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WEALTH MANAGEMENT TECHNOLOGY FORECAST 2022

Prospering in the Post-Pandemic Paradigm

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Executive Summary



As Europe and the Middle East finally turn the page to a new post-pandemic chapter, the Wealth Management industry has reason for cautious optimism. The crisis has led some firms to adopt new technologies (digital onboarding, hybrid advice, cloud) and cast away antiquated manual practices (traditional onboarding, legacy platforms) that would have taken many years to change.

While much uncertainty remains, it is imperative firms invest in technology to keep pace or risk being eclipsed by competitors. In this report, Celent illustrates the Wealth Management (WM) landscape, highlights 5 of today's most pertinent themes, and describes the most impactful technologies. This includes *Frictionless Advisor/Client Journeys*, *Harnessing the Power of the Advisor*, *Democratization of WM Services*, *High-Cost Challenges & Scale*, and *Regulation Tech & Security*.

This report also includes three IT spending scenarios, which consider Wealth Management firms' technology spending outlook. Celent attributes the highest probability to *Scenario B: Resilient Rebound*, which predicts a 4.5% increase in 2022 IT spending. We estimate overall yearly spending to be \$20.8 billion. Following this trajectory, Celent expects 2022–2024 spending to grow with a compound annual growth rate (CAGR) of 4.3%.

Lastly, Celent forecasts the geographic impact of various technologies across Western Europe, Eastern Europe, and the Middle East. Western Europe leads in digital transformation, and the Middle East is investing heavily in self-service and hybrid advice models. On the other hand, Eastern Europe lacks the business imperative to significantly ramp up investment in a modernized infrastructure.

WM FIRMS ARE OVERDUE FOR AN HONEST REFLECTION

Industry-wide top-line growth has masked hidden pitfalls that many WM firms must address. A combination of forces, both expected and unexpected, has contributed to a rapidly changing landscape. With one of the world's oldest populations, Europe is in the early stages of a massive intergenerational wealth transfer. If firms fail to modernize, they risk losing an increasingly important group of younger, more technologically savvy asset owners. At the same time, COVID has further increased the urgency of adopting digital processes.

European Digital Abandonment by Year¹
% of users who failed to complete an onboarding process

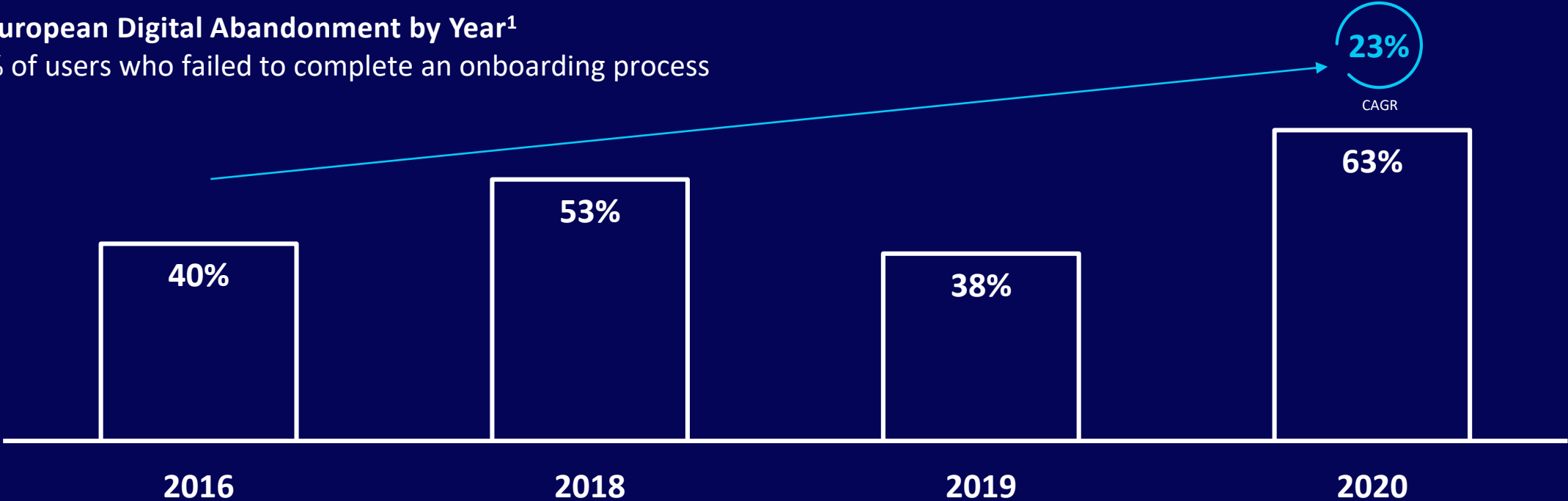


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THE ECONOMIC LANDSCAPE

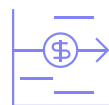
VACCINE DISTRIBUTION HAS BEEN ANEMIC, LEADING TO DOWNWARD GDP REVISIONS



Europe has lagged behind much of the advanced developed world in vaccine distribution. Thus the “return to normalcy” is taking longer than expected. 70% of the population is expected to be vaccinated by “end of summer.”²



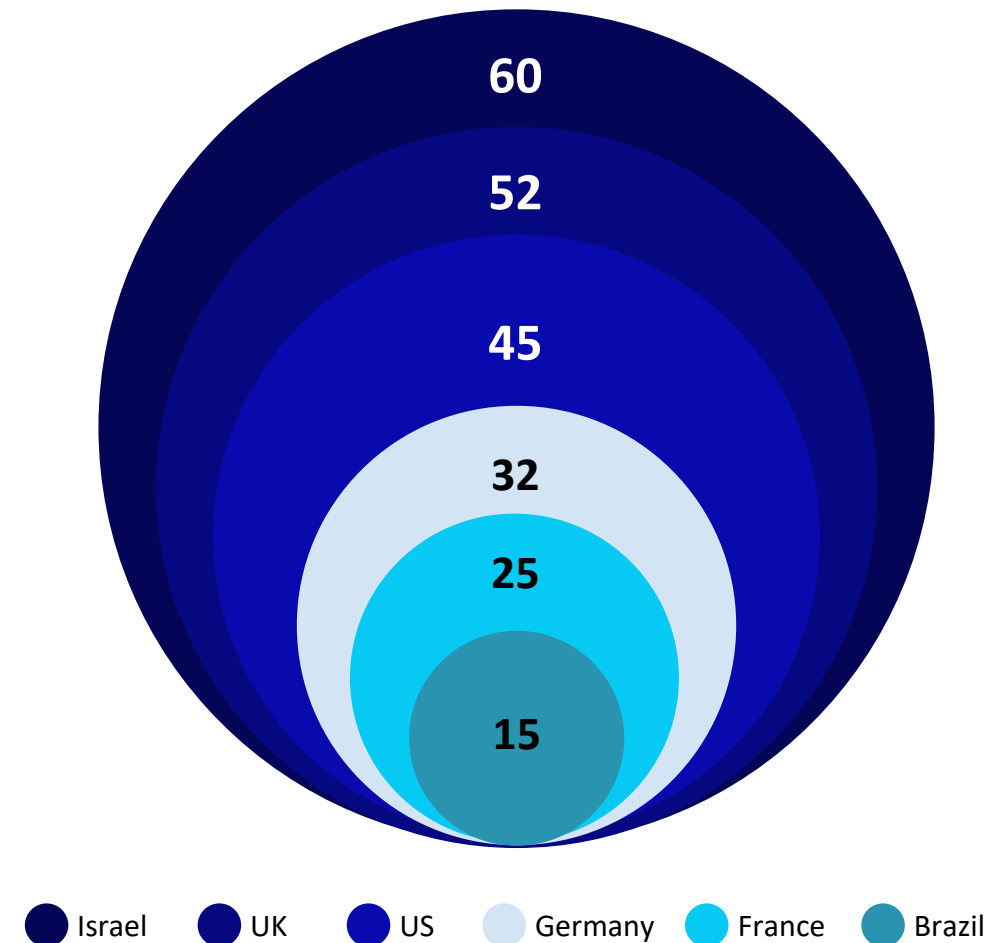
Lockdown restrictions have negatively impacted business output and consumer behavior. This has led to a downward revision in forecasted GDP. The consensus 2021 GDP forecast has decreased from 4.4% to 4.1%.³



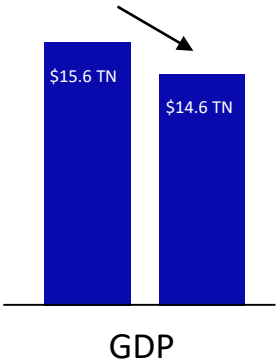
Against this backdrop, WM firms have shown resilience due to strong market performance and AUM growth. As consumer confidence is strong and many believe a GDP slowdown will be temporary, WM firms should continue to grow faster than many of those in the real economy.

Vaccinations by Country % of population that received the first COVID-19 vaccine⁴

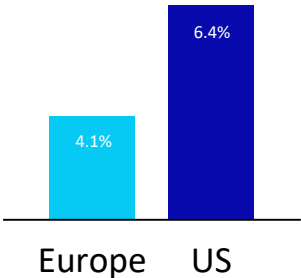
Updated May 7, 2021



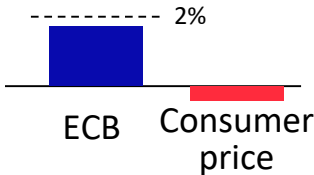
EUROPEAN GROWTH HAS BEEN SLUGGISH DESPITE ACCOMMODATIVE MONETARY AND FISCAL POLICY



The European Central Bank's (ECB) **\$750 BN** stimulus has largely been ineffective as the Eurozone suffered a **6.8% GDP** contraction in 2020.⁵



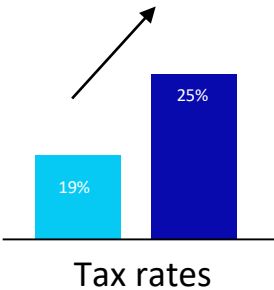
Europe is expected to **grow at two-thirds the pace of the U.S.** in 2021.⁶



Europe faces a material deflationary risk as the ECB is unable to achieve close to its **2%** inflation target. Consumer price inflation has also been flat to negative.⁷



The ECB has a limited arsenal of stimulatory measures as debt as a percentage of GDP is expected to exceed **100%** this year, and severe risks can emerge from slashing **interest rates that are already negative.**⁸

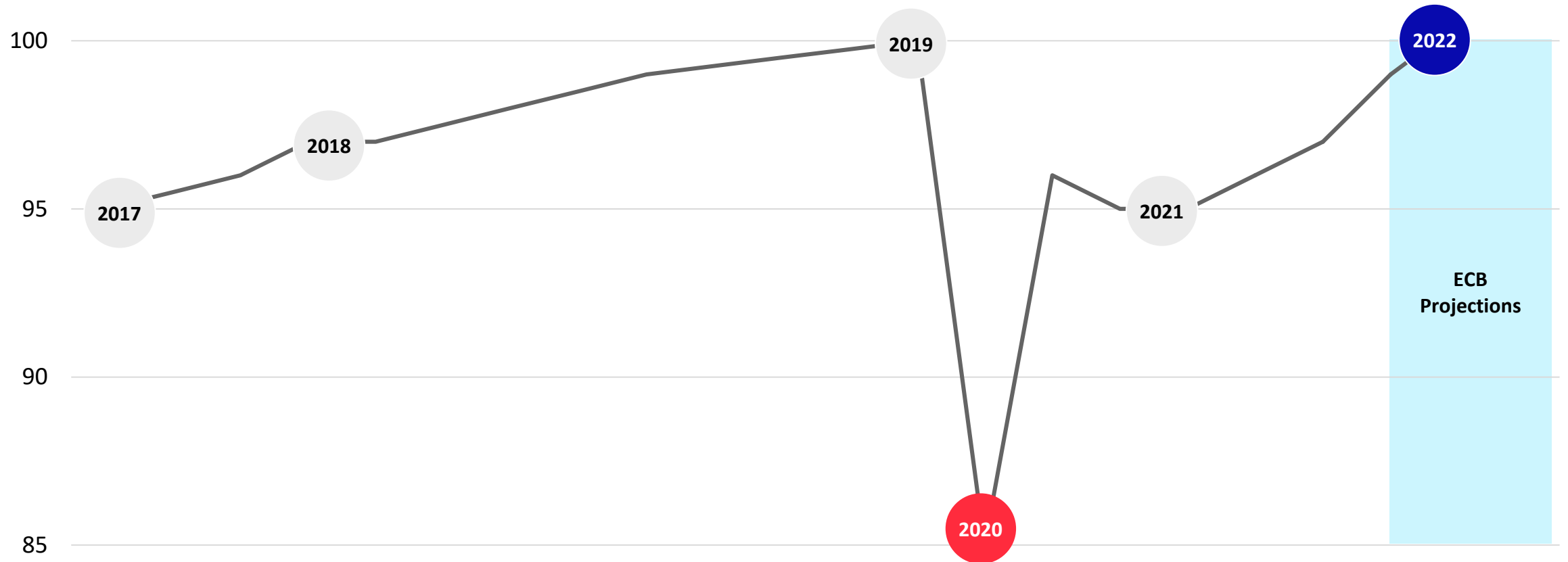


To make up for the COVID stimulus spending shortfall, the UK has enacted legislation that will increase the corporate tax rate from **19%** to **25%** by 2023.⁹

A FULL ECONOMIC RECOVERY IS NOT EXPECTED UNTIL 2022

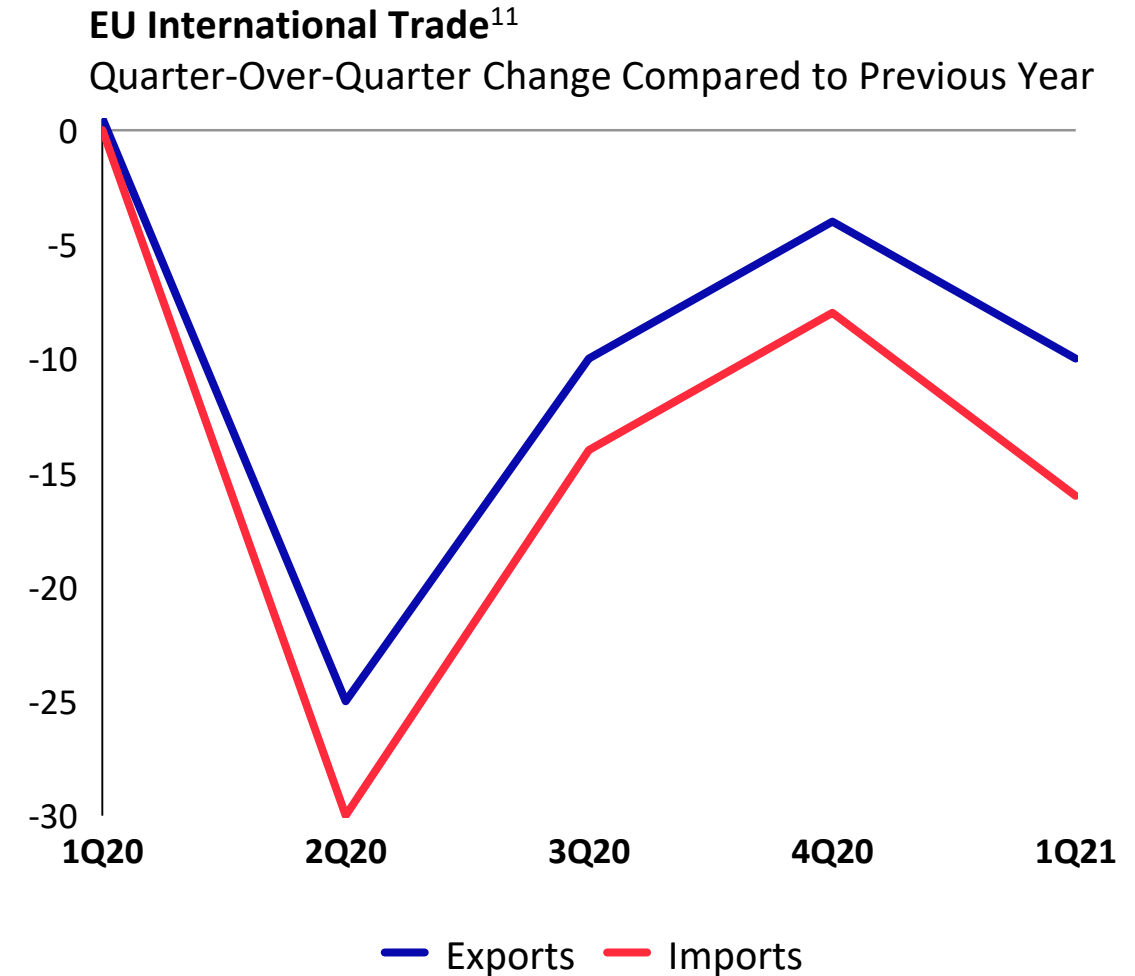
European Real GDP¹⁰

\$TN, Indexed to 2019 being 100



TRADE BARRIERS AND GEOPOLITICAL RISKS ARE AFFECTING GROWTH

- Following The UK's exit from the EU single market in January, export of goods to the UK fell by 31.9% while imports dipped 57.5%.¹¹
- In response to allegations of Chinese human rights abuses, the EU imposed sanctions against China. The move comes amid already heightened geopolitical tensions over an aircraft subsidy disagreement and threatens the possibility of a once highly anticipated trade deal. Further, the risk of a trade war is the highest it has been in the past several years.
- Seemingly irreconcilable differences have left the EU-Mercosur pact on life support. The deal between the EU and the "Mercosur market" (Brazil, Argentina, Uruguay, and Paraguay) was signed in 2019. However the agreement, which covers nearly 800 million people and 25% of global trade, is at risk of being dissolved.¹²





WEALTH MANAGEMENT TECHNOLOGY SPENDING

CELENT EXPECTS EUROPE AND MIDDLE EAST IT SPEND TO BE NEARLY \$20 BILLION IN 2021

Scenario A: Business is Boomin'

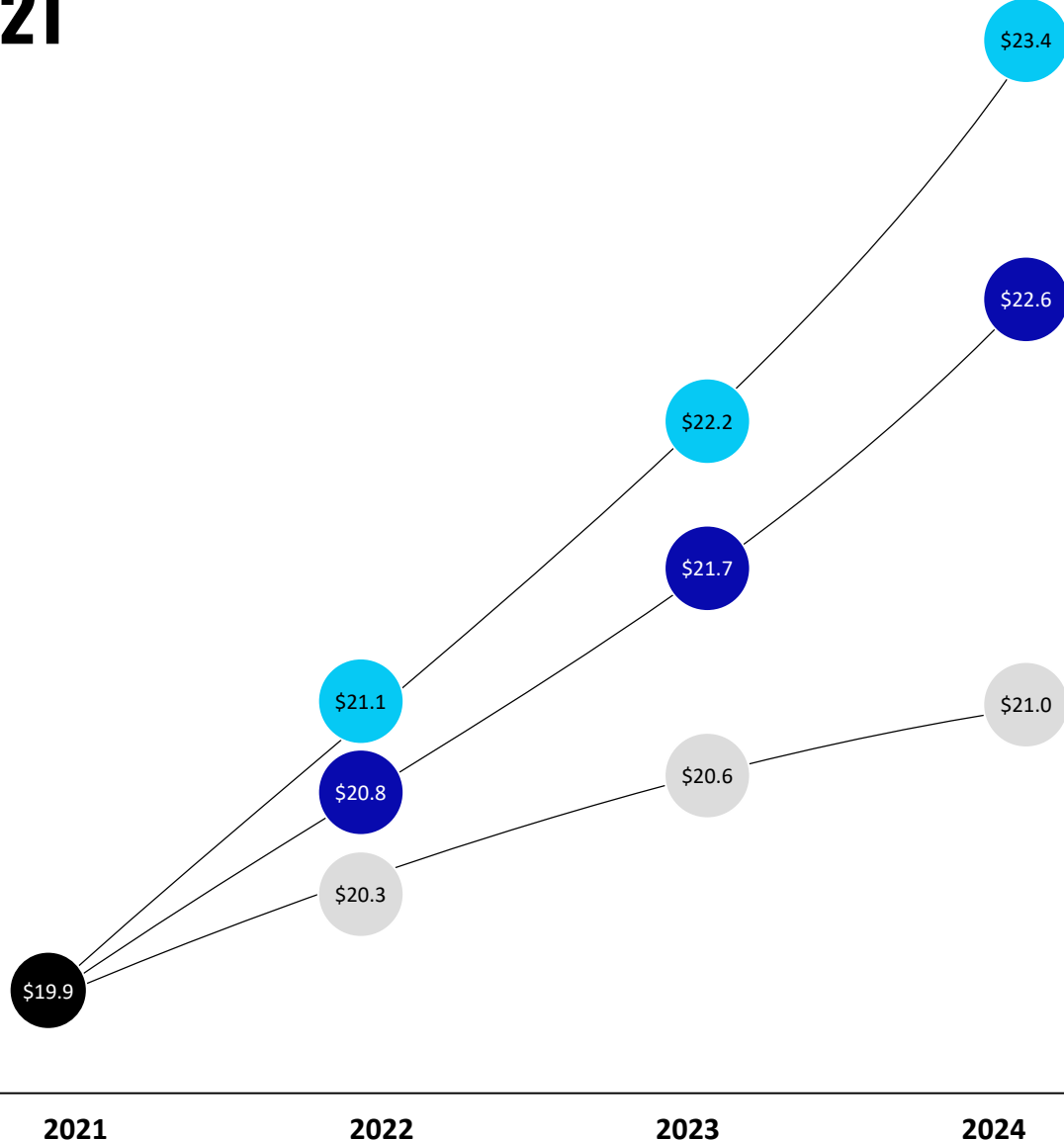
Increased WM revenues are driven by market outperformance, net new inflows, and increased consumer confidence. A full recovery combined with economic stimulus accelerates investment in a next-gen technology infrastructure. (5.5% CAGR)

Scenario B: Resilient Rebound [Default]

A modest economic recovery combined with a shift toward digital services underscores the importance of technology in today's new paradigm. As such, firms re-prioritize technology investments accordingly. (4.3% CAGR)

Scenario C: Melancholic Malaise

The pandemic leaves behind residual effects that linger. WMs focus on near-term core business priorities while modestly raising IT CapEx. They cling to proven technology investments as IT spending takes a few years to return to its normal growth trajectory. (1.8% CAGR)

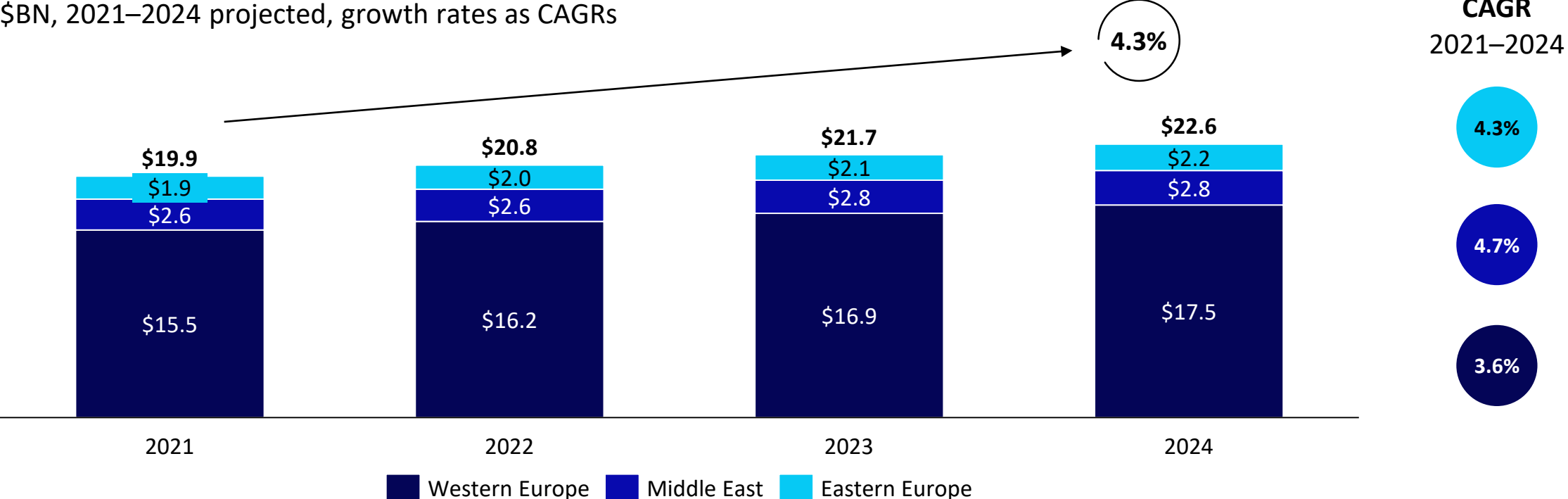


CELENT EXPECTS IT SPENDING TO GROW BY 4.5% IN 2021

Despite the budgetary constraints caused by the pandemic, IT spending is expected to grow to \$19.9 billion in 2021. Propelled by an influx of offshore capital and skilled labor, Middle Eastern WMs are accelerating investment in IT infrastructure. Conversely, Eastern European firms continue to maintain a comparatively low level of technology spend as business conditions haven't warranted a recalibration of investment.

Regional IT Spending Breakdown*

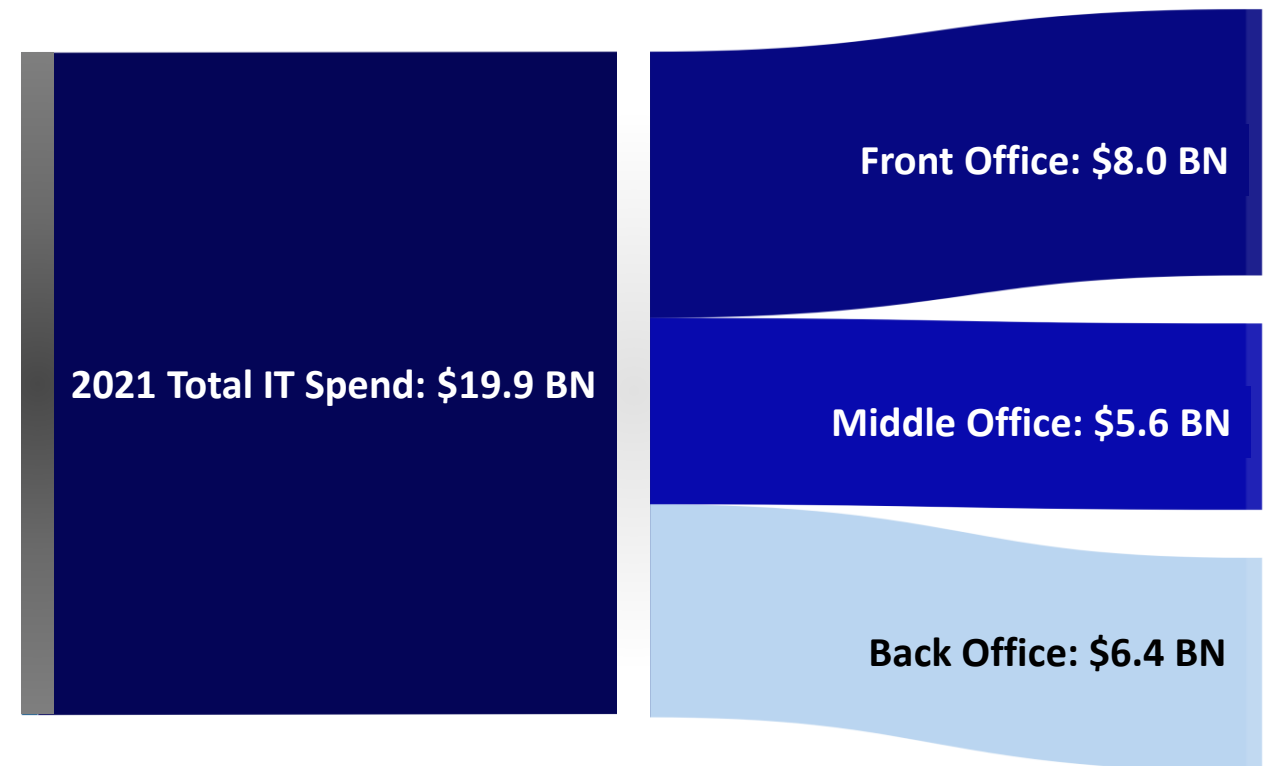
\$BN, 2021–2024 projected, growth rates as CAGRs



* See appendix
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BUDGETARY FOCUS IS SHIFTING TOWARD THE FRONT OFFICE

- Firms are devoting greater resources toward enhancing advisor efficiency and the client journey. They also continue to view the front office as a competitive differentiator.
- Owing to some head count reduction, firms have further relied on digitizing the front office and outsourcing back-/middle-office functions.
- **Front office:** Advisor-driven and other client-facing activity (e.g., onboarding, financial planning, portfolio management/monitoring).
- **Middle office:** Processes that support front-office functions (e.g., trade processing, investment analytics, risk management, reporting).
- **Back office:** Core operational functionalities with focus on accounting and workflow (e.g., settlement, document management, accounting, compliance).





TECHNOLOGY THEMES

CELENT ILLUSTRATES AREAS OF INVESTMENT PRIORITIZATION



Frictionless Advisor/Client Journeys

- Digital Onboarding
- Intelligent Advice



Harnessing the Power of the Advisor

- Hybrid Advice
- Robotic Process Automation (RPA)



Democratization of WM Services

- Self-Directed Platforms
- Crypto
- ESG



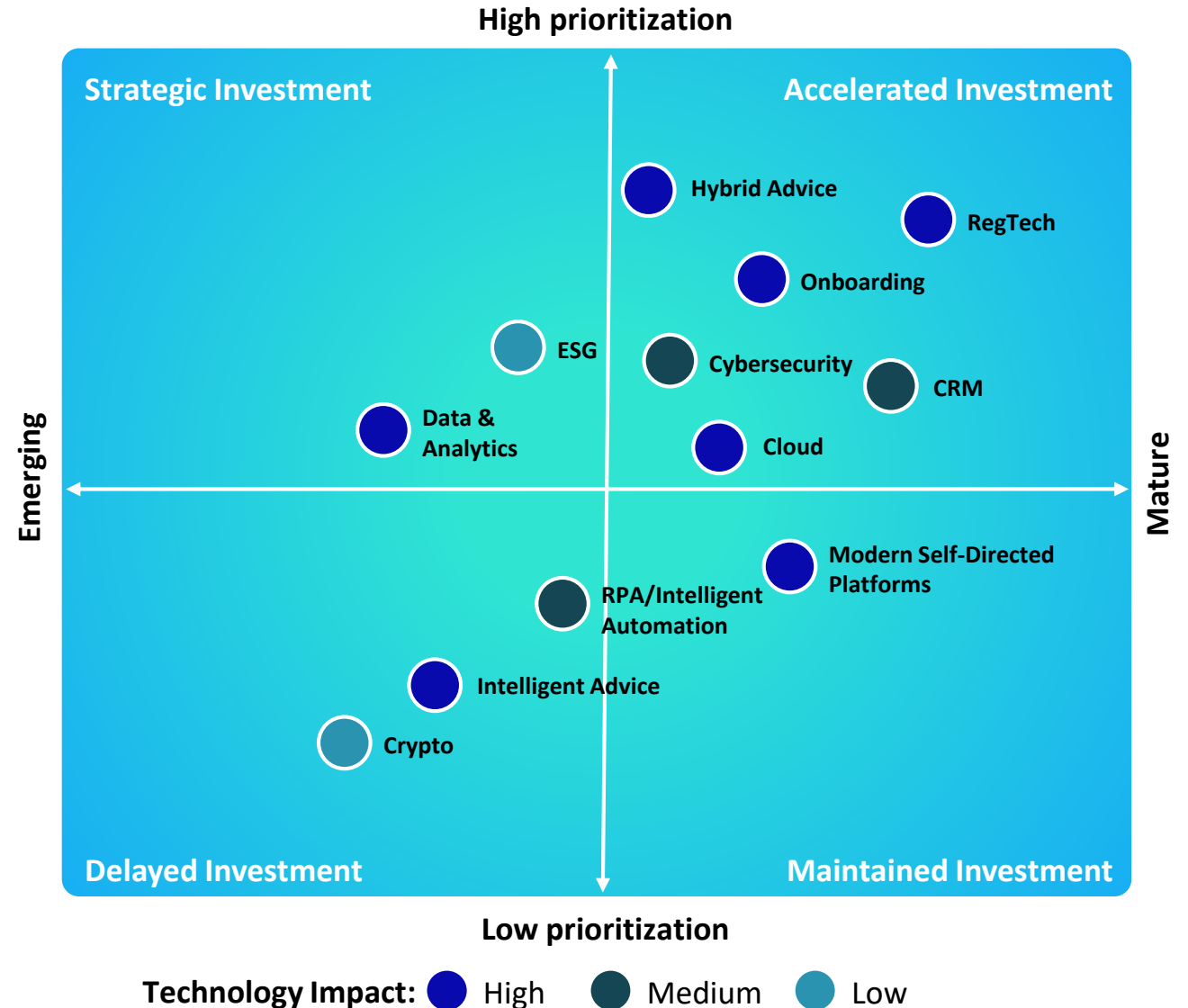
High-Cost Challenges & Scale

- Cloud
- FinTech



Regulation Tech & Cybersecurity

- RegTech
- Cybersecurity



FRICITIONLESS ADVISOR/CLIENT JOURNEYS

Offering an easier, faster and all-around better client experience

Relevant technologies:

Digital Onboarding

Intelligent Advice

Geographic impact:

Western Europe



Eastern Europe



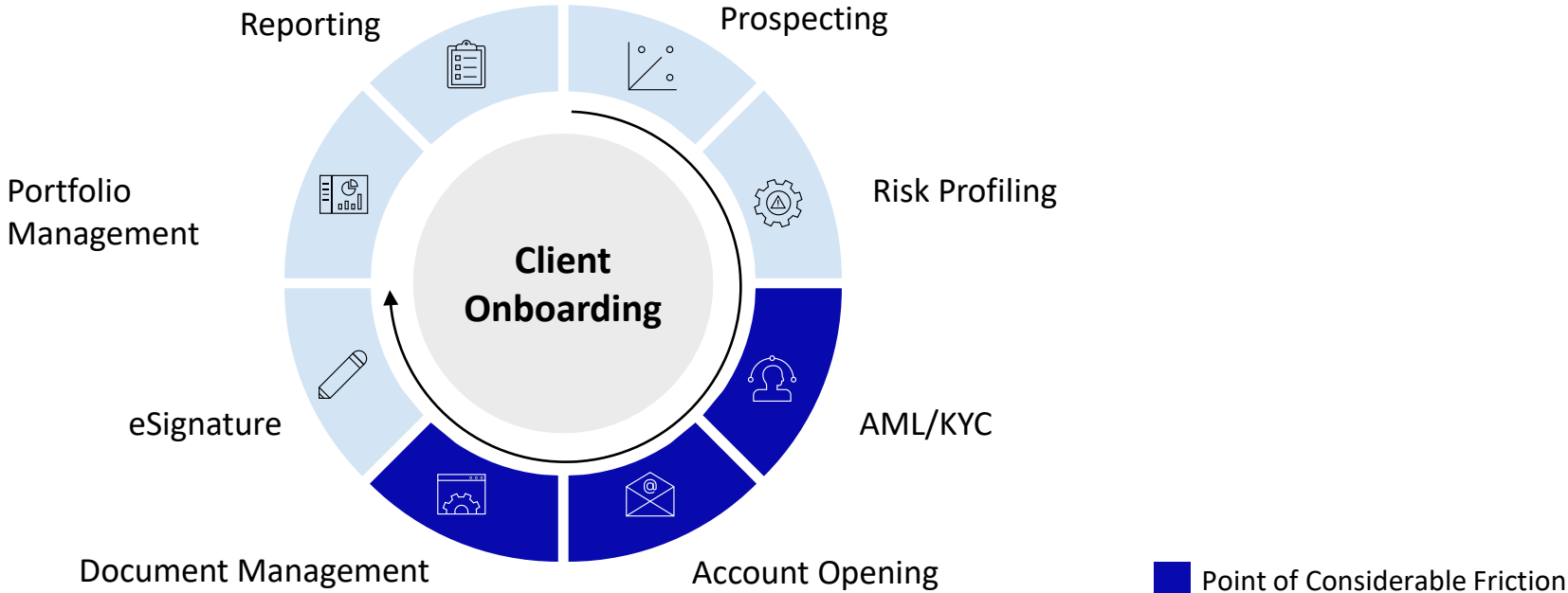
Middle East



CONVENTIONAL PROCESSES ARE FINALLY GETTING A 'FACE LIFT'

Over the past few years, a growing number of clients have refused to accept areas of friction they once believed they had to tolerate as part of the client journey. A younger and more tech-savvy generation is steadily entering the marketplace even as the pandemic has put a spotlight on digital processes for both advisors and clients.¹³ These factors have elevated the risk of client attrition.

Onboarding Lifecycle



TRADITIONAL ONBOARDING IS ON LIFE SUPPORT

Digital Onboarding

- The days of “partial digital onboarding” are gone. It is now a business imperative for firms to offer a streamlined digital onboarding experience that encompasses account opening, AML-KYC, user authentication, and document management.
- 68% of clients expect 100% digital onboarding in today’s post-COVID environment.¹⁴
- Leading firms are making strides toward integrating digital onboarding throughout the entirety of the client lifecycle, going beyond simple account opening.
- With the advent of biometric authentication tools, many firms have begun incorporating voice/live ID verification to create a simpler and more secure experience.

CREDIT SUISSE

Credit Suisse unveils fully digital onboarding — autoform generation and e-signature enable 15 min. onboarding.

BARCLAYS

Barclays Wealth partners with Nuance to biometrically authenticate client voice-prints; results in a 15% call time reduction.

Julius Bär

Julius Baer introduces a guided digital onboarding solution that uses video identification to verify clients remotely.

AI IS A CORNERSTONE TO THE MODERN ADVISOR WORKFLOW ... AND SHOULD BE TREATED AS SUCH

Intelligent Advice

- Many European firms don't realize "the future is already here — it's just not evenly distributed."¹⁵ The trend toward an increasingly personalized client journey is global. However, it is mostly American firms that have been investing in and are already reaping the benefits of an AI infrastructure.
- 70% of clients believe that degree of personalization is one of the most critical factors when deciding on an advisor.¹⁶
- Intelligent advice present advisors with a ripe opportunity to not only increase scale but also enhance existing interactions.
- These capabilities can optimize investment strategies, provide bespoke product offerings, deliver personalized communication, and address basic client requests.



Santander uses Next Best Action (NBA) to analyze client interactions and predict churn. Its NLP uses keywords associated with client dissatisfaction which it applies to assess risk.



BNP Paribas provides relationship managers contextual product offers based on client preferences; achieves a 75% uptake in product recommendations.



Credit Suisse's AI tool scans client portfolios to determine best investment action based on the firm's market guidance and client preferences; frees up 4 hours of advisor capacity per investment proposal generation session.



HARNESSING THE POWER OF THE ADVISOR

Fusing the advisor human touch with the scalability of technology to drive a more tailored experience

Relevant technologies:

Hybrid Advice

RPA

Regional prioritization:

Western Europe



Eastern Europe



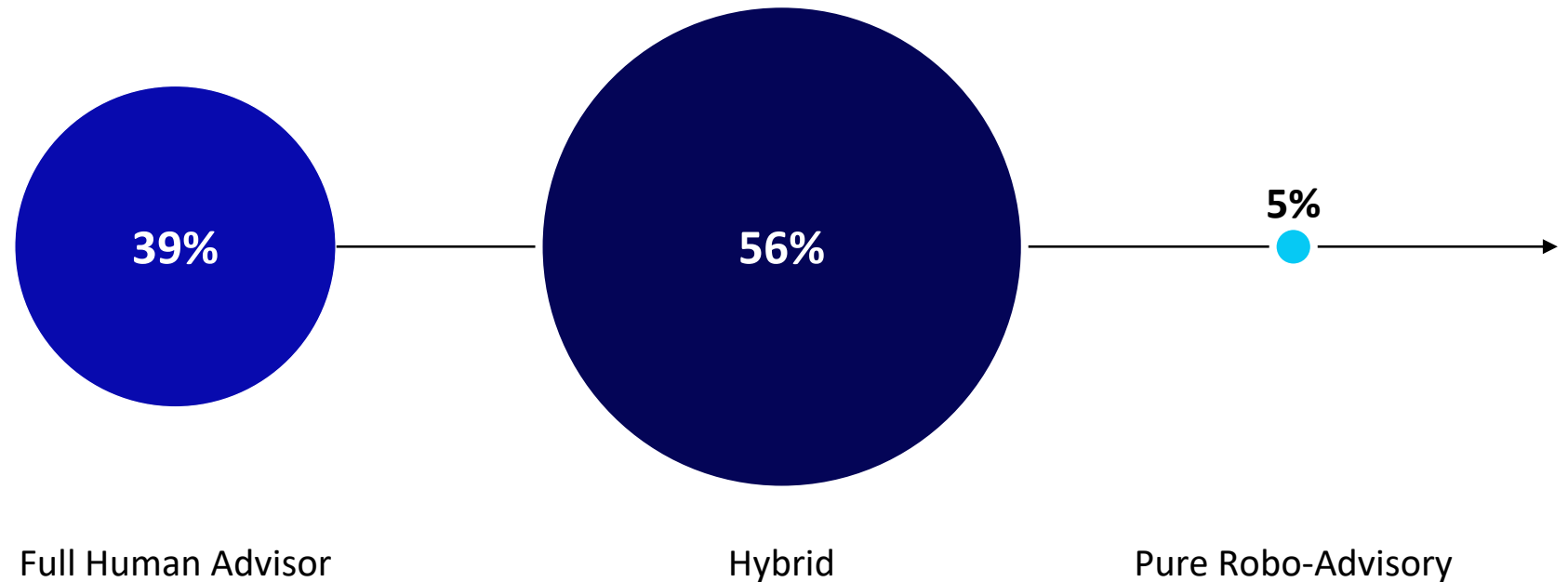
Middle East



THE 'BIONIC ADVISOR' WILL PREVAIL

To achieve the goal of providing a truly “omni-channel” experience, advisors need to fuse the human touch with scalability. By leveraging technologies that optimize the advisor workflow, they will be able to effectively serve a larger population of clients. One of the main reasons clients do not adopt hybrid advice and, to a lesser extent, robo advisory is due to a misunderstanding or a lack of education around its capabilities and a skepticism around its efficacy.¹⁷

Which model do clients believe provides most value?¹⁸



MASS ADOPTION OF FULLY AUTOMATED ADVICE IS A PIPE DREAM

Hybrid Advice

- COVID underscored the importance of hybrid-advice models. Throughout last year's unprecedented market volatility, clients leaned on advisors for counsel. In most instances, fully automated advice just wasn't adequate.
- 63% of clients who would consider using fully automated advice feel it is vital to have access to human advice.¹⁹
- The European wealth market has been and will likely continue to be slow to adopt robo-advisory models. Presently, the largest robo players in the UK manage, on average, ~3% of the AUM managed by top robo-advisors. Despite the divergence, capex in both regions is nearly equivalent.²⁰
- While pure robo-advisory hasn't attained significant traction, tomorrow's prevailing advice model will be one that seamlessly blends robo with human advice.



Royal London acquired FinTech firm Wealth Wizards for its hybrid-advice technology; this allows Royal London to scale its existing advice model and digitizes the client experience.



Nutmeg introduced human financial advisors to coincide with its digital-only robo-advisory capabilities. The initial rollout experienced 8% client penetration.



Santander's Digital Investment Advisor is an automated platform that provides personalized investment strategies; this coincides with its branch-based advisor network.

PROPER USE OF RPA CAN ENHANCE COLLABORATION BETWEEN MAN AND MACHINE

RPA

- Firms are taking early strides toward front-to-back office automation with Robotic Process Automation (RPA).
- RPA encompasses a set of technologies that automate routine advisor tasks. This can include prospecting, onboarding, KYC, trade processing, marketing, client report generation, document management, and chatbots.
- Proper implementation of RPA can accrue up to 50% in cost savings due to reduced labor costs.²¹ While RPA's impact has the potential to be material, firms must consider the pitfalls associated with implementation, governance, and scalability.
- While RPA has proven value, owing to its static nature, as processes change, firms will need to continually invest resources toward maintenance. Some will move to an RPA-as-a-Service model, outsourcing maintenance to third parties.
- Ultimately low-code/no-code platforms may serve as a preferred substitute for RPA.



ST. JAMES'S PLACE
WEALTH MANAGEMENT

St. James's Place attains an 85% reduction in cycle time and a 50% increase in operational efficiency by launching a cognitive RPA bot.



Emirates NBD deploys over 100 RPA bots across the enterprise; part of a \$275 million digital transformation investment in response to the pandemic.



Rabobank

Rabobank automates end-to-end business processes by combining Kofax RPA with lean process optimization; reduces overall time by ~85%.



DEMOCRATIZATION OF WM SERVICES

Serving the emerging and previously overlooked demographic of asset-holders — a ripe opportunity for firms

Relevant technologies:

Modern Self-Directed Platforms

ESG

Crypto

Data/Analytics

Regional prioritization:

Western Europe Low High

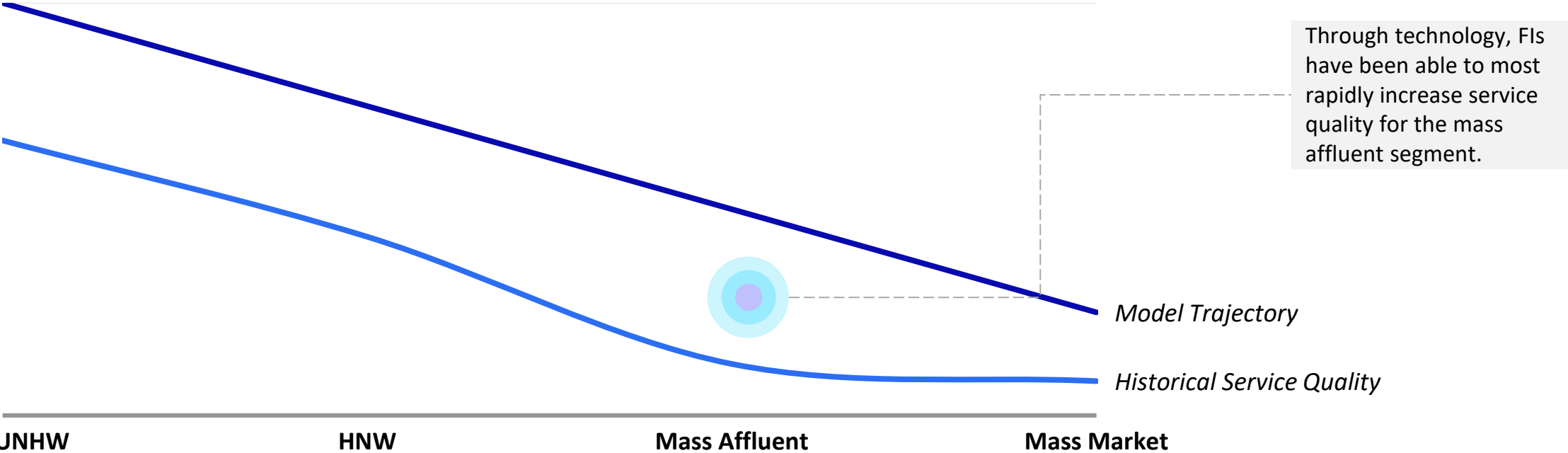
Eastern Europe Low High

Middle East Low High

DON'T 'MISS THE MASS'

Traditionally, larger institutions have taken a binary approach when targeting clients. The result is either white glove service for HNW individuals or on homogenous service for the lower end. Today's technology provides an opportunity to enhance the mass affluent value proposition. Celent believes firms have a window of opportunity to build a dedicated model that goes beyond pure standardization but is not a slimmed down HNW offering.

Quality of Service by Client Segment




BANK-TIED, SELF-DIRECTED OFFERINGS DON'T STACK UP AGAINST D2C PURE-PLAY PLATFORMS

Modern Self-Directed Platforms

ESG

Crypto

- Pure-play, self-directed platforms have most effectively captured retail investor market share.²² From lackluster UI to limited functionality, many bank-tied offerings are unable to compete with purpose-built platforms.
- Traditional WM firms have devoted significantly less attention to the quality of their digital offerings as their apps are updated 80% less frequently than those of digital pure-play providers.²³
- Although less relevant to European investors than their US counterparts, features like zero-commissions, ESG, and crypto are likely to carry more weight in the future.
- To make inroads with younger investors, WMs should consider providing access to specialized asset classes like crypto. 42% of European wealth managers are placing an increased focus on crypto with a view to eventually allow clients to make allocations.²⁴



LOMBARD ODIER
LOMBARD ODIER DARIER HENTSCH

Lombard Odier rolled out an innovative automated ESG scoring framework that analyzes companies based on their “consciousness, actions, results” score.

**HARGREAVES
LANSDOWN**

Hargreaves Lansdown’s digital investment platform experienced its strongest calendar period in history, acquiring 84k retail investors in Q3 and Q4 2020.



**SAXO
BANK**

Saxo Bank partners with Lunar Bank to offer novice retail investors a straightforward trading platform that includes fractional share purchases.

ADVISORS NEED TO BE BETTER EQUIPPED TO CAPTURE THE MASS AFFLUENT OPPORTUNITY

Data/Analytics

- While some advisors are steadily making inroads with the mass affluent, there is much room for improvement.
- Some firms have deployed the hybrid-advice model to serve the mass affluent, but they lack the capabilities to effectively scale this to a larger portion of clients.
- Due to a lack of investment in data analytics infrastructure, advisors will need to make a trade-off between scalability and personalization.
- Data and analytics enable the advisor to better understand a larger pool of clients on a more personalized level. This is achieved through multi-layered segmentation in a number of categories including age, demographic, and risk appetite.
- 70% of asset managers remain in the “early stages” of their data analytics program, and its operational use is expected to grow 180% between 2019 and 2022.²⁵



UBS developed a data analytics CoE and agile teams to address inefficiencies stemming from its siloed nature, which resulted in increased synergies across the organization.

Morgan Stanley

Morgan Stanley's 3D Insights Engine uses analytics to provide the relationship manager with personalized research, client information, and product recommendations.



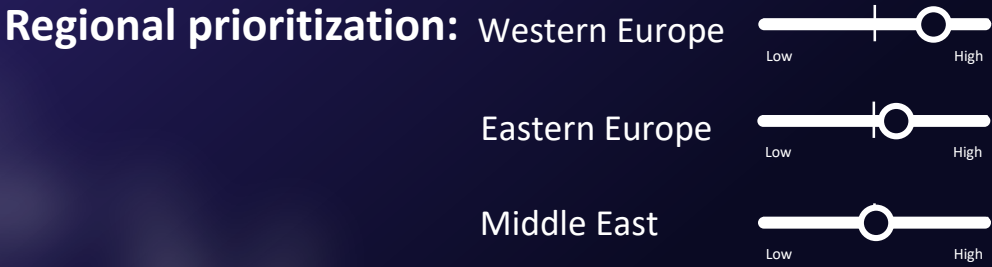
SberBank leverages Avaloq's SaaS offering, Avaloq Insight, to provide advisors with advanced data analytics and client insights.



HIGH-COST CHALLENGES & SCALE

Addressing rising cost pressures and decreasing operating margins through the application of technology

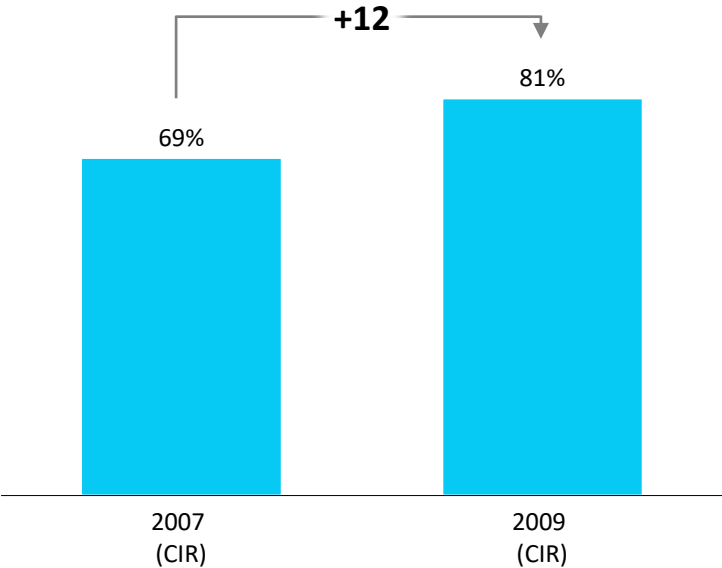
Relevant technologies: Cloud FinTech



EXPENSE MANAGEMENT SHOULD REMAIN A TOP PRIORITY

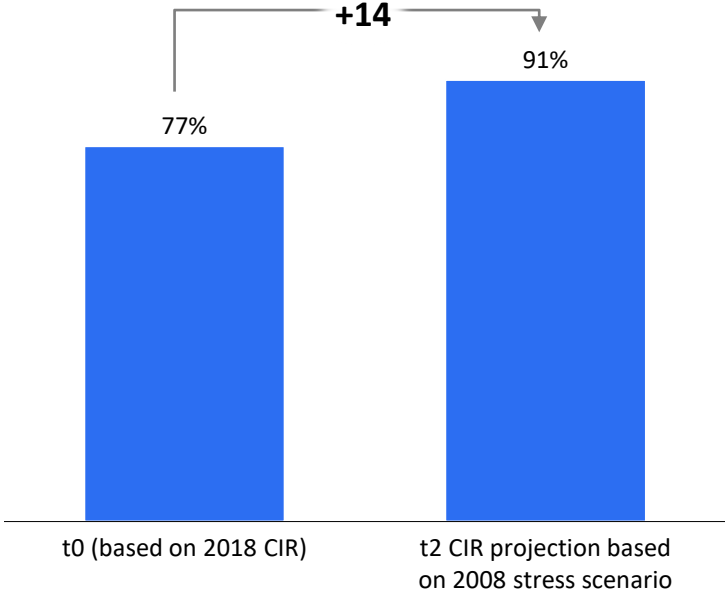
Owing to enduring secular headwinds such as fee compression, negative interest rates, the rise of passive products, and intense competition, firms need to ensure they are keeping costs down. Even though revenues are increasing, for many firms, costs are outpacing revenue growth. These pressures combined with the WM industry's high-touch and costly service model make firms vulnerable to an exogenous financial shock. It is imperative firms leverage best-in-class technologies to mitigate deteriorating profitability.

Cost-to-income ratio (CIR) changes during the 2008 crisis²⁶



As costs are outpacing revenue growth, firms may be more exposed to a financial crisis than they were in 2007.

Simulating CIR change based on a 2008 level shock²⁷



THE PRICE OF INACTION IS FAR GREATER THAN THE COST OF MAKING A MISTAKE

Cloud

- While many NA WMs are in the mature stages of cloud adoption, many European firms remain laggards.
- The primary barriers to implementation include concerns regarding data privacy, limitations of legacy infrastructure, IT budget constraints, a lack of internal alignment, and an overall skepticism of its benefits.
- 84% of cloud users noted that IT agility, and technical resilience were the top reasons for cloud migration.²⁸
- The daunting challenges of selecting a cloud provider, migrating legacy infrastructure, and managing implementation costs can cause initial “cloud paralysis.”²⁹
- However, the benefits of cloud go beyond simply cost and scalability; firms can create applications and deploy updates in a more flexible environment. This gives them a foundation to modernize client applications to bridge the gap with increasing digital expectations.



UBS is leveraging Microsoft Azure to enable business flexibility, application modernization, and enhanced interactions with the surrounding ecosystem.

The logo for SEB, consisting of a green square with the letters 'SEB' in white.

SEB Investment Management is using Google Cloud to increase its cloud environment from 10% to 50% within the next 5 years.



ABN Amro Bank is hiring Infosys and TCS to help the firm implement Microsoft Azure cloud via an agile execution program.

FINTECHS SHOULD BE VIEWED AS COLLABORATORS, NOT COMPETITORS

FinTech

- The FinTech revolution has led to significant innovation, cost savings, and acceleration of the digital transformation journey. It often makes sense for WMs to forge partnerships with these disruptive players rather than embark on a costly and potentially unsuccessful arms race.
- UK challenger banks have developed forward-thinking models to collaborate with FinTechs. Eastern Europe and the Middle East should emulate this approach.
- Lloyds Bank developed a framework to evaluate potential FinTech partners at scale. Currently, 78% of its cost base has been digitized, in part due to specialist technology acquired through FinTechs.³⁰
- Conversely, the majority of WMs fear their business is at risk to FinTech companies ... yet many don't partner with them.



Lloyds Bank partnered with Form3 to accelerate its development of a cloud-based payments-as-a-service platform; this allowed Lloyds to simplify its payments architecture.



Schroders Wealth Management has selected Temenos Wealth Front Office solution to automate front-office processes and enhance relationship manager capabilities.



Commerzbank is partnering with Deutsche Börse and 360X to develop a series of blockchain-based platforms for "real assets" such as art and real estate.



REGULATION TECH & SECURITY

Harnessing technology to become more secure and agile in today's rapidly evolving regulatory landscape

Relevant technologies: RegTech Cybersecurity

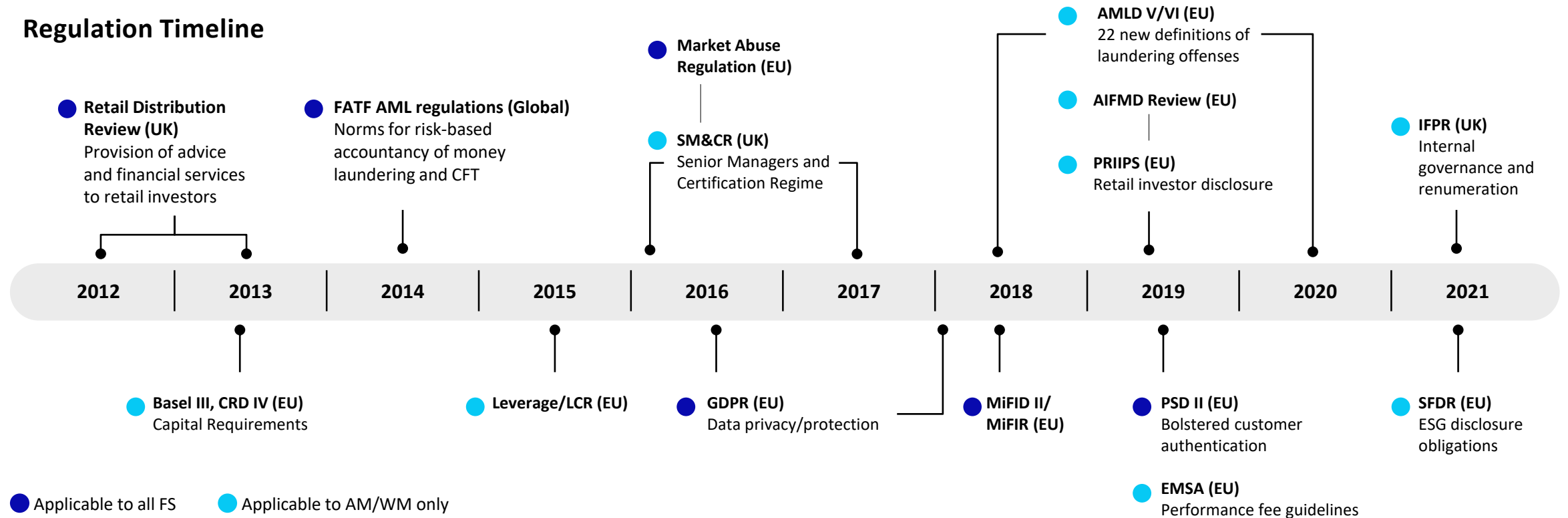
Regional prioritization:

Western Europe	<input type="range" value="85"/>
Eastern Europe	<input type="range" value="75"/>
Middle East	<input type="range" value="50"/>

TECHNOLOGY CAN HELP FIRMS AVERT REGULATORY TRAFFIC JAMS & CYBER RISK

While Europe is known for its uniquely stringent and consumer-friendly regulatory landscape, firms are both adapting to new mandates and anxiously awaiting decrees in the pipeline. WMs also need to ensure they are compliant with the highly consequential Brexit terms, which have already slowed down the velocity of business. Even though there is not a reward for stellar security and compliance, oversight errors can be costly.

Regulation Timeline



BETTER (REGU)LATE THAN NEVER

RegTech

- The EU's current regulatory agenda focuses on several main areas, including investor protection, outsourcing, firm conduct, and financial stability domains.
- Sweeping and explicit regulations include MIFID II, PSD II, and GDPR.
- Following Brexit, firms on both sides of the English Channel lost their "passporting rights," which allow them to do business in both regions. The result is a complicated regulatory environment in which distinct authorization is required to do business in each nation.
- Regulatory compliance is today's clear top priority based on Celent's CIO survey.³¹
- In the Middle East there is comparatively less regulation than in Europe. Nevertheless, several countries are trying to lure onshore presence of foreign WM by increasing business confidence through regulation.



BBVA

BBVA UK has partnered with Wolters Kluwer to ensure adherence to UK regulatory obligations and conformity with liquidity risk requirements.



BNP PARIBAS

BNP Paribas is using Droit Financial Technologies' fully digital MiFID II trade compliance software to comply with the mandate's thousands of pages of regulation.



ABLV

Latvian ABLV Bank is also using Wolters Kluwer's OneSumX regulatory reporting software as well as its regulatory and compliance tracking solution.

INCREASED RISK OF CYBER ATTACK IS EXACERBATED BY THE SHIFT TO DIGITAL

Cybersecurity

- The increased interconnectedness, including API integration of the WM ecosystem, has made the industry ripe for cyber threats. Some at-risk components are client data and intellectual property.
- With the “Family Office Boom,” firms that have significant AUM but lack a sophisticated technological infrastructure are vulnerable to cyber espionage. Further, cybersecurity is typically outsourced.
- ~26% of family offices have suffered a cyber attack. Despite this, only 31% have implemented cyber security measures.³²
- Several prominent cyberattacks and the ratification of the far-reaching GDPR and NIS Directive have thrust cybersecurity into the spotlight. The recently proposed Digital Operational Resilience Act (DORA) has also set forth a harmonized framework that promotes operational resilience for firms.



ING Netherlands has partnered with Israeli RegTech ThetaRay to sift through large amounts of transactions to detect fraudulent activity



NatWest

NatWest is providing customers with Malwarebytes Premium to shield them from cyberattacks and protect their digital experience within the online portal



HSBC is working with the consortium NEASQC to research how quantum computing can protect against sophisticated forms of cyber-risk

REGIONAL PATH FORWARD

LEADING FIRMS ARE BEGINNING TO MODERNIZE THEIR CORE IT INFRASTRUCTURE TO BRIDGE A WIDENING EXPECTATION GAP

	Western Europe	Eastern Europe	Middle East	
Digital Onboarding	High	Medium	High	Digital onboarding will continue to evolve into the area of client lifecycle management (CLM) through a diversified ecosystem of integrations. Particular focus is paid to digital ID verification, paperless document management, and compliance management.
Intelligent Advice	Low	Medium	Low	Data aggregation and data wrangling challenges still hinder Eastern European and Middle Eastern firms from successfully operationalizing Next Best Action. Meanwhile, some Western European-based firms are in the initial stages of pushing adoption amongst advisors and RMs.
Hybrid Advice	High	Medium	High	While Middle Eastern firms have begun testing robo-advisory capabilities, adoption has been lagging across Europe. Firms employing a balanced advice model will continue to prosper, as clients increasingly prefer the flexibility of human interaction combined with automated investing.
RPA	Low	Low	Low	RPA was traditionally viewed as a stepping stone for AI-based automation; however, costs associated with its maintenance continue to hinder European adoption. In the future, no-code/low-code platforms may replace its use entirely
Modern Self-Directed Platforms	High	High	High	Digital brokerage platforms will continue to gain critical mass of retail investors. With the slow introduction of zero-commission trading in the Middle East (e.g., Sarwa) and quite possibly in Europe, incumbent firms will consider build, buy, and partnership opportunities to modernize their self-directed platforms.
ESG	High	High	Medium	The pandemic has increased Middle Eastern engagement with environmental and social issues, leading to a steady rise in ESG-mandated investments. Europe will continue to mature as a hub for ESG investing by aligning firms over a harmonized ratings and disclosure system.
Crypto	Low	Low	Low	Firms are cautiously beginning to offer private banking clients exposure to bitcoin and crypto-asset funds. European firms are beginning to explore partnerships with crypto custody solution providers.

Denotes regional priority

High
 Medium
 Low








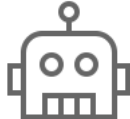






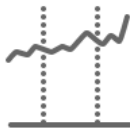


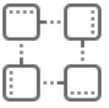
FIRMS ARE OUTSOURCING INFRASTRUCTURE AND APPLICATIONS TO FORGE TOMORROW'S IT LANDSCAPE

	Western Europe	Eastern Europe	Middle East	
CRM	High	High	High	CRM will support advanced use cases enabled by behavioral customer analytics, allowing advisors to engage clients with higher degrees of personalization and prevent churn. Nonetheless, these capabilities will be dependant on firms' willingness to undergo significant digital transformation
Data Analytics	High	Low	High	Firms still face an uphill battle restructuring their data architecture and moving toward a unified data environment that allows them to harness AI and Machine Learning (ML) capabilities. All three regions recognize its immense importance even though their data transformation lifecycle is often in its early stages
Cloud	High	Low	Medium	Several European and Middle Eastern banks have announced multi-cloud strategies. Western European WMs are further ahead, accelerating cloud migration as a cost-control measure
FinTech Innovation	High	High	Medium	Fuelled by generous amounts of capital, FinTech firms have set a new standard for innovation across Europe. Their financial stability has been softened due to the pandemic, making partnerships and M&A activity increasingly attractive for incumbent firms that desperately require an upgrade to their legacy offerings
RegTech	High	Medium	Low	There are few places in the world with a more stringent and rapidly evolving regulatory landscape than the Eurozone. Ever increasing compliance mandates combined with complex Brexit terms necessitate that firms stay alert. The likely review of AI and consumer data privacy may also force firms to redefine how they use these powerful technologies. In the Middle East, there is likely to be a continued increase in regulation in order to create an "environment of stability" and thus lure offshore investors
Cybersecurity	Medium	High	Low	Cybersecurity continues to be an issue for many firms. As attacks become more sophisticated, WMs need to ensure they are taking all appropriate steps to prevent breaches. The risk is especially elevated in Family Offices where many have a large AUM with proportionally smaller operations/risk staff.

Denotes regional priority

High Medium Low

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APPENDIX



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Celent analysis pertains to all pages of this report

METHODOLOGY

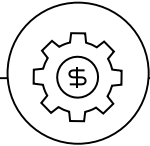
Celent's EMEA Wealth Management technology spending model is derived from:

- Oliver Wyman proprietary Wealth Management revenue and wallet share data that is segmented by region.
- Publicly available company revenue and segmented operating expense figures.
- IMF and ECB GDP projections.
- Responses from Celent's Wealth Management CIO survey. The survey aims to uncover how firms, from both a behavioral and resource allocation perspective, are reacting to today's period of uncertainty.
- Economic impact and recovery data of other market crashes to integrate within the spend trajectory.

Since much of Europe is still focused on containing COVID-19, and the vaccine distribution timeline is unclear, the short-medium term economic outlook is highly variable. As such, Celent includes three scenarios to illustrate potential IT spending. Scenarios are not meant to be predictive but instead intended to show potential trajectory.

For more information and insights, please visit Celent's [COVID-19 Content Page](#) or feel free to contact the authors directly using the contact details located at the end of this report.

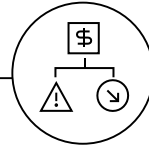
SYSTEM AREA DEFINITIONS



Front Office (FO)

Advisory processes from end to end in an integrated workflow and single infrastructure

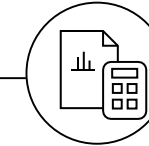
Functions	Activities
1 Client Onboarding	<ul style="list-style-type: none"> Lead generation Contact management Investor accreditation Asset/funds transfer AML & KYC
2 Financial Planning	<ul style="list-style-type: none"> Goal-based plan Risk profiling Advanced analytics Cash flow-based plan Asset allocation
3 Portfolio Management	<ul style="list-style-type: none"> Portfolio optimization Portfolio modelling Rebalancing Account restrictions Tax considerations
4 Portfolio Monitoring	<ul style="list-style-type: none"> Real time valuations Performance calculation Portfolio simulation



Middle Office (MO)

Supportive processes of front-office functions: investment professionals, operations, data

Services	Activities
1 Trade Processing	<ul style="list-style-type: none"> Commission/fee routing Capture/order management Asset services Reconciliations
2 Investment Analysis & Risk management	<ul style="list-style-type: none"> Benchmarking Portfolio analytics Tailored solutions Independent analysis Customized fact sheets
3 Reporting	<ul style="list-style-type: none"> Tax/financial reporting Performance reporting Data aggregation Ad hoc analysis
4 Information Services	<ul style="list-style-type: none"> Market statistics Fund research Order referential Fund ranking



Back Office (BO)

Core operational functionalities with focus on accounting and workflow

Services	Activities
1 Settlement & Custody	<ul style="list-style-type: none"> Order processing Payments process Recordkeeping Safeguarding of funds Tax-related support
2 Document Management	<ul style="list-style-type: none"> e-Signature Account documentation Document archiving Data mapping & OCR Document storage
3 Accounting & Billing	<ul style="list-style-type: none"> Portfolio accounting Client accounting Commissions & fees Disbursements Margining
4 Compliance	<ul style="list-style-type: none"> Pre-trade compliance AML & KYC Post-trade compliance Monitoring & surveillance

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