Are you supporting tomorrow’s wealth management with yesterday’s technology?

Accelerating the transformation of wealth management through digital technology
# Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Editorial</td>
<td>3</td>
</tr>
<tr>
<td>Executive summary</td>
<td>4</td>
</tr>
<tr>
<td><strong>A. The new playing field in wealth management</strong></td>
<td>6</td>
</tr>
<tr>
<td>Digital in wealth management - moving toward a new paradigm</td>
<td>6</td>
</tr>
<tr>
<td>Five tactical steps to stay ahead of the curve</td>
<td>11</td>
</tr>
<tr>
<td><strong>B. Navigating the new digital reality: a guidebook for IT executives</strong></td>
<td>12</td>
</tr>
<tr>
<td>Disruptive change on the horizon</td>
<td>12</td>
</tr>
<tr>
<td>Taking bold steps toward digital readiness: a guidebook for IT executives</td>
<td>21</td>
</tr>
<tr>
<td><strong>C. Aligning IT spend with the most important digital priorities</strong></td>
<td>22</td>
</tr>
<tr>
<td>Understanding where IT spend adds the most value</td>
<td>22</td>
</tr>
<tr>
<td>Increasing transparency of where IT spend is going</td>
<td>28</td>
</tr>
<tr>
<td>Making IT spend more effective</td>
<td>29</td>
</tr>
<tr>
<td><strong>D. Retooling the IT function for the digital age</strong></td>
<td>32</td>
</tr>
<tr>
<td>Building a high-performance IT function</td>
<td>32</td>
</tr>
<tr>
<td>Making IT outsourcing deliver value</td>
<td>41</td>
</tr>
<tr>
<td><strong>E. Forging an IT landscape ready for digital transformation</strong></td>
<td>43</td>
</tr>
<tr>
<td>Modernizing core IT platforms for digital</td>
<td>43</td>
</tr>
<tr>
<td>Building a digital-ready IT architecture</td>
<td>50</td>
</tr>
</tbody>
</table>
Wealth management is changing, and it is changing fast. Multiple forces - from shifting client expectations and innovative technologies to the emergence of disruptive operating models and the market encroachment of unconventional foes - are reshaping the playing field. Within this new arena, the role of IT executives and technology leaders is taking on paramount importance, both at an operational and a strategic level. It is them that organizations should increasingly entrust to guide the business through the new digital reality.

In this edition of our Digital Disruption in Wealth Management series, we look at the impact of digital on the wealth management sector and its implications for strategy and operations. We present a guidebook for IT executives to help them navigate the new digital reality. Our latest research into the state of technology in the wealth management sector identifies the capabilities that wealth managers need to build, and by when; how they can transform their organizations for the digital age; and where they should place their digital bets.

We trust that you will find our take on the subject an interesting read, and we would welcome the opportunity to meet with you personally to dive deeper into the results and provide you with more details and insights we gained from this study. Feel free to get in touch with us; a list of contacts is provided at the end of this report.

Editorial

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Technology-enabled Transformation in Wealth and Asset Management
Accelerating the transformation of wealth management through digital technology

Wealth managers will increasingly engage head to head in the field of technology. Granted, technology has always been an important driver in the wealth management sector, but the intensity of change is about to reach new heights. This report presents the findings of a comprehensive research initiative on the state of technology within wealth management. It derives critical insights from research, including interviews with wealth managers globally, and from an EY proprietary benchmark database, that tracks key metrics in the sector over time. Our goal is to analyze the role of technology within the industry and to identify what wealth managers need to do to excel in the digital age.

The strategic and operational ramifications of digital transformation for wealth managers are significant and will leave no area of the business untouched. Technology leaders and IT executives are called upon to forge a response to the pressing challenges ahead, and to deliver effective solutions in multiple dimensions, such as digital enterprise strategy, incubation and innovation, experience transformation, digital operations and digital trust.

Executive summary

Key findings

- Wealth management is exposed to change on multiple fronts, including evolving client needs, market entry of nontraditional competitors and a shifting landscape of emerging technology providers. For incumbents, these changes represent a source of both opportunity and risk. There has never been a more pressing need for action.

- IT executives need to take a central role in retooling their organizations for the digital age and aligning IT spend with the most important digital priorities. Best-practice wealth managers spend more on front-office initiatives and outsource more (and get more value for their money) than their peers.

- There are large differences in how wealth managers capture value from their technology spend. Three measures can help technology leaders increase the value delivered by their IT investments: improve strategic alignment, right-size demand for IT services and forcefully manage complexity.

- The “one-size-fits-all” operating model for IT is no longer an option. Each organization must find its own fit-for-purpose IT operating model that allows it to manage the slow evolution of core platforms while simultaneously delivering completely new digital capabilities.
Wealth managers still tend to sideline technology as a factor that merely supports and enables their core business, rather than recognizing it as a central strategic element in its own right. IT talent in particular is undervalued. Those who ignore market trends in compensation and incentives are going to struggle to close the tech talent gap, as they increasingly find themselves in fierce competition with other industries for sought-after specialists.

The benefits realized from IT outsourcing often fall short of expectations. Capturing maximum value often hinges on three elements: a capable and committed vendor, an optimized relationship between contracting parties and a strong retained IT organization.

For too long, wealth managers have put off the long-overdue modernization of their core IT systems. Apart from some leading players, most wealth managers are merely taking tentative steps toward the transformation process. Our analysis underscores that a reticent approach merely burdens organizations with avoidable costs and a heightened risk exposure.

Almost all IT leaders acknowledge the need for optimizing application portfolios, but few tackle the challenge head-on and drive for increased value realization. Our analysis highlights how making a conscious effort to consolidate, replace and decommission applications pays off in the long run.

The report is structured as follows:

In section A, we present the case for mounting a response to the challenges and opportunities emerging on the horizon. We explore in detail the technologies, the business models and the formidable new players that are reshaping the playing field. We conclude by providing five tactical steps that wealth managers can take to help them stay ahead of the curve.

Section B presents the findings of our research and interviews with IT executives at wealth management firms. We pinpoint the main sources of disruption, key areas for digital investment, how emerging technologies are being deployed and how priorities in the sector are evolving. We then present our digital guidebook designed to help IT executives navigate the new digital reality.

In section C, we drill down into the dimensions of digital where investment can deliver the greatest value. After establishing the importance of tracking and managing IT costs, we deep-dive into proven methods wealth managers can use to obtain cost transparency and make IT spend more effective.

Section D focuses on two critical areas: the operating model of the IT organization itself and its approach toward outsourcing. Each organization must find its own fit-for-purpose IT operating model that allows it to manage the slow evolution of core platforms while at the same time delivering completely new digital capabilities. We also look into how well wealth managers are benefiting from external capabilities through IT outsourcing.

Section E turns to the task of forging a digital-ready IT landscape. We focus on operational aspects such as vendor selection, but also on replatforming strategies and their timing. We conclude with a discussion of approaches that have proven successful in gearing up IT architecture for major transformations of the scope and scale needed for the digital age.
Consensus is growing that wealth management is on the cusp of a digital transformation, with all its opportunities and ruthless ramifications. After years of mounting geopolitical uncertainty, volatile markets and continued margin erosion, the digital age could usher in significant opportunities – but who will capture them?

The operating environment is changing. Technology is lowering barriers to market entry, opening the gates to a completely new set of formidable digital competitors armed with innovative capabilities and intent on far-reaching disruption. Silicon Valley giants and agile FinTechs are reshaping the playing field by elevating the customer experience in many areas of interaction.

Client behavior too is changing across all segments. More and more, clients want online tools and mobile functionality as well as a seamless customer experience that is fast, convenient and intuitive.

With investment in innovation and digitization, wealth managers can not only enhance efficiency through front-to-back automation and leaner processes, but also launch their operations toward the next horizon of growth by upgrading client touchpoints and overhauling their value propositions.

The race is on to take advantage of the opportunities emerging from, and manage the risks integral to, the digital economy. The ability to innovate quickly and effectively is turning into a core asset. Examples of digital transformation within wealth management span the entire value chain, from client onboarding to fulfilment and trading. Consider these recent examples of the power of digital transformation in wealth management:

- **Client onboarding.** A wealth manager in Liechtenstein has launched a service that allows clients to open accounts using video conferencing. Other wealth managers are following suit and digitizing the onboarding process using innovative technology, from electronic signatures and online ID verification to biometric authentication.

- **Advice.** In Asia, a wealth manager has introduced a suite of digital banking tools for tablets and smartphones. The app provides personalized content, trading tools and opportunities for multichannel collaboration.
• **Sales support.** Providers are designing tablet apps to support relationship managers in client meetings by guiding them through a smart, adaptive and interactive sales process, consolidating all relevant sales functionalities in a single platform.

• **Investment recommendations.** A large global wealth manager has introduced personalized health checks that identify potential issues with personal portfolios, offering tailored remedies to bring the health status back to desired levels.

• **Fulfillment and trading.** A number of wealth managers are building digital solutions that provide social marketplaces where customers can trade stocks and funds online.

As digital continues to transform wealth management, senior executives need to ask themselves three critical questions:

• **What do clients expect in terms of digital capabilities?** It seems like only yesterday that wealth managers interacted with clients almost entirely by phone, email, electronic orders and face-to-face presentations. Today, a large majority of clients would not hesitate to switch wealth managers in exchange for better digital capabilities.

• **What can wealth managers learn from the new digital upstarts?** Many of the digital trends are driven by robo-advisors, which are already capturing parts of the wealth management value chain (see “Meet your new digital competitor” on page 9). Incumbents should take the opportunity to learn from the approaches these digital upstarts are taking.

• **How can wealth managers benefit from the emerging ecosystems of FinTech providers?** FinTechs are proliferating and delivering a myriad of innovative business-to-business solutions. Many wealth managers are seizing the opportunity to cooperate with FinTechs in building new digital capabilities.

The following subsections provide some answers to these pressing questions.
What do wealth clients value? Our 2016 survey of more than 2,000 wealth clients globally⁴ exposes their preferences in three dimensions: engagement, trust and performance. In terms of engagement, clients value accurate information, self-service and digital channel capabilities. As regards financial performance, they value a solid understanding of their financial goals and having at their disposal a broad suite of products and tools. Through the prism of trust, clients value transparency in fees, transaction security and data confidentiality the most.

Expectations of clients on their wealth managers are changing, with digital channels being a good case in point. A majority (59%) of the wealth clients state that digital will be their preferred channel for receiving advice within the next two to three years.

Most clients are also familiar with robo-advice offerings. Not surprisingly, younger generations are more likely to consider robo-offerings than older age groups, with 61% of clients aged between 18 and 34 likely to consider robo-advisors, compared with 51% aged between 35 and 50 or 24% aged between 51 and 71. Moreover, it is primarily the (HNW) segment that has the greatest awareness of, and preference for, robo-advice, not the mass affluent or emerging HNW segments, as commonly assumed. Over 70% of HNW clients would consider robo-advice, compared with 37% of mass affluent clients.

Advances in technology are offering wealth managers new ways of serving their clients. However, research shows that meeting enhanced client expectations can prove a major challenge for incumbents.

At the same time, simply meeting expectations may not always be enough. Big data, advanced analytics or artificial intelligence are creating opportunities for market leaders to stay ahead of demand by predicting trends and innovating their offering.

Meet your new digital competitor

A raft of “automated wealth managers”, or robo-advisors, are storming the gates. Using algorithms to offer financial advice for a fraction of the price of a real-life client advisor, they are growing at a rapid pace, doubling their assets under management every few months.

The service models of robo-advisors range from automated investment and self-service advice to guided advice. With automated investment, clients subscribe to wealth guidance and advice that is provided and implemented without their explicit approval. Once their account is opened, clients are typically treated at “arm’s length” and assets managed autonomously by the wealth manager. Exchange-traded funds are often the preferred form of investment. With self-service advice, digital tools are provided to support customers in identifying the scope of service to be provided and create wealth advice and guidance, typically in relation to specific needs, e.g., retirement planning.

Wealth managers assess clients with a small number of basic questions to determine their investment appetite and derive recommended portfolios. In the case of guided advice, remote advice is delivered over the phone or by video communication.

A human client advisor is responsible for the investment advice and typically focuses on a holistic strategy.

In all cases, the robo-advisor model is built on three key pillars:

**Rapid technology change cycles.** Technology adoption is at the core of most robo-advisors. They are likely to integrate technology rapidly, especially in areas such as the effective deployment of mobile apps and harnessing artificial intelligence for client communication.

**Self-service and automation.** High levels of automation and self-service allow robo-advisors to keep their cost base low.

**Passive investment strategies.** Robo-advisors focus on passive investment strategies, rather than discretionary decisions. As a result, there is less, if any, need for a human portfolio manager.

Although the first wave of digital competitors has penetrated the sector, they have so far only captured less than 1% of the global market. That said, robo-advice providers are gaining traction around the globe, and they will improve their capabilities and expand — that much is certain.

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The structure of the FinTech industry is changing. While some FinTech players, such as robo-advisors, are bypassing incumbents and targeting end customers directly, a growing number of FinTechs are entering the market with business-to-business offerings. These players are partnering with, and providing services to, wealth managers, rather than competing head-on.

Collaborating with a growing ecosystem of FinTech service providers can offer wealth managers the opportunity to reduce costs, comply more easily and effectively with regulation and, ultimately, serve their clients better. An overarching challenge for wealth managers is how to “open up” structurally to leverage the evolving ecosystem of FinTech providers. As wealth managers test new concepts and supplement their in-house technical capabilities with solutions from external providers, determining whom to collaborate with and how will be key.

Several forms of collaboration aimed at gaining a competitive edge are emerging. Acquiring a FinTech provides exclusive access to know-how and allows the wealth manager to upgrade internal capabilities. By partnering with a FinTech, a wealth manager can upgrade internal capabilities by jointly developing nonstandard solutions. And funding FinTechs allows wealth managers to benefit from exclusive insights and partake in some level of decision-making.

Across wealth management, digital technologies are advancing rapidly. As the digital economy picks up speed, wealth managers have no choice but to take action or risk falling behind.
Five tactical steps to stay ahead of the curve

The right digital offering can yield attractive benefits, ranging from revenue uplift and increased customer penetration to lower operating costs. Clearly, wealth managers need to act to avoid losing further ground. But how strong is the case for change and what is the level of urgency? What capabilities do wealth managers need to build and by when? How can wealth managers transform their organizations for the digital age and where should they place their digital bets?

Taking five “no-regret” steps can help shed some light on these critical questions:

• **Define digital objectives and criteria for success.** Wealth managers need to define the objectives they are pursuing and what they term “success.” Consider the following examples: increasing client loads per relationship manager by 10%, reducing operational cost by 15% or achieving client satisfaction ratios of 90% with digital offerings.

• **Determine the broader implications across the business and operating model.** Successful digital strategies require changes beyond process and technology. Additional areas to keep in mind: client segmentation, governance of digital channels, operational readiness, digital product and service content and organizational blueprint.

• **Assess the digital capabilities needed, and prioritize their implementation.** Evaluate digital capabilities in terms of their impact (e.g., by assessing client demand) and the effort needed to implement them. The aim here is to identify the digital opportunities worth pursuing in the short, medium and long term. Prioritization by key stakeholders will surface those areas with the highest cost-benefit ratio, whether that is video functionality for relationship managers or self-service for simple trading.

• **Develop an overall digitization road map.** A road map for digital transformation serves multiple purposes: establishing an implementation plan that sequences the buildup of digital capabilities over a multiyear time horizon, galvanizing the organization on the ramp-up of resources and know-how around digital and outlining the investments needed both in the near and long term.

• **Develop a high-level solution design, and define key architecture principles.** It is important to seek consensus on high-level solution design and the underlying architecture principles that will support the operationalization of the digital road map. Key questions to address include: Should user interfaces be designed for mobile devices first? Should iterative approaches and rapid prototyping be favored in order to optimize usability? Should a “buy-before-make” policy be adopted, combined with in-house development only for integration?

In our view, the success of any digital transformation hinges on five core elements: digital enterprise strategy, incubation and innovation, experience transformation, digital operations and digital trust.

Given the increasing importance of technology, IT executives and technology leaders are uniquely positioned to take on a leading role in driving the transformation toward digital. In the next chapter, we present a guidebook for IT executives, designed to help them navigate the new digital reality.
Navigating the new digital reality: a guidebook for IT executives

As digitization spreads, players in the industry are dramatically expanding their use of IT to improve the effectiveness of business processes and gain access to new revenue streams. This development represents an enormous opportunity for IT executives and technology leaders to forge a new role as the drivers of transformational change. Doing so successfully, however, will require IT executives to increase performance of the IT function, build new capabilities and learn new skills.

To gain a view of technology developments shaping the agenda and to identify key priorities and trends, EY asked IT executives (CIOs and heads of IT) across wealth management businesses globally to share their insights.

Disruptive change on the horizon

Wealth management is exposed to disruptive change on a number of fronts, ranging from regulation, emerging business models (e.g., robo-advice) and technology developments (e.g., cloud, robotics, artificial intelligence) through to innovative IT processes, such as agile and DevOps.

Main sources of disruption

From which sources do IT executives expect the bulk of disruption to their wealth management business to emerge from? Looking at the next two to three years, 87% of IT executives in our research rate new compliance and regulatory requirements and 70% emerging technology trends, such as cloud, robotics or artificial intelligence, as major sources of disruption (Exhibit 1). Emerging business models, such as new means of advice delivery, is a development considered highly disruptive by 53%. Only 31% view new IT processes, such as agile, DevOps or continuous delivery, as a major source of disruptive change.
### Exhibit 1

New compliance and regulatory requirements are still perceived as the largest source of disruption to existing business operations

<table>
<thead>
<tr>
<th>Source of Disruption</th>
<th>% of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>New compliance and regulatory requirements</td>
<td>87%</td>
</tr>
<tr>
<td>Emerging technology trends (e.g., mobile first, robotics)</td>
<td>70%</td>
</tr>
<tr>
<td>Emerging business models (e.g., robo-advisors)</td>
<td>53%</td>
</tr>
<tr>
<td>New IT processes, (e.g., agile and DevOps)</td>
<td>31%</td>
</tr>
</tbody>
</table>

What level of disruption do you expect over the next two to three years from the following sources?

% of respondents who rate relevance as high to very high

Source: EY analysis.
By when do IT executives expect digital disruption to make a visible and direct impact on their wealth management business? Most respondents (42%) believe that digital transformation will be most relevant to their business in the medium term, i.e., within the next one to three years (Exhibit 2). In contrast, 23% expect to see the greatest impact within the next 12 months and 36% in the next three to five years.

Exhibit 2

Wealth managers view digital transformation as most relevant to their business within the next one to three years

<table>
<thead>
<tr>
<th>How relevant is digital transformation to your business in the short, medium or long term?</th>
<th>% of respondents who rate relevance as high to very high</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relevant in the <strong>short term</strong> \  (within next 12 months)</td>
<td>![23%]</td>
</tr>
<tr>
<td>Relevant in the <strong>medium term</strong> \  (in one to three years)</td>
<td>![42%]</td>
</tr>
<tr>
<td>Relevant in the <strong>long term</strong> \  (in three to five years)</td>
<td>![36%]</td>
</tr>
</tbody>
</table>

Source: EY analysis.

**Key areas of digital investment**

Wealth managers are investing in digital capabilities in a number of areas, including technology (e.g., cloud, robotics, artificial intelligence), data analytics, improvement of the customer experience and integration of third-party application programming interfaces (APIs).

What areas are wealth managers prioritizing in ongoing and future digital investment? In total, 63% of respondents are prioritizing improvements to customer experience and 50% omni-channel access for customers in ongoing and future investment (Exhibit 3). Data analytics capabilities to support personalization of digital offerings are rated by 40% of respondents as central to their digital investment plans. Incorporating new technologies (e.g., robotics and artificial intelligence) is considered an investment priority by 50% of respondents, while 37% prioritize integration of third-party APIs. Only 7% of respondents rate social media monitoring and management as an investment priority.
Exhibit 3

Improving the customer experience and in omni-channel access are viewed as the most important future digital investment areas

How important are the following areas for your ongoing and future digital investments?

% of respondents who rate relevance as high to very high

<table>
<thead>
<tr>
<th>Area</th>
<th>% of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improving the customer experience (e.g., through customer service design)</td>
<td>63%</td>
</tr>
<tr>
<td>Omni-channel access (e.g., multiple devices and channels)</td>
<td>50%</td>
</tr>
<tr>
<td>Incorporating new technologies (e.g., cloud, big data, robotics, AI)</td>
<td>50%</td>
</tr>
<tr>
<td>Data analytics capabilities (to support personalization of offerings)</td>
<td>40%</td>
</tr>
<tr>
<td>Integration of third-party applications (e.g., APIs)</td>
<td>37%</td>
</tr>
<tr>
<td>Social media monitoring and management</td>
<td>7%</td>
</tr>
</tbody>
</table>

Source: EY analysis.
Deployment of emerging technologies

Emerging technologies have stepped out of the laboratory and into corporate IT, where they are starting to deliver concrete benefits measured by revenue growth and cost reductions. High-profile examples include the cloud, with its ability to deliver digital power at low cost and in small increments; robotic process automation (RPA), the technology that mimics humans as it handles tasks within a process; big data analytics, the array of technologies that allows users to scan huge volumes of data for hidden patterns, correlations and other insights; and blockchain, the transaction database technology underpinning bitcoin currency.

We asked IT executives what technologies were at the top of their deployment agenda (Exhibit 4). Sixty-seven percent of wealth managers operate cloud technology or are actively considering its deployment, 47% are considering big data analytics, but only 33% are considering RPA.

Exhibit 4

Cloud technology is the most deployed, followed by big data analytics and RPA

Please indicate the level to which certain technologies are deployed within your organization

% of respondents that agree or strongly agree

<table>
<thead>
<tr>
<th>Technology</th>
<th>% of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cloud infrastructure</td>
<td>67%</td>
</tr>
<tr>
<td>We currently operate cloud technology or are actively considering its deployment</td>
<td></td>
</tr>
<tr>
<td>Big data analytics</td>
<td>47%</td>
</tr>
<tr>
<td>We currently operate big data technology or are actively considering its deployment</td>
<td></td>
</tr>
<tr>
<td>RPA</td>
<td>33%</td>
</tr>
<tr>
<td>We currently operate robotics technology or are actively considering its deployment</td>
<td></td>
</tr>
</tbody>
</table>

Source: EY analysis.
**Technology strategy for digital transformation**

Are digital investments being made predominantly inside the IT function or outside it? Most (67%) of the wealth managers in our sample state that the majority of investment in digital will take place within the IT function (Exhibit 5). The remaining 33% say that the majority of investment in digital will go outside of IT (i.e., to other business and support functions). Larger wealth managers in particular are channeling most of their digital investment into the IT function, with 80% of respondents in this segment confirming that their IT function is the main beneficiary of major investments.

### Exhibit 5

**Two-thirds of wealth managers report the majority of digital investments will take place within their IT function**

<table>
<thead>
<tr>
<th>Majority of digital investment</th>
<th>67%</th>
</tr>
</thead>
<tbody>
<tr>
<td>within the IT function</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Majority of digital investment</th>
<th>33%</th>
</tr>
</thead>
<tbody>
<tr>
<td>outside the IT function</td>
<td></td>
</tr>
</tbody>
</table>

Will the majority of investments into digital transformation occur within or outside of the IT function (i.e., within the business)?

% of respondents that agree or strongly agree

Source: EY analysis.
As the majority of investment toward digital transformation focuses on the IT department, establishing a sound strategy and approach toward technology-enabled innovation and change gains fundamental importance. But what progress are IT executives making toward defining their IT strategy for digital transformation? Only 37% of respondents state that their IT strategy has been defined and agreed, 50% state that their IT strategy for digital is currently under development, and 13% of wealth managers do not have an IT strategy for digital transformation in place yet (Exhibit 6).

Exhibit 6

Only 13% of wealth managers have not defined an IT strategy for digital transformation, while 37% have defined and agreed upon an IT strategy

Which of these statements best describes your IT strategy for digital transformation?

<table>
<thead>
<tr>
<th>% of respondents that agree or strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>No IT strategy for digital transformation defined</td>
</tr>
<tr>
<td>IT strategy for digital transformation under development</td>
</tr>
<tr>
<td>IT strategy for digital transformation defined and agreed</td>
</tr>
</tbody>
</table>

Source: EY analysis.

Evolving priorities

Meeting the needs of the business requires IT executives to reprioritize on a continual basis and strike a delicate balance between often conflicting requirements and priorities. IT executives shared with us how they are rising to the challenge.

What strategic business priorities is IT expected to have the most impact on? Focusing on the next 12 months, 80% of respondents rate regulatory compliance, 57% revenue growth and 53% operational efficiency and risk reduction as those business priorities with the greatest impact on IT (Exhibit 7). Looking further ahead to the next 24 to 36 months, the balance of business priorities shifts noticeably: 77% of respondents view regulatory compliance (down by 3 percentage points), 70% operational efficiency (up by 17 percentage points), 67% revenue growth (up by 10 percentage points) and 63% risk reduction (up by 10 percentage points) as business priorities. Taking a longer-term perspective, IT executives in the wealth management sector clearly expect attention on regulatory compliance to recede slightly, while operational efficiency and revenue growth climb up the list of priorities.
Which of these strategic business priorities is IT expected to have the most impact on?

% of respondents that agree or strongly agree

<table>
<thead>
<tr>
<th>Priority</th>
<th>Within next 12 months</th>
<th>Within next 36 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regulatory compliance</td>
<td>80%</td>
<td>77%</td>
</tr>
<tr>
<td>Revenue growth and protection</td>
<td>57%</td>
<td>67%</td>
</tr>
<tr>
<td>Operational efficiency and improvement</td>
<td>53%</td>
<td>70%</td>
</tr>
<tr>
<td>Risk reduction (e.g., cybersecurity)</td>
<td>53%</td>
<td>63%</td>
</tr>
</tbody>
</table>

Source: EY analysis.

Focusing on business priorities, what are the IT function’s key objectives over the coming years? Digital innovation is viewed as the top priority for IT executives, both in the short and long term (Exhibit 8), with 47% rating digital innovation as a priority for the next 12 months, and 43% as a priority in the next two to three years. Stability and cost reduction are viewed by 53% of respondents as priorities in the next 12 months, and by 47% within two to three years. Complexity reduction is viewed by 50% of respondents as a priority, both in the short and long term. At the same time, 57% consider risk reduction (e.g., through cybersecurity) a key priority in the short term, and more so (63%) in the long term. Likewise, time to market is viewed as a priority with increasing importance: 50% see time to market it as a priority within the next year, with 67% seeing it as a priority in the next two to three years.
What are the key objectives for your IT function over the coming years?
% of respondents that agree or strongly agree

<table>
<thead>
<tr>
<th>Objective</th>
<th>Within next 12 months</th>
<th>Within next 36 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stability</td>
<td>53%</td>
<td>47%</td>
</tr>
<tr>
<td>Complexity reduction</td>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td>Risk reduction (e.g., cybersecurity)</td>
<td>57%</td>
<td>63%</td>
</tr>
<tr>
<td>Cost reduction</td>
<td>53%</td>
<td>47%</td>
</tr>
<tr>
<td>Time to market improvement</td>
<td>50%</td>
<td>67%</td>
</tr>
<tr>
<td>Innovation and digital capabilities</td>
<td>47%</td>
<td>43%</td>
</tr>
</tbody>
</table>

Source: EY analysis.
Disruption is coming, and it is coming fast: the case for mounting a digital response is compelling and there is no time to lose. IT executives need to take the initiative in defining the technology strategy for digital transformation. They have a pivotal role to play in supporting the process of prioritizing capability building and of determining which digital bets are likely to yield the best returns for their organization.

Taking bold steps toward digital readiness: a guidebook for IT executives

The responsibilities of IT executives are wide-ranging: securing targeted benefits from technology implementation, ensuring that IT operations are secure and screening trends for ways to unlock value with digital technologies.

These responsibilities provide IT executives with a unique vantage point, not only to support but also to drive and enable the transformation toward digital. To make meaningful progress toward the digital target state, IT executives will have to renew their focus and double up their efforts in three areas: aligning IT spend with the most important digital priorities, retooling the IT function for the digital age and forging an IT landscape ready for digital transformation. Taking these steps will allow IT executives to navigate the new digital reality and achieve competitive advantage for their wealth management business.

Aligning IT spend with the most important digital priorities

Technology can improve business performance by driving revenue and reducing overall costs. Understanding where IT spend adds the most value provides a prism on investment priorities and a focus for benefit realization. Wealth managers will benefit from:

- Increasing transparency on where IT spend is going
- Making IT spend more effective

Retooling the IT function for the digital age

The IT function needed by wealth managers tomorrow is a very different proposition from that of today.

Disruptive technologies, new “as-a-service” sourcing models, competition from new players such as FinTech players, new cyberthreats and increased commercial and regulatory pressures are changing priorities rapidly and reshaping the IT function of the future. Wealth managers should prioritize:

- Building a high-performance and agile IT organization
- Optimizing IT outsourcing relationships

Forging an IT landscape ready for digital transformation

Wealth managers can determine the digital readiness of their IT landscapes in a number of ways, by taking both evolutionary and revolutionary approaches. In order to develop a fast, flexible and adjustable architecture, the following steps become necessary:

- Modernizing core IT platforms
- Reducing complexity and rationalizing the IT landscape

Wealth managers should empower their IT executives and other technology leaders to play a more meaningful role in shaping the technology strategy toward digital. This requires IT executives to shift away from a supplier mindset focused on cost-effective utility and toward IT leadership that is integrated into discussions of overall digital strategy. This approach is sure to contribute positively to building and innovating the business.
In times of intense competition and margin contraction, wealth managers are trying to stretch capital and operating budgets, and do more with less. Despite the increasing importance of technology as wealth managers digitize their business and operating models, annual budgets for IT continue to be subject to intense scrutiny.

Only by making IT costs transparent to the business and increasing the effectiveness of IT spend can IT executives and other technology leaders shift dialogue onto a more productive plane and obtain a deeper, shared understanding of how IT spend adds value, the top and bottom line.

EY regularly benchmarks the IT capabilities of wealth managers to determine IT performance in relation to business results. Our benchmark captures relative business performance against several technology parameters, such as IT cost, architecture and staffing levels, as well as sourcing models. We calculate key IT cost ratios in order to pinpoint where individual wealth managers are positioned in their IT investment cycles. The key ratios calculated are IT cost as a percentage of operating income (IT cost-income ratio) and IT cost as a percentage of operating expenses (IT share of cost). Additional relevant metrics are IT outsourcing ratio, IT change and discretionary ratio and unit IT staff costs.

According to our IT benchmarking of wealth managers globally, IT spend averaged 10.4% of operating expenses and 8.2% of operating income between 2013 and 2016 (Exhibit 9). IT spend of wealth managers has been growing, both in absolute and relative terms. In 2013, IT spend was 9.8% of operating expenses and 7.7% of operating income. By 2016, IT spend had increased by a whole percentage point in terms of operating expenses and operating income, to 10.8% and 8.7% respectively. Measured in relation to assets under management (AuM), IT spend averaged 10 basis points of AuM in 2016, up from 8 basis points in 2013. Looking at IT spend in absolute terms, a similar picture emerges. Compared with 2013 (indexed at 100%), IT spend grew by 67% between 2013 and 2016. Over the same period, operating expenses grew by a mere 24%, and operating income by 16%, resulting in an overall deterioration of the cost-income ratio, from 78.4% in 2013 to 84.2% in 2016.

Aligning IT spend with the most important digital priorities

Understanding where IT spend adds the most value
Exhibit 9

Globally, IT spend increased between 2013 and 2016, both in relation to IT share of cost and IT cost-income ratio

<table>
<thead>
<tr>
<th>Region</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>Avg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Americas</td>
<td>6.3</td>
<td>6.1</td>
<td>6.0</td>
<td>5.9</td>
<td>6.1</td>
</tr>
<tr>
<td></td>
<td>8.0</td>
<td>7.3</td>
<td>7.1</td>
<td>6.5</td>
<td>7.2</td>
</tr>
<tr>
<td>IT share of cost¹</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IT cost-income ratio²</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asia-Pacific</td>
<td>6.8</td>
<td>7.7</td>
<td>8.2</td>
<td>8.9</td>
<td>7.9</td>
</tr>
<tr>
<td></td>
<td>10.0</td>
<td>11.1</td>
<td>12.2</td>
<td>13.3</td>
<td>11.6</td>
</tr>
<tr>
<td>Western Europe</td>
<td>8.0</td>
<td>8.5</td>
<td>8.6</td>
<td>8.9</td>
<td>8.5</td>
</tr>
<tr>
<td></td>
<td>10.0</td>
<td>10.5</td>
<td>10.4</td>
<td>10.7</td>
<td>10.4</td>
</tr>
<tr>
<td>Global average</td>
<td>7.7</td>
<td>8.2</td>
<td>8.3</td>
<td>8.7</td>
<td>8.2</td>
</tr>
<tr>
<td></td>
<td>9.8</td>
<td>10.3</td>
<td>10.4</td>
<td>10.8</td>
<td>10.4</td>
</tr>
</tbody>
</table>

1 IT share of cost divided by operating expenses.
2 IT cost divided by operating income.
Source: EY analysis.
Regional variation

The development of IT budgets varies by region, mainly reflecting differences in growth cycles and unit costs. IT spend growth has been strongest in Asia-Pacific. In absolute terms, IT spend grew there by 88% between 2013 and 2016. In the same period, operating expenses and operating income have grown more slowly, by 34% and 41% respectively. Relative to operating expenses, IT spend in Asia-Pacific grew to 13.3% in 2016, from 10.0% in 2013.

In contrast, growth of IT spend in the Americas has been slower, rising 19% between 2013 and 2016. In the same period, operating expenses grew by 44% and operating income by 25%. IT share of cost and IT cost-income ratio have been declining: IT share of cost was 6.5% in 2016, down from 8.0% in 2013, and IT cost-income ratio was 5.9% in 2016, down from 6.3% in 2013.

In the period between 2013 and 2016, wealth managers in Western Europe saw IT spend climb by 67%, operating expenses by 19% and operating income by 10%. IT share of cost was 10.7% in 2016, up from 10% in 2013, and the IT cost-income ratio was 8.9% in 2016, up from 8.0% in 2013.

IT spend distribution

Total IT spend comprises all spend types, across the front, middle and back office. Our analysis focuses on the following six areas: client relationship management, product and service management, trading services, operations and processing, support infrastructure, and risk, finance and compliance. Client relationship management covers sales, distribution and the management of prospects and clients. Product and service management covers advisory, product management and profiling. Trading services includes trade reporting and order management. Operations and processing covers clearing and settlement. Support infrastructure includes HR, legal and other support services. Risk, finance and compliance covers risk management, accounting, finance and compliance. IT spend in client relationship management and product and service management are viewed as front-office IT spend, and all other segments as middle- and back-office IT spend.

On average, 34% of the annual IT budget is spent on the front office, focusing on customer relationship management and products and service management (Exhibit 10). The remainder, 67% of IT spend, goes to the middle and back office, including trading, operations, support infrastructure and risk, finance and compliance.
Exhibit 10

IT spend on the front office has been growing as a percentage of total IT spend

Breakdown of IT spend
IT spend categories as a percentage of total IT spend (average between 2013 and 2016)

<table>
<thead>
<tr>
<th>Front office</th>
<th>Middle and back office</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer relationship mgmt.</td>
<td>19</td>
</tr>
<tr>
<td>Product mgmt.</td>
<td>15</td>
</tr>
<tr>
<td>Trading</td>
<td>11</td>
</tr>
<tr>
<td>Operations</td>
<td>24</td>
</tr>
<tr>
<td>Risk and compliance</td>
<td>14</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>18</td>
</tr>
</tbody>
</table>

Development of IT spend categories
IT spend categories as % of total IT spend (time series)

<table>
<thead>
<tr>
<th>Middle and back office</th>
<th>Front office</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013: 71</td>
<td>2013: 30</td>
</tr>
<tr>
<td>Average: 67</td>
<td>Average: 40</td>
</tr>
</tbody>
</table>

Numbers may not add up due to rounding.
Source: EY analysis.
A closer look at those areas where wealth managers are spending the most reveals that 24% of total annual spend goes into operations (clearing and settlement) and 19% into customer relationship management (mainly sales and distribution). Other key areas of IT spend are support infrastructure (mainly HR, legal and other support services) with 18%, and product and service management with 15% of total annual IT spend. The percentage of IT spend in the front office is growing: in 2013, IT spend on front-office operations made up 30% of total spend. And in 2016, it went up to 40%.

**Key drivers of success**

Technology can improve business performance by driving revenues (e.g., using big data for cross-selling in digital channels) and reducing overall costs (e.g., by automating end-to-end processes). Our benchmark ranks the IT performance of individual wealth managers by comparing their IT spend levels and relative business performance against the average values for their peer group. We assess efficiency and effectiveness of IT spend in two dimensions:

- **Contribution to business efficiency.** Leading wealth managers in this category excel in driving efficiency and automation. In doing so, they are able to sustainably lower non-IT operating expenses. Those IT functions that achieve high levels of business efficiency are able to spend 8 percentage points less on IT (measured as IT share of cost) while achieving 13 percentage points lower non-IT operating expenses (normalized by operating income) compared with the poorest performers.

- **Contribution to business growth.** Leading wealth managers in this category excel in driving revenue growth. Those IT functions that contribute to high levels of business growth achieve USD 61,000 more operating income while spending USD 24 less on IT (both figures normalized by full-time equivalents). In other words, the best performers get USD 8.9 more operating income per USD 1 of IT spend than the poorest performers.

Players that excel in either the business efficiency or the business growth dimension (Exhibit 11) have a number of traits in common:

- Best-practice wealth managers spend more on front-office initiatives, such as customer relationship or product and sales management, than the average wealth manager. Of total IT spend, best-practice wealth managers channel 39% into the front office, compared with 24% in the case of low-performing wealth managers.

- Best-practice wealth managers report higher outsourcing levels and higher value realized from outsourcing, measured by metrics such as business efficiency and contribution to business growth. Leading wealth managers report that 39% of total IT spend relates to outsourced services; low performers only 29%.

- Best-practice wealth managers report that 54% of total IT spend, on average, is discretionary, below the peer-group average of 60%. Despite lower outlays on discretionary IT spend, top-performing wealth managers do a better job of extracting business value from their discretionary IT spend.
Exhibit 11

Significant differences in value realized from IT investments between top and bottom performers

Business efficiency contribution
Business expense as % of operating income vs. IT share of cost

Revenue growth contribution
Operating income per internal FTE vs. IT spend per internal FTE

Bubble size represents AuM

1 Full-time equivalent.
Source: EY analysis.

Best practice
Top performers
Bottom performers

Source: EY analysis.
Many wealth managers see IT as a black box that generates significant costs. Few business managers know exactly what they are paying for and why their outlays keep rising. Increasing transparency on IT costs can fundamentally change the way the business perceives IT costs and consumes IT services. In turn, this can improve the partnership between IT and the business in their joint efforts to keep the IT cost base in check.

Transparency on IT costs can provide the business with two powerful tools: firstly, a catalog of IT services and products that specifies features, prices and service levels, and secondly, a “bill of IT” showing the infrastructure assets consumed by these products and the cost of their consumption. Combined, these two tools allow IT to charge the business only for the type and volume of IT services consumed, thus enabling true consumption-based chargeback of IT costs.

Building a catalog of IT services

The first step toward IT cost transparency is to develop a catalog of IT services. This catalog encompasses both run and change services, covering application development, application hosting, application maintenance and end-user computing. The service catalog describes services that are distinct and can be ordered by the business. IT services are defined in user-friendly terms, through the lens of the end consumer, clearly articulating the business benefit and also providing information on quality metrics. The number of services in the catalog can be limited by bundling related service components into a combined service offering.

To manage the IT service portfolio based on cost and value, each IT service is assigned to a service owner. They are accountable for ensuring cost, quality and performance of the end-to-end service, not just individual service components. A forum to engage with business units to understand their needs, obtain feedback on services and rationalize services can further drive adoption of the IT service catalog.

Creating a bill of IT

A bill of IT provides the business with a detailed account of the consumption of technology resources and the resulting charges. It includes a list of IT services consumed by the business along with details about service unit rates, units of measurement, volume and cost. The bill of IT is typically broken down into two sections: run and change. This structure provides greater transparency on the alignment of technology costs and demonstrates a direct correlation between IT resource volumes and costs.

With clarity of unitized IT costs and actual levels of consumption provided in the bill of IT, the business can begin seeking ways to control and reduce consumption and right-size demand. Managers are able to understand what they are paying for and where they can cut back. Establishing this level of transparency on IT costs is not straightforward. A large IT organization might support thousands of applications, dozens of physical sites and tens of thousands of end users. Full clarity on unitized costs and levels of consumption, however, is required to create a comprehensive bill of IT.

Establishing this transparency on unitized IT costs is one area in which the wealth managers struggle the most according to our research: 36% told us that their IT services were not charged to the business based on unit costs.

Another benefit of cost transparency is the improvement of dialogue between IT and the business as users begin to understand IT costs and their drivers. Moreover, apart from laying the groundwork for identifying cost avoidance and reduction opportunities, cost transparency is of fundamental importance for successful outsourcing and for the evaluation and integration of IT in mergers and acquisitions.
Making IT spend more effective

The ability to optimize IT spend and free up funds from “keep-the-lights-on” maintenance for burgeoning digital initiatives is a key success factor for IT executives who wish to ready their organizations for the transformation toward digital. Freeing up resources for digital initiatives - to address concerns around security, regulation, organizational improvement, system maintenance and modernization but also to drive IT-enabled innovation - can be achieved in a number of ways, including by making IT operations more efficient through automation and self-service or establishing self-funding mechanisms for digital innovation.

To identify areas for improvement, we look at the relationship between the overall cost-income ratio and the IT cost-income ratio (measured as total IT cost divided by operating income). Benchmarking wealth managers along these dimensions highlights four performance categories (Exhibit 12):

- **Effective business enablers.** Thirty-nine percent of wealth managers are effective business enablers. This group of wealth managers maintain low levels of IT spending but successfully put IT investments to good business use. To stay on top of market developments, players in this group should look at opportunities to selectively rebalance IT investments. Building capabilities in strategic areas such as digital or big data will allow IT to exploit innovations quickly.

- **Efficient IT executors.** Twenty-two percent of wealth managers are efficient IT executors. Players in this category do not invest heavily in IT, but neither do they see high levels of business return on their IT investments. To improve performance, this group of efficient IT executors should sharpen the focus of current IT spending on improving and innovating front-office tools and enablers, e.g., mobile banking or client analytics.

- **High IT spenders.** Seventeen percent of wealth managers are high IT spenders. These players exhibit above-average IT spending but below-average cost-income ratios. For this group, IT investments do not result in proportional business returns. It is likely that these players spend too much on running their daily operations and too little on innovation that would set them apart from their competition. High IT spenders should reduce spending, invest selectively to improve business performance and achieve better alignment with business objectives. This can be done by evaluating IT projects with regard to benefits and cutting projects that are not strategic.

- **Heavy IT transformers.** Twenty-two percent of wealth managers are heavy transformers. These players spend heavily on their IT and see proportional business returns on their investments. The majority of players in this group have undergone high-impact IT-enabled transformation programs with above-average IT investments for their peer group. Over time, heavy IT transformers should cut back spending without losing efficiency and limiting innovations. These players should improve their governance and performance-management techniques to align IT spending more strongly with priorities once specific phases of transformation are complete.
Effective IT executers achieve a low cost-income ratio and, at the same time, a low IT cost-income ratio

Effective business enablers
- Rebalance IT investments
- Build capabilities to exploit emerging innovations quickly

Heavy IT transformers
- Align IT spending with priorities
- Redirect spending after transformation

Efficient IT executers
- Increase front-end investments to build out new sources of income
- Redirect back-end spending to boost cost performance

High IT spenders
- Cut nonstrategic IT projects
- Ensure alignment with business
- Prioritize development and fast delivery

Source: EY analysis.
High-performance wealth managers achieve better performance by spending their technology dollars more efficiently and with a clearer focus than their peers. These benchmarking results reflect the potential currently available to wealth managers in optimizing their IT function. With the acceleration of digital transformation, the value up for grabs is likely to increase in the future, as will the opportunity cost of falling behind digital leaders.

Three measures can help wealth managers increase the value delivered by their IT investments:

- **Improving strategic alignment.** Wealth managers that achieve superior returns for lower IT expenditures are much better at aligning IT spending with the strategic priorities of the business. These wealth managers also form their IT strategies in close cooperation and alignment with the business by using formal governance processes and engaging the business to focus on value creation levers that are influenced by IT. Our survey research indicates that wealth managers are doing well in this area. Overall, 36% of respondents agree that the alignment between IT project investment and overall business benefit in their organization is well defined and clear. However, only 32% of respondents agree that the impact of IT investments on run costs (and thus on total cost of ownership) is fully understood and factored into their run budgets, with 25% disagreeing or strongly disagreeing that this is the case within their organization.

- **Right-sizing demand.** Demand for IT services can be controlled on both the run and the change side. On the run side, the objective is to make the cost of IT services on a unitized basis transparent to business consumers. On the change side, the goal is to improve governance around project selection and funding. Reducing the number of noncritical projects entering the pipeline, wealth managers should request each incoming change initiative to articulate the expected return on investment as part of the approval process. This ensures that resource consumption and returns are made transparent and that management has an overview of IT spending.

- **Forcefully managing complexity.** Leading wealth managers exercise rigorous discipline in cutting complexity across multiple layers, by applying strong governance frameworks, architecture review and design authority boards and streamlining application and infrastructure environments. By tightening discipline and governance around key IT complexity drivers, wealth managers can reduce operational costs and improve the quality and time to market of solutions. Concrete steps for reducing complexity are outlined on page 50 under “Building a digital-ready IT architecture”.

Accelerating the transformation of wealth management through digital technology
Accelerating the transformation of wealth management through digital technology

The IT function needed by wealth managers tomorrow is a very different proposition from that of today. Disruptive technologies, new “as-a-service” sourcing models, competition from new players such as FinTech players, new cyber threats and increased commercial and regulatory pressures are changing priorities rapidly and reshaping the IT function of the future.

What is evident from our work with clients is that best-practice players are able to create more value from IT through an IT operating model that is efficient, scalable and flexible. What is also clear is that the “one-size-fits-all” operating model for IT no longer exists. Each organization must find its own fit-for-purpose IT operating model that allows it to manage the slow evolution of core platforms while at the same time delivering completely new digital capabilities. Increasingly, the ability to incorporate multiple approaches within a single IT operating model is turning into a competitive advantage. In our quest to better understand the nature and mechanics of high-performing IT functions, we drilled down into two critical areas: the nature of the IT organization itself and its approach toward outsourcing.

Building a high-performance IT function

Three components are essential for building a high-performing IT function: its organizational structure, its approach toward talent management and its IT capabilities and processes. Only by orchestrating performance across all three building blocks can wealth managers expect to reap the benefits of a high-performance IT function.

A future-proof IT organization

We asked wealth managers what organizational structures they have in place for their IT function (Exhibit 13). The most prevalent answer (37%) is that their IT organizational model is designed along the software development life cycle, with IT teams grouped by functional responsibilities for designing, constructing and operating business systems. A total of 27% of respondents say that their IT function is geared toward outsourcing, with IT teams clustered around the interface to IT outsourcing providers. Another 20% report that their IT function is organized along technology towers and core technologies. The remaining 17% state that their IT function is organized around agile mechanisms, with IT teams applying delivery methods with short development cycles and continuous software delivery.

Several correlations emerge when different IT organizational models are contrasted against key IT metrics:

- Wealth managers with a self-reported agile organizational model are ahead of their peers across a number of metrics, including change ratio (50% versus peer-group average of 42%), IT share of cost (7.7%
versus average of 10.2%), IT cost-income ratio (5.7% versus peer average of 8.0%).

- Wealth managers with a self-reported outsourcing-oriented model have the highest IT outsourcing ratio, (62% versus a peer average of 35%).
- Those wealth managers with an operating model oriented toward the software development life cycle are ahead on driving business efficiency through IT-enabled automation, as evidenced by a non-IT operating expenses ratio of 63% versus a peer-group average of 72%.

Our research also reveals an above-average prevalence of agile IT operating models within the group of best-practice IT functions (measured by the relationship between overall cost-income ratio to IT cost-income ratio). A total of 44% of best-practice IT functions in our sample have agile IT organizational models, by far exceeding the share of agile models in the full population (17%).
Wealth managers with a self-reported agile organizational model are ahead of their peers based on IT cost-income ratio

### IT organizational model

- **Agile IT organization**
  - IT teams apply agile methods with short development cycles

- **Tech-focused IT organization**
  - Teams are grouped around core technologies and structured around towers or silos

- **Software life cycle-oriented IT organization**
  - Teams are grouped around functional responsibilities

- **Outsourcing-oriented IT organization**
  - Teams work on brokering, orchestrating and integrating change

### Distribution (in % of total participants)

<table>
<thead>
<tr>
<th>Model</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agile</td>
<td>17%</td>
</tr>
<tr>
<td>Tech-focused</td>
<td>20%</td>
</tr>
<tr>
<td>Software life cycle-oriented</td>
<td>37%</td>
</tr>
<tr>
<td>Outsourcing-oriented</td>
<td>27%</td>
</tr>
</tbody>
</table>

### IT cost-income ratio (IT cost as % of operating income)

- Agile: 5.7%
- Tech-focused: 9.4%
- Software life cycle-oriented: 8.4%
- Outsourcing-oriented: 8.3%

### Operating income per banking FTEs (USD ‘000)

- Agile: 346
- Tech-focused: 328
- Software life cycle-oriented: 360
- Outsourcing-oriented: 387

Numbers may not add up due to rounding. Source: EY analysis.
At the heart of the agile organization is rapid decision making. Small cross-functional teams work side by side, checking in daily for quick progress updates and problem-solving. Whereas the shift away from “waterfall” methodologies to agile techniques such as “scrums” is evident across the entire industry, few wealth managers are putting agile methods to good business use. In our sample, 27% of wealth managers state that they never apply any agile methods. Only 23% state that agile is used for most projects, while 50% state that agile approaches are used exclusively for fast-moving applications. These findings suggest that more could be done to capture the full potential of agile in accelerating time to market, among other benefits. There is more work to be done in pivoting the delivery models of wealth managers toward increased use of agile.

**Winning the game for IT talent**

The organization’s structural model is clearly an important element of a high-performance IT function. A motivated and innovative IT workforce that is able to solve the organization’s most complex technical problems and engage senior business leaders is another, and equally important, enabler of high performance.

Our research into IT staffing and compensation levels exposes two dominant trends. Firstly, whereas IT staffing levels relative to total organizational size are steadily increasing, the gap in compensation between IT staff and non-IT staff is widening. Secondly, IT executives believe that they have the right talent in place to cope with upcoming challenges, for the most part.

**Right talent to cope with upcoming challenges**

According to our research, overall demand for IT talent is growing. Measured in full-time equivalents (FTE) and relative to organizational size, total staffing levels in the IT function have increased from 8.4% in 2013 to 10.2% in 2016. The IT staffing mix is also undergoing change, with IT departments increasingly relying on external IT staff (contingent workforce) to meet their staffing requirements (Exhibit 14).
Exhibit 14

Total IT FTEs have increased between 2013 and 2016 by 6.7%, mainly fueled by external FTE staff

Source: EY analysis.
While demand for IT staff grows steadily, the gap in compensation between IT and non-IT staff continues to widen, as is evident from a comparison between total annual unit cost for IT staff as a proxy for compensation and total annual cost for the entire workforce in the organization (Exhibit 14). Given this development, what are IT executives doing to attract and retain the talent they need?

**Attracting and retaining talent for the IT function**

Consistent, high-performance delivery requires IT to address its talent agenda mainly in two ways: attracting more talent, including from within the organization, and developing and retaining the internal talent pool.

Against the backdrop of growing demand for IT staff, IT executives are cautiously optimistic that they have the right talent. In our sample, 47% of respondents believe that their teams are suitably staffed, both for business and IT. Wealth managers in EMEA are particularly bullish about their talent situation, with 59% of wealth managers in the region optimistic about their staffing.

How can the IT function retain and attract more talent? According to our research, 83% of wealth managers believe that setting interesting challenges (e.g., working with state-of-the-art technology) is the most effective way to attract more talent (Exhibit 15). Exactly half of respondents believe that recognition of IT as a valued function is key to attracting talent, while 37% set store by the way of working (e.g., daily interactions alongside output delivered). Only 20% believe that monetary incentives, and 17% that a structured career path, are effective ways of attracting talent to the IT function.
Retaining internal talent and building on the existing talent pool, in particular high performers, hinges on career development and learning opportunities in combination with reward and compensation systems. Effective measures to foster development and learning include training programs and job rotation, as well as senior and external exposure. Adjustments in compensation and incentives may be required to align with market levels.
The increasing pace of digital innovation is putting a strain on existing IT capabilities. Building the right IT capabilities required for digital transformation is one of the key challenges IT executives face today. Doing so properly can easily mean the difference between a thriving wealth management business that is propelled by an agile IT function or an IT function that fails to provide any meaningful impetus for the business.

To evaluate the relative importance attached to specific IT capabilities, we leverage the IT capability maturity framework (IT-CMF), an IT management framework designed to help organizations optimize their IT capabilities and maximize IT's delivery of business value. The IT capabilities we evaluate fall into nine groups that address the different ways that technology provides value to the business.

- **IT-enabled business innovation**: Executing product, service, process, and IT innovations
- **Agile IT architecture**: Achieving system flexibility and integration capability to enable efficient business change
- **Business and IT strategic alignment**: Integrating business and IT strategy and road maps
- **Portfolio, program and project delivery**: Well-governed portfolio prioritization and program delivery processes
- **High-performance organization**: Effective and efficient organization to deliver IT services
- **Cost management**: Transparent, relevant and business-oriented forecasting and allocation
- **Sourcing management**: Strategic sourcing capability that enables access to scale, efficiency and market innovation
- **Business and IT operational integration**: Strong business and IT collaboration
- **Service delivery**: Standard, simple services with cost and quality differentiated on the basis of business needs

IT leaders rate the following five IT capabilities as most important in their future plans (Exhibit 16):

- **Portfolio, program and project delivery** (sub-capabilities: benefits assessment and program and project management.) is rated by 80% of respondents as highly important.
- **High-performance organization** (sub-capabilities: IT leadership, people asset management and organization design.) is rated by 67% of respondents as highly important.
- **Cost management** (sub-capabilities: total cost of ownership and accounting.) is rated by 61% of respondents as highly important.
- **Agile IT architecture** (sub-capabilities: enterprise architecture management and business process management.) is rated by 54% of respondents as highly important.

Lower importance was attached to the following IT capabilities:

- **Sourcing management** (sub-capabilities: capacity forecasting, supplier management and sourcing.) is rated by 49% of respondents as highly important.
- **Service delivery** (sub-capabilities: technical infrastructure management, solutions delivery and sourcing.) is rated by 49% of respondents as important.
- **IT-enabled innovation** (sub-capabilities: innovation management, knowledge management and R&D, etc.) is rated by 41% of respondents as important.
- **Business and IT operational integration** (sub-capabilities: service analytics, relationship asset management and risk management.) is rated by 38% of respondents as important.

Organizations need to forge an IT function that is fit for purpose in a digital age. But it is not feasible, nor is it desirable, to attempt to assemble internally the full gamut of structures, skills and capabilities needed. Deciding what to keep or build in-house and what to outsource is a critical step in the digital transformation journey.
### Exhibit 16

The most important capability for wealth managers is business and IT strategic alignment

<table>
<thead>
<tr>
<th>IT capability</th>
<th>IT sub-capabilities</th>
<th>Importance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1</strong> Business and IT strategic alignment</td>
<td>• Portfolio planning&lt;br&gt;• Strategic planning&lt;br&gt;• Business planning</td>
<td>84%</td>
</tr>
<tr>
<td><strong>2</strong> Portfolio, program and project delivery</td>
<td>• Portfolio planning&lt;br&gt;• Program and project mgmt.&lt;br&gt;• Benefits assessment</td>
<td>80%</td>
</tr>
<tr>
<td><strong>3</strong> High-performance organization</td>
<td>• People asset mgmt.&lt;br&gt;• IT leadership&lt;br&gt;• Organization design</td>
<td>67%</td>
</tr>
<tr>
<td><strong>4</strong> Cost management</td>
<td>• Total cost of ownership&lt;br&gt;• People asset mgmt.&lt;br&gt;• Accounting</td>
<td>61%</td>
</tr>
<tr>
<td><strong>5</strong> Agile IT architecture</td>
<td>• People asset mgmt.&lt;br&gt;• Enterprise architecture mgmt.&lt;br&gt;• Business process mgmt.</td>
<td>54%</td>
</tr>
<tr>
<td><strong>6</strong> Sourcing management</td>
<td>• Capacity forecasting&lt;br&gt;• Supplier mgmt.&lt;br&gt;• Sourcing</td>
<td>49%</td>
</tr>
<tr>
<td><strong>7</strong> Service delivery</td>
<td>• Technical infrastructure mgmt.&lt;br&gt;• Solutions delivery&lt;br&gt;• Sourcing</td>
<td>49%</td>
</tr>
<tr>
<td><strong>8</strong> IT-enabled business innovation</td>
<td>• Innovation mgmt.&lt;br&gt;• Knowledge mgmt.&lt;br&gt;• R&amp;D</td>
<td>41%</td>
</tr>
<tr>
<td><strong>9</strong> Business and IT operational integration</td>
<td>• Service analytics&lt;br&gt;• Relationship asset mgmt.&lt;br&gt;• Risk mgmt.</td>
<td>38%</td>
</tr>
</tbody>
</table>

1 Self-assessed importance (aggregate average across all sub-capabilities).<br>Source: EY analysis.
Making IT outsourcing deliver value

Outsourcing to technology vendors is a critical element of the IT operating model. Technology vendors provide a range of benefits, from greater economies of scale and access to a lower-cost skill base through to process efficiencies derived from experience.

Almost all wealth managers in our database practice some form of IT outsourcing. The average IT outsourcing ratio (measured as outsourced IT spend as a percentage of total IT spend) has remained roughly constant over the years, averaging 35% across the entire population within our database.

The diversity and maturity of external service providers has evolved over the years. Several outsourcing models are available to wealth managers today, ranging from pure IT outsourcing (ITO) to business process outsourcing (BPO). In a self-assessment of their dominant IT sourcing model, 41% of wealth managers report that they outsource only IT services, 11% that they outsource entire business processes within the back office and 48% that they operate the majority of their IT in-house. The IT outsourcing ratios vary accordingly between these three dominant sourcing models. The average IT outsourcing ratio is 49% for those who say they outsource mainly under an ITO model and 68% for those that outsource mainly under a BPO model. Respondents that report largely operating their IT in-house show a much lower IT outsourcing ratio, averaging 16% across the population.

Wealth managers can outsource different layers of the technology stack, covering infrastructure, applications or a combination of the two. The outsourcing ratios vary depending on the depth of the technology stack that is outsourced. The IT outsourcing ratio was highest for those that outsource both infrastructure and applications, averaging 71% throughout the period under review. For those outsourcing only applications, the average IT outsourcing ratio was 42%. At 29%, the IT ratio was lowest for those outsourcing only infrastructure.

A comparison of practices between smaller and larger wealth managers reveals a number of interesting patterns. Smaller-sized wealth managers outsource on average 47% of IT operations, a much higher value compared with larger wealth managers, who report that they outsource between 32% and 40% of their operations. Smaller players also frequently leverage the BPO model, contracting large components of their back-office services from external providers. In markets such as Switzerland, where the provider landscape is mature, smaller wealth managers frequently contract out the majority of their back office to external providers, often only maintaining customer relationship and risk management in-house.

Given the diversity of how IT outsourcing is practiced among wealth managers globally, we asked ourselves how successful wealth managers were in outsourcing parts of their IT function. To answer this question, we split the population of wealth managers into two groups depending on their relative positioning to the median of the IT outsourcing ratio. A comparison of those with an IT outsourcing ratio below the median against those above the median surfaced the following findings (Exhibit 17):

- The average IT outsourcing ratio within our population was 35% and the average IT share of cost was just above 10%.
- The IT share of cost (IT spend as a percentage of operating expenses) and IT cost-income ratio (IT spend as a percentage of operating income) was slightly higher for those with a below-median IT outsourcing ratio.
- As indicated by the value gap, excessive outsourcing achieves the opposite result desired. Costs start increasing again for an IT outsourcing ratio just above 50%.

The benefits realized from IT outsourcing often fall short of expectations. In our experience, the extent to which IT outsourcing arrangements can deliver maximum value hinges on three elements: a capable and committed vendor, an optimized relationship between contracting parties, and a strong retained IT organization that is able to sustain the benefits. The capabilities of the retained IT organization in particular are essential for delivering the intended benefits from IT outsourcing. Only a retained organization equipped with the correct skills will be able to extract the full value from IT outsourcing.
Wealth managers with a very high outsourcing ratio do not realize benefits

Exhibit 17

IT outsourcing ratio vs. IT share of cost

Source: EY analysis.
At the heart of every wealth manager’s IT infrastructure lies its core IT platform. This is the technology workhorse that processes virtually everything that wealth managers do, linking customers to products and services, across the front, middle and back office.

Many wealth managers face critical modernization issues around their core IT platform, whether that means managing or moving away from aging software and hardware solutions or shifting to newer technologies. One wealth manager realized that its old and unwieldy core platform was severely hurting its ability to control costs. Another found that its platform, made up of multiple incompatible vendor packages and in-house applications, was limiting its ability to aggregate client data across business units.

Modernizing core IT platforms for digital

The nature of core IT platforms differs among wealth managers in our sample. Only 10% of wealth managers have developed their core IT platform using internal development resources (a self-developed IT platform). The core IT platforms of these players is typically older than average, covers less functionality and achieves lower business efficiency. A large majority (90%) of wealth managers in our sample have installed an external software package, either off-the-shelf without major modification (a packaged core IT platform) or with major modification and customization (a best-of-breed core IT platform).

Our analysis of the state of play around core IT platforms evaluates a number of key metrics: percentage of overall business functionality embedded in the core IT platform, business efficiency enabled by the core IT platform, and overall satisfaction with the software package and vendor. We also evaluate total cost of ownership, taking IT share of cost (IT spend as a percentage of operating expenses) as a proxy for the annual cost of operating the platform.
Choosing the right vendor

Selecting the right outside vendor is critical, considering that the core IT platform touches almost all aspects of the enterprise architecture and remains in operation for at least ten years. To shed light on differences between vendors and their packages, we queried wealth managers on their installed software packages, their satisfaction with the combination of vendor and platform, and the percentage of total functionality embedded in the core IT platform, a measure that provides an indication of the extent to which the platform’s capabilities are leveraged. Our analysis focuses on software vendors for which the sample size is sufficient to allow for meaningful inferences, including vendors such as Fiducia, Avaloq, Advent, Temenos and ERI Bancaire. All findings are fully anonymized.

The following findings stand out from our analysis (Exhibit 18):

- **Functional integration.** For the combination of software vendors and wealth managers in our sample, an average of 73.6% of overall functionality is embedded within the core IT platform. All other functionality is provided by satellite applications. Smaller wealth managers in particular rely heavily on the core IT platform for much of their business functionality, frequently leveraging 80% and more of the functionality provided by the vendor package.

- **Satisfaction with package and vendor.** In terms of satisfaction with functionality (both from a business and IT perspective) and vendor support (for maintenance and functional development), wealth managers on average gave functionality a rating of 6.5 and their vendor relationship a rating of 6.9, on a scale of 1 to 10 (with 1 as least and 10 as most satisfied).

- **Total cost of ownership.** Given that the core IT platform frequently provides more than 80% of total functionality, we use IT share of cost (measured as annual IT spend as a percentage of operating expenses) as a proxy for total cost of ownership of the core platform. Our analysis shows significant differences in costs depending on the IT platform provider. The delta of costs between the different providers is as big as 6.3 percentage points.

Selecting the vendor package that offers an optimized balance between functionality, flexibility and cost is not straightforward. Given the importance of selecting the right vendor package, wealth managers will do well to invest time and effort into a diligent vendor selection process that holistically considers the most important functional, technical and commercial aspects.
In total, 73.6% of overall functionality is provided by the core IT platform

Source: EY analysis.
Adopt or adapt

Once the core IT platform has reached its end of life or is no longer considered fit for purpose, wealth managers have little choice but to embark on the journey toward replatforming. Having selected a suitable vendor, wealth managers are confronted with a fundamental decision: whether to adopt standard functionality provided by the vendor or to adapt off-the-shelf functionality to achieve higher levels of customization. On the one hand, a single-minded quest to customize a chosen vendor package to meet specific business requirements can result in unwieldy designs and inefficient processes. On the other hand, excessive reliance on off-the-shelf functionality can limit the value provided by the core IT platform. Finding the right balance between standard processes that promote efficiency and tailored offerings that meet the needs of the business can make the difference between success and failure.

Of those wealth managers in our sample that have installed an external vendor platform, 44% state that they rely mostly on off-the-shelf functionality provided by the vendor (a packaged core IT platform). The other 56% of wealth managers state that they have modified the vendor package to a high degree in order to meet functional requirements (best-of-breed core IT platform).

To weigh up the pros and cons of the two approaches, our analysis drills down into functional coverage of the platform and total cost of ownership. The findings are as follows (Exhibit 19):

- Those wealth managers that operate a packaged core IT platform with limited customization report that it covers 79.1% of total business functionality provided by the IT function, compared with 60.4% of functional coverage for best-of-breed core IT platforms.
- In terms of annual total cost of ownership (TCO) of the core IT platform (measured as IT share of cost multiplied by functional coverage), those wealth managers with a self-reported best-of-breed core IT platform have a lower annual TCO (5.9%) than those with a self-reported packaged platform (8.3%).
Accelerating the transformation of wealth management through digital technology

Exhibit 19

Off-the-shelf platform implementations have significantly higher functional coverage but also higher cost

<table>
<thead>
<tr>
<th>Level of standardization of core IT platform</th>
<th>Off-the-shelf core IT platform</th>
<th>Best-of-breed core IT platform</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fully standardized</td>
<td>Core IT platform purchased from software provider, with minimal customization</td>
<td>External software package in place, with large degree of customization</td>
</tr>
</tbody>
</table>

**Metrics**

**Functional coverage of core IT platform**

- % of business functionality provided by core IT platform
  - Off-the-shelf: 79.1
  - Best-of-breed: 60.4

**Total cost of ownership of core IT platform**

- Platform cost as % of total operating cost
  - Off-the-shelf: 8.3
  - Best-of-breed: 5.9

Source: EY analysis.
Getting the timing of replacement right

Historically, wealth managers have favored an incremental approach to modernizing their core IT platforms, addressing the immediate pain points and subsequent issues as they occur. However, the threat of digital disruption is creating an urgent need for wealth managers to modernize, and to do so with an eye on the big picture.

Our analysis confirms that aging core IT platforms have detrimental effects on total costs. Those wealth managers with core IT platforms older than 10 years bear significantly higher IT costs, relative both to operating expenses and operating income (Exhibit 20):

- Wealth managers operating IT platforms older than 10 years have a 2.7 percentage points higher IT cost-income ratio compared with wealth managers with IT platforms less than 10 years old.
- At the same time, IT platforms older than 10 years also generate higher IT share of cost. In our analysis, the difference between the age categories is 3.4 percentage points.

While a number of leading wealth managers have begun to transform their core IT platforms, many others are merely taking tentative steps. Our analysis highlights that a reticent approach does little more than delay the inevitable. Meanwhile, organizations are burdened with avoidable costs and a heightened risk exposure.
Exhibit 20

Wealth managers with core IT platforms older than 10 years report significantly higher IT costs

Age of core IT platform¹

<table>
<thead>
<tr>
<th></th>
<th>Less than 10 years</th>
<th>More than 10 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT cost-income ratio</td>
<td>6.7</td>
<td>9.4</td>
</tr>
<tr>
<td>IT share of cost</td>
<td>8.6</td>
<td>12.0</td>
</tr>
</tbody>
</table>

¹ Age of the oldest installed application of the core IT system. Source: EY analysis.
Building a digital-ready IT architecture

All wealth managers have an IT architecture, but few control it. This is especially evident in how applications are rolled out to support very specific business processes. More often than not, these applications meet the specific needs of one division or business unit, with little regard for impact on the broader IT architecture. Over time, the IT architecture grows, resulting in duplicated systems, proliferating and inconsistent data, and makeshift integration.

The resulting complex IT environment that is common for many large wealth managers can translate into unnecessarily high IT costs and poor service levels. It can also make the IT organization less agile, impeding its ability to help the business seize emerging opportunities. An overly complex IT architecture and application estate can significantly slow down and obstruct the transformation toward digital enablement. Wealth managers can reduce their IT cost base and extract more value from their application portfolio in two ways: by standardizing their IT architecture and by managing their application portfolio to optimize value.

**Standardizing the IT architecture**

Standardizing the IT architecture can provide a multitude of benefits, ranging from simplification to lower run cost. To gain a better understanding of the relationship between architecture standardization and total cost of ownership for IT, we asked wealth managers in our sample to assess their perceived level of architecture standardization based on three levels: none, medium and high. To qualify for medium-level architecture standardization, respondents had to have defined a preferred application architecture or have published architecture standards. For the high level of standardization, participants had to have mandated use of architecture standards or even enforced adherence to such standards through governance mechanisms and processes.

Our analysis reveals the following (Exhibit 21):

- Wealth managers with a self-assessed low level of IT architecture standardization have a significant higher IT share of cost (total annual IT spend divided by total annual operating cost) than those wealth managers with a self-assessed high level of IT architecture standardization. More specifically, wealth managers stating a high level of IT architecture standardization on average reported an IT share of cost of 9.9% compared with 14% for wealth managers reporting a low level of IT architecture standardization.
- In comparing IT spend per AuM of wealth managers in our sample, a similar picture emerges. Wealth managers with a low level of IT architecture standardization report 15.5 basis points (bps) IT spend per AuM against 8.8 bps for those with a high level of IT architecture standardization.
- In comparing the development over time, wealth managers with a low level of IT architecture standardization report 26% compound average growth of IT share of cost and 39% of IT spend per AuM between 2013 and 2016.
- By contrast, wealth managers with a high level of IT architecture standardization have a much lower IT spend growth: negative 4% IT share of cost and positive 4% IT spend per AuM, measured as the compound average between 2013 and 2016.
Wealth managers with high levels of IT architecture standardization realize significant benefits

<table>
<thead>
<tr>
<th>Level of IT architecture standardization¹</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Low level of architecture standardization</strong></td>
</tr>
<tr>
<td>• Organization has not standardized IT architecture or has only defined and published a preferred application architecture</td>
</tr>
<tr>
<td><strong>High level of architecture standardization</strong></td>
</tr>
<tr>
<td>• Organization has agreed on mandatory application architecture standards or sets standards through governance mechanism</td>
</tr>
</tbody>
</table>

### IT share of cost

<table>
<thead>
<tr>
<th>Year</th>
<th>Low Level</th>
<th>High Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>9.3%</td>
<td>10.3%</td>
</tr>
<tr>
<td>2014</td>
<td>12.6%</td>
<td>10.6%</td>
</tr>
<tr>
<td>2015</td>
<td>15.4%</td>
<td>9.4%</td>
</tr>
<tr>
<td>2016</td>
<td>18.6%</td>
<td>9.1%</td>
</tr>
</tbody>
</table>

### IT spend per AuM

<table>
<thead>
<tr>
<th>Year</th>
<th>Low Level</th>
<th>High Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>8.6%</td>
<td>8.4%</td>
</tr>
<tr>
<td>2014</td>
<td>12.4%</td>
<td>8.4%</td>
</tr>
<tr>
<td>2015</td>
<td>17.7%</td>
<td>9.2%</td>
</tr>
<tr>
<td>2016</td>
<td>23.3%</td>
<td>9.3%</td>
</tr>
</tbody>
</table>

¹ Based on self-assessment.
Source: EY analysis.

---

Exhibit 21

Accelerating the transformation of wealth management through digital technology
As the results of our research demonstrate, standardization of the IT architecture offers significant benefit in cost avoidance and cost reduction. In driving toward higher and more cost-efficient levels of IT architecture standardization, the following approaches have proven successful:

- **Create a target IT architecture blueprint.** The first step is to define a high-level blueprint of the target IT architecture. At a minimum, this consists of enterprise-wide design principles as well as key metrics for the target IT architecture. The design principles define the qualitative standards and guidelines across the different architecture layers, e.g., data model, applications, integration platform and infrastructure. The key metrics define in quantitative terms “what good looks like” for the target IT architecture, e.g., the number of applications, interfaces, data repositories and technical infrastructure elements during “business as usual”, i.e., once the simplification effort has run its course.

- **Define a set of guiding principles.** Defining a set of guiding principles can galvanize the IT function toward greater standardization. In working toward agreed and published guiding principles, a number of decision points need to be agreed, e.g., favoring best-in-class solutions instead of one-stop-shop, decoupling the agile front layers from the stable backend, supporting in-house software development only for integration or building solutions with straight-through processing in mind.

- **Publish IT architecture patterns.** Standardization hinges on reducing the number of patterns in the IT architecture, thereby minimizing the variety of technologies, processes and skills necessary. Also, assets need to be designed for reuse. Reusable IT systems are critical for efficiency and are characterized by modularity (independently functioning modules of code) and interoperability (modules interacting seamlessly thanks to standard protocols).

Done correctly, increasing the standardization of the IT architecture can achieve greater ability to leverage economies of scale and not only avoid but actually reduce overall IT costs.

**Increasing value of the IT application portfolio**

Leading wealth managers in our sample maintain fewer applications (0.19 applications per FTE employee for best-practice wealth managers compared with an average of 0.26 across the entire sample) and spend less per application (USD 0.49 million annual IT spend per application for best-practice wealth managers compared with the average of USD 0.7 million). On average, wealth managers in our sample decommissioned 5.2% of applications in the previous year and plan to decommission another 6.1% within the next 12 months. One wealth manager was able to decommission nearly 40% of applications in the portfolio. Optimizing the portfolio of applications through consolidation, replacement and decommissioning can achieve greater speed and adaptability to changing business requirements and reduce total IT costs. In our experience, identifying
opportunities for optimization and value improvement across the application portfolio relies on three core activities:

- **Business capability alignment.** A business taxonomy organized at the highest level by the enterprise value chain provides a framework for categorizing aspects of the business in a consistent manner. Alignment to business taxonomy is required to identify duplicate applications, redundant functionality, priority areas for optimization and business dependencies.

- **Application disposition.** Application disposition focuses on classifying applications based on three predefined categories: buy, sell or hold. This can provide insight on where to reduce complexity and simplify the application stack, where to realize cost savings in the “sell” category versus investment in the “buy” or “hold” categories and how to align technology activities with business strategies and needs. The classification into the three categories “buy”, “sell” or “hold” is informed by an analysis of functional and technical viability and total cost of ownership. Functional viability evaluates how well an application supports the business, relying on criteria such as product innovation and growth, performance, functionality, quality, business risk and speed to market. Technical viability evaluates an application's strength from a technical perspective, based on criteria such as design and maintenance, architecture interoperability, risk, support and operations. Total cost of ownership analysis focuses on identifying applications that are financially sound, based on use, business coverage and mission-critical relevance.

- **Road map and governance.** Once the full landscape of value-improvement opportunities is identified through application analysis and decision metrics, opportunities are quantified in terms of their benefits and the costs associated with implementing them. Next, they are assessed in terms of priority for implementation and consolidated into a strategic rationalization road map that includes a repeatable methodology to realize cost savings associated with decommissioning identified applications.

While almost all IT leaders acknowledge the need for optimizing application portfolios, only a few tackle the challenge head-on and drive for increased value realization. As our analysis highlights, making a conscious effort to consolidate, replace and decommission applications most certainly pays off in the long run.
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