The future of robotic process automation and artificial intelligence

Benchmarking report 2017

RPA & ARTIFICIAL INTELLIGENCE
For Banking, Financial
Services & Insurance
W O R L D   S U M M I T

roboticsbfsi.iqpc.com

Contents

Introduction

Robotic process automation (RPA) and artificial intelligence (AI) are being leveraged by banking, insurance and financial institutions to provide a key competitive advantage. Transformation in back office operations and effortless customer interactions at the front end is now what is considered the new normal. Are you laser focused on scaling up RPA and building cognitive capabilities to develop your digital enterprise?

Ahead of the **RPA & Artificial Intelligence for Banking, Financial Services & Insurance World Summit**, **PEX Network's The future of robotic process automation and artificial intelligence benchmarking report 2017** will provide you with an assessment of the key priorities and areas of investment in 2017 and beyond. This is your unique opportunity to benchmark and gain critical knowledge of where you are against your peers on this remarkable future-forging journey.
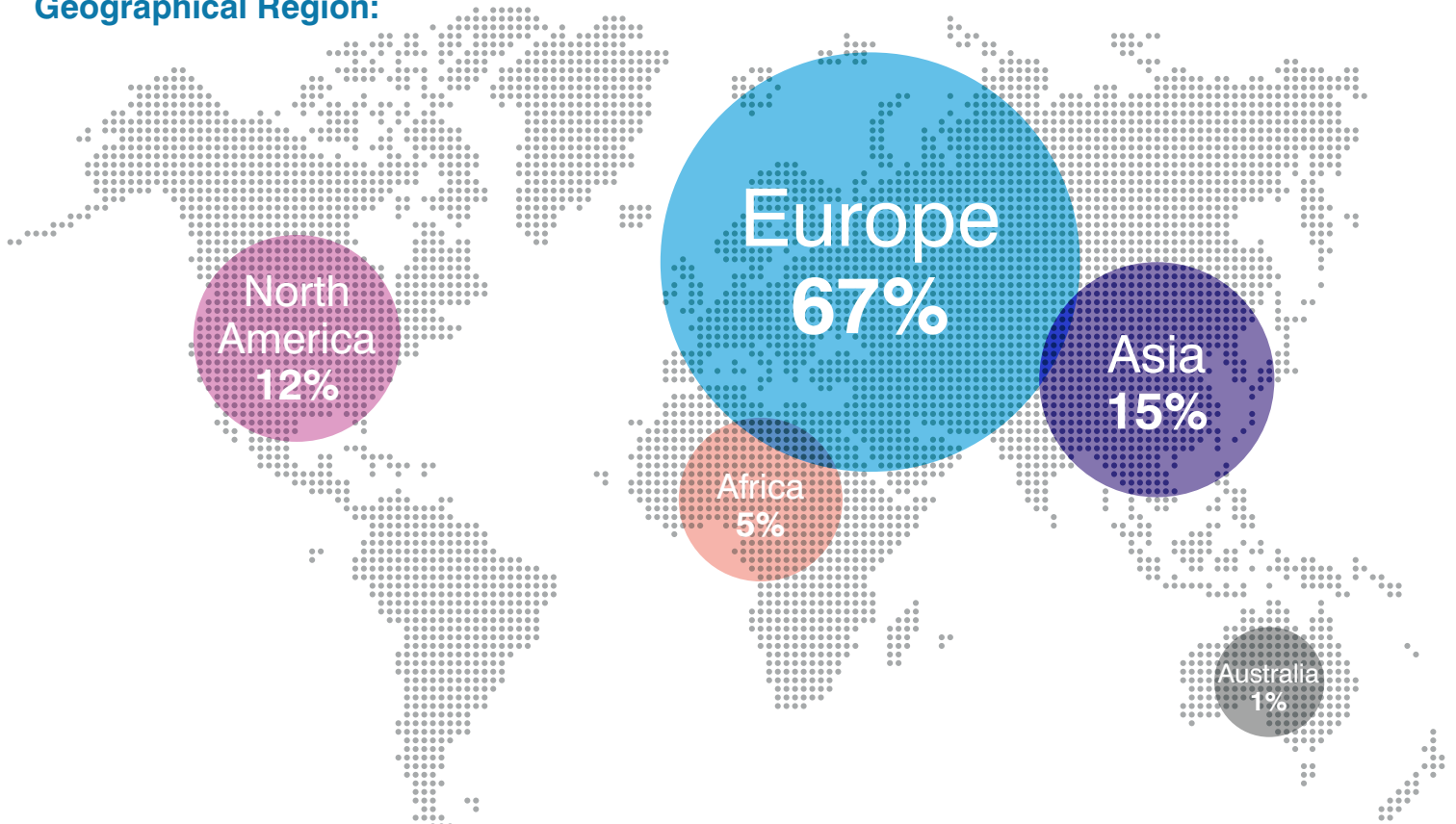
Read this report and discover:

- The main obstacles to successful RPA implementation
- Trends in RPA and AI implementation
- How AI is making positive business impacts
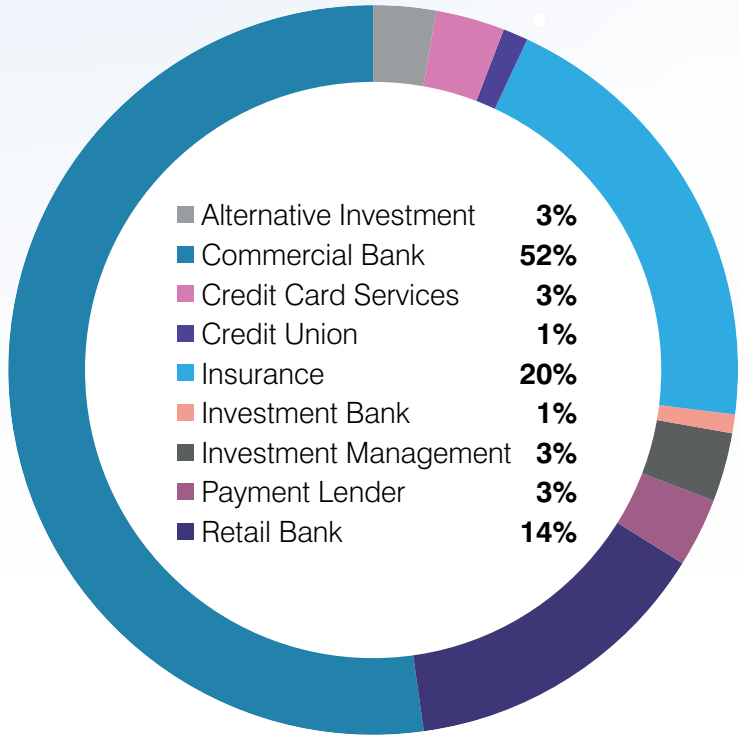- Key AI & fintech technologies being evaluated

About the survey respondents

The PEX Network conducted a survey in March 2017 with over 150 banking, financial services and insurance executives to understand the key challenges, priorities and strategies for 2017.
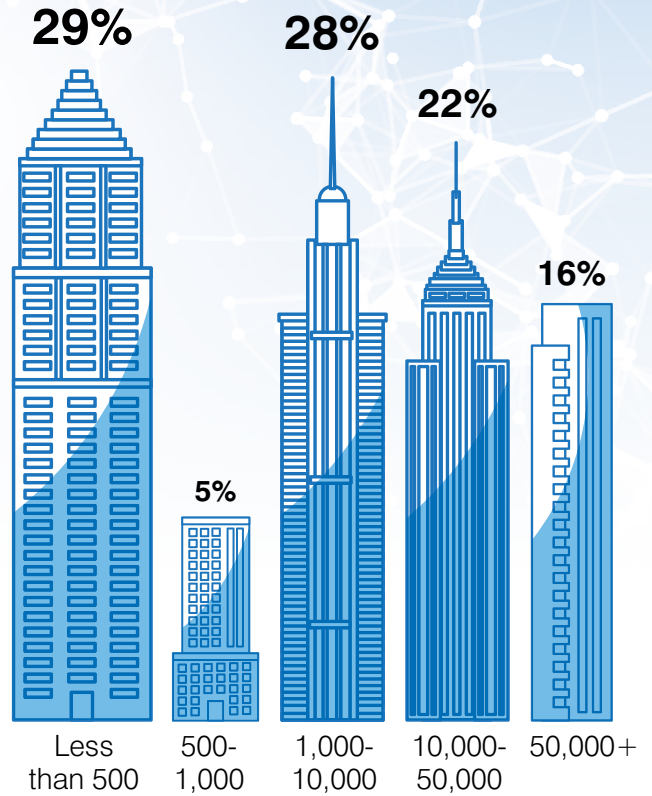
Geographical Region:

North America 12%

Europe 67%

Asia 15%

Africa 5%

Australia 1%

Type of Organisation

▪ Alternative Investment	**3%**	
▪ Commercial Bank	**52%**	
▪ Credit Card Services	**3%**	
▪ Credit Union	**1%**	
▪ Insurance	**20%**	
▪ Investment Bank	**1%**	
▪ Investment Management	**3%**	
▪ Payment Lender	**3%**	
▪ Retail Bank	**14%**	

Size of Organisation

Less than 500	500-1,000	1,000-10,000	10,000-50,000	50,000+
29%	**5%**	**28%**	**22%**	**16%**

Function

Business Architect	Business Intelligence	C-suite	HR	IT
3%	**9%**	**8%**	**4%**	**20%**

Marketing	Operations	Process	Sales	Other
3%	**9%**	**18%**	**3%**	**23%**
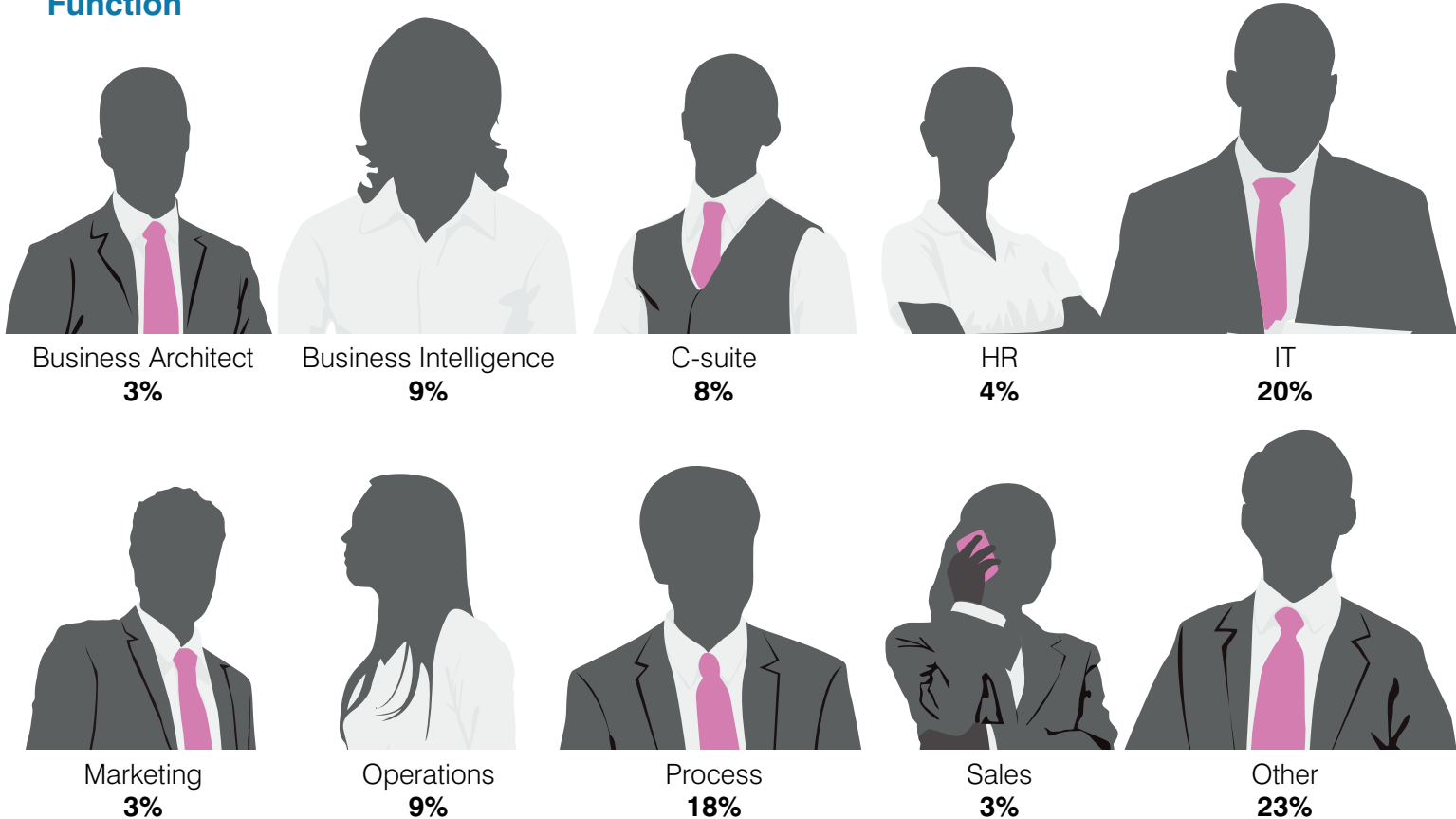
RPA – it's a journey, not a project

Where are you in the RPA journey?

11% Not started

17% Not started but planning to

26% Piloting

11% Implemented solution and evaluating results

35% Implemented solution and looking to expand usage to other processes

What is your annual spend on RPA (inclusive of capital and operating cost)?

Less than £100,000	**33%**
£100,000 - £500,000	**36%**
£500,000 - £1m	**12%**
£1m+	**19%**

35 per cent of respondents mention they have implemented a solution, but the relative amounts firms are investing remains small with 80 per cent of firms spending < £1m. This is both the benefit and challenge with RPA. The entry point is low, but firms need to invest significant enough amounts to build the capabilities to create sustainable benefits. Similarly AI investment remains low (60 per cent @ <£100k) which indicates that firms really haven't committed in the belief it will deliver transformational benefit.

What critical factors do you need to consider integrating RPA with BPM and other organisational architecture to ensure a sustainable digital strategy?
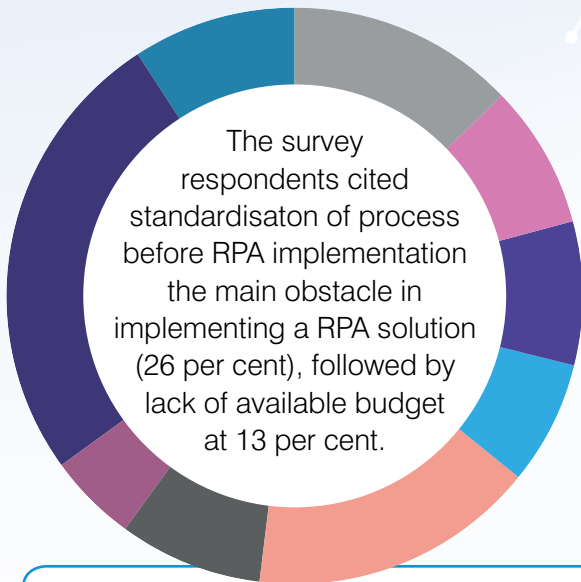
We have rapidly learnt that RPA is most effective when you address both the process and automation together. The documented process, data collected from process execution and PEX capability are core to any digital transformation.

Charles Mulinder,
Former Managing Director - Group Technology,
UBS

KEYNOTE SESSION:
Robotics as a strategic lever to enhance digital transformation in BFSI

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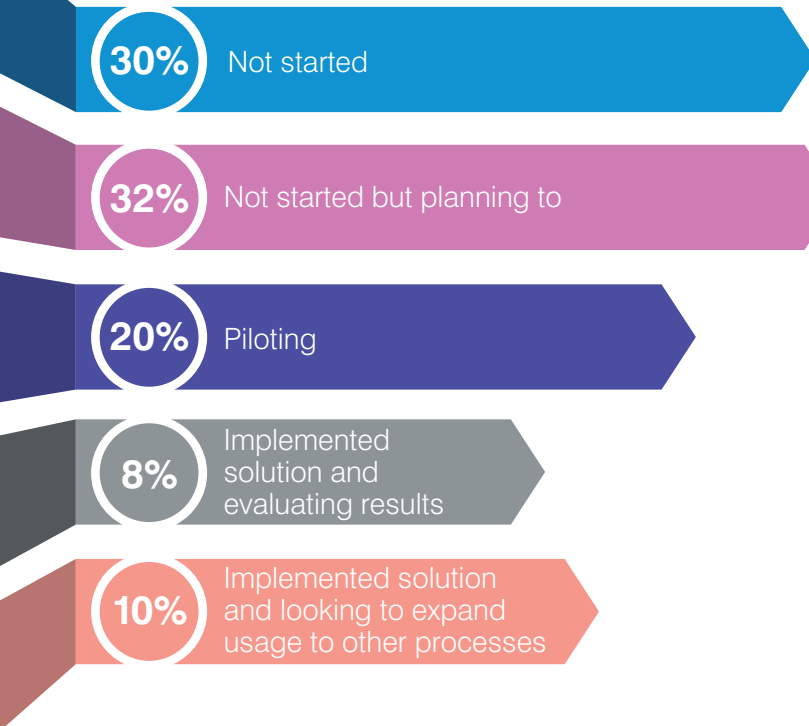## What do you see as the main obstacle in implementing a RPA solution?

The survey respondents cited standardisaton of process before RPA implementation the main obstacle in implementing a RPA solution (26 per cent), followed by lack of available budget at 13 per cent.

■ Budget availability	**13%**
■ Competing investment priorities	**8%**
■ FTEs fear of job loss	**5%**
■ IT not supportive	**8%**
■ Lack of resources to allocate to this project	**16%**
■ Management not convinced of its value	**7%**
■ Other	**9%**
■ Standardisation of processes before RPA implementation	**26%**
■ Watertight business case to persuade skeptics	**8%**

Nearly 30 per cent of respondents are experiencing the challenges with automating non-standardised processes in RPA. This remains a major barrier not just for RPA but for AI solutions when they are eventually deployed to business processes. It reinforces the need for companies to invest now in PEX capabilities and use RPA as the 'training ground' for effective use AI and cognitive technologies beyond niche implementations.

Charles Mulinder, *Former Managing Director - Group Technology,* **UBS**

Where are you in your AI journey?

30% Not started

32% Not started but planning to

20% Piloting

8% Implemented solution and evaluating results

10% Implemented solution and looking to expand usage to other processes

Things really start to move. During RPA & AI conferences in 2015 there were maybe 1-2 companies that you met, who stated that they were experimenting with AI and a few more that were planning to do something. The vast majority of the conference participants were just observing the developments and focusing on RPA. Now you have about 40 per cent of the respondents stating that they have either implemented a solution or are currently piloting solution. This is a true step change and demonstrates that financial service companies are now ready to take the next step in their automation journey moving beyond RPA. One open question is whether the different companies focus on the same type of use cases and technology partners? This will be an interesting question to discuss during the summit.

Gero Gunkel, *Cognitive Automation Program Manager,* **Zurich Insurance**

How is AI making positive business impacts?

There are three big benefits from AI – more automation, better insights & enhanced services. AI can help you to fully digitise also complex processes and activities that were too difficult to automate with simple rules based systems, improving the productivity of your processes. It can also help you to get better market and customer insights, given the ability of machine learning algorithms to identify also very complex patterns in data sets with hundreds and thousands of parameters. Last but not least, AI improves the services for customers. For example, through faster services. AI can, therefore, be an appropriate lever to address a wide array of business problems.

Gero Gunkel, *Cognitive Automation Program Manager,* **Zurich Insurance**

IDG U:
How is AI making positive business impacts

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Using AI gives us three benefits. Firstly cutting costs: the more tasks can be automated, the better will be our position to reduce costs. The second benefit is to give a better user experience. Sometimes, we as humans have limitations: the time it takes to get information and to understand the problem. So we need help from AI. The third benefit is increased sales, because using technologies we can give the best and most tailored and relevant offer to our clients.

Pedro Suja, *Head of Artificial Intelligence Technologies,* **BBVA**

KEYNOTE CASE STUDY: Deploying Artificial Intelligence as the key part of a new global technology framework

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What is your annual spend on AI (inclusive of capital and operating cost)?

Less than £100,000	£100,000 - £500,000	£500,000 - £1m	£1m+
60%	**21%**	**8%**	**11%**

The relatively low investments in AI can be quite easily explained by the fact that very few enterprises have moved already to an industrial roll-out of these technologies. Most companies that start their AI journey invest only into one proof of concept (PoC) or a portfolio of small PoCs, but not into large scale implementations. Also, companies use to an increasing extend also open source applications and not proprietary software to test AI use cases, which reduces the cost per project significantly. Obviously, once these AI programs mature we would anticipate a significant jump in the CAPEX numbers – similar to the investments into RPA over the last years.

Gero Gunkel, *Cognitive Automation Program Manager,* **Zurich Insurance**

Process – the front end of digital transformation

Gregory North, *Founder & President,* **Globe North**

The process excellence community may view digital transformation as a threat – shifting the improvement focus onto technology – but it represents a tremendous opportunity

Digital transformation is overhauling the world of work. The automation of manual tasks in service industries offers the prospect of reducing costs and improving quality and increasing speed the same way that manufacturing has automated assembly lines.

These "robots" are not mechanical arms assembling cars, they are workflow tools armed with business rules automating repetitive tasks and routing the output to the next step in the process. Where these technologies have been fully leveraged the result is processing without human intervention.

The process excellence community may view this development as a threat – shifting the improvement focus onto technology. My sense, however, is it represents a tremendous opportunity for those of us who lead or provide services to process and business transformation functions.

The question is will we step up and ride this wave of change, positioning ourselves at the process optimisation frontend of successful automation, or cede that space to others? Whether we do or do not, there is no question one word will come up again and again in the lexicon of automation – and that is "process" because it is central to automation success in two vital ways:

1. A process is the focus of business automation

2. How that automation is done is also process

The thing that is being automated is a process. Understanding that process – from its inputs, steps and outputs, to the variations in how it is performed and the rules that govern how it flows – is vital to getting the automation right.

Even more important is choosing the right process to automate. The processes selected for automation should be ones that are strategic – that create new value for customers and new opportunities for the business to grow their top as well as bottom line. Transformation of these processes should take the organisation's capability and their customer experience to a new level.

Process – the front end of digital transformation continued

For digital transformation to have the full benefit it must re-imagine processes not just repair them. Time and money invested in automating a bad process or the wrong process is waste. Therefore, process led automation – understanding which processes to automate and designing those processes with mission success in mind – is key to success in digital transformation.

The importance of the process role in automation is already observable in the rapidly changing landscape of digital business services:

- Business process outsourcing leaders are emphasising the importance of process in automation, highlighting their Lean Six Sigma capability

- Companies offering automation services bundle these with process consulting skills to frame and execute automation opportunities

- Some of the most successful examples of digital transformation to date have been where a business process is offered as a service or where straight-through-processing has been achieved through end-to-end process design eliminating the need for manual work

- The state of process documentation, the caliber of process redesign talent and the problem-solving instincts of the culture at large are key predictors of whether a process automation journey will be successful or not

For companies looking to automate the first step is an assessment to determine where and how best to invest their digital transformation time and funding. Key questions include:

- What processes are best suited for the rapid cycle change toolkit of robotic process automation (RPA)?

- Where are opportunities to eliminate silos through end-to-end automation?

- What Lean or Six Sigma capability exists to analyse, design and re-engineer processes?

- Is there already business process management (BPM) discipline in place, including accurate current state documentation and process flows? If not, it will be critical to roll this out as part of the process automation initiative.

- Are BPM workflow tools part of the existing systems infrastructure and can they or alternatives act as a springboard for RPA?
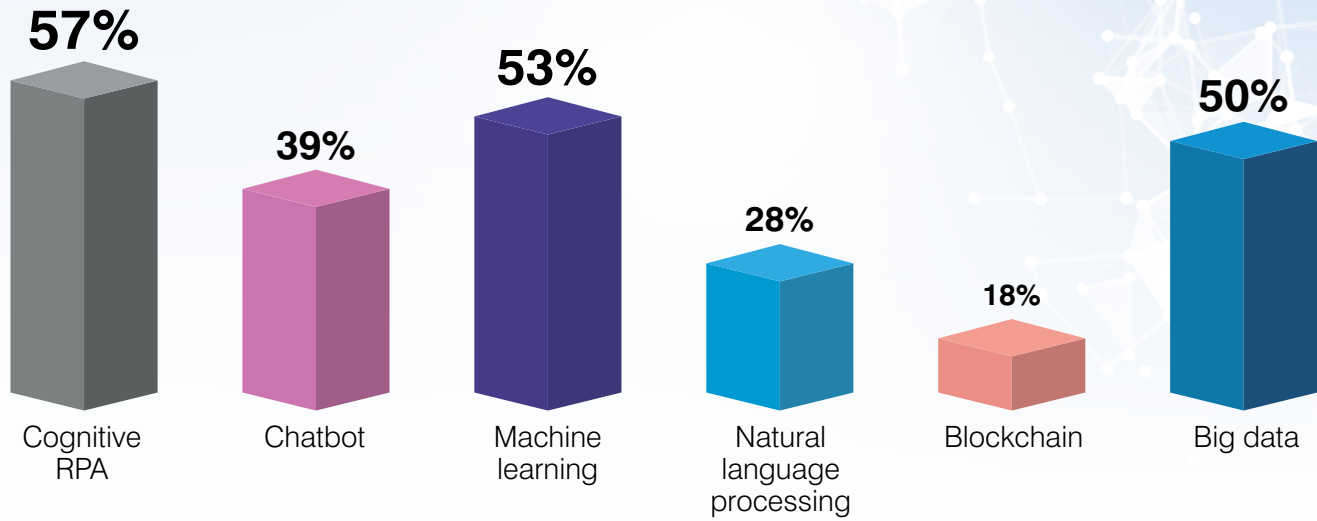
When selecting partners to get you started on the automation journey look for strong capability to assess, model, design and streamline, not just automate.

In this age of digital business there are a dizzying array of new technologies – the internet of things, big data, analytics, artificial intelligence, robot process automation, blockchain and others – all vying for our attention and investments. We know they are vitally important to our future, potential disrupters of our markets – but where to start? The only place to begin is with process.

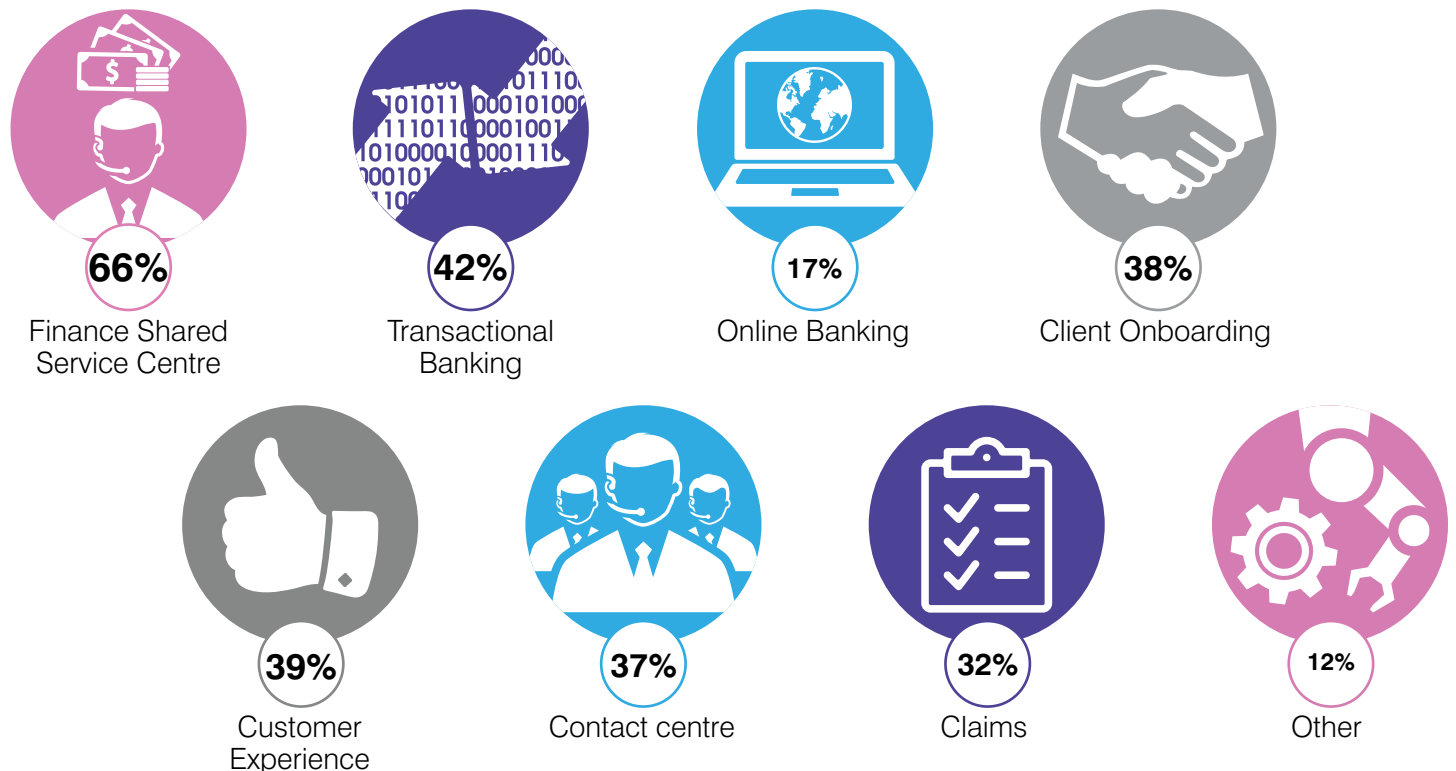# Technology, automation and process – what came first the chicken or the egg?

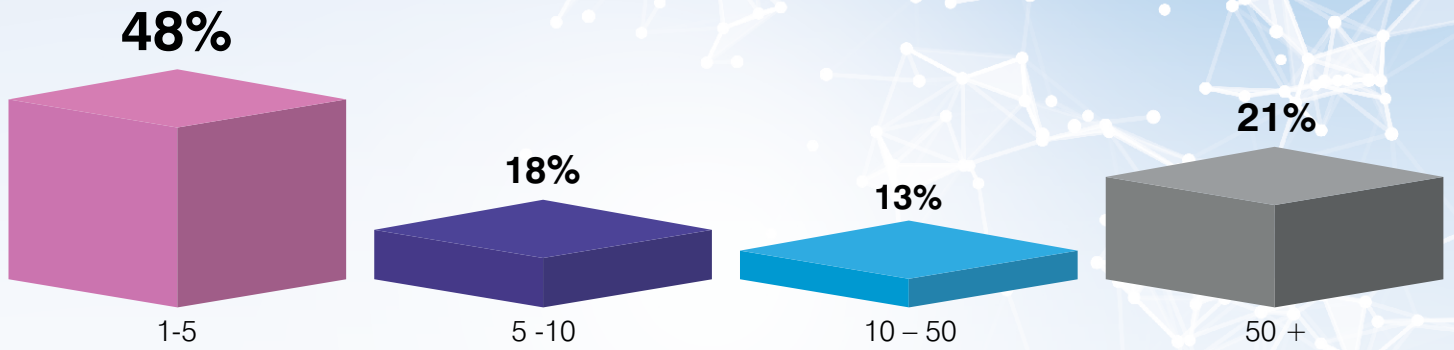## Which AI & fintech technologies are you evaluating?

- **57%** Cognitive RPA
- **39%** Chatbot
- **53%** Machine learning
- **28%** Natural language processing
- **18%** Blockchain
- **50%** Big data

> Implementing advance solutions without clear consistent understanding of process is a recipe for a mess.
>
> **Charles Mulinder**, *Former Managing Director - Group Technology*, **UBS**

Which processes are you currently automating or looking to automate?

- **66%** Finance Shared Service Centre
- **42%** Transactional Banking
- **17%** Online Banking
- **38%** Client Onboarding
- **39%** Customer Experience
- **37%** Contact centre
- **32%** Claims
- **12%** Other

How many processes have you automated through RPA & AI?

48% 1-5

18% 5 -10

13% 10 – 50

21% 50 +

> We have c. 140 unique robot scripts with several hundred forecast for end of year, but I am always somewhat cautious with trying to compare / contrast metrics as the basis from them can be materially different. Additionally, a few of our scripts have significant user bases (+1000 users daily). It remains a challenge doing like for like comparison using processes or robots as a metrics.
>
> **Charles Mulinder,** *Former Managing Director - Group Technology,* **UBS**

How many robots do you currently employ?

57% 1 -10

27% 10 -100

6% 100 – 500

10% 500+
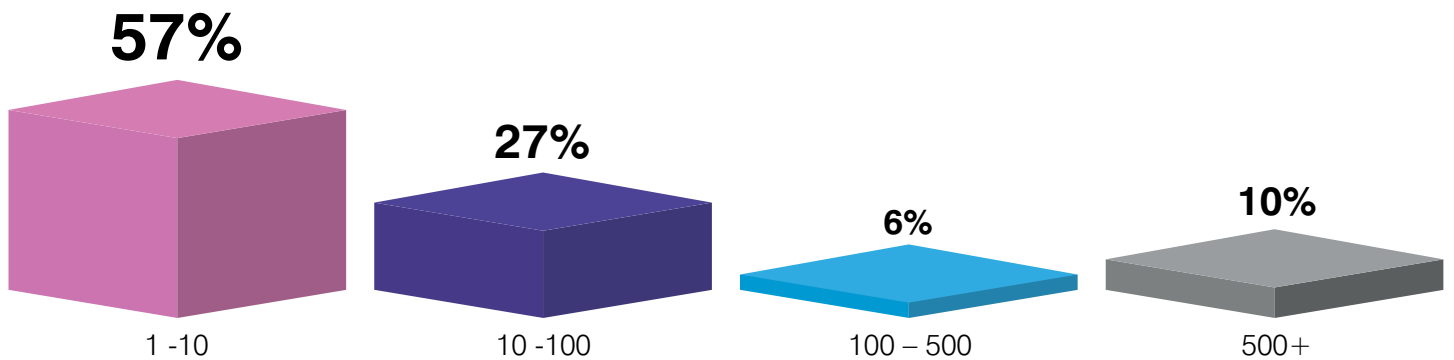
What key lessons have you learnt from robotic process automation (RPA) implementation?

In 2016, we learnt that successful RPA implementation requires the combination of business value, velocity and re-usability. It is the mixture of these ingredients that will determine how successful you are.

> It is vital to understand the technical aspect, in order to make the right decisions.
>
> **Bart van de Sande,** *Head Transaction Banking Operations,* **ABN AMRO**

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DIGITAL TRANSFORMATION OF TRANSACTION BANKING CASE STUDY:
Experimenting with RPA & AI

Conclusion

Over the next five to ten years robotic process automation and artificial intelligence have the potential to drastically transform banking, financial services and insurance. However, successful business transformation requires a holistic approach that encompasses technology, process and people:

"Processes, data and digitisation are core foundations of any digital transformation. RPA enables a firm to start their digital transformation at a low price point with short payback, but more importantly it started to construct the foundations a firm will have to put in place for sustainable digital transformation including adoption of AI technologies," said Charles Mulinder, Managing Director - Group Technology, UBS to the PEX Network.

"In my view, innovation remains too technology focused today. The ability of organisations to actively and effectively transform processes to leverage technology innovation is lagging particularly in the outsourced world we operate in. This remains an area I think firms need to focus their capability development." said Mulinder.

Acknowledgments

The PEX Network would like to thank all the speakers and delegates at our events, and the members of the PEX Network community. This report would not have been possible without the input and views from a significant number of operational excellence and process improvement stakeholders. An especially big thank you is due to the professionals who took part in our RPA and AI in Banking, Financial Services and Insurance Benchmarking Survey and also a special thank you to those whom we have directly cited.

Gero Gunkel,
Cognitive Automation Program Manager,
Zurich Insurance

Charles Mulinder,
Former Managing Director - Group Technology,
UBS

Gregory North,
Founder & President,
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Pedro Suja,
Head of Artificial Intelligence Technologies,
BBVA

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Head Transaction Banking Operations,
ABN AMRO

About the PEX Network

The Process Excellence Network is a global community for process professionals, business leaders and executives who want to improve their businesses through process and operational excellence. With a global membership of 135,000+, and a burgeoning global portfolio of live events, webinars, and networking opportunities, our mission is to inspire and inform our members with access to practical advice on business improvement tools, methodologies and technologies in order to achieve their business goals.

PEXNetwork.com provides expert commentary and learning resources developed by experienced process professionals and industry insiders. The focus is on peer to peer sharing of what it really takes to harness the power of people, process and technology and improve business operations. Coverage includes Business Process Management (BPM), Robotic Process Automation (RPA), Lean, Change Management, Operational Excellence, Six Sigma & Quality, Performance Management, Information Technology Trends and Customer Experience.

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☑ **RPA Scaling up:** Engaging your wider business to ensure smooth scaling up

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