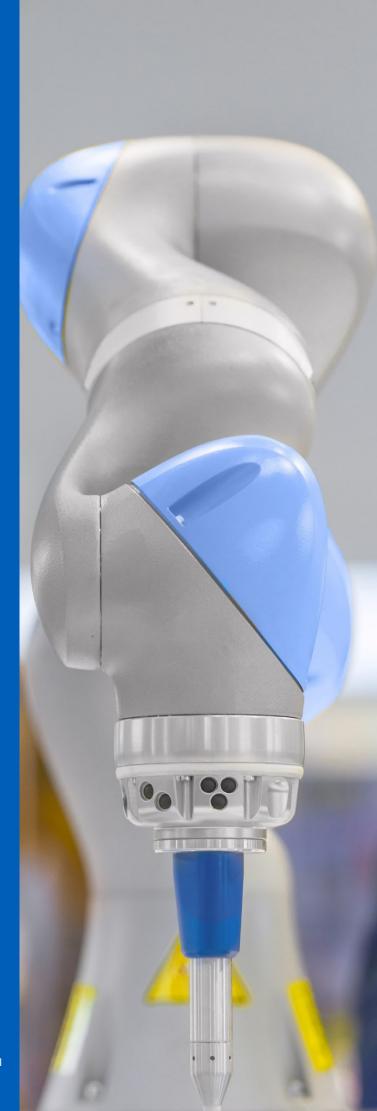


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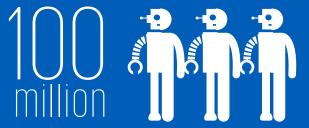




### Introduction: See the future. Get there faster.

Robotic process automation is set to transform our lives. For business services, it promises huge gains, including lower costs, better market insight and an improved customer experience.

An estimated



global knowledge workers impacted by automation by 2025 (1)

compound annual growth in robotics automation market forecast by 2017-20 (2)

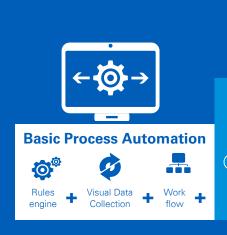


More than



of global corporations currently exploring new automation opportunities (3)

As a result, many organisations are already using basic Robotic Process Automation (RPA) to carry out simple, rule-based tasks to make themselves more productive.







The next step is to introduce more sophisticated automation classes like cognitive automation and Al that have the potential to deliver transformational change.

To realise the benefits of automation faster, many organisations want to understand how to accelerate the automation journey. At KPMG, our experience shows us planning should follow four principles.

Business led, technology enabled

Use RPA to deliver productivity and as a stepping-stone for enhanced process and cognitive automation delivering transformational change

Start small, execute well and scale up rapidly

Develop an internal automation capability to sustain progress

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Source: (1) McKinsey Global Institute – "Disruptive technologies: Advances that will transform life, business and the global economy" 2013. (2) Transparency Market Research for CAGR (3) HsF Research and KPMG LLP – "From human to digital: The future of Global Business Services" 2016.

## The automation journey - types and benefits



### Basic Process Automation

Basic process automation technologies address simpler processes that follow very explicit 'rules-based' manual steps, often leveraging multiple systems (e.g. order entry). These automation tools often reside on the desktop resulting in shorter integration times and a faster path to automation.

#### Examples

Activities such as journal entry, MI reporting, reconciliation activities, ordering, billing and commercial operations

Basic process automation technology used by customer centres to automate tier 1 enquiries (e.g. changes to supplier addresses).



### **Enhanced Process Automation**

The next level is enhanced process automation – with built-in knowledge and natural language processing, capable of analysing unstructured data. This often includes 'starter automations' right out of the box for activities such as IT operations and finance.

Machine learning software, designed to support customer on-boarding, transaction monitoring and fraud prevention by identifying patterns in behaviour that could indicate fraudulent payment activity.

Natural language processing software used by some international banks to monitor internal communication and identify potential misconduct with regards to trading compliance.



### Cognitive Automation

Cognitive automation is the most recent entry into the digital labour space. It includes cognitive machine learning, artificial intelligence, language processing and big data analytics and creates sophisticated cognitive technologies that think and learn like humans.

Artificial intelligence deployed by a global bank to deliver personalised advice to the bank's wealthy clients. The technology models 85 million behavioural patterns to show potential matches with different types of wealth management products.

Artificial intelligence used by crop insurance providers. Used in combination with aerial drones to photograph crops, Al helps insurers evaluate crop health and assess claims accurately, and provide support to farms to help them maximise yield by detecting problems early.

#### Different types of automation offer different types of potential benefits.





# Rethinking myths around automation

Misconceptions about automation can delay the automation journey or dilute the potential benefits. Will mistaken beliefs about automation slow you down?



#### "Implementing a 'bot' will improve productivity significantly"

Yes, but delivering savings is often more complex than expected e.g. implementing a new process and managing change simultaneously can dilute savings.



#### "We need to transform our processes before applying RPA"

Ideally yes, but transformation can be incorporated into your RPA journey, either before or after automation. RPA is another lever that can be combined with more traditional transformation tools.



#### "We can deploy our first 'bot' quickly"

The pilot can take longer than expected, as you need to build the right infrastructure, capabilities and sponsorship. The 'cost per bot' will decrease significantly as you scale up and accelerate your speed of execution.



#### "We need to build lots of bots"

Don't get mesmerised by the volume. Utilisation per 'bot' is a better measure for understanding the effectiveness and efficiency of automation.



#### "We can move straight to cognitive solutions"

You need to walk before you can run. RPA is a stepping-stone in your automation journey and part of a longer process of transformational change.

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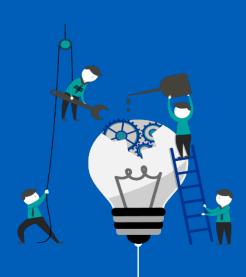
### Your RPA journey: the first 100 days

With a clear plan of action, you can be ready to scale up to production within just three months.

Decide on a methodology, from assessment to deployment Agree a methodology that will work in your organisation to assess opportunities and aid deployment. Create a matrix for assessing and prioritising automation This will help you identify quick-wins and deliver value early using pre-Raise awareness. defined prioritisation criteria. align functions Combine automation with other transformation levers and mobilise, Automation is a lever that needs to be considered in conjunction with other including a strong transformation levers such as process engineering and system integration. sponsor Conduct a technology capability assessment Review the existing technology landscape in detail to prepare your infrastructure. Define your capability delivery model Agree how you will build an internal capability to deliver automation. **Days** 1-30 **Days** 30-60 **Engage and align expectations** Raise awareness across functions of what RPA can do and define who will be 'leading the charge'. **Identify existing transformation initiatives** Assess initial All existing channels and in-flight programmes should be opportunities and considered to reduce any business disruptions. conduct a proof of Organised around a programme of work concept Dedicated resources (both financial and 'human') will become a critical success factor. Identify your automation 'evangelists' A core (and blended) delivery team will become essential in establishing the tools and methods that fully enable your RPA programme.

## ... preparing to scale up

Assess results from the proof of concept, build your governance capability and agree a roadmap to begin development at scale



Days 60-100 Scaling up to production

#### **Assess and select vendors**

Choose a vendor that meets the needs of today and tomorrow – giving you scalability and accelerated integration across different products.

#### Deploy a proof of concept to assess suitability

Test to see whether the vendor's technology is fit for purpose, robust and scalable across your organisation.

#### Infrastructure requirements deployed

This will become a critical element to move into production at scale, beyond the first 100 day period.

#### Define and start building your CoE

The new digital operation will require a framework for governance and change.

#### Develop a roadmap for adoption

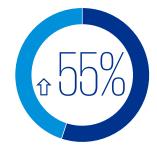
Outline what your automation journey looks like based on your defined case for change and business priorities.

### Case study: Top three global retailer

Our UK headquartered client has a significant global presence and delivers back office functions. Our client's objective was to become fully compliant with a new regulatory framework, achieve better data quality and reduce operational costs.

#### **Delivered benefits**

#### Operations can be delivered faster

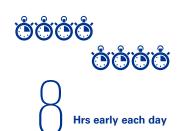


**Elapsed time improvement** 

#### Reduced points of failure



**Data availability** 



#### **Front-office benefits**

#### Potential headcount redeployment

#### **Accuracy level observed**



**↓** 38-45% \*\*\*



100%

#### Assessed the opportunities for automation

- reviewed processes to understand where automation would deliver the most benefit
- created a matrix to show priorities for implementation
- facilitated internal customer engagement to adopt automation

#### Developed our client's automation capability

- helped our client develop the skills required to implement automation
- developed a methodology and customised tools to support the work
- provided 'on the job training' to strengthen and embed our client's new capability

#### Supported the technical architecture build

- assisted in designing the interim and end state IT infrastructure
- provided oversight and support in implementing different system environments
- self-assessed risk across different elements of the programme

#### Deployed the bots

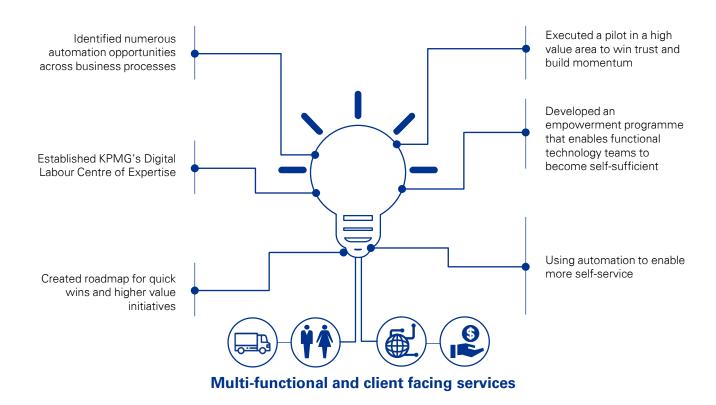
- implemented the 'bots' in a live virtual environment
- provided support from User Acceptance Testing (UAT) to 'go-live'
- monitored benefit realisation based on the deployed 'bots'





### Case study: 'Tasting our own medicine'

KPMG has investigated short, medium and long term opportunities for deploying automation technologies in their business, in an effort to drive operational efficiency, effectiveness and create a platform for innovation in RPA and cognitive.



#### End to end approach



Identified crossfunctional opportunities spanning from RPA to Cognitive Automation

### Designed for sustainability and scalability

Launched a Digital Labour Centre of Expertise





#### Tangible benefits



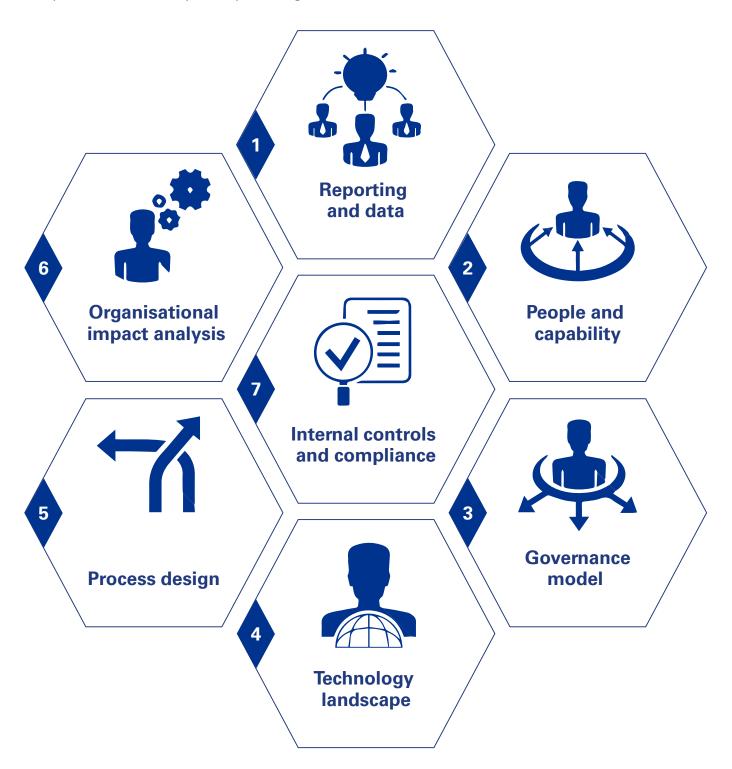
Identified opportunities across KPMG UK to deliver better services in a more efficient manner

#### Tried and tested approach

- Cross-functional end to end process review
- Pull lifecycle experience across multiple technologies
- 3 Leveraging the knowledge to support our clients

### See the bigger picture

Implementing RPA is about more than just technological change. It could affect components across your operating model.





# Operating model considerations



#### Reporting and data

Adopting a new digital operating model will become an enabler for data quality programmes, performance dashboards and centralised real-time information to enable better management information.



#### People and capability

Refining the Employee Value Proposition (EVP) across the organisation will become increasingly important. The new operational environment means you will need to up-skill resources, provide alternative career paths and reinvigorate existing roles, such as continuous improvement specialists and process owners.



#### Governance model

The new environment will give you better control of any changes or decisions that could affect operations. An environment with clearly defined roles and responsibilities will have a potential impact across your current or target operating model.



#### **Technology landscape**

RPA will make it easier to deploy resources across different virtual environments. This will make operations more resilient, accelerate integration across systems and buy you time to address more structural and costly systemic changes.



#### **Process design**

Automation will provide an opportunity to design true end-to-end processes and realise the associated benefits. This will make operations more consistent, reduce process fragmentation and make ways of working more transparent.



#### Organisational impact analysis

Automation will shift the organisation's focus from a departmental view to a process view. New roles will be created to control the digital operation, handle exceptions, and maintain and change bots. All of this will enable better integration across functions and geographies.



#### Internal control and compliance

Deploying digital labour will give you measurable SLAs and auditable processes. Overall adherence to processes, policies and data disclosure across the organisation will be significantly enhanced

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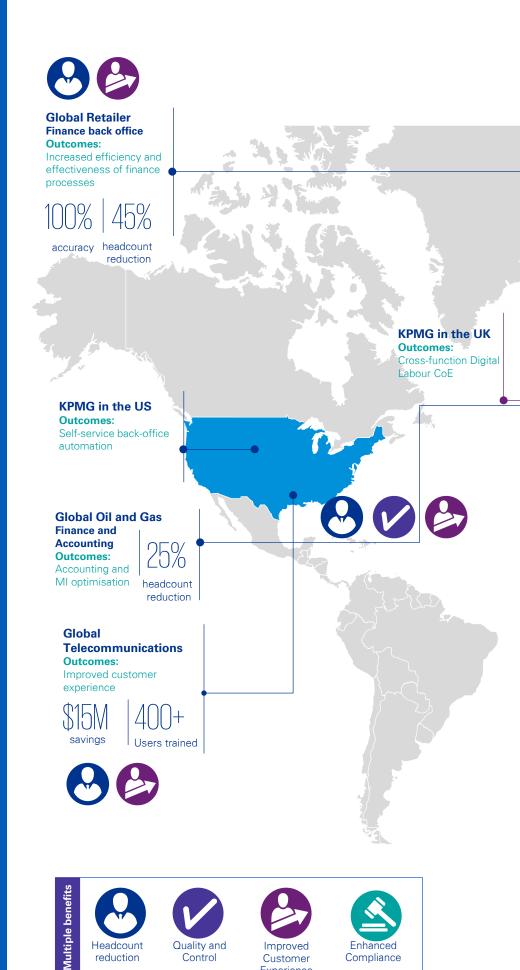
### We've done this before ...

KPMG has delivered successful implementations across different industries and functions, delivering a wide range of benefits

KPMG's global network of member firms have capability to support automation and operating model transformation programmes.



KPMG's global network of firms have two dedicated delivery centres in India and Portugal.

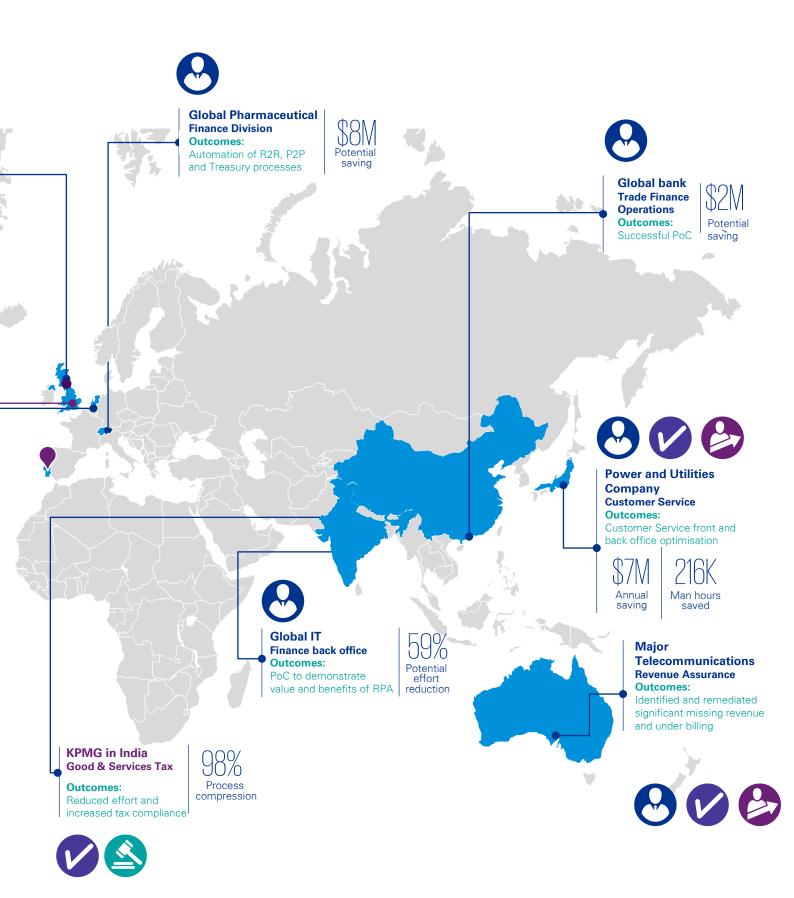




Customer Experience Compliance

Control

reduction



# More than 50 automation projects delivered by KPMG's global network of firms

### Managing change - the human element

The seamless integration of your co-existing workforce ('humans and bots') will need to be carefully planned and executed throughout your automation journey. This new digital ecosystem will require fundamental changes in the skills and responsibilities across the entire organisation and operations.

In this context, adoption of a structured approach to change, from approved solution design to deployment in a live environment, remains a critical success factor in achieving a sustainable Business As Usual (BAU) state.





- Plan roles and responsibilities in advance for releasing your first 'bots'
- Identify teams that will be impacted first, based on your release strategy
- Take advantage of user acceptance testing to 'make introductions'
- Provide training on new ways of working with clear focus on exception handling
- Understand 'breaking points', such as process upstream dependencies



#### Integrate your new colleagues with your current teams...

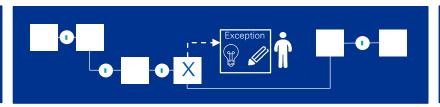
- Assess the resource requirements to retain and attract new talent
- Remember that communicating and engaging with your 'new colleague' will be critical
- Train your management team, as they will be managing a newly blended workforce
- Make your change management team an active partner in this journey
- HR, Employee Relations and Communication teams will have to work even more closely



#### Recognise the need to create new career paths...

- Review your existing Employee Value Proposition to recognise the new 'workforce diversity'
- Recognise that IT 'savviness' will become a core skill across your organisation
- Reconsider your current talent sourcing to better connect skills with career paths

From Solution Design



To Business As Usual



## Lessons learnt — 'The dirty dozen of automation'

Our global network of firms has delivered more than 50 automation projects around the world. Here are some insights we've learnt on the way.



#### Establish an enterprise wide capability

Regardless of where automation is initiated, the capability to deliver any automation proposal needs to have an end-to-end operational remit, to build the right solution effectively.



#### **Build solid foundations**

Build your automation programme structure with a long-term strategic intent. Over time, this will allow your automation project team to transition into a core part of your BAU structure.



#### Partner with your technology function

The technology function will become a key partner in enabling your RPA led transformation. Their ability to generate scalability (e.g. testing environments, bot credentials, etc.) will help determine the success of your automation programme.



#### Identify and incentivise talent

Use the digital programme lifecycle as an incubator for upskilling and redeploying talent across your newly established digital operations. In parallel, articulate a clear retention strategy at the beginning of the programme to help retain your top talent and mitigate against any business continuity risk.



#### Strike the balance of your transformation

RPA is a vehicle to transform your business, but it needs to co-exist with other levers (e.g. process reengineering, system integration, organisational design) to enhance the opportunity presented by automation programmes. How you sequence these will determine the value you unlock for your organisation.



#### Start small, deliver swiftly

Getting some 'scores on the door' early will help build momentum and give your automation agenda credibility, allowing you to compete for and secure the organisational resources required to move forward.



#### **Protect your business case**

Ensure you fully understand the ramifications of any existing 'in-flight' transformation initiatives on your automation pipeline. Align and communicate any overlaps to avoid dilution of estimated potential savings in your business case.



#### Consider business scalability

Cloud solutions and data accessibility will become more relevant as you progress through your automation journey, as they are key enablers for enhanced automation (e.g. machine learning).



#### Select vendors aligned with your ambition

Understanding the RPA product evolution and having a clear vendor management strategy are key considerations for a digital transformation. Select an RPA product that can be augmented (e.g. machine learning, Al, etc.) to meet your automation ambition.



#### **Evolve your analytics capability**

An automation programme will give you access to 'almost' real-time transactional data and an opportunity to develop new analytical layers in your data and analytics portfolio.



#### Set your priorities and the rest will follow

There is no right sequence for adopting different types of automation technologies. Your business priorities and the level of benefits required should inform your decision on which automation solution to adopt.



#### Automation 'horses for courses'

You will need to explore different types of automation classes to identify cost-effective use cases and deploy suitable automation solutions. This is a critical success factor in realising targeted benefit types.



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