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EXECUTIVE SUMMARY

KEY FINDINGS:

- While customer personalisation for guidance and communication is widespread in financial services (63% of respondents), moving beyond segmentation to true individualisation of product and service is not yet a priority. Only 9% of respondents ranked this first or second on an importance scale.

- AI is going to have an impact across many different parts of financial institutions, but 42% of respondents to this survey believe it is going to have the biggest effect on the value chain in the area of customer service and retention. But only if challenges around accessing data from disparate sources and growing management’s understanding of AI can be overcome.

- Just over half (58%) of respondents say they can today onboard new customers using only digital channels. Most of these digital-capable banks can complete onboarding processes in two days or less, but this was more likely for retail institutions rather than corporate banking divisions. Overall, 45% of survey respondents say they can complete onboarding of a new customer in 40 minutes or less.

- 80% of organisations say they aspire to exchange, integrate and leverage underutilised data sitting siloed inside their enterprise’s legacy applications. But the nature of these systems poses the biggest challenge to effective information governance.
This survey on AI, onboarding and information readiness in financial services was conducted online by Finextra, mid-2019. We had responses from 70 financial institutions – predominantly from retail and corporate banking groups - in 42 countries.

**CHART 1**

**RESPONSES BY REGION**

- **APAC**: 20%
- **Europe**: 27%
- **UK**: 16%
- **North America**: 12%
- **Middle East & Africa**: 9%
- **South America**: 4%
SAMPLE BANKS

• ABN Amro
• Bank of Ireland
• Barclays
• Commercial Bank of Ceylon
• Eurobank
• HDFC Bank
• HSBC Bank
• Nordea
• Raiffeisen Bank
• Sberbank
• Thai Commercial Bank
• Westpac

SAMPLE JOB TITLES

• AVP Digital Strategy
• Big Data & Analytics Solution Architect
• Chief information security officer
• Director of Innovation
• Head of Analytics & Advanced Campaign Management
• Head of Business Intelligence
• Head of KYC & Reference data
• Head of Research
• Product Director
• Programme Manager
• Strategic ecosystems leader
• VP Enterprise Risk
Customer segmentation and profiling – grouping types of customers together and tailoring a product or service to their needs – became commonplace in financial services in the mid-20th century. But as marketing practices have since become more sophisticated and the availability and usability of data has increased, it has become possible to focus more granularly on particular traits and behaviours and multiply the number of segments used.

Branching out from simple segmentation of customer type, such as corporate, mass-market retail or high-net worth individuals, financial services organisations now routinely segment within these on geographic, demographic, risk factors and customer business type and assets, and individual socio-economic data.

The logical conclusion of this journey is a state where every customer gets a product and service tailored completely and specifically to meet and exceed their individual needs, while also building a profitable relationship for the financial services provider.

Achieving this at scale, however, is difficult because it requires combining behavioural, transactional and historical data into a single view of the customer, and a significant re-tooling of all systems from marketing and channels through to the back office.

Today many financial institutions have worked on improving the customer experience, making changes to their sales and marketing funnels and onboarding processes to provide the perception of personalisation. But, a closer look at the underlying products and services reveals a standard catalogue of pre-defined options.

This current difficulty in achieving true personalisation is reflected in the answers to the first question in this survey. Given a scale where 1 was the highest importance to their organisation, only 20% of all respondents ranked customer individualisation as 5 or better on the importance scale, and only 7% ranked it number one.
More importance was placed on personalisation by corporate and private banking respondents, but those who work for retail banks or retail divisions within universal banking groups were less likely to rate it highly. Only 3% of these retail respondents gave it a rank of one for importance.

Despite this lack of importance placed on across-the-board individualisation, extending through to products and services, 64% of respondents said they do at least provide personalisation of communications and guidance to customers today.

But just personalising sales messages and service reminders will not be enough to maintain customer satisfaction in the medium-to-long term. Customers increasingly know the value of their data. And thanks to the business models of the social media and tech giants, they expect their primary service providers to be able to use that to provide customised experiences, advice and benefits that are tailored to their life stage, current situation, goals and needs.

We can infer the high priority that will be attributed to increasingly personalised customer experiences, when taking into account the 80% respondents who said yes to aspiring to leverage underutilised data sitting in siloes. Survey participants identified that AI is likely to be utilised to deliver enhanced customer experience. A seamless multichannel experience is a challenge to achieve but is certainly at the forefront of the customer agenda. Indeed, 60% of respondents said front and back office systems and processes are not aligned to deliver optimal customer service.

“Today’s banking customers expect to be addressed as a ‘segment of one’, which is only possible with the implementation of a customer experience platform and achievable with the highest level of personalisation of both content and delivery, using AI.”

CHRISTIAN BARCKHAHN, SENIOR DIRECTOR, CUSTOMER EXPERIENCE MANAGEMENT, PRODUCT MARKETING, OPENTEXT
WITH ONE BEING THE HIGHEST AND 10 BEING THE LOWEST, PLEASE RANK IN ORDER YOUR PRIORITIES FOR 2019

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% 29 12 25 12 1 5 2 4 2 7

ARE YOU PROVIDING PERSONALISED COMMUNICATION AND GUIDANCE TO YOUR CUSTOMERS TODAY?

- Yes: 37%
- No: 63%
The term Artificial Intelligence (AI), as used in business environments today, encompasses a range of technology and approaches, including Machine Learning (ML), Natural Language Processing (NLP).

Confidence across the industry is high that AI will play an important role in the short and medium term in areas as diverse as operational efficiency, risk management, fraud prevention and customer service and insights.

Financial crime has often been the entry point for many financial institutions pushing AI into production, but customer service areas have also been early adopters. Particularly in retail financial services, the deployment of sophisticated chatbots driven by advances in NLP and other AI is increasingly common.

Other prominent use cases revolve around the customer too; learning more about their behaviours, anticipating their needs and identifying opportunities, while making the onboarding process more streamlined for new products and relationships and improving service.

Forty-two per cent of those surveyed chose customer service and retention as the part of their value chains that they expect to see AI having the most impact on going forward.
AI AND INFORMATION PAVING THE PATH TO PERSONALISATION

One way that machine learning promises to make improvements in this part of the value chain is by identifying and extracting key elements (such as metadata), transforming that content into a more structured form, and then more easily searching and analysing it for patterns. Combined with structured data such as (real-time and historic) transactions, use cases can be developed for customer insight and referral-based sales.

But to achieve this requires full context of data from multiple sources, a network view of entities and transactions, and a better data governance model to ensure value generation while staying on the right side of ethics and regulation.

ADDRESSING THE CHALLENGES

There are multiple challenges, however, to fully realising the value of AI in any live production deployment, let alone as part of a joined-up enterprise wide AI strategy.

These challenges fall into two main areas. On the one hand, data – accessing it across multiple internal sources and managing it under a governance structure that also includes external data usage. On the other hand, there is the challenge of the pace of advancement in AI technology and practice, and the ability of business and technology executives to fully understand the possible applications and pitfalls associated with AI deployment.

“Banks are finding it is not enough just to ‘crunch the numbers’ if they want to deliver insights-driven engagement. They need context for insights into investments and markets and to streamline their internal operations, including interpreting consumer sentiment or shifting political winds, quickly and accurately summarising research reports or news stories, and efficiently processing text-based forms, such as loan applications or complaint forms. But traditional analytics and financial tools were designed only for ‘structured data’, i.e. numbers and labels that fit neatly into databases.”

“As part of a complete financial analytics solution, artificial intelligence (AI) and machine learning add the ability to ‘understand’ human language in all its richness and ambiguity. This helps banks quickly and effectively spot patterns and find valuable nuggets of information in text, such as survey notes, news stories, customer support chats and social media, then combine these with findings from their traditional, database-oriented business intelligence tools for even deeper, more valuable insights.”

ZACHARY JARVINEN, DIRECTOR, PRODUCT MARKETING, AI & ANALYTICS, OPENTEXT
When asked to rank the scale of challenges associated with implementing AI within their organisations, with 1 being the biggest challenge, 24% of respondents said accessing data from multiple disparate data stores internally was the most difficult obstacle to overcome. This was followed by keeping up with the changing AI landscape and data governance on 15% and 14% respectively.

But if you look at which obstacles were ranked either first or second most challenging, the lack of understanding about the application of AI, at 36%, came just behind multiple data stores as a challenge. This indicates there is still a lack of experience and knowledge within organisations of what problems are suited to AI solutions, and how to execute implementations successfully.

**CHART 4**

**WHICH PART OF THE VALUE CHAIN DO YOU SEE AI HAVING THE MOST IMPACT? SELECT ONE**

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer service and retention</td>
<td>42%</td>
</tr>
<tr>
<td>Risk management</td>
<td>20%</td>
</tr>
<tr>
<td>Time to market / Product innovation</td>
<td>14%</td>
</tr>
<tr>
<td>Back office / operations</td>
<td>11%</td>
</tr>
<tr>
<td>Payments</td>
<td>8%</td>
</tr>
<tr>
<td>Wealth and asset management</td>
<td>5%</td>
</tr>
</tbody>
</table>
## What are the challenges associated with implementing AI within the organisation? Scale of 1-8 for each, 1 being greatest challenge

<table>
<thead>
<tr>
<th>Challenge</th>
<th>Scale 1</th>
<th>Scale 2</th>
<th>Scale 3</th>
<th>Scale 4</th>
<th>Scale 5</th>
<th>Scale 6</th>
<th>Scale 7</th>
<th>Scale 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>The challenge of accessing data from multiple disparate data stores internally</td>
<td>24%</td>
<td>14%</td>
<td>10%</td>
<td>9%</td>
<td>8%</td>
<td>14%</td>
<td>8%</td>
<td>13%</td>
</tr>
<tr>
<td>Keeping up with the rapidly changing AI landscape</td>
<td>15%</td>
<td>14%</td>
<td>18%</td>
<td>13%</td>
<td>10%</td>
<td>15%</td>
<td>9%</td>
<td>6%</td>
</tr>
<tr>
<td>Data governance policies</td>
<td>14%</td>
<td>8%</td>
<td>16%</td>
<td>11%</td>
<td>21%</td>
<td>10%</td>
<td>8%</td>
<td>12%</td>
</tr>
<tr>
<td>Lack of understanding about the application of AI</td>
<td>12%</td>
<td>24%</td>
<td>15%</td>
<td>12%</td>
<td>9%</td>
<td>14%</td>
<td>9%</td>
<td>5%</td>
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<tr>
<td>Cultural challenges</td>
<td>11%</td>
<td>20%</td>
<td>13%</td>
<td>11%</td>
<td>8%</td>
<td>19%</td>
<td>7%</td>
<td>11%</td>
</tr>
<tr>
<td>Lack of clear use cases identified</td>
<td>11%</td>
<td>16%</td>
<td>14%</td>
<td>12%</td>
<td>11%</td>
<td>14%</td>
<td>14%</td>
<td>8%</td>
</tr>
<tr>
<td>The time and cost of implementing an AI capability</td>
<td>8%</td>
<td>16%</td>
<td>20%</td>
<td>15%</td>
<td>12%</td>
<td>13%</td>
<td>8%</td>
<td>8%</td>
</tr>
<tr>
<td>Lack of executive sponsorship</td>
<td>5%</td>
<td>14%</td>
<td>9%</td>
<td>18%</td>
<td>13%</td>
<td>18%</td>
<td>9%</td>
<td>14%</td>
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</tbody>
</table>
The period of time immediately following a sale is critical to the long-term profitability of a customer. It is during this onboarding period that process challenges often appear, which can delay ROI, generate customer satisfaction issues and decrease share of wallet.

It is a significant effort to nurture a new account, sending the right messages at the right time, and guiding the new customer throughout the service in such a way so as not to create undue friction. Asking too much of the customer, by way of time, repetition of information or clunky processes is a gauntlet FIs need to run and one that they will continually need to commit to improving, digitally.

There has been a lot of investment in recent years to improve onboarding processes. But there are still a significant number of financial institutions that cannot onboard a new customer digitally. This can be due to local market regulation or – more likely – lack of investment and alignment of systems and processes from the back to the front office.

Only 58% of respondents to this survey said they are able to onboard a customer purely through digital channels. This number was slightly higher for retail banking respondents, at 61%.

Only 40% of organisations believed their systems and processes are aligned to empower their front and back office staff to deliver optimal customer service. This number was lower for retail banking respondents, where only 25% are confident in the quality of their customer services.
ONBOARDING SPEED SETS TONE FOR CUSTOMER RELATIONSHIP

Customers increasingly want a convenient, appealing self-service experience that operates seamlessly across channels. When customer journeys are reset because they switch channels, or they have to repeatedly provide the same information or documentation to different parts of the bank, that causes dissatisfaction. Detrimental actions such as this are terrible for the customer relationship at any time. But when a customer is right at the beginning of that relationship, it’s even more critical for the financial services provider to make a good impression.

Bridging process gaps to ensure a seamless customer experience is where intelligent process automation can provide significant value for financial service providers. Digital onboarding involves new customer-centric, digital processes that require integration with both internal and external applications and systems. With intelligent process automation, AI can provide actionable insights to help trigger automated, information-rich processes ensuring a seamless digital onboarding experience for customers.

Those who can onboard customers digitally are far more likely to be able to onboard new customers in less than a day. But even if applications and supporting data from customers can be handled purely online, there is still scope for internal checks and decision-making processes to make the final onboarding steps drag on much longer than necessary. Overall, we found that 46% of respondents can onboard a customer in less than 40 minutes, including 21% that can complete in less then 10 minutes.

Retail banks, who generally face fewer hurdles in areas such as tax, Anti-Money Laundering (AML) and Know Your Customer (KYC) regulation, were more likely than corporate banks to be able to complete intra-day onboarding, while corporate banks generally take longer. Depending on the complexity of the client’s business, multi-jurisdictional requirements and the bank’s own information handling processes, for most corporate banks onboarding can take between five days and several weeks.

“Delivering a seamless digital customer experience requires new ways of working. Intelligent process automation helps deliver the insight, automation and information-rich processes required to deliver seamless digital experiences, such as onboarding, to meet customer expectations.”

LORI MCKELLAR, SR. DIRECTOR, OPENTEXT™ APPWORKS™ PRODUCT MARKETING, OPENTEXT
Whether it’s retail or corporate banking or financial markets participants, improving onboarding can help organisations improve retention, customer lifetime value and profitability.

“As people, systems and things interact, data has become a vital resource for increasing productivity and delivering top-notch experience for banking customers. But, connecting data from disparate applications, across unique formats and standards remains a key challenge. OpenText™ Business Network helps our customers integrate all data regardless of source, location or format, so they can securely exchange, collaborate on and drive insights from this data across their extended ecosystem—in turn, delivering insights that drive efficiency, agility and growth.”

MARCO DE VRIES, SENIOR DIRECTOR, PRODUCT MARKETING, OPENTEXT BUSINESS NETWORK, OPENTEXT

AI solutions, and complimentary technology such as digital process automation can sit at the foundation of a holistic strategy to achieve this goal, but financial institutions also have to build the procedures and organisational structure to take the advantage of the opportunities.

CHART 6

ARE YOUR SYSTEMS AND PROCESSES ALIGNED TO EMPOWER YOUR STAFF (FRONT AND BACK OFFICE) TO DELIVER OPTIMAL SERVICE TO YOUR CUSTOMERS?

- **Yes**: 60%
- **No**: 40%
## Chart 7

**Can a customer be onboarded digitally?**

- Yes: 58%
- No: 42%

## Chart 8

**How long does it take to onboard a new customer?**

- 10 minutes or less: 21%
- 40 minutes: 25%
- 2 days: 16%
- 5 days: 23%
- Over 15 days: 15%
The key to regulatory compliance and improving onboarding and customer service is the effective use and appropriate security of information. Information governance is the practice of stewardship and oversight of information across the enterprise. It is becoming a critical contributor to the future prosperity of financial institutions as they require faster and deeper access to a wide range of data to feed AI initiatives and satisfy regulators.

But those responsible for information governance who seek to derive value from their information and reduce litigation and legal risk, inefficient production and regulation and compliance failure, face a number of challenges.

"Financial institutions have growing volumes of documents and other forms of 'unstructured content'. New technologies are being applied to improve information sharing and customer service – in addition to governance and control. Content-centric technologies, such as intelligent capture, case management and content management platforms, are all essential elements of digital transformation in financial services."

FRED SASS, SENIOR DIRECTOR, PRODUCT MARKETING, CONTENT SERVICES, OPENTEXT

It is crucial that banks and FIs have the wherewithal to respond to cyber attacks in a timely manner. As we have seen in recent data breaches and cyber attacks - which are accumulating in both number and scale - the reputational harm alone when it is publicised can be damaging beyond any other factor. Sixty-nine per cent of respondents say that they can respond in a timely manner, reflecting the importance bestowed upon it. They can’t afford not to.
“Being prepared in advance for all possibilities is imperative to assure that an organization is secure. In the realm of cyber-defence, an attacker merely needs to be right once to wreak havoc on an organisation. Hence, key members of the security, privacy and compliance C-suite must join forces to plan, manage and monitor the effort.”

HOPE SWANCY-HASLAM, SENIOR DIRECTOR, PRODUCT MARKETING, SECURITY, OPENTEXT

Further to this, risk management comes in second as the area in which AI can have the biggest impact on the value chain. FIs can and will utilise AI to shore up security measures. Security and trust can be said to be the bedrock of a customer offering; therefore, the fact that customer service and retention comes first on this list speaks to the importance of security in serving and retaining the client-base.

The data that can become information all lives somewhere. And despite initiatives over the years to create data warehouses, then data lakes (that can sometimes more resemble multiple puddles), it still often resides in poorly connected legacy systems and data siloes.

We asked survey participants to list the challenges they faced, and legacy and siloed systems topped the list, at 72% and 63% respectively. Despite this, organisations were generally positive about the level of information utilisation they are able to achieve within their organisations. Sixty-one per cent claimed to use information “fairly well”, but only 19% considered themselves very proactive. And a smaller number still – just 11% -- actively use information to develop new products.

**BANKS AS A PLATFORM GATEWAY**

Platformification has been a trend in financial services for several years now. Building on the rise of regulatory and market-driven open banking initiatives worldwide, banks are working more collaboratively with fintechs and other partners. By offering themselves as a platform for accessing not only their own banking services, but a range of other tools and services from partners, banks can maintain the important primary customer relationship while increasing convenience for the customer.
Our survey found that 53% of financial institutions are using AI and APIs, automation and information governance as part of their platformification strategies. Reflecting the countries that have embraced open banking first, this was much more likely in mainland Europe and the UK, 60% and 67% respectively, than it was in APAC (just 35%).

“Open banking or platformification is an unprecedented evolution in banking. Driven by the ever-growing regulatory changes, customer preferences in other industries and innovations in technology, open banking will enable customers to securely share their banking data with third parties. Open banking holds the promise of improved customer experience, targeted offers, products and services. Those embracing the Information Advantage will succeed.”
MONICA HOVSEPIAN, SR. GLOBAL INDUSTRY STRATEGIST, FINANCIAL SERVICES, OPENTEXT

ACCESSING AND USING DISPARATE DATA

Eighty per cent of organisations say they aspire to exchange, integrate and leverage underutilised data sitting siloed inside their enterprise’s legacy applications. But as we have seen, the nature of these systems poses the biggest challenge to effective information governance.

More than half of respondents (52%) consider outdated processes to be a challenge in the use and security of information. If accessing the data is one problem, it follows that a leap is required to put it into effect. In this sense, automation becomes a requirement, the data flows being way beyond current processes could manage in both volume and speed. Process automation can be seen to be the bedrock of utilising AI to leverage information and data.
WHAT CHALLENGES ARE STAFF FACING WORKING IN INFORMATION GOVERNANCE (THE USE AND SECURITY OF INFORMATION)? – SELECT ALL THAT APPLY

- Legacy systems: 72%
- Siloed systems: 63%
- Outdated process: 52%
- Lack of skills: 52%
- Lack of visibility: 44%

CHART 10

DESCRIBE YOUR LEVEL OF INFORMATION UTILISATION WITHIN YOUR ORGANISATION? – SELECT ONE

- Fairly well: 61%
- Very proactive: 19%
- We actively use to develop new products: 11%
- Not at all: 9%
ARE YOU UTILISING AI AND APIS, AUTOMATION, INFORMATION GOVERNANCE TO EMBRACE PLATFORMIFICATION AND DELIVER ENHANCED CUSTOMER EXPERIENCE?

53% Yes 47% No

“The wealth of a bank no longer resides solely in its balance sheets but also in the wealth of information that exists within its customers’ digital identities. Continued success for banks in the age of platformification, and eco-system platforms, will require these digital identities to be grown through partnerships, shared with informed consent, and harvested in an ethical manner.”

SIMON MASTERMAN, WORLDWIDE FINANCIAL SERVICES LEAD, PRESALES, OPENTEXT
DO YOU HAVE THE VISIBILITY AND DETECTION TOOLS TO RESPOND TO CYBER ATTACKS IN A TIMELY MANNER?

- Yes: 69%
- No: 31%

DO YOU ASPIRE TO EXCHANGE, INTEGRATE AND LEVERAGE UNDERUTILISED DATA SITTING SILOED INSIDE YOUR ENTERPRISE’S LEGACY APPLICATIONS?

- Yes: 80%
- No: 20%
The extent to which FIs see the value in their increasing data flows is clear. There is an enterprise and industry wide acknowledgement that becoming more adept at capturing, accessing, understanding, and hence leveraging the ever-growing information at organisations’ fingertips is a key differentiator in competing in an opening, digital ecosystem.

There is benefit to be gleaned internally, by way of making processes more efficient, sharing onboarding information to inform value-add products as well as creating obvious cost efficiencies through automation. Tighter security capabilities underpin both the outward customer offering as well as operational security considerations, including regulatory compliance considerations.

Clear advantages may also be achieved by using data to hone a more personalised customer service and overall experience. To deliver an enhanced customer proposition and indeed journey, cultural change is required to adopt and foster new ways of working. There is strong recognition that processes are outdated, and need to be reconfigured, integrated and to a large extent automated.

An increasingly personalised service is the goal and mission of many FIs who want to compete and stay relevant. By tackling the data challenge head on and viewing it as a competitive advantage, they can deliver on their aims and grow their business in line with the discerning needs of their customers.

The use of AI and RPA are central to facilitating this, given the sheer amounts of data involved to be captured and analysed. Currently, the siloed landscape of most institutions is the biggest blocker to utilising the full capacity of artificial intelligence but most firms are not only wise to this and see it, as well as all the benefits and challenges herein laid out, as part of a digital overhaul, but they are overwhelmingly in favour of unlocking the value they see in the customer data with which they are entrusted.
Finextra

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