Forbes insights

IT TRANSFORMATION:
Success Hinges on CIO/CFO Collaboration

IN ASSOCIATION WITH:
DELL EMC

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INTRODUCTION

Enterprises throughout the world have made IT Transformation a priority in recent years. Unfortunately, despite investing heavily in time and money, many of them still haven't found the secret to gaining significant improvements in customer service and a clear competitive advantage from these efforts. Now, a new study helps explain why. Less-than-stellar IT Transformation results often center on problems that arise between two pivotal players — CIOs and CFOs — and their struggle to work together as a cohesive team. This is one of the conclusions from a global survey of 500 CEOs, COOs, CIOs and CFOs conducted by Forbes Insights and Dell EMC. The research found that a stunning 89% of senior executives acknowledge that significant barriers exist — ranging from outdated ideas about the role of CIOs to obsolete reporting structures — that keep CIOs and CFOs from collaborating more closely. The survey and a series of in-depth interviews with global IT and business executives also highlight other underlying frictions that thwart CIOs and CFOs from forming a united front to capitalize on the benefits of IT Transformation.

But a select group of enterprises that succeed in IT Transformation offers hope for ensuring that IT infrastructure modernization strategies can overcome these barriers and deliver concrete business results. In fact, companies that succeed in IT Transformation report the strongest competitive positions and high growth — with gains in both sales and profits of 7% or more in the past year. The research and interviews also show what best practices IT Transformation leaders have developed to overcome these barriers and use their digital prowess to increase the value of their businesses.

Note: Charts throughout the report may not add to 100% due to rounding.

KEY FINDINGS

89%

of senior executives surveyed acknowledge that significant barriers keep CIOs and CFOs from collaborating more closely on IT Transformation

Companies with the most successful transformation efforts see 7+% gains in sales and profits

85%

of global executives surveyed plan to spend up to a quarter of their total enterprise budgets on IT Transformation in 2018

75%

of global enterprises surveyed will invest in IT process reengineering, while 69% will automate IT as a service and 67% will install new server technologies

The top three investment areas in the next year will be big data platforms (77%), cloud services (76%) and social media activities (72%)

The top goals for IT Transformation are reduced IT costs (75%), being first to market with new products and services (73%) and reallocating funds to strategic business projects (67%)

Leading companies see significantly faster returns on their transformation investments, with a quarter registering paybacks within 12 months

THE STATE OF IT TRANSFORMATION

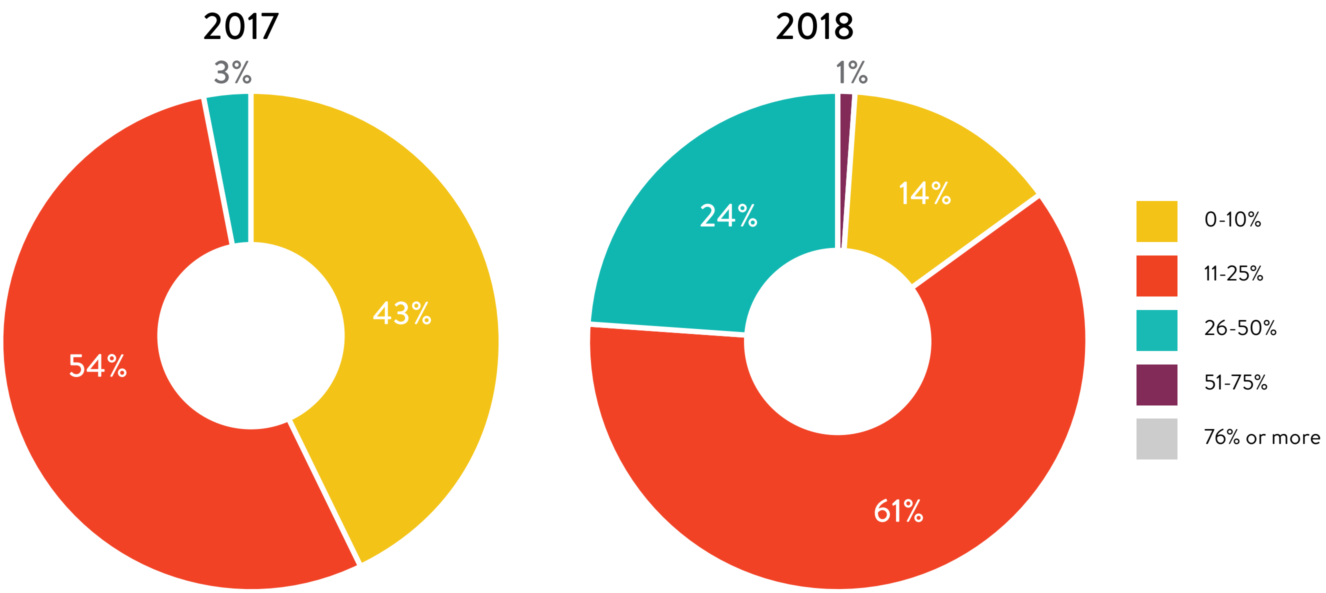
Successful collaborations between CIOs and CFOs are important because these key players provide the financial and technical skills necessary for IT Transformation, which itself is becoming a competitive differentiator. For example, while Panera Bread, GE Digital, Royal Resorts, Aviva and the U.S. Federal Communications Commission are in vastly different industry segments in different countries, they all see IT Transformation as essential for maintaining their competitive edge and addressing the shifting demands of customers. In fact, many executives consider technology innovation so important, they routinely describe their organizations as digital enterprises. "We're a restaurant company that's also a technology company," says Mike Bufano, CFO of the casual dining chain Panera Bread, based in St. Louis, summing up this prevailing attitude.

"We're a restaurant company that's also a technology company."

MIKE BUFANO, CFO, PANERA BREAD

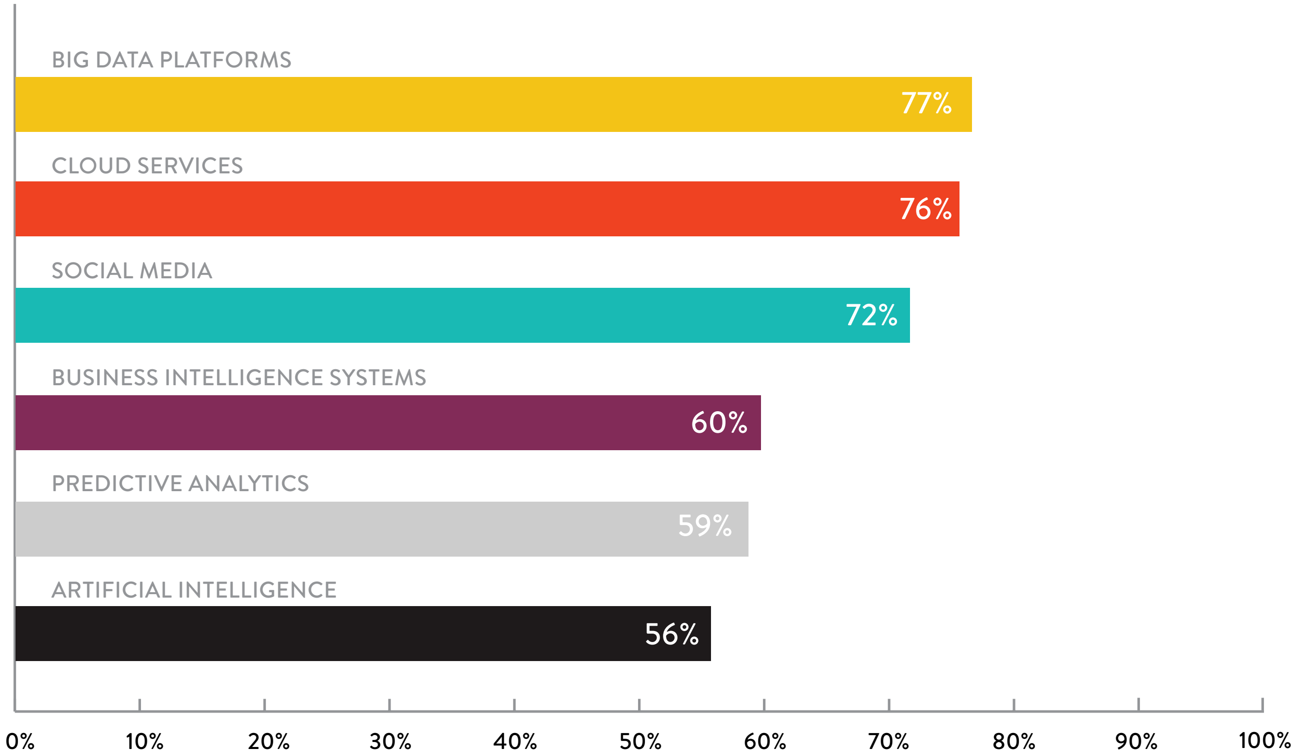
Enterprises aren't just talking transformation, they're placing big bets on modern IT infrastructures, with most respondents scheduled to dedicate up to a quarter of their total budgets to these projects this year, and the number of organizations dedicating up to 50% of their budgets rising nearly fivefold by 2018.

Figure 1. What percentage of your enterprise's total budget (including people, technology, services, etc.) is and will be earmarked for IT Transformation?



Overwhelmingly, these investments are focused on big data platforms, an area that 77% of the global executives plan to focus on in the next year. Other top investment areas are cloud services (76%) and social media activities (72%).

Figure 2. Which of the following technologies do you plan to invest in over the next 12 months to further transformation?

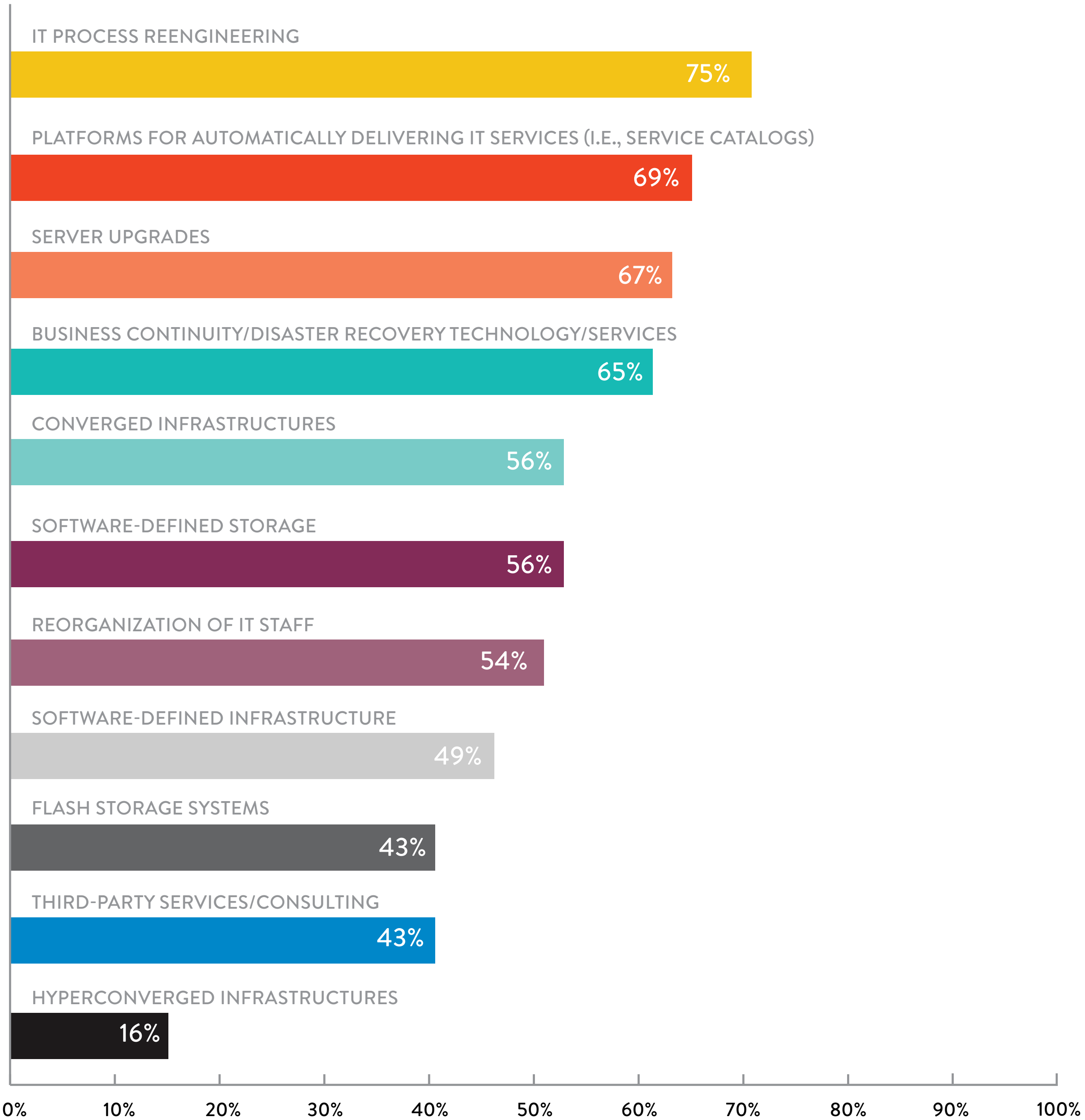


Global enterprises are focusing on these areas for a variety of reasons. Cloud computing in all its delivery models — from private and public clouds to hybrid and multi-cloud architectures — can exchange upfront capital costs for predictable operating expenses, and give enterprises flexibility to quickly spin up new services to match dynamic business needs. Predictive analytics, big data and business intelligence platforms offer greater insights into the current and future requirements of customers to help enterprises gain an edge over competitors.

In addition, as illustrated in figure 3, most IT Transformation efforts aim to make internal operations more efficient. To do that, three-quarters of the respondents will be taking advantage of IT process reengineering. In addition, 69% will install platforms for automating IT-as-a-Service, 67% will move to the latest server technologies, and 65% will enhance their business continuity/disaster recovery capabilities.

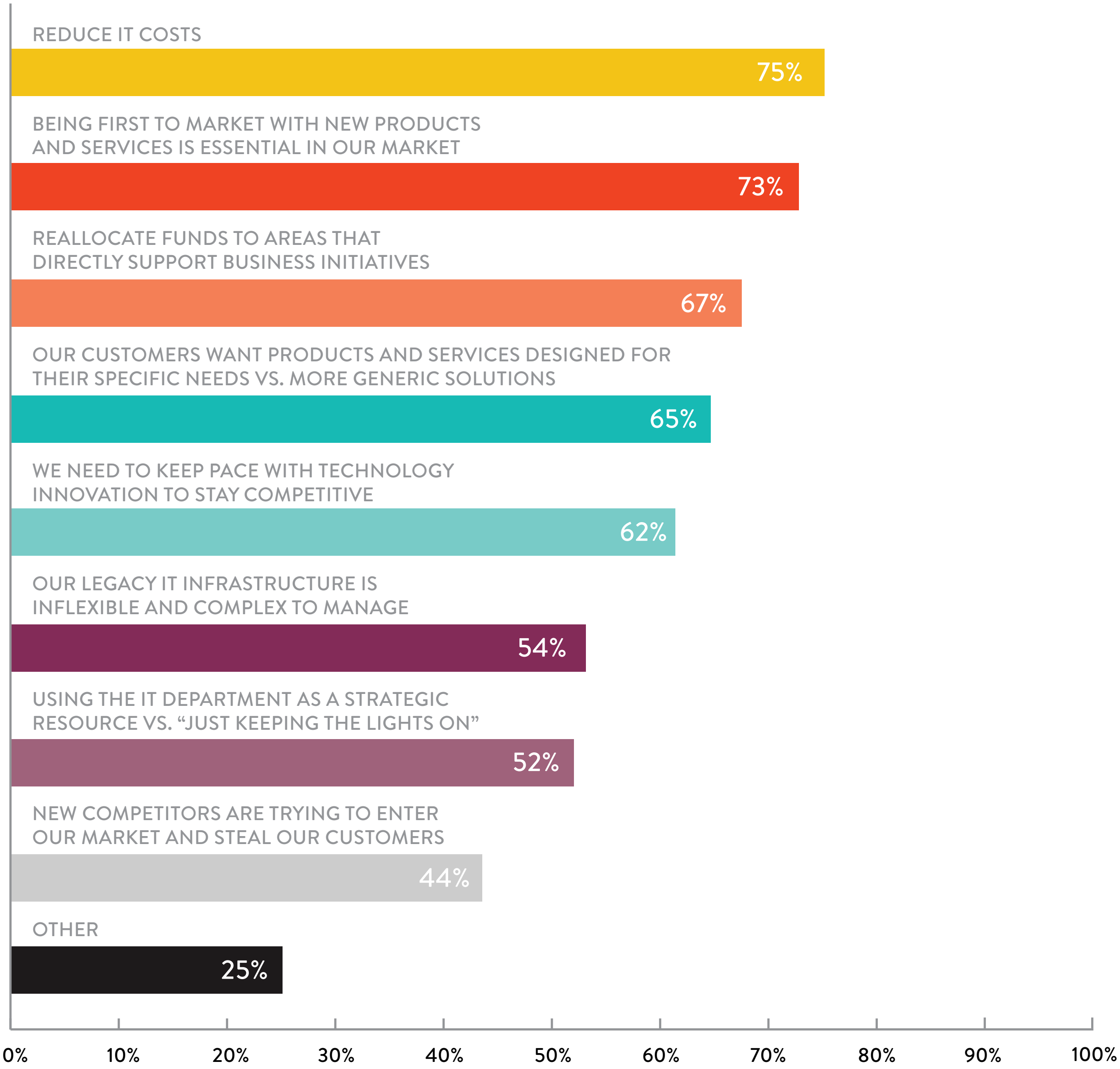
None of this is technology for technology's sake — senior executives have clear business goals in mind when they invest in IT Transformation. "If we're the slowest in our marketplace, we'll lose, so my job is to make sure we're the fastest," says Pete Marsden, digital CIO at Aviva, a worldwide provider of insurance, savings and investment products headquartered in London. "That doesn't mean I gold-plate everything — I have to think like a businessperson, like everyone else. But I also have to make sure we invest correctly in technologies and make the results as beneficial for our customers as we possibly can."

Figure 3. Which of the following technologies/initiatives do you plan to adopt or expand in the following year to modernize IT operations?



The most critical goals include the drive to reduce IT costs and be first to market with new products and services, according to 75% and 73% of the respondents, respectively. Sixty-seven percent want to reallocate funds for strategic business areas. But even with these levels of spending and upper management commitment, is IT Transformation delivering the payoffs global executives seek? Unfortunately, outcomes are mixed.

Figure 4. On a scale of 1 to 5 where 1 is "not important" and 5 is "critical," please rate which market forces are driving your company the most to consider/adopt an IT Transformation strategy.

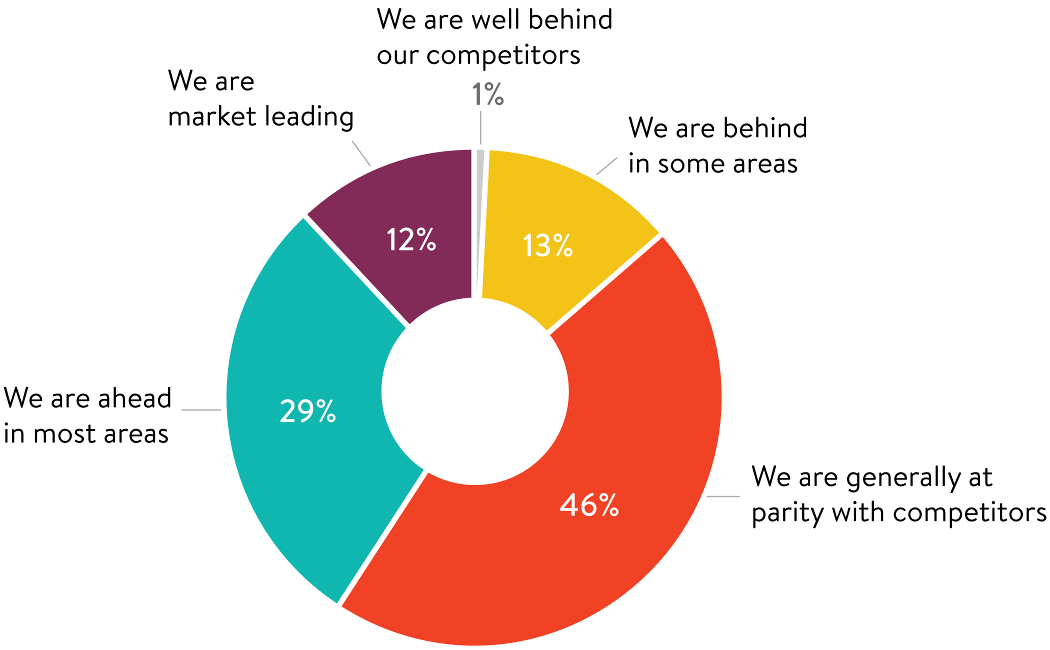


Note: Chart total shows responses for "Critical" and "Important"

TRANSFORMATIVE ORGANIZATIONS SEE MIXED RESULTS

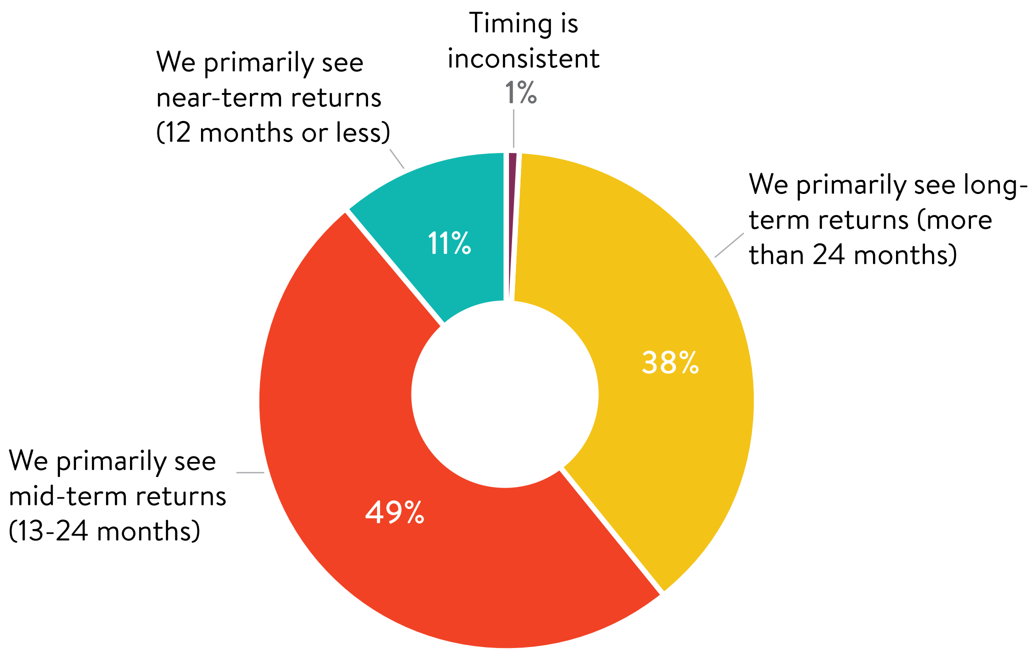
While IT Transformation is critical for business success at most organizations, there's a large gap between transformation leaders and their less advanced peers. What's more, the difference is having a significant impact on the value of transformation initiatives. For example, data from the Forbes Insights/Dell EMC survey found that many enterprises still aren't gaining a clear competitive advantage from transformation strategies. In fact, 59% say they've achieved parity, at best.

Figure 5. Which best describes your perception of your company's IT Transformation efforts relative to others in your industry?



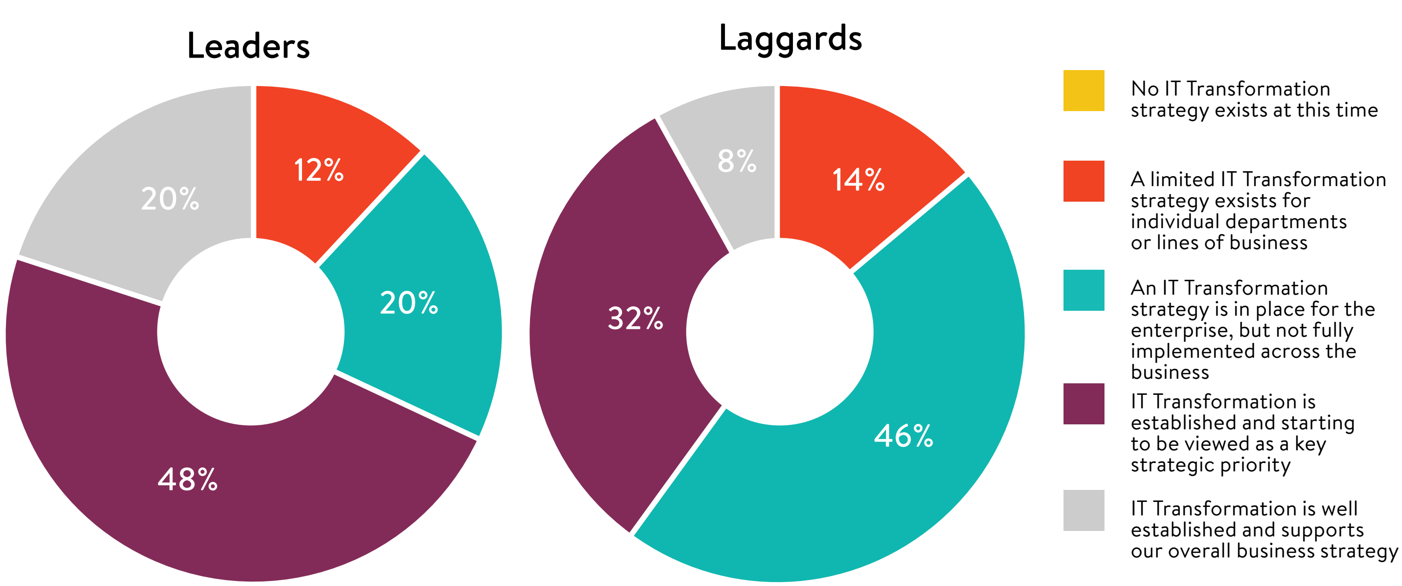
In addition, returns on investments may take years to realize. As illustrated in figure 6, only 11% see returns within a year, while more than a third must wait 24 months or more for full paybacks.

Figure 6. What best describes the timing of ROI for IT Transformation?



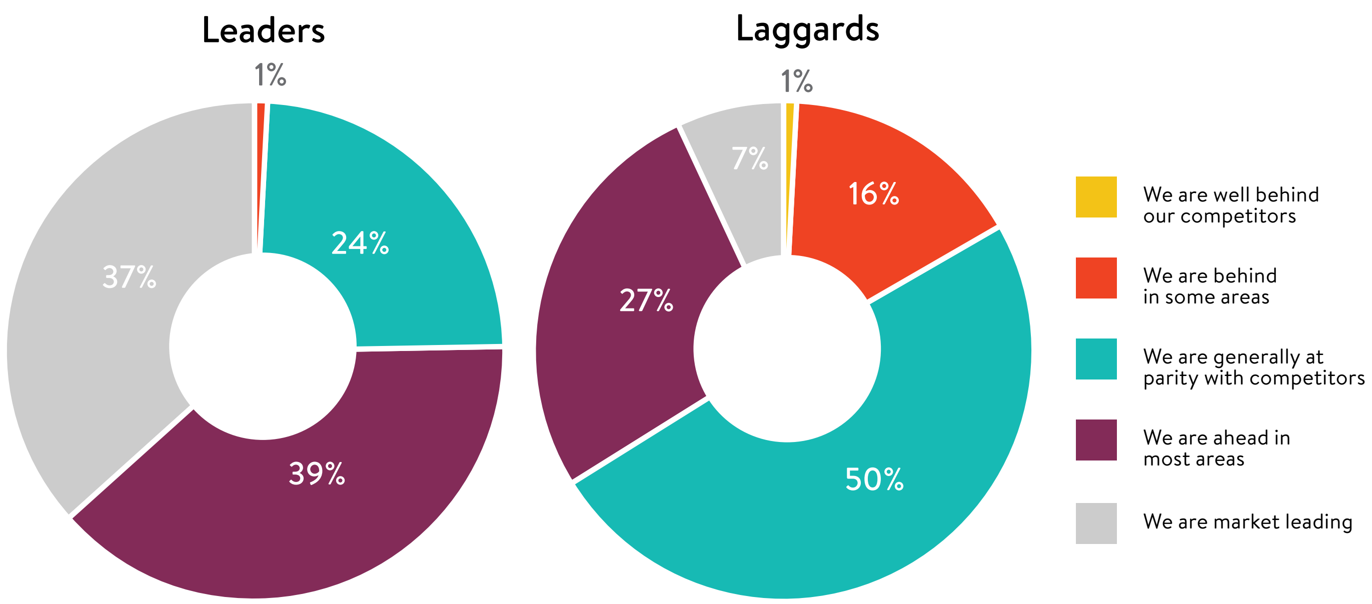
But these overall results don't tell the full story. A subset of global organizations has emerged as clear leaders in IT Transformation. The Forbes Insights/Dell EMC research segmented respondents into companies whose sales grew by 7% or more, whose profits grew by 7% or more, and that have seen a significant improvement in competitive position. This group demonstrates a direct correlation between business success and transformation maturity, with 68% of leaders rating IT Transformation as an established strategic priority and in many cases a component in overall business strategies. Only about 40% of the others say the same.

Figure 7. Please describe the current state of IT Transformation at your organization.



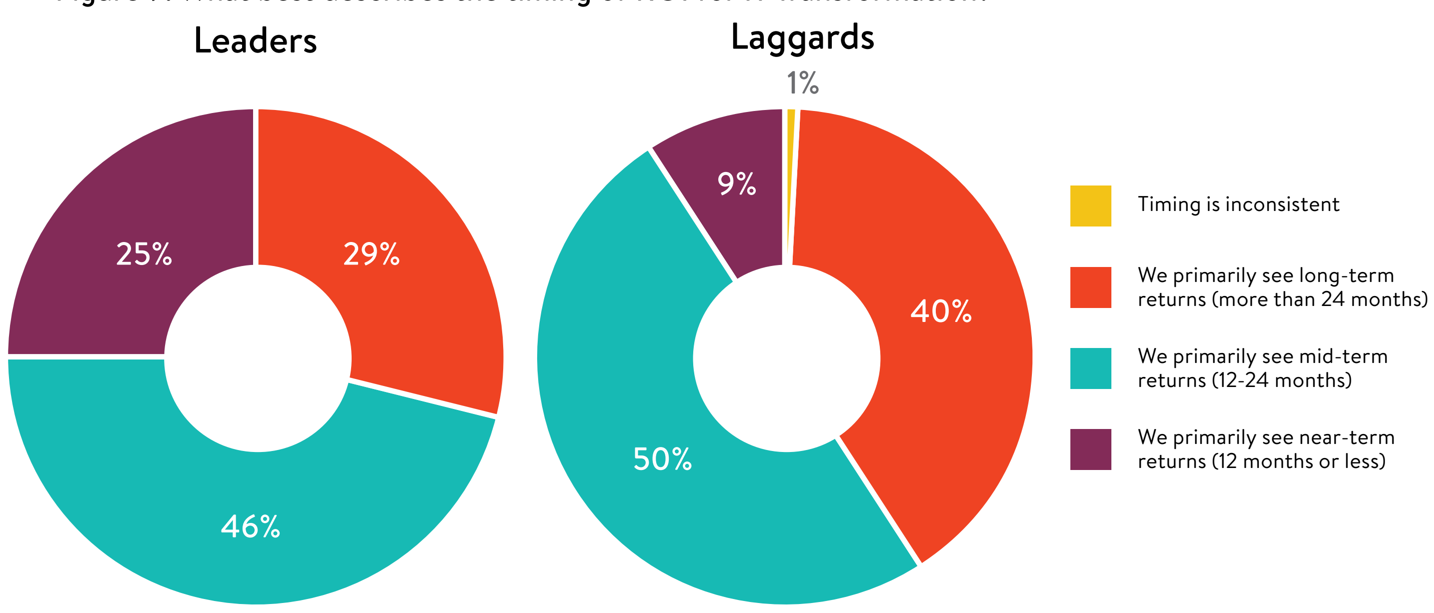
Leaders see clear advantages because of their status. Only 34% of their peers make the same claim. The leaders' head start is confirmed by self-assessments of transformation progress. ITT Leaders are more than twice as likely to report they are ahead of their competition, a sharp distinction from the 34% of laggards who offer similar ratings.

Figure 8. Which best describes your perception of your company's IT Transformation effort relative to others in your industry?



Leaders are also two and a half times more likely to report ITT ROI in 12 months or less.

Figure 9. What best describes the timing of ROI for IT Transformation?



INDUSTRIES THROUGHOUT THE WORLD EMBRACE IT TRANSFORMATION

Enterprises exemplify the link between business goals and IT Transformation across many types of industries.

INSURANCE AND FINANCIAL SERVICES

"Digital technologies are fundamentally impacting the types of products we sell," Aviva's Marsden says. "To bring new products to market very quickly, our digital systems must be flexible enough for us to change them every day — we can't wait six to 18 months to respond if the business comes up with a fantastic idea. As a result, I have to build incredible flexibility into our systems to make sure we can react at that kind of speed."

Clouds are a key component for achieving that level of responsiveness. The company is currently migrating almost all of its IT infrastructure, including web servers and client data, to a private cloud. "From an infrastructure perspective, cloud is incredible for giving us the speed we need to roll out new services," he explains. "I can request new computing capabilities, and the cloud provider can pretty much spin it up there. That's an incredible speed-to-delivery advantage for us."

When Marsden arrived at Aviva a couple of years ago, the company released about 20 new and updated digital products a year. In 2017 the number spiked to 200. "Every release represents new products for our customers and new opportunities for us to provide better service," he says.

TRAVEL AND HOSPITALITY

As with others in the hospitality industry, the shockwaves of digital transformation have rippled through Royal Resorts. Based in Cancun, Mexico, the company caters to tourists traveling to St. Maarten, Curaçao and its home country. It has launched a multi-year effort to transform its business model and modernize its IT infrastructure.

Royal Resorts built its success selling vacation club memberships to more than 40,000 travelers who wanted accommodations in prime getaway areas. Now, it's expanding beyond its established member base by using the web to significantly boost its rental business for non-club members, a move that increased revenue to $60 million from $8 million. In the process, Royal Resorts created a new business unit and started to offer all-inclusive deals that promote accommodations, meals and amenities. "The all-inclusive project was a huge disruption at our company," says Carlos Gonzalez Alvarado, CIO. "We now have four distinct business units, each of them very successful, but they're pursuing different goals, and the [business and IT] operations aren't well integrated. So, we proposed a way to align the business units in a single process around the customer journey, and that's the transformation effort we're working on now."

But because the company isn't satisfied with its ability to track and understand its core customers, it's now turning to the cloud. After a careful review, Royal Resorts is now narrowing its short list of cloud-based customer relationship management platforms. "Having modern capabilities in this area will have a significant impact on the whole organization," Gonzalez says.

DINING AND ENTERTAINMENT

Similarly, technology is changing how diners interact with restaurants, and for Panera Bread, that fuels the need for an IT infrastructure designed for e-commerce. Up to a couple years ago, about 60% of its sales were generated by eat-in customers, with the remainder from takeout business. As the number of eat-in diners per restaurant remains stable, the restaurant chain is seeing a sharp rise in to-go sales, which means it must find ways to improve customer experience for these guests.

More than a quarter of Panera's business is now ordered digitally, via mobile devices, computers or in-store kiosks. Panera's technology investments also aim to improve internal operations. To do this, it moved to a variety of cloud-based resources, such as Infrastructure-as-a-Service, as well as marketing and web analytics, recruiting and payroll applications. "If we have two sandwich lines running in a café during lunchtime, we use our digital systems to balance the order flow for each line," Bufano explains. "Once we built out our IT infrastructure, we've learned it can open up a wide variety of opportunities for us."

As a result, the company now earmarks nearly $40 million a year for technology capital, up from less than $10 million a few years ago. "Technology is a big part of that because it's become such a large part of everyone's lives," Bufano says. "We recognized pretty quickly that digital interactions with customers are some of the biggest sales drivers we have, so you have to give it room to grow and develop over time."

MANUFACTURING

"The intersection of business goals and information technology is essential to industrial firms today," notes Khozema Shipchandler, global CFO for GE Digital, a San Ramon, California, business unit within General Electric that is promulgating the Industrial Internet of Things (IIoT). As such, the parent corporation is in the unique position of both commercializing GE Digital's innovations and using them within its own manufacturing operations. Key IIoT components include sensors that collect performance and status data throughout manufacturing, service and supply chain operations. The information then flows to big data platforms in onsite data centers or in the cloud, where it's analyzed for ways to improve productivity or spot early signs of service problems before they cause downtime. Shipchandler notes that while productivity gains have plateaued at about 1% for industrial companies in recent years, the IIoT technology used internally has yielded gains of 4%, with related cost savings through more efficient supply chains, manufacturing lines and other corporate-wide activities.

GOVERNMENT AND EDUCATION

Since 2013, the CIO of the U.S. Federal Communications Commission has been leading a digital transformation effort designed to move the commission's IT infrastructure at its headquarters to public cloud and commercial providers. Thus far, the migration is about 40% complete. The result: In the past, 85% of the FCC's IT budget went to maintaining the legacy infrastructure, a percentage that has now dropped to less than 50%, says David Bray, the CIO who led the project and who was recently named to the new role of chief ventures officer at the U.S. National Geospatial Intelligence Agency. The cloud project achieved a significant reduction in legacy IT spend. Even though IT operations had a flat budget, the savings produced from its digital transformation effort will now help fund the FCC's continuous modernization efforts to its applications, so that it doesn't face a similar "legacy IT glut" in the future, Bray says.

The University of California Berkeley's Haas School of Business recently completed a $75 million building dedicated to teaching and collaboration between students, faculty and the rich Bay Area innovation ecosystem that features the latest in A/V and classroom technology. Behind the scenes, the business school relies on the cloud for email, office automation and collaboration applications. The project is part of a larger effort to leverage IT to transform the university's instructional methods. "Much of higher education still follows an old business model — the 'sage on the stage' lecture," says Kevin Cornish, CIO. "But with digital technology, we have new opportunities to partner with faculty to better engage their students. Methods range from delivering lectures prerecorded in our studio so students can consume information before class and then use the modern classroom resources for interactive discussions and group problem-solving activities to the development of highly engaging online courses that enable students to create a uniquely tailored path through the course content that meets their individualized learning objective."

OIL AND GAS

Petróleos Mexicanos (Pemex) is Mexico's leading petroleum company and for years operated as a state-run monopoly. That changed in 2013 when industry reform opened the firm to private-company competition. To succeed in this new environment, Pemex launched a multi-year IT Transformation effort designed to boost internal efficiency, end losses from oil thieves and enhance customer service for patrons of its franchised gas stations. To reach these goals, the company is relying on a range of modern IT platforms. "Pemex is big on big data, analytics and internet-connected industrial sensors," says Rodrigo Becerra, corporate director and CIO. "Digital transformation is important because it enables us to partner or compete with world-class companies, which themselves are undergoing massive technology changes. We'd better be at the same level, otherwise we are going to lose."

Pemex's transformation efforts are paying off. IIoT sensors installed throughout its supply lines provide early warning signals when underworld gangs pierce pipes to drain supplies to sell on the black market. Pemex officials estimate thefts have totaled about $1 billion in losses. "The phenomenon has been around for the last 10 years, but now we have analytics and the sensors to give us insights into the behavior of the thieves," he explains. "We haven't fully solved the problem, but we see improvement."

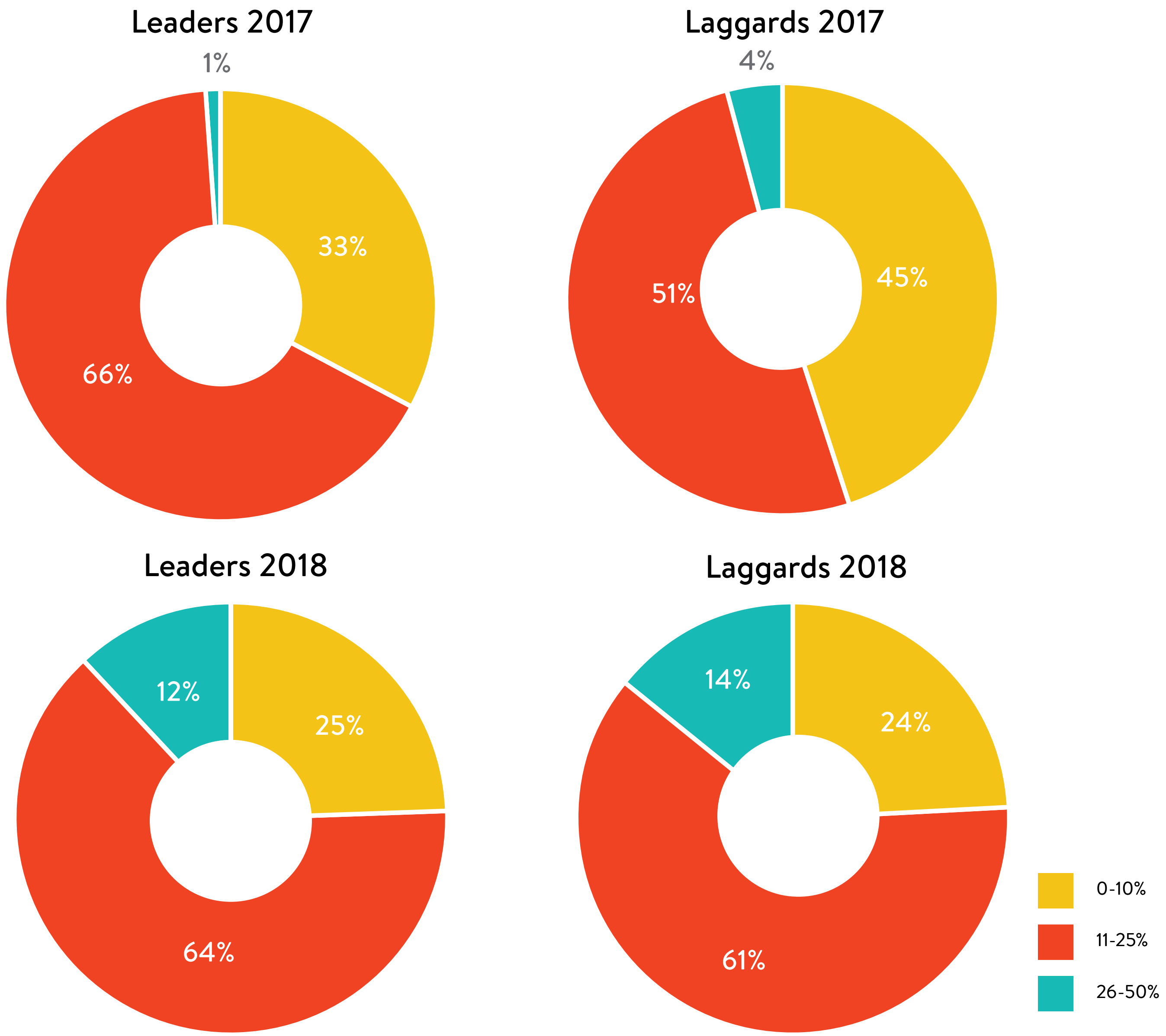
A similar project uses IIoT sensors and predictive analytics to mitigate unscheduled oil-rig and refinery downtime due to maintenance problems. Several pilot projects have demonstrated that this combination of transformation technologies can predict impending maintenance problems so crews can fix them before they lead to downtime, Becerra says.

Influenced by opportunities like these, the global respondents in the Forbes Insights/Dell EMC survey make it clear that IT Transformation isn't just an overhyped fad. They see it as a critical component for staying ahead of the competition over the next year, specifically when applied to customer support, finance, operations and business development departments.

CIO/CFO COLLABORATION: THE DISTINGUISHING FACTOR

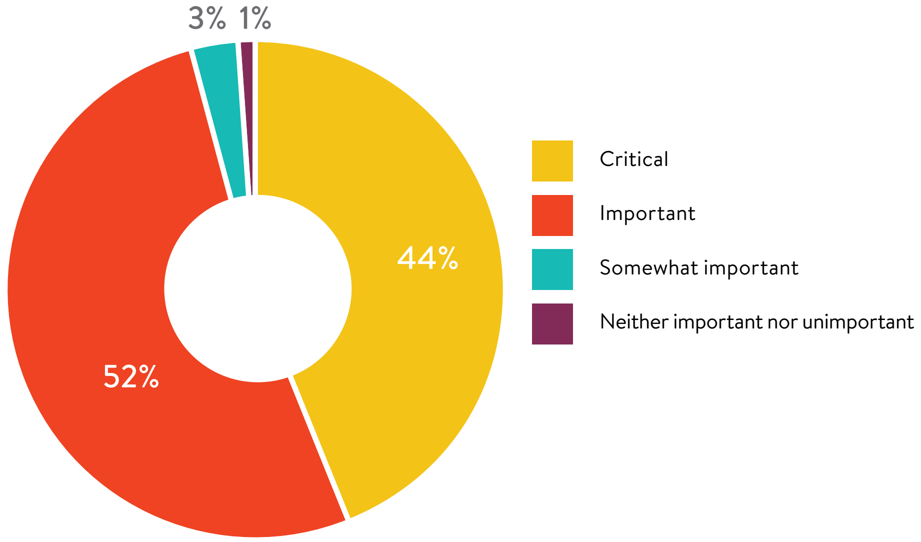
What's significant is that although leaders and laggards are seeing different outcomes, the results aren't a function of who spends the most for IT Transformation. This year and in 2018, both groups are devoting significant percentages of their total budgets in this area. It's clear that other factors are more significant for success than just the size of budgets.

Figure 10. What percentage of your enterprise's total budget (including people, technology, services, etc.) is and will be earmarked for IT Transformation?



The survey identifies a fundamental problem that leads to the different outcomes of leaders and laggards. Successful IT Transformation calls for CFOs and CIOs to join forces. For example, nearly all respondents (96%) see close CIO/CFO collaboration as being important or critical to business success.

Figure 11. On a scale from 1 to 5 where 1 is "not important" and 5 is "critical," please rate the importance of close collaboration between the CIO and CFO for business sucess in your industry.



However, only 11% of all survey respondents say they see no significant barriers to closer working relationships between CFOs and CIOs. Even members of these two groups indicate there's room for improvement: Only 36% of CFOs and 38% of CIOs describe their collaboration as "excellent." CIOs and CFOs point to different reasons for these breakdowns, while agreeing on others.

For their part, CIOs say some CFOs have outdated attitudes about the role of CIOs. "Collaboration is challenged when a CFO sees IT as just a cost center," says CIO Bray. But he also acknowledges the vital role CFOs serve. "Left on their own, CIOs may not know the overarching financial goals of the organization," Bray says. "That's why it's important to have a CEO, CFO or COO who can clearly outline the business and financial goals of the organization, and let the CIO identify the technical options for achieving them through IT Transformation. In turn, the CIO can offer choice architecture options to different stakeholders, be they the CEO, COO, CFO, or other division representatives. Specifically, strategy-savvy CIOs should frame what they propose as business cases. For example, by saying 'This system will get what you want quickly, at this price. While this system will take longer to deliver benefits, but it costs less.' CIOs should make the case that the speed at which IT organizations move is based on the financial and workforce fuels we are given. If either one is reduced, IT and organizational progress can be slowed or require dramatic shifts in how the organization operates to reduce legacy spending."

> "Collaboration is challenged when a CFO sees IT as just a cost center."
>
> **DAVID BRAY,** CIO, U.S. FEDERAL COMMUNICATIONS COMMISSION; NEWLY NAMED CHIEF VENTURES OFFICER, U.S. NATIONAL GEOSPATIAL INTELLIGENCE AGENCY

Collaboration problems are exacerbated by conflicts arising from traditional reporting structures and a lack of new incentives aimed at fostering closer cooperation between CIOs and CFOs.

Figure 12. What are the biggest barriers keeping CIOs and CFOs from collaborating most closely?

(Please select the top two)	CEO	COO	CFO	CIO
Conflicting responsibilities and priorities	20%	20%	20%	20%
CFOs' lack of sufficient technical expertise	35%	31%	20%	29%
CIOs' lack of business expertise	34%	46%	30%	25%
Conflicts arising over traditional reporting structure	38%	34%	35%	29%
Lack of incentives to work more closely together	18%	43%	18%	32%
CFOs have outdated attitudes about the primary role of the CIO	45%	23%	30%	30%
No clear mandate from CEO/board	3%	0%	16%	11%
There are no significant barriers	3%	0%	13%	13%
Other	0%	3%	1%	0%

Note: Highlighted cells represent the two top choices for each title.

"The finance team becomes a barrier if the discussions are only about the budget and how to run as lean as possible. That's a losing attitude for IT Transformation."

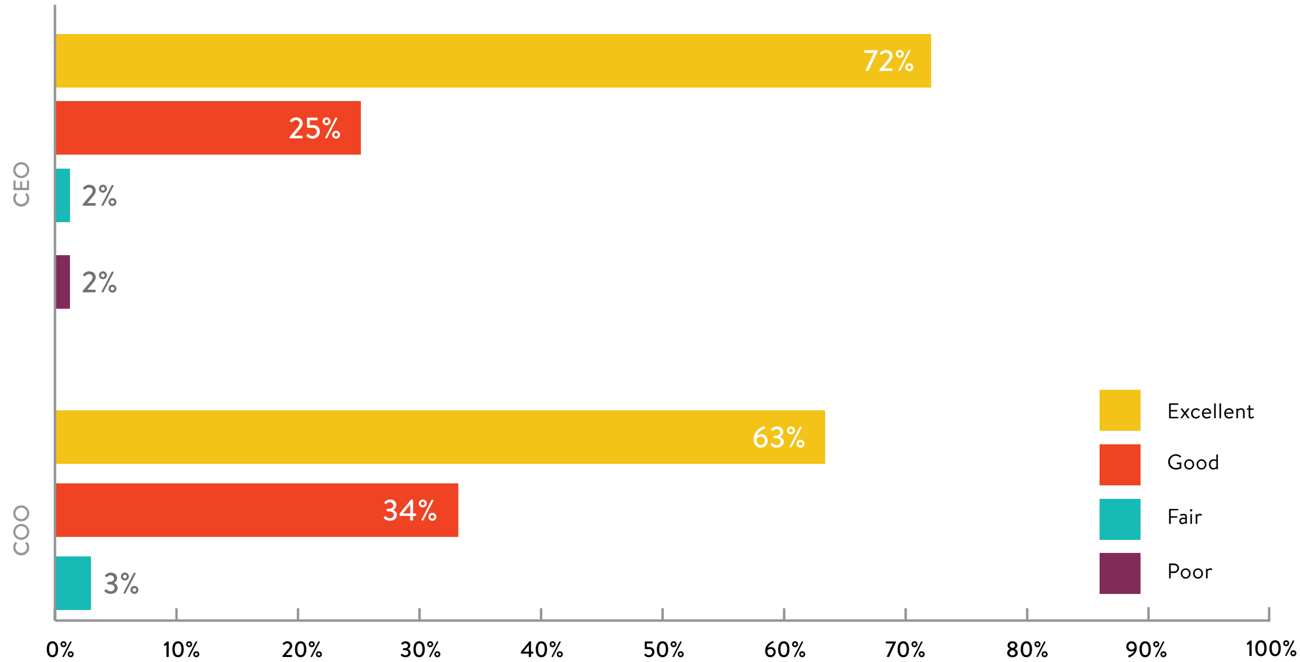
KHOZEMA SHIPCHANDLER,
GLOBAL CFO, GE DIGITAL

On the other hand, CFOs point to problems stemming from a lack of business expertise among CIOs and the conflicting priorities of the two groups. But what's surprising is that CFOs agree with CIOs about one key problem: Like their technology counterparts, CFOs acknowledge that their own attitudes about the role of CIOs are outdated.

"The finance team becomes a barrier if the discussions are only about the budget and how to run as lean as possible. That's a losing attitude for IT Transformation," Shipchandler says. "Conversely, barriers arise when the metrics used by the IT team to define success don't have a financial underpinning. But once both sides can agree to give and take in both areas, they can develop a much more constructive relationship and ongoing dialogue."

That's the desired goal, but what's particularly alarming is that when friction between these two groups prevents that from happening, most senior executives may not even be aware of the problems. When asked to rate the effectiveness of CIO/CFO collaboration, nearly three-quarters (72%) of CEOs and 63% of COOs consider it excellent.

Figure 13. How would you rate the effectiveness of CIO/CFO collaboration at your company?



Left unaddressed, CFO/CIO frictions may torpedo IT Transformation and business goals. By a wide margin, as illustrated in figure 14, the respondents see the risk of falling behind competitors as the biggest consequence of poor collaboration. This concern is sobering considering that the top IT Transformation goals cited earlier by respondents are being first to market with new products and services, along with successfully blocking new competitors from entering markets and stealing customers. Clearly, overcoming CFO/CIO breakdowns is a must for achieving desired results.

On the flip side, as illustrated in figure 15, organizations have a lot to gain when these two groups are in sync, in particular the ability to react more quickly to market changes, according to the global executives.

For example, Cornish maintains close working relationships with the school's executive leadership team, whom he characterizes as a transformation-oriented group. "We frequently connect to discuss ideas for expanding the reach of the university, focusing on how to increase our reputation and grow revenue in order to service our mission."

Pemex's Becerra also sees mutual benefits from forging close ties with the CFO. "I was able to offer him technology to give him greater visibility into the financial structure of the company and the individual business units, which he hasn't had before," Becerra says.

A strong financial core, in turn, opens up resources for digital transformation. "Let me put it this way: We are partners in crime," Becerra says. "We're working to create a uniform financial platform, as well as a uniform technology architecture together."

Figure 14. What are the biggest consequences you see when CIOs and CFOs don't work together successfully? (Please select the top two.)

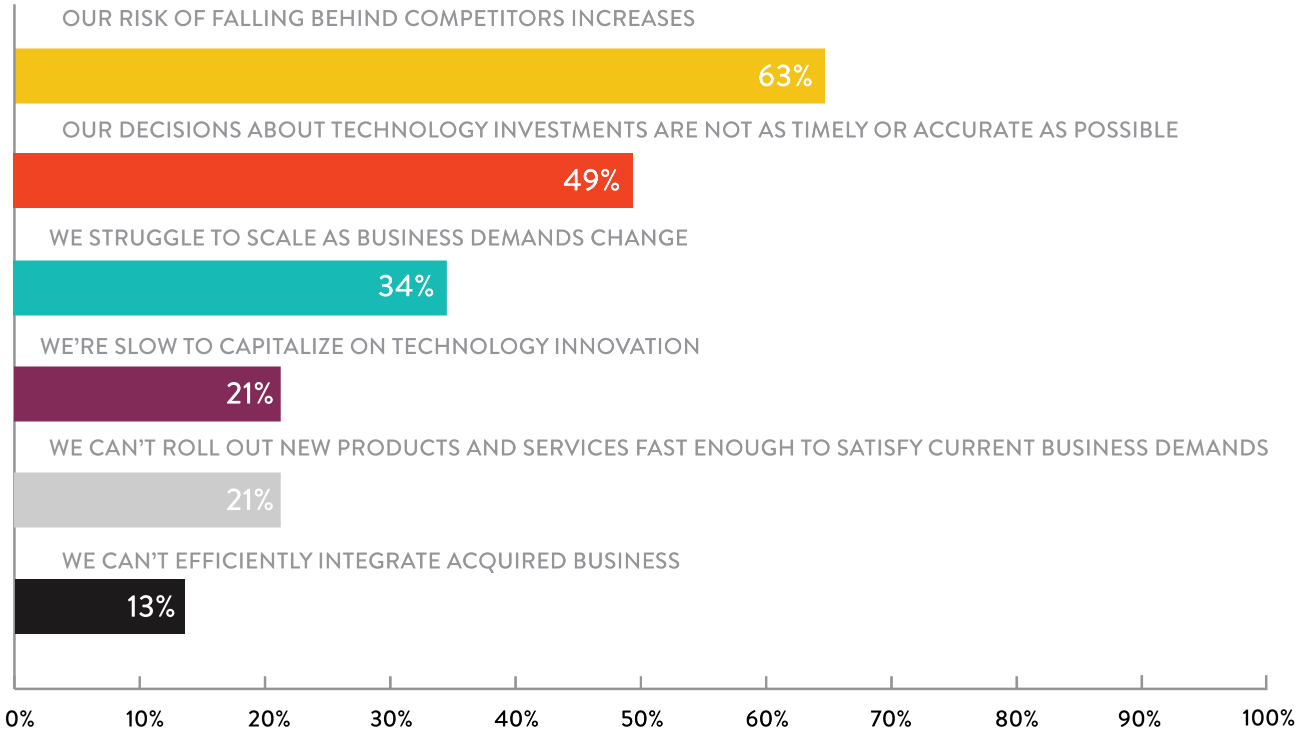
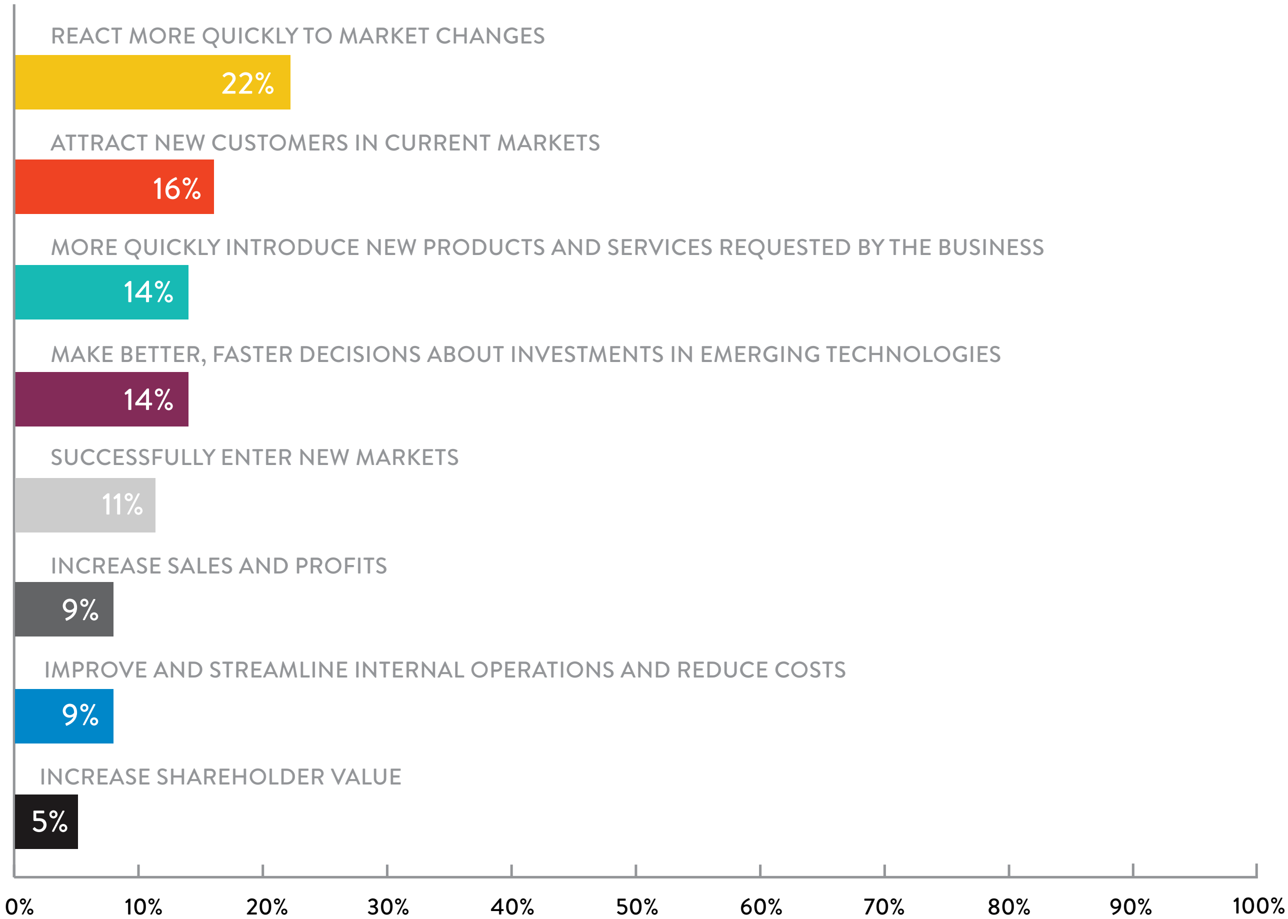


Figure 15. What are the biggest benefits that you see arising from closer CIO/CFO collaboration?

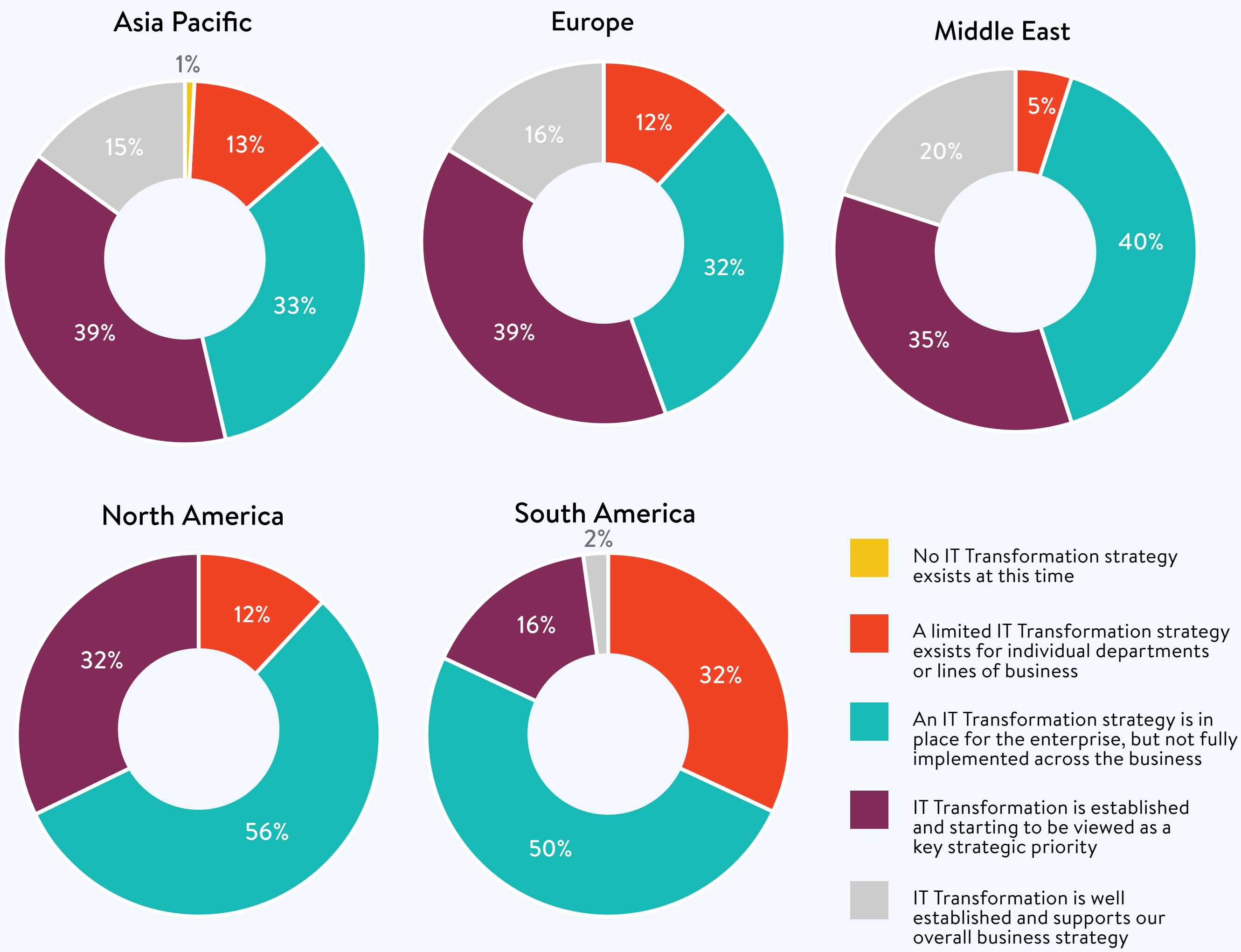


GLOBAL TRENDS

IT Transformation is a global imperative, and the Forbes Insights/ Dell EMC research reveals differences in transformation maturity and challenges across Asia Pacific, Europe, the Middle East, and North and South America.

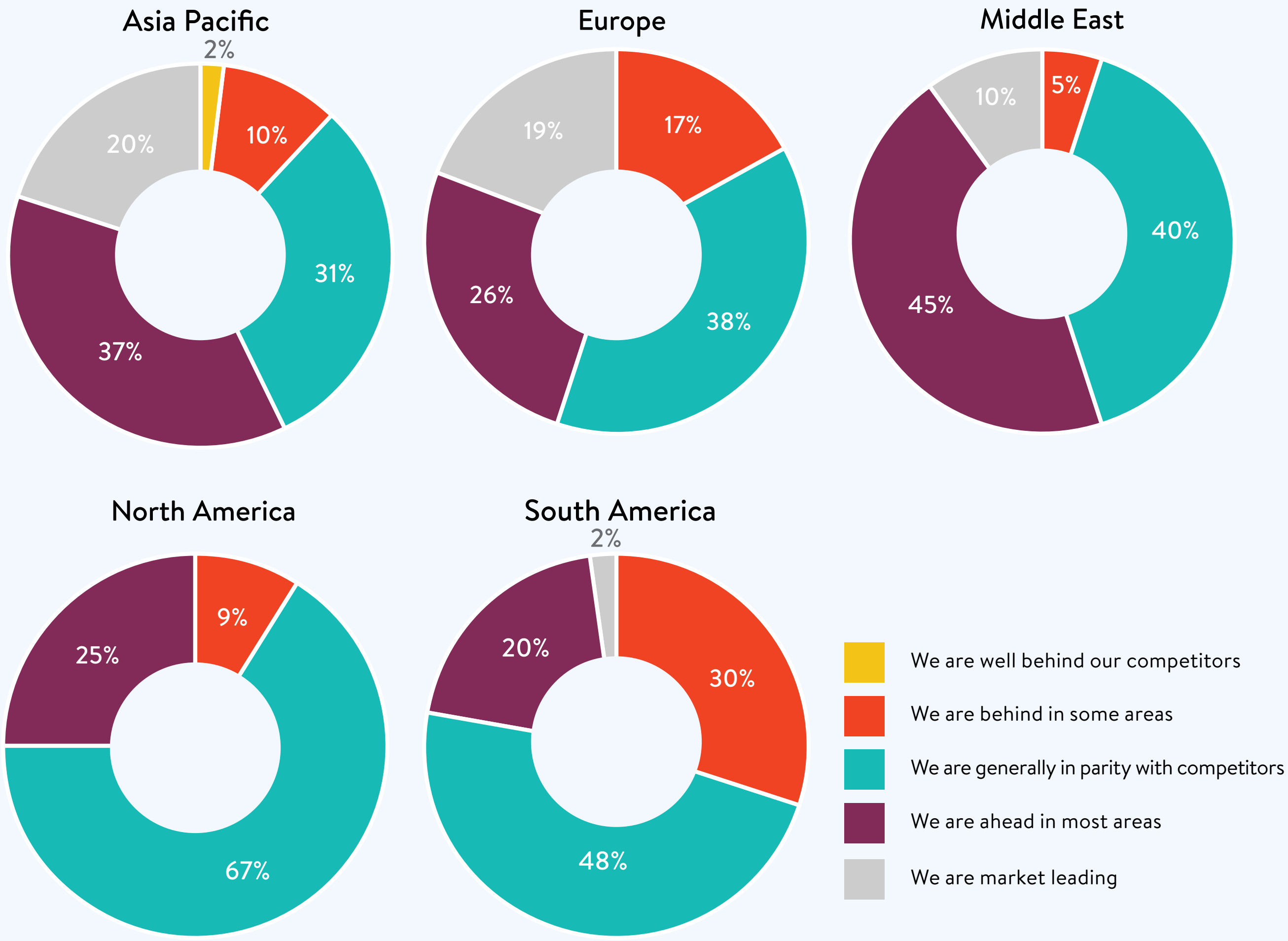
For example, the survey found that enterprises in Asia, Europe and the Middle East are leading in transformation efforts, with more than half in each region describing their strategies as established and key elements of their strategic priorities and business strategies. This contrasts with the assessments of executives in the Americas, where most executives say transformation strategies have not been fully rolled out across their organizations.

Figure 16. Please describe the current state of IT Transformation at your organization.



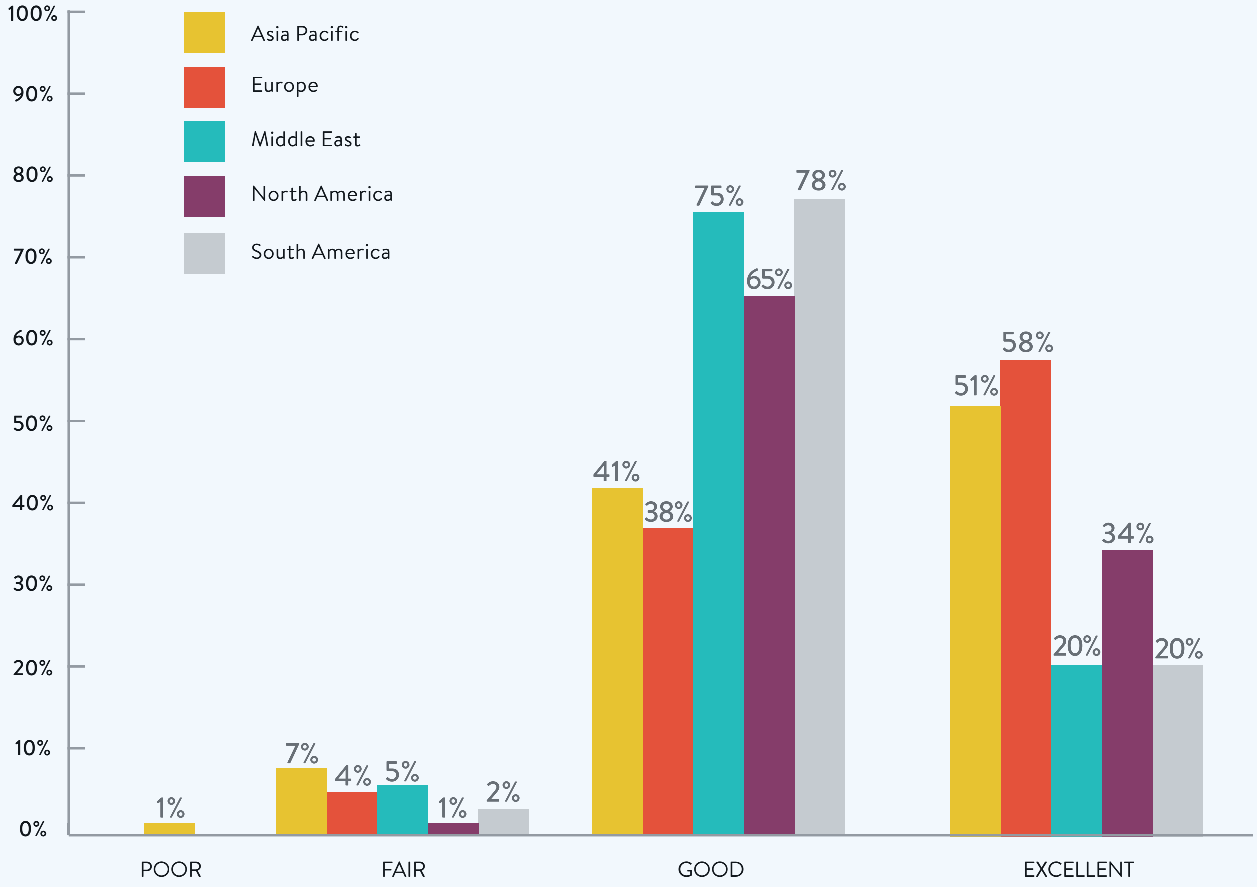
Similarly, more respondents in Asia and Europe by far consider themselves market leading when it comes to IT Transformation. None of the North American executives rate their company's success as highly, and the Middle East is the only other area that reports double-digit figures.

Figure 17. Which best describes your perception of your company's IT Transformation efforts relative to others in your industry?



The overall survey found that 96% of executives consider a close working relationship between CIOs and CFOs important for business success. More than half of all Asian and European executives, respectively, describe collaboration between these two leaders as "excellent," as illustrated on the previous page in figure 17.

Figure 18. How would you rate the effectiveness of CIO/CFO collaboration at your company?



Nevertheless, enterprise executives on all continents remain on guard against the barriers that can thwart better CIO/CFO interactions. However, regional differences surfaced in the survey. In Asia, respondents saw the biggest problems arising from a lack of expertise among CIOs and CFOs in their counterparts' discipline. By contrast, respondents in North and South America focus their attention on the conflicting responsibilities and priorities of the two groups, as well as conflicts in traditional reporting structures. The latter is a concern shared by a large percentage of European executives.

Figure 19. What are the biggest barriers keeping CIOs and CFOs from collaborating more closely?

(Please select the top two)	Asia Pacific	Europe	Middle East	North America	South America
Conflicting responsibilities and priorities	11%	10%	15%	42%	34%
CFOs' lack of sufficient technical expertise	34%	34%	30%	18%	6%
CIOs' lack of business expertise	45%	31%	35%	14%	22%
Conflicts arising over traditional reporting structure	27%	35%	20%	39%	32%
Lack of incentives to work more closely together	21%	25%	25%	33%	12%
CFOs have outdated attitudes about the primary role of the CIO	43%	45%	15%	17%	10%
No clear mandate from CEO/board	7%	2%	10%	15%	34%
There are no significant barriers	5%	9%	25%	11%	24%

Note: Highlighted cells represent the two top choices for each title.

The regional differences point to opportunities for IT Transformation leaders who have global connections: By sharing best practices with their peers, enterprises throughout the world can collectively address future breakdowns in CIO/CFO collaboration.

BEHIND THE NUMBERS

IT Transformation is changing the respective roles of CFOs and CIOs. CFOs are being pushed to become more knowledgeable about the business impact of important digital technologies, such as advanced analytics, artificial intelligence and machine learning, the cloud and process automation. "These aren't just buzzwords anymore," CFO Shipchandler says. "They're burgeoning areas with significant value-added potential if they can be put to their best use."

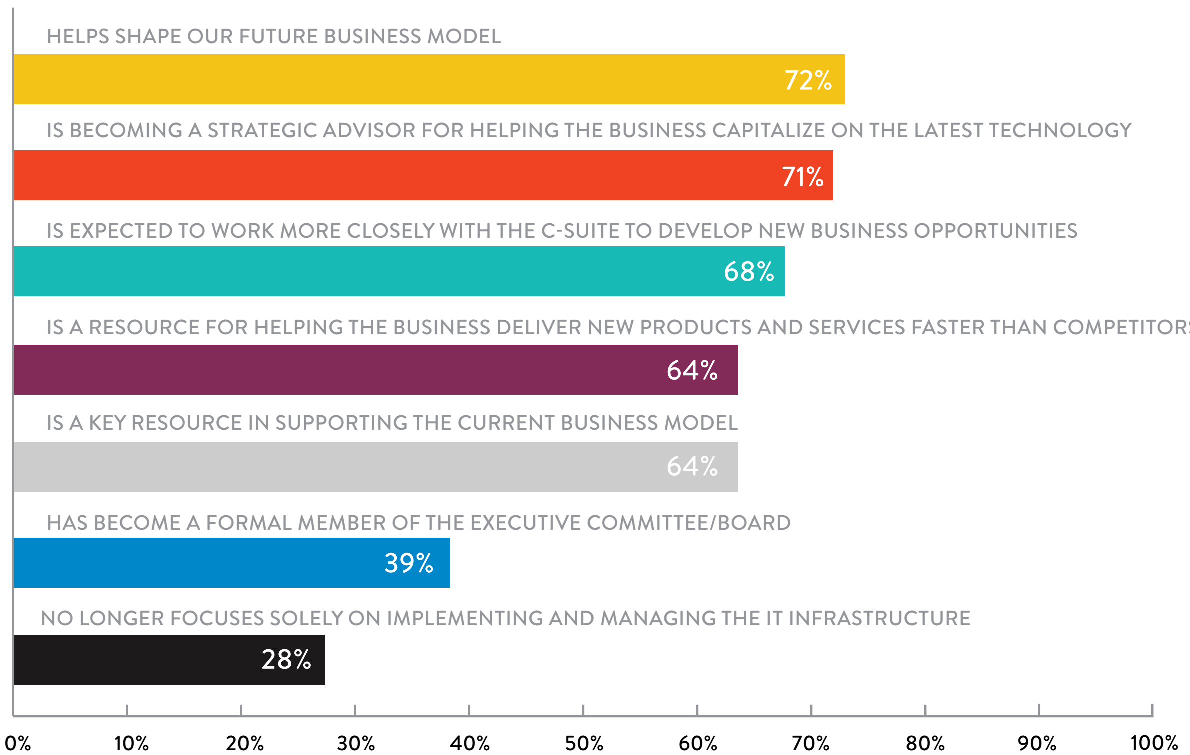
Similarly, CIOs are expected to help realize this potential by applying their technology expertise to core business disciplines, such as finance, marketing and supply chains. "Our chief operating officer now sees us as part of the business process instead of just providing IT infrastructure and software services," CIO Gonzalez says. "We're part of the discussions about how business initiatives should take shape and evolve."

"Our chief operating officer now sees us as part of the business process instead of just providing IT infrastructure and software services."

CARLOS GONZALEZ ALVARADO,
CIO, ROYAL RESORTS

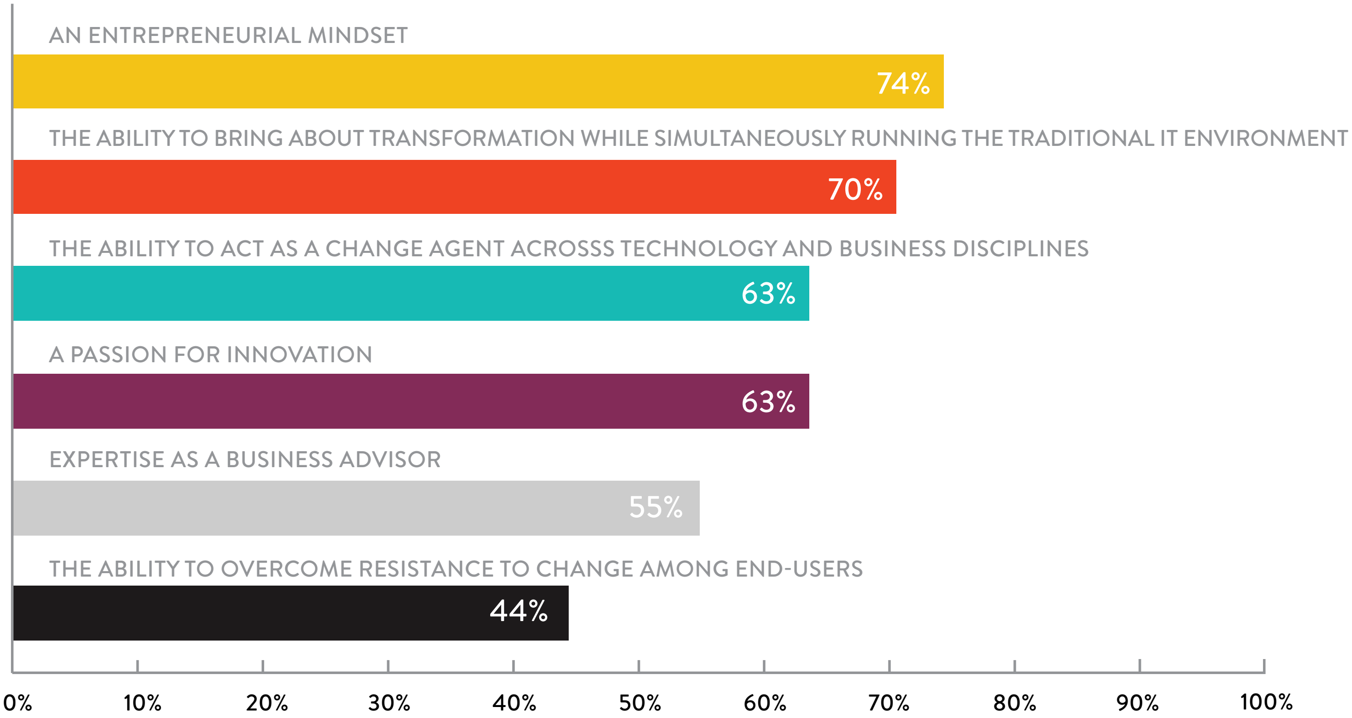
The data bears out shifts like these. CIOs are increasingly being judged by their ability to shape business models and act as strategic advisors to help enterprises capitalize on emerging business opportunities.

Figure 20. How has IT Transformation impacted the role of the CIO in your organization?



In fact, most CIOs now hold joint responsibility with line-of-business managers for ensuring the success of new business initiatives. This means modern CIOs must hone managerial and business skills as they continue to strengthen their technical acumen. Top-rated skills include an entrepreneurial mindset and the ability to simultaneously act as transformation leader and traditional IT manager.

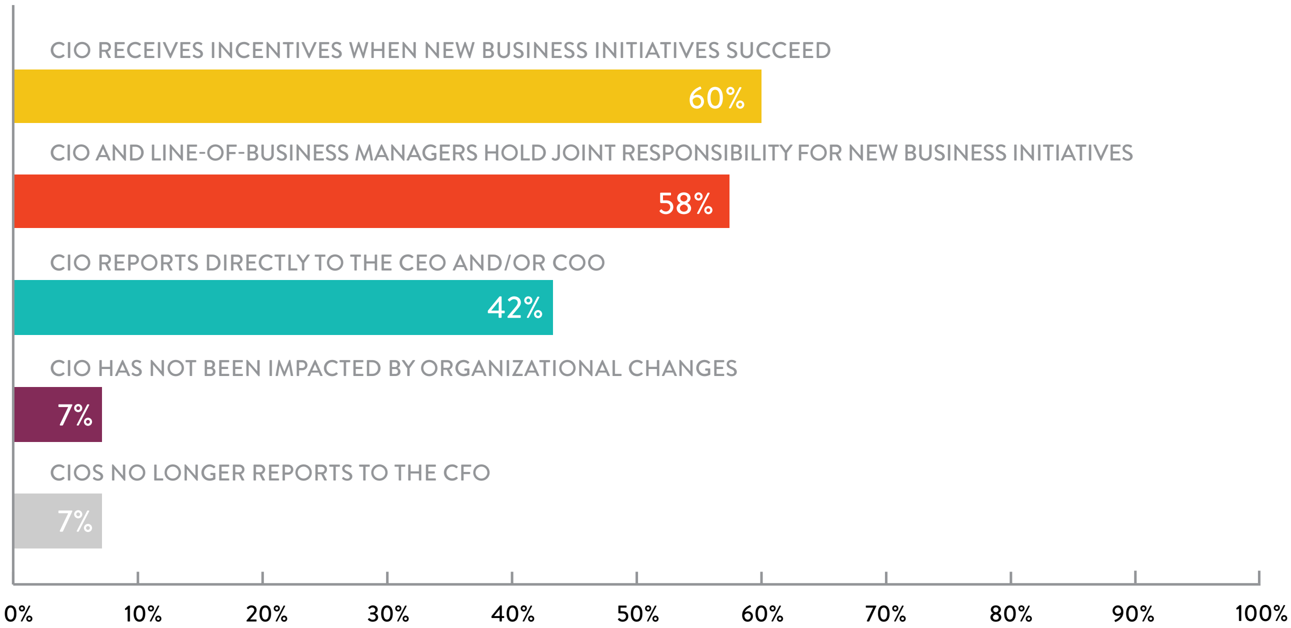
Figure 21. What characteristics are most important for a CIO when leading IT Transformation efforts?



UPDATE REPORTING STRUCTURES TO ADDRESS THE EVOLVING ROLES OF CIOS

How can organizations use trends like these as a springboard to better working relationships between CIOs and CFOs? Senior executives advise focusing on these six key areas. The survey found that IT Transformation is realigning management strategies, with 60% of CIOs seeing rewards for helping the business succeed. In addition, nearly half (42%) of the survey respondents say that CIOs have a direct line to the C-suite by reporting directly to CEOs and COOs.

Figure 22. What organizational changes have impacted you/your CIO recently?



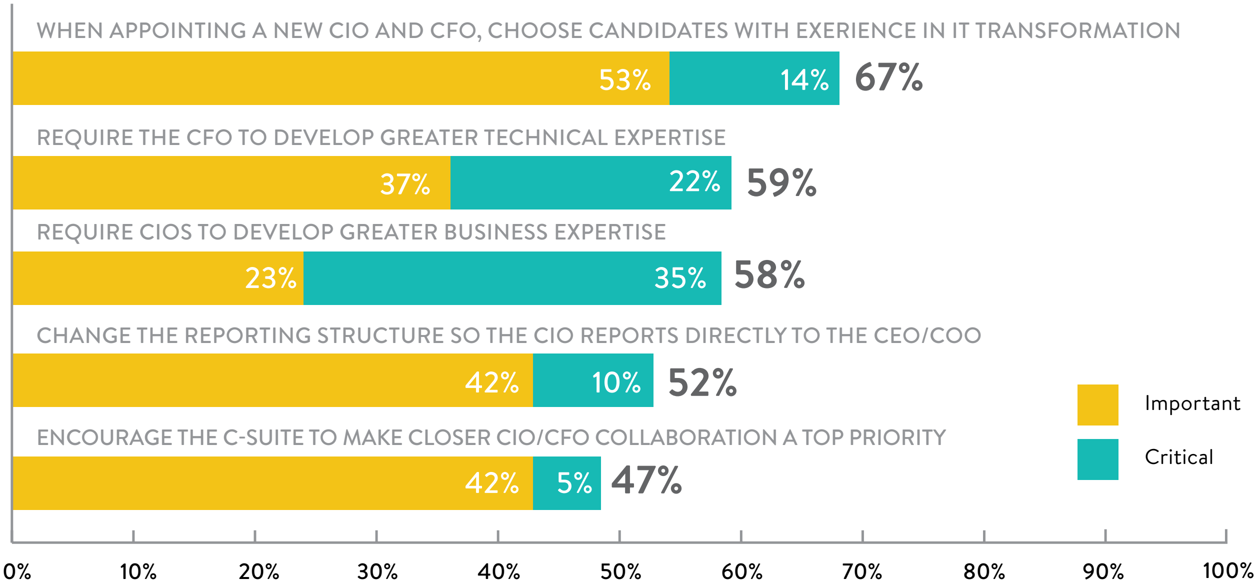
CIO Gonzalez is part of this trend. He reports directly to the chief operating officer and the vice presidents of the business units, in addition to the CFO. We have direct communications with our COO and the vice president when we're trying to get buy-in for transformation projects," he explains. "But the analysis of a proposal's underlying business value is done in conjunction with the CFO and his team."

GE reorganized its reporting structure by naming an IT leader with oversight across five business operations — supply chain, engineering, commercial, finance and services. People in this role distribute capital across the entirety of GE versus each area individually. "GE's CIO has flipped activities that used to happen in distinct and isolated ways within each of our unique business units to run them horizontally across the company," Shipchandler says. "Our businesses still want someone they can go to about technology, but we think of that individual as a chief automation officer, versus as a CIO for each of the business segments. This has allowed us to remove waste, drive a better reuse of tools and applications, and drive commonality across various programs in the various units."

CULTIVATE CHANGE AGENTS AMONG CIOS AND CFOS

Respondents point to choosing executives in these roles who have experience in transformation initiatives. For example, 67% say appointing a new CIO or CFO with experience in IT Transformation ranks as either "important" or "critical."

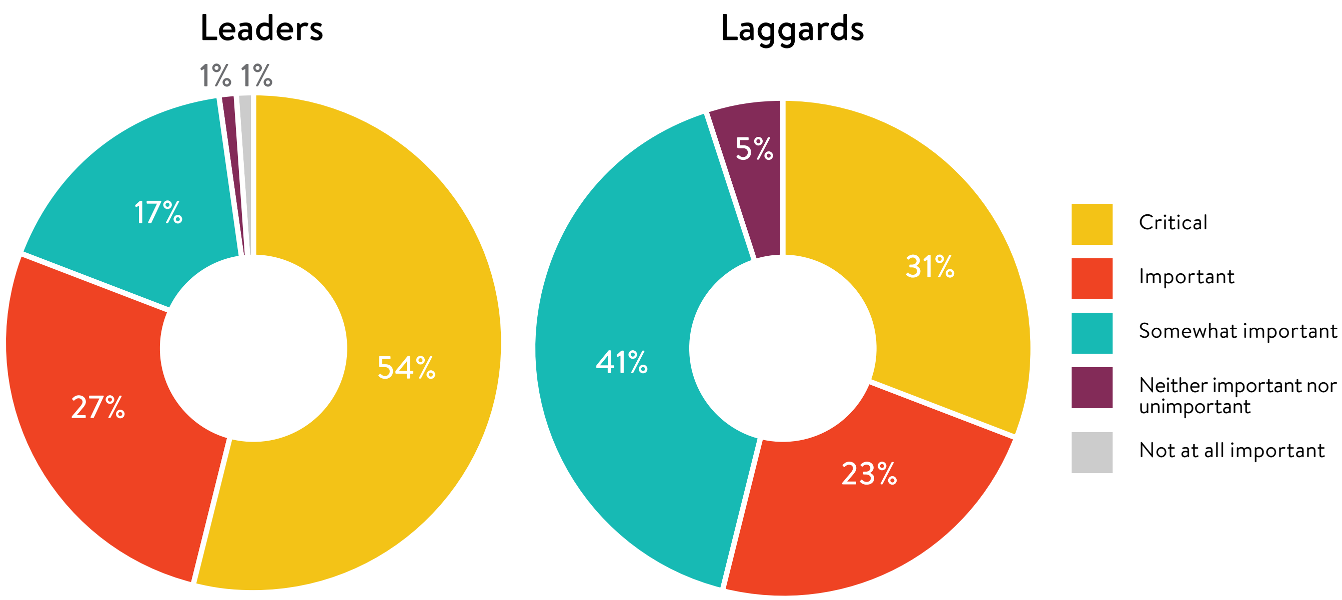
Figure 23. When appointing a new CIO and CFO, how important is it to choose candidates with experience in IT Transformation?



MEASURE — AND REWARD — CIO PERFORMANCE ACCORDING TO BUSINESS OUTCOMES

Leaders in IT Transformation place greater importance than their peers on the business acumen of CIOs, with more than half (54%) of leaders calling this critical versus less than a third of less mature organizations.

Figure 24. How important is requiring CIOs to develop greater business expertise in fostering closer CIO/CFO collaboration?



"Historically, our CIO was measured largely on activities that were specifically IT related, such as the success of an enterprise resource planning implementation," Shipchandler says. "Increasingly, our CIOs are responsible for financial goals related to benchmarks such as operating profit, cash flow or inventory turns — metrics that matter to the bottom line of the company."

SEE ROI CALCULATIONS AS GUIDES, NOT HARD AND FAST REQUIREMENTS

Developing upfront estimates of investment returns is relatively easy for some IT Transformation projects, such as those tied to new revenue streams or production efficiencies. Others, including initiatives built around predictive analytics or the Internet of Things, for example, have less quantifiable early returns but could inspire new ways of working with a long-term impact on the organization. The key is using the creative tension between CIOs and CFOs to create risk-balanced investment portfolios. "You can't put only those projects with a proven ROI at the top of the investment priority list — if you do, you'll do very little innovation," Bufano warns.

So he works with the CIO and the CEO to chart near- and long-term business goals, and then base priorities on what projects may have the biggest impact on customer experience. But he's also ready to quickly change direction when necessary. "Not everything we do is going to work as planned, so we may have to iterate a strategy a few times before we find success," he says. "It's great to create investment models, but don't fall in love with them. Innovation doesn't always work according to plan, so we're ready to keep making adjustments along the way."

Aviva merges members of the IT and business staff into teams that follow agile development methods, characterized by breaking up large projects into iterative chunks that allow for continuous course corrections. "When a business person has an idea for a product that we on the digital side believe is worth investing in, we go to finance to lay out the plan together," Marsden says. "We tell the CFO that we don't know exactly what we're going to build, but we'll build something every day. We can't guarantee what the customer outcomes and benefits will ultimately be, but we can guarantee that the cost of our team for 12 months will be X, so finance will know exactly what the investment will be. And every two weeks or every month, we'll report our progress so everyone will know exactly what they're delivering to customers. At any point, the CFO can say, 'We're not meeting our original goals, so we're going to cut the funding completely or curtail it.' Or, 'We're doing amazingly well, let's invest more.'" This provides an accurate view of each project's results.

IMPLEMENT CLEAR MILESTONES TO MONITOR THE PROGRESS OF HIGHER-RISK INITIATIVES

Close CIO/CFO collaboration can help enterprises mitigate the risk of more experimental transformation efforts. Together, they can design an agile-like iterative investment approach that avoids committing tens of millions of dollars at the start in the hopes of a large payout later. "By setting up a series of toll gates throughout the investment life cycle, we can closely follow the progress of an experimental project," says Shipchandler. "This lets us monitor if the project is working as planned or if it's just too experimental, for example. Or perhaps it's showing early signs of success and we should invest more money. By moving on an iterative basis, CFOs and CIOs can avoid contentious dialogues about ongoing support for these types of projects. Each side just has to be willing to commit to getting to the next toll gate."

TURN THE IT DEPARTMENT INTO A CONSULTANCY

As noted earlier, CIOs are increasingly being judged by their ability to shape business models and act as strategic advisors. But additional responses to that question show how extensive the consulting role is becoming for CIOs. A large majority of respondents in the overall survey say their organizations also expect IT leaders to work hand-in-hand with the C-suite to capitalize on new opportunities and to help bring new products and services to market. Together, these four activities — business model development, strategic consulting, seizing new business opportunities and rolling out new products — also represent an area of particularly close alignment between leaders and laggards. It's clear that all types of organizations consider the consulting expertise of IT as a critical resource for IT Transformation.

CIOs are welcoming this new role. "I've seen cases where things get messy because a CFO wades too deeply into the technology choices," Bray says. "That's why as a CIO, I insist on hearing the goals and the desired outcomes from different stakeholders, be they a CFO, COO, CEO, or division representative, rather than a proscriptive direction, such as 'I want specific technology product X.'"

The Haas School of Business is following a similar strategy. "We've reorganized IT around solution domains

"We want people to see IT as a resource that will help them achieve their goals — whether they involve technology or not."

KEVIN CORNISH, CIO, UNIVERSITY OF CALIFORNIA, BERKELEY'S HAAS SCHOOL OF BUSINESS

— empowering managers and their teams to focus on different customer needs across the institution," Cornish explains. "We want people to see IT as a resource that will help them achieve their goals — whether they involve technology or not."

The CFO is moving to a similar model by evolving the staff of financial analysts into business analysts who support innovative thinking and not just budget management, he adds.

CIO Gonzalez and his team proactively work with Royal Resort business units to not only keep them up to date on new technology, but also to show how these innovations can address problems in financial management, customer relationship management, or other areas. "The business is willing to accept that some areas are not in the best possible shape, and they are willing to hear how we can help," he says. "We show them that the world is changing and how we can keep up with the pace of the change."

But while these discussions may include descriptions of the latest digital developments, technology shouldn't be the focus of these talks. "Get close to business peers and talk to them about their goals instead of the latest technology," Gonzalez says. "When you talk with them about the business, these managers open up and the solutions just come naturally to the table. Then, after brainstorming together, we can decide what to do and what not to do based on what is happening in the company and the hospitality industry on the whole."

A CULTURE OF INNOVATION

IT Transformation is becoming a core element of business models for all global organizations. Whether in commercial industry or the public sector, enterprises can react more quickly to shifting market demands, identify new opportunities and address longstanding productivity problems related to legacy infrastructures. But achieving transformation requires more than simply spending more money for the latest and greatest technology. Senior leaders must cultivate transformation-oriented cultures that marry innovation and risk-taking with practical financial controls. The leaders highlight six steps for moving toward these goals:

- Update reporting structures to address the evolving roles of CIOs
- Cultivate change agents among CIOs and CFOs
- Measure — and reward — CIO performance according to business outcomes
- See ROI calculations as guides, not hard and fast requirements
- Implement clear milestones to monitor the progress of higher risk initiatives
- Turn the IT department into a consultancy

Together with closer collaboration between CIOs and CFOs, leading enterprises are using these guidelines to turn IT Transformation into a strategy for business success.

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METHODOLOGY

This report is based on a survey of 500 global executives. Thirty percent are from North American companies, 30% from Asia Pacific, 30% from EMEA and 10% from South America. The executives work in a variety of sectors, including energy, healthcare, technology and education. All are C-suite executives; 40% are CIOs, 40% CFOs and the rest a mix of COOs and CEOs.

For more information about IT Transformation from Dell EMC, visit **DellEMC.com/ITTransformation**

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