The robotic revolution

Business transformation through digital labour

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With over 50 skilled people specialised in operational excellence in Luxembourg, KPMG can enhance your transformation journey while preparing you for the challenges on today's digital landscape.

Today's organisational challenges

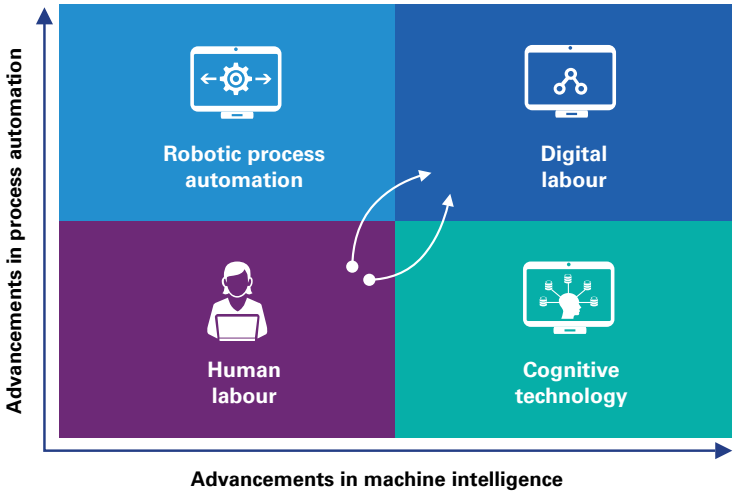
Capital markets have been expanding globally, alongside which has come increased competition between incumbent players and disruptive entrants. Unburdened by legacy infrastructure, some of these entrants have proven to be nimbler and tech-savvier than established firms.

This increased competition, together with ever-mounting pressures to reduce costs, means that working harder is not good enough anymore—what counts is working smarter.

Changing the way business is done

Robots are not new: for years they have played tremendous roles in manufacturing, medicine, warehouse operations, and other industries.

However, robotics is morphing into digital labour, a confluence of mighty processing power, artificial intelligence, natural language processing and exponential data growth. Digital labour offers opportunities to augment or even replace human labour.



The key components in the continuum of technologies are:

- **robotic process automation**, which automates physical tasks; and
- **cognitive technology,** which augments human judgment.

Research suggests that these technologies will enable a progressive digitalisation of labour which will, in turn, drive an exponential and unparalleled transformation of business models.

An interface that features machine learning, data and analytics, visual recognition, natural language processing and robotic automation would have the ability to interact naturally and productively with laypeople in everyday business environments.

Three classes of automation

Digital labour is the application of technology that allows employees to configure computer software or a "robot" to capture and interpret existing applications for processing a transaction, manipulating data, triggering responses and communicating with other digital systems.

Digital labour falls into three categories of sophistication. Applications from each level are differently suited to addressing issues of varying cost/performance trade-offs (e.g. you do not need a cognitive platform to perform copy/paste activities).

Class 1

Basic robotic process automation

Class 1 automation leverages several "tried and true" technologies to automate basic swivel-chair processes found in almost all organisations today. It can be implemented without further IT development. Solutions can be easily designed and quickly tested, and need little investment before being put into use. This technology can only use structured data.

Examples: data collection and aggregation; basic reconciliation

Class 2

Enhanced process automation

Class 2 automation leverages more advanced technologies that incorporate elements of self-learning to address automation of processes that are less structured and often more specialised. It can draw from both structured and unstructured data.

Examples: insurance policy renewal (premium recalculation); exception handling

Class 3

Cognitive automation

Class 3 automation incorporates advanced self-learning capabilities based on technologies such as natural language processing, artificial intelligence, machine learning, and data analytics. It provides real decision support on complex processes that are more cognitive in nature.

Examples: robotic customer service agents (chatbots); fraud prevention tools (via predictive analysis)

Key advantages of digital labour

- Limit human exposure to sensitive corporate data.
- Increase security and governance tasks without adding new human labour.

Privacy and compliance

- Reduce the number of quality issues associated with manual data entry.
- Reduce the need for re-work.

Quality and accuracy

- Leverage digitalised data to increase visibility and to continuously improve your efficiency.
- Enable yourself to focus more on higher value-adding activities, and less on routine processes.

Process improvement and efficiency

- Benefit from technology that performs tasks 365 days a year at 24/7 availability.
- Rapidly scale up / scale down for changes in transaction volumes.

Speed

- Decouple the correlation between labour and revenue growth.
- Reduce need for seasonal labour force (e.g. during busy seasons).

Productivity

Your digital labour journey

Explore RPA and its potential.

Awareness workshop

- Gain your understanding of digital labour and the classes of automation.
- Discover how digital labour could be rolled out within your firm (potential tools, vendors, benefits, etc.)

Select the process to start with.

Process workshop

- Review the current state of your business process management and automation.
- Identify processes eligible for digital labour through either a top-down or bottom-up analysis.
- Select 1-2 process(es) for a proof of concept.

Try it on a limited scale.

Proof of concept (POC)

- Select the right digital labour tool/ vendor for the POC.
- Define the scope and success criteria.
- Design and configure the identified POC process(es) in the selected tool(s).
- Demonstrate the POC to stakeholders, assess results and document key takeaways.

Pilot roll-out

- Confirm digital labour vendor/ tool selection, or conduct a fully fledged vendor selection process.
- Develop a digital labour opportunity catalogue, identifying processes for rolling out a pilot.
- Establish a business case estimating potential benefits and related costs.
- Roll out the pilot.

Select the most suitable technology and prepare for the roll-out.

Implementation and further roll-out

- Define an operating model incorporating digital labour (identify roles and responsibilities, organisational structures, and operating and delivery models).
- Define a BPM strategy aligned with the digital labour implementation roadmap.
- Roll out the digital labour initiative.
- Explore other classes of digital labour.

Build your new capabilities.

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