



Emerging Models of Digital Wealth Advisory

A joint discussion paper by Deloitte and Avaloq

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The trend towards digitisation that can be seen across many industries is being driven by the invention and growth of new technologies, such as smartphones. The emergence of these new technologies and changing demographic demands from younger more tech savvy customers is leading to the blurring of traditional borders between industries. The financial services industry is not only impacted by these new challenges but continues to face increased regulatory pressure, decreased margins and the overall loss of confidence from consumers since the last financial crisis.

In that context many wealth managers are now investing in innovative digital technology across their operations. However, this rush to technology does not always deliver the intended outcomes. Like many major industrial shifts, while the impetus for change may well be derived from technological innovation, understanding how to benefit from it is not so straight forward. The threats, pressures to achieve, and need to keep up with innovation in the digital field are continually evolving. Wealth managers and private banks are finding that they need to be strategically astute about how they deploy technology. They are beginning to appreciate that digitisation is not only about the technology itself, but that there are also implications for banking culture as well.

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Key changes in the wealth management industry

I Digital transformation

of the wealth management industry is not a pure technological challenge. To understand this, it is necessary to reflect on how the industry has evolved since the financial crisis.



Profit in the wealth management industry under pressure

Client wealth levels suffered significant decreases following the recession in 2007-2008 that led to significant declines in wealth managers' Assets under Management (AuM) and profitability. Despite a notable recovery in AuM since 2008, wealth managers are struggling to recapture the high levels of profit margin they experienced in the past. As illustrated in exhibit 1, pre-tax profit margins have remained between 17bps and 19bps while AuM have grown by approximately 70% between 2008 and 2015.¹

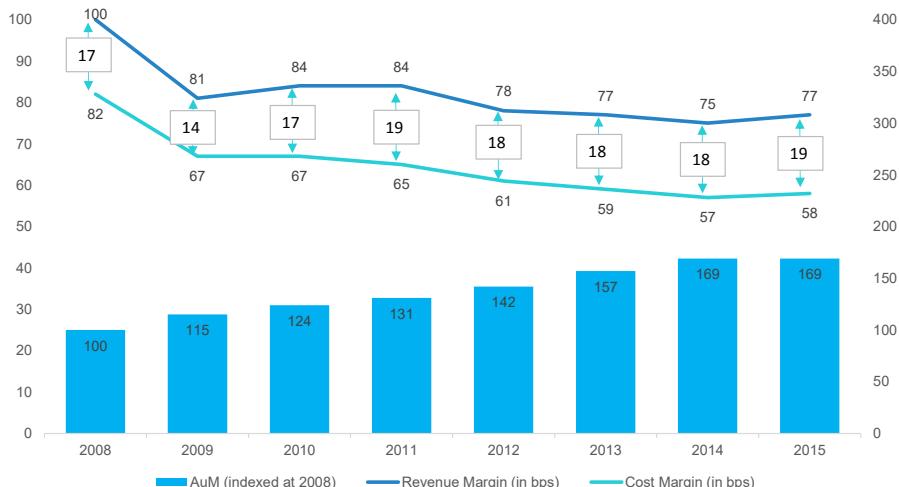


Exhibit 1: AuM and pre-tax margin evolution

There are several explanations why wealth managers' profitability remains under pressure:

Clients have grown increasingly conservative and price sensitive

Following the financial crisis, many investors have de-risked their portfolio and moved into low-cost, index-based products such as ETF's or trackers. They are reluctant to move back into the types of riskier asset classes, such as equities, that had previously generated higher revenues and margins due to their related advisory fees.

Increased regulatory environment has constrained industry development

In recent years, a number of new regulations have been introduced and had a multitude of impacts for wealth managers, such as:

- Reduced financial resources (e.g. lending capacity, deposit taking capacity) to comply with new capital requirements
- Reduced product scalability due to additional administrative burdens
- Increased and expanded KYC processes to help identify and verify the customer and their source of wealth
- Increased transparency on the types of services provided to customers and the associated fees

Intensified competition has pushed wealth managers to sharpen their added value

The removal of the Banking secrecy in offshore centers, such as Luxembourg or Switzerland, the automatic exchange of information (AEI) and the recent developments in the fintech space have had consequences:

- They reduce competitive advantages of incumbent players
- They lower the industry barriers to entry

Intense competition and more transparent product offerings have empowered customers to compare offers from different firms. These developments have increased competition and have created a need for wealth managers to demonstrate clearly how they add value.



The need to reinvent the wealth management business model triggers a number of new strategic priorities

As the likelihood of returning to pre-crisis revenue margins is remote, wealth managers need to reinvent their business model to adapt to existing clients' changing needs and to capture new clients while reducing operating expenses on a relative basis. In this respect, key strategic priorities for decision makers include:

- Developing capabilities to enhance the value of the client experience and to ease the daily interactions with their bank
- Investing in new advisory models to address the changing market dynamic and grow
- Automating middle and back office processes to reduce cost-to-serve

Addressing these priorities may have a number of implications. But common to all is the implication that the client proposition needs to be redefined and that this can be achieved by developing digital capabilities.

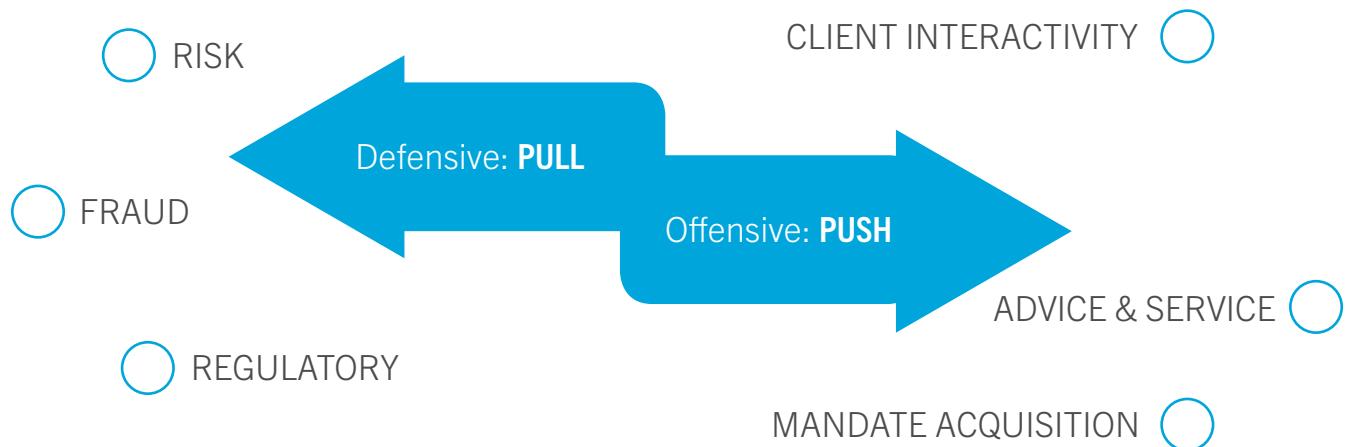


Exhibit 2: Technology usage: Defensive vs Offensive

Developing digital capabilities has become a priority

The reason why developing digital capabilities is viewed, within private banking and wealth management, as key to redefining the client proposition is three fold:

- Bridging the generation gap. With increases in life expectation, there is a broader set of attitudes and engagement norms as banks need to serve the older generation as well as their grandchildren. Their expectations in term of level and accessibility to services can be dramatically different.
- Evolution of the wealth ownership. Today's wealth manager has to deal not only with the traditional inherited family wealth, but also a growing set of highly connected global entrepreneurs with strong aspirations and short time thresholds.
- The need to meet user experience and technology expectations. Private wealth managers offer a high tier, quality service, and their client's experience has to stay ahead of the crowd.

The current drive to digital within Avaloq's community of clients emerged over the last five years. Projects initiated to simply modernise the banks' online presence have rapidly been overtaken by the need for complete digitisation of the customer wealth experience. Today, over a third of Avaloq clients have worked with Avaloq solutions in this respect, but their objectives significantly differ.

Many technology approaches of banks can be considered as "defensive" strategies, i.e. implementing technical solutions because it is necessary in order to continue to do business or meet regulatory requirements. These can include applications and infrastructure supporting risk management, fraud prevention, regulatory and anti-money laundering compliance. User-friendly web presence can also be an example when it is simply seen to be driven by the need to offer something more modern.

Other banks have taken an "offensive" approach towards technology. They are using technology to achieve marketing goals and revenue growth. A growing number of banks have adopted this approach as a way to transform today's business challenges into opportunities for growth.

An example where an assumed defence technology can be turned into offence technology is the development of models that are used to identify customers with existing credit issues. With adaptation this technology can be used to define specific credit based marketing campaigns.

New technologies can often be used for both defensive and offensive strategies. For instance, natural language generation (NLG). It can help from a defensive perspective to process text supporting anti-money laundering (AML) activities such as writing suspicious activity reports (SARs). But it can also be used in an offensive way to generate investment reports from client discussions.

Another example, which Avaloq has seen at banks, is the automation of the customer relationship management (CRM) within the client on-boarding process. Where the initial need for knowing your customer (KYC) has now led to more sophisticated target campaigns based on gathered data and the definition of personal financial objectives. A relationship that one private bank now refers to as "push not pull".

While it is clear that digitisation has become a priority, this also highlights that there are a myriad of options and perspectives to consider. Not all digitisation projects offer the real rewards of additional margin, some just defend against regulation. An ideal would be to ensure that technology decisions present both defensive and offensive benefits.

The bigger picture

Determining which technology makes sense clearly requires some strategic thought. There are a number of perspectives that have proved useful when thinking through a digitisation strategy:

- The overall logic for being a digital enterprise
 - The market segments in which to operate
 - The technical trends that are likely to impact the solution



Is being digital an aim?

Digital has been defined as the exponential use of technology disrupting the way to design products, services and operating model. However, a MIT Sloan Management Review and Deloitte's global study of digital business argues that strategy, not technology should drive digital transformation.²

The report separates businesses into different maturity levels and states that maturing digital businesses are focused on integrating digital capabilities such as social, mobile, analytics, internet-of-things and cloud computing in the service of transforming their business to create value, whereas less mature digital businesses are focused on solving discrete business problems with individual digital technologies.

There are four main findings from the study regarding successful digital organisations:

- Maturing digital organisations build skills to realise the strategy
- Employees want to work for digital leaders
- Taking risks become a cultural norm
- The digital agenda is led from the top

Digitally maturing organisations are four times more likely to provide employees with the needed skills than an organisation at the lower end of the digital maturity spectrum. The private wealth manager should therefore not neglect these aspects when thinking about digitising their capabilities.

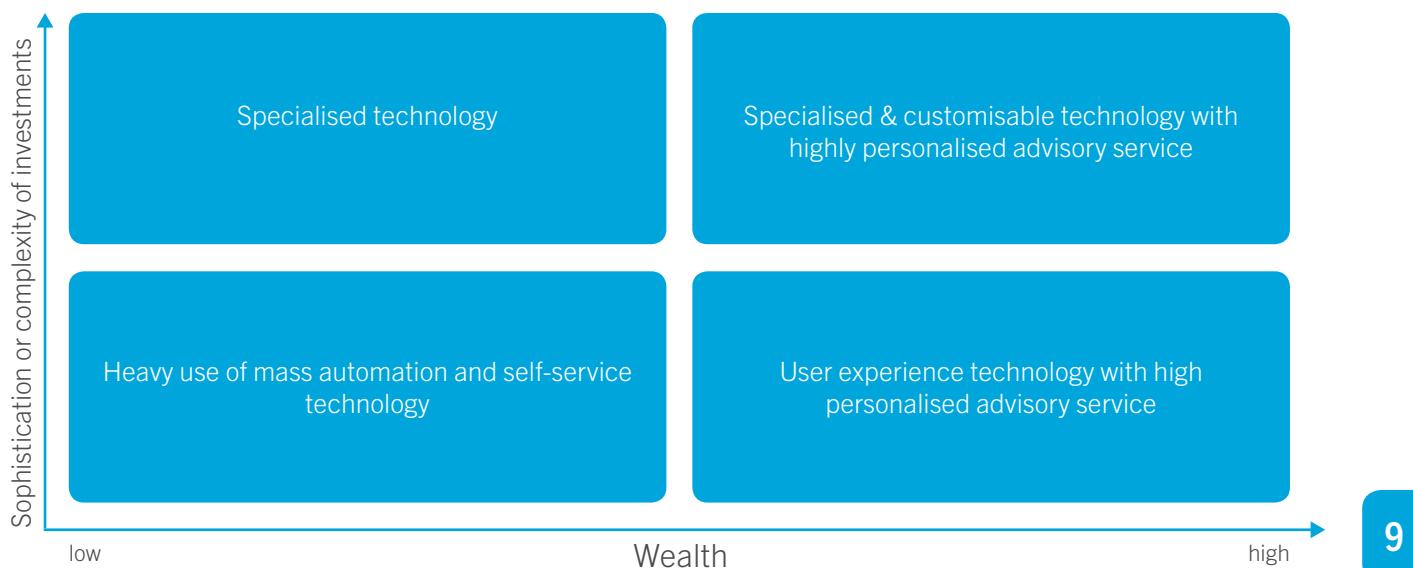
For which clients does digital technology fit?



Another strategic consideration is whether automation and specific technical innovations will actually enhance value for clients. As touched upon earlier, the client landscape is changing, so it is critical to think through how different service offerings will be perceived by different clients. Moreover, the relative cost and return economics of each service offering has to be positioned with clarity.

There are two critical dimensions that are regularly used within private banking when assessing their technology use. The combination of client wealth and the level of client technological sophistication or maturity. Exhibit 3 is illustrative of the starting position several banks have undertaken when considering where to begin with their advisory digitisation. In practice there is a need to drill down further, agree on client segments and build out a clear differentiation for each.

Exhibit 3: Market segmentation implications for technology





What is the impact of digital technology on the industry?

While there are a wide range of technological trends potentially impacting the wealth advisory business model, ranging from blockchain to the internet-of-things, three that are most pertinent are:

- The advent of the robo-advisor
- The heavy investment in fintechs
- The open banking movement

The latter two trends can be seen as highly interconnected, as the emergence of innovative technologies within the fintech community is being fostered by industry bodies and governments to open up banking and alleviate barriers to entry. However, these trends require a deeper discussion and as they are not the focus of this paper, the key question here relates to the impact of the emerging robo-advisors and related automation technologies.



What is robo-advisory about?

It is not clear to many what should be included in the definition of robo-advisory. As the name implies, wealth advice is provided by automated processes without the influence of a human being. Instead mathematical algorithms are used to support investment decisions. It also implies that advice from wealth management services is delivered using online and mobile channels. Effectively, it is an online portfolio management solution that aims to invest client assets by automating client advice.³

However, there is no uniform robo-advisory offer or solution and all differ based on a number of factors:

- **Target Group**
Robo-advisory is fundamentally more accessible than traditional advisory across all wealth brackets. However, it appears most implementations are targeting the mass affluent segment as a way to expand and grow business.
- **Investment Philosophy**
Most robo-advisors are focused only on passive ETF portfolios to maximize cost efficiency for highly diversified, yet small portfolios. With very high volumes it is possible for them to make reasonable margin.

- **Service Level**

Some robo-advisors offer advice by providing suggestions for their investment decisions, whereas others are automatically placing orders based on goal and risk profiling.

- **Individualization**

The number of investor profiles versus risk classifications covered ranges widely. The more classifications, the more investments can be tailored to the investors' needs. But these increases require a more sophisticated and costly solution to maintain.

Moreover, the definitions are muddled as there have been algorithmic automation solutions within portfolio management for a long time in the discretionary services, so many are simply extensions to existing technologies that banks are already very familiar with. Nevertheless, for an increasing set of affluent clients who want to ensure that the core of their investments is kept in low cost, well diversified portfolios, support from robo-advisors can be a strong complementary solution to the more focused and custom wealth advisory.

In addition to the automation of the core investment portfolio are a myriad of emerging technologies used to support and automate the workflow of the client advisor and the client experience. Combined these deliver on today's client imperatives; the desire to be in control, the requirement for transparency and the aspirational digital experience.

Client Interaction and User Experience:

Co-browsing, Video, ChatBots, Mobile, UI Design, VR, Natural Language

Client Acquisition & Lifecycle Management:

On-boarding, Digital Signing, Geolocation, CRM, eDocument Management, Self Service Workflows

Advice:

Robo-advisory, AI based auto-rebalancing, Goal-Based Automation, Data Intelligence and Analytics, Comparative Benchmarking

Innovations in Practice: Goal Based Advisor

An illustration of this is the automation of the goal based advisory approach. The client advisor is able to ensure that their client's investment portfolio is constantly re-balanced to their client's goals, in line with their client's risk tolerance. Complex and lengthy iterations between relationship manager and client portfolio manager can be alleviated, enabling the relationship manager to discuss options in real-time and focus more attention to client relationships.



Is robo-advisory a threat for wealth management?

In the fintech sphere, one of the most prominent buzzwords is robo-advisor. Indeed, when searching Google for robo-advisor it returns 419 000 hits. There are currently more than 100 robo-advisors in 15 countries as of today. The market in 2020 is expected to account for \$2.2 trillion – \$3.7 trillion of Assets under Management (AuM)³. This figure increases to \$16 trillion in 2025, which would account for a larger AuM than BlackRock.

On the other hand, the above figures need to be put into perspective. Looking at the overall AuM in Private Banking and wealth management, robo-advisory currently represents less than 1% of this

wealth, and taking into account the overall wealth projection, this percentage could rise to 3% in 2020⁴. Consequently, it would be wise to say that despite a growing traction for this type of solution, most of the wealth managed by private banks and wealth managers remains with a traditional personal approach when viewed globally.

Clearly the US may be trending ahead of this as some projections estimate 10% to 15% of assets being managed by robo-advisors by 2025⁵. With a particularly stronger 40% uptake among the US millennial population⁶.



Reinventing the advisory model

As wealth managers and private banks enact their digitisation strategies, a number of new models for advisory business can be seen to emerge. The challenge lies in the ability to build such capabilities in a way that still enables agility in delivering client value, while delivering on cost efficiency at the same time.

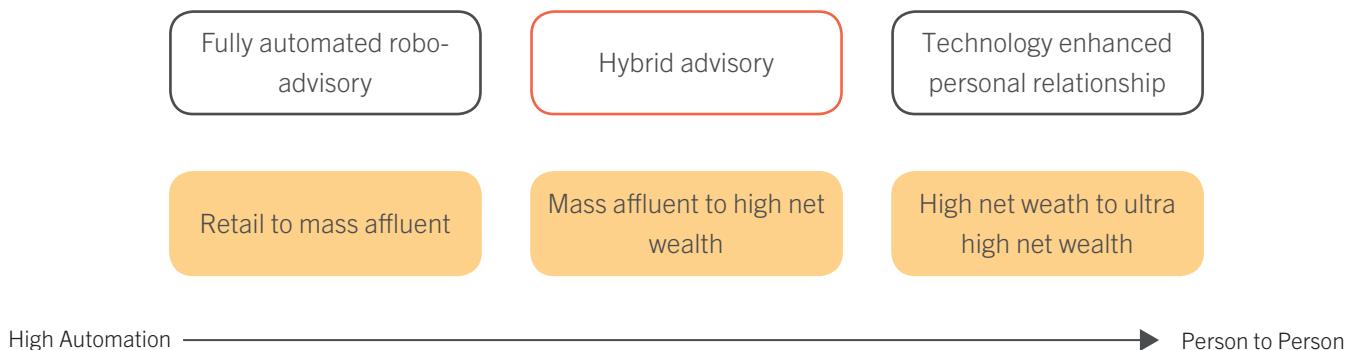
The digital advisory models

Avaloq and Deloitte work with clients who are developing a number of different models of digital advisory. These can largely be split into three main categories:

- (i) The enhancement of the personal advisor relationship with digital technology
- (ii) The automated advisory
- (iii) The hybrid advisor model

All of them do use elements of advisory service automation, but in different ways.

Exhibit 5: Emerging Models of Wealth Advisory



Enhanced personal relationships

Despite the trend to provide automated advice, many wealth managers Avaloq deals with remain focused on a model of direct client contact, with regular meetings supported with more sophisticated modern technologies. Such technologies can include rapid creation of cross-border report sets tailored to the client's goals, which can be used to create interactive presentations of investment during a face-to-face discussion. At the same time they aim at augmenting the relationship with mobility, customised visualisation and interactive communication media. In other words, it is about modernising and reinforcing the personal relationship, not avoiding it. Making use of simple automation and client empowerment technologies as a support to service and relationship enhancement.

Full automation

Actual implementations of full automation in the wealth advisory are still quite rare. But some banks are investing in technologies to provide a fully automated, low touch portfolio management and advice services. At one end of the spectrum this can be seen as a way of providing a service to a lower tier

retail or mass affluent client base. But at the other end, for the higher wealth tiers, this is more about how larger wealth managers can provide core rebalancing services to smaller external asset managers (EAM), family offices and banks who are looking to outsource basic investment management. In this way, the outsourcer can concentrate on specific investment advice and their client relationships.

Hybrid advisory

The most interesting model for wealth managers currently is exemplified by those who have launched a hybrid advisory that does provide a degree of automated advisory services. For example, some wealth managers have defined Gold, Silver and Bronze service level agreements, where different fees (between 40-80bps on AUM) are used to determine the level of monitoring and active management of the portfolio – but still with regular face-to-face meetings. The model also gives clients the flexibility to view and analyse additional services online (e.g. tax reports), as well as ensuring that in-house processes are automated for the advisors themselves.

It is clear that robo-advisors, while having many forms, can play a significant role in a range of wealth management strategies. Whether in a fully automatic, enhanced or hybrid wealth advisory model, an automated advisory capability has become a key question in any digital strategy.



How can banks implement a robo-advisory?

According to Deloitte's study on robo-advisory, there are three main methods of building such a capability:

Build in-house

- A financial institution remains the owner of its data, integrates it in its own system and can manage regulatory changes in line with its robo-advice. Algorithms are publicly available, however, there is a need for scarce skilled resources (e.g. big data, cybersecurity, mathematic, UX specialists)
- Complexity increases in the IT landscape maintenance

- Data feeds are also crucial and it can be difficult to align data quality to fit with robo-advice standards

Work with a fintech

- Out of the box solution allowing fastest time to market and lower entry cost (e.g. low hiring costs)
- Banks benefit from constant updates and alignment with regulations of the provider
- However compliance to local regulations might be weak or missing
- Risks arising from the contractual aspects with the fintech in regards to security and confidentiality
- Data alignment between the robo-advisor's interface and current solutions to be taken into account

Building on current platforms

- Robo-advice in this situation can achieve higher rates of straight-through-processing (STP), automation and cost efficiency benefits
- Less inconvenience in terms of time to market, agility and evolution of service offering, which is in turn less disruptive to existing clients

In short, a collaborative approach with external financial technology companies is likely to be necessary and beneficial. Building on the existing integrated banking platforms may deliver a more holistic client experience, agility and automation. The question then becomes, what are the key aspects of the technology for achieving digitisation?

The common ingredients

Assessment of financial technology can be difficult from a business perspective, as it becomes frequently embroiled in detail and the specifics of the latest functional fad. Whereas, technology decisions have to outlast the current trend of requirements for the solution to be considered an asset which provides real and sustainable value.

To be able to cope with changing models or advisory over time, and allow for trial and error in searching for the right functional mix to serve new markets, technology has to be designed with significant flexibility in mind. Here a distinction has to be made between the agility in the design of the platform, and a platform that enables the business to be agile. Platforms that provide a level of modularity, component switching, and simple interfacing, on a commercial as well as technical level, can enable such agility for the wealth manager. The balance is to ensure that such a service does not just become an empty box of tools, where the complexity in managing disparate functionality leads, once again, to escalating maintenance costs.

A temptation heightened by intense social media attention, is to become focused on the espoused trend or fad, at the expense of the expressed client facing requirements. This is especially true with the current run of innovation. It becomes hard to be sure which capability is a priority. Technology often conflicts in its response, between providing “bleeding edge” point solutions and broad enterprise-wide mediocracy. An approach is to ensure the technology can cover

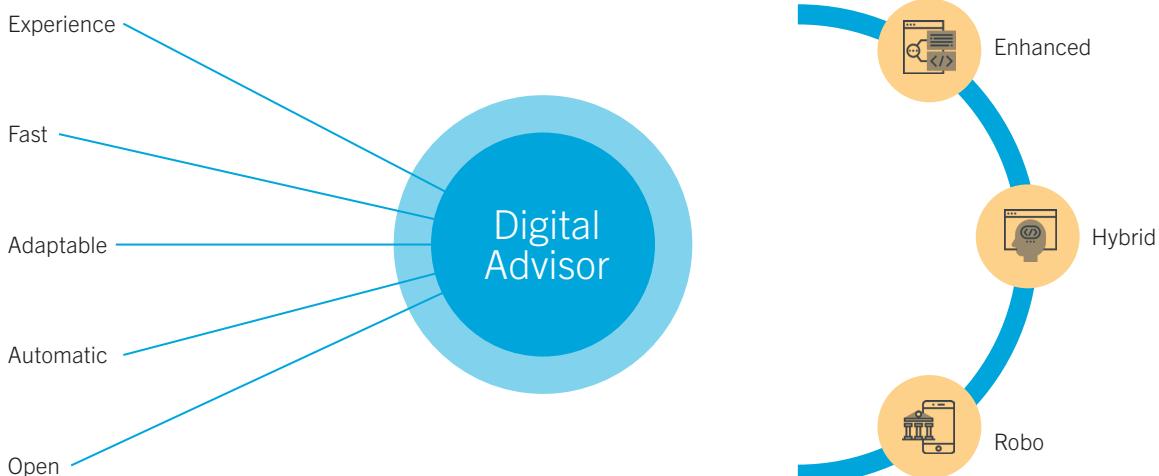
sufficient capabilities of the whole client journey within wealth management, and then pick point solutions. Trying to achieve a balance between ensuring a seamless customer experience throughout, and points of heightened differentiation is, however, challenging.

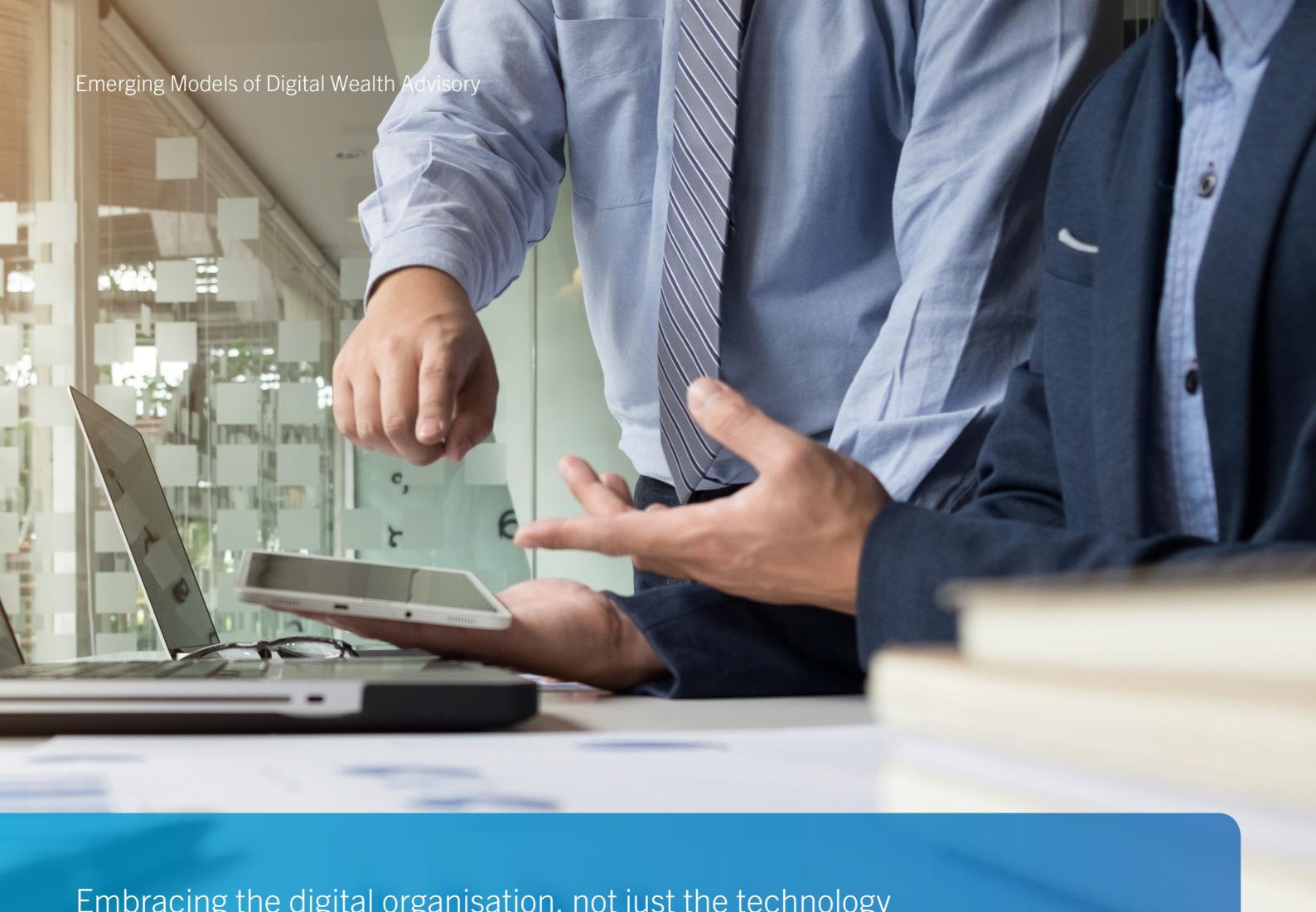
An implication of these expectations, is that there is unlikely to be any one platform that really fits all requirements. Moreover, whatever is decided now, will change. One perspective on this dilemma is to ensure the technology is fully open to external services and technology. In this way, changes can be accommodated without reinventing the whole architecture. The question is how open should banking be? As highlighted above, the route to innovation implies providing easy access to bank platform technology for new fintechs. But there are clear risks involved, both from security and operational perspectives, that need to be overcome. Moreover, wasn't the complexity of internal interface maintenance the very thing that banking industry spent decades trying to migrate away from?

For many banks these risks will need to be mitigated and circumvented. The prospect of not being able to adapt is potentially a higher risk. It can already be seen that banks that have embraced digitisation have the ability to quickly add new service offerings and enter new markets at lightning speed. The concept of dramatically shortening time to market is compelling, even if the implication of providing an open banking architecture does not sit well with private banks' IT and security functions.

A similar dilemma must be faced with the need to automate. The lining up of end to end homogeneous processes across wealth management is clearly desirable to be able to achieve high rates of data throughput, reduce errors and deliver on cost. The drive to increase margin is frequently the strongest imperative for any initiative in this area. The contradiction is that using disparate capabilities from different fintech providers could hinder such ideals of automation. In practice, modern interfacing techniques do overcome many shortcomings of past predecessors. Nevertheless, there needs to be clarity between business functionality that really delivers new or high value, versus components that just reinvent existing capabilities and simply add to the complexity. Specifically the questions are, how much native functionality should a platform have? Does a technology have inbuilt intellectual property around wealth management that can deliver on these business imperatives? Is it capable of adaption, reducing time to market, and deliver cutting edge user experience, while still tackling the need for cost optimisation? Is the technology future proof or a future legacy?

Exhibit 6: Common digital ingredients





Embracing the digital organisation, not just the technology

"Being digital is significantly different from the traditional way of doing things in the financial sector"⁸. It implies a greater adaptability to change, a collaborative workstyle, a distributed organisational structure, customer centricity and finally an exploratory culture which may seem distant from traditional banking culture.

In one example the client openly stated at the outset of their digitisation process, that they were very unsure of which advisory model to choose and the degree to which automation should or should not feature. Clearly in the high net wealth sector the client relationship is highly sensitive, and the idea of disrupting such a position with a trial and error approach was a question of hot debate. What appealed in this situation were solutions that allowed the bank to trial various different set-ups with client advisors and their clients. However, this is a departure from their normal way of implementing solutions. Clearly, this required significant cultural adjustment as they embraced this new iterative, adaptive way of doing things.





There is a clear need to step back and properly assess the strategic imperatives for implementing technology, rather than jumping in without a clear understanding of how clients will react or how to operate in new market segments. A number of new advisory models are emerging, centred on the concept of a hybrid advisor making use of innovative robo-advisory technologies. However, there is still a great deal of uncertainty as to how this will play out and firms need to be able to retain the ability to re-adjust, rather than become stuck in indecision or with a future problem to handle. A degree of trial and error is necessary.

This ultimately implies ensuring technology is able to cope with multiple models of advisory business. That it is open to new fintech innovations and services, and that it can be adapted easily and fast. But of critical importance is that the underlying platforms can actually deliver automation and real operational cost savings, through the front, mid and back office and not just become another bolt-on to existing systems requiring additional IT management.

Digital transformation is not simply about technology, as digitally mature firms view being digital as the combination of strategy, culture and leadership. Banks are competing at various levels of maturity and the wealth management industry often appears to lag behind the digital crowd. There is often a cultural gap which remains high in terms of senior leadership appreciation of the need to adapt and a natural risk aversion reinforced by stringent regulation.



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With its integrated BPO services, Avaloq is the only independent provider for the financial industry to both develop and operate its own software.

Avaloq's growing ecosystem comprises:

- * Over 2'000 employees (FTEs) from 66 nationalities;
- * 3 R&D centres in Zurich, Edinburgh and Manila, and 3 BPO centres in Lugano, Singapore and Berlin;
- * More than 500 third-party developers that co-innovate with Avaloq;
- * 155 banks and wealth managers in the most important financial centres worldwide which have chosen Avaloq technology to manage client assets worth over 4'000 bn CHF;
- * 270 Raiffeisen banks in Switzerland which are served by ARIZON, a joint-venture of Raiffeisen Switzerland and Avaloq with over 300 employees

Headquartered in Switzerland, Avaloq has branches in Berlin, Edinburgh, Frankfurt, Hong Kong, Leipzig, London, Lugano, Luxembourg, Madrid, Manila, Nyon, Paris, Singapore, Sydney and Zurich. More information on www.avaloq.com

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