

The Path to Digital Leadership



Executive Summary

A global thought leadership project produced
in conjunction with:

**Appway, Broadridge, Cisco, eToro,
J.P. Morgan Asset Management, Oracle,
Protiviti, Sapient Consulting, and Vauban Group**

Distribution partner: Robo-Investing

The background of the page is a vibrant red. In the top left corner, a portion of a white laptop keyboard is visible. To its right is a white computer mouse. In the top right corner, a pair of black-rimmed glasses is shown. In the bottom left corner, the top edge of a tablet or laptop screen is visible. In the bottom right corner, a pair of white headphones with a coiled cord is depicted. A dark gray rectangular box is centered on the page, containing the text.

Research background

To provide the financial services industry with a digital vision of the future, Roubini ThoughtLab conducted comprehensive global research in conjunction with a coalition of organizations across the industry. These include Appway, Broadridge Financial Solutions, Cisco, eToro, J.P. Morgan Asset Management, Oracle, Protiviti, Sapient Consulting, and Vauban Group.

As part of the study, we established an advisory group of industry executives and experts to help guide the research and provide their insights. From April to June 2017, the Roubini ThoughtLab team surveyed a spectrum of 1,503 providers from around the world. At the same time, we conducted 42 in-depth interviews with senior executives from financial institutions, consultancies and technology firms.

The ThoughtLab team analyzed the survey data to spot and forecast trends across sub-sectors, regions, and levels of digital maturity. Our economists then created models to assess the impact of digital adoption on corporate performance and provide the business case for going digital.

This report summarizes our key findings.

“Technology is the future of our industry.”

Bob Reynolds, president and CEO, Putnam Investments and Great-West Financial



Executive summary

The convergence of digitalization, globalization, and consumerization will reshape the industry, according to our study of universal banks, retail banks and wealth and asset management firms around the globe. Financial leaders now recognize that consumers throughout the world—and across generations and wealth levels—want to manage their money in the same way they now shop, communicate, and learn: using a range of digital tools, social media, and mobile apps. For most industry executives, the question is no longer whether the industry will go through a digital metamorphosis, but how they can ensure they are not left behind.

With the industry facing high-velocity change, providers must act now to embrace digital innovation. Firms that have already reached an advanced digital stage report an 8.6% increase in revenue, an 11.3% rise in productivity, and a 6.3% improvement in market share. Those that move too slowly stand to lose \$79 million per billion dollars of revenue a year—and risk falling out of the race altogether.

“If you don’t master technology, you won’t survive.”

Francisco Gonzales, chairman, BBVA

The digital imperative

Digital transformation is now at the top of the CEO agenda. Faced with escalating demands from customers, growing competition from early fintech adopters, and a \$30 trillion generational wealth transfer, leaders across the industry recognize the burning need to go digital.

The speed of change has been remarkable. In Roubini ThoughtLab's study last year, 24% of CEOs said that digital transformation was unimportant or slightly important. This year nearly all CEOs (96%)—across all sub-sectors and locations—view digital transformation as central to their businesses.

According to our research, 99% of providers are in the process of digital transformation. About a quarter of firms surveyed are just beginning their digital journey, almost half are transitioning, and slightly over a quarter are maturing (see Figure 1). Only 2.3% of firms emerged as digital leaders, with universal banks (7.5%) and retail banks (4.8%) out in front. Over the next five years, one out of five firms expect to be digital leaders, and a further 47% plan to be digitally mature.

With Silicon Valley setting the pace, digital transformation will be essential for staying relevant in the future. Our research shows that customers no longer judge financial service providers just against their peers, but against Amazon and Google. They want the same level of customer-centricity, transparency, and ease of business they have come to expect from the consumer retail industry.

These shifting customer expectations are evident in the survey results. Firms report rising demands for product simplicity/transparency (49%), anytime, anywhere, any device access (45%), robust cybersecurity (43%), more innovative products (32%), and reduced fees (27%). To respond, firms plan to leverage technology over the next five years to drive efficiencies (51%), expand distribution (46%), improve predictive analytics (45%), develop fintech (41%), and become data-driven (41%).

But providers are struggling to keep up. For example, our survey shows that 80% of retail banks are now behind on smart beta, 71% of broker-dealers are not ready for fintech, and 50% of mutual funds companies are not prepared for holistic goal planning.

The hallmarks of a digital leader

To thrive in the coming industry shakeout, firms will want to position themselves as digital leaders. The research showed that digital leaders excel in seven key ways:

- 1. A digital vision and business case.** Almost all digital leaders (97%) identify future growth areas from digital innovation and 85% ensure close coordination between digital and business teams.
- 2. A cogent digital transformation plan.** Digital leaders are methodical about change: 82% are executing a full digital transformation and 77% have developed a properly-staged road map to digital leadership.
- 3. A culture of innovation.** Digital leaders foster a culture of innovation (85%), encourage the cross-pollination of digital ideas (79%), and reward intrapreneurship (77%).

Four stages of digital maturity

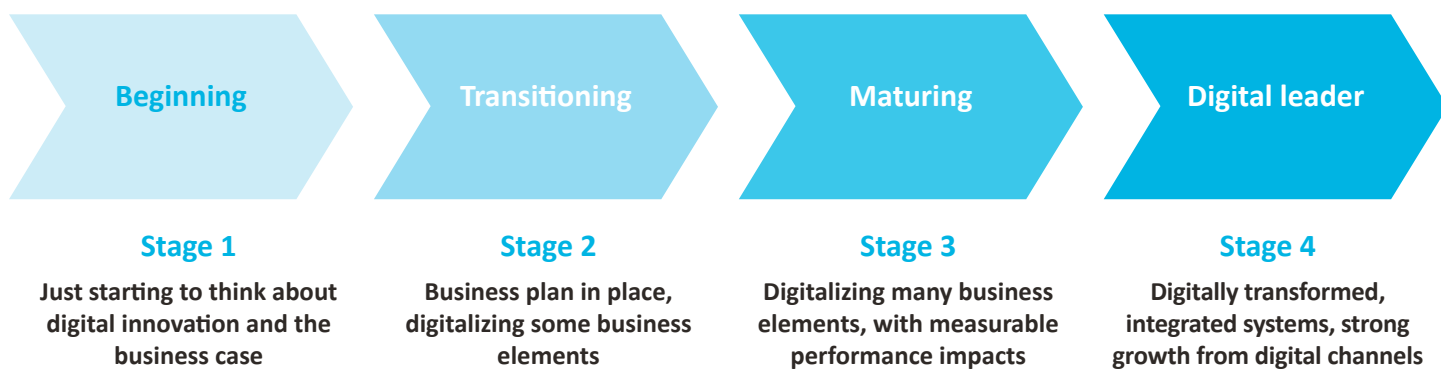


Figure 1: How respondents classified themselves on the digital maturity spectrum.

4. A customer-centric mindset. For digital leaders, customer centrality is not just a goal, it is a passion. Our survey shows that 91% focus on analyzing customer needs and 88% put the customer at the center of innovation.

5. An agile product development process. Some 74% of digital leaders in our study are using cloud as a platform to enable agile product development. They strive to shorten times to market (85%) and adapt products to meet evolving customer digital needs (82%).

6. Early adoption of advanced technology. Most digital leaders (94%) harness analytics throughout their business, 88% have a range of fintech capabilities, and 85% systematically track emerging technologies.

7. A digital team to drive change. To stay ahead, 94% of digital leaders provide digital business training, 79% create dedicated digital groups, and another 79% are creative in attracting and retaining staff.

Despite the benefits of going digital, for many organizations, getting there won't be easy. The obstacles range from budgetary constraints (43%) and unproven ROI (39%) to concerns about data security (37%) and market uncertainty (34%).

Staying ahead of technology

By 2022, the SMAC stack (social, mobile, analytics and cloud) will be table stakes for investment providers (Figure 2). **Cloud platforms** will become essential for

The SMAC stack will become pervasive

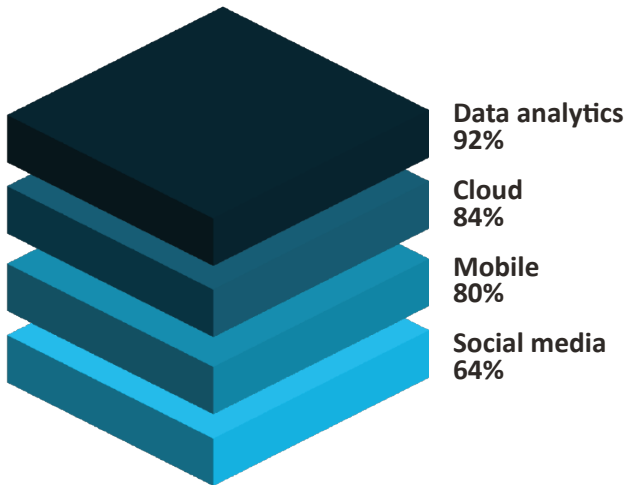


Figure 2: Basic technologies respondents expect their firms to be using by 2022.

Over half (53%) of providers and 59% of digital leaders surveyed plan to use a cloud platform to replace their legacy systems.

driving digital innovation. Over the next five years, moving to the cloud will help firms support customer centrality (59%), reduce operating costs (56%), accelerate time to market (56%), and drive innovation (54%).

A cloud-based platform will also make it easier for firms to harness new technologies, such as blockchain, artificial intelligence (AI), robotics, web collaboration, and application programming interfaces (APIs), all of which our research shows will be increasing in use (see Figure 3). A cloud platform, coupled with a data warehouse, is

Fastest growing technologies to 2022

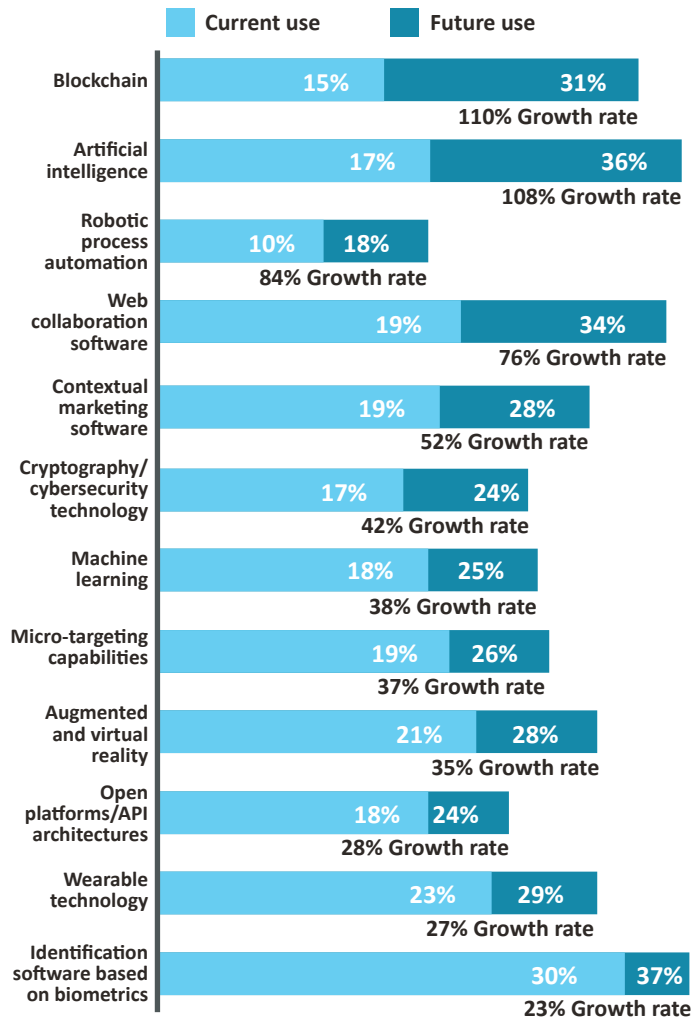


Figure 3: Advanced technologies respondents expect to be using by 2022.

crucial for leveraging advanced analytics to personalize offerings, improve forecasting, and target clients.

AI will enable firms to fully leverage their data and turbo-charge key activities. Financial Services providers plan to double their use of AI, from 17% today to 36% by 2022. About four out of 10 digital leaders currently use AI to improve portfolio management, detect cybersecurity risks, improve forecasting, find and attract investors, and create automated financial advisors. Over the next five years, AI applications will mature along a continuum from linear robotic process automation (RPA), through intelligent process automation and machine learning, to deep learning.

“AI is the new alchemy of growth.”

- Clara Durodie, CEO, Cognitive Finance Group

Like AI, **blockchain**, a distributed ledger for making and recording transactions, is slated for rapid growth. Our survey shows that investment providers plan to more than double their use of blockchain from 15% now to 31% over the next five years. Full-service banks currently have first-mover advantage: 28% are already piloting blockchain and over half expect to use it by 2022.

Firms are now exploring many applications for blockchain: accessing detailed customer data (10%), simplifying payments (10%), reducing fraud and cybersecurity risks (9%), improving transparency (9%), and tapping into new markets (9%). While most executives believe that blockchain will revolutionize the financial industry over the long run, many believe it will take time for the technology to gain market acceptance.

Our research shows that forward-looking providers are already tapping other smart technologies. For example, BBVA, the Spain-based banking group, uses **facial recognition software** to speed up client onboarding. Pictet, a 200-year-old Swiss bank, recently used **virtual reality** to take their clients on a “virtual field trip” to see their investments, including a vertical farm, water park, and driverless cars in Singapore.

However, providers also know they cannot embrace digital innovation at the expense of security. Over the next five years, many firms will take further steps to improve their overall **cybersecurity**, including

using secure cloud platforms (69%), actively monitoring networks (57%), managing privileged access (48%), and predicting cyber risks (47%). Digital leaders will integrate smart technologies—such as AI and machine learning—with their cybersecurity approach not just to defend against risks, but to create a new source of competitive advantage.

Digital-first engagement

Financial Services providers are scrambling to reframe their customer interactions for a digital-first world. By 2022, communication through smartphones, telepresence, webinars, and online chats will rise dramatically, while face-to-face meetings and email will fall (see Figure 4). For some providers, such as Charles Schwab and Vanguard, most of their client interactions are already digital.

Communication methods

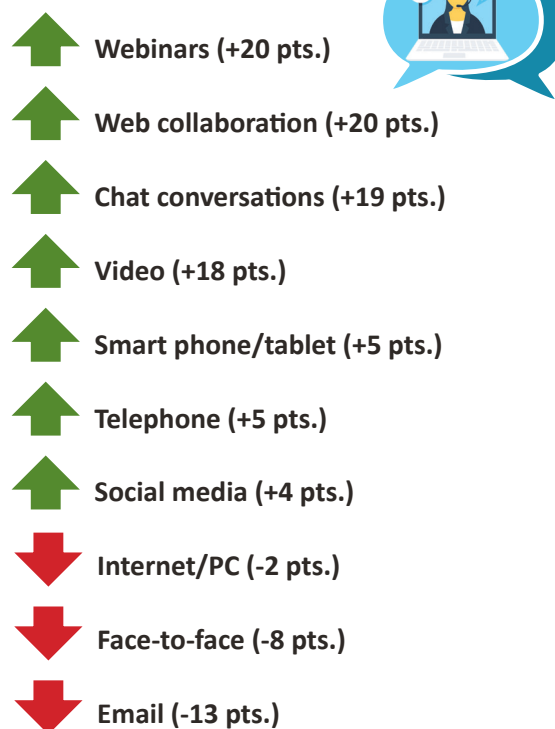


Figure 4: How digital technology will transform client interactions by 2022.

“Technology is our friend and inspiration to deliver the perfect client and employee experience.” - Wiwi Gutmannsbauer, global head of omnichannel management, UBS Wealth Management

The report indicates that digital leaders are well ahead of others in creating a seamless customer experience—one that smoothly passes a customer from smartphone to computer, from app to chatbot, or directly to an expert. To do this, many firms are already taking steps, such as adapting the channel mix to support their customers' digital behaviors, providing anytime, any-device access, and leveraging customer data and analytics (see Figure 5).

Digital onboarding—the starting point for a seamless customer experience—is fast becoming the norm: 43% of firms now offer digital onboarding, and the number will rise to 69% by 2022. The highest growth in online onboarding will come from apps, which will more than double in use from 22% to 45% by 2022, and the internet, which will rise from 49% to 71%.

“Years ago, customers would compare financial services firms like Fidelity, Vanguard and Schwab. It’s not like that today—now they are comparing how easy it is to put money into an investment vehicle with how easy it is to use Uber or Lyft.” - John Marcante, CIO, Vanguard

The shift to digital will not only transform how firms engage with their customers, but also with their employees. For many firms, the use of new technologies will eliminate repetitive tasks, thereby freeing staff to focus on activities that will add more value for investors.

Our research shows that by 2022, there will remain a roughly even balance between the roles of human advisors and automated solutions, with machines well ahead on executing transactions, but slightly behind on providing analysis and advice (see Figure 6). This “bionic” model will likely become the standard for most providers by 2022.

“Rather than digital replacing people, they will work hand-in-hand as part of the omnichannel experience.” - Dean Butler, head of retail wealth, HSBC UK

The future of work

Embracing technology will have a major impact on workers, both altering the way they work and the skills they need. Many of those changes will be positive for employees, helping to improve decision-making (38%), increase productivity (36%), and automate routine tasks

Steps for building a seamless customer experience

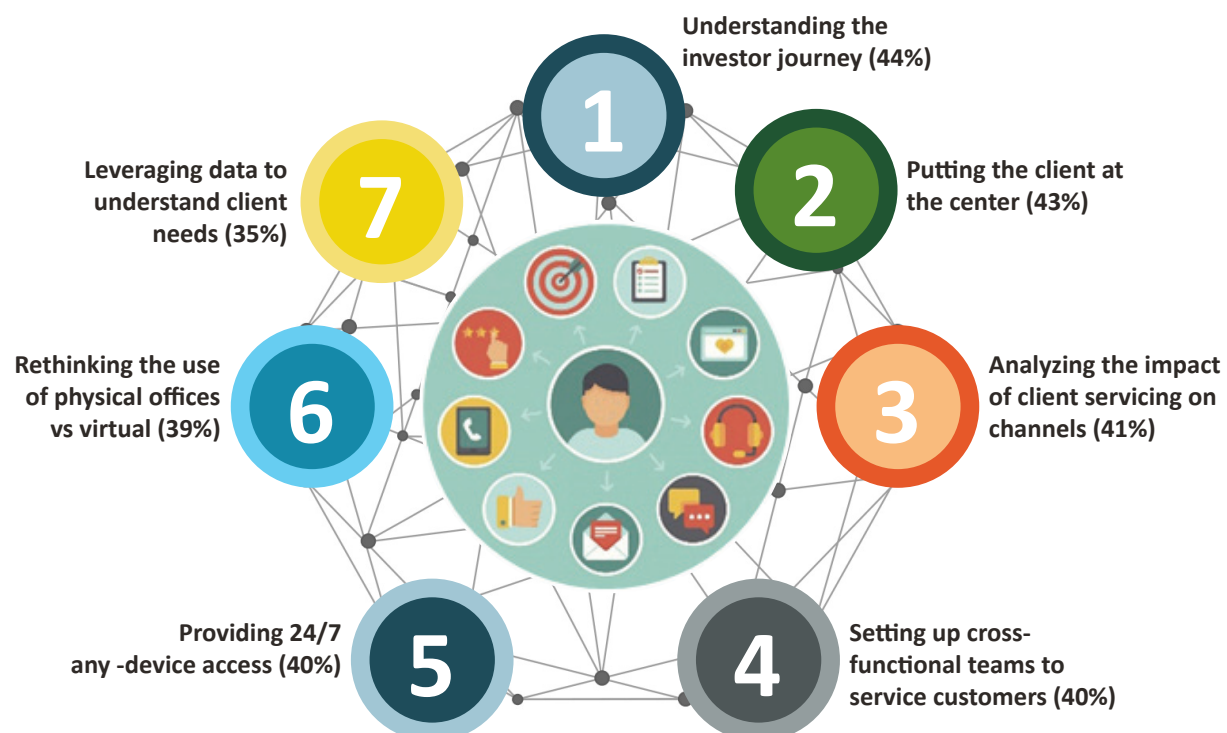


Figure 5: Steps firms are taking to create an integrated, cross-channel customer experience.

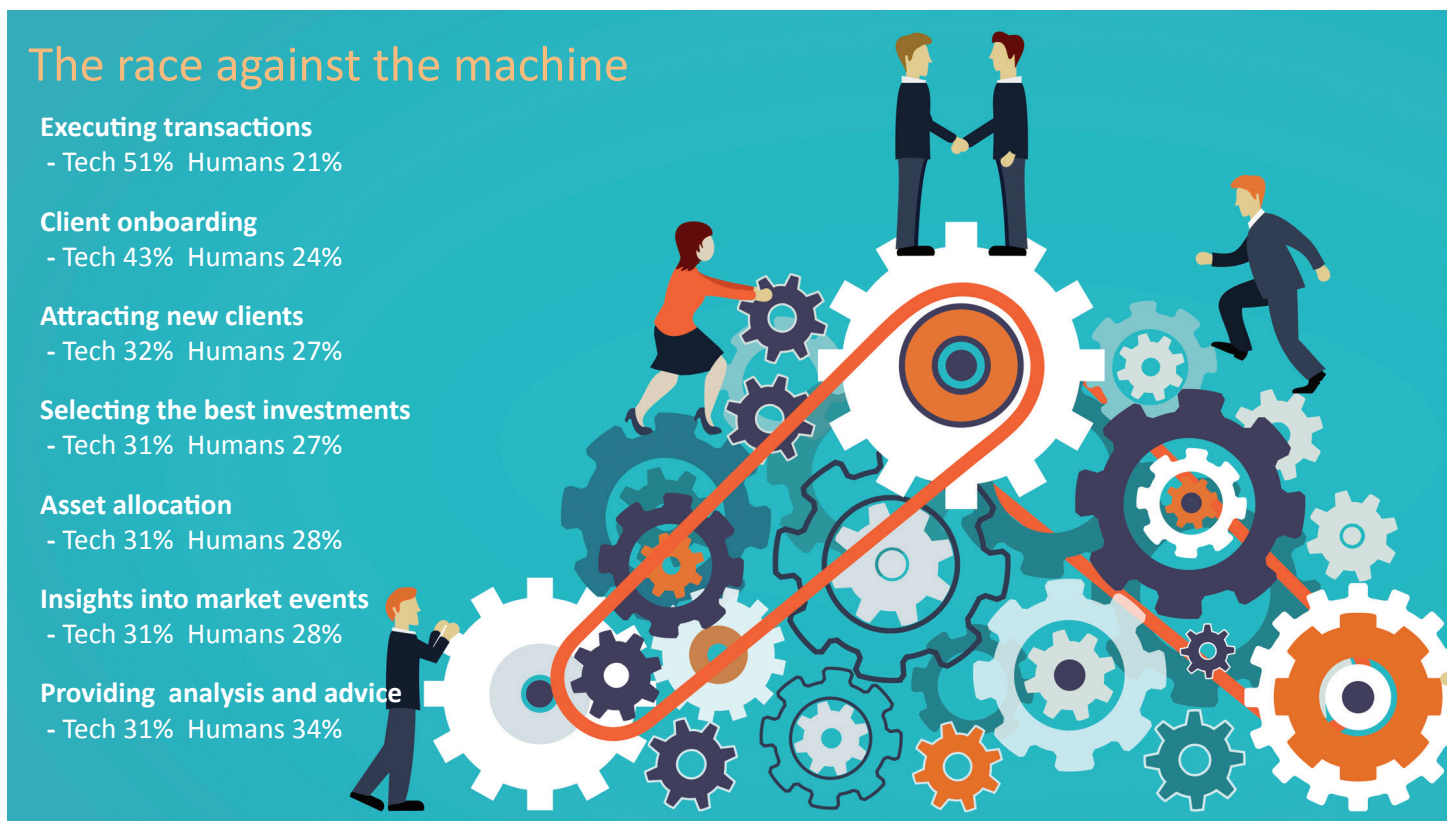


Figure 6: Tasks respondents expect to handle through technology vs. humans over the next five years.

(31%. At the same time, as jobs become more specialized and collaborative, firms will have greater demand for skills around innovation (35%), digital (33%, analytical (32%), and communication (32%).

Financial Services providers are now taking measures, such as conducting skills audits, to ensure they have the right talent to drive their digital agenda. However, improving digital skills is not enough; companies need to change the culture of their organizations to become true digital leaders able to attract the right talent. This change must come from the top, including creating a digital vision, setting expectations for new behaviors, and encouraging collaboration and innovation. Some firms are moving from rigid functional silos to more agile and collaborative environments. Others are bringing their digital teams together in Silicon Valley-style workplaces.

“Our recent technology rebuild wasn’t a cultural shift, it was a cultural earthquake.”

- Michael Williamson, executive director, State of Wisconsin Investment Board

The business case for going digital

To analyze the impact of technology on the performance of firms, our economists classified organizations into three stages of digital transformation. Of the 1,503 firms surveyed, 29% were categorized as advanced (including digital leaders and digitally maturing firms), 48% as transitioning, and 23% as beginning.

Advanced firms now spend 16.8% of their revenue in technology, and plan to increase that investment to 24% by 2022. While these investments are large, the payback can be even larger. Over the last year, digitally-advanced firms generated an 8.6% increase in revenue, an 11.3% jump in productivity, and a 6.3% improvement in market share from their technological initiatives. Further, advanced firms now derive 32% of their revenue through digital channels, and expect that percentage to rise to 48% by 2022.

Our research shows that over the last year, providers across the board have seen performance gains from the use of digital technology (see Figure 7). When orchestrated correctly, digital transformation creates a

Digital performance scorecard

	Total	INSTITUTIONAL	ALTERNATIVE	BROKER-DEALERS	FINTECHS	UNIVERSAL BANKS	MUTUAL FUNDS	PRIVATE BANKS	RETAIL BANKS	ADVISORS
Revenue	5.6%	5.1%	4.7%	2.9%	8.0%	6.8%	3.9%	6.8%	3.2%	6.9%
Profits	8.9%	11.1%	6.9%	12.0%	10.2%	5.7%	9.4%	9.3%	7.3%	9.3%
AUM	4.0%	3.5%	2.6%	2.9%	6.2%	5.7%	4.2%	3.6%	2.3%	4.6%
Productivity	10.6%	11.7%	7.5%	11.7%	15.8%	9.5%	10.7%	11.9%	8.0%	10.6%
Market share	3.6%	3.0%	2.2%	1.7%	5.3%	5.5%	2.6%	3.8%	2.4%	4.3%

Figure 7: Performance gains due to technology over the past year reported by respondents across sectors.

virtual circle of growth: as firms invest more, they move up the digital maturity curve and see larger performance gains. Our research also shows that as companies move up the digital maturity curve, the positive impact on revenue rises, and the negative impact on costs decreases, as can be seen in Figure 8 below.

Revenue vs. cost of going digital

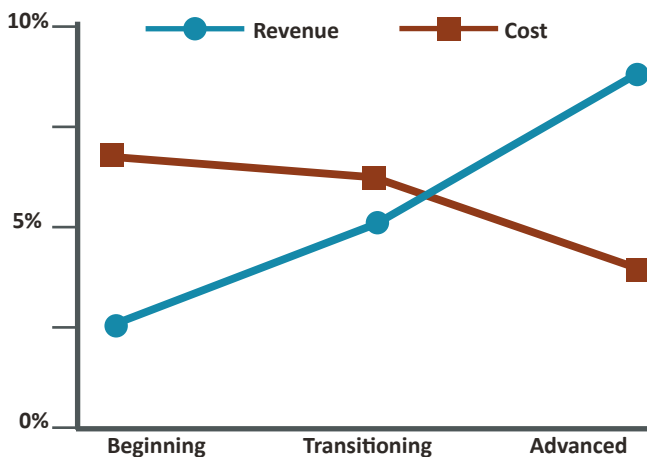


Figure 8: How going digital affects revenues and costs by maturity stage.

To better understand the business case for going digital, our economists calculated the indicative ROI (expressed as a percent of revenue) based on the digital investment plans of financial firms and their expected performance impacts over the next five years. On average, the ROI of going from a beginning to a transitioning stage is roughly 5.5% per year; the ROI of going from transitioning to advanced is slightly less at 5% per year (see Figure 9).

How ROI changes from earlier to later stage

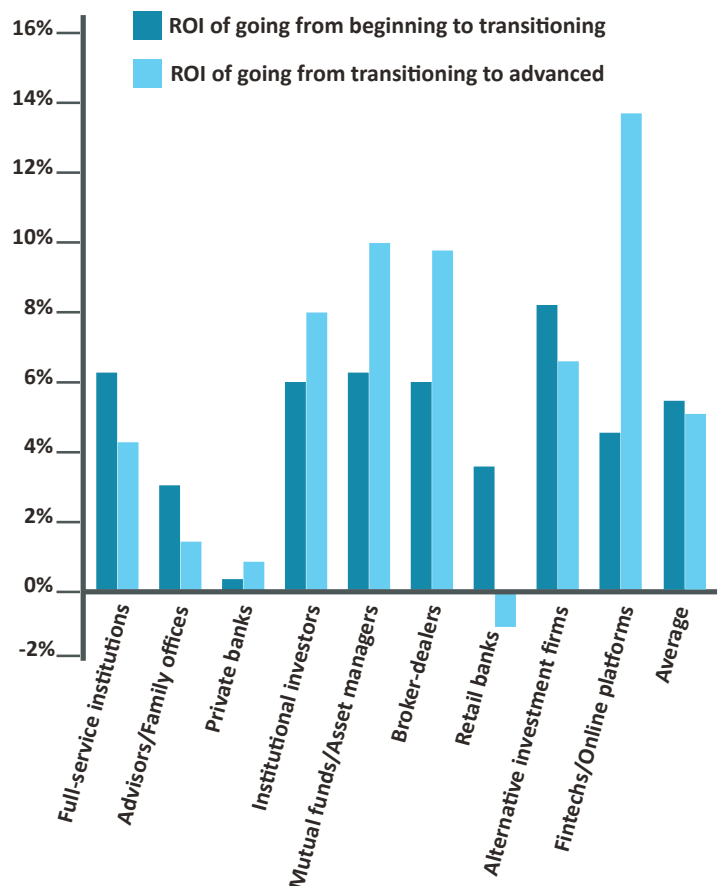


Figure 9: ROI of going from beginning to transitioning and of going from transitioning to advanced.

Our model not only measures the financial benefits of going digital, it identifies a “laggard penalty” for falling behind. According to our calculations, by moving too

slowly, firms stand to lose \$79.2 million per billion dollars of revenue. But digital laggards may pay an even bigger price: falling out of the race altogether.

Calls to action

Based on our findings, we framed eight calls to action to ensure your firm is on the fast track to digital leadership:

1. Create a digital vision and business case

Bridging the gap between business and technology is crucial for developing a digital vision. The most successful firms combine a top-down business vision and strategy with bottom-up implementation and innovation. Digital leaders build a strong business case for transformation, weighing the cost-benefits of alternative initiatives and reviewing results and assumptions on a regular basis.

2. Map out a clear path to digital transformation

Your firm should first determine where it is on the digital maturity spectrum, where it wants to be, and then sequence its plans accordingly. This should include appraising your firm's strengths and weaknesses in meeting customer expectations, taking steps to expand your business relationships with fintech startups, and building a surrounding ecosystem.

3. Nurture a culture of innovation

To deliver on a digital vision, your firm should aim to instill a culture of innovation. This requires a new mindset that encourages experimentation and collaboration, while allowing for potential failure and disruption. Such cultural change needs to be led from the top, but executed by a fully engaged team. Ongoing digital business training is required at all levels, including top management.

4. Drive continuous product development

To compete with platform companies like Amazon and Google, your firm needs to take on a start-up mentality, continuously developing and testing new products. To do this, digital leaders often employ cross-functional teams that own the client experience and are given the latitude to experiment and learn. Setting up innovation labs and partnering with third parties can also be effective.

5. Build a seamless, omnichannel customer experience

Integrating a digital and personal approach—supported by an integrated back-end—is the key to delivering the best possible client experience. Incumbents should

reverse their thinking, imagining the customer journey as if it were 100% digital, and then finding where a human touch might add value. Simplified digital onboarding is the starting point for a seamless customer experience.

6. Stay ahead of the technology curve

With most legacy systems no longer fit for purpose, your firm will need to migrate to a cloud-based platform. It will enable your firm to fully leverage data, drive innovation, and quickly integrate APIs, AI, blockchain, and other smart technologies. Systematic tracking of emerging technologies and their impacts is critical.

7. Develop the digital talent to drive your future

If you don't have a strong digital team, then the other pathways to digital leadership won't work. Conducting a digital skills assessment at all levels will help identify and fill gaps. But product innovation calls for more than digital skills; it also requires an understanding of the business and regulatory issues. Since finding those skills in one individual is difficult, a team approach typically works best.

8. Make cybersecurity airtight

To keep your organization safe from cyber-attacks, your firm should: (1) Decide which data sets **MUST** be protected; (2) Install a system to protect that data; (3) Understand that detection is just as important as protection; (4) Have an integrated response and recovery plan ready to go before a breach happens. The best cybersecurity approaches draw on a combination of advanced technologies, but recognize that data and people make the difference.

Find out more about
The Path to Digital Leadership
use the online benchmarking tool to gauge your
organization's readiness for digital leadership and
learn more about how Cisco can help, go to:
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About Roubini ThoughtLab

Roubini ThoughtLab is a trend-setting thought leadership consultancy providing fresh management thinking and decision support to help business and government leaders cope with transformative change. By applying the latest analytical tools, predictive models, and expert opinion, we provide actionable insights into future megatrends and their impact on the world.

Our team of thought leadership experts and global economists specialize in creating 360° decision support that sits at the intersection of visionary thinking, analytical excellence, and engaging communication. An agile, collaborative enterprise, Roubini ThoughtLab draws on the diverse skills of its in-house team, global expert network, and alliance partners to fill any or all thought leadership needs—from surveys, interviews, and advisory boards, to analytical tools, indexes and econometric models, to white papers, social media, and infographics.

Roubini ThoughtLab is a joint venture with Econsult Solutions, a leading economic consultancy with links to academia. It was founded in 2015 by noted economist Dr. Nouriel Roubini and Lou Celi, a pioneer in thought leadership and digital publishing.

Special thanks to our sponsors

We would like to thank the sponsors of *The Path to Digital Leadership*, who contributed financial and intellectual support to this ground-breaking research program. Without them, this study would not have been possible.

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