Malastare AI Digital Banking Presented by Rihad Variawa

Contents

00. Introduction

Revolutionary times

New digital first competitors

01. Pillar 01 **Omni-channel banking**

An outdated approach

Turning the ship around

Getting the best out of the core

Get mobile banking right

Journey design never ends

Owning the experience

02. Pillar 02 **Modular banking**

Lego-style building blocks

Agile processes

Agile innovation

Continuous Integration, Continuous Deploy-

ment

Agile distribution

03. Pillar 03 **Open banking**

Composite applications (mash-ups)

Consuming open APIs

From banks to platforms

Make time for API strategies

The open network economy

04. Pillar 04 **Smart banking**

One size no longer fits all

It's all about Big Data

Al and machine learning - making sense of it

all

Enhancing the human elements

Next generation sales

Towards Cognitive Banking

Improved retention rates

05. The digital-first banking platform

About Backbase

Backbase named leader by analysts



Introduction

When today's customers evaluate financial institutions, they don't compare different banks anymore, they compare experiences. Everything in their lives as consumers is better than ever, with real-time, smart digital services being delivered daily via their smart-phone. Booking a flight, planning a holiday, shopping online - it's all easy, instant and seamless. Onboarding takes a few clicks and more importantly, unhappy customers can switch providers in a heartbeat.

Smart digital platforms power these superior experiences and this digital-first model has changed the game forever. There has been a fundamental shift in how business gets done, where staying relevant means becoming an active part of a customer's digital life.

Banks are already operating within an entirely new financial services industry and they must transform their business models to respond and stay relevant. In doing so, they have four key pillars for success at their disposal - omni-channel banking, open banking, modular architecture, and smart banking. This paper outlines these four pillars, and their importance in preparing for the banking industry of 2025.

Revolutionary times

What we are seeing in our time is unique - we are witnessing platformization. Huge companies like Google have won because they don't merely provide products or services. Instead, they aggregate a range of products and services to create a digital-first platform that enriches people's lives. Having created it,

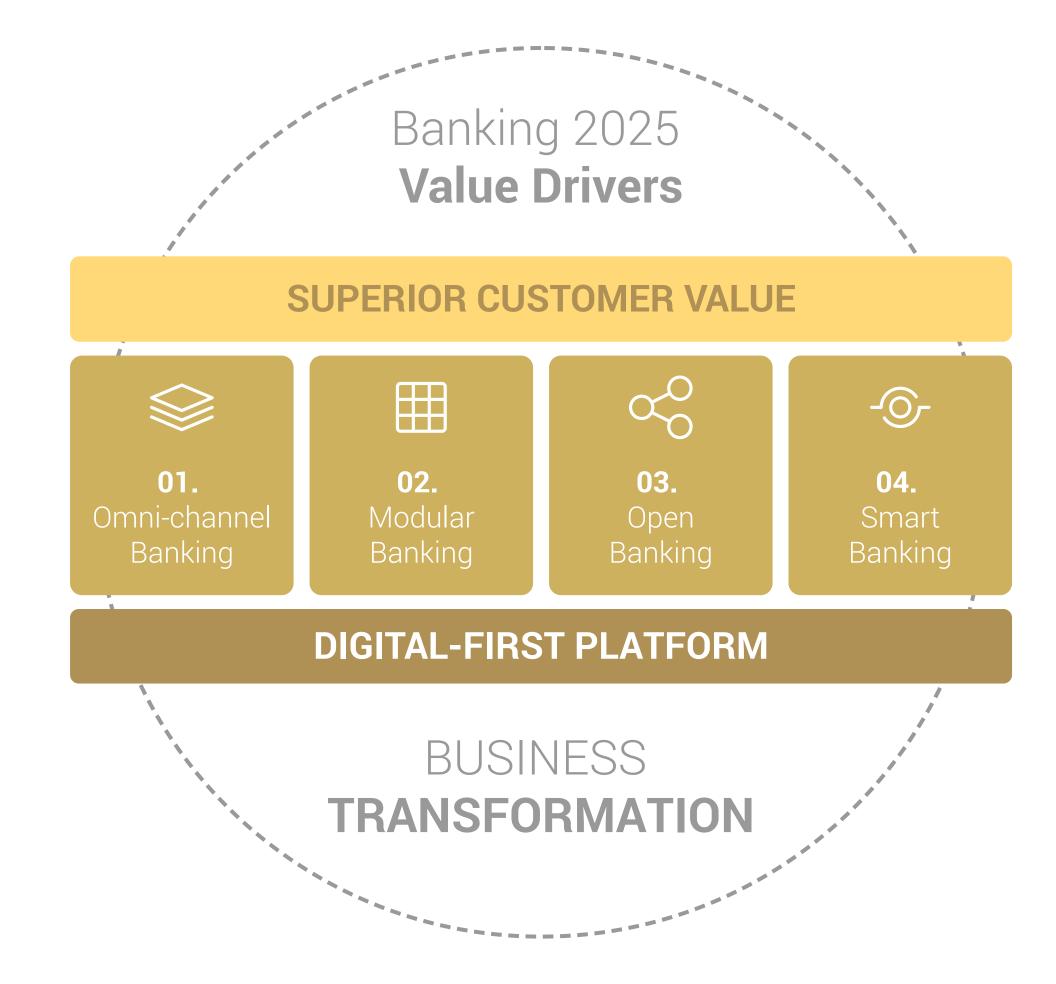
they constantly innovate to make it more sophisticated.

Back in the days when Microsoft was the disruptive innovator who ruled the desktop, they would never have imagined Apple would return from obscurity with such impact. iOS came along, moved us off the desktop and made us mobile. People could now achieve their goals with something as small as a smartphone, operated by fingertip. Microsoft suddenly ruled a world that had become less relevant they had not prepared for the mobile operating system that Apple created.

The 4 pillars of Banking 2025

To survive when giants like Google make their way into people's financial lives, banks must have the right framework in place to compete. This framework is the digital-first platform, supported by four pillars - omni-channel banking, smart banking, modular banking and open banking. Each of these four pillars is fundamental to success in the banking industry of the future.

1_A strong digital banking platform is supported by its four pillars; omni-channel banking, modular banking, open banking and smart banking. It is the key to driving value and transforming the business for banking 2025.





01. Omni-channel banking

Where channels are streamlined and optimized to ensure superior customer journeys over any touch-point. One central orchestration hub coordinates the addition of new features and powers frictionless experiences on any device.



02. Modular banking

Where the system architecture is made of a series of reusable, Lego-style digital building blocks. Functionalities can be reused and swapped around as needed and banks can react to market changes quickly and easily.



03. Open banking

Where the bank uses open APIs to connect internally and to third parties. Banks can connect to other organizations via open APIs and therefore tag new experiences and value onto their own products and services.



04. Smart banking

Where smart technologies like AI and machine learning gather, analyze and mine data to drive highly-personalized customer interactions, boosting sales and retention.



Every industry is filled with examples where myopia has been fatal, where companies did not prepare for the rise of digital platform that would change the game forever. Nokia, who brought the mobile phone into our lives, has battled to regain relevance since Apple took over this space. The home video industry did not prepare for Netflix. Kodak saw digital coming, but did not mobilize quickly enough. In every sector, digital is king, and organizations that don't react, or do so in a non-committal way, just won't make it.

Financial institutions have seen this change happen around them, yet many still have the traditional operating system in place. Their current setup was grown from bricks and mortar, checkbooks and batch processing - all components of a framework that is becoming obsolete. It cannot and will not guarantee survival into the next decade. Sounds like a scary proposition, but it's a very real one.

New digital-first competitors

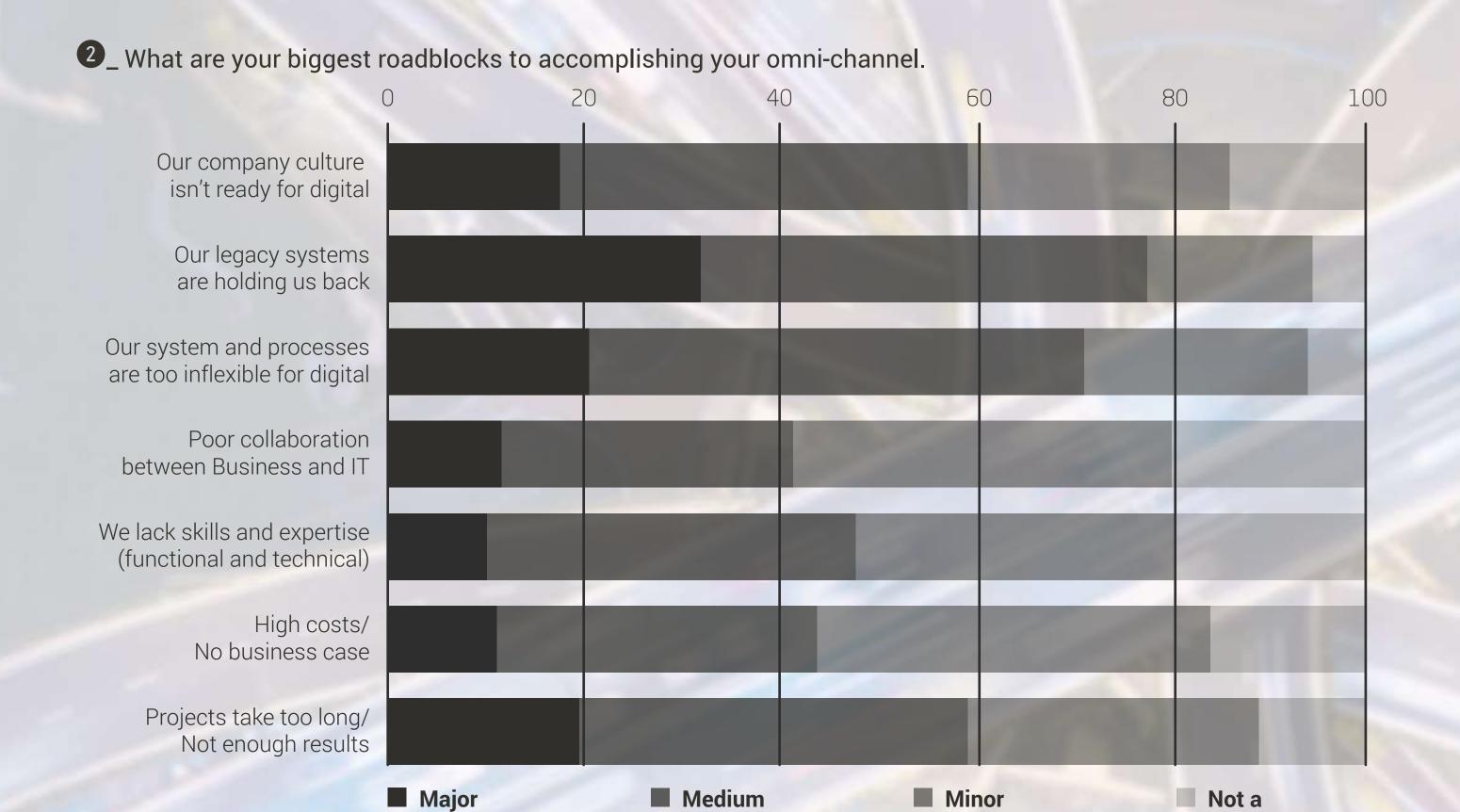
New challenges are coming from powerful sources, often from outside the financial services industry. Google, Apple, Facebook and Amazon, having already built a digital-first platform, can use it to surprise and delight customers. It is also easily mapped onto different sectors and big techs like Google are wasting no time in entering new industries. One of those industries is banking and finance.

Alibaba, Tencent and Amazon already feature in the competitive landscape, as do Google, Facebook and Apple - all have gone into payments. While this has raised concern in some quarters, especially when it comes to regulation, that concern won't be enough to stem the tide of change.[1]

The simple fact remains that fintechs and big techs do digital better and banks have to catch up. As long as customers demand digital convenience, there is

no alternative but to get competitive. Change is needed and it must run deep. Banks must literally alter how they think and revamp their business models. Tagging on bits of digital to the current offering will not be enough either. Digital transformation must permeate every level of the organization.





roadblock

roadblock

roadblock

roadblock

2_ Legacy, siloed systems are impeding progress with omni-channel banking. Over 77% consider these systems the biggest roadblock to their digital transformation, while over 50% see them as a medium roadblock to capitalizing on digital opportunities.

An outdated approach

The traditional approach, with siloed channels (like web, online or branches), is neither customer friendly, staff friendly, nor efficient. Each channel needs its own raft of workflows, content, screen design and other supports, meaning the same functionality is created time and again. Work is redone many times, with the end result distributed to channels that don't relate to each other.

The numbers are staggering. Millions are spent each year on the duplicated logic, personnel and systems needed to prop all of this up. In a world where customers expect seamless and consistent customer experiences this is completely unsustainable. Such an outdated approach is putting banks at a serious disadvantage.

Turning the ship around

Rather than creating digital business functions for each channel, it makes sense to do everything once, and disperse to all channels via a central hub. In this way, banks can orchestrate customer interactions across multiple touchpoints, generating massive time and cost savings, and customer experiences that make sense.

Digital-first platforms generally win over channels, no matter how sophisticated each channel may be. Consider the competition, Google does not have channels - it has a platform, so it does not need a huge team of people maintaining each touchpoint. Instead, resources are put into doing the right thing for the customer. It's about adding real value, rather than administering systems.

What's needed is a central omni-channel digital banking platform to orchestrate customer interactions across any touchpoint.



Getting the best out of the core

A key part of creating customer-friendly platforms is being flexible and innovative. Banks struggle with this due to the inflexible nature of their legacy core systems. The reality is however that banks won't be replacing these core systems any time soon - they simply can't. Fortunately, they don't have to.

3_ From different channels to omni-channel fabric Mobile **Branch** Internet Mobile Branch Internet Screen design, workflows, Screen design, Screen design, Omni-Channel Dialogs Screen design, Workflows, Content workflows, workflows, content content content Omni-Channel Platform Channel | Silo Legacy Onboarding Credit **Credit Card Account Opening** Onboarding **Application Application** Mortgages Loans Mobile Mobile

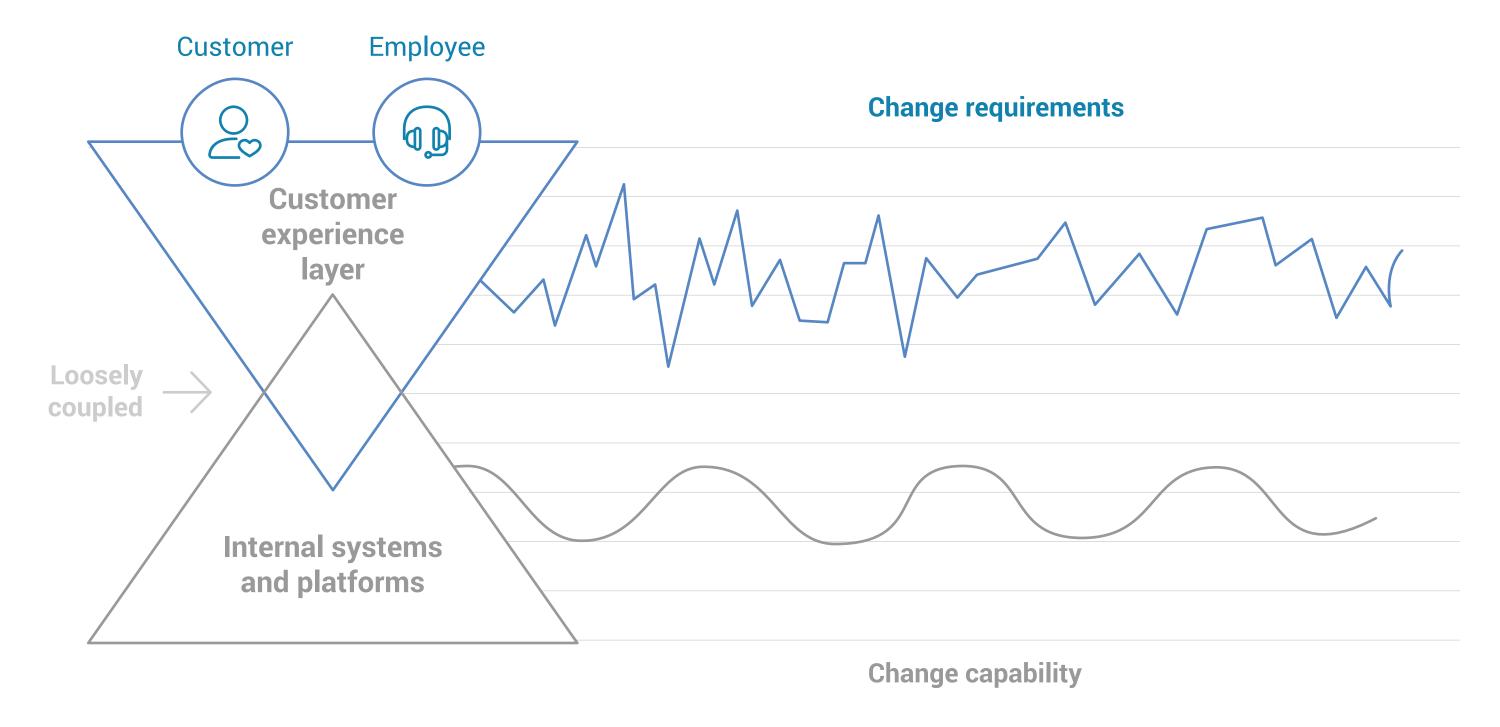
The traditional silo channel format is outdated and it's time to weave each one into the fabric of omni-channel. Innovations or improvements are then made once and reused across the board.

Introducing a two-speed architecture will allow banks to combine the best of old and new. Placing a digital-first customer experience layer on top of legacy systems creates the ability to orchestrate seamless customer journeys by reusing data and capabilities from core systems. As this customer experience layer is loosely coupled with traditional core systems, innovation can occur at two different speeds - slow and steady at the core and fast at the digital level. Such a two-speed innovation heartbeat allows for frequent front end changes to keep pace with market demands.

4 A two speed architecture is the key to combining the best of the old and new. A smart customer experience layer can work in harmony with core systems, introducing the flexibility banks need to compete.

Source: Backbase

4_A two-speed innovation heartbeat



Banks can therefore continue to work with their core legacy systems, and meet modern demands via a digital customer experience layer.

Get mobile banking right

Mobile banking has become a prime omni-channel touch point. A key strength of mobile is its ability to literally bring the bank to a customer's pocket. With mobile banking apps, services can be consumed anytime, anywhere. Mobile also offers unique real time communication capabilities, meaning issues

or complaints can be resolved instantly. Access and recognition is handled immediately via biometric technologies, while scanning technologies eradicate paperwork.

Mobile really has a lot to offer, but banks must exercise some caution. Getting distracted by mobile will not enhance the omni-channel portfolio, it will just create another silo. A once-off mobile app should be avoided. Instead banks must create generic omni-channel capabilities that are smartphone-friendly,

but can easily be repurposed across other customer touchpoints including online banking, or even faceto-face channels. Investing in a mobile app strategy is the right thing to do, failing to make it omni-channel from its very inception is not.

When banks do get mobile right, customer representatives get a more indepth idea of what's needed and can deliver more complete solutions. Issues are resolved faster, with huge cost savings and benefits for customer loyalty.^[2]

Journey design never ends

Every great omni-channel effort needs clever customer journey design. The starting point here is to ask what the customer needs, and how processes can be designed to suit. Each touchpoint, be it digital or human, should connect all other components and eliminate friction. This is how companies like Uber became the best at what they do.

When a banking customer seeks a new product, they don't always wish to travel to a branch, or fill in a collection of forms, yet they are often forced to. Employees should not have to enter and re-enter data, but they still do. In many cases, the design is just not right. Journeys should be designed for integrated omni-channel experiences that streamline everything across multiple touchpoints and devices 3. A

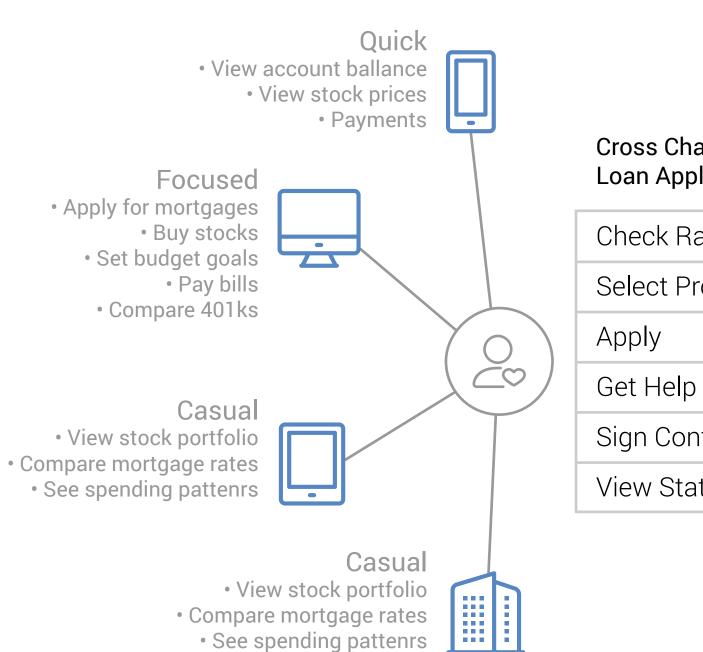
clever design empowers customers to get what they need from their bank, while empowering front-office employees with automated tasks and real time data.

Good multi-channel banking experiences optimize the various apps and websites for different customer types. This approach literally accounts for how a customer wishes to consume services. People are different. Some want to get their banking done quickly, while others take a very focused, prepared approach. Others take time to think things over, and yet others prefer a face-to-face experience. Depending on how a customer feels at that time, the journey flow should accommodate, and navigating across channels should always be seamless.



A customer may start an application for a banking product on a tablet, then come back to it later on a desktop, but find it important to sign off at a branch. Whatever the preferred route, they should be in control and that happens when integrated cross-channel journeys are possible 5.

5_Cross channel journeys: Loan application



Cross Channel Journeys:
Loan Application

Check Rates

Select Products

Apply

Get Help

Sign Contract

View Status

5_ Customer journeys must be seamless across any combination of channels.

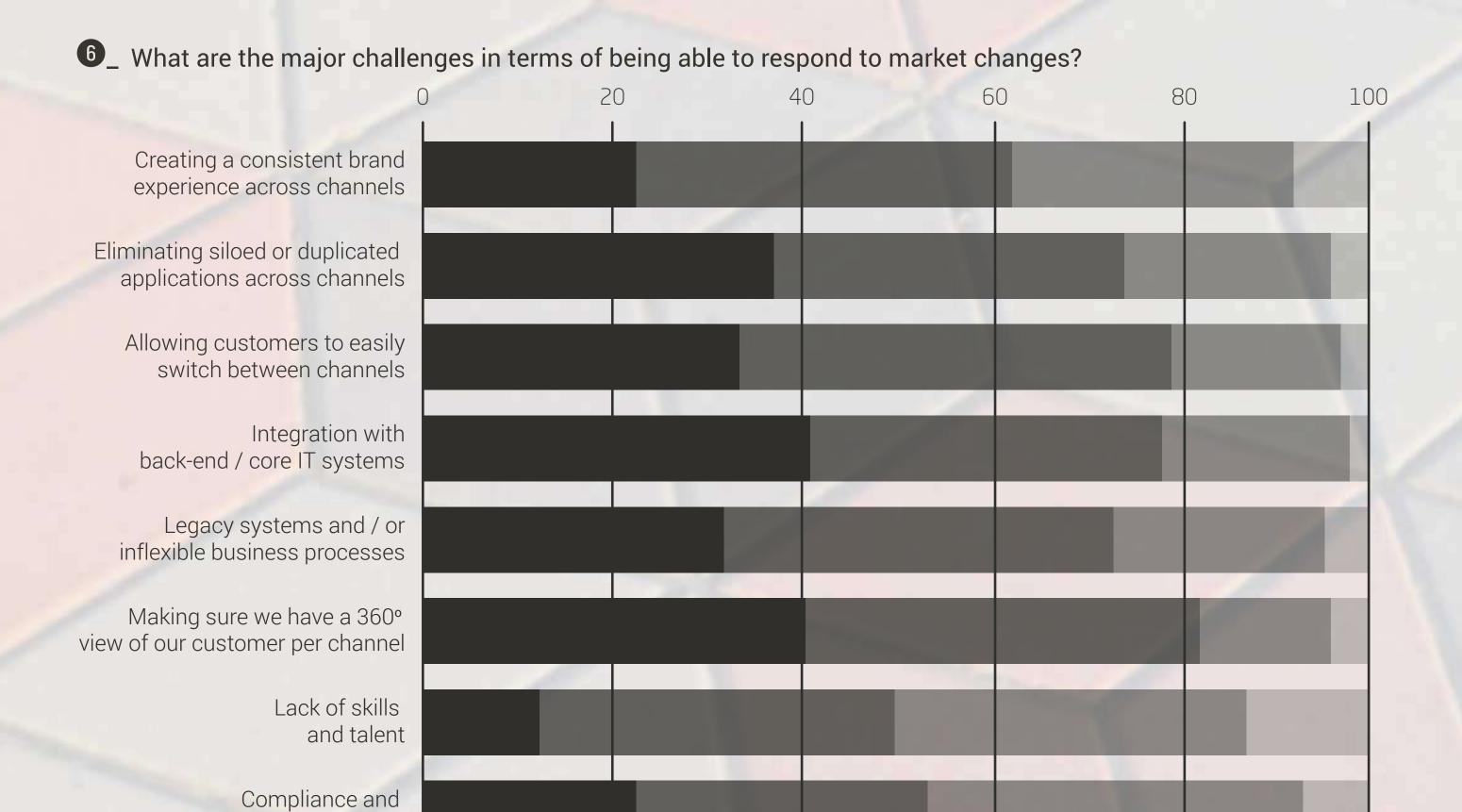
Getting the journey right is one thing, but it's also important to remember that customer needs do not stand still. Banks that stay one step ahead of them will get the best from the digital banking platform. Designing real omni-channel experiences never stops, even after the delivery of milestone projects. It's an ongoing process, creating the best, analyzing feedback and results, and continuing to optimize.

Owning the experience

A silent battle for the digital customer experience is already underway and banks must have a firm handle on it to ensure continued relevance. To own the customer experience, they must move away from silos and go truly omni-channel. That means creating end-to-end capabilities, which can be mixed and matched to suit any screen format or user persona.







Medium

challenge

Minor

challenge

Not a

challenge

risk restriction

Major

challenge

6_Legacy systems and the inflexible business processes they generate are noted as a major challenge by a third of banks, and a medium challenge by 40% of them. 39% find it a major challenge to get a 360 degree of customers, while over 40% find it a medium challenge to deliver consistent experiences across all channels.

If customers expect increased dynamism at the front end, then the system architecture must be agile enough to handle it. At the moment rigid, monolithic systems are hampering digital transformations, with reams of spaghetti code that demand hours of maintenance - and that's before we even get to innovation. The current setup is prone to errors, costly to manage, and impossible to change without major upheaval.

Changes to unwieldy monoliths are also unpredictable, as banks don't always have visibility over the final outcome. The implications are enormous when you consider the potential impact on thousands of customer accounts. All of this is a huge distraction from adding value, which is what really counts if banks want to hold onto their customer's attention. With monolithic systems, banks are sorely lacking the foundation they need to compete.

Lego-style building blocks

The more agile fintechs and big techs use component-based systems, which allow the same capabilities to be shared across processes using standardized exchange principles. By swapping around different modules as needed, it's possible to customize offerings or add new features, without large deployment efforts. Modules are created once, reused and infinitely combined, creating a fluid structure that can be used to respond to the latest customer demands.

Agile processes

A modular set-up paves the way for faster, more agile ways of working. Supported by this Lego-style building block architecture, it is possible to create and alter processes, products or channels as needed. Changes are easily made, by small business teams, with minimal impact on the business.

Banks have started to decouple the various organizational layers, which is a step in the right direction. In the new competitive environment however, this needs to go further. Decoupling the front and back end may provide a bit more flexibility, but in the broader competitive environment it doesn't enable the bank to move at the speed of digital, which is what's needed.

By incorporating a digital-first platform with a modular architecture, banks can drive their agility. Business owners can be increasingly creative in sales and service design, while engineering can quickly develop and launch new value propositions. Modular banking is the key to fine-tuned processes, and will drive any efforts to create a future-proof digital banking platform.

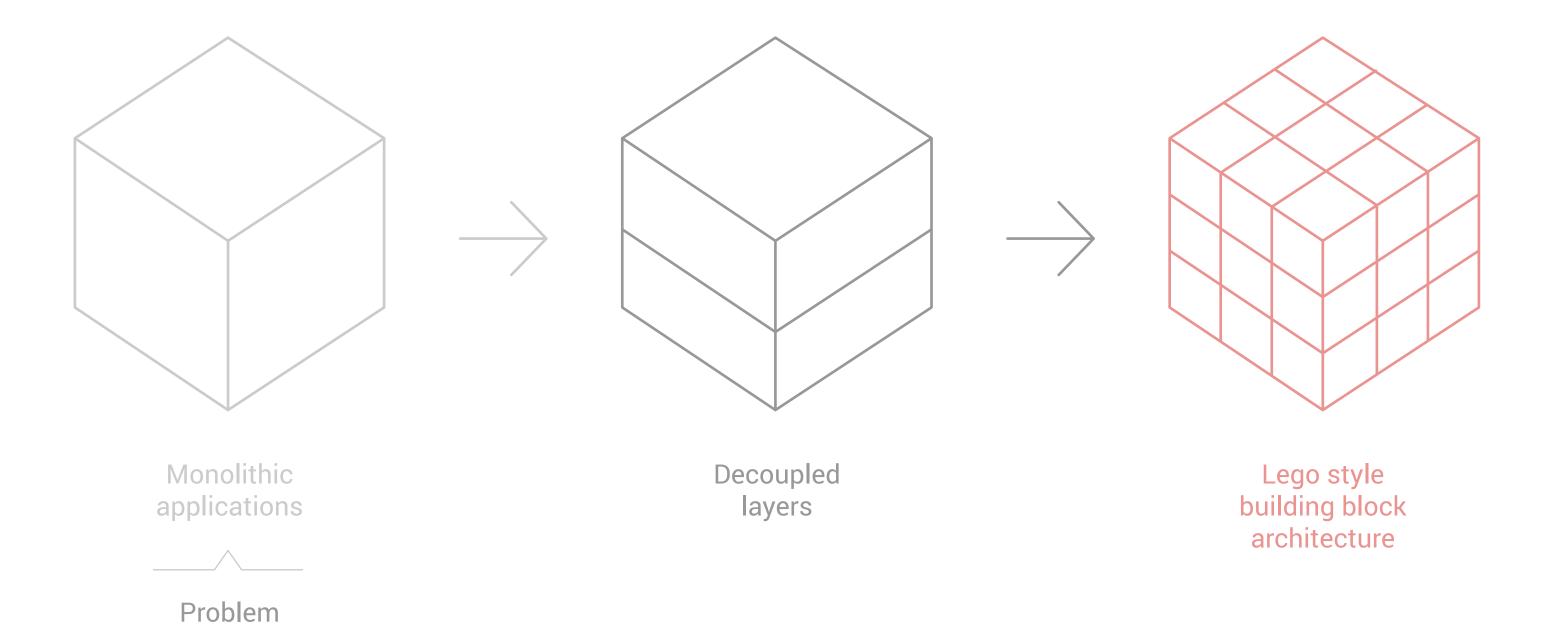
Lego-style building blocks

The more agile fintechs and big techs use component-based systems, which allow the same capabilities to be shared across processes using standardized exchange principles. By swapping around different modules as needed, it's possible to customize offerings or add new features, without large deployment efforts. Modules are created once, reused and infinitely combined, creating a fluid structure that can be used to respond to the latest customer demands.

• Monolithic applications have had their day, a modular architecture can bring banks the flexibility they need to compete effectively.

Source: Backbase

The Lego-style approach



Agile processes

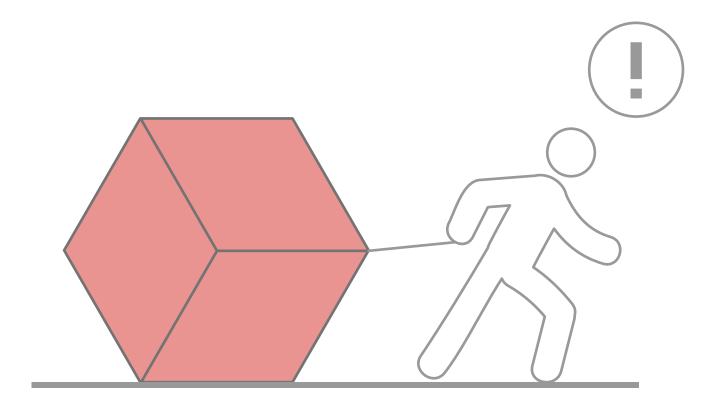
A modular set-up paves the way for faster, more agile ways of working. Supported by this Lego-style building block architecture, it is possible to create and alter processes, products or channels as needed. Changes are easily made, by small business teams, with minimal impact on the business.

Banks have started to decouple the various organizational layers, which is a step in the right direction. In the new competitive environment however, this needs to go further. Decoupling the front and back end may provide a bit more flexibility, but in the broader competitive environment it doesn't enable the bank to move at the speed of digital, which is what's needed.

8_ Modularity adds pace and flexibility, breaking up big deployments into small, manageable changes.

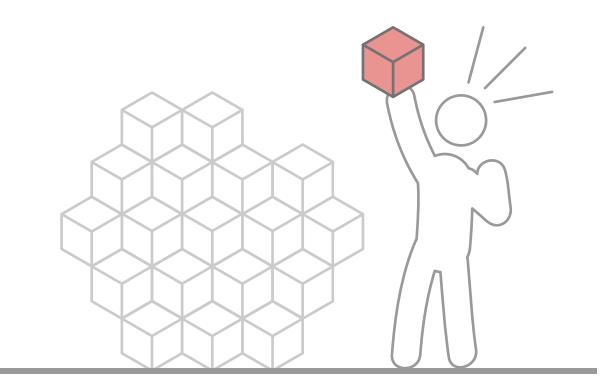
Source: Backbase

8_Waterfall vs Agile process



Waterfall process

- Perfect plans; avoidance of risk of failure
- Everything is important, fragmented multitasking
- Diplomacy, spin and controlled power
- Layers of internally focused approval
- Individual performance



Agile process

- Rapid adaptation, learning and recovery from failure
- Laser focus on things that are more important
- Transparency, honesty, trust and delegated power
- Customer-focused design and empowered employees
- Collaboration and alignment

By incorporating a digital-first platform with a modular architecture, banks can drive their agility. Business owners can be increasingly creative in sales and service design, while engineering can quickly develop and launch new value propositions. Modular banking is the key to fine-tuned processes, and will drive any efforts to create a future-proof digital banking platform.

Agile innovation

The Ubers and Facebooks of this world frequently introduce clever new features, quickly and at almost zero marginal cost. They are agile enough to exceed customer expectations without any major implementations, upheaval or cost implications. They easily roll out new offerings and scale them up or down - at will.

With a modular architecture in place, it's possible for banks to innovate in the same way - fast and in line with customer needs. A modular architecture empowers a bank to go beyond responding to market realities, to actively creating them - in conjunction with the customer.

Banks need this freedom and velocity to stay in touch with market demands. With a more agile foundation in place, they can really start to innovate for competitive advantage.

Continuous Integration, Continuous Deployment (CICD)

In line with an increased capacity to innovate, banks can change the way they release new products or features. The traditional waterfall approach to new product development can be replaced with a Continuous Integration, Continuous Deployment (CICD) approach. This method is characterized by short, frequent release cycles, where a running pipeline of improvements are automatically and continuously rolled out over native cloud technologies.

In this way, small incremental changes are regularly made, rather than huge, infrequent ones that involve major upheaval. Banks can continuously introduce smart new features in the background, while business runs as usual on the front end.

From cutting costs to ensuring business continuity, modular banking brings banks the increased flexibility they need to compete. [3]

Agile distribution

Traditionally, when banks create something new, they launch it via the existing channels. This has not guaranteed acceptance in the market however, and many have paid the price with wasted resources and PR failures. Delivery must be via the customer's choice of channel so both offering and channel are personalized. It's time to bring the customer what they want, where they want it.

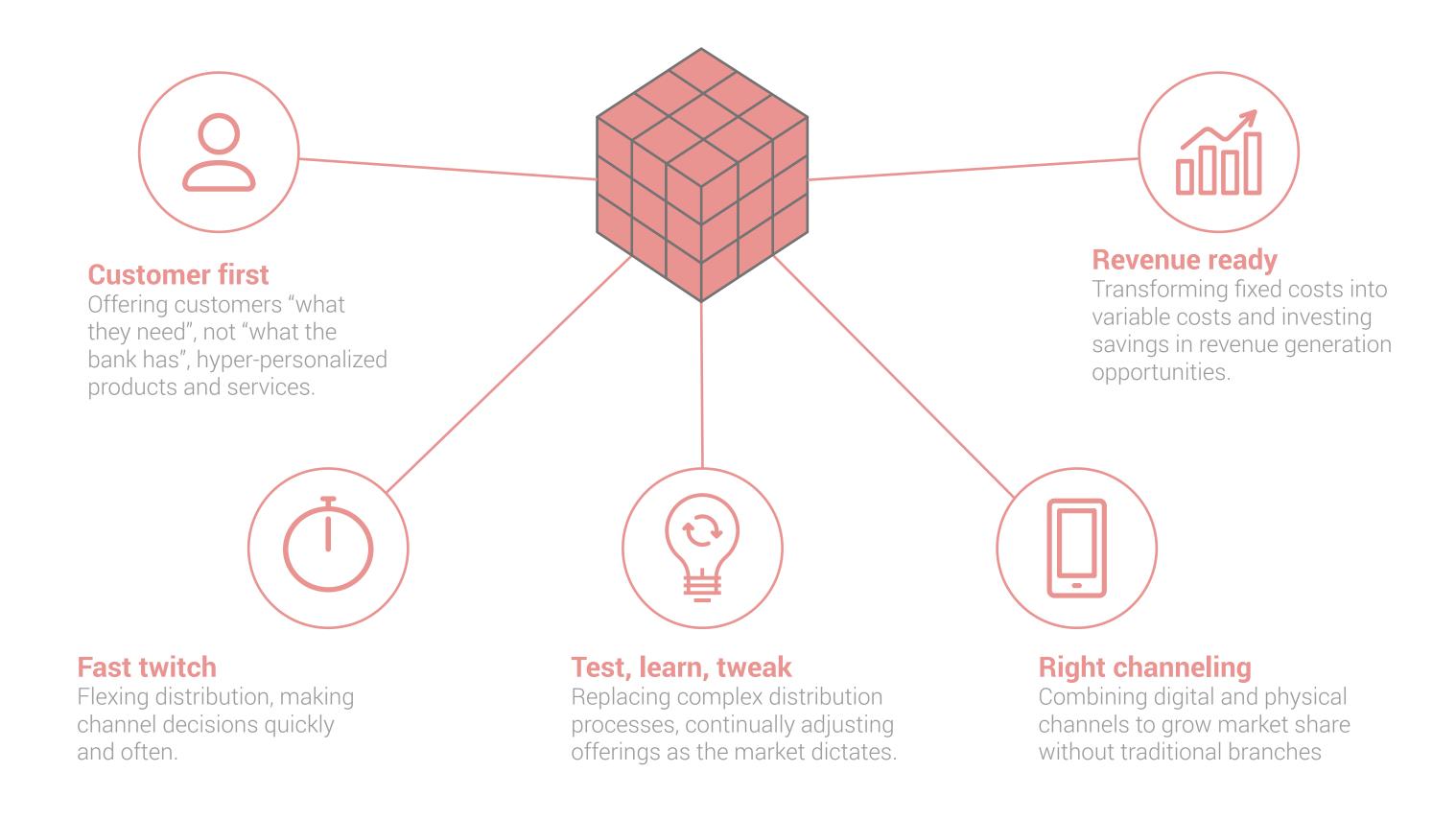
With an agile, modular architecture, distribution channels can be adapted, deleted or added as the market demands. The fixed costs associated with traditional distribution formats become replaced with the lower variable costs of streamlined, digital-ready channels. The upshot is that resources are released for continuous improvement and added value. Banks can start to focus on what matters to customers, while saving money and boosting revenues.

9_ Agile production must be met with agile distribution. Banks must be flexible enough to deliver what's needed, where needed.

Source: Accenture - The Agile Bank:

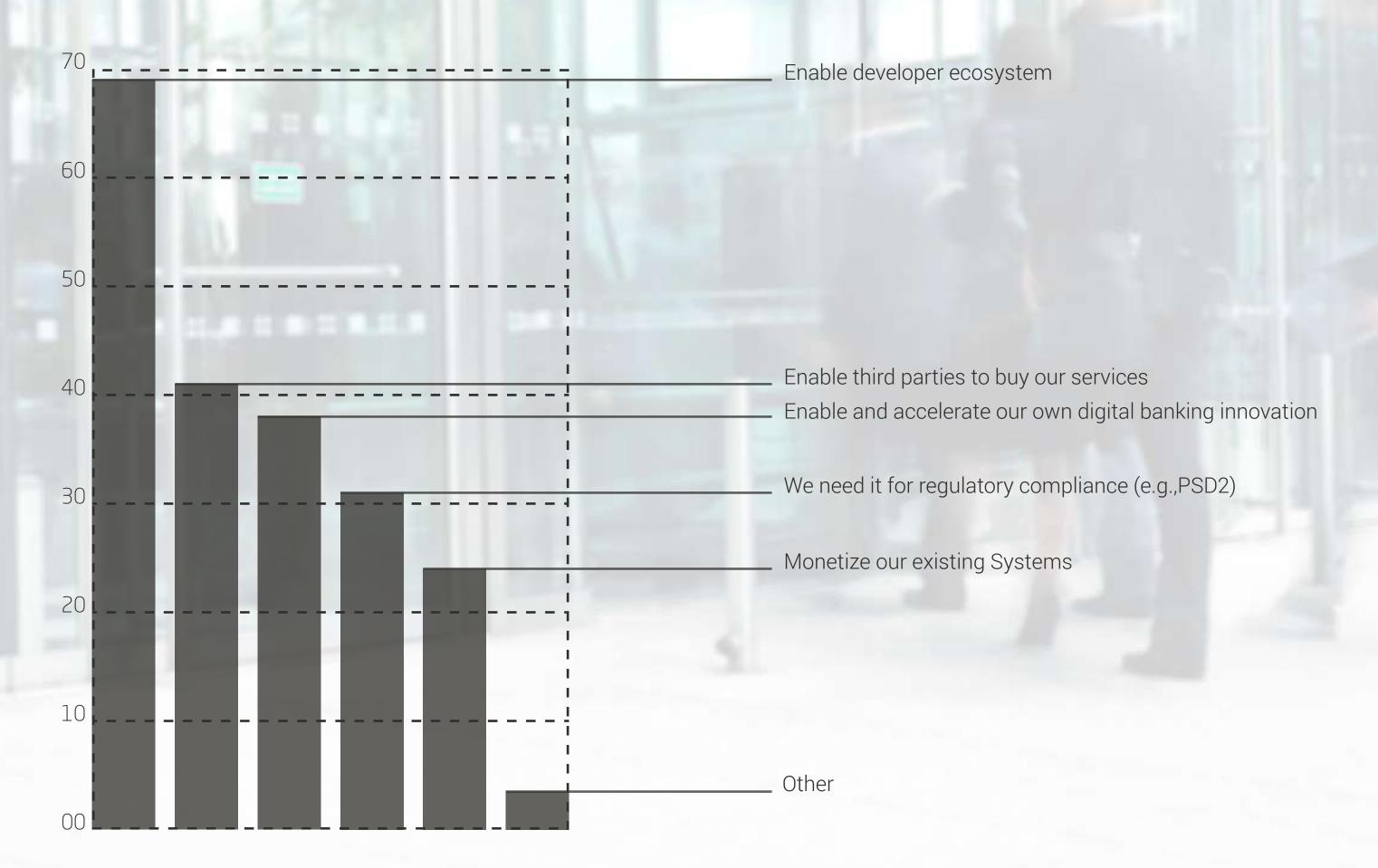
Transforming The Customer Experience

9_5 characteristics of agile distribution





Why are you implementing an API gateway as part of your open banking strategy?



Despite their initial reluctance towards open APIs, banks are starting to understand their potential, with almost 70% implementing API gateways to accelerate digital banking innovation. 41% see an API gateway an enabler of the developer ecosystem, while almost 38% as a chance to open up to third parties.

Banks have made some strides with internal APIs in recent years. Today however, using open APIs to share data with external third parties counts just as much. In the past, the banks managed all of the inputs and outputs related to banking services. Their data was secret, nicely hidden away from competitors. They controlled distribution, because they owned the branches and online banking channels. The bank was the black box for all information relating to a customer's finances. Loyalty often resulted from a customer's unwillingness to extract historical information from their current bank and move it to another one. If the world had stayed the same, banks may have been able to coast along like this, but it has not.

Open Banking and PSD2 have changed everything in Europe. It's expected that most banks around the world will also explore more open business models, to begin creat-

ing valuable business networks and add value to their offering.

The threat of disintermediation has been an issue for banks since PSD2 and open banking showed up on their radar. Opening up their APIs gives other parties, including competitors, unprecedented access to a bank's data. Customer demands have changed however, so failing to take on open banking, and properly, will lead to disintermediation anyway. Whether by business model choice or by regulation, banks simply have to engage.

Composite applications (mash-ups)

Despite the perceived threats, open banking holds many opportunities to drive business model flexibility. People have become used to the comprehensive services offered by aggregators like Uber. Uber works with a mash-up mod-

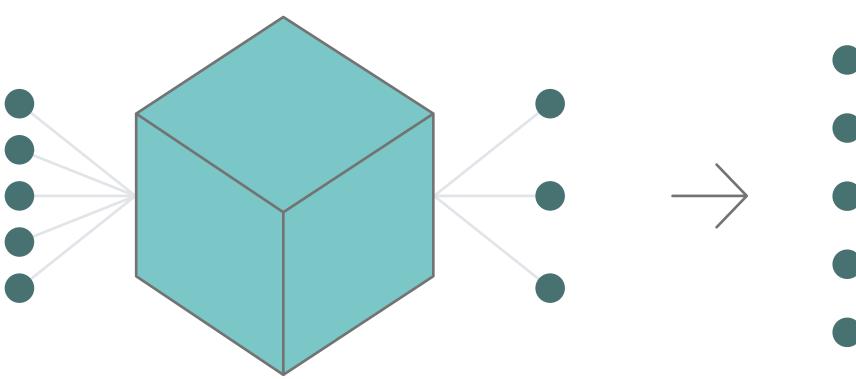
el, incorporating payment gateways, Google maps and Appstore distribution to create a network application that delivers an end-to-end taxi service. The customer need not seek out a taxi, directions, or even money to pay the driver, Uber handles it all, in one place.

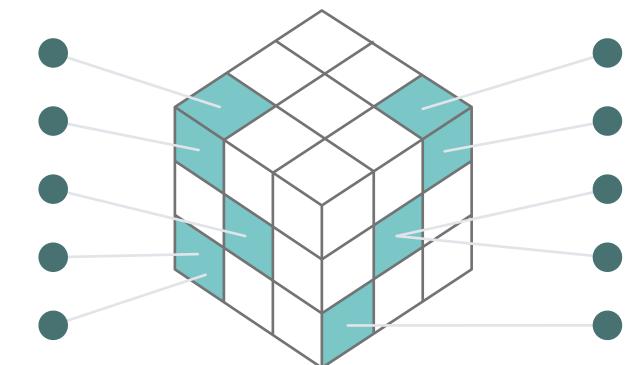
Customers can already pick and choose their banking service providers via open APIs, so there is no reason why they wouldn't opt for banks that incorporate smart, third-party products and services. In a digital world, the bank is no longer the sole creator of value for its clients. Today, competitive strength comes from having good connections with other players and from adding or sharing value. Banks must use open APIs to connect, both internally and to third parties, to ensure they can keep their customer base interested.

Consuming open APIs

Banks must open up their APIs - that's true - but they can also benefit by becoming consumers of them, tapping into third party capabilities to add real value to their offering. Doing this in a clever way could help them enhance their products and services to the point that they become the Uber of their area. When looking at things this way, the potential really begins to outweigh the threat.

Closed vs Open banking





Closed banking

- Assets ownership
- Localized work
- Mass production
- Properietary value
- Scarcity control

Open banking

- Connections access
- Distributed work
- Unit production
- Shared value
- Abundance management

Open banking means that banks simultaneously lose control and gain opportunity. Opening up to third parties exposes their data, but it also lets them tag added value onto their own products and services.

Business Model Agility

Leveraging open APIs to integrate both internal and external capabilities will give banks the flexibility to innovate with their business models. In recent years we see four digital business models emerging, threat.

Business Model Agility

Scenario 01 Digital banking interface **Core systems** Digital front-end Scenario 02 **Built-for-digital bank** Lean core Digital bank Scenario 03 **Fintech providers** Lean value aggregator Aggregator **Fintech providers** Scenario 04 **Core systems** Transformation **Customer-centric Fintech providers** Digital banking platform finantial services **Fintech providers**

12_ Banks can adopt various API strategies but the transformational one is optimal because it blends the best of the old and the new.

- **01. Digital Front-end** a tactical approach, creating a new digital front-end on top of existing core systems. This is enough to compete in a digital first world.
- **02. Neo Bank** creating a digital bank from scratch. With this approach the bank is unbounded by legacy systems, and the digital platform is central to everything.
- **03. Digital Aggregator** Banks can take up the role of aggregator, connecting to 3rd party fintech providers and owning the integrated customer experience. This is a pure open banking philosophy, where Uber-style composite applications are created.
- **04. Digital First Bank** a transformational approach, that blends the best of the classic and digital worlds. Here the focus is on creating Uber-style composite applications and driving innovation, whilst preserving the good in what has gone before.

My financial life

From the customer's point of view, true open banking allows them to access all aspects of their financial life at one location, rather than logging into a series of institutions. Their entire financial lives should be visible on a single dashboard or app. For example, an SME owner could use one interface for both personal and business banking. It goes further, why not pay utilities and energy bills via that same interface? Anything connected to a customer's financial life can and should operate from one dashboard. This is the final destination for banks and a key driver of future success.

The open network economy

Continuous, API-driven collaboration and the four emerging business models are all part of the larger open network economy trend. Participants of the open network economy will grow faster as they benefit from a 'network effect'. As more organizations create integrated value propositions, they will attract more users, and create more value within the network. Those that join in a clever way will ac-

quire the value of the network, strategically using APIs to offer more value and drive more traffic to their platform. Those that get it wrong will fail to gain that value and simply open up their data to competitors.



The customer experience is ground zero

In all of this, there is one crucial factor - the digital customer experience. Banks must absolutely ensure they secure ownership of it. This is essential, otherwise they run the risk of opening up APIs, giving away data to the competition, and failing to add any value to strengthen their own position.

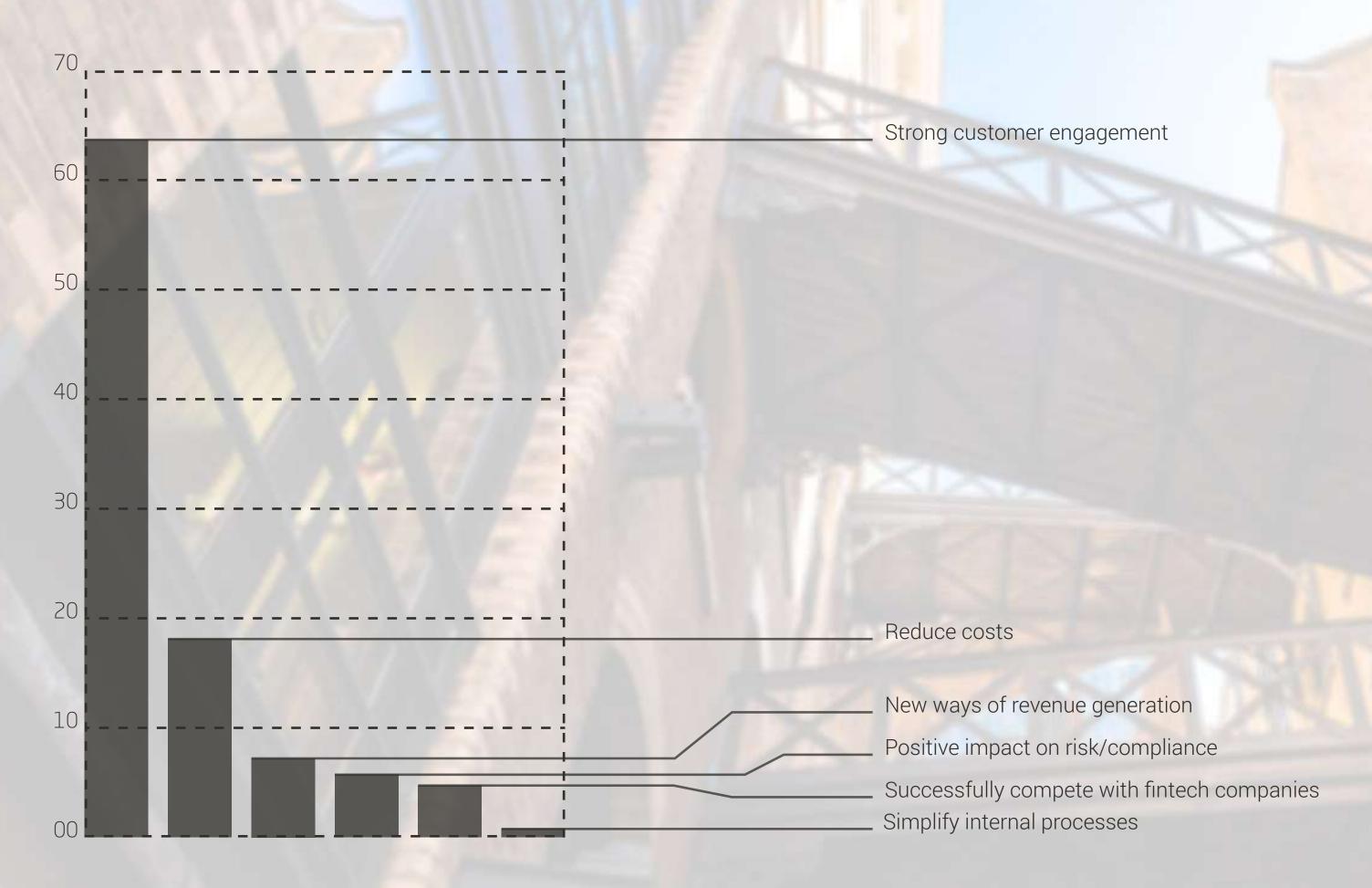
As part of this, banks must master new digital technologies and software development skills. They must integrate multiple disconnected back-end systems into a single, seamless digital customer experience. They must move to paperless, digitized

processes, and translate customer data into valuable insights that helps customers make better financial decisions.

This process requires some thought, and a business model. Will a bank charge for open APIs like Amazon does? How can banks selectively open up whilst keeping their business secure? The line between a beneficial collaboration and a data giveaway is a fine one and banks must prime themselves to work open banking the right way.



13_ What does your bank see as the biggest benefit of a smart banking approach?



Banks should focus their efforts on keeping pace with fintechs, who have mastered smart tech. 64% of banks are more concerned with customer engagement however, and 18% on new revenue channels. Less than 5% of banks note the value of competing with fintechs.

Smart targeting engines and artificial intelligence are among the many tools big tech and fintech have used to blaze a trail in the industry. Customers are increasingly used to hyper-personalized services and communications. In fact, they have come to demand them and the key to delivering this is the use of smart technologies.

One size no longer fits all

The 'one-size-fits-all' approach, where services are mass delivered over selected channels, no longer applies. In today's world, smart engines dynamically assemble the right content and data into hyper-personalized experienc-

es. Smart technologies can automate the process, making segments-of-one possible on a large scale. Automated behaviour tracking provides valuable insights into a customer's needs, enabling banks to offer relevant advice and offers. A user browsing real estate or mortgage products, for example, should be presented with an appropriate mortgage offering. By tracking in this way, customer needs are constantly catered to, while the bank becomes a trusted advisor, always on the lookout for their best interests. When the customer directs how they are segmented and targeted, it makes everything more meaningful for them and more profitable for the bank.



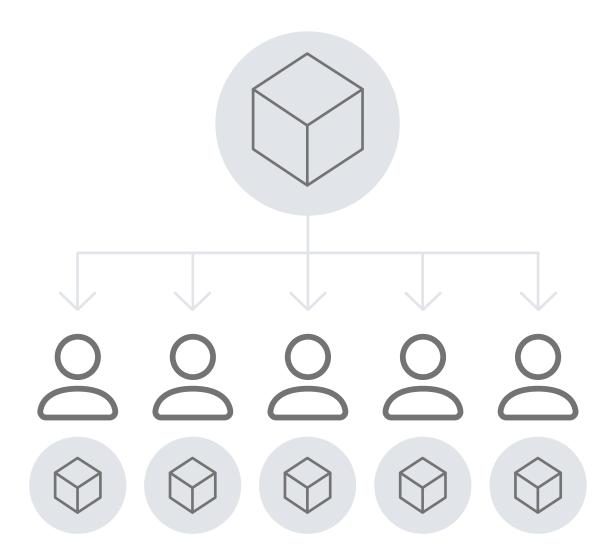
It's all about Big Data

Effective segmentation, targeting and tracking is done by collating data from various sources, and analyzing it to create actionable insights. Big data is the engine that drives all of these efforts so banks must get comfortable with understanding their own data and that of other parties. A new era of personalization heralds the need for new skills to blend massive volumes of data from divergent systems into meaningful, actionable information. Banks will invest more in data scientists to leverage all the data they have and translate it into both customer and business value. The end goal is to leverage big data to create more efficient operations, higher profits and happier customers.

One size no longer fits all. Banks must use smart technologies to personalize offerings and distribution channels.

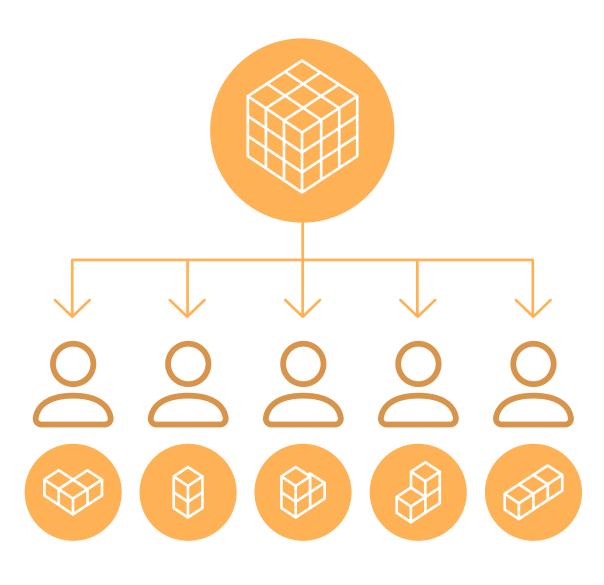
Source: Backbase

4 One-size-fits-all vs Hyper-personalization



One size fits all

Where the same products and services are produced and released, in bulk, to all customers via a series of pre-selected, existing channels. This approach does not account for a customer's individual preferences - not ideal to ensure customer satisfaction or customer adoption rates.



Hyper personalization

Each customer receives a product or service tailored to their individual needs, over the channel or selection of channels most suitable for them. This approach drives customer satisfaction, tailoring both the product and distribution channel to their needs at any given time

5 Star treatment

Jouk Pleiter, CEO of Backbase at Finovate Europe 2018

The customer is in control more than ever before. They have come to expect nothing less than five-star banking services, with relevant offers and guidance in line with their daily needs. This new expectation level was outlined during the winning showcase at Finovate Europe 2018.

Smart actions

Customers can be empowered to easily automate manual tasks. This transforms mobile banking into a personal concierge service, tailored to their exact needs. Imagine a scenario where a customer can educate their mobile banking app to make life easy by actually thinking for them. It's possible, in fact it's already happening.

Take the example of a business trip. Flight expenses can be set up to go directly into an Expensify account, and credit card bills paid automatically. This flow takes seconds to set up and once done, the banking app knows to do it going forward. A smart banking app can also proactively help, offering suggestions for investment or ecommerce opportunities, or even a restaurant for dinner. Leveraging 3rd party open APIs, the app can even make a reservation and add the appointment to a user's calendar.

Aggregation

It's important to combine capabilities from within the bank, and outside it. Third parties like airlines, telcos or e-commerce providers can be directly integrated

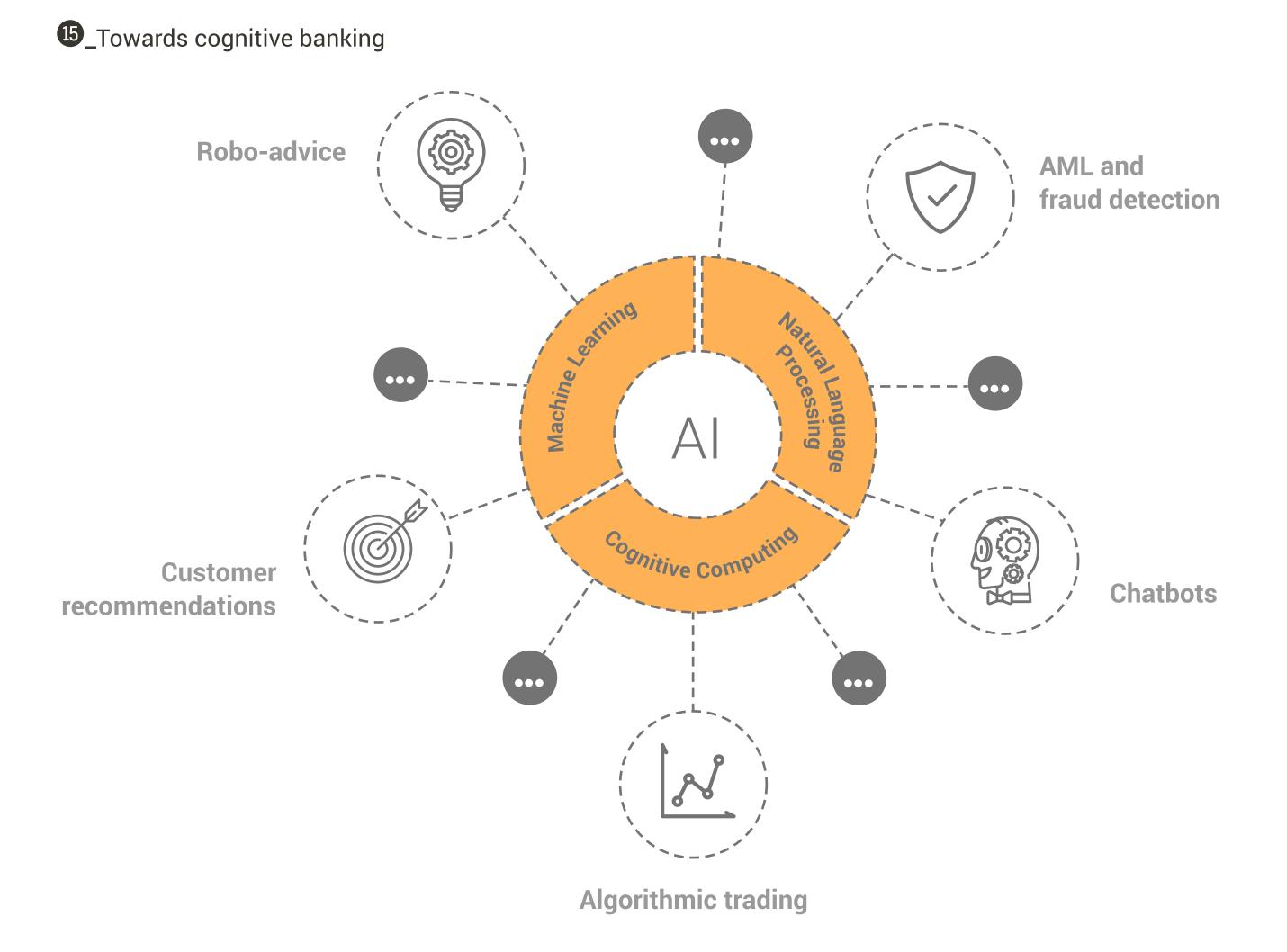
in the mobile banking application. For example, a customer can use facial recognition to log in for a complete overview of all financial products - from a range of banks. This interface could also incorporate healthcare, ecommerce providers and more. By being the best aggregator, the bank becomes the go-to platform for their customer.

Think outside the box

Banks must be imaginative enough to create 10 times better customer experiences. This is done by merging multiple capabilities to deliver the best. Smart integration merges the value of different providers, putting the app at heart of digital customer's lives.

Towards cognitive banking

Artificial Intelligence (AI), a key smart technology, can slice and dice data to support compliance, customer engagement and operational efficiency. Rather than working with after-the-fact analyses, banks can use AI to predict customer needs and tap into the decision-making process before customers act, for example by offering personalised suggestions/call to actions. Banks therefore go beyond analyzing explicit behavior to actively predicting it, which brings them into the realms of cognitive banking. The bank essentially becomes part of the customer's decision-making process. Smart banking effectively reaches into the future to actively craft customer journeys and consistently provide timely, optimal solutions.



Next generation sales

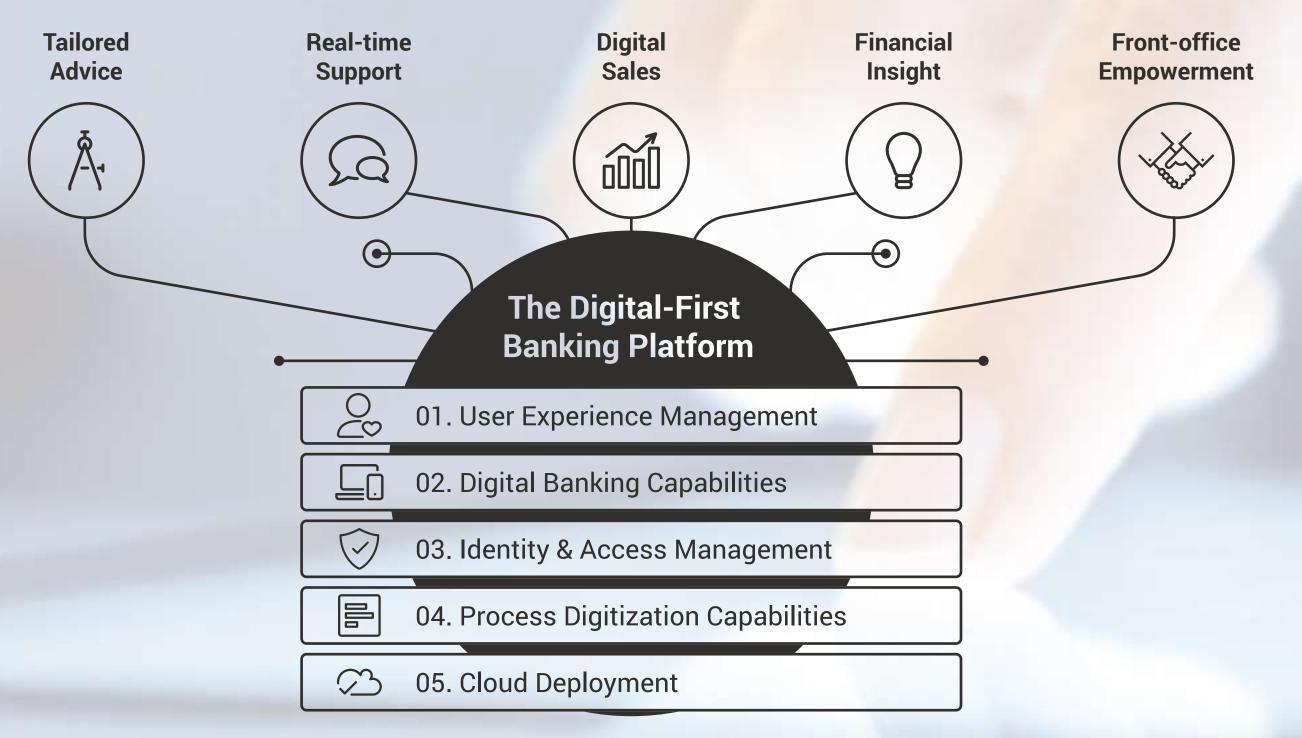
Marketing campaigns have benefitted from the use of AI and machine learning for some time now, but those who prefer cold, hard sales metrics will be happy to learn that cross-selling and up-selling can also benefit from it. According to CapGemini, three in four organizations that implements both AI and machine learning can have their sales of new products and services grow by over 10%. [5] Understanding customers is key to digital sales and smart technologies can drive this, often better than humans can. Behavioral analyses can be done by human salespeople, but smart AI tools can do it even better. By automatically identifying customers to whom banks can add real value, they target them with highly relevant proposals, at the right moment and in the right tone of voice.

Increase customer loyalty

Aside from bringing in new customers, smart technologies drive customer retention by constantly tracking their needs and providing them with well tailored targeted advice. If a bank can make relevant suggestions at the right time, it can demonstrate that it is in touch with a customer's needs and interested in helping them optimize their financial situation. A wealthy client should be presented with the best investment opportunities, in line with their demands at a given time. A potential car buyer should be handed the most suitable loan rates on a platter, having no need to shop around, as he knows that his current bank always has the right answer.



16_The components of the digital-first banking platform



15_ strong digital banking platform is a function of well-managed user experiences, backed by digital capabilities, security, smart processes and cloud deployment.

Google owns information, Amazon owns ecommerce, Facebook owns communication - these players dominate in their areas. Now it's time for banks to own finance. They must reinvent themselves and go beyond a digital transformation to achieving a business transformation. Banks that work the digital-first banking platform properly will empower themselves to do things 10 times better. That's how they will hold onto their customers at a time when the threat of attrition is bigger than ever.

A robust, agile digital-first banking platform will connect and empower all parts of the organization to optimize omni-channel customer journeys. It works alongside legacy systems, connecting, aligning and informing to support staff and customers.

When all systems talk to each other, tailored advice and real-time support are instantly available to customers. Frontline staff are freed from slow, paper-based processes and empowered to deliver excellent service, with the right information at their fingertips. The user experience works, from onboarding to upselling, and this drives digital sales. Enhanced financial insights help customers to manage their financial lives and banks to strategize. The digital banking platform connects all the dots to deliver for the end customer and ensure the bank can compete into the future.

01. User experience management

Behind every great user experience is a smooth integration with back-end services. When customer data can be quickly sourced, frontline staff are empowered with real-time, accurate data, and customers enjoy superior self-service capabilities.



02. Digital banking capabilities

To compete in a digital world, banks must offer smart digital products and services that are easily accessible over every device. Banks need a platform that supports their efforts to stay competitive by providing innovative digital excellence.



03. Identity and access management

Identity and access management is key to ensuring access security in today's open banking market-place. A sophisticated entitlements solution makes this easy, by automating and managing the process of granting access rights to trusted users.





04. Process digitization capabilities

Smart online forms and logical processes are key to efficient customer journeys. When they don't work properly, abandonment increases, impacting the success of online initiatives. Smart forms and dynamic process management increase efficiency and remove manual, paper-based tasks - making life easier for both customers and employees.

05. Cloud deployment

Cloud deployment powers constant feature or functionality updates, without any impact on day-to-day business. New code can be deployed thousands of times per month, and fast. Development teams can bring new capabilities to market via a highly automated platform that scales with the business. Security can also be automated, making it easier to keep pace with industry regulations and compliance standards.

