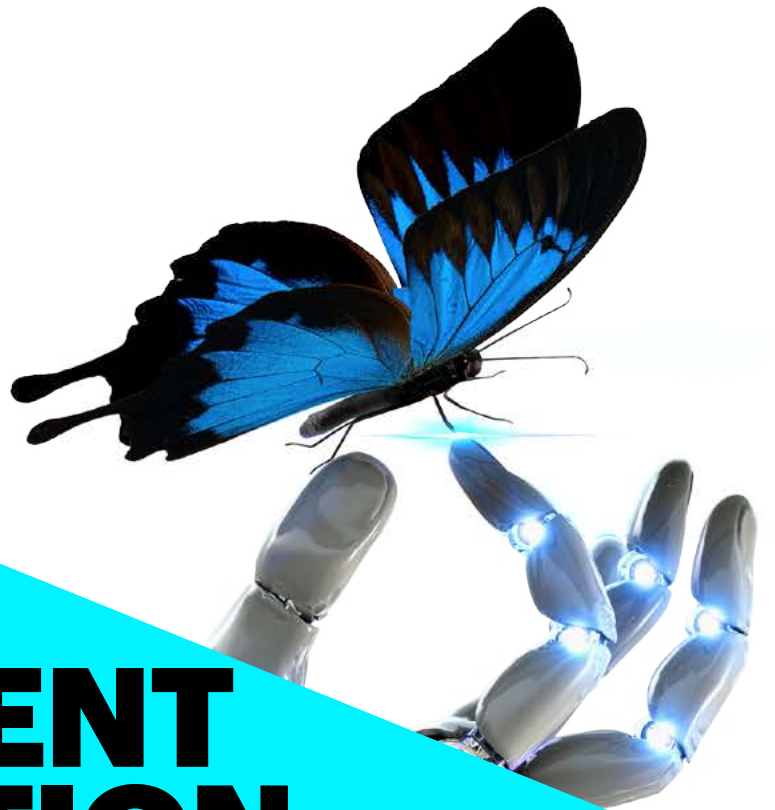




strategy | consulting | digital | technology | operations



# **INTELLIGENT AUTOMATION** **IN FINANCIAL SERVICES**

**AN UNPRECEDENTED  
OPPORTUNITY FOR  
HR TO DRIVE DIGITAL  
TRANSFORMATION**



# HR TEAMS ARE IDEALLY POSITIONED TO DRIVE VALUE THROUGH INTELLIGENT AUTOMATION

# BUT FEW ARE READY

Intelligent automation (IA) is on the verge of transforming jobs, workforces, organizations and industries, in the financial services (FS) as well as most other sectors. Seventy-seven percent of senior executives interviewed for Accenture's 2016 Technology Vision study said their organizations had increased their investment in artificial intelligence (AI) technologies over the preceding two years, and the same number expected to continue doing so over the following three years.

No fewer than four out of five believe automation driven by AI will be seamlessly embedded into every aspect of their business by 2021.

In the 2017 Technology Vision study, 70 percent of FS executives said their organization was likely to be completely or significantly changed by 2020 as a result of AI, while 77 percent foresaw this for their industry as a whole. Seventy-six percent predicted that in the next three years, the majority of organizations in their industry would deploy AI interfaces as their primary means of interacting with customers.

The Harvard Business Review<sup>1</sup> compares the impact of IA with that of the internet: "Today, innovations in digitization and robotization are quickly laying the foundation for another disruptive corporate transformation." It won't happen overnight, the journal offers reassuringly, "but the inflection point always happens faster than expected."

As is the case with the adoption of most innovations, this will be followed by sudden acceleration. "So early preparation is needed."

Automation is likely to affect most if not all parts of the FS organization. As IA solutions will be domain- and task-specific, investment decisions will be heavily influenced by the respective unit heads. But the collective impact will be felt by everyone throughout the enterprise. For this reason the human resources (HR) function has a critical role to play in preparing people for its various roles and effects, and in developing and sourcing the scarce skills needed for its successful implementation.

Unless HR takes the lead in defining the necessary organizational culture and structure, the changes in jobs, teams and workforces, the changes in governance, and an effective staffing plan – in other words, an enterprise-wide AI people strategy – the organization will struggle to realize the far-reaching benefits that these technologies promise.

And the reality is that few FS firms have made much progress in preparing their people for intelligent automation. So when the industry "significantly or completely changes" over the next few years, as our Tech Vision Survey respondents predicted, most are likely to be caught unprepared.

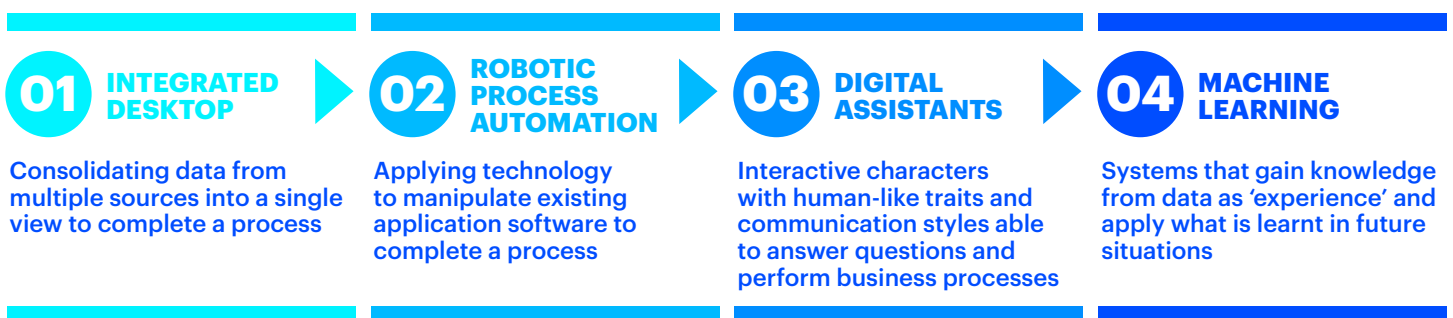
# IA OFFERS TREMENDOUS, LONG-LASTING BENEFITS ACROSS THE FS ORGANIZATION

Accenture defines intelligent automation as a collection of technologies that together enable machines to sense, comprehend, act and learn, either on their own or to augment human activities. They interact with the organization's systems in the same way as its people always have, creating a 'virtualized' workforce to carry out the more repetitive tasks with great accuracy and efficiency. Coupled with massive, inexpensive, cloud-accessible computing power and low-cost storage, the algorithms to sift rapidly through enormous volumes of data, and the ability to learn from all data it receives and

each action it performs, it is well on track to fundamentally transform and improve how we work and live.

As new AI technologies emerge, so the automation spectrum changes (figure 1). The advent of virtual agents, machine learning and natural language classification, among others, will further drive automation and augmentation of FS processes. Already, 73 percent of FS executives believe AI is capable of becoming the face of their organization or brand<sup>2</sup>.

Figure 1. The automation spectrum



# THE BENEFITS THAT IA OFFERS FALL INTO FOUR MAIN GROUPS

1

## **EFFICIENCY**

It performs consistently and inexpensively when carrying out routine activities based on well-defined rules, procedures and criteria. Citigroup predicted in 2016 that as many as 30 percent of all retail banking jobs could be automated by 2025<sup>3</sup>, with automation estimated by various analysts to reduce the cost of work by between 40 and 80 percent<sup>4</sup>.

2

## **EXPERTISE**

It supports human decision-making and action by augmenting human sensing and analysis and offering advice and implementation assistance. In the Accenture FS Distribution & Marketing Consumer Survey (2016), 74 percent of insurance customers said they would be willing to receive computer-generated advice on the type of insurance needed, and 78% on investment asset allocation.

3

## **EFFECTIVENESS**

It acts as personal assistant or agent, improving the overall ability of humans. Thirty-six percent of the organizations surveyed in the 2017 Technology Vision study are already using AI-powered virtual assistants in select areas of the business, while a further 31 percent have deployed them on large-scale projects or broadly across the enterprise.

4

## **INNOVATION**

It enhances creativity by identifying alternatives and making recommendations to optimize the decisions and actions of humans. Accenture research shows consistently that the greatest potential of IA for value creation in organizations lies in putting people first and amplifying what they can achieve.



# **A HOLISTIC, PEOPLE- CENTRIC STRATEGY IS ESSENTIAL**

**WHICH IS WHY THE ROLE  
OF HR IS CRITICAL**

There is much to commend an incremental, iterative approach to intelligent automation. But that's not the same as being tentative; waiting until the pilot proves itself before exploring the next opportunity for automation. There should be no doubt that just as computers changed every part of the organization, and today support all information workers, so IA will pervade most FS processes, jobs and functions. The only difference is it will do so much more rapidly than the advance of computerization.

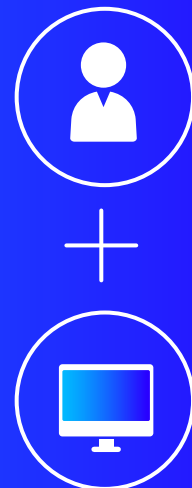
Organizations need to anticipate this by developing a holistic, enterprise-wide vision and strategy at the same time as they start to identify discrete opportunities and launch pilot projects. A clear, agreed approach will help them prioritize implementation and develop the necessary capabilities.

HR is ideally placed to take a leading role in envisioning and creating an automation-powered organization – and in doing so can make a major contribution to the transformation of the organization into a more efficient operation, a more rewarding place to work, and a more valued service provider.

As a function that spans the enterprise it is well positioned to liaise with all the various siloes and develop an understanding of their respective needs and potential. While it may not be equipped to evaluate the processes best suited to automation or the solutions most likely to achieve this, it certainly should take responsibility for the role of people.

## SPECIFICALLY, THIS INCLUDES

- An organizational structure that supports the scaling of a holistic IA strategy;
- A corporate culture that embraces the notion of humans working alongside machines, and fosters an appreciation by all of the benefits of automation;
- The nature of work and how it is performed, including collaboration between people and machines;
- What jobs consist of, now and in the future, and the changing skills that are needed;
- New talent required to implement and make the most of automation;
- The management of IA-empowered workforces;
- A new governance model, framework and policies to allow effective, agile and scalable mobilization of robotics;
- Management of the ongoing change that all of this entails.



The dramatic advances which we are seeing in technology tend to conceal an important truth: that the leaders of the future will not be those organizations which simply use technology more, but rather those that employ it to enable

their people to accomplish more. The focus of any automation initiative should therefore be on people, first and foremost – which is why the responsibility rests squarely on HR.



# FIVE STEPS

## TO LAYING A FOUNDATION FOR AN IA-EMPOWERED ORGANIZATION

Many heads of HR in FS organizations have started to consider and assess the benefits of IA. But most have concentrated on the HR processes that lend themselves to automation. Few have developed a comprehensive vision of its inevitable impact on the organization as a whole: how jobs and behavior across the enterprise will be affected, the skills that will be needed and how they will be acquired, the necessary management and governance changes ... in fact, how the very nature of the organization will evolve.

And then there's the matter of how this all-encompassing transformation will be managed.

The HR function in the majority of FS organizations, large and small, is altogether unprepared for the challenge of IA. Given the

undisputed potential of IA to give early adopters a competitive advantage, this is a serious charge – seldom if ever before has the future of the organization been so dependent on the will and the ability of HR to rise to the challenge. Rarely has HR had the opportunity to lift itself above its facilitation role and help shape the future of the organization.

We believe there are five steps that HR can embark on to prepare the organization for IA and to get the ball rolling in the areas that will yield the greatest, most immediate benefits.



# 1

## DEVELOP THE VISION

Appoint a C-suite executive as talent transformation sponsor, to define a top-down, company-wide IA talent vision and strategy. This vision will include a definition of the expected business benefits and how these align to corporate strategy.

It will also explore the design of an organizational structure that best enables delivery of the IA capability and supports the new corporate strategy and culture. IA will profoundly change the organization's customer and employee experiences, and as such will turn the enterprise architecture on its head – from back-office through to front-office, across most business processes and infrastructure, and including connections between all affected systems, interfaces and points of interaction.

# 2

## DEFINE THE POLICY

Launch a cross-functional team, with a dedicated budget and executive-level stakeholders, to define HR policy with regard to AI. This team should be business-led but well supported by the IT function. It will serve as the gate-keeper for the demand for process automation, building an enterprise roadmap that is aligned to the IA strategy and vision. It will be responsible for developing business cases and defining and prioritizing the IA change schedule. It will also be accountable for benefits realization tracking and for communicating IA success across the organization.

# 3

## ESTABLISH PRIORITIES

Interview business leaders across the organization to determine the potential for and likely impact of AI, and its implications for the workforce.

Identify the necessary governance changes, such as creating a comprehensive governance framework to support the IA implementation, and also to manage automation demand and supply, manage stakeholder expectations, and ensure proper adoption of the new processes by the business. Specify the new skills needed; the role, behavior and mindset changes that are required; a new approach to talent management; and training for these changes.

At the same time, define a set of interventions that address the needs of the human workforce in an increasingly automated workplace. Building employees' trust in machines, and keeping them enthused and motivated while taking advantage of the new technologies, will be a key challenge<sup>5</sup>.



# 4

## ACQUIRE CAPABILITIES

Develop and pilot a training program for AI teams and user experience / interface teams to cross-train on implementing AI. Three types of talent are needed to design, manage and run an AI project: data scientists with a machine learning background, technologists with a computer vision or similar background, and specific domain experts. AI will continue to feed the demand for analytics talent. And finally but crucially, define the new skills that will be needed by workers whose roles will be supported by IA: the ability to interface effectively with machines and also to perform more judgment-based tasks.

Bear in mind that companies cannot develop IA expertise overnight – while a process analyst may typically achieve accreditation in four to six weeks, training an automation manager is more likely to take three to four months and producing an accredited program manager as long as six to nine months.

# 5

## MANAGE THE CHANGE

Plan a comprehensive change management approach for rapid adoption of AI. This includes the impact and transition plans required to scale the automation project, continuous monitoring of the machines and their output, and the development of back-up plans to address the business implications of machine failure. The IA team should also proactively track new trends and technologies in order to determine when to abandon the firm's current projects and move on to new IA initiatives.

# THE FULL SPECTRUM OF IA IMPACTS CAN BE SUCCESSFULLY ENABLED IF THE METHODOLOGY FOR CHANGE INCORPORATES THREE KEY COMPONENTS:

## PREDICTABILITY

Analytics should be used to track the target groups and change phases that are leading or lagging, so that planning and remedial actions can be insight-based;

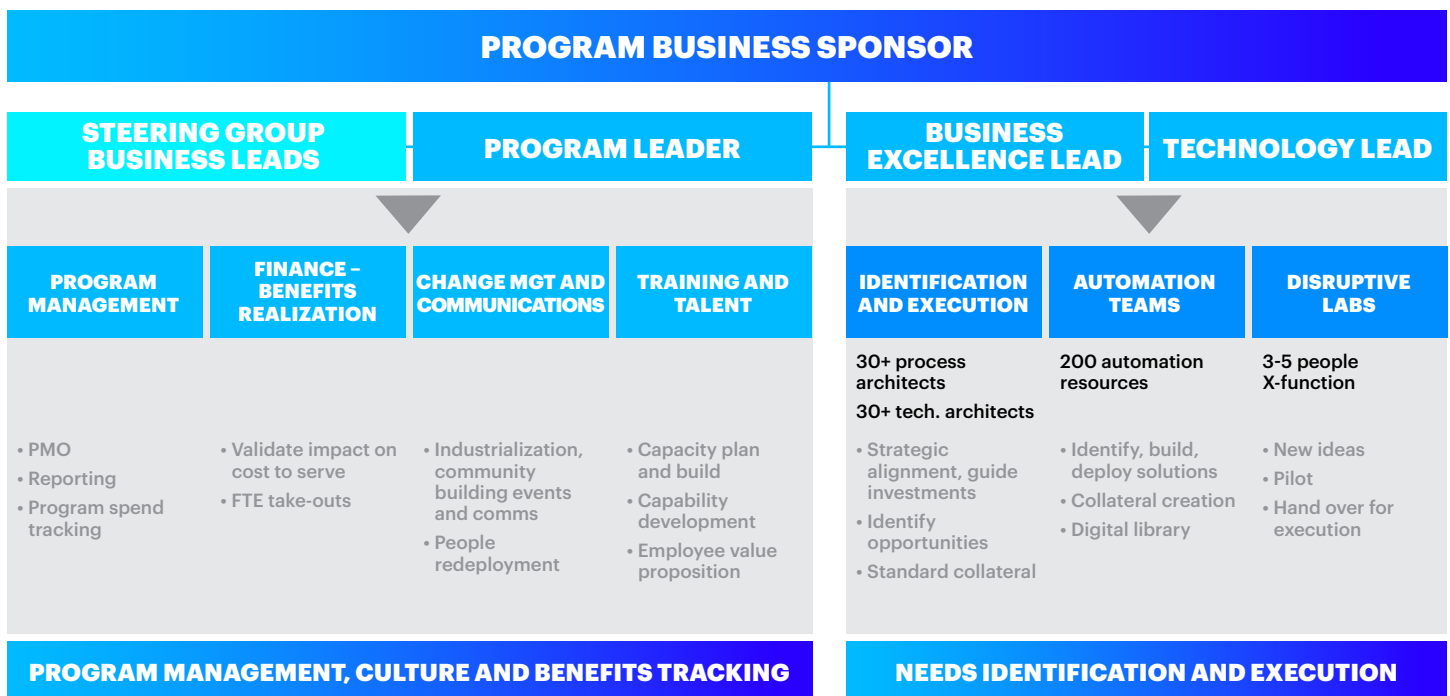
## AGILITY

The workforce needs to be mobilized faster, and commitment built earlier, with an emphasis on modular, iterative and engaging stakeholder interactions that enable transparency and feedback;

## SUSTAINABILITY

The adoption of IA needs to be sustained through an experience-centric focus that includes personalized change journeys designed around target groups' needs and preferences.

Figure 2. An intelligent automation cross-functional team: a typical structure and size for the automation of 5,000 FTE roles



# AS MACHINES BECOME MORE HUMAN, HR'S ROLE BECOMES BROADER AND MORE CRITICAL

In order to integrate intelligent automation systems with the people, processes and technology that currently keep the FS organization working, a strategic approach is needed that meets three criteria:

## **BUSINESS-ORIENTED**

Like human experts who specialize in one or a few areas of expertise, AI solutions need specific business domain expertise to be able to reason and deliver the required business results.

## **PEOPLE-FIRST**

FS organizations must focus on enabling people – employees, ecosystem partners and customers – to accomplish more with technology. Their corporate culture must harness digital to enable people to constantly adapt, learn, create new solutions, drive relentless change, and disrupt the status quo.

## **TECHNOLOGY-RICH**

Artificial intelligence consists of a constellation of technologies that, when integrated, can create an efficient, highly adaptable, nimble business capability.

Within these three principles, people are the core and the focus. Machines are immensely powerful, and are becoming more so every day. But they will be the newest recruits to a digitally empowered workforce, bringing new skills to help people do new jobs, and reinventing what's possible.

The challenge for HR will be to integrate human intelligence and machine intelligence, so that they coexist in a successful two-way learning relationship. The division and the nature of tasks will change, causing a ripple effect throughout the workforce, all the way up to senior management. Just one of the consequences will be the need for HR to re-evaluate the type of knowledge and skills needed in the future.

It will meet this challenge with technology, which is becoming inherently more focused on helping people as it becomes more human. To an unprecedented degree, technology is an agent of change – and HR will be using it to empower people in an interactive, collaborative and much more rewarding way.

## CONTACT

For more information about intelligent automation, and the role of HR in facilitating its adoption in the FS organization, please contact:

### **Mitch Lassman**

FS UK / Ireland Digital HR Lead  
mitch.lassman@accenture.com

### **Yohann Bollack**

FS Talent & Organization Gallia / France GU Lead  
yohann.bollack@accenture.com

## REFERENCES

1. Prepare Your Workforce for the Automation Age. Harvard Business Review, 23 November 2016.
2. Accenture Technology Vision, 2017.
3. Thirty Percent of Bank Jobs are Under Threat. CNN Money International, 4 April 2016.
4. Robotic Process Automation: The New IT Job Killer? InfoWorld, 23 March 2015.
5. The Robots Keep Rising as AI-Driven Business Transformation Evolves. Information Age, 24 March 2016.

## JOIN THE CONVERSATION

 [Read our blog](#)

 [LinkedIn](#)

 [Twitter](#)

## ABOUT ACCENTURE

Accenture is a leading global professional services company, providing a broad range of services and solutions in strategy, consulting, digital, technology and operations. Combining unmatched experience and specialized skills across more than 40 industries and all business functions – underpinned by the world’s largest delivery network – Accenture works at the intersection of business and technology to help clients improve their performance and create sustainable value for their stakeholders. With approximately 373,000 people serving clients in more than 120 countries, Accenture drives innovation to improve the way the world works and lives. Visit us at [www.accenture.com](http://www.accenture.com).

Copyright © 2017 Accenture. All rights reserved. Accenture, its logo, and High Performance Delivered are trademarks of Accenture. This document is produced by consultants at Accenture as general guidance. It is not intended to provide specific advice on your circumstances. If you require advice or further details on any matters referred to, please contact your Accenture representative.

