



NATIONAL CENTER FOR
THE MIDDLE MARKET

A REPORT BY THE NATIONAL CENTER FOR THE MIDDLE MARKET

THE CASE FOR DIGITAL TRANSFORMATION

Strategic Use of Digital Technology Paves the
Way to Growth and Opportunity in the Middle Market

IN COLLABORATION WITH



THE OHIO STATE UNIVERSITY
FISHER COLLEGE OF BUSINESS

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About This Report

DIGITAL TRANSFORMATION IS THE BIGGEST OPPORTUNITY IN BUSINESS TODAY—AND THE BIGGEST CHALLENGE

Digital transformation matters, especially for companies in the middle market. These businesses are positioned between the bulky power of corporate giants and the disruptive nimbleness of start-ups. Digital transformation offers ways for them to compete, win, and thrive. For some, it may also be necessary to survive.

CONSIDER THIS SHORT LIST OF OPPORTUNITIES AND ISSUES:

- Middle market companies with a digital vision that is clear, comprehensive, and guides strategic decisions grow, on average, 75% faster than less digitally sophisticated peers.
- 54% of middle market executives say digital transformation is extremely or very important, but only 9% say it is a cornerstone of their company's strategy.
- Companies with a strategic approach to digital transformation grow faster than their peers; they are also twice as likely as other middle market companies to achieve their customer-experience goals. By contrast, companies with a digital approach that is merely defensive or "not there" lag far behind.
- Cost is the most significant obstacle to digital transformation, preventing many businesses from pursuing digital as aggressively as they might like.
- A digital skills gap afflicts nearly two-thirds of middle market companies, whose leaders say it is holding them back in their digital pursuits.

HOW THE RESEARCH WAS CONDUCTED

Data gathered by the National Center for the Middle Market has amply documented the case for digital transformation. That research includes studies of best practices in the management of sales forces and supply chains; research about customer experience, workforce development, risk management, cybersecurity, and culture; and examinations of obstacles and success factors in manufacturing and retail. (For a list of and links to these studies, see p. 18.) These and other Center projects show how profoundly the digital revolution has changed competitive conditions and how successful mid-sized companies have overcome hurdles, and, in some cases, reprioritized resources, in order to rise to the occasion.

This analysis pulls data and insights from those studies as well as previously unpublished data to create a coherent picture of the importance of digital transformation for middle market companies and to present a framework that executives can use to advance digital initiatives in their businesses. This is the first of many steps the Center plans to take to understand digital transformation fully, explore how it plays out in different middle market industries and business functions, and examine the capabilities and resources companies need to make the journey successfully.

What We Mean by Digital Transformation

“Digital transformation” is a term that gets increasingly vague the more it is used. With digital transformation, as with many in-vogue management ideas, vendors and advisors attempt to stretch the definition so their products and services fall within it, blurring the meaning as they do. In our research, we distinguish among three different degrees to which digital tools and processes can improve companies: digitization, digitalization, and digital transformation.

DIGITIZATION

Refers to converting documents, ledgers, and other paperwork into digital formats. It reduces paper clutter and improves efficiency by making information easier to store, search, and find.

DIGITALIZATION

The next level, involves using digital technologies to automate processes for better outcomes and greater value. Fully digitalizing processes can reduce administrative cost, eliminate errors, and increase speed.

DIGITAL TRANSFORMATION

As the name implies, involves more than doing things better. It involves doing different things, or doing them in fundamentally different ways. Digital transformations can produce dramatic changes in product and service offerings, competitiveness, and performance through enterprise-wide automation and modernization, game-changing restructuring of balance sheets and assets, or new business models and revenue streams.

Digital transformation can improve performance in many ways. For example, by integrating the IT “stack” of applications, systems, and tools used for sales with the stacks for operations and inventory management a company can transform production from building-to-stock to building-to-order. Whole categories of digital and digitally enhanced assets, from software to warehouses, can be stripped from balance sheets and rented as needed. This makes a business less asset-intensive, enabling faster, cheaper scaling, allowing access to skills mid-sized companies could not afford to develop themselves, and increasing the inter-connectedness and inter-dependence of firms. Digital transformation can create value by re-forging value chains. It can eliminate intermediaries (allowing direct-to-consumer sales or service, for example) or create new ones, such as platform companies. Edmunds.com, for example, began as a publisher of Blue

Book guides to used car prices and transformed itself into a digital market-maker that connects shoppers to auto dealers. Other opportunities come from insights that could not previously be made or exploited, such as granular knowledge about customer behavior. And there are businesses that would not even be possible without a digital foundation upon which to build, including GPS-based businesses like ride-share companies. These changes in strategy, structure, and operations expose new risks as well as opening new opportunities. (See p. 15).

Leaders who are choosing to proceed slowly—or who are forced to, based on resource restraints—might be right, or right for right now. But given the overwhelming evidence of improved performance that goes hand-in-hand with digital pursuits, it is hard to argue with the proposition that just about every company should become more digital than it is today.

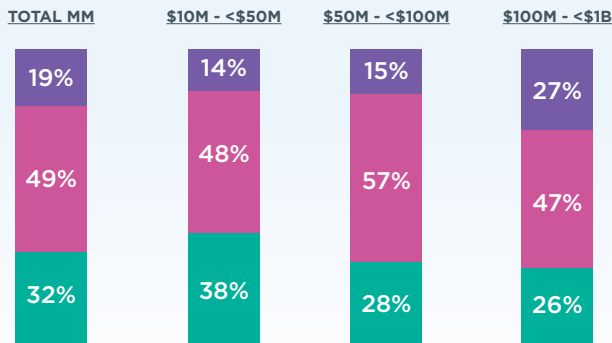
Middle market companies place high priority on all three kinds of digital work

Nearly two-thirds of middle market leaders say that digital ranks among their top business priorities. On average, they spend 12% of revenue on digital initiatives. Asked where they would allocate an additional dollar of revenue, IT ranks with plant and equipment and adding to staff as the highest investment priorities. Protecting digital assets—i.e., cybersecurity—ranks higher as a risk-management priority than anything else. When it comes to growth and transformation, three out of four say digital is essential.

Within this overall embrace of digital tools and processes, there are significant differences between companies that are just

digitizing and those that are transforming their business. Among middle market leaders, 32% are digitizers while half (49%) have moved into the area of digitalization. Just under a fifth—19% — say they are pursuing digital transformation. Larger companies in general are more likely to have transformative visions, and this may be largely attributed to the fact that they have more money, time, and talent to devote to the effort; 27% of those with revenues between \$100 million and \$1 billion fall into the digital transformation category.

CURRENT STATE OF DIGITIZATION: LARGER FIRMS ARE FURTHER ALONG IN THEIR DIGITAL JOURNEY



- Digital Transformation**—integrating digitalized processes to achieve enterprise-wide automation, modernization, and previously unattainable outcomes.
- Digitization**—converting paper, processes, or other records into digital formats.
- Digitalization**—using digital technologies to automate processes for better outcomes and to optimize value.

Source: Middle Market Indicator Report, 4Q 2018

Where Digital Dollars Go Now

Much of the middle market's digital investment thus far has focused on back-office functions rather than those that directly interface with customers or future-oriented activities such as innovation and strategy.

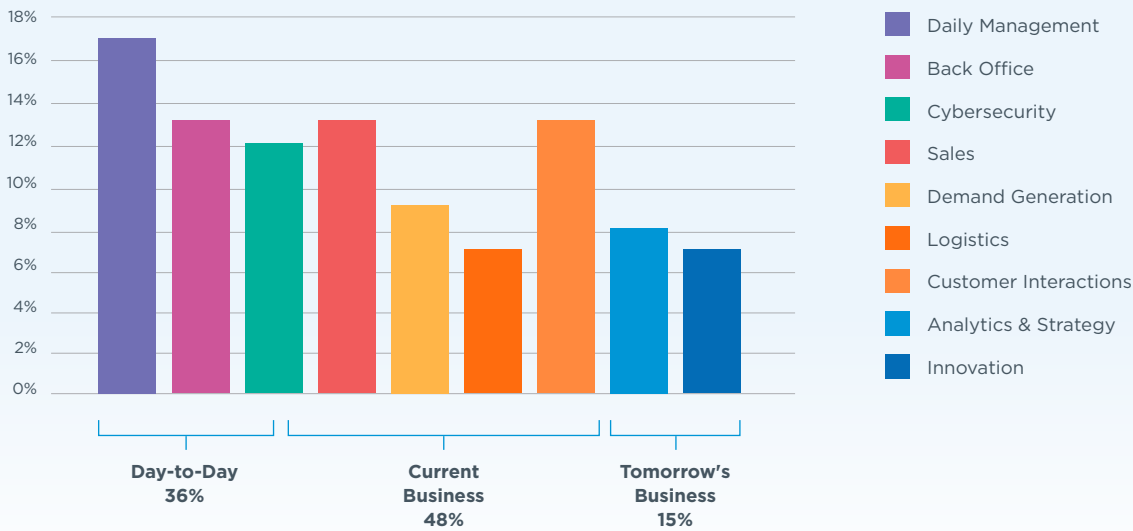
Middle market firms are most confident in their abilities to automate and leverage technology for day-to-day functions such as payroll, accounting, and HR management. The projects they invest in mostly pertain to keeping the lights on, counting the money, and operating the current business. They also put an increasing portion of their IT spending toward security, which protects everything from employee records to customer files. Only about 15% of digital spending goes toward future-oriented activities like analytics, strategy, and innovation.

However, middle market digital efforts have increasingly emphasized customer-facing activities (such as sales, demand generation, and service) and executives expect future efforts to focus more on those areas. Retailers, in particular, tell the

Center that they are increasing spend on customer-experience technologies such as websites and kiosks more than on back-office technologies, with food-service retailers most dramatically changing the spending mix. Across all industries, there is a significant increase in the amount of digital support middle market companies provide for their sales forces—more than half use CRM (customer relationship management) software.

While spending increases are expected across the board, the largest increases are anticipated in the areas of business analytics, strategy, and innovation as companies move beyond core business functions and begin to focus on projects and processes that directly affect their operations and future offerings. More than four out of 10 companies anticipate increasing or significantly increasing digital spending on business analytics and strategy development, while nearly the same number (39%) expect to increase the digital share of their budgets for innovation.

2Q 2019 MMI: WHERE INFORMATION TECHNOLOGY SPENDING GOES



Source: Middle Market Indicator Report, 2Q 2019

The Digital Future

The more wide-ranging and sophisticated a company's approach to digital investments, the better it performs. There are two ways to gauge the impact of these investments: by looking at middle market companies as a group, and by looking at how the digital activities of top-performing companies differ from the rest of the pack.

Nearly all mid-sized firms say that digital solutions have had some level of positive impact on the way they do business. In the sales function, for example, 75% of users of CRM software say their sales teams are more "effective than peers in their industry," compared to 64% for non-users. Among manufacturers, 76% say advanced technology has improved productivity and nearly all—90%—say the impact of these technologies has been positive in one way or another and will lead to even greater efficiency gains, enable more customization, and pave the way to future growth.

Fast-growing companies are consistent leaders in digital. Fully 49% of companies growing at an annual rate of 10% or more consider themselves to be digitally advanced, versus 36% of the market as a whole. Among these high-growth firms, 65% rate themselves excellent or very good in the use of technology by their sales forces, compared to just 50% of companies with lower growth rates. Manufacturers are more likely to produce and sell smart products, embrace digital integration of their supply chains, and leverage digital technologies to achieve their customer experience goals. In all industries, fast growing companies are more likely to consider cybersecurity important, and they spend more on it—in other words, investing in a good digital defense (cybersecurity) appears not to be positively correlated with their ability to run a strong digital offense (revenue growth).

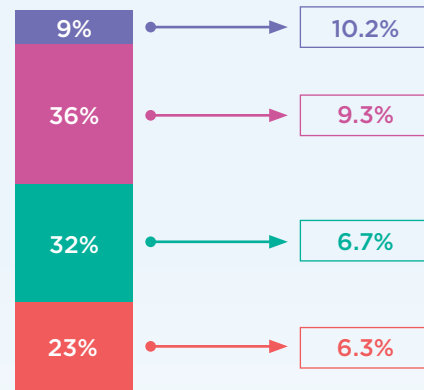
The biggest performance boost comes from linking digital investments to strategic intent—and, particularly, to digital transformation. Companies with a strategic view of digital transformation are more forward-looking. They innovate more, and they use digital capabilities to innovate in more valuable space. Innovation among the least digital companies emphasizes improvements in existing products. Companies in the middle of the digital pack are even more likely to invest in existing offerings than the least digital, and they introduce new products as well. The most digitally advanced companies are the most heavily

engaged in product innovations and they add process innovation to the mix, which is often the most valuable kind of change.

The effort pays off: During 2018, the digitally strategic set raced ahead of their peers with 10.2% year-over-year revenue growth, faster than any other cohort. Not far behind are companies who call themselves "digitally advanced," which grew 9.3% during that period. Two-and-a-half full points of growth separate them from companies in the "defensive" category; these companies say they deploy only as much technology as they need to keep up—but in fact they are falling behind.

DIGITALLY SAVVY COMPANIES GROW FASTER

APPROACH TO DIGITAL REVENUE GROWTH (LAST 12 MO.)



- Strategic**—digital transformation is a cornerstone of our strategy and we are among the leaders in our competitor set
- Advanced**—we are actively engaged in transforming important parts of our operations and customer interaction
- Defensive**—we are keeping up with established best practice
- Not there**—we are using digitization to improve the company, but not to transform how we do business

Source: Middle Market Indicator Report, 4Q 2018



Evidence of the impact of digital transformation shows up strongly in retail—an industry supposedly facing an “apocalypse.” A thriving group of middle market retailers are adopting the tools of digital transformation and reaping rewards across all areas of their businesses. Retailers in this group grew by 10.5% during the 12 months ended in October 2018, compared to 5.9% for the whole middle market retail segment for roughly the same period. The retail industry overall grew by 5.2% during this time period, according to the U.S. Census Retail Trade Survey.

There remains much opportunity in the digital space for middle market companies to embrace. Companies are only marginally satisfied with digital practices at their firms. Most middle market companies across revenue segments, industry sectors, and geographies give themselves a B or a C grade for their digitization efforts. In sales and marketing, even among the digitally strategic firms, only about a quarter have achieved end-to-end omnichannel capabilities for interacting with customers.

Indeed, in no area of digital advancement do companies believe they have captured more than half of the full potential benefit. Middle market leaders indicate that they have made the most progress in back office areas, such as payments and records—not coincidentally, the places where computers first were deployed. But even in the back office, companies have realized just half the potential benefit. As an example, paper checks remain the preferred method of making payments for all expense types except payroll and are also still one of the most preferred methods for receiving payments. Even in industries like retail, where a cadre of digitally transforming businesses is lapping the field, 65% of companies say they only adopt enough technology to keep up with competitors.

Overall priority given to cybersecurity, while rising sharply, is still low, and only half of middle market leaders express high levels of confidence in their technical team, leadership oversight, and overall cybersecurity strategy. This is indicative of a wider pattern: Where the risks associated with digitalization are getting any attention, the focus is disproportionately on cyber-based threats. These are critical; however, as the digital and physical worlds converge and middle market companies increasingly interweave their physical operations with digital tools and processes, a broader, more fundamental set of operational and supply chain risks arise. A cyber event could now potentially result in physical harm to a company’s facility or employees or introduce defects in products that could cause physical or financial harm to vendors and customers.

Lack of awareness or understanding of these types of vulnerabilities likely means they are getting shorter shrift. Indeed, companies who are engaging in digital transformation in response to a fear of falling behind as opposed to being driven by strategic intent, may have a heightened vulnerability to the operational risks introduced by digitalization without even realizing it.

As with cybersecurity, emphasis on analytics is perhaps below where it should be. While most companies believe analytics tools are critical to their business, adoption of these tools is relatively low. Just 50% of firms take advantage of demand planning and forecasting tools; other tools, even foundational such as business intelligence reporting and data visualization, have much lower adoption rates.

A Framework for Digital Transformation

Digital transformation is valuable for four reasons. First, it improves the efficiency, speed, and quality of operations. Second, customers and employees increasingly expect digital products and experiences. The companies that deliver are rewarded with more business and increased loyalty from the best customers and talent. Third, it can make scaling and expanding faster and cheaper because companies can substitute cheap digital assets for expensive brick-and-mortar. Finally, digital transformation can open the door to whole new business models and, indeed, new businesses that would not be possible without it.

The Center developed the following framework as a guide for executive teams looking to understand the major areas for digital transformation and how they work together to evolve the company's overall business strategy and direction. While not all companies need to focus in all areas, and not every company will or should take these elements to their digital

extreme, it is important to note that without a strategic vision and plan for the transformed enterprise, the value of digital investments will mostly come from gains in efficiency and effectiveness. In contrast, companies whose leaders agree that their "organization's digital vision is clear and comprehensive, widely understood, and used to guide strategic decisions" will be positioned for game-changing improvements in competitiveness, innovation, and knowledge that will affect how they create and capture value—which is why companies that put themselves into this category are already growing nearly twice as fast as companies whose executives are neutral or disagree.

At a minimum, every company should understand what its digitally strategic and advanced peers and rivals do and devise a program that best fits its own strengths and strategy. Here is a closer look at each of the elements of the digital transformation framework.



Our Enterprise



The heart of the framework is the strategic vision that separates top performers from the rest. Digital transformation is typically a top down initiative led by the CEO or a formal steering group. It affects all business functions, providing new answers to core strategy questions: What do we sell? Where do we play? How do we win? This strategic mindset enables companies to fully embrace the possibilities of digital and weave them throughout the business to transform its activities and performance.

BEST PRACTICES

- + Take a top down approach to transformation that recognizes the importance of digital for the enterprise as a whole and across all business functions
- + Rethink strategy, operating model, and balance sheet
- + Combine processes (such as sales and production) in ways that drive efficiencies, align the organization, and enable new value chains
- + Use analytics across all elements of the business to discover previously hidden inefficiencies, new customer insights, and innovation opportunities
- + Develop digital capabilities and skillsets that reinforce specific competitive advantages
- + Understand and manage new strategic and operational risks created by digital transformation
- + Prioritize digital transformation of IT, customer experience, and innovation

RESULTS

- + Faster revenue growth
- + Reduced capital intensity from eliminating or renting previously owned assets
- + Improved flexibility, faster scaling, and better control of variable costs
- + Superior knowledge of customers and markets
- + Potential new business models

Digitally strategic
companies experience

10.2%
GROWTH
PER YEAR

Source: Middle Market Indicator Report, 4Q 2018

What We Sell



The number of connected things will reach 25 billion by 2021¹—a fact that will transform every industry. Many of those smart things will be consumer products like TVs and home security systems, medical products for monitoring chronic conditions, and even food. Digital products have already utterly changed media and entertainment. Diabetics can now monitor their blood sugar in real time by touching smart phones to a device implanted in their arms. 3D printing is being used to make food—and sneakers to wear while working off the calories. The rest—two-fifths of devices and half the spending²—will be smart things for business, ranging from systems to manage building HVAC and lighting to sensors for utilities to connected factory-floors. Currently, however, digital product offerings are still in their infancy. About three out of five middle market manufacturers produce some smart products, but these devices typically make up less than 25% of the product mix.

BEST PRACTICES

- + More likely to have plans to introduce a new product or service
- + More heavily invested in innovation and new product development
- + Dedicate a larger percentage of offerings to IoT-enabled products
- + Sell new value-added services enabled by digital transformation
- + Have a holistic, end-to-end view of how customers use their product and collaborate to make customers more successful

RESULTS

- + Stronger revenue numbers
- + Healthier predictions for future growth
- + Access to end-user data that improves products and sparks innovation in next-generation products
- + Greater customer engagement and loyalty
- + Better ability to innovate new products and services

26% OF FAST-GROWING MIDDLE MARKET MANUFACTURERS dedicate at least a quarter of their output to smart products

Source: [Middle Market Manufacturing](#)

¹ <https://www.gartner.com/en/newsroom/press-releases/2018-11-07-gartner-identifies-top-10-strategic-iot-technologies-and-trends>

² <https://www.gartner.com/en/newsroom/press-releases/2017-02-07-gartner-says-8-billion-connected-things-will-be-in-use-in-2017-up-31-percent-from-2016>

How We Produce It



Smart factories, digitally integrated supply chains, artificial intelligence, advanced materials, digital twins—these and other technologies are changing operations from end-to-end. Executives continue to view digitization primarily in its traditional role: as a means for driving efficiency and reducing operating costs. As they become more digitally strategic, they are using technology to develop new business processes and inform a wide range of business functions from the C-suite down to the manufacturing floor, digitally integrate with suppliers, partners, and customers; and ultimately improve their agility and gain greater control over their operations.

BEST PRACTICES

- + Devote substantial attention and investment to innovating processes as well as products and services
- + Use IT to reduce paper usage and clutter, slash error rates, and streamline functions
- + Invest in advanced manufacturing techniques (process controls, robotics, automation) to boost productivity, flexibility, and quality
- + Adopt new technologies to streamline suppliers, inventory, and shipping channels; increase end-to-end visibility; and shorten cycle times
- + Use technology to integrate with their customers' systems across a range of business functions
- + Embrace digital in innovation, such as rapid prototyping and agile product development
- + Implement risk management plans to address new exposures and the impact of operational breakdowns and business interruptions

RESULTS

- + Capture efficiencies, insights, and improved process control across all functions of the business
- + Improved quality and reliability of processes and products
- + Higher returns on innovation investment
- + Tighter integration with suppliers, with lower cost and reduced time
- + Faster product development and shorter time to market
- + Reduced operating and product development costs
- + Reduced amount of capital needed to operate and scale the business

FAST-GROWING MANUFACTURERS PRIORITIZE TECHNOLOGY INVESTMENTS MORE THAN THE MIDDLE MARKET AS A WHOLE*

	Cybersecurity	New materials or composites	Advanced process control	Robotics and other advanced automation	Additive manufacturing & other rapid prototyping	Embedded sensor technology
10%+ Growth	72%	72%	76%	63%	64%	60%
All Firms	68%	62%	62%	58%	56%	48%

*Percent of respondents stating each technology was very/extremely important
Source: [Middle Market Manufacturing](#)

How We Sell It



For most middle market companies (with the exception of retailers) customer-facing digitization has taken a back seat to back-office technology. However, this is changing, and technology is playing an increasingly transformative role in every step of the customer journey, starting with how consumers first learn about a company's offering, through the purchase process and customer support. Indeed, sales currently ranks second only to the back-office as the functional area most affected by digital transformation and middle market leaders say customer experience, lead generation, and marketing tools are their top three customer-facing digital priorities at the moment.

BEST PRACTICES

- + Place greater importance on integrated multi-channel marketing and sales, finding the right mix of online and offline marketing, sales, and service
- + Have a more fully functional website that connects customers with employees and offers support for products and services
- + Have greater online interaction with customers (website, social media, mobile)
- + Use a variety of digital customer experience and analytics tools
- + Effectively use technologies that support the sales force such as CRM systems and social media
- + Have achieved or are working toward an omnichannel end-to-end digital experience on all platforms and channels

RESULTS

- + Happier customers, faster growth: Firms that are digitally strategic when it comes to customer experience grow twice as fast as their non-digital peers (9.9% vs. 4.7% year-over-year revenue growth)
- + More advanced marketing and communications capabilities, including ability to target potential customers more accurately
- + Ability to use digital tools to expand faster and less expensively into new markets at home and abroad
- + Cost savings, increased loyalty, higher share of wallet
- + Superior customer insight that feeds back into new product and service development
- + More likely to achieve customer experience goals
- + Are proficient and prolific users of the most effective customer experience digitization tools

High-growth middle market companies are

30%

MORE LIKELY TO REPORT EFFECTIVE USE OF TECHNOLOGY BY THEIR SALES FORCES THAN THEIR PEERS

Source: [The Force Is With You: Building A Highly Effective Sales Organization](#)

Our IT Backbone



Digital transformation hinges on computing power and security. Overall, most middle market companies believe they are in the middle of the pack when it comes to digital readiness. Just over a third (36%) consider themselves very advanced or ahead of the pack, while about one in five feel they are lagging behind. As businesses generate more data and connect more devices, keeping business and customer information secure and managing IT and operational interdependencies that occur as digital and physical worlds become increasingly intertwined is a growing challenge. Since 2016, the percentage of middle market executives who are focused on cybersecurity issues jumped by 15 points. However, whether the awareness of the increased operational risks introduced by digitalization and digital transformation is equally high remains an open question.

BEST PRACTICES

- + Spend more heavily on IT in general
- + Allocate a larger proportion of the IT budget to innovation, strategy development, and business analytics and less to daily management of the business
- + Effectively work with IT service providers to move some IT capabilities to the cloud; have a strategic understanding of which capabilities should be maintained in-house
- + Rank cybersecurity as the number one priority for their IT function and are increasing cybersecurity spending
- + Have a documented business continuity and disaster recovery plan in place to respond to internal and external operational breakdowns or interruptions and cyber threats or attacks
- + Invest in backup capabilities, training for staff, risk assessment and management, threat detection, and cloud security practices

ADVANTAGES

- + Grow revenue and employment faster than peers who view cybersecurity as less important
- + Expect and achieve a higher rate of return on digital projects and initiatives
- + Are more prepared to respond and recover from digital-based operational breakdowns or interruptions and cybersecurity attacks
- + Higher levels of confidence in technical teams, leadership oversight, business continuity and disaster recovery plans, and overall cybersecurity strategy

MIDDLE MARKET COMPANIES THAT PRIORITIZE CYBERSECURITY GROW FASTER

High Priority		Low Priority	
Revenue	Jobs	Revenue	Jobs
9.8%	7.9%	8.9%	4.6%
Revenue growth when cybersecurity is viewed as extremely important	Employment growth when cybersecurity is viewed as extremely important	Revenue growth when cybersecurity is viewed as not very/not at all important	Employment growth when cybersecurity is viewed as not very/not at all important

Source: [Cybersecurity and the Middle Market](#)

Our Workforce



One of the biggest roadblocks in the path of middle market companies' digital transformation journey is a lack of digital skills among the workforce. Most middle market leaders say the digital skill requirements for the workforce have increased, and a quarter say they have increased significantly. Research from the Brookings Institution says that 70% of U.S. jobs require medium to high levels of digital skill, up from 45% in 2002. Their study shows that digitalization scores rose for 517 of the 545 occupations analyzed and the average digitalization score across all occupations rose by 57%. Highly digital jobs have become even more digital while medium-digital occupations (such as automotive service technicians, elementary school teachers, registered nurses, and human resources specialists) and low-digital occupations (home health aids, heavy truck drivers, and retail workers, for example) all saw their digitalization scores surge³. In virtually every job category, employers today must hire a far different talent profile with different skill sets than were needed two decades ago.

BEST PRACTICES

- + Make a concerted effort to invest in people with specific digital expertise and skills
- + Culture and leadership promote adopting the latest and best technology and digital processes, including using digital platforms for employee goal setting and performance management and using mobile apps for talent acquisition
- + Take a strategic approach to realigning the workforce and deciding which activities can be contracted to outside specialists in order to combat the digital skills gap
- + Willing to pay a premium for the right skill sets
- + Provide career pathing, training, and development

RESULTS

- + Maintain a workforce with a higher digital skill level
- + Report greater success with managing the skills gap; better at finding and retaining people with the right skills
- + Report fewer talent management challenges in the short and long term
- + Have stronger employee value propositions

65% of middle market executives cite a lack of talent
 AS AN OBSTACLE TO DIGITIZATION EFFORTS

Source: [How Digital Are You?](#)

³ Metropolitan Policy Program at Brookings; Digitalization and the American Workforce

Challenges

Our research makes a strong case for digital transformation for each element of the framework. Within every area, middle market companies have clear opportunities to propel stronger growth and set themselves apart from the competition. Yet, they face formidable challenges all along the path to a more digital future.

MANAGEMENT SUPPORT AND MINDSET

Digital transformation is most successful when it's led from the top. Companies whose leaders strongly believe that their organization's digital vision is "clear and comprehensive, widely understood, and used to guide strategic decisions" grew 10.5% in 2018, four-and-a-half points faster than companies whose leaders could not make that claim. Leaders must be willing to "reset" the organization if necessary and rethink their business model and talent mix in order to develop and support newly required capabilities and processes, all while managing conflict between the digital and analog areas of the business. And they have to be willing to stick it out; it takes time to make significant progress, realize true transformation in the business, and capture the financial return.

TALENT

With greater demand for digitally-savvy workers among all industries—including traditionally less-digital industries such as retail and manufacturing—it's no surprise that a solid majority of executives cite a lack of talent as an obstacle to their digitization efforts. Retraining and upskilling current staff is difficult, too. Since digitally advanced companies are growing faster, they feel the pinch even more because they have more openings to fill. This is true for upper middle market companies as well. And, despite the belief that automation will replace the need for workers, the fastest-growing middle market manufacturers believe they will need to onboard even more people in the years to come as they become more digital. These people, of course, will require a new set of digital skills.

NEW RISKS AND LIABILITIES

As digital transformation alters the traditional ways in which products are manufactured and distributed and how companies interact with their suppliers, partners, and customers, it introduces greater exposure to the physical and digital risks that accompany new opportunities. Some of these emerging risks are yet to be fully understood, and companies may not be adequately prepared to address them. But executives are increasingly concerned: nearly 50% believe overall risk is rising for their businesses.

Specifically, smart products and services themselves must be protected. Second, the more companies use technology to integrate upstream and downstream, the more their business operations become interdependent and their data more vulnerable to breach. Companies are at heightened risk of

operational breakdowns and interruptions originating both inside and outside their firms while at the same time they are taking on more responsibility for their partners' and customers' data.

Specific to cybersecurity, nearly four out of five (79%) companies say cybersecurity is at least somewhat challenging. However, resource constraints can make it difficult for companies to field top-notch cybersecurity capabilities, which is why middle market companies increasingly go to cloud-based outside providers. And while more executives recognize the emergence of malicious, cyber-based threats, they may be overlooking or unaware of the broader operational risks introduced by digital transformation—risks that pose an equally, if not larger, threat and that have the potential to result in both physical and financial harm to companies, vendors, and customers.

THE PRICE TAG

Our research shows that the most significant obstacle across all industries is the expense associated with digitization. Some companies—particularly smaller ones—say the price tag outweighs the benefits that digital affords. Retooling factories isn't cheap, increasing the need for capital. And in some cases, particularly with customer experience digitalization, the benefits are non-linear, fully materializing only once companies have strategically and heavily invested in effective technologies. The digital transformation journey introduces an upgrade challenge as well—to fully embrace digital transformation, companies must be willing and able to continually invest in the effort.

CULTURE

Lack of a digitally-intensive culture can exacerbate all of the other challenges that stand in the way of digital transformation. Our research on culture has shown that middle market companies with innovative or technically-oriented cultures grow fastest while companies with risk-averse cultures grow slowest. In organizations that are slow to embrace change and accept the risk that comes with it, becoming more digital will be an uphill battle. Among companies that have made direct attempts to alter culture, only about a third say the effort was extremely successful. However, while culture can be hard to budge, it's not impossible. Executives that want to move toward a more digital future can help promote success by modeling a more digital mindset from the top down, clearly communicating expectations for employees, and rewarding employees who embody the new, more digital culture that the company envisions.

Starting Your Digital Transformation

Despite significant challenges, middle market companies have a unique set of advantages when it comes to pursuing digital transformation. Individually and collectively, hurdles can hold back a middle market company from the ambitious digital transformation it would like to pursue, if only it had the money, talent, and time. And they are, indeed, formidable obstacles. However, a subset of middle market companies has found ways to embrace digital transformation and surmount the challenges. And they are reaping the rewards, especially those companies that have infused digital into their strategies and are clearly outpacing their competitors in terms of rapid growth. They have also evidenced a more holistic view of the risks arising from their digital transformation efforts and implemented sound risk management plans that mitigate the effects of an operational breakdown, interruption, or cyber event that could become magnified in a physical-digital environment.

For those that aren't quite there yet, drawing on key strengths inherent to being a middle market company can help. Middle market companies are typically more flexible and agile than their larger peers and may be less hamstrung by existing investments in less productive channels. This affords the opportunity to pick and choose the newest and best technologies as needed to advance specific growth goals and initiatives that will deliver the greatest impact.

Companies can start by exploring the best practices in the framework in this paper and determining which most easily fit into their existing business and can be supported by currently available resources. As they do, the advantages gained can be used to enable more digital pursuits. Some digital transformation can be undertaken with the support of business partners and rapidly “bleed” into other areas; for example, banks will often help with the digitalization of payments processes, which can, in turn, lead into digital transformation of elements of supply chain and distribution.

In the coming months, the Center aims to share additional insights to help middle market executives further leverage the framework to focus and advance their digital transformation journeys, more efficiently overcome the obstacles, and more fully enjoy the many advantages that digital transformation affords.

ASSESS YOUR DIGITAL TRANSFORMATION READINESS AND BUILD YOUR ROADMAP

As you begin to consider what your digital transformation journey will look like, the following prompts can help you clarify your current digital state, identify your greatest areas of opportunity or where you may already be well down the path, and decide how best to focus your resources going forward.



OUR ENTERPRISE

Business Model,
Strategy, Value Drivers

- + To what extent do we aspire to be among the leaders in our industry in creating business value from digital technologies?
- + In which areas of the business are we leaders in our industry? In which areas are we lagging behind our peers?
- + Does our company have a digital vision that is clear and comprehensive; widely understood internally and externally by employees, customers, and partners; and used to guide strategic decisions?
- + Does our company have a strategy to use digital technologies to achieve competitive advantage, increase revenue, and use capital more effectively?



WHAT WE SELL

Products,
Services, Innovation

- + Do our offerings include advanced, internet-connected products and services?
- + Do we use advanced technologies such as digital twins, rapid prototyping, and sensors to produce and improve our offerings and understand how customers use them?
- + Does our innovation portfolio comprise product/service, process, and business model innovation?



HOW WE PRODUCE IT

Operations, Supply
Chain, Distribution

- + Are our operations efficient and agile?
- + Are we deploying advanced production technologies?
- + Do we have a “glass pipeline”—a real time, digital view of our entire supply and distribution chain—or is each element managed in a separate silo?



HOW WE SELL IT

Sales, Customer
Experience, Channels,
Marketing

- + Does our sales force have the digital tools it needs to succeed?
- + Can customers interact and do business with us on all channels—web, mobile, phone, face-to-face?
- + Is digital fully integrated into our marketing mix?
- + Do we have real-time, detailed knowledge of our customers?



OUR IT BACKBONE

Infrastructure,
Security

- + In general, are our firm's IT capabilities ahead of, just keeping pace, or lagging behind our competitors?
- + Have we connected our sales and marketing IT to our production systems? To our financial systems?
- + Do we have and deploy analytics tools broadly across the organization, including sales and marketing, operations, HR, and risk and compliance?
- + Are our cybersecurity defenses sufficient and appropriate, up-to-date, and audited annually?



OUR WORKFORCE

Talent,
Digital Skills

- + In general, are the digital skills of our workforce ahead of, just keeping pace, or lagging behind our competitors?
- + Do we have a digital skills gap? Do we know where it is most acute and what the business consequences are?
- + Do we have a talent management plan to upgrade the digital skills of our workforce?

References

The data and insights in this report are based on findings from the Center's Middle Market Indicator, a quarterly business performance update and economic outlook survey conducted among 1,000 C-suite executives of companies with annual revenues between \$10MM and \$1B, as well as several of the Center's previously published research studies, including:

The Power of Business Analytics in the Middle Market,

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