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HOW AI REFOCUSSES YOUR BUSINESS ON THE CUSTOMER



PEGA®

Finextra

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INTRODUCTION: WHERE AI AND PERSONALISATION MEET

After two years of being bombarded with messages about the power and potential of AI to disrupt, and augment, financial institutions could be forgiven for feeling some confusion, fatigue, even some disillusionment, about what the ‘so-called AI revolution’ means for them. Where does the hype end and the reality begin?

Including AI in its 2017 assessment of the most important emerging technologies, analyst Gartner acknowledges that the media has been consumed by hype stories driven by interest in innovations like autonomous vehicles.

However, Gartner also emphasises the fundamental importance of AI technologies – enabling the extraction of knowledge from information assets, as it becomes impossible for growing volumes of data to be analysed meaningfully in more traditional ways.

During the same timeframe, financial institutions also cannot have failed to hear about the importance of personalisation – of delivering tailored, contextual information, services and offers to their customers in the right way, via the right channel, at the right time.

Amazon and others have trained consumers to trust automated advice because it is based on an understanding of their behaviour, and this level of personalisation is now expected. Banks know that their customers want them to use the insights they have to move beyond simply trying to sell them the next product, to focus instead on improving their finances, augmenting other aspects of their lives, and saving and respecting their precious time.

Indeed, as recent research by Forrester has shown, banks acknowledge that shifting customer expectations are forcing them to rethink their engagement strategies. While just a quarter of the banks surveyed feel they deliver highly-personalised experiences today, according to Forrester, leading firms see a clear path forward: unified CRM platforms, augmented by AI and machine learning recommendations.



From the range of potential applications of AI technologies in financial services, customer engagement is one of the strongest fits. Banks can leverage these technologies to empower their sales teams, automate and augment decision-making, and enable hyper-personalised interactions with their customers, across all channels.

AI allows banks to determine their customers' moments of need and to reach out to them proactively with relevant actions (information, content, offers et cetera) in real-time – making it possible to genuinely engage with and satisfy customers, while at the same time adhering to audit requirements and driving revenue creation.

In today's digital era, banks have a new type of customer: one who is constantly connected and expects immediate gratification and experiences that are frictionless and focused on their needs. Predictive analytics and AI hold the key to enabling banks to put their customers squarely at the centre of their activities – across marketing, sales and service interactions.



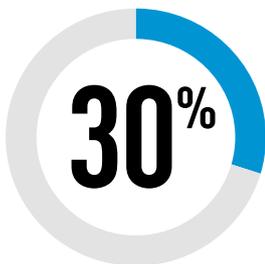
AI: WHAT'S THE REAL STORY?

During the past two years, excitement about the potential for AI in financial services has gone from strength to strength. A perfect storm of factors has pushed AI into the limelight: the convergence of advanced analytics, increasing computing power, a plentiful and growing mountain of data and virtually free data storage.

As a result, lofty predictions about the impact of AI have come thick and fast in recent months. Gartner has said that by 2020, 30% of all companies will employ AI to augment at least one of their primary sales processes. Forrester, meanwhile, predicts that in the same timeframe, 'insights-driven' businesses will steal \$1.2 trillion per annum from their less well-informed peers.

LOFTY PREDICTIONS ABOUT THE IMPACT OF AI HAVE COME THICK AND FAST IN RECENT MONTHS

IMPACT OF AI BY 2020

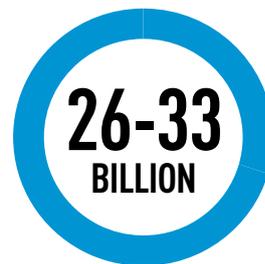


According to Gartner all companies will employ AI to augment at least one of their primary sales processes.



According to Forrester 'insights-driven' businesses will steal \$1.2 trillion per annum from their less well-informed peers.

COST SAVING OPPORTUNITIES BY 2025



Investment bank Goldman Sachs has said it believes machine learning and AI will enable £26 billion to £33 billion in annual cost savings.

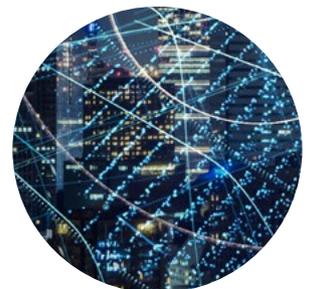


According to Constellation Research, the AI market will exceed \$40 billion by 2020, and surpass \$100 billion by 2025. And the Economist Intelligence Unit reported in 2017 that 75% of more than 200 business executives surveyed said AI would be actively implemented in their companies within the next three years.

As insistent as the excited voices have been, the doomsayers have been equally vocal. Among the most high-profile, Tesla founder Elon Musk has repeatedly warned about a possible ‘AI Apocalypse’: the danger of a handful of tech giants controlling AI systems with overwhelming levels of power, and the threat such systems pose to people. Musk has even called on companies working on AI to slow down, to ensure they do not unintentionally build something unsafe.

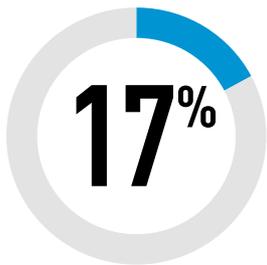
Given the hype around AI, at both ends of the spectrum, positive and negative, it would not be surprising if executives in financial services firms felt a degree of scepticism about these technologies. In this context, it is important to remember that AI as presented by Hollywood remains for the most part science fiction.

Key to success is being pragmatic: looking beyond the ‘magic’ of AI, and focusing on how to derive value from these technologies in the current environment, especially in the context of customer outcomes and experiences. Some clues as to how to achieve this can be found in the Economist Intelligence Unit survey results. Though respondents declare wariness about AI’s potential to reduce human employment, 79% of the 200 executives surveyed around the globe believe AI will make their job easier and more efficient.

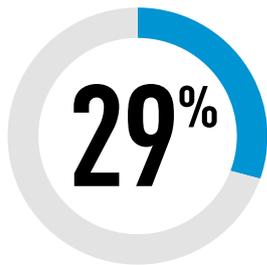


While 17% say they believe AI will increase sales revenue and 29% say it will improve operating efficiency, 26% say AI will improve customer service and 27% believe that introducing AI into their businesses will improve decision making.

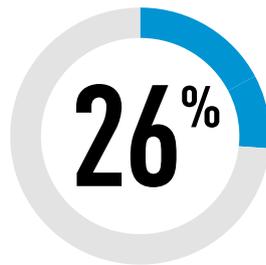
In a similar vein, the Forrester Tech Radar of AI technologies in 2017 positions ‘decision management’ as the most established of these technologies, ahead of other up-and-coming solutions.



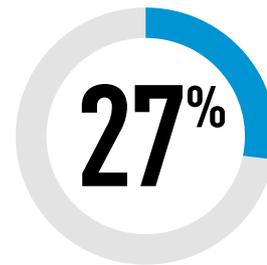
they believe AI will increase sales revenue



it will improve operating efficiency



AI will improve customer service



believe that introducing AI into their businesses will improve decision making

“The Forrester Tech Radar of AI technologies in 2017 positions decision management as the most mature and established, a ahead of robotic process automation, machine learning, textual analysis and natural language processing, virtual agents and far ahead of deep learning technology.”

The concept of a single, omnichannel ‘brain’ leveraging financial institutions’ rich data to fuel decision-making, underpinning the delivery of world-class, personalised customer experience, is clearly within reach for firms today. Indeed, customer decisioning is arguably where AI lives and breathes in the current environment.



03

PERSONALISATION: WHY IS IT SO IMPORTANT?

The era during which consumers are content to be bombarded with irrelevant content and offers is fast approaching its end – and indeed for the millennial generation it never started. How many of us have an email address we use only to register on sites we anticipate will subsequently spam us, directing these unwanted mails to an inbox we have no intention of checking?

Being forced to ingest information that isn't relevant very obviously interrupts the customer experience and is off-putting in the extreme – not least because it eats into what is increasingly our most precious commodity: time.

As consumers, we know that what we want is a personalised service: for our providers, including our financial services providers, to deliver meaningful, relevant experiences, based on their understanding of our specific views, preferences, needs and circumstances. We want to deal with companies that connect with us at an emotional level and exhibit brands that reflect our outlook and identity.

As businesses, any doubt as to the need to deliver hyper-personalisation is surely banished by simply considering what a response rate of 1% (the expectation, increasingly ambitious for a 'standard' marketing campaign) means in real terms: that 99% of customers contacted are at best ignoring our messages, and, at worst, are actively annoyed by them.

The fact is that marketing used to be driven by what companies wanted their customers to do, not by what customers wanted. But the 25 plus year tradition of 'one to many' marketing has had its day. Consumers see right through it: if a company puts a badly-targeted advert in front of its customer, it makes it obvious that it hasn't taken the trouble to know that customer. The advert is all about the company, and not about the customer. If a company can't align with a customer's needs, then its customer will tune it out.



Today, ‘one to many’ marketing is no longer acceptable. More progressive companies pursue genuine relationships with their customers, from ‘one to many’ marketing to ‘one to one’ – or more accurately, as Forrester terms it, ‘one to a moment’ marketing.

The critical attribute of personalised marketing is that it is not about pushing the objectives of the brand on to the customer, discounting what the customer really needs or wants. By contrast, in short, personalisation depends on understanding the customer, by leveraging analytics and AI, the emotional state of customers in any given moment, and reacting in the right way (delivering an offer, a piece of content, some advice, or perhaps doing nothing at all), at the right time, via the right channel, to meet each customer’s unique needs.

Context is all-important here. Context is all about what the customer is trying to accomplish and their situation. When companies make a marketing offer to a customer when they are trying to address a service issue, or try to sell customers with a high churn risk and declining account usage additional products when they are barely using existing products, they are ignoring the customer context – and do so at their peril.

To be contextual, financial institutions need to demonstrate empathy, and to do so they must understand their customers’ situations by analysing an increasing number of data points, derived from transactional and behavioural data, from banks and third parties. Firms need to gain insights into customer preference from structured and unstructured customer data and conversations in and across all channels, in order to pre-emptively anticipate their customers’ needs.

The upside for financial services firms is significant. A Forbes study (entitled Customer Engagement: Best of the Best) has shown the extent to which companies can flourish when they pay attention to customer engagement.

“When companies do customer engagement really well, very good things happen: including a fourfold growth in top and bottom line growth, and a threefold increase in customer acquisition.”

FORBES STUDY, CUSTOMER ENGAGEMENT: BEST OF THE BEST



Ultimately, then, these improved, personalised customer interactions can drive revenue generation: the better a financial institution can anticipate its customers' needs, the more it can meet those needs by offering the right products, and the more chance it has to deepen its share of wallet rather than lose share to another provider. Being able to target products accurately to customer needs will also help banks to avoid mis-selling scandals.

In fact, personalisation is about much more than simply selling – and certainly depends on understanding when to try to sell and when not to. A recent CEB Tower study showed that what retail bank customers most desire is assistance with keeping their finances on track. Moreover, the study also showed that financial institutions that deliver this receive a bump in loyalty.

Reinforcing this, the JD Power US Retail Banking Satisfaction Study revealed 'quick tips' to improve financial wellbeing to be very popular, and that receiving such advice increases loyalty.

“The JD Power US Retail Banking Satisfaction Study revealed that the most sought-after service is “Quick tips to improve my financial situation” (42% respondents), and that propensity to select a given financial institution the next time increases among customers that have received advice, versus those who have not.”



THE CHALLENGES: WHY IS PERSONALISATION DIFFICULT?

Personalised experiences and advice need, above all, to be relevant to the customer in question, and, to stay relevant, financial institutions must continually adapt their outreach to take into account changes in customers' situations which may have been detected just seconds before.

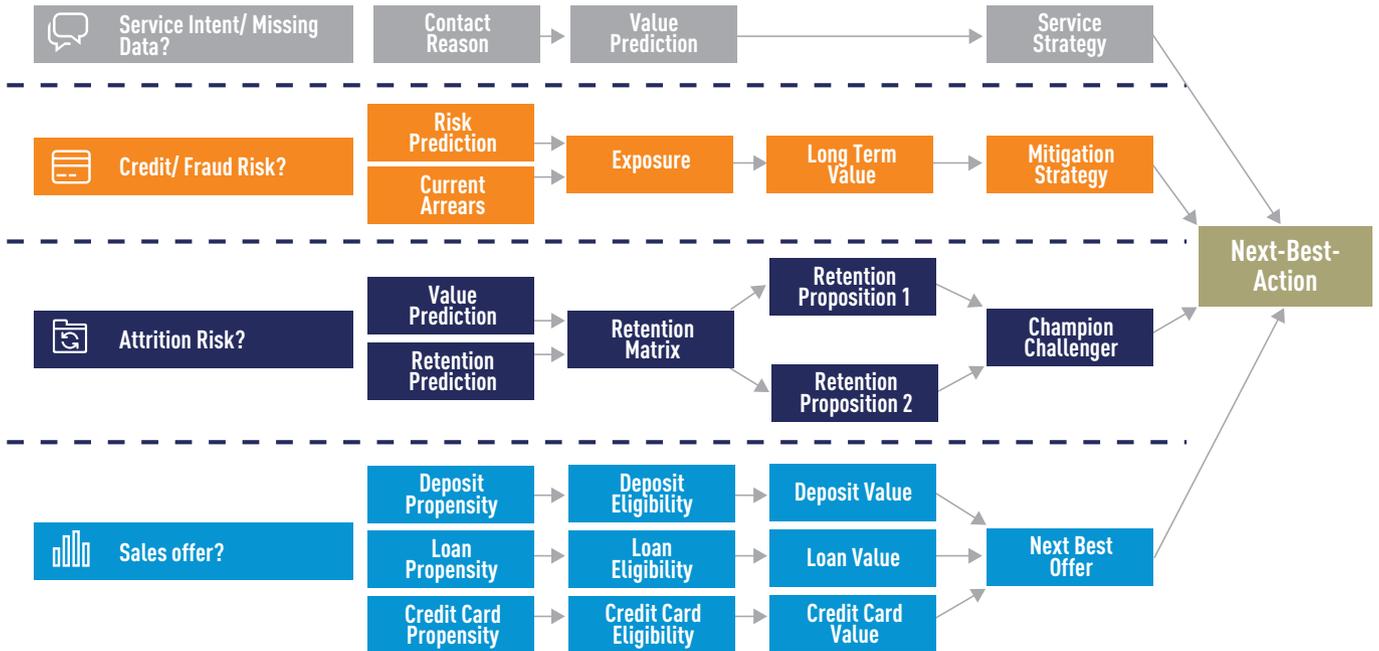
The shift that is required – from a firm-centric push campaign mentality to a customer-centric interaction management approach – depends on the availability of real-time insights to determine the 'next best action' (NBA) that will best meet the needs of both the customer and the bank. This is where AI comes in.

Having the data and analytics in place is a start. The real value for firms, however, comes when they are able to turn data into insight into action, and this requires making co-ordinated decisions in real-time across all channels. NBA could be any of all possible actions: making an offer, initiating a retention plan, opening a service case, continuing a transaction or conversation where a customer left off in another channel. It is critical to ensure that exactly the right action is taken during every interaction across all channels.

To achieve this, financial institutions' personalisation strategies need to be contextual. Their systems need the capability to listen to every click, reply, tweet and location change and act accordingly to produce a recommendation for the NBA.



NEXT BEST ACTION



Putting in place the required capabilities is not trivial for financial institutions, hampered as they often are by legacy systems, siloed lines of business and disconnected channels. While a number of firms have made significant progress in this area, as will be explored later in this paper, it is fair to say that for the majority this journey is in its early days.

Indeed, asked during a recent webinar hosted by BAI and Pega (Separating Fact from Fiction: The New Role of AI in Marketing) where they were on their AI/marketing personalisation journey, 60% of listeners admitted they were still investigating this area. While 33% said they had made a start, a tiny proportion put themselves in the ‘already implementing’ category.

“60% listeners admitted they were still investigating AI/marketing personalisation; 33% had made a start. Only a tiny proportion “already implementing”- when asked during a BAI and Pega-hosted webinar.”



Meanwhile, 2017 research from Forrester has shown that:

- While banks acknowledge that shifting customer expectations require them to rethink their engagement strategies, and that a relationship-based approach is the future, just over a quarter believe they are delivering highly-personalised experiences today.
- Banks still face many obstacles around customer intimacy and customer engagement – revealing limitations when it comes to real-time customer data, technology failings and deployment issues, in turn preventing many firms from adequately supporting personalised engagement and relationship-based selling efforts.
- The top challenge is “lack of real-time customer specific insights and recommendations” (highlighted by 64%), and the top two barriers created by current tools are cited as “difficulty accessing complete data” and “lack of insights from current reporting/dashboard capabilities”.
- When asked “How valuable would it be to have a single, unified CRM platform to support customer engagement”, an overwhelming 99% said they would find it valuable, with 71% saying it would be very valuable.

The survey findings also show that AI is the next major development planned by responding financial institutions. Asked to rate how far they have progressed with “leveraging more data-driven recommendations via machine learning or artificial intelligence”, though just 22% report having implemented such capabilities and being in a position to expand them, 46% say they plan to implement in the next 12 months.



05

TECHNOLOGY REQUIREMENTS: WHAT SOLUTIONS DO FINANCIAL INSTITUTIONS NEED TO SUPPORT AI-DRIVEN PERSONALISATION?

As has been established, in today's digital era, financial institutions have a new type of customer: constantly connected, expecting immediate gratification and experiences that are frictionless, and focused on their needs, not those of their bank.

To meet these expectations, financial institutions need to put in place a solution that can act as an always-on digital customer brain. Such a solution will enable a bank to put their customer squarely in the center of their business, across marketing, sales and service interaction.

Powered by predictive analytics and AI, this 'brain' senses customers' moments of need and enables financial institutions to reach out to them with relevant actions and offers in real-time. Having meaningful conversations and building relationships with customers engenders loyalty and trust. Such an approach also underpins genuine customer engagement to drive growth, and help banks avoid miss-selling.

Key components of this type of solution include sophisticated analytics which use predictive analytics and machine learning to evaluate each customer's context, in real-time, as the interaction is taking place. These analytics continuously learn and adjust in response to customer interactions, so they can dynamically recommend the most relevant action, offer, content, timing and channel. Such a solution also needs to enable users to easily design, deploy, execute, measure and revise omnichannel customer strategies, which balance customer expectations and business objectives.

This depends upon the system's ability to extend decisions across multiple channels – mobile, email, traditional mail, location-based channels and social media. Also required are re-usable strategy templates which enable the development and co-ordination of effective inbound and outbound engagement strategies in one place.



It is very important for financial institutions to recognise the power of empowering employees. In fact, it's among the top 10 trends shaping business from 2018 to 2020 as identified by Forrester: organisations that focus on improving employee experience will also improve customer experience.

Clearly, giving employees systems that make processes easier will both improve their productivity and their satisfaction and free them up to focus more fully on delighting their customers.

IT teams also need increasingly to think of themselves as customer facing: a firm's brand lives in its systems of engagement, so in a very real sense the tools that IT builds represent the public face of a financial institution.

The potential for AI tools such as bots to support customer-facing and other employees is also evident. Gartner has predicted that by 2021, 55% of organisations will have developed bots – including ones that can automatically grab data for a salesperson from a range of different systems in order to create a quote, for example.

This kind of AI-driven automation frees up skilled employees to focus on customers, and helps to make firms' workforces as a whole more effective in customer engagement.

Other AI innovations can also support employees, ultimately enhancing customer engagement. AI-powered guidance on next best actions, driven by analytics and insights, make front-line staff more informed and better able to serve customers intelligently, by conducting real-time pertinent conversations. In this way, AI can ensure that both employees and customers are delighted.



PROGRESS SO FAR: ARE ANY BANKS DOING THIS YET?

The short answer is, yes, they are. As mentioned, many financial institutions are at an early point in the journey of leveraging AI for improved customer engagement and personalisation. However, the number of success stories is steadily growing, proving what's possible using tried and trusted technologies, assuming the right strategy and solutions are in place. For instance, three global banks have partnered with Pega using AI to drive customer engagement through digital transformation.

UK bank RBS has built a single decisioning layer which draws on a consolidated store of relevant data and feeds decisions out to all the bank's channels. Its aim is to build a "replacement for branch managers," leveraging its data and decisioning capabilities in order to "know" each customer individually, and conduct one-to-one conversations with them.

RBS's approach is not about selling or cost savings. On the contrary, the bank is committed to carrying out next best actions that will help customers, whether or not they drive new revenues or costs. The aim is to have relevant and timely conversations with customers and align with those customers' preoccupations at any given time, in order to deliver the best possible products, services and relationship.

"The focus is getting the message to the customer at the time that is right for them, not the time that is right for the bank."

- RBS

The Commonwealth Bank of Australia (CBA) has also implemented a centralised ‘brain’ to automate customer decisioning, connected to all its channels – including ATMs, branches, digital, mobile, email, paper mail and SMS. CBA, too, has worked with Pega to create its single decisioning engine, replacing a number of disparate solutions.

The bank is leveraging AI in the form of adaptive modelling and machine learning to understand two-way conversations with customers, to decide the next best action for customers across all channels, to determine which conversations are most successful, which to retire and which to adjust. Once again demonstrating how important it is that customer engagement goes beyond sales, CBA has found that sending credit card payment reminders to customers to help them avoid additional charges leads to an uplift of 5% in customer satisfaction compared with a control group.

For Canada’s Scotiabank, implementing AI to support decisioning has been part of its journey to move from simply providing banking products to providing a rich digital banking experience for its customers. The bank mixes proactive sales, marketing and advice demonstrating they understand customers by making timely and relevant offers.

Central to the bank’s approach is monitoring real-time data. If a customer visits travel and airline sites and checks FX rates, the information is fed into a scoring model which calculates a propensity. Then, when appropriate, Scotia launches a targeted offer – for example if the customer comes into a branch to do an FX transaction.

If the customer doesn’t come into a branch or call a contact centre then the offer will be launched via the customer’s preferred channel, ensuring a consistent and convenient omni-channel experience.

And, of course, the offer could be travel insurance – or it could be to ensure proactively that credit card spending abroad is not flagged as unusual use, or countless other use cases.

Reinforcing once again the importance of going beyond sales, Scotiabank’s aim is to use AI-driven personalisation to help it become a better financial adviser, and to provide a better service. Knowing customers better enables the bank to make more nuanced pay/no pay decisions and to head off collections situations – again ensuring Scotiabank becomes more relevant in its customers’ eyes.



CONCLUSION: HOW TO LEVERAGE AI TO PUT THE CUSTOMER AT THE CENTRE OF YOUR BUSINESS

Peeling back the AI hype layers, some technologies under the AI umbrella are ready for prime time use today and indeed are already being leveraged by financial services firms.

The principal area in which AI is currently being applied in banking is in customer engagement, as firms recognise and respond to the changing expectations of digital-savvy consumers.

The focus of firms' marketing outreach has moved from one-to-many, via one-to-one, to 'one-to-a-moment' approaches. As financial services firms seek to develop personal relationships with their customers by delivering relevant information and offers at the right time via the right channel, AI technologies such as predictive analytics and machine learning are invaluable, moving banks into an automated world by leveraging AI to replicate the role of local branch managers.

Successfully implementing a customer decision hub is not always easy for financial services firms with complex legacy systems, disparate data stores and siloed organisational structures, and therefore pragmatic approaches are needed: firms need to work out where AI technologies can best be applied to improve customer experience, to devise strategies that support those outcomes, and to move forward in steady phases.

Another critical consideration is to ensure that personalisation strategies go beyond selling to encompass not only next best offer but next best action. Not all actions will involve pushing new products and services: indeed many, if not most, will centre on delivering helpful advice and or excellent service which will then build loyalty towards the brand, increasing customer engagement, designed to cement and augment a bank's relationships with its customers.



In light of this, AI technologies capable of listening and responding to real-time information, making decisions about how to interact with customers on the basis of a changing picture, and feeding those decisions out via multiple channels to underpin personalised communications, have a central role to play.

AI technologies will be essential to enable financial institutions to keep pace with evolving customer demands and innovative new entrants in this fast-changing digital world.



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