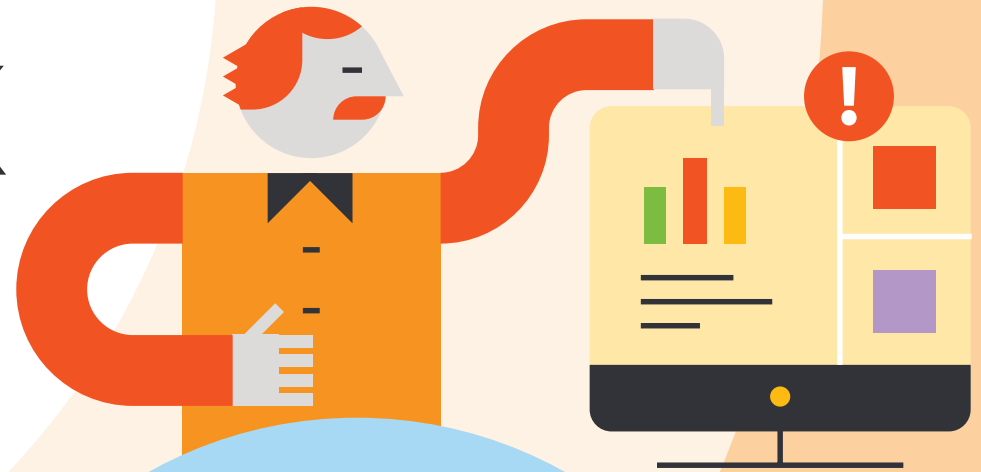


DIGITAL BANKING PLAYBOOK

Transformation Strategies
For A Connected Marketplace



Introducing The Digital Banking Frontier

The primary duty of any financial community is to produce, empower and actualize opportunity. From providing loans to jumpstarting entrepreneurial ventures, banks can provide an arsenal of catalytic tools for businesses and individuals alike to achieve their goals.

This economic importance has forced banks to rely on decades of established structures comprised of strictly defined roles—and in a pre-digital world, it's worked. However, in an economy of constraining regulations, heightened competition and elevated customer demands, it's these legacy systems and siloed operations that are preventing growth and stalling innovation.

To find success in this new landscape, financial organizations will need to look to emerging technologies, like artificial intelligence and machine learning software, to deliver more relevant services in the midst of changing markets. Banks with a digital infrastructure at the core can quickly adapt to changes in the marketplace and provide differentiated customer experiences, effectively establishing themselves as trusted and confident brokers for their clients' and organization's needs.

The keys for actualizing a successful digital business transformation revolve around four key pillars:

1. Engage clients with differentiated experiences that tailor to their personal financial needs and goals
2. Empower employees with tools that can provide accessible, holistic information at their fingertips about individual clients, while meeting critical security and compliance needs
3. Optimize internal operations with synchronized processes and democratized data-sharing
4. Transform products with open and connected systems and real-time predictive digital processes

The influence of technological, cultural and regulatory requirements mandate accelerated change across financial services.

Likewise, the opportunities presented with digital transformation extend to all banking verticals—from retail banking to capital markets. Because these shifts have decentralized banking operations, an agile, digital ecosystem is necessary for institutions to have greater, data-driven intelligence on their customers, markets and internal business processes.

In the **Digital Banking Playbook**, PSFK highlights how digital tools can augment a financial institution's ability to optimize operations and reinvigorate the client experience. Backed by marketplace trends and strategies for successful implementation, we present three scenarios that ground this digital conquest within the contextual framework of today's banking operations. This digital vision presents a new opportunity to deliver unprecedented innovation to the customer, as well as the internal, overarching banking enterprise.



Piers Fawkes
Founder & Editor-in-Chief
PSFK

ABOUT THIS REPORT

The Digital Banking Playbook is a report by business intelligence platform PSFK in partnership with Microsoft that presents opportunities for driving financial institutions forward with an intelligent cloud. Three scenarios highlight how cloud-based solutions can help the industry minimize risk, ensure optimal service at scale and think differently about security, privacy and regulatory compliance. Backed by expert insights and key analyses of global industry trends, the Digital Banking Playbook will guide financial institutions of all sizes as they aim to service a broader range of global clientele.

For copies: psfk.com/digital-banking-playbook



Financial Services Industry Disruptors

SPEED OF THE MARKETPLACE

Accelerated market speeds are placing increased pressure on financial institutions to rapidly respond to marketplace changes. The ability to analyze data in real time and accurately forecast outcomes, alongside having the right internal structures in place to quickly act, is becoming imperative for organizations to remain competitive.

PERSONALIZATION EXPECTATION

The digital transformation of other industries—retail, hospitality, entertainment—is giving rise to mass customization at scale, creating an expectation for products, services and experiences tailored to a market size of one.

INCREASED DATA BREACH RISK

As growth in the number of digital transactions continues and banking infrastructures migrate to a broader range of platforms, financial institutions, their employees and clients face increased exposure to data breaches. Additionally, banks have paid \$280 billion dollars in fines since 2009, indicating an elevated need for expanded, holistic security measures.

RISE OF ALTERNATIVE BANKING SOLUTIONS

Slow innovation by traditional financial players has created opportunities for nimble startups with digital DNA at their core to enter the marketplace. While many lack the scale of incumbents, a compelling mix of personalization, transparency and flexibility have positioned these companies as appealing alternatives to traditional financial institutions.

BALANCING INNOVATION AND REGULATION

Heavy compliance issues and regulations imposed on financial institutions are obstacles to the pace of technology innovation enjoyed by other industries. Because banks have too high cost-income-ratios, they need to optimize cost in order to drive innovation. Organizations must learn to navigate these complexities and position themselves as category leaders to drive meaningful change.



Understanding The Digital Disruption:

Retail Banking

The 'bundled' and less transparent products of traditional banking institutions are proving inefficient for a new wave of informed and always-on customers. Fintech firms, by contrast, are leveraging cutting-edge digital solutions to appeal to consumers—offering hyper-relevant products and services, seamless, multi-channel access and open transparency about fees and operations.

To bring value back to their own platforms, banks must offer seamless, contextual customer experiences across all channels. By reimagining the customer narrative through a digital lens and delivering secure, omni-channel access, banks can deliver highly personal, differentiated services and cultivate trust.

KEY CHALLENGES

- Synchronizing customer experience across multiple channels—online, mobile and physical branches
- Reversing the decline in customer loyalty and engagement
- Ensuring secure and seamless digital transactions and protecting customers from fraudulent activity
- Developing innovation and cross-channel efficiency at scale within a legacy system environment
- Adapting to regulation and compliance costs which inhibit agility
- Building trust with customers who demand transparency and enabling two-way conversation channels
- Creating platforms and services that cater to customer expectation for personalization, security and convenience
- Managing costs associated with customer acquisition and new product development
- Extracting additional value through personalized products and services
- Evolving traditional legacy systems, company culture and processes

SUPPORTING INSIGHTS

50.2% of global consumers do business with at least one non-traditional banking firm.

Capgemini And LinkedIn WFTR Voice Of The Customer Survey, Capgemini Financial Services Analysis, 2016

11% of consumers left their bank in the past year—and consumers switching to virtual banks is at double-digit levels.

2016 North America Consumer Digital Banking Survey, Accenture Consulting, 2016

“Banks can’t choose between digital and physical retail channels; rather, they must focus on how the two work together.”

Jim Miller, Senior Director of Banking, J.D. Power

20% of financial institutions are now launching or considering launching a digital bank as a parallel bank to the existing operation.

Efma Review: 2017, Efma, 2017

“Banks and credit unions of all sizes are not prepared to combat the increasing encroachment by fintech startups that focus on making every stage of the customer journey easy, seamless and contextual.”

“Why Fintech Firms Are Winning The Battle For Digital Consumers.” The Financial Brand, 2016

Innovation Strategies For Retail Banking

DEVELOP CONVERSATIONAL INTERFACES

Financial institutions can deploy digital assistants to convey crucial financial information in natural, conversational language to consumers who need quick resolutions to common problems or requests. These services, often integrated into existing digital platforms, help customers make financial decisions in less time and are able to adapt to their real-time contextual needs. Conversational tools can also solve menial customer requests and liberate human counterparts to take on a more personalized, active role to their customer service.

ENABLE OMNICHANNEL PAYMENT EXPERIENCES

Customers are seeking cross-channel access to their finances based on their unique preferences or circumstantial conditions. To empower customers to choose their preferred channel, banks can use APIs to integrate financial tools into partnering platforms, which allow users to complete a payment experience without leaving a provider or losing data. Untethered and unrestricted engagement allows increased customer satisfaction and positions the bank as a lifestyle partner.

OFFER HOLISTIC CREDIT EVALUATION

AI-enabled tools and services can help banks provide a more behavioral-based assessment of the creditworthiness of potential customers. By augmenting traditional credit evaluation methodologies with additional indicators of reliability, financial advisors can grow the list of customers they are able to serve. While AI-assistants can forge predictive and preventative solutions for instant credit scoring services, clients can receive tailored service and recommended products from human banking associates.

PROVIDE BIOMETRIC AUTHENTICATION

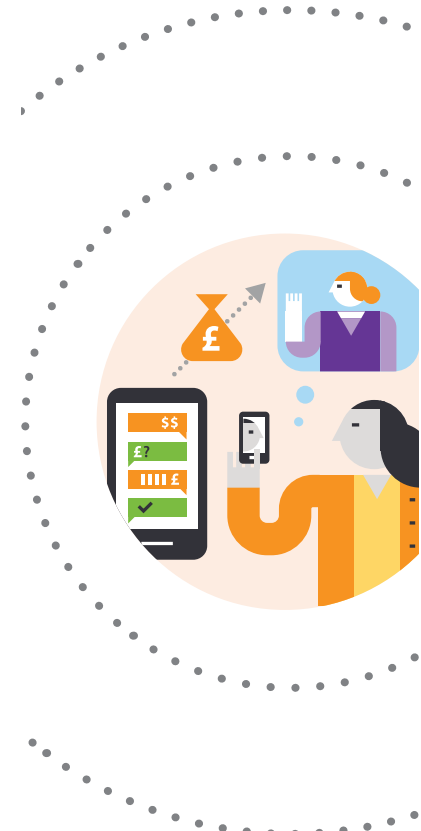
With today's uninhibited, always-accessible digitization, a complex password or security code doesn't always ensure optimal security. To better protect investments and financial portfolios, banking institutions are employing security features that leverage personal biometric characteristics to authenticate access to financial information. Financial systems are verifying customer identity through voice activation, fingerprints and other visual cues to provide better security measures, with an added convenience for the consumer.

CREATE AN OPERATIONAL ECOSYSTEM

As consumers grow more comfortable with ambient technologies within their homes, automobiles and daily routines, banks must partner with third-parties to integrate financial processes, services, content and data into the consumer ecosystem in a secure and reliable way. By assuming a role in a user's connected routine, a financial institution can securely communicate and learn from consumers in their most natural environments.

DELIVER PROGRESSIVE TRANSPARENCY

Financial services can build trust and gain consumer loyalty by inviting consumers to take a look at their internal operational structures and fee litigation. By using clearer messaging, visible fee structures and even allowing customer input into product and service development, customers will feel more comfortable relying on a bank to handle all their financial needs.



Quick Win Initiatives

CUSTOMER EXPERIENCE

- Gain actionable customer insights to enable higher-value client relationships and personalized banking experiences. Deepen your understanding of each customer by tracking the details of every interaction—whether in person or via phone, web, mobile, email or social media—to deliver contextual, connected experiences
- Customize experiences with personalized financial guidance, service, and offers. Increase customer satisfaction and improve upsell and cross-sell performance by engaging customers with personalized financial guidance and next best offers
- Democratize artificial intelligence and make it valuable to everyone. Benefit from built-in intelligence, based on deep learning technology, with solutions that see, hear, speak, and understand customer needs and emotions using natural methods of communication

RISK MANAGEMENT

- Develop tools and content that help customers understand the components that determine their risk profile; build client trust by offering transparent risk assessments and recommendations to improve creditworthiness
- Leverage AI to explore alternate indicators of creditworthiness like purchase behavior, social media activity, job history and other components of personal data to support a more holistic risk assessment
- Use cloud technologies to reduce the time needed to gather approval for loans and reduce processing time, reducing total cost and enabling banks to reach a broader range of potential consumers

SECURITY

- Determine what points of the retail banking process, from cash withdrawal to transaction authentication, are the most vulnerable for security flaws and fortify them with enterprise-grade encryption and biometrics
- Leverage AI assistants to detect, compile and aggregate patterns of suspicious behavior that could indicate financial fraud
- Build consumer trust by proactively educating clients in best practices to protect themselves from security breaches, while communicating your security initiatives

MICROSOFT SPOTLIGHT: INNOVATION IN ACTION

UK-based retail bank **Metro Bank** partnered with Microsoft to fully optimize their customer service delivery. By leveraging **Microsoft Dynamics 365 platform**, Metro Bank's employees are empowered to answer their customers' needs with easy access to information. Because Metro Bank's goal is to provide optimal customer convenience and omnichannel access, they also use **Dynamics 365** to streamline customer interaction. Additionally, **Power BI** allows employees to identify and address problems before they interfere with the customer experience. By making Microsoft solutions an integral part of its employee operations, Metro Bank is transforming the customer experience.

bit.ly/2uvy5wb

Scenario: Fluid Consumer Banking

INSIGHT

Mobile-first, global lifestyles and uncertainty towards financial institutions are causing consumers to seek alternatives to traditional banks. To change the relationship they have with their customers, banks are evolving to deliver greater transparency and offer services that align with current consumer behaviors and needs.

Mary currently uses a larger bank but wants to switch to a digital-only bank to have greater access to her financial assets. This new bank would allow Mary to access financial services through a range of platforms, partners with frequently used commercial services and prioritizes transparent communication at every step.

- 1 Mary submits an application to the digital-only bank. She is approved based on her employment history, patterns of transactions and social media activity.
- 2 While shopping, Mary decides on a dress to purchase and is presented with a bill. Because Mary's bank analyzes her purchase patterns, they recognize that this transaction is atypical for her and alert her via a mobile app.
- 3 Mary is able to authorize the transaction through her bank by scanning her fingerprint.



RETAIL BANKING

4

Afterwards, Mary goes out to dinner. She realizes that she forgot to transfer money to her daughter Patricia, who is doing a semester abroad in the UK.

5

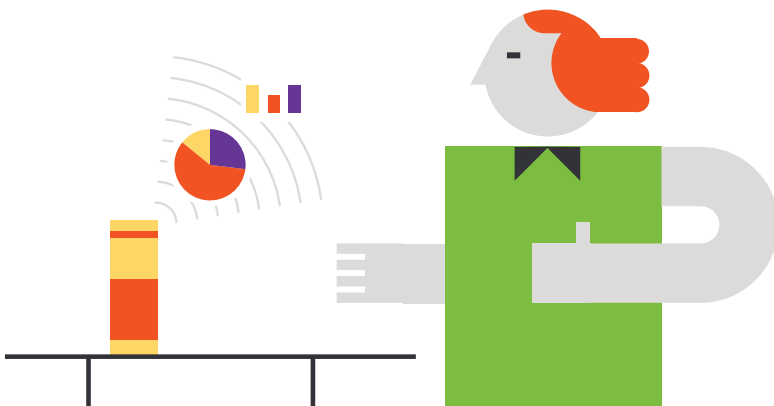
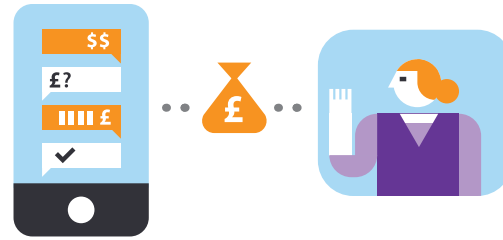
She uses Facebook Messenger to ask her bank to initiate the transfer.

6

The bank's AI chatbot responds and asks Mary to authenticate her identity by sending a selfie.

7

Once Mary sends a selfie, the AI chatbot approves the transaction.



8

Mary asks for a check when she finishes dinner. The waiter sends the check to her phone and she approves the charge by scanning her fingerprint. The waiter receives a notification that the bill has been paid.

9

While driving home, Mary's AI assistant, which is integrated into the car system, reminds her of upcoming bill payments; she requests to pay them from her car. The in-vehicle AI assistant verifies her identity via her voice and the bank verifies her payment.

10

At the end of the day, Mary is able to access a summary of the day's transactions on her desktop, mobile devices and at-home voice assistants.

Understanding The Digital Disruption: Investment Banking

With extremely high regulatory scrutiny and increasing complexity in managing risk, it is an unprecedented time for the financial industry. The industry also continues to face margin pressures, while requirements for increased capital reserves and liquidity are central to a bank's freedom to fund new market opportunities.

To improve operational efficiency and risk management capabilities, investment banks are moving to cloud-based solutions. In doing so, they can derive more sophisticated data insights, streamline operational efficiencies and improve security, while designing with agility-first, new business models.

KEY CHALLENGES

- Addressing structural cost by creating an agile infrastructure that can respond to evolving market trends and regulatory requirements
- Improving the efficiency and speed of collaboration between bankers across departments to employ the expertise of colleagues
- Optimizing compute capacity based on real-time needs and usage to ensure proficiency of risk models
- Increasing bankers' mobility resources for remote, secure, private and compliant access to their working platforms
- Upgrading legacy systems to more effectively gather, analyze and contextualize a wide range of data
- Quickly deploying new, innovative products and services to deliver more value to clients
- Scaling computing resources to optimize risk management and meet a continued evolution of regulatory requirements

“60% Capital Markets institutions say that cloud-based entrants will challenge traditional industry models.”

“Top 10 Challenges For Investment Banks.” Accenture, 2017.

“Capital markets and investment banking firms invested heavily in digitizing their front offices years ago because there was a commercial imperative to do so. While ROEs were high, there was less of an immediate need to innovate in the back office. That is no longer the case. The business model is changing, and we have to find new ways to reduce structural costs and simplify our architecture. We have to innovate, and we are engaging our people at every level in the organization in the innovation agenda.”

Anthony Woolley, UK Chief Information Officer, Société Générale

Source: EY-Capital Markets-Innovation

“Our industry is going through a transformational time, driven by competition, regulation and advancements in technology.”

Daniel Pinto, CEO of the Corporate & Investment Bank, J.P. Morgan

Source: EY-Capital Markets-Innovation

“We are at a point where we have an opportunity to reposition financial services. With the technology available, we can change the way transactions are done, reducing costs from dollars to pennies. Through collaboration, we have the opportunity not only to revive businesses that have died, but also to create new ones that haven't even been thought of.”

David Rutter, Founder and CEO, R3 CEV

Source: EY-Capital Markets-Innovation

Innovation Strategies For Investment Banking

CREATE PERSONALIZED EXPERIENCES AT SPEED

With ever-increasing market speeds, the ability to predict the efficacy of an investment becomes more difficult. By leveraging artificial intelligence and data farming tools, financial institutions can more quickly identify risks associated with trades or investment opportunities. These systems analyze patterns in local contexts, global policies and other market fluctuations to provide a thorough analysis of the risks associated with investment decisions, assess trade values or make the trades on their own, all at the speed of the market.

ENABLE A MODERN WORKPLACE

By providing a modern workplace, firms can ensure that staff are always able to access secure information and contribute to in-the-moment analyses. Internally, employees are able to collaborate and make better-informed decisions that are based on real-time data, increasing accuracy and expediting processes. Intelligent virtual assistants can automate tedious and time-consuming tasks, allowing bankers to concentrate on servicing client relationships.

OPTIMIZING RISK MANAGEMENT & COMPLIANCE

To expedite compliance preparation and regulatory requirements when underwriting mergers, acquisitions and trading portfolios, regulatory teams can incorporate cloud-enabled tools into their existing systems to run risk models, complete stress testing and ensure compliance. Technology such as blockchain provides a secure way to exchange information between multiple participants that need to approve deals and transactions, saving time and streamlining processes to reduce operational costs.

EMBRACE THE API ECONOMY

In order to survive in today's rapidly changing financial markets, bankers need to focus on product and service innovation—at a macro, enterprise-wide scale. Although traditional financial institutions have been siloed and self-sufficient, bankers must collaborate with third-party technology developers to compete and expand service offerings. By embracing an open financial ecosystem, they can unlock new investment opportunities for their clients and drive growth.



Quick Win Initiatives

CLIENT CENTRICITY

- Provide personalized experiences by transforming customer data into next-best actions, ensuring long-term client relationships
- Put the client at the heart of everything with a 360-degree view of their needs

BANKER PRODUCTIVITY

- Offload preliminary research and modeling responsibilities to machine learning technologies to reduce computational times and better use staff time
- Build a mobile workforce by offering employees secure access to real-time information from any device
- Encourage inter-departmental collaboration via cloud-based workstream platforms, which share up-to-the-minute information and updates to expedite document preparation, compliance review and regulatory approval

ADVANCED RISK ANALYTICS

- Invest in cloud-based risk compute capacity to improve modeling accuracy and evaluate risk more efficiently
- Create omnipresent, simplified dashboards that help teams monitor risk exposure in real time and incorporate risk analytics as part of their everyday activities

REGULATORY COMPLIANCE

- Migrate computational systems to the cloud to protect client, transaction and institutional data
- Analyze current internal data-sharing systems and determine which steps are most vulnerable to threats; compartmentalize these areas to create an infrastructure that responds more quickly without compromising the entire operation
- Reduce the compliance burden by analyzing internal and market data on an ongoing basis, in order to identify fraud patterns and offer enhanced security through real-time fraud analytics

MICROSOFT SPOTLIGHT: INNOVATION IN ACTION

Mitsubishi UFJ Securities International plc, a member of MUFG, a global financial group, is committed to serving its clients best-in-class financial solutions, while adhering to the high standards needed to support the new regulatory landscape. In order to house the volume of data needed to compute its risk calculations, MUFG moved its on-premises, high-performance computing grids to **Microsoft Azure**. By offloading its daily risk assessments to Azure, MUFG can ensure agile risk computations at scale, while optimizing security for both its firm and client data.

bit.ly/2wxt19C

Scenario: Managing Investments Against Unexpected Market Events

INSIGHT

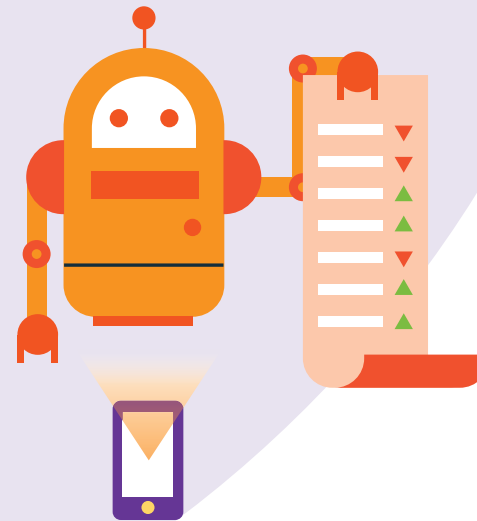
By leveraging deep data insights and AI-powered advisory tools, banks can provide faster, more intelligent advice and execution capabilities to their clients. These intelligent digital tools improve accessibility for sophisticated investment management to allow users to deal with unexpected and volatile market events swiftly and effectively.

Karen is an ultra high net worth client traveling from London to New York.

1 Karen, who holds investments in Japan's energy sector, receives an alert on her mobile device from her bank's AI-powered investment bot that Japan has issued a tsunami warning after detecting offshore seismic activity.

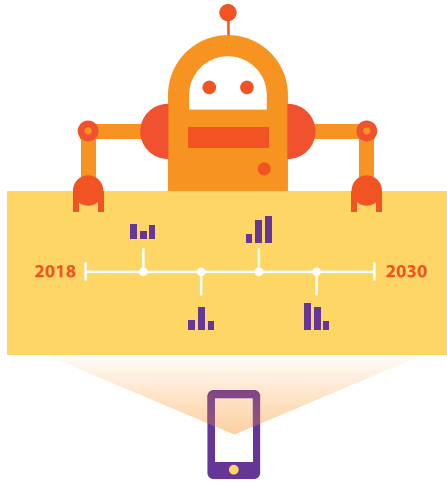
2 The bot sends Karen a detailed summary of the situation and risk, loss and effect imposed.

3 The virtual bot automates a risk simulation of possible strategies that Karen should pursue based on her personal finance profiles—financial history, investment behavior and wealth goals.



4

The bot also forecasts how each strategy could evolve over time by conducting an analysis of contextual market data.



5

Karen decides to follow through on one of the bot-recommended investment strategies and executes her trades.

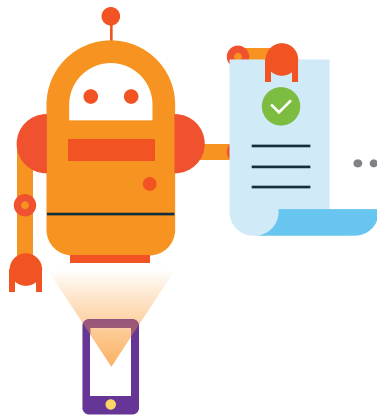


6

The transactions are assured with blockchain to optimize secure legibility for audit purposes.

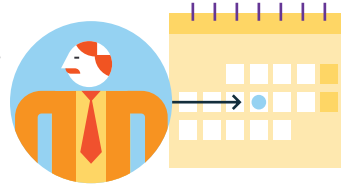
7

The bot automatically generates the required compliance documentation.



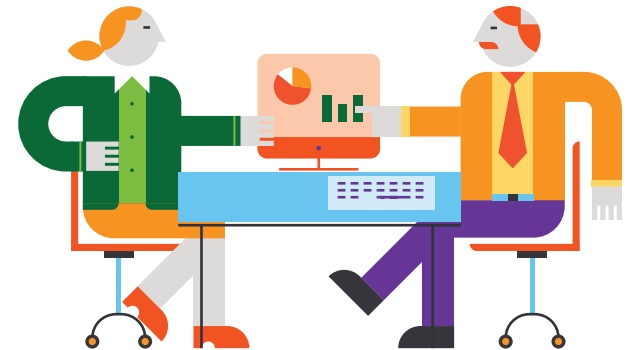
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The AI-powered investment bot also coordinates a follow-up appointment for Karen with her relationship manager to discuss the long term effects of the market event.



9

The bot augments the meeting preparation undertaken by the Relationship Manager by providing contextual and personalized guidance.



Understanding The Digital Disruption:

Wealth Management

Greater access to financial information and digital investment platforms have lowered the barriers to markets, allowing a broader subset of customers to become their own financial advisors, while streamlining the way that all audiences interact and monitor their portfolios.

To maintain relevancy, financial institutions must determine how to address the needs of different segments and communicate their value. By utilizing technologies such as augmented intelligence and real-time collaboration, bankers can become the ultimate digital concierge, anticipating customer's needs and goals and connecting them with the tools and opportunities to succeed.

KEY CHALLENGES

- Integrating with emerging technological and digital channels to deliver new client value and differentiate from competing services
- Reorganizing internal processes and appropriating spending to areas of the business that drive future growth
- Providing personalized financial management at scale based on different customer needs
- Develop differentiated deep-client services for Ultra High Net Worth Individuals and High Net Worth Individuals clients and Mass Affluents demographics
- Improving service agility and speed to respond to real-time requests or market factors
- Optimizing customer profitability and turning customers into loyal advocates

SUPPORTING INSIGHTS

60% of asset and wealth managers think that at least part of their business is at risk to Fintech.

2016 Global Fintech Survey, PwC

69% of high net worth individuals (HNWIs) are now using online/mobile banking but only a quarter of wealth managers currently offer digital channels beyond email.

2016 Strategy & Global Wealth Management Survey, PwC

90% of the asset and wealth managers identify increased data analytics as the most important trend for the next five years.

2016 Global FinTech Survey, PwC

“The industry is already racing to maximize productivity. How many assets under management can you manage as a financial adviser? Even in the high-net-worth environment, you have to think about how much you can automate and drive efficiency while not losing that personal touch.”

Oliver Bussmann, Founder & Managing Partner, Bussmann Advisory

“We believe that the firms that can get organized around their data, understand and are able to research what all those data are telling them and predicting can ultimately invest in a way to create better returns for clients.”

Jody Kochansky, Head Of The Aladdin Product Group, BlackRock

Innovation Strategies For Wealth Management

OFFER MACHINE-AUGMENTED MANAGEMENT

Using machine learning systems to support advisory services enables a higher quality of advice at a significantly lower cost to the firm. Wealth and asset managers who offload routine tasks such as preliminary data collection, research and compliance adherence to robo-advisors can focus on preparing more premium strategies and packages for each high net worth client. AI services also allow firms to offer a broader range of financial services for audiences in different income brackets.

AUTOMATE PORTFOLIO OPTIMIZATION

Until now, the pace of portfolio optimization has relied on human effort; now, digital and algorithmic programs allow firms to respond more quickly to economic, global and market trends and optimize returns for clients. Intelligent money management systems that track contextual indicators and automatically adjust portfolios offer a more responsive level of service to clients without straining staff.

IMPLEMENT PREDICTIVE ANALYTICS

A portfolio's performance is subject to a variety of market factors; AI services, together with predictive analytics, can track multiple macro- and micro-economic indicators, regulatory trends and social sentiments to produce insights and timely advice, which managers can leverage to make portfolio recommendations or help customers build the right financial management solutions for their lifestyle.

PROMOTE PROGRESSIVE TRANSPARENCY

In order to retain top clients and gain new customer loyalty, wealth managers must reevaluate their internal operations and messaging to give customers more insight and control over their financial management. Firms should consider incorporating clearer messaging, preemptive communication, transparent fee structures and even channels for customer feedback on product development. By addressing client concerns and incorporating their ideas, firms can efficiently appropriate spending toward products and services that meet client needs.



Quick Win Initiatives

CLIENT EXPERIENCE

- Facilitate an anywhere, anytime client relationship by building secure wealth management tools into consumers' preferred social and digital channels
- Identify how contextual factors, like a change of career or a death in the family, might affect clients' wealth management decisions; partner with services that can predict and communicate these touchpoints with clients
- Consider how sharing aggregated portfolio updates directly with consumers, such as a daily mobile update or digital debrief, can help them feel in control of their investments
- Stratify investment tools by level of automation in order to offer a wider range of solutions to a greater audience

RISK MANAGEMENT

- Mitigate risk by running investment simulation models that utilize real-time global market data to more accurately predict portfolio performance and adjust as needed
- Create a flagging compliance system that uses data insights from previous trades and investments to automatically mark potential irregularities to reduce the risk of non-compliance

SECURITY

- Enable software-supported portfolio management tools to offload day-to-day tracking, compliance and risk management from analysts
- Reduce compliance burden and associated costs by ensuring that customers' devices and digital management channels are secure

MICROSOFT SPOTLIGHT: INNOVATION IN ACTION

South Africa's **Nedbank** built an artificial intelligent, cloud-based bot that allows the bank deliver enhanced customer service using **Microsoft Bot Framework**. Nedbank can not only provide better service at a lower cost, but expand its individual investor business without straying from its broker-based financial services. Through the **Microsoft Azure Language Understanding Intelligent Service**, Nedbank's Electronic Virtual Assistant (EVA) can meet their client's specific needs and respond aptly to context-dependent situations. Since its deployment, the EVA has been able to respond to 80 percent of client inquiries at 10 percent of the traditional cost of live agents.

bit.ly/Microsoft_NedBank

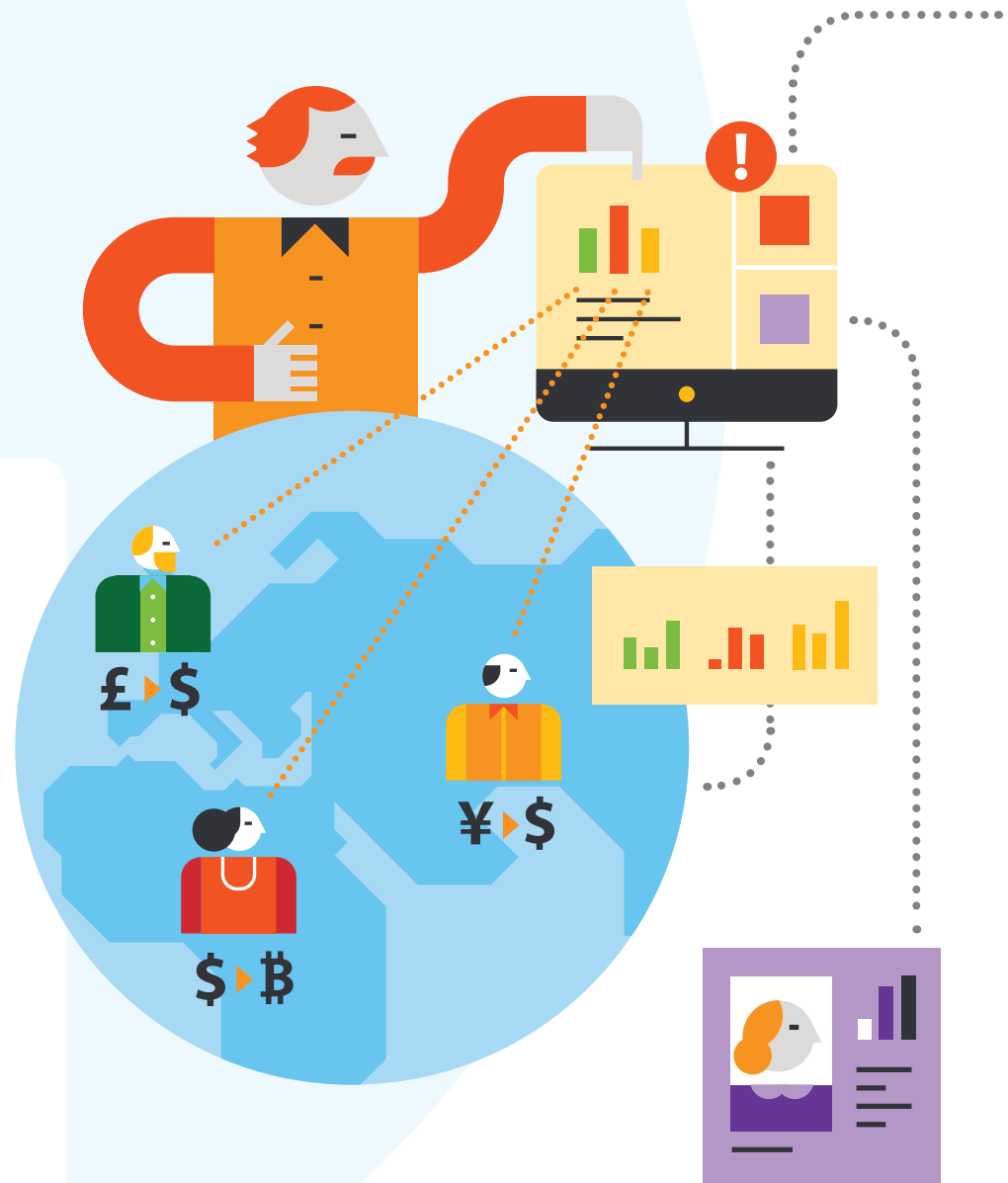
Scenario: Catalyzing Wealth Management At Scale

INSIGHT

In order to grow their customer base, financial service firms must develop a range of differentiated packages to complement their clients' budgets and levels of assumed risk. By matching offerings to a client's needs and parameters, financial institutions can prevent customer attrition and optimize their return on each client relationship.

Peter, a relationship manager for a wealth management firm, wants to offer his services to a broader scope of customers by promoting an artificial intelligence platform that includes tailored investment portfolios, on-demand services and intelligent forecasting models, personalized for each customer.

- 1 Peter begins his day by reading the latest client investment reports generated by the platform. They provide an analysis of the week's investment performance, a combination of trades that had gains and losses, and the analytical predictions based on collected contextual data.
- 2 Peter makes adjustments to his client portfolios based on the platform's predictive suggestions, which Peter approves. The system then generates updated investment reports and sends them to portfolio-holding clients.
- 3 While checking in with his clients, Peter's personal dashboard notifies him of a new client assignment from his manager, displaying aggregate information about the client's personal information, past investments and investment preferences.





- 4 In tandem, Peter receives an alert that the Japanese yields are rallying (dropping/decreasing). His dashboard compiles a list of eligible clients who are seeking leveraged carry trades funded in JPY for a power reversal dual-currency note.
- 5 Peter sends the client list to his manager for approval and compliance documentation.
- 6 While Peter awaits approval, he runs an analysis on the new client through the AI-based system and generates a report of various investment portfolio options that display a combination of the investments based on the client's data.
- 7 Peter sends three possible investment combinations to the client. All three reports are personalized for the client and use straightforward language and visuals to demonstrate the investments and their predictive performance.
- 8 The client receives these reports and, after studying them, approves a portfolio that provides the most return on her investment. Peter receives a notification of her approval.
- 9 Once the client approval is received, the system populates compliance documentation and delivers these notices to various departments for approvals.
- 10 Meanwhile, the manager approves Peter's suggested client list for the new derivative product. Peter is automatically notified through the system and forwards the portfolio option to the client list.
- 11 While the new client's approvals are going through the system, Peter sets up her investment parameters on the platform. The trades are automatically executed after other departments approve the document.
- 12 The client receives a confirmation that her investment portfolio has been set up and gains access to a suite of tools to manage it. Peter is able to set up a tax plan during a face-to-face interaction on Skype For Business.

Final Takeaways: Technologies Influencing The Financial Industry

ARTIFICIAL INTELLIGENCE

Artificial intelligence enables financial institutions to drive a new era of agility and innovation, with built-in intelligence based on deep learning technology and solutions that see, hear, speak and understand customer needs and emotions using natural methods of communication.

MACHINE LEARNING

Sophisticated algorithms are capable of analyzing vast troves of data to make novel connections and extract insights, which can be leveraged to make unbiased decisions on a customer's creditworthiness, develop new financial products and respond to and even predict changes in the marketplace.

CLOUD-BASED INFRASTRUCTURE

The identity, analytic, compute, database, mobile, networking, storage and web services provided in the cloud creates a unique platform of technologies that allow organizations to focus on the swift creation of customer value. A cloud services model negates the need for large capital expense that stands up the infrastructure and minimises operational overhead and ongoing costs.

BLOCKCHAIN

Blockchain provides a rapid, low-cost platform to enable financial institutions to collaborate with new business processes. It offers an open, transparent and publicly verifiable system that will fundamentally change the way financial institutions think about exchanging value and assets, enforcing contracts and sharing data across industries.

THE API ECONOMY

Application programming interfaces (APIs) enable you to deliver more connected experiences to customers, enabling faster product and service innovation with low cost and low risk. Financial institutions can quickly extend processes, services, content and data to partners, mobile experiences and third-party developers in a reliable and highly secure way.

RESPONSIVE SECURITY SYSTEMS

As financial institutions move their operations to the cloud, systems become more vulnerable to security breaches. To protect consumer and institutional data, investing into flexible and agile security solutions is a must in order to respond rapidly to security threats.



About PSFK

PSFK is the world's leading provider of innovation insights. Since 2004, we have offered the tools, content and advice to inspire creative professionals to make better products, services and experiences.

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