DIGITAL DISRUPTION IN RETAIL BANKING

Powered by Intelligent Automation

ABSTRACT

Like most of the other industries, the financial sector is also experiencing a digital disruption powered by the new generation of technologies including Robotic Process Automation (RPA), Intelligent Automation (IA), Internet of Things (IoT), Blockchains, Analytics and Artificial Intelligence (AI). Even the large incumbent banks are experiencing tight competition as the new entrants are adopting these technologies at a faster pace. Apart from the competitions, the increasing customer expectations and the introduction of innovative services based on the customer expectations are reshaping the banking ecosystem as a whole. Virtual Banking, Assisted Banking, Zero hour contracts, Peer to Peer payments, Connected payments and so on are some of the key trends that the new generation customers expect from their banking partners. These new trends and digital ecosystem are compelling the different players including Retail banks, Community banks, Investment banks, Private Equity firms and wealth management firms to adopt a sound and executable digital strategy inside and outside their organization. However, are all the players able to bring in this efficient digital strategy into their existing banking ecosystem? Are the banking sector players experiencing challenges in the below areas?

01	Acquiring new customers and on boarding them without manual intensive processes

02	Launching of new products/ services in line with the customer expectations and under tight deadlines

03	Keeping a balance between legacy systems and new age digital systems to drive back office operations efficiently

04	Automating customer interactions & engagement to provide a seamless Customer Experience

Digital Transformation powered by Intelligent Automation can address your challenges to a larger extent and bring in the business disruption by reimagining existing processes of customer acquisition and engagement, rolling out new lines of services, creating deeper pockets with existing customers with better insights, redefining employee engagement and streamlining back office operations. This paper explores some of the key pain points that banking sector experiences currently and how IA can address them to a greater extent.
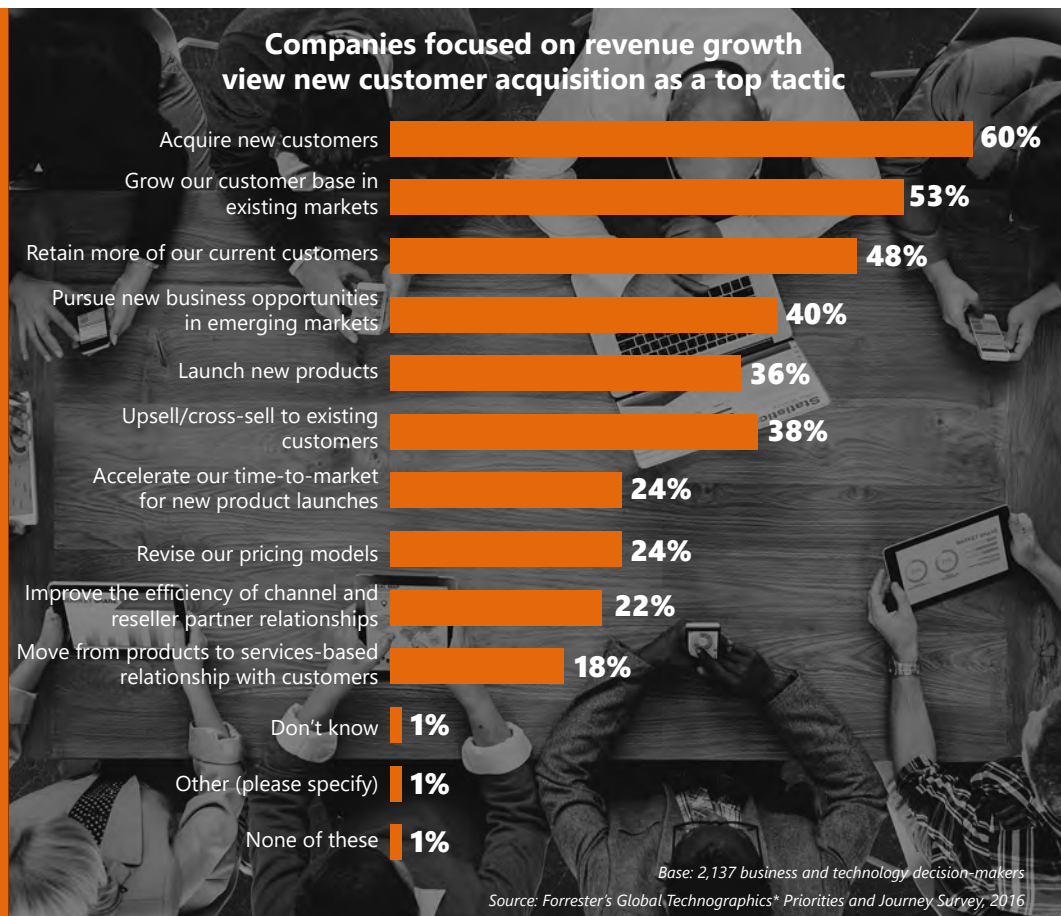
CONTENTS

THE KEY CHALLENGES THAT **RETAIL BANKS** FACE IN A **DIGITAL JOURNEY**

01 CUSTOMER ACQUISITION AND ONBOARDING

According to Forrester's Global Business Technographics Priorities and Journey Survey 2016, 60% of the business and IT decision makers see acquiring new customers as their top priority.

> " You said that in the coming year, your firm wants to grow revenues. What actions is your firm taking to achieve this objective? "

Companies focused on revenue growth view new customer acquisition as a top tactic

Acquire new customers	60%
Grow our customer base in existing markets	53%
Retain more of our current customers	48%
Pursue new business opportunities in emerging markets	40%
Launch new products	36%
Upsell/cross-sell to existing customers	38%
Accelerate our time-to-market for new product launches	24%
Revise our pricing models	24%
Improve the efficiency of channel and reseller partner relationships	22%
Move from products to services-based relationship with customers	18%
Don't know	1%
Other (please specify)	1%
None of these	1%

Base: 2,137 business and technology decision-makers
Source: Forrester's Global Technographics Priorities and Journey Survey, 2016*

In this extremely competitive business world, Customer acquisition is always a key element of the success and growth of any business. Banking is also no different. Realizing this, banks are moving from a product driven or channel driven approach to a customer centric approach to acquire new customers and grow the business. To achieve this, the banks need to manage traditional channels and explore digital delivery channels to attract customers, build loyalty and retain them. The next step after the customer acquisition is the client onboarding which is, in fact, the first step to set up an impression for the client on his further interactions/ engagement with the bank. Traditionally it was all manual intensive and paper based processes associated with customer onboarding. However, Gen Y customers expect frictionless, automated and user-friendly procedures by simply uploading the documents through their mobile or tablet, avoiding manual errors and repeating questions to fill the forms. Automation creates more room for a better and more effective engagement with the customer and building a long lasting relationship with them.

02 DIGITALIZATION OF TEDIOUS AND REPETITIVE BACK OFFICE OPERATIONS

Banking is a sector which involves a vast amount of back office operations. In many of the traditional banks, these operations are mostly stuck up with legacy systems, paper based manual processes and data from multiple siloed data sources which will lead to increase in the cost of maintenance, delay in rolling out new products and delayed response to the customers. In many organizations, the volume of documentation required for financial transactions slows down the processing times. In many instances, a process could be stuck in limbo for days, weeks or even longer as it awaits approval. This also opens the doors to innumerable human errors which again cause an increase in elapsed time to closure of a transaction. The other major factors that complicate the internal banking operations include Mergers and Acquisitions, regulation & compliance changes and product launches which take up considerable time and cost to make changes in their existing IT architecture. The digitalization of the banking back office operations is a major challenge that many of the players in this sector faces currently. Before implementing automation, these organizations also need to divide their internal process into fully automatable, partially automatable and the third category which needs manual intervention.

03 PROVIDING A SEAMLESS CUSTOMER EXPERIENCE

In this digital age, Customer experience is of paramount importance which acts as a competitive differentiator in all the businesses. The level of customer experience that you deliver to the customer is the key factor which makes or breaks a business. A report on Customer Experience from Forrester says that "Forward-looking organizations augment human customer service with artificial intelligence (ai) to deepen their understanding of customers' attitudes and emotions and to free up frontline staff by eliminating low-value workloads". The 2017 Retail Banking Trends and Predictions from Digital Banking report reveal that improving the customer journey and providing a positive customer experience (CX) was ranked as the number one trend, as well as top strategic priority. Technological capabilities can act as a key enabler for delivering a seamless customer experience. However, having a balanced strategy between digital self-service and human interaction for customer services is the ideal strategy that many new generation digital organizations choose to follow. This offers greater opportunities to identify client requirements and deliver the services according to the customer expectations. However, for delivering new customer friendly propositions, these new modules of services need to gel with the existing banking infrastructure and operations. Here comes the relevance of digitally powered, modular and automated solutions in the banking sector.

04 DRIVING RESULTS WITH EMPLOYEE ENGAGEMENT

Changing customer demands along with advancements in technology are driving the bank branch transformation. In this wake, the retail employees need to embrace the technology, changing roles and service expectations to create value addition in the new gen digital banks. They need to get transformed into video tellers, specialists delivering on demand and personalized services for their customers.

As per a 2016 survey from Forrester **"the traditionally fragmented employee experience stands in stark contrast to what a modern digital approach can achieve (see Figure below). This fragmented employee experience is not only ineffective; it sends the wrong message — that the organization doesn't care about investing in technology to engage its workforce."**

Characteristics of Traditional versus Next-Generation Digital Employee Experiences

TRADITIONAL EXPERIENCE	NEXT-GENERATION DIGITAL EXPERIENCE
Static portal with links to internal documents	Dynamically refreshed destination with interactive multimedia content
Corporate message board and mass email communications	Interactive corporate communications with timely information and employee feedback
HR transactional self-service, limited to administrative tasks	Mobile apps for a variety of tasks, including pay, benefits, health, performance and learning
Periodic employee satisfaction surveys and performance reviews	Pulse surveys and social communication channels; continuos coaching and performance measurement
Multiple applications with unique logons and user experiences	Seamless user experience with single sign-on
Infrequent use	Daily destination

Source: Forrester Research, Inc. 2017

INTELLIGENT AUTOMATION
THE KEY LEVER FOR DIGITAL TRANSFORMATION IN BANKING

In this age of digital disruption in the banking sector, Intelligent Automation is the new buzz word, and it holds power to redefine all the stages of banking procedure right from the customer acquisition to delivering a seamless customer experience. IA is the key lever in reimagining the banking functions and taking it to the next level by improving the customer acquisition, accelerating the back office operations, enhancing compliance and improving the customer as well as employee engagement, which collectively impacts the overall customer experience delivered. In its simplest form, IA can be defined as a technology which helps humans in automating simple rule based process by mimicking the human actions. What distinguishes IA from the traditional IT automation is its ability to adapt to changing circumstances and its applicability across system domains. IA systems are designed to work autonomously for massive data operations, trigger responses and communicate with other systems. Like a multi-tasking human, IA systems can capture instructions, interpret actions and issue commands in simple natural language.

IA and IT automation often create conflicts of understanding in the business world. Let us consider electronic forms that are being filled for insurance service. If the customer has missed entering a zip code by accident, the IT automation system will reject the form. So what would the IA system do in this situation? Instead of rejecting a form and flagging it to be handled by human interference, IA would analyse and self-correct without human assistance. This saves time and effort greatly for the insurance firm and the customer. Of course, there are many complex use cases and to accomplish this with zero error, it takes a lot of learning for the robot. However, once done, it is reusable and applicable to the entire requirements spectra.

BANKING AND IA
A MATCH MADE IN AUTOMATION

Highly regulated industries like banking with high volume and transactional processes will be the early ones to adopt IA and cognitive solutions. However, this story is in evolution, and the biggest impact with early advantages has been seen in the banking, insurance and financial services sector. According to MarketsandMarkets Analysis done last year, the global Banking, Financial Services, and Insurance (BFSI) robotic automation market is expected to grow at a CAGR of 75% and is expected to reach USD 835 million by 2020. The report also says that the rapid adoption rate indicates, that BFSI companies will focus on investing in training and ownership of the automation technologies, as compared to investing in professional services to automate processes, over the forecasted period.

Banks work in an incredibly competitive market and have already done several forms of automation, to reduce labour and human errors. Overcoming the challenges with legacy systems and adopting new technologies has been a continuous process in banking.

Quoting "examples of automation being used for front-, middle- and back-office deployment included for banking and insurance," Gartner specifies, "Due to the major cost-reduction pressures in these industries, these organizations have been the highest adopters of automation tools to date. Examples include moving data for claims processing, predominantly from customer facing websites; card management for issuing replacements for lost or stolen cards, and reversal of card charges; and mortgage processing, with the resubmission of failed payments."

According to a latest Bloomberg Report, many leading players in the Financial services sector including Goldman Sachs group and JP Morgan Chase have started reengineering their services to become more agile and efficient by adopting automation. Robotics allow them to free up time by picking off the most redundant, the most repetitive, the most labor-intensive tasks and automating them.

HOW IA ADDRESSES THE
MAJOR CHALLENGES IN THE BANKING SECTOR

01

AUTOMATION IN CUSTOMER ACQUISITION AND ONBOARDING

Business to survive and grow requires new and loyal customers along with retaining the existing customers. Acquiring new customers and providing them an efficient and simple on boarding process is a top priority for any BFSI organization. For customer acquisition, they need to focus on existing markets as well as the emerging markets. With Omnichannel digital channels for customers to engage in their lives, the businesses need to have a solid, smart and automated strategy to acquire and retain the customer base. Automation can play a key role in tracking the customers through omnichannel and engaging with them as advisors. Virtual data rooms, enterprise content management platforms, enterprise file sink and share and digital customer onboarding solutions play a key role in automating the customer acquisition and onboarding process. After the acquisition, on boarding customers is an area of immense importance to business since the first impression is indelible in the minds of customers. Efficient customer On boarding solutions which can be seamlessly integrated with bank back-end systems brings in disruptive capabilities (to name a few - zero data entry, real-time validation & verification, bio-metric authentication, country-specific KYC compliance) This results in reduction of Customer On Boarding (COB) Time by up to 50% or more, Lower Customer Effort Score (CES) up to 30% and reduce COB cost up to 30%.

CASE **STUDY**

Digital Knowledge Management Solution for a leading Global IT Services Company in the US

A Leading Global IT Services Company in the US

BUSINESS REQUIREMENTS

- A cognitive contact center capable of self learning.

- Relevant and contextual knowledge delivery to the end users with predictive analytical capabilities.

SOLUTION

- An efficient SaaS based Platform powered with self learning algorithms and cognitive technology is developed and deployed at client's contact center.

- Enabled relevant and contextual knowledge delivery

- Deployed Intelligent virtual agent solution with 24/7 support.

IMPACT DELIVERED

Faster Customer Onboarding and Query Management

Reduced call time with relevant knowledge delivery

Improved business and operational efficiency with Cognitive platform

Enhanced customer engagement and overall customer experience with Virtual Agent support

02

FASTER AND AGILER BACK OFFICE OPERATIONS WITH AUTOMATION

The diagram below by the Everest Group cites the adoption potential along with the tasks that will be most affected, with banking leading the pack. The earliest adopters of Automation have been Banking, Financial Services, Insurance, Healthcare and Business Process Outsourcing firms.

The Robotic Process Automation (RPA) opportunity varies by Industry and Function

Regulated industries with high-volume and transactional business processes offer the most potential.

RPA adoption potential by buyer industry and function

Potential for RPA

Low ⬤ ⬤ ⬤ ⬤ **High**

Illustrative processes with higher potential

Function	F & A	Procurement	Human Resource	Contact Center	Industry-specific process	
Industry	Accounts recievable, accounts payable, general ledger	Invoice processing, requisition-to-purchase order	Payroll, hiring, candidate management	Customer Service		
Banking & Financial Services	⬤	⬤	⬤	⬤	⬤	• Cards activation • Fraud claims discovery
Insurance	⬤	⬤	⬤	⬤	⬤	• Claims processing • New business preperation
Healthcare	⬤	⬤	⬤	⬤	⬤	• Reports automation • System reconciliation
Manufacturing	⬤	⬤	⬤	⬤	⬤	• Bills of material (BOM) generation
Hi-tech & Telecom	⬤	⬤	⬤	⬤	⬤	• Service order management • Quality reporting
Energy & Utilities	⬤	⬤	⬤	⬤	⬤	• Account setup • Meter-reading validation

Source: Everest Group

There is a good reason for adoption – IA has a lot to offer in the form of process quality, speed, governance, security, and continuity.

The volume of documentation required for financial transactions can slow down processing times. In many instances, a process could be stuck in limbo for days, weeks or even longer as it awaits approval. This also opens the doors to innumerable human errors which again cause an increase in elapsed time to closure of a transaction.

Another area where IA is beneficial to the banking and financial industry is compliance. Like insurance, banks and other financial institutions are required to constantly maintain a high level of regulatory compliance. Frank J Casale, Founder of the Institute for Robotic Process Automation says, IA is a game-changer in banking and financial services as it offers:

| Dramatic cost reduction (25 to 50% lower costs in general) | IT departments can now deliver technology based services within their budgets and which are more reliable and efficient | Compliance and risk management functions | Reduces human error |

There are already over 20 unique integrated automation solution implementations and proof of concepts for various vertical-specific processes such as in insurance, finance and accounting, procurement, customer experience and back-office service areas in the market today. Banking and financial services industry have enormous scope to adopt IA for more than two-third of its processes.

Intelligent Automation is the place to start for well over half of Enterprises

What is the most impactful timing to begin these actions?

Action	Now	Within the next year	Within 3 years	Within 5 years	Never
Invest in intelligent automation	23%	34%	26%	12%	4%
Identify / hire a transformational leader / change agent	21%	34%	28%	10%	7%
Invest in effective analytics tools & skills	24%	30%	30%	12%	4%
Invest in international IT talent to help us migrate away from legacy systems	20%	32%	26%	16%	5%
Invest in specialized change management support to reorient operations staff	19%	33%	29%	13%	7%
Retrain existing internal operations talent to redesign processes	18%	33%	32%	11%	6%
Accomplish creative problem solving / "Design Thinking"	19%	31%	30%	15%	6%

■ Now   ■ Within the next year   ■ Within 3 years   ■ Within 5 years   ■ Never

Source: Horses for Sources

CASE **STUDY**

Enhanced Agent Productivity with AI Chatbot for the Largest Commercial Bank in the US

A Leading Commercial Financial Services Institute in the US.

BUSINESS REQUIREMENTS

• Implementing a Single Source of truth for CSAs.

• Enhance Employee Productivity

• Optimize the call wait time in peak business hours

• Reduce the first call duration

SOLUTION

• AI based Agent Assistant Bot with NLP capabilities.

• Self Assembling Knowledge Base for all enterprise knowledge.

• Intelligent Conversational Workflows to handle common services.

• Advanced Dashboards to measure & visualize customer sentiments and usage.

IMPACT DELIVERED

Increased business efficiency with savings up to 61K$

Better agent utilization with a saving of 2880 hours

Significant reduction in agent training cost i.e., 40% of company's turnover

03

TAKING THE CUSTOMER EXPERIENCE TO THE NEXT LEVEL WITH AUTOMATION

According to the Global Consumer Banking Survey 2016 by Earnest & Young, the traditional banks are under threat and their relevance with consumers is waning. Therefore, traditional banks need to rethink – and in some cases even revolutionize – their approach to consumer relationships. This shows the relevance of customer experience in growing and retaining the customer base. Retail banks to create an effective customer relationship strategy need to view the world from a customer's point of view. They need to understand the customer concerns, requirements and expectations and need to provide solutions and support based on this. Unlike the traditional means of customer services, the new generation customer service avenues are very nimble and real-time. Automation plays a key role in this. From looking up the information to filling the forms to fast processing of the applications and finally to provide the required

support for the customer through Digital Query Assistants or Virtual Agents or Chatbots, Automation is redefining the customer experience arena.

IA based solutions can drastically reduce the turnaround time from months to a few days or hours' time. Digital Query Assistant (DQA) solutions powered by artificial intelligence and various areas of cognitive computing, holds power to manage and optimize customer interaction across disparate channels including mobile, the web, social media, and voice mail in a manner driven by automation. AI powered DQA can make the customer's self –serve journey more meaningful & contextual. It, not only understands the customer better (portfolio, transactions and behaviors/activities) but also helps automate the mundane & repeated actions like Card/Loan Application, Fund Transfer thereby delivering a seamless customer experience. Disruptions like

Seamless Transition from Bot Assisted Self-Serve to Agent Interaction (Reduce 40+% of your Contact Centre calls), Digitally Unified Agent Desktop (Agent grappling thru 20-25 screens / applications) and Super Agent (Digital Assistant for CC Agents/Customers) will show you how we can directly improve C-SAT up to 1%, Agent Productivity by 10%, reduce effective Agent On-boarding time by 50% or more, and Cross/Up Sell by 20%.

CASE **STUDY**

End User Virtual Assistant Solution for a Leading B2C Fintech Firm

A leading Fintech company that helps millennials set up their financial goals and helps them manage spend pattern

BUSINESS REQUIREMENTS

• Reduce the capital expenditure

• Predict end user spend behavior with accuracy

• A Multi platform solution for personalized end user interaction

SOLUTION

• Implementation of Virtual Financial Advisor (VFA) solution for the client

• Incorporating personalized conversational interaction and cognitive anticipation features to understand the customer requirements

• Incorporating Anticipative gamification features to influence the savings and spend behavior of the millennials

IMPACT DELIVERED

Increased business Growth with better customer understanding

Improved Consumer Spend Pattern with more personalized financial advises

Increase in overall Customer Satisfaction with gamification features

04

INCREASING RELEVANCE OF AUTOMATION IN EMPLOYEE ON BOARDING AND ENGAGEMENT

IA has changed the work structure and allocation in organization providing room for the employees to focus on more core tasks which require human emotion and intellect in decision making. It frees up the resources from repetitive and time consuming mundane tasks ranging from customer acquisition to handling them. IA potentially streamlines HR processes, payroll management, hiring and onboarding of new employees and talent management which manually requires extensive multistep processes and systems. A flawless on boarding process with automation brings in higher job satisfaction and lower turnover, organizational devotion, career effectiveness, stronger performance, and reduced stress for the employees.

A 2017 Forrester report titled 'The Digital Employee Experience Drives Engagement and Productivity' highlights that "the likelihood that an employee will stay with an employer for a long time and advance in responsibility and influence is a high-value outcome of the employee experience. identifying the key retention levers and enabling them in a contextual employee experience can reduce costly turnover and help and organization develop talent". The report also says that an effectively designed Digital Employ Experience strategy has a more elevated value proposition: it is not only easy and emotionally rewarding to use, but it also drives the productivity increases with employee commitment and advocacy of the company and its products and services.

Why have an Onboarding Strategy

Lower EOB Time, Lower Onboarding Cost, Lower Employee Effort Score (EES)

54%

Organizations with a standard Onboarding witnessed 54% greater **NEW HIRE PRODUCTIVITY.**

69%

New hires with organized orientation program tend to stay in the organization upto 3X years.

60%

Organizations with better Onboarding structure saw 60% improvement in productivity of employees.

60%

YoY improvement in revenue per full time employee due to a waell structured Onboarding program.

40%

Currently, less than 40% of Onboarding process is intelligent and AI assisted technologies

71%

Of companies are in the process of revamping their Onboarding programs

Finally, a robust Onboarding process helps decrease in skill gap, higher employee retention rate, New employees contributing to the bottom line faster, less time spent on knowlwdge transfers, reduced training time & travelling costs.

CASE **STUDY**

Digital Assistance Solution for
a Leading Banking and Payment Services firm in the US

Fortune 300 Banking and Payment Services Firm in the US with $ 10 B revenue

BUSINESS REQUIREMENTS

- Improve operational efficiency and value of HR systems

- Implement a Self-Assembling Knowledge platform

- Address the challenges in providing Relevant and Contextualized Knowledge

SOLUTION

- AI based HR Virtual Assistant Bot having NLP Capabilities.

- Self Learning Engine with Cognitive capabilities

- Real Time Conversing of Relevant and Contextualized Knowledge Delivery

IMPACT DELIVERED

Relevant Knowledge Delivery with contextualized self assembling platform

Increase in Customer Satisfaction with Chatbot assistance

Improved the over all Business and Operational Efficiency

INTELLIGENT AUTOMATION IN BANKING

THE FUTURE

Entrepreneur magazine says, "Successful business leaders often say they are only as strong as their teams. Think of robots as teammates, we can have players that can make us stronger. When businesses gain a competitive advantage by "staffing" robots, we get higher salaries and a happier workforce." IA has gone miles ahead than just being a concept. It is now real and has been successfully deployed by numerous leading, and often conservative, financial institutions. This is just the beginning of a new journey, and we can expect more fruitful and efficient evolution of this technology in the coming few years. From the current mere automating machines, we can expect the future systems with increased cognitive capabilities including decision- making skills at par with humans. Apart from this, the much awaited convergence of humans with bots can bring in new differentiators in the business as well as technology front. The future of digital banking also pins its hopes in much advanced levels of Intelligent Automation and Machine Learning. Banks need to be open to the changes that these new age technology trends bring in. They need to explore, innovate and transform to stay ahead of the competition in the digital world.

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ABOUT HAPPIEST MINDS

Happiest Minds, the Mindful IT Company, applies agile methodologies to enable digital transformation for enterprises and technology providers by delivering seamless customer experience, business efficiency and actionable insights. We leverage a spectrum of disruptive technologies such as: Big Data Analytics, AI & Cognitive Computing, Internet of Things, Cloud, Security, SDN-NFV, RPA, Blockchain, etc. Positioned as "Born Digital . Born Agile", our capabilities spans across product engineering, digital business solutions, infrastructure management and security services. We deliver these services across industry sectors such as retail, consumer packaged goods, edutech, e-commerce, banking, insurance, hi-tech, engineering R&D, manufacturing, automotive and travel/transportation/hospitality.

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References

https://www.bloomberg.com/news/articles/2017-06-13/goldman-set-out-to-automate-ipos-and-it-s-come-far-really-fast
http://www.everestgrp.com/2015-10-the-robotic-process-automation-rpa-opportunity-varies-by-industry-and-function-market-insights-19166.html/
http://www.horsesforsources.com/rpa-one-third-enterprise-penetration_052916
https://www.atkearney.com/financial-institutions/ideas-insights/robotic-process-automation
http://www.ey.com/gl/en/industries/financial-services/banking---capital-markets/ey-global-consumer-banking-survey-2016
http://www.marketsandmarkets.com/PressReleases/robotic-process-automation.asp
http://www.softomotive.com/wp-content/uploads/2017/01/Robotic-Process-Automation-An-Automation-Guide-for-Banks-and-Financial-Institutions-January-17-2017-1.pdf
https://www.digitalbankingreport.com/dbr/dbr245/