



2019 Finance Trends Report



Introduction

It's a new era. We're ten years removed from the peak of the financial crisis, a new generation has transformed the workplace, and every business is now a "technology" business. The rules of the game have changed. Organizations that fail to evolve find themselves in a growing graveyard of companies that were out-innovated by young, forward-thinking businesses. And now, the role of finance must evolve, too.

Today, the stereotype of suit-wearing, number-crunching finance personnel is being replaced by a new breed of finance professionals. These finance leaders are the ligaments that connect technology across the organization, the muscle that fights risk, the brains that drive innovation, and they are the heart that's embracing a new generation of workers.

To thrive in today's business environment, in a world with growing complexity, organizations are increasingly relying upon the technological and strategic prowess of their financial leaders. Today's finance professionals must navigate a range of new challenges and responsibilities, reporting on the past, managing the present, and creating the future.

The following will explore six emerging trends in finance that we believe will help empower finance professionals to better evaluate and manage risk, build innovative corporate strategies, and grow their businesses.



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The role of finance grows

- The CFO's role continues to grow
- Finance's involvement in IT grows
- Finance takes on technology risk management
- CFOs lead business transformation
- The COO role continues to disappear
- Finance leaders become strategy leaders
- Expectations from Wall Street evolve



The role of finance grows

The CFO role continues to grow

The role of the CFO can be summed up in two simple truths: 1) if something impacts the bottom line, it's the CFO's responsibility, and 2) everything impacts the bottom line. From staffing and employee engagement to product development and mergers and acquisitions, businesses increasingly rely on the financial and strategic prowess of their most senior financial leaders whose growing influence can be felt throughout the organization.

Finance's involvement in IT grows

Over the past decade, one of the most visible additions to the CFO's responsibilities has been the management of technology across the business. This should come as no surprise given the growth of technology in all aspects of the corporate world. Global IT spending is projected to reach \$3.7 trillion in 2018, a 4.5% increase from 2017,¹ and this growth is projected to continue into the foreseeable future.² Today's businesses spend an average of 3.28% of their annual revenue on IT, and in some industries, such as banking and securities, this rate can be as high as 7.16%.³

Due to the financial demands technology has created, both as a major expense and as a capital asset, it is more important than ever for CFOs to have a comprehensive view of these large financial line items. But technology is now more than just a number on a balance sheet, it's the lifeblood of many organizations, presenting new risks and revenue opportunities that will determine the future of the business. As technology becomes a critical component in the financial success of an organization, finance has taken a more significant role in managing technology, particularly in the areas of risk management and investment.

Global IT spend is projected to reach \$3.7 trillion in 2018.

Executive summary

Finance and the role of the Chief Financial Officer (CFO) have been elevated and broadened in the past several years, a trend that will continue moving forward.

Highlights

- Global IT spending is projected to reach \$3.7 trillion in 2018, a 4.5% increase from 2017.
- Sixty-four percent of CFOs reported being asked to take on broader operational leadership roles beyond finance.
- Nearly 70% of CFOs reported plans to increase investment in digital transformation in 2018.

In 2017, the average cost of a data breach was \$3.62 million.



Finance takes on technology risk management

You don't need to look hard to find examples of companies who have been impacted by technology failures or data breaches. Beyond the many unquantifiable costs to a data breach—from customer trust to employee morale—the direct financial cost of a technology failure is significant. In 2017, the average cost of a data breach was \$3.62 million; and with an average cost of \$141 per lost or stolen record, this number escalates quickly for large businesses.⁴ In a recent survey by IBM, 48% of CFOs listed cyber risks as a major rising trend transforming the business landscape.⁵ As a result, finance leaders are taking on greater responsibility in helping their businesses better manage this large financial risk; fifty-seven percent of CFOs report that risk management will become a critical part of their role in the future, a number that jumps to 66% among CFOs of companies with over \$5 billion in revenue.⁶

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CFOs lead business transformation

Today's industry leaders are leveraging technology in exciting new ways to transform their business models. This trend has been exemplified by the upsurge in Anything as a Service (XaaS) offerings and on-demand services, which grew 7.3% in 2017.⁷

With technology leading this transformation, their newfound role as technology leader has also pushed CFOs into the role of transformation leader, evaluating technology investments, overseeing product development, and leading strategic planning for the organization. Accordingly, nearly 70% of CFOs reported plans to increase investment in digital transformation in 2018, with 40% planning an increase of more than 10%. And with 56% of senior leadership identifying digital transformation as critical to long-term success, CFOs' involvement in this area will continue to grow.⁸

The COO role continues to disappear

Finance leaders are increasingly involved in operations. In a recent survey by EY, 64% of CFOs reported being asked to take on broader operational leadership roles beyond finance.⁹ This transition has been partially driven by the decline of the Chief Operating Officer (COO). Today, only 29% of Fortune 500 and S&P 500 companies still have COOs, a decrease of 40% from 2000.¹⁰

This COO decline can be primarily attributed to the fact that the CEOs of many major corporations were promoted from within and had previously served as COO, as is the case at 48% of Fortune 500 and S&P 500 companies.¹¹ Subsequent to these promotions, many companies opted to eliminate the COO role and divide these responsibilities between the CEO and the CFO. While the distribution of tasks between these two executive leaders varies by company, often the CEOs, with their strong operational backgrounds, assume responsibility for manufacturing and the supply chain, while CFOs take over procurement and IT oversight.

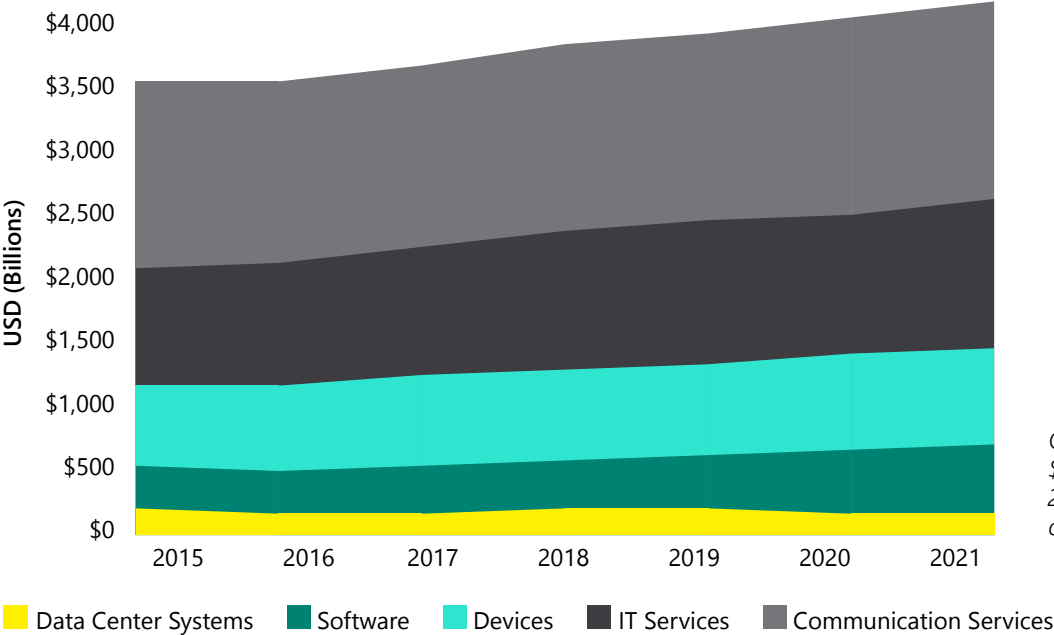
Finance leaders become strategy leaders

CFOs increasingly find themselves serving as strategic advisors within their companies. One primary factor driving this shift has been technology's proliferation across all aspects of business. Where technology spending was once primarily consolidated in the IT department, today's technology budgets are generally distributed across the entire organization. In fact, an early 2018 survey found that only 54% of technology investments are actually controlled by IT departments.¹² With software and analytics solutions making up an increasing percentage of technology spend,¹³ the average CMO now wields as much technology spending power as a CIO.¹⁴

Technology is ubiquitous in modern businesses, and while CFOs may not be able to code a website or set up a database, like technology, CFOs have also become ubiquitous throughout the organization. Because CFOs possess a deep understanding of both the organization's technology and its operational units, they are a natural fit to drive corporate strategy. And with a background in finance, CFOs possess a unique ability to apply a systemic and objective lens to business decisions. While CFOs remain saddled with a reputation for being penny pinchers and number junkies, the shift to a more quantified management approach provides an essential counterbalance to the gut instinct style of previous decades.

Only 54% of technology investments are actually controlled by IT departments.

Worldwide IT Spending Growth



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Expectations from Wall Street evolve

Before the mid-1980s, managing a company's investors was relatively easy for CFOs. Shareholders were generally an easily defined group with clear motivations and expectations. But with the growth of sophisticated private equity firms in the mid-1980s, coupled with a transformation of share registers, CFOs now had to deal with institutionalized investors, which comprised the majority of shareholders at large firms by the mid-1990s. While the CFO's influence had been growing internally for decades, this shift in stakeholder relations pushed many CFOs into the public spotlight for the first time.

Since the growth of institutionalized investing in the mid-1980s, CFOs have played an important role in managing relationships with private equity firms. And as the demands from Wall Street increase, so will the need for CFOs to directly engage with investors. Ac-

cording to a CFO Insights report by Deloitte,¹⁵ today's CFOs should plan on spending at least 20% of their time in investor relations.

Of the emerging roles of the CFO, this new public persona is frequently one of the largest challenges for many of today's finance leaders, who are often known more for their discretion than their yearning for the spotlight. This challenge can be compounded by the competing interests of different investors; counter to the quarterly pressures of the past decade, companies like Amazon and Tesla are now shifting some investor mindsets toward accepting short-term losses with the prospect of more substantial long-term gains.¹⁶ Thus, it is the job of the CFO to set the strategy for the business, both short- and long-term, and to manage shareholder expectations.

Get more done

CFOs and finance professionals are moving from number crunchers to strategic leaders. To make this transition, finance teams must work faster and smarter. At Microsoft, we are empowering finance professionals to do more with tools that streamline processes, provide greater visibility into operations, and deliver actionable insights.

Streamline operations

Transitioning to strategic work requires that finance professionals spend less time on routine accounting tasks. From productivity tools, like Office 365, to workflow automation capabilities in Dynamics 365, Microsoft is helping finance teams get more done, freeing them up so that they can spend more time on high-value strategic work.

Get greater visibility

To effectively guide their organizations, finance leaders require visibility into all areas of their business. By combining unified data in the cloud with powerful data visualization tools, like Power BI, Microsoft provides finance leaders with a single source of visibility into their organization—from a high level down to a transactional level—so they can make more informed decisions.

Be more proactive

To grow their businesses, finance leaders must look beyond the past and into the future. Microsoft empowers leaders with tools to help them identify emerging trends, predict outcomes, and automatically optimize workflows so that organizations can become less reactive and more proactive with their business strategies and operations.



Changing customer demands disrupt industries

- Innovation raises customer expectations
- Millennials evolve
- Gen Z gains influence
- Corporate responsibility gains momentum
- The new X-economies disrupt industries
- A-commerce (anywhere) becomes the new reality
- Businesses try to take back margins



Changing customer demands disrupt industries

Innovation raises customer expectations

Stating that technology is changing customer demands feels like stating the obvious. Innovation—from the printing press and combustion engine to computers and wireless internet — has always been a driver of demand, unlocking new possibilities and raising expectations. Today, we find ourselves at the intersection of rapid innovation and a new generation of consumers who have grown up empowered by technology.

Millennials evolve

The number and influence of Millennials continue to grow. Today, Millennials make up roughly a quarter of the U.S. population,¹⁷ and according to the Pew Research Center, they will overtake Baby Boomers as America’s largest population in 2019 (73 million vs. 72 million).¹⁸ On the surface, Millennials look very different from their predecessors: they are more diverse,¹⁹ better educated, and more likely to be never married than any other adult generation was at the same age.²⁰

They are also a generation who entered adulthood facing a strong headwind. They have been crippled by student loans, with over 60% of students taking out loans to pay for college.²¹ The average student loan debt for Millennials graduating in 2017 was nearly \$40,000.²² To compound this, many graduated in the midst of the 2008 recession. As a result, they have been pressured to take lower paying jobs and have lower employment rates compared to workers of the same age in past generations.²³

However, despite these challenges, Millennials are smart and savvy. They have become a generation that is fiscally responsible, with 63% of Millennials setting savings goals and 59% reporting feeling financially secure, higher rates than Boomers or Gen X.²⁴ Seventy-three percent of Millennials stick to their budgets every month, and 16% have saved over \$100,000.²⁵

While their financial burdens have led to lower rates of home and auto own-

Executive summary

Driven by technology and demographic shifts, today's customers are more empowered than ever and expect more from the businesses with which they interact.

Highlights

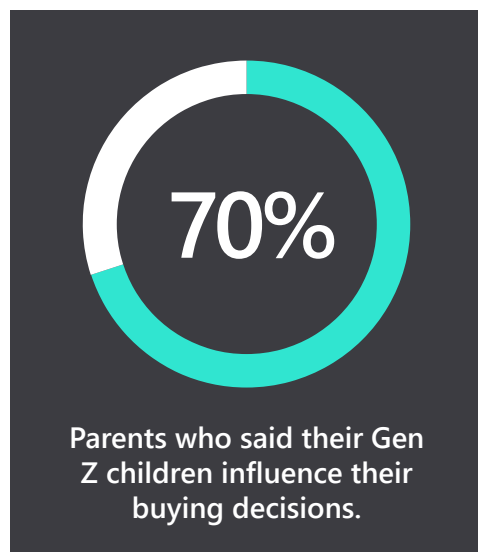
- Millennials make up roughly a quarter of the U.S. population and will overtake Baby Boomers as America’s largest population in 2019 (73 million vs. 72 million).
- Purchases via contactless payments are projected to increase to \$1.3 trillion globally in 2019 and over \$2 trillion by 2021.

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ership,²⁶ Millennials do spend in other areas; however, they remain thrifty when they do. Case in point: Amazon accounts for the largest volume of on-line apparel sales for Millennials, nearly 17%, more than double that of the next largest seller, Nordstrom.²⁷ This shift to thrift has also played a role in the growth of on-demand services, sharing marketplaces, and online consignment stores.

Gen Z gains influence

As the size and influence of the Millennial cohort grow, they are proving themselves to be a generation of tech-savvy individuals. But where Millennials were digital pioneers, helping make technology mainstream, Gen Z is the first generation of digital natives, never having experienced life before computers and pervasive internet.



By 2020, Gen Z will be the third-largest generation in the U.S., just behind Gen X, and they are already accumulating significant purchasing power. With their oldest members only in their early twenties, it is difficult to predict

Gen Z's purchasing behaviors precisely, but what's clear is that they already wield great spending influence. There was \$829.5 billion spent on Gen Z in 2015, accounting for 6.8% of total consumer spending that year.²⁸ Furthermore, over 70% of parents said their Gen Z children influenced their buying decisions on clothes and food.²⁹

Gen Z is even more diverse than their Millennial predecessors and will become the nation's first majority non-white generation.³⁰ With this diversity comes a much more tolerant and inclusive generation.³¹ Additionally, growing up with the internet gave them much greater visibility into global issues. As a result, they are a very globally and socially-minded population. Twenty-six percent of 16-to-19-year-olds currently volunteer, and 60% reported that they want their jobs to impact the world.³²

Like Millennials, Gen Z is made up of savvy shoppers. According to a recent report by Interactions, 89% of Gen Z considers themselves price-conscious shoppers and listed price as the top factor in making a purchase.³³ According to the report, 72% said they would switch from their favorite brand if they found a similar product at a lower price. Members of Gen Z also value community, with 59% preferring local stores over large retailers and 72% saying they would be more willing to shop at national chains if they had more of a local presence in their community.

The profile of Gen Z is lengthy, and we have much to discover about them as they mature. But for now, one thing is sure: Gen Z will have a significant impact on both business and the world.

By 2020, Gen Z will be the third largest generation in the U.S.

Corporate responsibility gains momentum

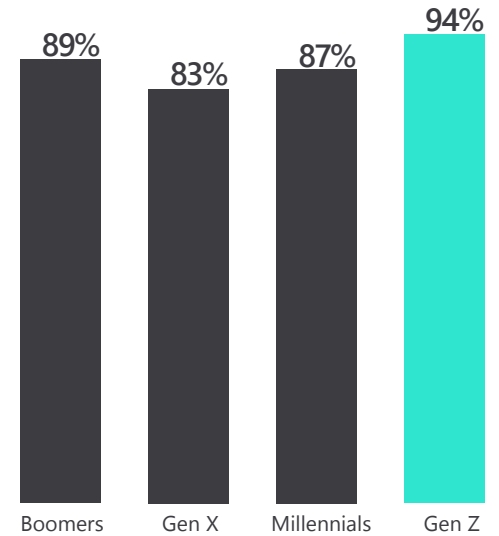
Over the last decade, there has been substantial buzz about Corporate Social Responsibility (CSR), yet for many companies, the financial costs of change initially outweighed the benefits. But as Millennials and Gen Z become more influential, both as employees and consumers, they are pushing businesses to behave more responsibly.

While 86% of general consumers feel that companies should help address social issues, 94% of Gen Z believe that companies have a responsibility to do so.³⁴ When compared to members of other generations, members

of Gen Z are more likely to share positive opinions about companies doing good (87%), are more likely to protest to support a cause they care about (58%), and are more likely to buy from a company which addresses social or environmental issues (90%).³⁵

In response, businesses are investing more resources in corporate responsibility initiatives. According to PwC's Global CEO survey, 64% of CEOs now feel that CSR is central to their business, rather than a standalone program.³⁶ Even institutional investors are getting on board, pushing firms to make more responsible decisions.³⁷ And as Millennials and Gen Z assume roles of power in the corporate world, the impacts of CSR will only become more pronounced.

Should companies help address social issues?



The new X-economies disrupt industries

Millennials, burdened by high unemployment, low wages, and high debt, have rapidly embraced new business models that offer them the latest products with greater flexibility and lower costs. In today's market, startups have led the way with these new offerings, but large businesses—either through acquisitions or internal development — are beginning to evolve their business models to the needs of the modern consumer. These models fall into one of a few categories:

On-demand services

Projected to grow to nearly \$57 billion in 2018, on-demand services represent perhaps the largest of these categories.³⁸ A model popularized greatly by Uber, on-demand businesses are launching for just about every category imaginable, from printing and dog walkers to babysitters and massages.

**\$57
billion**

Projected size of the on-demand economy in 2018.

Sharing economy

The sharing economy—where consumers “share” products and services directly instead of purchasing via a retailer or distributor — is another business model that has grown in popularity over the last several years. Perhaps the most commonly known example of a sharing economy business is Airbnb, where travelers can rent rooms and homes directly from other individuals. The sharing economy is projected to grow to 86.5 million U.S. users by 2021, up from 44.8 million in 2016.³⁹

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Subscription box services

Subscription box services have become incredibly popular due to their highly targeted nature and ease of use. Companies like Birchbox, ClubW, Stitch Fix, and NatureBox are just the tip of the iceberg when it comes to the subscription box market, which now provides services for dogs owners, coffee lovers, mountain climbers, gold miners, and sock enthusiasts.

Online consignment

When eBay and Craigslist launched in the mid-1990s, they provided individuals with the opportunity to use the internet to sell used goods. Nearly two decades later, a new set of online consignment stores has emerged to help streamline this process. Sites like thredUP, Swap, and TheRealReal allow shoppers to sell and purchase used clothes, jewelry, toys, and luxury fashion accessories online.



XaaS

As cloud computing becomes more ubiquitous, Anything as a Service (XaaS) business models are also becoming more popular. The principle behind XaaS is that businesses can provide better, more cost-effective solutions to customers via subscriptions or pay-as-you-go models than via traditional software licensing models. The most commonly known XaaS model is Software as a Service (SaaS), which provides individual software applications and services through the cloud; however, Platform as a Service (PaaS) and Infrastructure as a Service (IaaS) models have also gained traction as a way for technology companies to expand their footprint.

While XaaS has historically referred to cloud computing, it is increasingly being used to define all service-based business models, from Transportation as a Service (Uber and Lyft) to Shopping as a Service (Trunk Club and Stitch Fix). Regardless of what you call it, it's clear that customers' needs are evolving and businesses must adapt accordingly.

A-commerce (anywhere) becomes the new reality

Technology has granted customers access to a dizzying array of products, and customers expect to be able to purchase on their terms, whenever and wherever they want. From social buying on Instagram to v-commerce with Alexa, businesses are no longer forcing customers to their websites

ers have consulted social media sites for purchase inspiration or research for years, we are only now seeing the potential of these channels to translate into direct sales.

Today, idea-collection site Pinterest has 175 million users, and 93% of them use the site to plan purchases. More than half of them also use the site to shop for products.⁴¹ Pinterest's "Shop the Look" feature employs computer vision and human curation to allow users to shop Pinned products on the

ular consumers of its business partners.⁴³ In 2016, Instagram piloted its Shopping Tags program, allowing companies to upload a product catalog and tag specific products on their posts. When clicked, a tagged product takes the user directly to the product page. The program has since expanded to thousands of businesses, and the results have been promising.⁴⁴ Industry leader Nike has announced that it will sell certain products via Instagram in what they describe as a "seamless" experience for customers.⁴⁵



to make a purchase; instead, they are turning every platform into a purchase platform.

Social media selling

Social media continues to grow in popularity; globally, 482 million people became new active users in 2016. Today, a total of 2.789 billion social media users are spending an average of 40 minutes to four hours on social media sites each day.⁴⁰ While custom-

web and their mobile devices. Early tests showed that users visit a company's website two to three times more frequently when "Shop the Look" Pins are deployed.⁴² Additionally, Pinterest for Business offers a "Buyable Pins" option, which allows customers to purchase a company's products directly on Pinterest with a credit card or Apple Pay.

Instagram continues to explore ways to turn its 700 million users into reg-

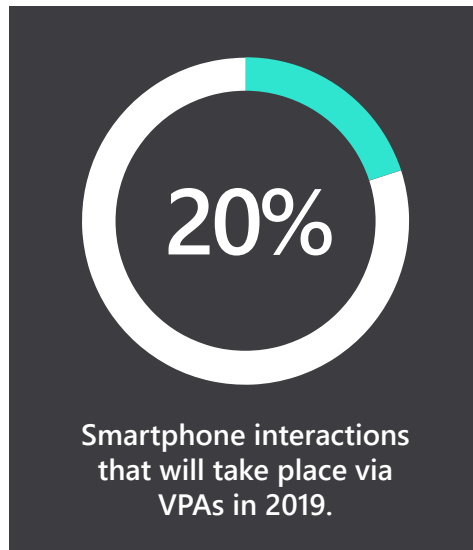
One issue brands face in expanding social media sales is that many customers are not aware that they can shop directly via social media sites; in a recent survey, 26.4% of respondents said they had never heard of social commerce.⁴⁶ However, if social media platforms and retailers can generate better awareness — and remove barriers to purchasing with a smoother transition from browsing to buying — social media users will readily become in-app consumers.



Voice-first conversational commerce

In 2016, nearly half of U.S. smartphone users consulted virtual personal assistants (VPAs) — such as Microsoft’s Cortana, Apple’s Siri, Amazon’s Alexa, and Google Assistant — and Gartner predicts that by 2019, 20% of all smartphone interactions will take place via VPAs.⁴⁷ While the shopping capabilities of voice-enabled VPAs are still nascent, as they evolve, they will offer a powerful new platform through which businesses can reach customers directly.

In addition to living on mobile devices and computers, VPAs now exist on household devices like the Harman Kardon Invoke, Apple HomePod, Amazon Echo and Google Home. A VoiceLabs report estimated that by the end of last year, 33 million voice-first devices would be in circulation,⁴⁸ and these devices are beginning to drive sales: Amazon Echo owners make 6% more purchases on Amazon than they did prior to owning the device.⁴⁹ Shopping capability on Google Home launched in February 2016 and 18 months later, predicting the growth of voice shopping, Walmart partnered with Google to offer hundreds of thousands of products for sale via Google Assistant, with a vision that customers will use Google Home devices to reorder frequently purchased items.⁵⁰



Microsoft’s Cortana, Amazon Alexa, and Google Assistant are working toward developing better user experiences for their voice-first merchant ecosystems, adding skills and features that make the checkout process easier and more accessible. In early 2017, only 28% of U.S. residents indicated that they would use a VPA to buy goods and that they were more likely to use their VPAs to play music, give weather information, or provide search results.⁵¹ As users increasingly rely on their VPAs, the trend toward voice interactions will continue alongside the development of other artificially intelligent systems—based on gestures, biometrics, and more—that will make these type of interactions easier and more natural for users.

Amazon Echo owners make 6% more purchases on Amazon than they did prior to owning the device.

Brands go direct-to-consumer

In order to pursue bigger profit margins and retain control of the customer experience, some brands are bypassing traditional retail channels and going straight to the consumer. Cutting out the middleman allows retailers to build relationships with customers and collect more accurate data. This shift, in turn, enables brands to develop more personalized experiences, something that 75% of customers prefer.⁵²

75% of customers prefer personalized brand experiences.

Having achieved a valuation of \$1.2 billion, Warby Parker has succeeded with direct-to-consumer (D2C) sales, initially via e-commerce platforms and now with physical locations as well.⁵³ Major multi-channel retailers Nike and Adidas have doubled down on their D2C efforts. Nike announced a new company alignment, the Consumer Direct Offense, that includes the creation of a Nike Direct organization, which will strategize ways to deepen one-to-one relationships with customers.⁵⁴ In 2016, Adidas launched Avenue A, limited-edition boxes that ship curated selections of women's apparel and footwear to subscribers.⁵⁵

Direct-to-consumer subscription services have grown significantly in popularity; visits to subscription-box websites increased 3,000% from 2013 to 2016.⁵⁶ Arguably one of the most successful D2C practitioners is Dollar Shave Club. The men's grooming company disrupted its sector, retaining nearly half of its customers for one year after their first subscription, and was purchased for \$1 billion by Unilever in 2016.⁵⁷ To compete with Dollar Shave Club and online market competitor Harry's, Gillette recently initiated its own shaving subscription club,

Gillette On Demand. The new service allows customers to order refills via text.⁵⁸

Since the cost of entry is minimal to existing retailers, the marketplace is already saturated with subscription services; as of early 2018, subscription box aggregator My Subscription Addition indexed roughly 3,000 boxes.⁵⁹ And now, even major retailers — including Starbucks, Amazon, Macy's, Walmart, and Nordstrom — are joining in with their own subscription box services. To succeed in this sector, subscription services must feature an offering that has the ability to surprise and satisfy customers on a recurring basis.

Mobile payments go mainstream

Apple Pay launched to great fanfare in October 2014, but the public has been slow to adopt this technology. In 2016, a study by Auriemma Consulting Group reported that only 27% of users with an eligible device had used contactless payments.⁶⁰ At the time, 39% said they would use mobile payments more if stores accepted it, but the study found that even when a store did accept mobile payments, less than a third (31%) of users consistently used mobile pay, most frequently citing that they simply forgot.⁶¹

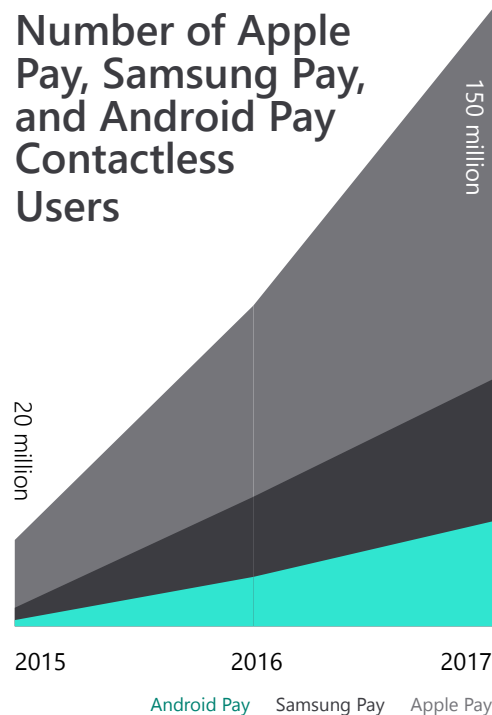
Despite its slow start, mobile payments may finally be reaching a tipping point. Apple Pay is now available in 20 markets around the world, works with 4,000 card issuers, and is available at 50% of U.S. retailers.⁶² This increased availability has driven growth in the market; Apple Pay, Samsung Pay, and Google Pay currently have a user base of roughly 150 million and are expected to exceed 500 million users by 2021.⁶³ And these numbers don't even account for China's leading mobile payment provider, Alipay, which boasts 520 million users.⁶⁴

Globally, \$590 billion was spent using contactless payments in 2017, and purchases via contactless payments are projected to increase to \$1.3 trillion in 2019 and over \$2 trillion globally by 2021.⁶⁵

As mobile wallets become more broadly adopted, businesses are looking to capture a piece of the mobile payment market, which is projected to grow to \$112.29 billion by 2021.⁶⁶ The list of mobile payment providers is growing and now includes PayPal, Intuit GoPayment, Barclaycard bPay, Chase Pay, Visa Checkout, Walmart Pay, CVS Pay, Target Wallet, Starbucks, Kohl's Pay, Square, Stripe, Venmo, LevelUp, PayAnywhere, and more.

Further pushing mobile payments into the mainstream is the broader adoption of mobile wallets as a whole. An increasing number of businesses, from stadiums to airlines, are leveraging mobile wallets for paperless ticket distribution. As adoption increases around the world, it seems clear that mobile wallets are the way of the future.

Number of Apple Pay, Samsung Pay, and Android Pay Contactless Users



After a decade of downslide, many businesses have cut and optimized as far as they can.

Businesses try to take back margins

Over the past decade, traditional retailers have seen their profit margins slowly disappear. Online retailers, namely Amazon, are able to offer a wider variety of products than a brick and mortar retailer can, while simultaneously avoiding the overhead costs involved in running a physical store. To stay competitive, retailers were compelled to slash prices to match those offered on Amazon.

This price slashing necessitated some drastic changes on the back end: businesses were forced to become lean

and mean, cutting costs and streamlining operations wherever possible. This quickly created a race to the bottom, with companies competing on price while trying to optimize operations enough to stay profitable. After a decade of downslide, many businesses have cut and optimized as far as they can; now, in a change of strategy, they are looking to increase profit margins, building value for customers through improved offerings, superior service, and delivering amazing customer experiences.



Deliver amazing experiences

Driven by new technologies and changing demographics, today's customers demand more from brands than ever before. Businesses must be more responsive to new trends and deliver the seamless experiences customers now expect. At Microsoft, we're helping companies meet changing customer demands with the tools and technology to better understand customer needs, become more agile, and deliver amazing experiences for their customers.

Understand customers

As customer behaviors and expectations evolve, businesses must gain visibility into their users' needs to get ahead. Microsoft Dynamics 365 enables companies to track product usage and performance so they can predict and prevent potential issues and create better, more engaging experiences for their customers.

Improve agility

Businesses must work with greater precision and agility to meet today's rapidly changing customer and market demands. By connecting data from across the value chain, Microsoft Azure and Dynamics 365 help organizations improve communication between business units, predict and respond more rapidly to trends, and better manage changes on the fly.

Exceed expectations

As the baseline for service continues to climb, companies must rely on technology to deliver the amazing experiences that customers expect, at scale. Microsoft is empowering organizations with the tools and technology to create innovative, frictionless experiences that delight customers and exceed expectations every time.

A photograph of three business professionals in a modern office setting. On the left, a man in a dark suit is speaking and gesturing with his hand. In the center, a woman in a black top is looking at a laptop. On the right, a man in a light blue shirt is standing and looking towards the laptop. The background shows glass partitions and office lighting.

Technology makes finance smarter and faster

- Finance drives technology advancements
- Blockchain becomes more than just a buzzword
- Businesses establish a culture of data
- AI and ML deliver instant intelligence
- Automation streamlines operations



Technology makes finance smarter and faster

Finance drives technology advancements

Finance professionals have long been technology pioneers, a fact for which they rarely receive credit. The expansion of the telegraph in the U.S.—from a single 40-mile line connecting Baltimore and Washington, D.C. in 1844 to over 23,000 miles spanning the United States just a decade later—was driven by exchange traders who needed a way to share market information faster. In 1865, the pantelegraph, an early form of the fax machine, was originally used to verify signatures in banking transactions between Paris and Lyon, France. In 1918, the Fedwire Funds Service—a Morse code system sent via telegraph — was established in the United States to transfer funds between the 12 connected Federal Reserve Banks, the Federal Reserve Board, and the U.S. Treasury.

In 1958, Bank of America issued the BankAmericard, the first modern credit card, which would change financial transactions forever. The 1960s brought the ATM and the first electronic systems that could provide up-to-the-minute stock market information through desktop terminals. The 1970s saw the launch of the Nasdaq electronic bulletin board, SWIFT, and MIDAS, all of which simplified, standardized, and secured the way financial information was distributed around the world.

The 1980s gave us electronic trading platforms, cash machine networks, and in 1984, Jane Snowball made the world's first online purchase. Companies like eBay and Amazon pioneered e-commerce in the 1990s, while direct trading, Chip and PIN systems, contactless payment systems, and the first version of Bitcoin launched in the 2000s.

Finance has long operated on the cusp of technology, and from digital spreadsheets to accounting software, finance professionals have pioneered digital technology in the workplace for decades. Today, finance professionals are driving the adoption of new analytics tools and techniques to help improve operations, better forecast business performance, and help their organizations strategically plan for the future.⁶⁷

Executive summary

Finance professionals have a history of embracing cutting-edge technology, leading the charge to adopt the tools that have revolutionized the business world. Today's CFOs proudly follow in their footsteps.

Highlights

- The global blockchain market is projected to reach a value of \$20 billion by 2024.
- Eighty-five percent of CEOs reported that their CFO's ability to gather and analyze data was key to profit growth.
- Businesses will generate \$2.9 trillion in business value from AI by 2021.

Finance professionals have been pioneering digital technology in the workplace for decades.

Blockchain becomes more than just a buzzword

First described in 1991 by Stuart Haber and W. Scott Stornetta,⁶⁸ blockchains are decentralized, shared ledgers where all transactions are recorded securely by encryption in near real-time and are immutable (incapable of being altered or deleted). Blockchain technology sparked a revolution in 2009 when Satoshi Nakamoto leveraged blockchain to provide the data structure for a novel peer-to-peer electronic cash system, Bitcoin.⁶⁹

Despite blockchain being nearly three decades old, we are still in the early adoption phase, but blockchain technology is expected to grow rapidly over the next six years,⁷⁰ with the global blockchain market projected to reach a value of \$20 billion by 2024.⁷¹ Even today, attitudes are changing fast. In AFP's 2017 MindShift Survey, only 1% of organizations had implemented blockchain, while 51% reported no plans to do so.⁷² By their 2018 report, 23% said they were currently using blockchain technology,⁷³ a huge year-over-year leap.

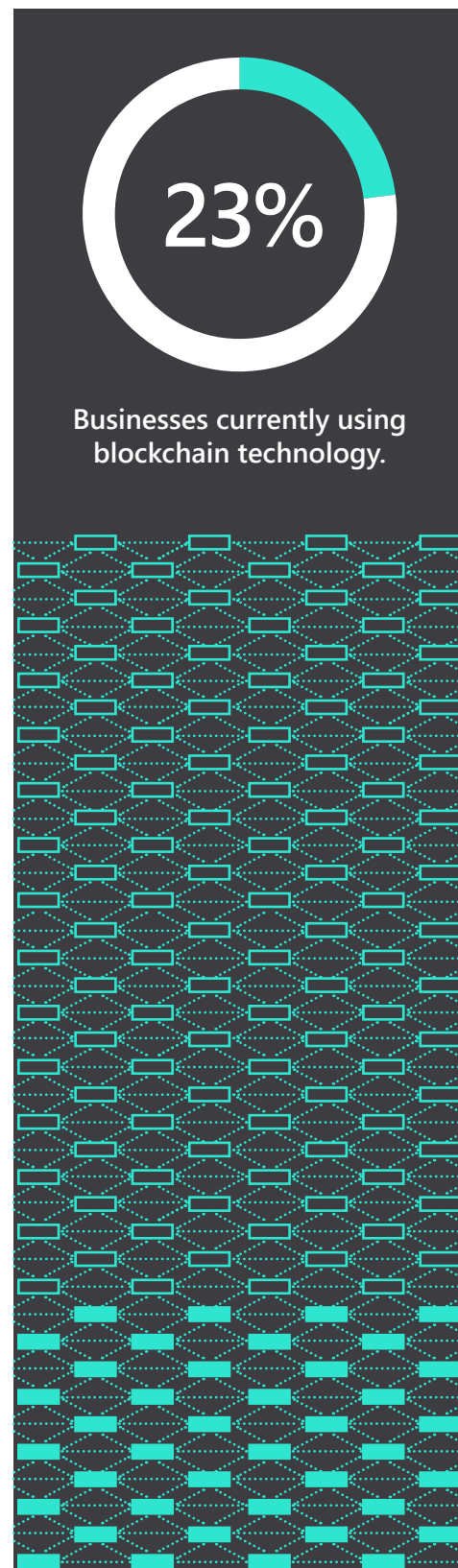
Businesses are discovering revolutionary applications for blockchain technology across many industries, including a number of areas impacting financial operations. For example, a blockchain can connect ledgers from across an organization's supply chain (supplier, manufacturer, distributor, shipper, retailer, and end consumer) to make tasks, like tracking a product's journey, much more accurate and efficient. Tracking a product's journey via blockchain can turn a manual process that once took days into an automated process that takes only seconds.⁷⁴

Businesses are poised to see signif-

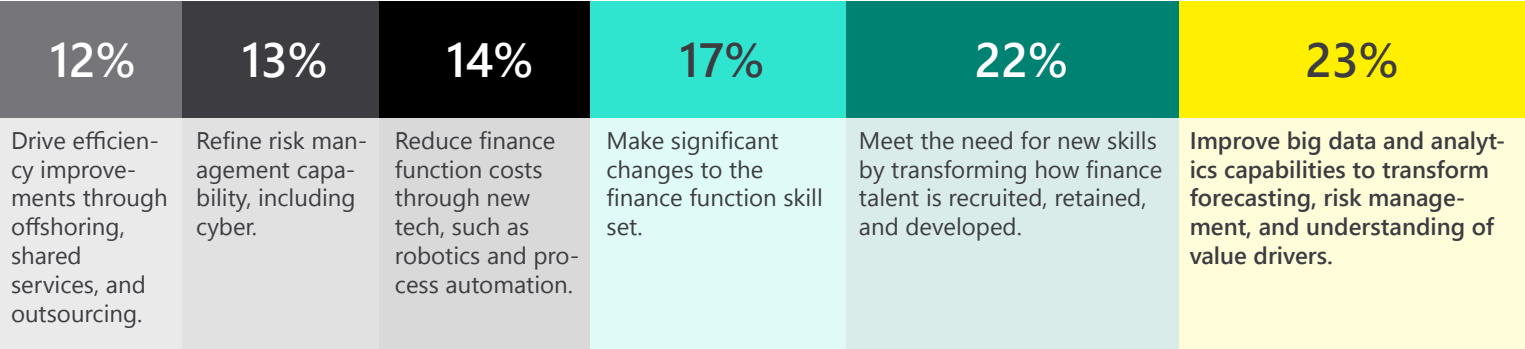
icant returns from blockchain. A recent study from Accenture reported that blockchain could help cut costs and deliver savings of more than 30% across the middle and back office. This includes an estimated 70% savings on central finance reporting and 50% savings on compliance, centralized operations, and business operations.⁷⁵ Many of these savings are due to streamlined processes, optimized data quality, improved transparency, and better internal controls.

While blockchain has become popular due to its efficiency in processing financial transactions, companies are already looking to blockchain to solve other business problems. A number of blockchain solutions now enable companies to build anti-counterfeit databases, track stolen products, or track items with specific qualities, such as diamonds from conflict zones or luxury products that rely on product authenticity.⁷⁶ One promising application of blockchain is with contract and document management — digitizing and moving the governance of paper certificates, warranties, and contracts into a blockchain — which can automatically update the documents when a triggering event occurs. And testing has already been implemented in the food safety industry, where blockchain allows food to be granularly tracked, so when a producer identifies an issue — like a tainted batch of spinach — they can contain the problem by isolating the source and issuing a recall for only the affected products.

Other potential benefits of employing blockchain technology include reduced risk of fraud, reduced time to complete transactions, better networked loyalty programs, and increased customer trust. Today's finance leaders must understand blockchain and the possibilities offered by this disruptive technology.



Priorities of the future finance function



Percent of finance leaders that chose category as number one priority

Businesses establish a culture of data

Big data has been a buzzword for the past few years, so it should come as no surprise that finance leaders continue to focus efforts on data and analytics programs. Eighty-five percent of CEOs reported that their CFO's ability to gather and analyze data was key to profit growth,⁷⁷ and in a recent study by EY, "improving analytics capabilities to transform forecasting, risk management, and understanding of value drivers" was the top priority most commonly cited by CFOs (23%).⁷⁸

As finance professionals move into strategic business leadership roles, the importance of having quality data grows, and they must increasingly rely on their technology counterparts to help them drive business intelligence. Seventy-three percent of finance leaders said that closer CFO-CIO alignment was important to achieving financial transformation.⁷⁹ With more intelligent and powerful cloud computing, big data is finally moving into new areas, helping finance leaders close books faster, deliver more accu-

rate reporting, and build more intelligent business strategies.

Beyond data analysis, CFOs face another modern-day data challenge: as they take on larger roles within IT and analytics, CFOs are forced to tackle the growing issue of data management. This includes both data storage, as well as monitoring and managing data quality. These critical tasks not only enable CFOs to do their job, but they allow other functions to operate more efficiently. Without data quality control, CFOs and other business leaders risk making decisions based on flawed information.

As data and analytics play an increasingly important role in business, companies—and their CFOs—are working to establish cultures of data across their organizations. This means that measurement strategies and data collection plans are the starting point and not an afterthought, there is a high level of fluency in analytics across teams, and business leaders have access to the data they need, whenever they need it, to make informed strategic decisions.





AI and ML deliver instant intelligence

Not long ago, artificially intelligent machines seemed like a thing of science fiction; even today, when people think of artificial intelligence (AI), many still envision human-like robots. But in practice, artificially intelligent machines have been around for decades, making our lives better, safer, and more efficient. So why all the buzz now?

In short, it's because these systems are only now getting really good. Correction: really, really good. In 2016, Microsoft's Artificial Intelligent and Research team reported that their conversational speech recognition system had reached human parity, i.e., their system made the same or fewer errors converting speech to text as a professional transcriptionist.⁸⁰ This system, which boasted a word error rate (WER) of 5.9% in 2016, has since improved to a WER of 5.1%.⁸¹ As the processing power and accuracy of these intelligent systems improve — from advancements in neural networks to natural language processing — the opportunities to leverage these technologies increase as well.

To understand how artificial intelligence and machine learning will impact finance, it's first useful to understand what these terms mean. While there are many types and definitions of AI, it can commonly be understood as a computer that performs a function that requires

some form of cognitive intelligence. This may include visual perception, speech recognition, or decision making. Machine learning is a type of artificial intelligence where computers leverage new information to improve their outputs automatically.⁸²

**\$2.9
trillion**

Business value generated
from AI by 2021.

The power of these intelligent computers — which are frequently cloud-based — is in their ability to process a large volume of information at a speed which humans are not capable of achieving. While reaching human parity in WER is excellent, the true power of this artificially intelligent system is that it can transcribe hours of audio in seconds at that same WER. This proficiency makes artificially intelligent computers extremely effective in performing four categories of tasks: detection, classification, probability, and optimization.

Detection

Intelligent systems can be used to analyze large amounts of data and detect anomalies. In finance, this may be

used to help identify fraud by monitoring behavioral patterns, flag when a payment will arrive late, or detect changes to market conditions. These tools are also being used to help mitigate risk by ensuring regulatory compliance and improving operations, flagging abnormal changes or anomalies for further investigation.

Classification

Artificially intelligent systems can be used to organize and classify data categorically. Through classification—often referred to as segmentation or clustering—businesses can leverage AI to reconcile transactions, categorize expenses, and even evaluate interactions between categories to identify correlations.

Probability

These AI systems can be used to conduct probability analysis. These tools give finance teams the ability to run faster, more accurate data models. This enables them to quickly test how changes to specific variables will impact outcomes, such as how different prices will impact revenue or how changes to net payment terms will alter cash flow.

Optimization

Lastly, these tools can be used to optimize systems, processes, and decision making. Through real-time data analysis, intelligent systems can calculate the probability of various outcomes and optimize accordingly; analytical models can weigh information and make optimizations based on the re-

sults. In finance, this type of optimization can be used to maximize profits by dynamically optimizing prices at different times, reducing shop floor injuries by slowing down a machine when a sensor identifies a potential issue, or cut costs by automatically optimizing resource allocation across the organization.

Despite its many benefits, just 15% of businesses are currently leveraging AI, but 31% are planning to implement intelligent systems over the next year.⁸³ Eighty-three percent of companies said that AI is a strategic priority for them.⁸⁴ As organizations reap the efficiencies and insights of AI, Gartner predicts that businesses will generate \$2.9 trillion in business value from AI by 2021.⁸⁵

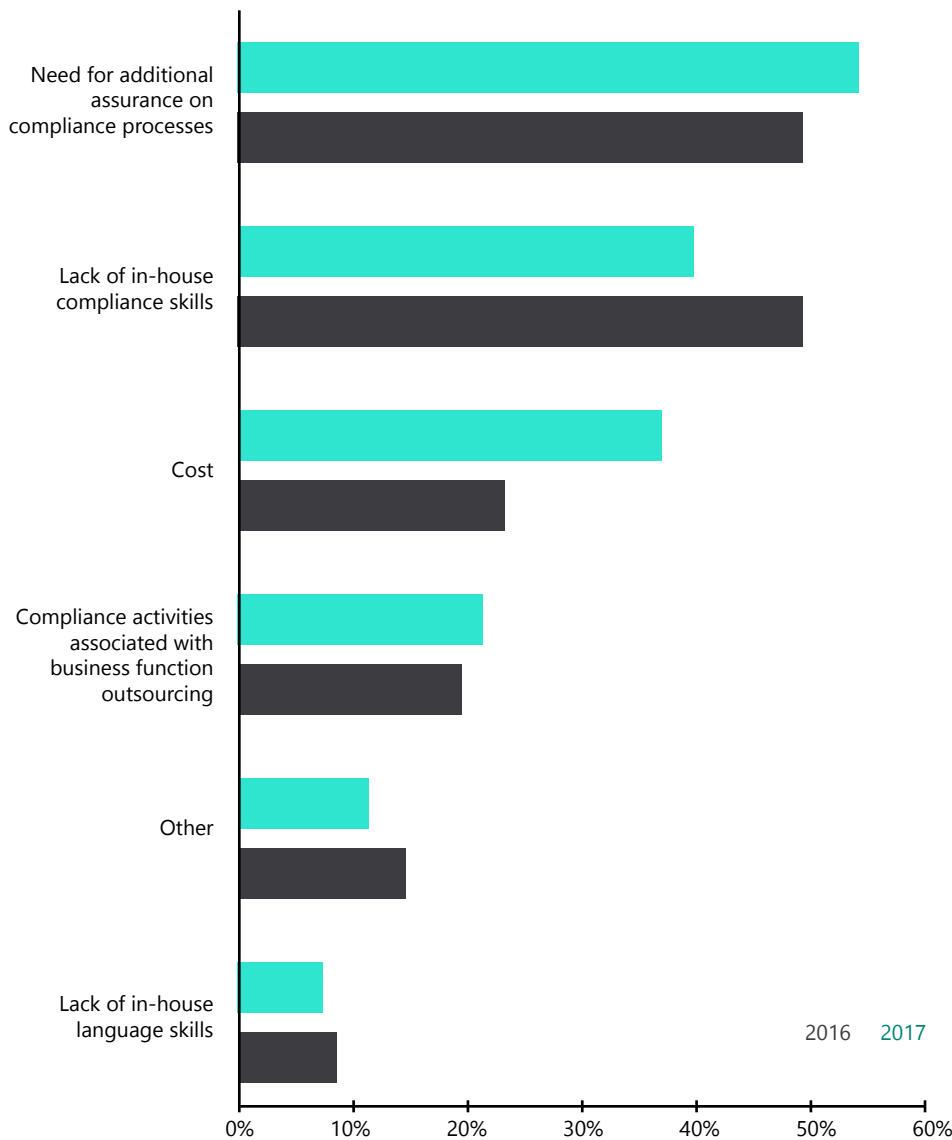
The merging of big data with intelligent technology has made processing large data sets easier than ever, and from mining big data to predictive analytics, finance leaders are increasingly relying on these new, intelligent tools to help them succeed. Today, finance professionals are being asked to apply their systemic approach for numbers to data that reaches far beyond the realm of finance, including assessing consumer data to forecast sales trends, economic indicators to predict market trends, and operations metrics to help streamline processes and cut costs. Beyond dollars and cents, finance leaders possess the ability to extract knowledge from numbers and apply that knowledge to make strategic business decisions, and now, with AI, these leaders are becoming smarter and more powerful than ever.

Artificially intelligent computers are extremely effective in performing four categories of tasks: **detection, classification, probability, and optimization.**



Fifty-three percent of companies outsource tax functions.

Main drivers for outsourcing all or part of the compliance function



Automation streamlines operations

As increasing transaction volumes and ever-changing regulations are making finance more complex, businesses are looking to reduce the costs of the many manual tasks required in bookkeeping and accounting. Fifty-three percent of companies in Deloitte’s most recent Global Outsourcing Survey⁸⁶ reportedly outsource tax functions, and 42% outsource certain finance functions. For compliance specifically, 56% of companies said the main reason they outsourced was due to lack of in-house skills, while 38% cited costs.⁸⁷

With the rise of AI, businesses are now turning to robotic process automation (RPA) to help reduce costs, speed processing, improve quality controls, and free up their employees’ time for more strategic work. Eighty-

eight percent of businesses projected a moderate to high demand for RPA in finance and accounting in 2018,⁸⁸ while 66% reported that automated AI applications would become applicable to their finance and accounting over the next couple of years.⁸⁹

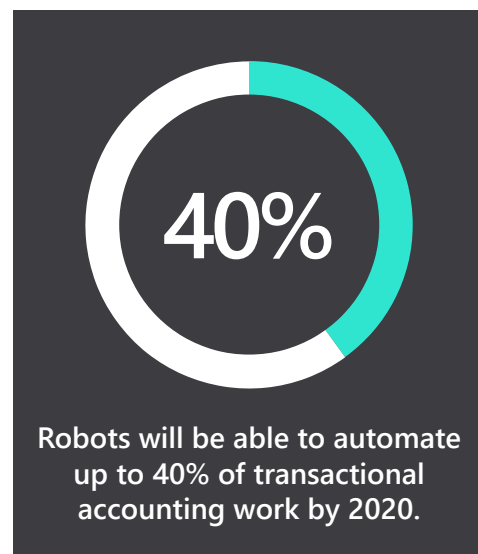
Automation—enhanced by AI and machine learning—is streamlining finance operations in many ways and saving money by completing previously manual tasks faster and more efficiently. RPA—artificially intelligent workers⁹⁰ — can now be used for many tasks, including digital invoicing, expense management, fixed-asset accounting, conducting general ledger account reconciliation, evaluating customer risk, and auditing expense reports.

Beyond faster speeds and lower costs, automation is playing a larger role in compliance. Automated, intelligent systems can review employee disclosures, open accounts, and paper statements to flag any trades or transfers for the appropriate level of

review. They may also review employee expenditures — particularly on gifts and entertainment—to help identify potential areas of conflict or policy abuse. Furthermore, they can help businesses manage financial risk through tasks like detecting changes in risk exposure and helping to determine the causes for such movement, as well as in evaluating customer risk and making recommendations on credit limits or maximum loan amounts.

Companies are finding that digital assistants are reducing operating costs by as much as 80%,⁹¹ and a study by Accenture showed that robots will be able to automate or eliminate up to 40% of transactional accounting work by 2020.⁹² But this doesn't mean that automation will be the end of the finance professional. To the contrary, automation, AI, and RPA are elevating the finance function, allowing workers to spend less time on tedious manual tasks and more time deriving higher-value strategic insights for their businesses. These technologies are estimated to recover between 25%

and 75% of financial staff's time, freeing them up to focus on more meaningful work, like predictive analytics and performance management.⁹³ Before long, today's manual financial processes will be a distant memory, but automation alone won't transform finance; successful finance departments will continue to need human oversight and a knowledgeable workforce to help drive strategic business growth.



Work faster and smarter

From risk management to strategic planning, finance professionals are taking on new, important challenges in the workplace. To meet these changing demands, they must leverage innovative, intelligent tools to combat new threats while fostering growth. At Microsoft, we're making finance smarter and safer with unified data that powers intelligent, automated systems.

Unify business data

Finance leaders need real-time visibility into business operations and performance to make informed decisions. From cloud-based data solutions on Azure to intelligent analytics tools in Dynamics 365, we're helping businesses turn data into actionable insights so they can optimize operations and make more strategic business decisions.

Get predictive insights

To succeed in today's competitive business environment, business leaders need better financial forecasts and foresight into emerging market trends. With artificial intelligence and machine learning embedded, Dynamics 365 allows companies to be less reactive and more proactive and provides them with the knowledge to make smarter risk and investment choices.

Automate workflows

As the pace of modern business accelerates, finance teams are looking to streamline processes and get more done. With Azure, Dynamics 365, and Microsoft 365, we're providing businesses with tools to automate workflows and simplify communication so they can improve efficiency, productivity, and compliance.



Living in the age of uncertainty

- The age of uncertainty
- Regulation changes create uncertainty
- Businesses brace for Brexit
- Leaders try to navigate a highly politicized environment
- Uncertainty takes a toll



Living in the age of uncertainty

The age of uncertainty

From Brexit negotiations and trade tariffs to immigration reform and environmental policies, the unpredictability of today's political and social landscape reigns supreme among the factors concerning finance leaders.⁹⁴

As the future of various regulations around the globe remains unclear in a highly politicized environment, uncertainty is placing a great amount of pressure on businesses; forty-nine percent of finance leaders feel that they are exposed to more uncertainty today than they were three years ago.⁹⁵ This uncertainty can be seen in the amount of cash U.S. businesses are accumulating, an amount that continued to climb in the third quarter of 2017⁹⁶ despite projections of steady U.S. GDP growth in 2018,⁹⁷ signaling that finance professionals remain cautious about the economy.

Unfortunately, the waters on the horizon appear no calmer than those of the past year, so finance leaders need to prepare their businesses for more uncertainty ahead.

Regulation changes create uncertainty

Over the last 18 months, a string of major regulatory changes has been initiated and enacted. From GDPR to tariffs, these regulations span across a wide range of disciplines and touch nearly every business. As business leaders adapt to comply with the latest regulations, they remain concerned over the impact of additional pending regulations that could upend their operations. In 2018, 42% of CEOs globally and 50% of CEOs in North America reported over-regulation as a top concern,⁹⁸ with 54% citing rising risk levels due to industry-specific regulation.⁹⁹

Finance regulation

Finance professionals continue to face an onslaught of changes to financial regulations. Last year, new revenue recognition rules went into effect for most public entities. These new rules, created by the FASB and IASB, attempt to simplify and

Executive summary

In an incredibly polarized political environment, attitudes can shift on a dime, making it difficult for companies to plan for the future.

Highlights

- Forty-nine percent of finance leaders feel that they are exposed to more uncertainty today than they were three years ago.
- Forty-two percent of global CEOs reported over-regulation as a top concern.
- Sixty-six percent of consumers felt it was important for brands to take a public stand on social and political issues.

Forty-nine percent of finance leaders feel they are exposed to more uncertainty today than three years ago.

clarify the rules by which revenue is reported by breaking it down into a five-step model.

In addition to revenue recognition, businesses are preparing to adopt new lease accounting standards on January 1, 2019. According to an early 2018 survey by Deloitte, only 21.2% of companies were prepared to comply with the new lease accounting standard.¹⁰⁰ Furthermore, finance professionals are actively managing the regulatory fallout from Brexit, the new U.S. tax bill, new tariffs, and new internal controls.

Data protection

Data protection and data privacy compliance are huge concerns for today's business leaders, with 78% expressing increasing concerns in a recent study by EY.¹⁰¹ As many companies struggle with managing and securing their customers' data, regulators are now making moves to empower consumers and ensure the privacy of said data.

As GDPR rolls out in the European Union (E.U.), it's impacting businesses worldwide, affecting any business who has customers in the E.U., and many companies remain unprepared. In an early 2018 study, only 33% of companies reported having a plan while 39% said they were not familiar with GDPR at all.¹⁰²

As businesses prepare for GDPR, many are also facing the prospect of new regulations as the U.S. grapples with several large data breach cases, each with far-reaching consequences, and weighs options for better managing data privacy and consumer protections.

Trade policy

With newly imposed tariffs on imported steel (25%), aluminum (10%) and solar panels (30%), many business leaders and financial experts fear that new trade tariffs could negatively affect domestic economic growth and accordingly, hurt job growth.¹⁰³ There is also increasing concern regarding the potential for future tariffs. Sparked by these new tariffs, and the list of 1,300 additional tariffs that have been proposed by the U.S., nearly three-quarters of finance leaders are now worried about a trade war, which could have an extremely negative impact on businesses in the U.S. and abroad.

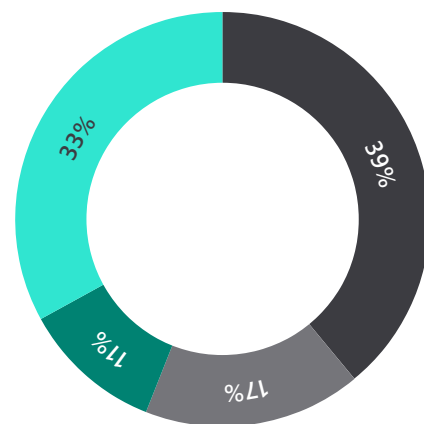
Other policies

Beyond finance, data, and trade, there is a long list of policy areas currently being upended that are of great interest and concern to business leaders. From immigration to labor policy, new legislation is impacting how businesses source and manage talent. Many industries are also being impacted by rollbacks in environmental policies, which can affect sourcing and operations. Some industries—like the technology industry—have been relatively unified in their objection to these environmental policy changes,¹⁰⁴ while others — like utilities — remain divided.¹⁰⁵

Beyond regulatory policy, many other policy uncertainties exist on the horizon, including international policy in regions like North Korea, Syria, Yemen, and Iran, each of which could have a substantial impact on businesses and the world.

Legal note: *The material contained within this document is for informational purposes only and is not meant to be a substitute for professional advice. Please consult an accounting or legal professional for advice on any new rules and guidelines.*

GDPR compliance readiness



- I'm not familiar with the GDPR
- We have heard of the GDP but have not yet taken any action
- We are studying the GDPR and its scope
- We have a plan for GDPR



Businesses brace for Brexit

On June 23, 2016, Britain shocked the world when they passed a referendum to leave the European Union (E.U.). This decision sent a shockwave through global markets as the implications of Britain's departure from the European Union moved from theory to reality.

The initial vote was met with severe backlash from the business world. The British Pound plunged and has remained roughly 15% lower compared to the dollar than before the referendum.¹⁰⁶ While the FTSE 100 has recovered from its initial fall,¹⁰⁷ a long list of outstanding Brexit unknowns have resulted in a choppy start to 2018,¹⁰⁸ and the uncertainty has pushed U.K. government bonds to record lows as investors seek safer assets.

Many global businesses are now having to make difficult decisions about how to proceed with business in the U.K. For many, the U.K. was a link into the E.U., but with the U.K. now leaving the E.U., many are reconsidering their U.K. operations. In one study by Gowling WLG, two-thirds of U.S. businesses polled said that the Brexit decision was already impacting in-

vestment choices in the county.¹⁰⁹ Half of the businesses polled cited plans to bypass the U.K. in order to do business directly with the E.U.

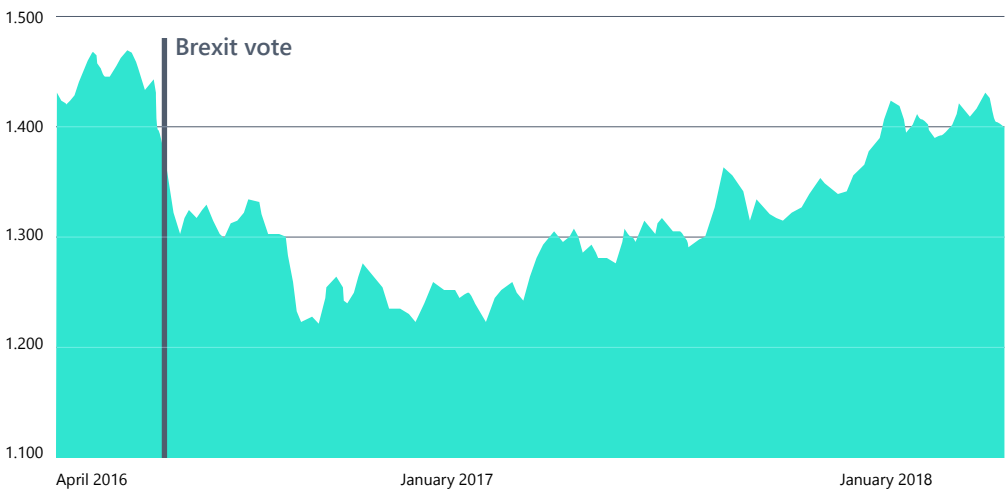
The sheer uncertainty surrounding Brexit is also having an impact on the job market in the U.K., with companies, job seekers, and employees all showing signs of cold feet. In the year following the Brexit vote, fewer foreigners applied for work in the U.K., uncertain about their ability to stay and work, and fewer British companies sent offers to job seekers located outside the U.K. This has caused the representation of foreign candidates in the U.K. talent pool to decrease by 50%.¹¹⁰ In addition, 41% of U.K. tech workers surveyed said they were less likely to start their business in the U.K. due to Brexit.

As the Brexit date approaches, businesses are still seeking clarity from the U.K. government future trade arrangements with the E.U. and the world. This ambiguity has created a great deal of frustration for business leaders, who are struggling to set long-term investment strategies as a result of the uncertainty.

The U.K. is scheduled to leave the E.U. on March 29, 2019.

The U.K. is scheduled to leave the E.U. on March 29, 2019.

British Pound/U.S. Dollar



Sixty-six percent of consumers feel it is important for brands to take a public stand on social and political issues.



Leaders try to navigate a highly politicized environment

While companies have historically taken a highly strategic and tactical approach to public relations, massive social media campaigns and boycotts—like #GrabYourWallet, a movement started by Shannon Coulter in October 2016—have forced many companies to enter the political conversation whether they wanted to or not.

Executive orders directly affecting both customers and employees have prompted companies to take a political position, with CEOs from Microsoft, Apple, Google, Goldman Sachs, Starbucks, Nike, Tesla, and Facebook (among many others) decrying certain policies—including those on immigration and the environment — in public statements and pledging to protect their employees who might be impacted by particular decisions.¹¹¹ An executive order in April 2017 calling for a review of national monuments prompted outdoor retailers REI, Patagonia, and The North Face to urge customers to contact their legislators and oppose any legislation that threatens federally protected public land.¹¹²

In the past, it was rare for large companies to make openly political statements; however, with changing demographics, the rise of social media, and a rapidly shifting political environment, customers are vocal when they believe a business has misstepped and now expect brands to take a stand on issues. In a recent study by Sprout Social, 66% of consumers felt it was important for brands to take a public stand on social and political issues.¹¹³

Uncertainty takes a toll

Business leaders are trained to “expect the unexpected,” but living in limbo can take a toll, and long-term uncertainty—whether geopolitical, regulatory, social, or other—has been associated with prolonged declines in economic activity.¹¹⁴ More concerning, research also shows no evidence of a rapid rebound when uncertainty declines—known as the “wait-and-see” effect. Instead, the data show that uncertainty exists in a series of feedback loops which signal bad economic times.

In the NBER paper, “Uncertainty and Economic Activity,”¹¹⁵ researchers Bachmann, Elstner, and Sims show that in an uncertain environment, businesses shift to a defensive posture. Due to uncertainty, businesses reduce overall investment, which leads to a decrease in hiring, work hours, research and development, manufacturing production, and labor

productivity. Bachmann, Elstner, and Sims write that, “Business uncertainty [has] effects similar to negative business confidence,” and go on to detail how during these cycles, hard earned relationships are damaged and business models fail. All of this, in turn, cuts economic output and drives further uncertainty, which restarts the cycle. “Business and customer relationships have to be re-established and business models altered when the economy is at trough. This generates uncertainty.” Summarized succinctly in their final words, “Uncertainty is a concomitant phenomenon of negative first moments events in the economy. Bad times breed uncertainty.”

Uncertainty makes it difficult for businesses to forecast performance and risk. Seventy-one percent of finance professionals said that forecasting risk today is as difficult or even more difficult than it was three years ago, and 54% believe it will be increasingly difficult in the next three years.¹¹⁶

In spite of the data, the complexity of 2018 only creates greater uncertainty over the effects of this uncertainty. In-line with Bachmann, Elstner, and Sims’s findings, in 2018, Goldman Sachs projects buybacks will jump to \$650 billion, up 23% year-over-year. Driven in large part by savings realized through the recently enacted U.S. tax cuts, this growth in buybacks suggests that businesses are seeking alternative ways to deploy cash instead of re-investing internally. Yet, as businesses increase buybacks, Goldman Sachs is also projecting a 16% growth in mergers and acquisitions (\$360 billion) and an 11% increase in capital expenditures (\$690 billion),¹¹⁷ conflicting narratives to add to the complexity of these modern times.

While the outcome remains to be seen, one thing is certain: as uncertainty looms with no end in sight, businesses will be relying on their finance leaders to help navigate the choppy waters ahead.

Pivot and adapt

Today’s business leaders face many difficult decisions as they navigate through a time of considerable ambiguity and uncertainty. At Microsoft, we’re empowering these leaders with greater visibility into their business operations to help them identify emerging hazards and the flexibility to adapt quickly and scale with ease.

Better manage risk

From cybersecurity to compliance, finance professionals must address a wide range of threats to their business. With Azure’s security, privacy, transparency, and industry-leading compliance coverage, business leaders can better manage cyber risks, and with unified data in the cloud, finance teams can improve reporting speed and accuracy.

Increase flexibility

To succeed in a world of uncertainty, businesses must be flexible to quickly pivot and adapt as market conditions change. With Azure and Dynamics 365, organizations have the flexibility to deploy how and where they want, leverage extensions to quickly add new, customizable capabilities, and easily manage how system updates and new features are implemented across the organization.

Scale with ease

Businesses face many challenges as they look to scale at home, abroad, and into new verticals. Dynamics 365’s cloud deployment options make scaling easier than ever, whether a company is looking to scale up and down to better manage seasonal demands or duplicate a Dynamics 365 instance on a server in a new country they’re entering.



Businesses adapt to an evolving workforce

- The workforce continues to change
- Diversity and inclusion are at the forefront
- Millennials become managers and Gen Z graduates
- Skill gaps create staffing challenges
- Businesses balance technology and politics in corporate offshoring
- Companies revisit remote working
- The gig economy booms



Businesses adapt to an evolving workforce

The workforce continues to change

The workforce is changing. The recession has caused many employees to delay retirement or return to work. Older adults (ages 55 and up) are now the fastest-growing segment of the American workforce.¹¹⁸ At the same time, a new generation of Millennial employees is placing their stamp on the workforce as Gen Z starts to enter the workforce. These highly motivated, highly educated, and tech-savvy young professionals are forcing many businesses to redefine their work environment.

This dichotomy between aging employees, some of whom struggle to adapt to the new fast-paced, tech-heavy business environments of today, and older Gen Zers, who are just getting their feet wet in the “real world,” poses two critical issues for business leaders. First, businesses may find themselves struggling to obtain talent with the ideal balance of flexibility and experience needed to run their organizations successfully. And second, managers may find it challenging to manage teams whose members have very disparate mindsets, skill sets, and needs.

With Millennials and Gen Z, finance leaders are also dealing with a new entrepreneurial breed of employees. Millennials are creating more companies (and starting them at an earlier age) compared to Baby Boomers.¹¹⁹ While possessing an entrepreneurial spirit is increasingly thought of as an asset in employees, it is a trait that can prove problematic to companies if employees are pouring all their energy into side endeavors. Bootstrapped entrepreneurs may take the liberty of using company resources for personal ventures. These liberties may include taking small items like pens and paper, as well as the use of data subscriptions, enterprise software, or work devices. And employees who burn the candle at both ends will be more fatigued, less productive, and more prone to making errors.

This is not to suggest companies should assume a defensive posture if they discover employees have side gigs or fledgling startups. Instead, finance leaders should institute formal programs that allow employees to harness their en-

Executive summary

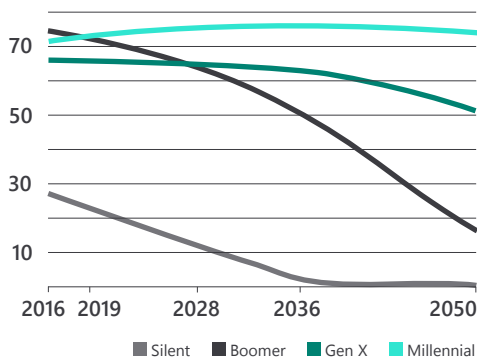
A new generation of highly educated workers is entering the job market, and they are forcing businesses to re-evaluate priorities.

Highlights

- Older adults (ages 55 and up) are now the fastest-growing segment of the American workforce.
- By the year 2065, there will be no one racial majority in the U.S.
- There could be a need for 736,000 data scientists by 2024, yet estimates predict only 438,000 data scientists in the workforce.

The workforce is changing.

Projected population by generation *in millions*



entrepreneurial tendencies for the good of the company—a concept known as intrapreneurship. Companies with intrapreneurial cultures enjoy higher levels of purpose-led management and employee engagement,¹²⁰ traits that ultimately lead to creativity, employee loyalty, and innovation.

Diversity and inclusion are at the forefront

Two new generations are poised to take over the workforce; they are both more diverse than previous generations and they place a higher value on diversity, inclusion, and accessibility than their predecessors. These generations are, of course, Millennials and Gen Z. When compared with Baby Boomers and Gen X, more Millennials and Gen Zers cited diversity and inclusion of a prospective employer as an important factor in their job search.¹²¹

Research by Nielsen indicates that Gen Z and Millennials, who make up roughly 48% of the U.S. population, are more racially diverse than preceding generations.¹²² By the year 2065, there will be no one racial majority in the U.S.¹²³ The face of the American population is changing, and with it, our expectations of who should be represented in the workplace are changing, as well.

Employees, investors, and the public have begun to demand increased transparency and accountability from companies regarding social issues. In turn, businesses are acknowledging

their shortcomings and making commitments and investments to change. Last year was a particularly hard year for the tech industry, with a number of high-profile companies facing intense criticism over missteps and failures with regard to implicit and explicit bias in the workplace.¹²⁴

In response to the growing national conversation around representation and equality, a coalition of corporate executives has banded together to create CEO Action for Diversity & Inclusion, a group dedicated to fostering frank and open discourse about issues like race, gender, and sexual orientation in the workplace. On its website, ceoaction.com, the group has created a repository of best practices for discussing and fostering a more diverse and inclusive workplace.

Public scrutiny aside, there are many reasons companies are seeking to have a more diverse workforce—a sense of equity, a desire for a company’s employees to more closely resemble the populations they serve,¹²⁵ and even profitability. Research by McKinsey shows that companies in the top quartile of gender and racial diversity were more likely to deliver financial returns that were above their national industry median.¹²⁶

As companies embrace gender and racial diversity, they open themselves up to a diversity of ideas that can uncover new opportunities, challenge long-held assumptions, and help unlock new communities of talented individuals.

Millennials become managers and Gen Z graduates

Not too long ago, the business world was all aflutter about how to deal with Millennials in the workplace, trying to predict what to expect from this new and seemingly exotic generation. Fast forward to 2018, and the oldest Millennials are already approaching mid-career, with many assuming management roles. And with Millennials taking on higher levels of responsibility earlier in their careers than was common in the past, they are increasingly in the position of managing employees older than themselves.¹²⁷

flexible about letting employees take care of personal matters as needed, so long as they stay on top of their work.¹²⁸

Looking to the next generation, the leading edge of Gen Z (also known as iGen) has just begun to enter the workforce. As they do, their beliefs, attitudes, and habits will shape how businesses operate and redefine how managers must lead in order to be successful.

In her book, *iGen: Why Today's Super-Connected Kids are Growing Up Less Rebellious, More Tolerant, Less Happy—and Completely Unprepared for Adulthood*, Professor Jean M.

Increasingly, Gen Zers are pursuing interests outside of their full-time employment that also generates income—in today's parlance, "everybody's got a side hustle."¹³⁰

Now in their late teens and early twenties, the oldest members of Gen Z grew up during a recession, making them far more risk-averse than Millennials.¹³¹ On average, these digital natives are coming of age later than previous generations, waiting longer to hit seminal milestones like dating, driving, and holding a job. As a consequence, they arrive in the workforce with less life experience under their belts and may require a high degree of oversight and guidance as they ad-



As a group, Millennials are typically characterized as tech-savvy, entrepreneurial, collaborative, and valuing of work-life balance, and this is impacting their approach to management. In practice, it means that they are likely to embrace the use of workplace communication and collaboration technologies to foster conversation and teamwork and that they promote a flatter hierarchy in the office, embracing good ideas from wherever they originate. And because the current IT environment makes it easier than ever for employees to work whenever and wherever they want, Millennial managers are often more

Twenge of San Diego State University analyzes the impact that this generation will have on society as they come of age. Twenge's research revealed that members of Gen Z are both more focused on work compared to Millennials at the same age and more likely to seek stable employment than to be self-employed.¹²⁹

Authors David and Jonah Stillman offer a counterpoint to this perspective in *Gen Z @ Work: How the Next Generation Is Transforming the Workplace*, arguing that this maturing generation's entrepreneurial impulses are simply expressed in a different way.

just to the rhythms and responsibilities of adult careers.¹³²

These findings present both opportunities and challenges for companies. From a financial perspective, Gen Z's desire to seek stable, long-term employment could spell higher employee retention rates—and thus lower costs for recruiting and training new employees over time. In exchange, employers must be willing to invest in training and guiding Gen Zers as they adjust to corporate life and to find ways to direct their entrepreneurial inclinations into their work with the company.



Skill gaps create staffing challenges

Perhaps one of the more under-represented responsibilities of the CFO is to develop talent within their organization. According to the KPMG Global CEO Outlook report, 97% of CEOs said that the CFOs were responsible for attracting and retaining top finance talent, yet only 33% gave their CFOs a passing grade in talent management.¹³³ But with unemployment at 4.1%, the lowest point in more than a decade,¹³⁴ attracting talent may be more challenging than it first seems. In a recent survey, 46% of employers reported having difficulty filling jobs.¹³⁵

Part of this skills gap has developed as academic finance programs remain heavily focused on traditional financial tasks and not enough on the new responsibilities of corporate finance, like managing technology and operations. One McKinsey study reported that there could be a need for 736,000 data scientists by 2024, yet estimates only 438,000 data scientists in the workforce.¹³⁶

In a survey commissioned by Bentley University, 58% of respondents, including business decision makers, recruiters, and students, gave recent college graduates a letter grade of "C" or lower on their preparedness for their first jobs, with nearly two thirds of respondents calling the lack of preparedness among Millennials a "real problem."¹³⁷ Sixty-four percent of corporate respondents remarked that the

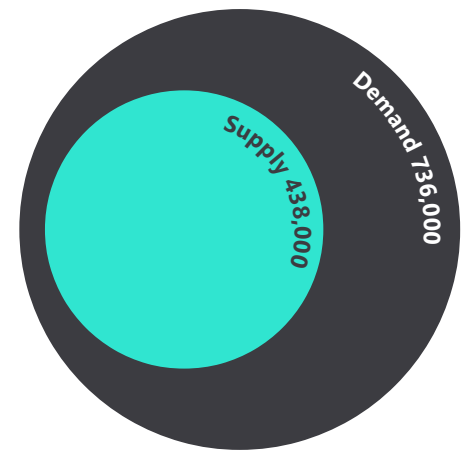
lack of preparation of new hires harms the productivity of their day-to-day business, while 74% said the lack of preparedness has an impact on the economic challenges facing the U.S. today. As a result of these challenges, 52% of CFOs reported not being able to focus on strategic priorities because they were unable to delegate other responsibilities to their team due to a lack of necessary skills.¹³⁸

Succession planning has also become a more complicated task for CFOs as their roles have become much more diversified. The path to CFO no longer entails climbing the ladder through the finance department, but frequently follows more operations-focused and business leadership roles. On their way up, many CFOs are given the responsibility of managing key business units or customer segments in conjunction with their finance responsibilities. The CFO position is no longer just a functional role but a business-leadership role.

Sixty-nine percent of Fortune 500 CFOs were promoted from within their organization.

Today, most CFOs are recruited internally, with 69% of Fortune 500 CFOs having been promoted from within their organization.¹³⁹ Of those internally promoted CFOs, 70% spent more than 11 years at the company prior to their promotion and 41% were there for more than 20 years.¹⁴⁰

Supply and demand of data scientists by 2024



Businesses balance technology and politics in corporate offshoring

Since the turn of the millennium, there has been a steady growth in offshoring, driven largely by improved communication (via technology), easier travel, and a growing low-cost, high-skilled labor market abroad. But the same disruptive force that enabled companies to move jobs overseas—technology—may now be responsible for bringing them back onshore.

The adoption of robotic process automation, artificial intelligence, and machine learning is allowing companies to automate routine jobs that previously would have been outsourced to a human workforce overseas. This trend has resulted in a resurgence of domestic jobs, as companies hire skilled professionals to oversee and troubleshoot technology in onshore facilities while continuing to invest in research to advance developments in these fields.¹⁴¹ For CFOs, the decision to bring low-skill tasks back in-house while simultaneously generating new, high-skilled positions is one that can potentially reap cost savings as well as political goodwill.

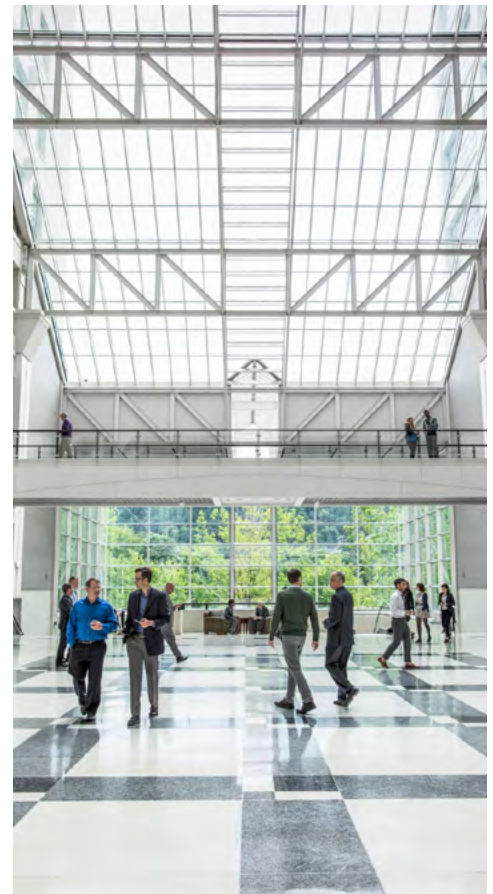
While technology is enabling companies to reduce offshore commitments, recent developments in domestic and international politics may be having the opposite effect. In the U.S., a newly introduced tariff on steel and alumi-

num may force companies to offshore the purchase or manufacturing of certain goods. At present, the domestic demand for steel and aluminum outstrips the available supply. Because of the tariff—which affects raw materials but not finished products—companies that manufacture products on U.S. soil using said imported steel may no longer be able to afford to do so, and in some cases, may opt to offshore their manufacturing. Likewise, companies that currently source steel components from U.S. companies may choose to import finished products from manufacturers overseas in order to remain price competitive.¹⁴²

The Tax Cut and Jobs Act, which was signed into law last December, may also have unintended effects on offshoring by U.S. businesses. The plan institutes the creation of a territorial tax system, under which profits earned by U.S. companies in foreign countries are not subject to U.S. taxes. Many experts fear that this will incentivize businesses to move jobs and operations to countries with lower tax rates than can be found domestically.¹⁴³

And in Europe, Britain's decision to exit the E.U. could result in jobs flowing out of the U.K. Due to uncertainty about the domestic job market and to the high cost of hiring foreign employees as a result of Brexit, skilled jobs which were previously filled by citizens of other E.U. member countries who had relocated to the U.K. for work may end up being outsourced outside Britain's borders.¹⁴⁴

The same disruptive force that enabled companies to move jobs overseas—technology—may now be responsible for bringing them back onshore.

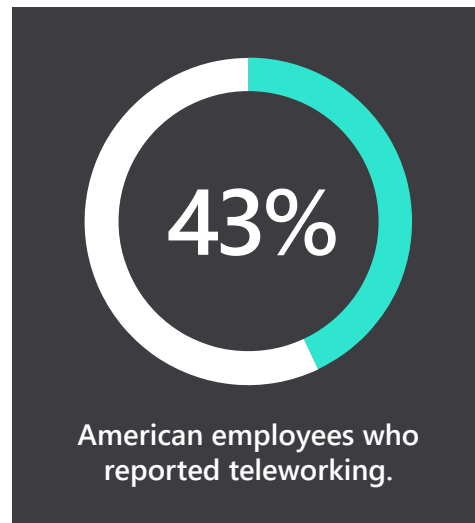


Companies revisit remote working

The “remote working experiment” as we know it may be coming to an end. In the past year alone, companies such as Yahoo!, Bank of America, Aetna, and IBM have either terminated or scaled back their teleworking programs in favor of more traditional work environments. This sudden reversal in policy reflects several underlying assumptions.

First is the hope that reuniting employees in traditional office settings will enable larger companies to better compete against startups. Large companies, being overall less nimble than their smaller competitors, are finding it hard to react to opportunities as quickly as startups do, particularly when their workforce no longer sees each other face-to-face on a daily basis. By regrouping employees under one roof, these companies are hoping to harness the collective brainpower of their workforce, spurring collaboration and increasing the pace at which things get done.

The second assumption is that having employees in one location will give managers a greater degree of oversight over their staff. After years of teleworking, some companies are discovering that their remote working policies might not be well thought out, leading to losses in productivity.



Interestingly, this move comes at a time when more people are teleworking than ever before. FlexJobs’ 2017 State of Telecommuting in the U.S. Employee Workforce Report found that telework rose 115% between 2005 and 2015, with four million employees reporting that they worked from home more than half of the time.¹⁴⁵ And according to Gallup’s State of the American Workplace poll, 43% percent of American employees reported teleworking in 2016, an increase of 4% from 2012.¹⁴⁶

Is remote working right for your company?

For CFOs and other C-level executives, the decision whether to expand or roll back remote working policies comes down to three factors:

Is your workforce centralized enough to make traditional work environment viable—and cost-effective?

In markets where you only have a few employees, the overhead costs of renting and maintaining office space may outweigh the benefits of uniting employees under one roof.

Do your employees work in functions that would benefit from collaboration with colleagues?

If so, the proximity and immediacy of a shared workplace might yield insights and developments that are not possible when employees work remotely. Conversely, in cases where employees operate independently and whose responsibilities are siloed, telework offers a degree of flexibility and work-life balance that might not be achievable if they had to commute.

Would working in a traditional office environment make your workforce more efficient?

If you’re noticing that your telework cohort is struggling to meet deadlines or quotas, then perhaps it is time to reunite the gang.

The gig economy booms

The proliferation of digital platforms and technology has made the gig economy more feasible and appealing for an increasing number of people. Thirty-six percent of the American workforce is now freelancing;¹⁴⁷ workers are choosing the flexibility of freelance work over the traditional perks of a nine-to-five job (such as paid time off, healthcare benefits, and retirement packages).

Intuit estimated that 3.9 million people regularly worked in the gig economy in 2017 and by 2021, they project that number will reach 9.2 million.¹⁴⁸

Forty-one percent of people participating in the gig economy also have a part-time or full-time job, with the extra hours they gain being used to supplement income.¹⁴⁹ One common misconception is that the gig economy is solely powered by Millennials. While they currently make up the largest share of the gig economy workforce, a recent survey by Payoneer reported that one in three U.S. gig workers was over the age of 50.¹⁵⁰

None of this would be possible without rapid advances in technology. Cloud-based platforms make it possible for remote workers to connect with employers from anywhere in the world, and companies like Airbnb and Uber used mobile applications to radically disrupt their respective industries.¹⁵¹

The gig economy poses a challenge for traditional businesses. Corporations need to figure out how to effectively engage and manage a remote portion of the workforce, as well as

determine how to securely grant access to internal systems.¹⁵² There are also concerns that a company's culture will suffer if there are too many freelance workers in the environment. However, there are substantial benefits for businesses who utilize the gig economy.

Freelancing offers corporations a more flexible and affordable means of hiring talent, especially if the company is only looking to fill a temporary need. In 2017, Samsung decided to experiment with using Upwork to satisfy needs for quick turnaround projects. This resulted in 60% cost savings and reduced administrative time by 64%.¹⁵³ Despite this, most companies still are not fully embracing freelance workers, with a recent Ernst & Young study finding that only 17% of global corporations' workforce was contingent.¹⁵⁴

Transform for the future

Two new generations of socially-minded, tech-savvy individuals are changing the workplace. As this evolving and empowered workforce seeks to leave their mark on their world, business leaders must empower them with the vision, opportunity, and resources to do so. As we undergo our own cultural transformation at Microsoft, it informs and inspires our pursuit to empower our clients as they transform their organizations for the future.

Empower employees

Employees are a business's most valuable asset; today's organizations must empower their employees to do more. From tools like Office 365 that help teams get more done to role-based workspaces in Dynamics 365 that put the right information at each employee's fingertips, Microsoft is helping businesses empower their employees to change the world.

Make tech accessible

Successful business leaders are seeking diverse perspectives and new ideas to challenge their most ingrained assumptions. With intuitive, familiar tools that are easy to learn and cloud-based applications that allow individuals to access information from anywhere, Microsoft is making technology more accessible to more people than ever before, opening up untapped markets for talent and innovation.

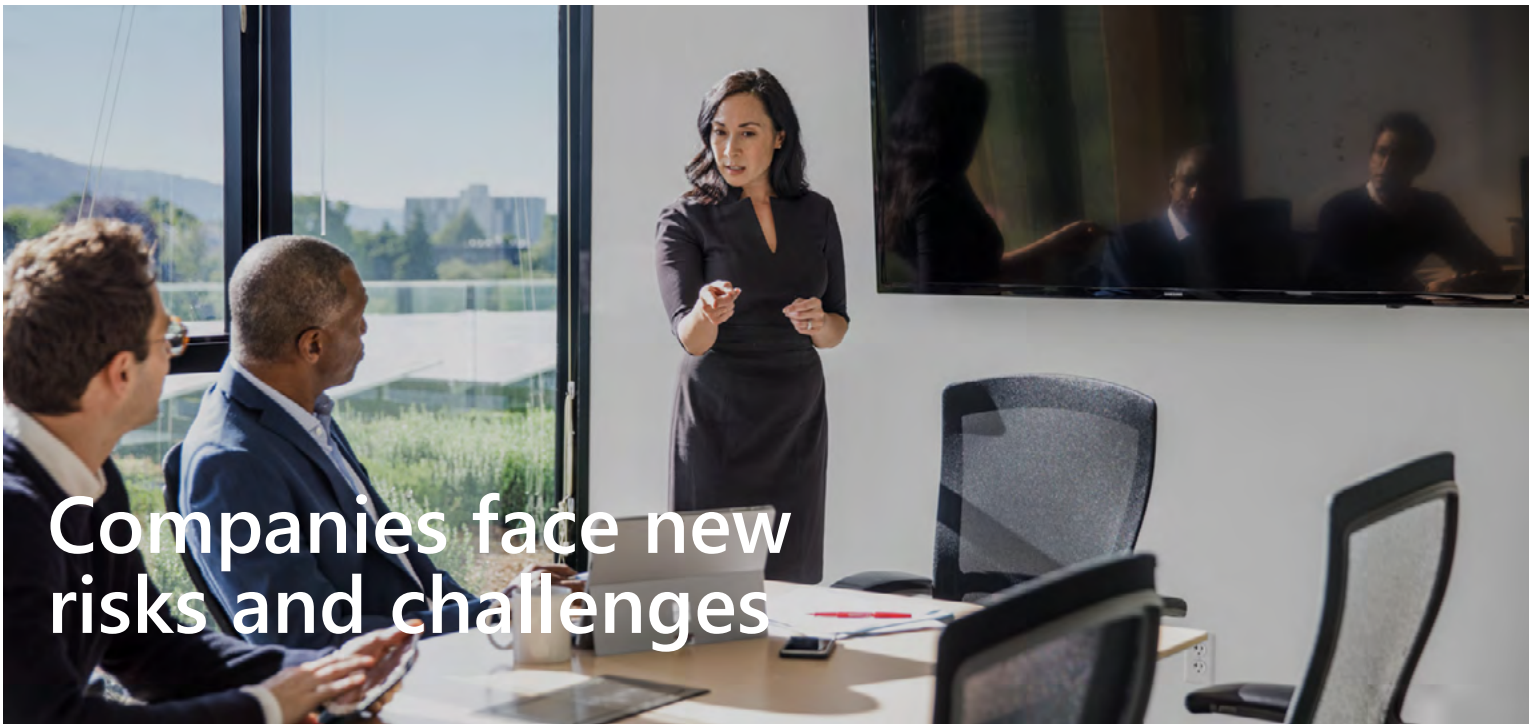
Transform culture

As our world faces new challenges, business leaders must transform their cultures to posture their workforce to solve today's most pressing problems. From tools that improve communication across an enterprise to the platform on which a startup will build the app that will disrupt an industry, Microsoft is empowering businesses to redefine their culture.

A woman in a black dress is standing and presenting to two men seated at a conference table. The room has large windows overlooking a city and greenery. The scene is brightly lit, suggesting a professional meeting or presentation.

Companies face new risks and challenges

- Shareholders demand greater transparency and better stewardship
- GDPR is here
- More data, more problems
- Industries converge



Companies face new risks and challenges

Shareholders demand greater transparency and better stewardship

In recent years, shareholders have become more vocal about what they expect from a company—beyond profits. In 2017, the majority of shareholders at four major energy companies voted in favor of greater disclosure on climate change.¹⁵⁵ This was the first time shareholders had approved climate-change resolutions at U.S. companies in opposition to board recommendations, and their move is indicative of the growing demand for transparency and stewardship at every level of corporate entities.

In 2017, 62% of Exxon shareholders voted for a non-binding resolution that would require the company to increase transparency as well as reduce CO2 emissions.¹⁵⁶ In 2016, AT&T shareholders forced a discussion about the company's Hemisphere program, which facilitates police access to phone records.¹⁵⁷ Shareholders have also pushed companies to be more transparent about their gender pay gap statistics—and were successful in the cases of Arjuna Capital and Pax World Management.¹⁵⁸

Transparency about a company's influence on politics is also a top demand of shareholders. In March 2017, investors at the Walt Disney Co. submitted a resolution asking the company to disclose its lobbying efforts. Investors had similar requests of Zevin Asset Management, where shareholders have been asking for clarification on political spending for ten years. This movement is not limited to the States; in Canada, shareholders demanded an update on how the Royal Bank of Canada addresses public policy issues in both Canada and the U.S.¹⁵⁹ In Australia, shareholders of BHP Billiton Limited (a multinational mining and petroleum company) demanded complete disclosure of the company's lobbying spending on climate and energy.¹⁶⁰

Perhaps not coincidentally, shareholders' rising demands correspond with consumers' demand for corporate responsibility. Eighty-six percent of consumers

Executive summary

Business challenges are a moving target. With each new year comes a new list of risks and obstacles that finance leaders will be forced to confront.

Highlights

- Eight-six percent of consumers believe that companies should help address social issues.
- By 2021, the annual damage caused by cyber crimes is expected to reach \$6 trillion, up from \$3 trillion in 2015.
- In 2018, industry convergence is the biggest trend CFOs see transforming the business landscape.

Eight-six percent of consumers believe that companies should help address social issues.

believe that companies should help address social issues¹⁶¹—and this affects their spending, particularly for Millennials and Gen Z. As consumers increasingly choose companies that offer better transparency and stewardship, shareholders will likely push for the same, as the companies' long-term economic interests realign with the social interests of the communities they serve.

GDPR is here

On May 25, 2018, a European privacy law took effect and set a new global bar for privacy rights, security, and compliance. The General Data Protection Regulation (GDPR) is fundamentally about protecting and enabling the privacy rights of individuals. The GDPR establishes strict global privacy requirements governing how businesses manage and protect personal data while respecting individual choice—no matter where data is sent, processed, or stored.

The GDPR imposes new rules on organizations that offer goods and services to people in the E.U., or that collect and analyze data tied to E.U. residents, regardless of where the business is located. Among the key elements of the GDPR are:

Enhanced personal privacy rights

Strengthening data protection for individuals within the E.U. by ensuring they have the right to access their data, to correct inaccuracies, to erase data, to object to the processing of their information, and to move their data;

Increased duty for protecting data

Reinforcing accountability of companies and public organizations that process personal data, providing increased clarity of responsibility in ensuring compliance;

Mandatory data breach reporting

Requiring companies to report data breaches to their supervisory authorities without undue delay, and generally no later than 72 hours; and

Significant penalties for non-compliance

Imposing steep sanctions, including substantial fines, that are applicable whether an organization has intentionally or inadvertently failed to comply.

Even with the law now in effect, there are still many questions surrounding the GDPR, and many businesses are still under-informed about the new regulation. Only 36% of IT professionals in the E.U. and 9% in the U.S. said they felt well informed about the GDPR and its impact on their business.¹⁶² As of mid-2017, only 28% of E.U. businesses and 5% of U.S. businesses reported that they had already started preparations to comply with the new laws. And as companies roll out plans, many concerns remain about ambiguity in the requirements, which could cost businesses millions if they fail to comply.



By 2021, the annual damage caused by cyber crimes is expected to reach \$6 trillion, up from \$3 trillion in 2015.



More data, more problems

As businesses aggregate an increasing amount of data, the risks of having that data compromised also increases. By 2021, the annual damage caused by cyber crimes is expected to reach \$6 trillion,¹⁶³ up from \$3 trillion in 2015.¹⁶⁴ This is the greatest transfer of wealth in history¹⁶⁵ and is more profitable than the global trade of all major illegal drugs combined.¹⁶⁶ In 2017, there were roughly 1,300 U.S. data breaches, exposing 175 million records. This represents a 19% increase over 2016.¹⁶⁷

This fact is not lost on CFOs, 48% of whom classified cyber risk as one of the biggest trends transforming businesses today.¹⁶⁸ In 2017, the average cost of a data breach was \$3.62 million; with an average cost per lost or stolen record of \$141, this number adds up quickly for large businesses.¹⁶⁹ As a result, finance leaders are taking on greater responsibility in helping their companies manage this large financial risk, with 57% of CFOs reporting that risk management will become a critical part of their role in the future, a number that jumps to 66% for CFOs of companies with over \$5 billion in revenue.¹⁷⁰

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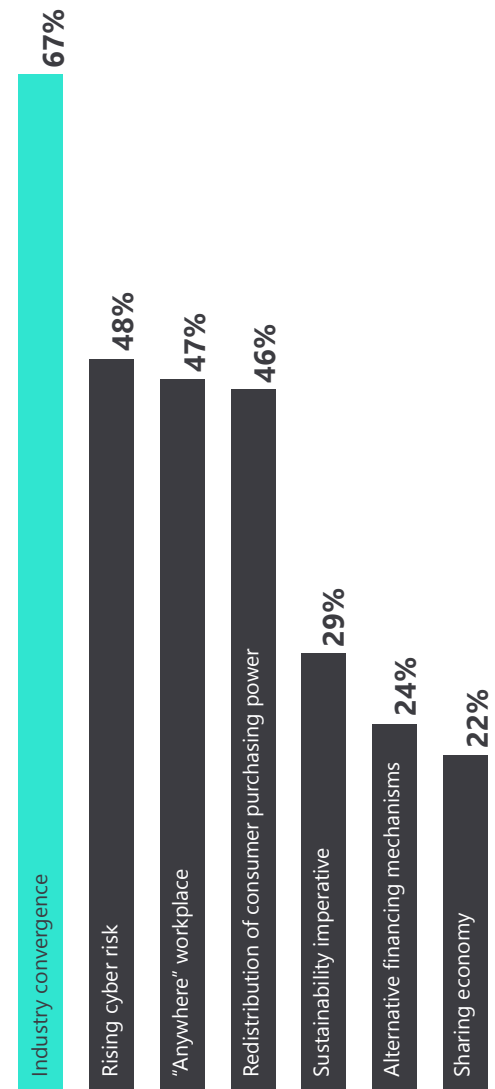
The single biggest trend CFOs think will transform the business arena

Industries converge

As organizations invest in technology and transform their companies through new business models, the boundaries of how a company may leverage their technology are becoming increasingly blurred. You don't have to look far to find examples of technology companies transcending industries to invest in autonomous vehicles, healthcare technology, brick and mortar retail, and entertainment. In a sense, as all companies become technology companies, the reciprocal also becomes true: a technology company can be any type of company.

In IBM's Global C-suite Study, industry convergence was the biggest trend CFOs saw transforming the business landscape. Accordingly, 47% were preparing their companies for an influx of entrants from other sectors, a 27% increase from 2013.¹⁷¹

In today's fast-moving business world, companies will continue to face more competition and new challenges. And as they do, they will continue to rely on their finance teams and leaders to navigate through uncertainty towards growth and progress.



Achieve more

The rate of innovation and disruption is increasing at an accelerating pace. To thrive in today's competitive environment, business leaders must leverage the latest technology. At Microsoft, we're empowering finance professionals with the tools and technology to help optimize operations, ensure compliance, and build smarter strategies to grow their business.

Integrate data

Tackling modern business challenges requires communication between systems running across the organization. With IoT and integrated data solutions running on Azure, we're providing business leaders with a single view of their data so they can optimize operations and make more informed business decisions.

Ensure compliance

With a long list of ever-evolving regulations, finance leaders must ensure that their businesses remain compliant. With unified data in the cloud, Microsoft's intelligent automated systems can process reports and detect anomalies faster, with greater precision, and more accurately than humans, helping to reduce error rates and ensure compliance.

Create the future

Finance leaders have the opportunity to transform their businesses and redefine industries. From tools that finance professionals have relied on for years, like Excel, to cutting-edge intelligent software that predicts the future, Microsoft continues to unlock new ways to empower finance professionals at every organization to achieve more.

Conclusion

The world is changing and as a result, so is the role of finance. Finance teams play a critical role in the success of the modern business. In addition to the trends covered in this report, many other issues are evolving in the finance space, including diversification in business lending, changes to benefits, changes to internal controls, changing needs of institutional investors, increasing interest rates, new tax regulations, and an ever-increasing need for speed.

Finance leaders have been tech leaders in the past, and they continue to be leaders in this arena. As new issues arise, they will continue to rely on technology to help overcome challenges and elevate business performance.



Accelerate your business growth.

Digital transformation

Modern businesses must embrace digital transformation to create value for their customers, empower employees, optimize operations, and transform products.

Dynamics 365

Microsoft Dynamics 365's suite of holistic, connected applications enables businesses to power intelligent business processes through digital feedback loops.

Finance and Operations

Microsoft Dynamics 365 for Finance and Operations gives businesses the tools to empower their people to make smarter decisions, transform processes, and drive rapid growth.

Digital transformation

Technology is disrupting every industry. Today, rapid transformation is the status quo and competition arises from everywhere. From manufacturing, financial services, and retail to healthcare, education, and government, business leaders are trying to understand what this change means for their organizations and how they can digitally transform to prepare for the future.

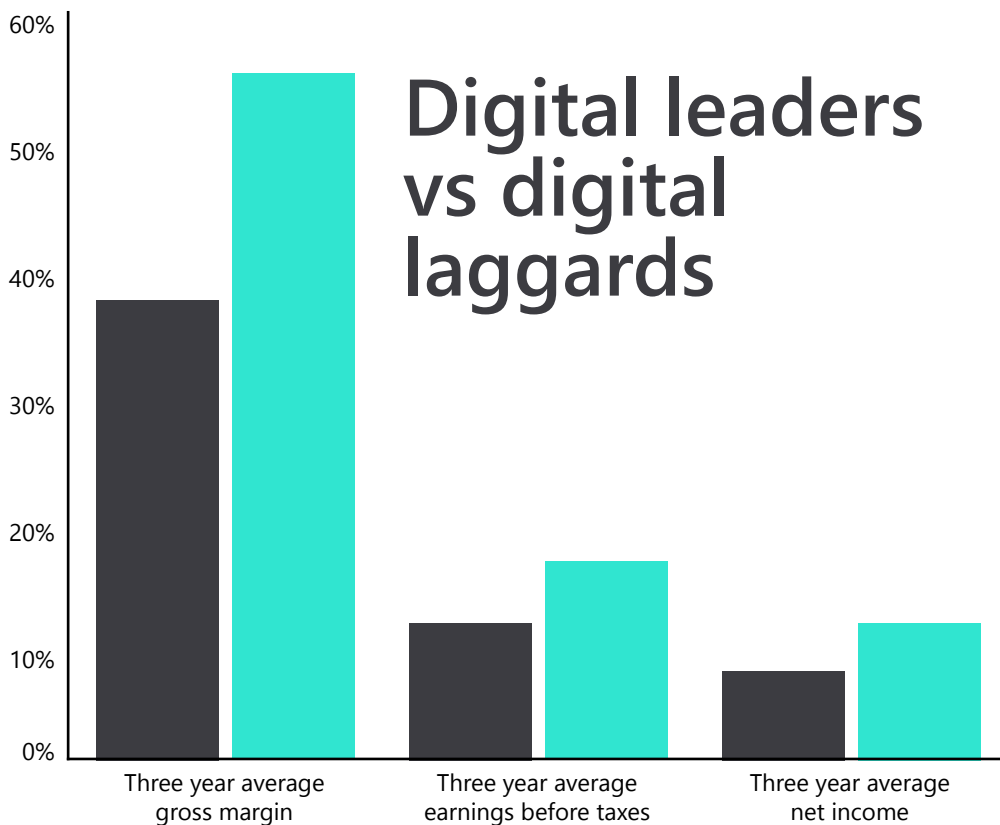
For companies to survive and thrive in this new era, they must embrace digital transformation. But digital transformation is not simply about technology; it requires a culture shift and new processes. It demands that business leaders evaluate and reimagine their

existing business models. Organizations must embrace a different way of bringing together people, data, and operations to create value for their customers, empower employees, and transform products. They must leverage every device, system, process, and asset across the company to turn data into action and create systems of intelligence.

Microsoft is in a unique position in that we are not only able to support our customers through their entire journey of transformation, but we can also solve for the many other challenges that come with managing and optimizing disparate, siloed solutions with:

- Modern Business Process with **Dynamics 365, Power BI, PowerApps and Flow**
- Complete Cloud Provider with **Azure and Intelligence/AI**
- Empowered worker productivity with **Microsoft 365**

The customer benefits of working with a single provider include having only one vendor to manage, one identity solution that is integrated, one document storage solution that can be accessed from anywhere, one productivity solution that leverages familiar usability across apps, and most importantly, one common data platform.



Digital laggards
 Bottom 25% of enterprises

Digital leaders
 Top 25% of enterprises

Customer benefits:

1. One productivity solution
2. One intelligence solution
3. One 'citizen developer' solution
4. One document storage solution
5. One identity solution
6. One cloud
7. One vendor
8. One support contract
9. One solution marketplace
10. One common data platform

"The Digital Business Divide, Analyzing the operating impact of digital transformation;" Marco Iansiti, Karim Lakhani, January 2017.

At Microsoft, our mission is to empower every person and every organization on the planet to achieve more. Our strategy is to build best-in-class platforms and productivity services for a mobile-first, cloud-first world.



Microsoft Dynamics 365

As organizations look to digitally transform and create systems of intelligence, they are shifting away from traditional, monolithic ERP systems that are difficult to implement and maintain and moving towards modular, modern platforms, such as Dynamics 365, that allow them to intelligently and flexibly manage their business.

Dynamics 365 is empowering businesses to drive true digital transformation through a suite of holistic, connected applications, and through the Microsoft cloud, Dynamics 365 can integrate with LinkedIn, Microsoft 365, Azure, and all of the other assets that we've built.

Unifying data from across the organization enables businesses to power intelligent business processes through digital feedback loops and deliver experiences that are synergistic and seamless.



Digital feedback loops

When businesses leverage business application platforms such as Dynamics 365 to create systems of intelligence within their organizations, it creates a digital feedback loop where data informs and creates action. This new action, in turn, creates more data, which informs further actions. This interplay between insight and action creates a digital feedback loop that powers a cycle of continuous improvement.

These digital feedback loops are powered by data, which is one of the biggest drivers of digital transformation, and we can now extract data from anything and everything. Every time someone tweets, visits a website, walks into a store, and every time they use a connected product, there's data flowing from that interaction from which we can gain insights and take action. Beyond a feedback loop in a stand-

alone system, businesses can unify data from separate, but related, systems, allowing inputs from one loop to inform another, powering intelligent business processes.

As businesses digitally transform, these intelligent business processes will benefit from the unification of four key areas: customers, products, operations, and people.

Customers

When leveraged correctly, customer data can help businesses gain a deep understanding of their target market's wants, needs, interests, and intent, enabling brands to engage with their customers more intelligently than ever before.

Products

Usage data can inform companies of how their products and services are

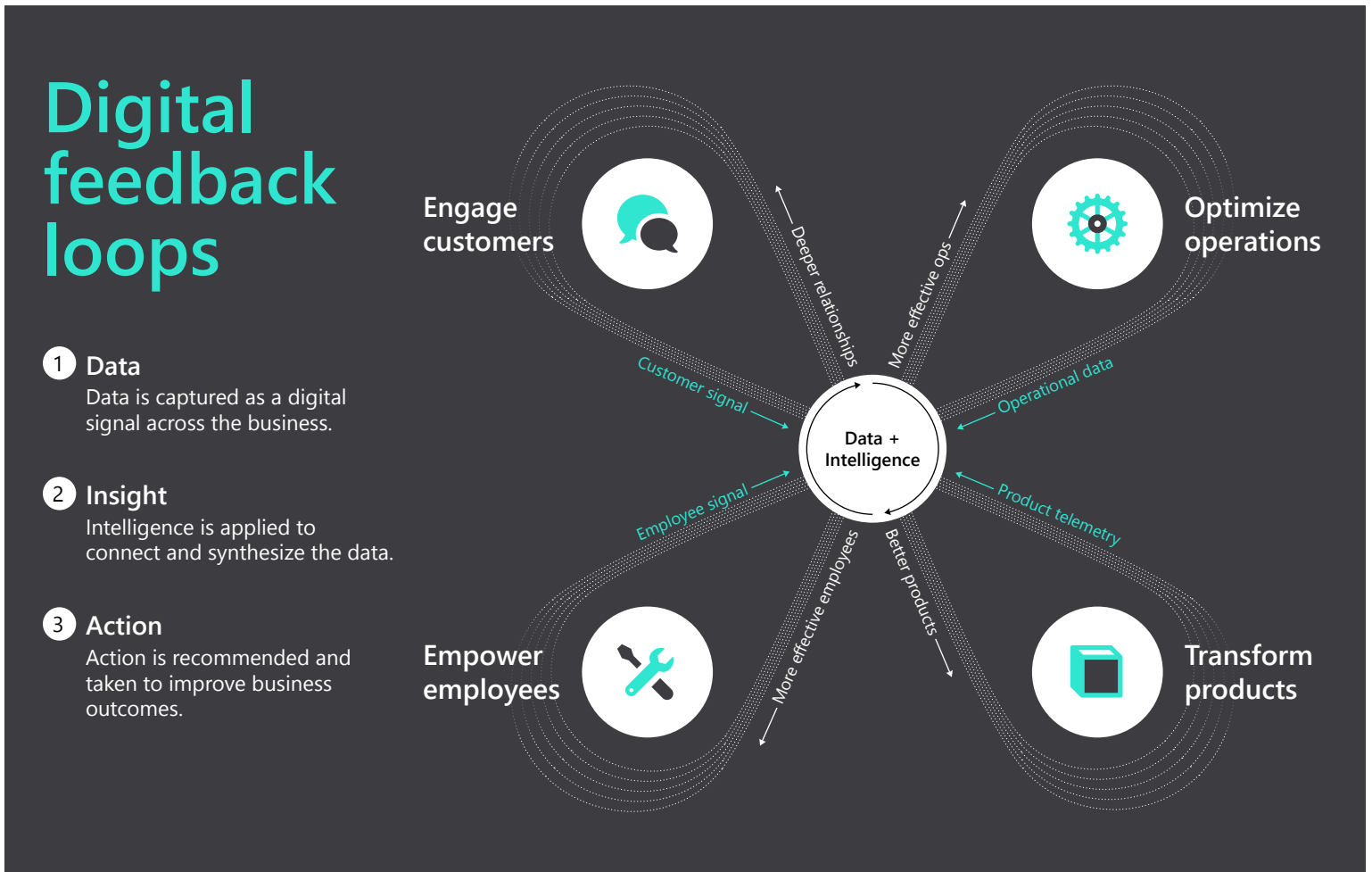
being used, allowing them to optimize their current offerings and develop new offerings to meet market demands.

Operations

By gathering data from across the supply chain, businesses can optimize their operations, better forecast demand, and manage inventory through automated ordering and distribution.

People

Modern businesses need talented people who can embrace digital technologies, understand data, and interact with customers and connected products in a way that wasn't possible before. Recruiting and developing these individuals is a requirement to be successful in this transformed economy.





As organizations look to digitally transform their businesses to deliver amazing customer experiences, design innovative products, and empower their people, they require modular, modern platforms—like Dynamics 365—so they can more intelligently and flexibly manage their business and unlock new opportunities to grow their bottom line.

Dynamics 365 lives up to its name by powering organizations with solutions that are modern, unified, intelligent, and adaptable.

Modern

Dynamics 365 solves specific business problems with modern, multi-channel mobile applications that work seamlessly together—and with your existing systems.

Unified

Dynamics 365 creates a more significant impact by unifying relationships, processes, and data across applications and ecosystems—powered by Microsoft Cloud with Microsoft 365, LinkedIn, and Azure.

Intelligent

Dynamics 365 delivers actionable insights and predictive outcomes with infused intelligence, built on Microsoft’s leading artificial intelligence and analytics technologies.

Adaptable

Dynamics 365 adapts processes to unique business needs in real time by connecting, extending, and building applications on a platform that’s flexible, scalable, and secure.

We’re empowering organizations with intelligent end-to-end applications that perform well on their own and even better together across Sales, Marketing, Customer Service, Field Service, Retail, and Talent.

For businesses looking to deliver true digital transformation across their organization, Finance and Operations gives businesses the tools to accelerate the speed of doing business by empowering people to make smarter decisions, transform business processes faster, and drive rapid business growth.

Microsoft Dynamics 365
Modern business applications

- Marketing
- Sales
- Customer Service
- Field Service
- Project Service Automation
- Finance and Operations
- Talent
- Retail



Finance and Operations

Microsoft Dynamics 365 for Finance and Operations is Microsoft's back-office business application, built on and for the Microsoft Azure cloud. It unifies financials and business operations across finance, manufacturing, supply chain, warehouse, inventory, and transportation management with an intelligent and intuitive user interface for running game-changing, modern global enterprises. And it provides organizations with a service that can support their unique requirements and rapidly adjust to changing business environments without the hassle of managing infrastructure.

Dynamics 365 for Finance and Operations brings together a set of adaptable ERP capabilities, BI, infrastructure, compute, and database services in a single offering that enables organizations to run industry-specific operational business processes that are extendable with specific solutions from business partners. Organizations can match their business growth by easily adding users and business processes with a 'pay-as-you-go' model.

Designed to accelerate the speed of doing business, Microsoft Dynamics 365 for Finance and Operations helps people make smarter decisions with an intelligent and intuitive user interface. It transforms business processes faster with proven methodologies, best practices, and enables organizations to do business nearly anywhere, anytime, on any device with the choice and flexibility of the cloud.

Dynamics 365 for

Finance and Operations

Discover how Microsoft is helping customers accelerate the speed of doing business by empowering people to make smarter decisions, transform business processes faster, and drive rapid business growth.



Elevate your financial performance Close books faster, deliver robust reporting, increase profitability with predictive intelligence, and ensure global compliance.



Run smarter with connected operations Bring speed, agility, and efficiency to your manufacturing to optimize production planning, scheduling, operations, and cost management.



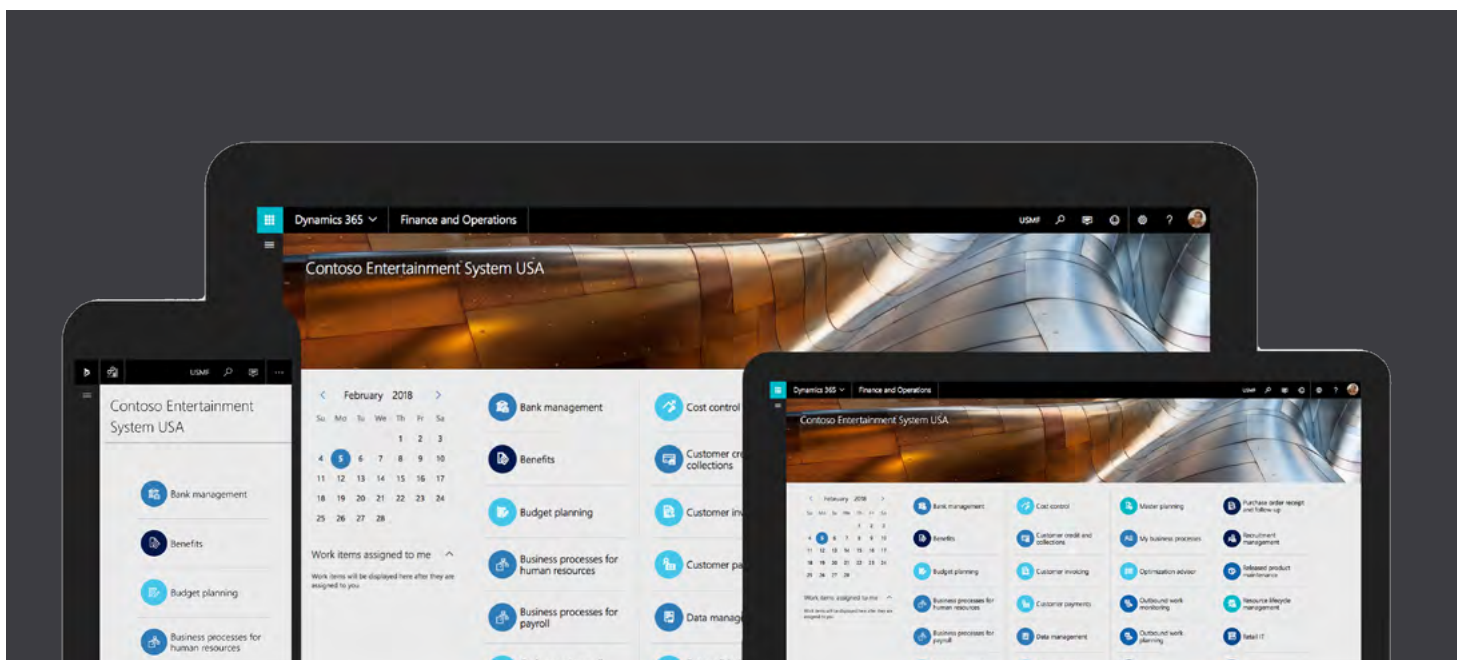
Automate and streamline your supply chain Modernize your supply chain to maximize customer satisfaction and profitability with unified, advanced warehouse and inventory management to improve material sourcing, fulfillment, and logistics.



Deliver unmatched workforce productivity Provide a single source of global business intelligence that drives productivity from assets and resources, aligns employees toward strategic goals, and enables real-time responses to the changing demands of customers, employees, and partners.



Innovate with a modern and adaptable platform Drive innovation with an intelligent application that is easy to tailor, scale, extend, and connect to other applications and services you already have to make full use of existing investments.





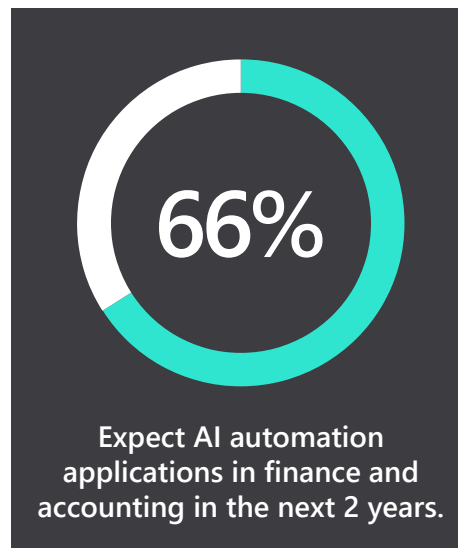
Elevate your financial performance *Close books faster, deliver robust reporting, increase profitability with predictive intelligence, and ensure global compliance.*

As industry convergence increases competition, businesses must optimize operations while maximizing revenue to remain competitive. To do so, business leaders are leveraging technology—like Dynamics 365 for Finance and Operations—to deliver operational efficiencies and gain greater visibility into organizational performance.

With data unified through the cloud, Dynamics 365 for Finance and Operations is helping businesses elevate their financial performance.

Built-in dashboards give business leaders a 360-degree view of their business, helping them identify opportunities for growth, better forecast performance, and optimize workforce productivity. With a centralized financial management solution, finance leaders can streamline operations and ensure compliance.

And with an easily expandable solution built on Azure, businesses can easily scale. Whether increasing operations locally, acquiring a new business, or expanding into new global markets, Finance and Operations gives companies the flexibility they need to grow at their own pace



State of Automation 2017, HfS Research, July 2017

Elevate your financial performance

Share a 360-degree view of your business

Bring organizational visibility by unifying your financials and business operations to provide real-time and predictive insights for data-driven decisions to capitalize on opportunities for growth.

Improve financial performance

Gain global visibility into the financial health of your business with role-based workspaces that provide core KPIs, charts, and financial performance to help drive accountability, efficiency, and growth.

Increase profitability

Drive margin revenue growth with a centralized, global financial management solution that delivers robust financial intelligence and embedded analytics in real-time.

Expand your business in new markets

Whether you want to optimize across subsidiaries, acquire companies, or expand organically, you can go live in weeks across 35 countries and 41 languages.



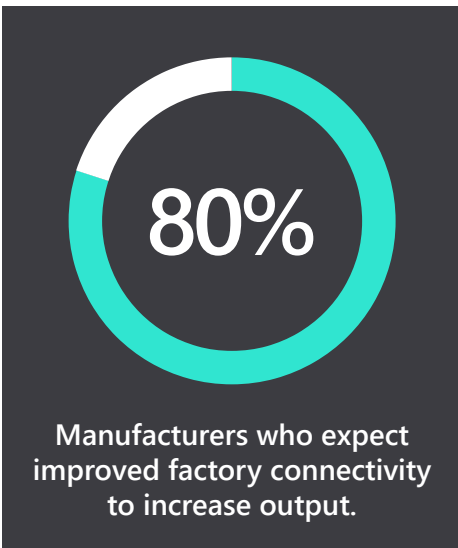
Run smarter with connected operations *Bring speed, agility, and efficiency to your manufacturing to optimize production planning, scheduling, operations, and cost management.*

As the speed of doing business increases, many businesses are struggling to keep up. To thrive in today's fast pace environment, organizations must leverage data from across their supply chain to increase agility, synchronize processes, and better support their customers.

By connecting data from across the supply chain in the cloud, Dynamics 365 for Finance and Operations is enabling organizations to run smarter with connected operations.

Through streamlined processes that effectively coordinates people, assets, and resources, organizations can reduce costs, improve service levels, and drive growth. Advanced warehouse and logistics management enables companies to accelerate product delivery and reduce time-to-market for new products.

With the power of IoT and machine learning, businesses can anticipate maintenance needs and predict equipment failures before they happen to avoid unscheduled downtime. These improvements ultimately lead to increased product quality and open the door for new service-based business models.



Annual Manufacturing Report 2017, Hennik Research, May 2017.



Run smarter with connected operations



Achieve operational excellence

Accelerate the speed and accuracy of your business operations with streamlined processes that effectively coordinate people, assets, and resources to reduce costs, improve service levels, and drive growth.



Drive strategic innovation

Connect your global operations and reorient growth discussions from static views focused on historic data to dynamic views of future trends, opportunities, and strategic options.



Select best-fit manufacturing processes

Optimize manufacturing processes based on current demand and market trends by creating a mix of discrete, lean, and process in a single, unified solution to support your processes across the supply chain.



Improve operational procedures

Optimize manufacturing parameters for each product family, including make to stock, make to order, pull to order, configure to order, and engineer to order.



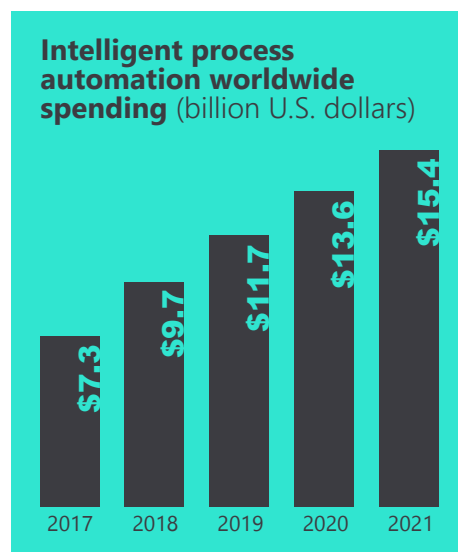
Automate and streamline your supply chain

Automate and streamline your supply chain Modernize your supply chain to maximize customer satisfaction and profitability with unified, advanced warehouse and inventory management to improve material sourcing, fulfillment, and logistics.

To meet the demands of today's customers, business leaders must work smarter, leveraging technology—like Dynamics 365 for Finance and Operations—to gain better visibility into their supply chain and streamline processes across the customer life-cycle, from marketing and sales to fulfillment and support.

With intelligent systems fueled by unified data, Dynamics 365 for Finance and Operations is enabling businesses to automate and streamline their supply chains.

By synchronizing logistics across sites, warehouses, and transportation models, businesses are able to optimize fulfillment and reduce costs. Unified data from across the organization in the cloud helps streamline and automate processes, such as the procure-to-pay and order-to-cash processes.



And through intelligent analytics tools, business leaders can gain predictive insights into their business and develop proactive responses, increase customer value with personalized products, and deliver intelligent customer support for real-time changes.


Modernize business logistics

Optimize fulfillment and reduce costs by synchronizing logistics across sites, warehouses, and transportation modes.

Get ahead with predictive insights

Gain visibility and control across all sites and warehouses for proactive responses to issues. Leverage existing customer data to effectively identify customer lifetime value, profitability, and buying trends.

Streamline procurement

 Reduce procurement costs and gain greater control by automating procure-to-pay processes.

Unify processes from sales to fulfillment

Seamlessly connect sales and purchasing with logistics, production, and warehouse management for a 360-degree view of your supply chain.



Deliver unmatched workforce productivity

Provide a single source of intelligence

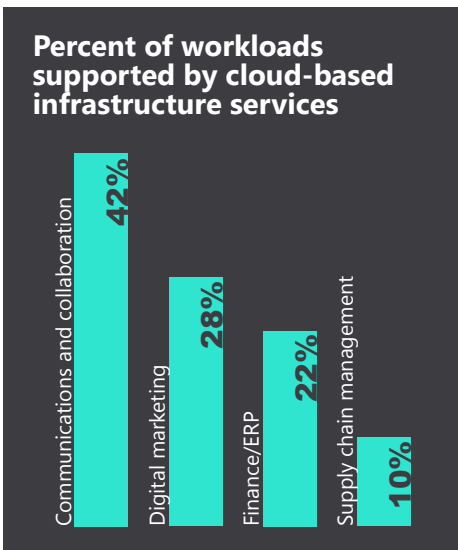
Leverage deep data and process integration across Dynamics 365, Microsoft 365, LinkedIn, and third-party applications for a centralized source of intelligent information that saves your employees time and enables them to collaborate across your organization and supply chain to make better and faster decisions for optimum business outcomes.

Empower and engage employees

Create an agile, mobile, always connected work environment that bridges the skills gap and brings people, data, and processes together to improve business productivity and results.

Enable fast user actions and decisions with over 50 role-based workspaces that provide embedded Power BI interactive data visualizations, giving them a high-level view of key business metrics and the ability to drill down into the transactions and KPIs to monitor the pulse of your business and accelerate performance.

Deliver unmatched workforce productivity Provide a single source of global business intelligence that drives productivity from assets and resources, aligns employees toward strategic goals, and enables real-time responses to the changing demands of customers, employees, and partners.



As the modern workforce changes—both in age and mindset—business leaders must adapt to evolving employee needs. By embracing new technology, businesses are empowering their workforce with the tools to innovate, create change, and get more done.

With familiar tools that employees love, and unified data from across the organization, Dynamics 365 for Finance and Operations is allowing businesses to deliver unmatched workforce productivity.

By leveraging embedded Power BI analytics, Cortana Intelligence, and cutting-edge IoT and machine learning technologies, employees are empowered with real-time intelligence and actionable, predictive insights. This enables them to make informed decisions, faster.

And with over 50 insightful, customizable, role-based workspaces, employees can get an overview of relevant business processes—with both transactional and analytical data through visuals, tiles, KPIs, and quick links to reports and pages—helping businesses boost both productivity and efficiency.



Innovate with a modern and adaptable platform Drive innovation with an intelligent application that is easy to tailor, scale, extend, and connect to other applications and services you already have to make full use of existing investments.

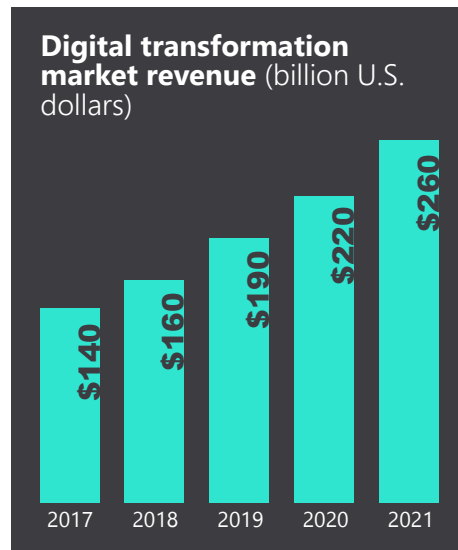
Innovation is the lifeblood of the modern business. To innovate, now and in the future, companies must build on an adaptable platform that provides flexibility, agility, and scalability.

Built on top of Microsoft's cloud, Dynamics 365 for Finance and Operations is empowering companies to innovate with a modern, adaptable platform.

Dynamics 365 for Finance and Operations offers unmatched flexible, scalable deployment options that enable enterprises to transform specific areas of their business. This provides quicker time to value while allowing them to easily expand with market demand.

With rapid deployment and onboarding, businesses can drive repeatable and predictable Dynamics

365 implementations, expediting go-live time and time to value. And with deeper insights into product use and customer interactions—powered by machine learning and artificial intelligence—businesses can improve their products, support changing business models, and innovate faster to gain a competitive advantage.



Innovate with a modern and adaptable platform



Enable flexible deployment

Drive continuous business growth with rapid, hybrid deployment options that adjust to changing requirements, comply with regulations, and maximize existing investments.

Use a combination of cloud, hybrid, and on-premises deployments to meet your global business requirements of today, and have the flexibility and ease to change as your business needs evolve over time.



Adapt quickly

Accelerate time to market and adapt the application to your needs with no-code visual editors and tools that make it easy to build and deploy web and mobile apps.

Manage your growing and global business by rapidly deploying new subsidiaries in record time with the ability to copy an existing legal entity's setup to a new company, allowing the onboarding of a new location to be quick and consistent with the company's best practices.



Extend and connect

Automate processes across Dynamics 365 applications and third-party systems for a unified experience.

Our mission

At Microsoft, we're continually exploring new ways to empower our customers to better manage change and transform their businesses. We imagine a better world for business users everywhere. One that uses modern, mobile, enterprise-ready intelligent business apps from the cloud that are as easy to use as the consumer apps that help us all get rides, book rooms, listen to music, and take actions to improve our health. A world where things simply work and where they work simply.

In the end, our story is not about 0s and 1s but rather about how we enable people to change the world for the better. Through our integrated set of tools and services—including Dynamics 365, Microsoft 365, LinkedIn, and Azure—we are empowering every person and every organization on the planet to achieve more.



How can you get Dynamics 365?

Get started with Dynamics 365 today

- Options for one or many products
 - Choices for any type of user
- Editions for businesses of any size

GET STARTED >

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