transformation Requires Development Transformation," Forrester Research, Inc., December 13, 2019.

[7] Source: "Architect Your Automation Strike Teams To Accelerate Transformation," Forrester Research, Inc., October 11, 2019.

[8] Source: "Mind The Cloud Skills Gap," Forrester Research, Inc., March 11, 2020.

[9] Source: "Where To Adjust Tech Budgets In The Pandemic Recession," Forrester Research, Inc., May 19, 2020.

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