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Y ROBOT?
Insurance on Demand, Virtual Agent's and Telematics…

We have clearly entered "The Digital revolution" and the way we work needs to change dramatically.

Today's leading financial services companies are operating in a new and more complex environment; one where the fundamental definition of how customers experience and interact with an insurer is being challenged and redefined. This is further complicated by millennials' dramatically different buying patterns, alternate channels and changing expectations for consumer and digital experiences. This new consumer driven / customer centric business model is one that many insurers recognise and are striving to adopt in order to win and retain customers.

With disruptors entering the market, "time" now plays a key role in the insurance business. Not only when writing business, but across the value chain. More lean business models, the ability to integrate alternate channels and "smart" technologies such as telematics and Internet of Things (IoT) devices are placing immense pressure on many established insurers.

On a day-to-day basis companies are worried about performance, cost, security and data breaches. Many insurance companies are simultaneously dealing with legacy IT issues and data challenges whilst exploring competitive levers with newer technologies and digital services to meet changing consumer needs and securing their future. In a recent global technology risk publication, the Tech Risk Radar,[1] "Inability to deploy and exploit emerging technology" was cited as the highest risk factor for insurance companies globally.

We see leading innovations such as driverless cars, 3D printing and Blockchain driving a change in business models and this will only accelerate in pace as we grow to virtual reality, Artificial Intelligence ('AI") and a more digital customer. A key challenge for the market is the misalignment between front office and back office transformation, and in many regards, back office processes and systems are not designed to support the innovation pace today, proving more challenging as organisations strive to shift their front office into increased digital experience.

Bring in the robots

Robotic Process Automation (RPA), also referred to as digital labour, is an emerging technology, aimed at improving operational efficiency for repetitive processes. RPA involves deployment of software tools to replicate human actions for repetitive and manual tasks and improve business processes. It is lightweight, quick to deploy and does not involve significant alteration to existing IT

[1] www.kpmg.com/uk/en/home/insights/2016/12/tech-risk-radar-2016-edition.html

infrastructure. Whilst automation is not a new concept to insurance, the challenge has been in applying automation consistently across functions in end to end processes. The lightweight nature of RPA and lead time to deployment make it an attractive investment, and many companies have already made significant investments in exploring this. RPA currently operates on a continuum of basic automation through to cognitive machine learning solutions, as organisations work towards AI.

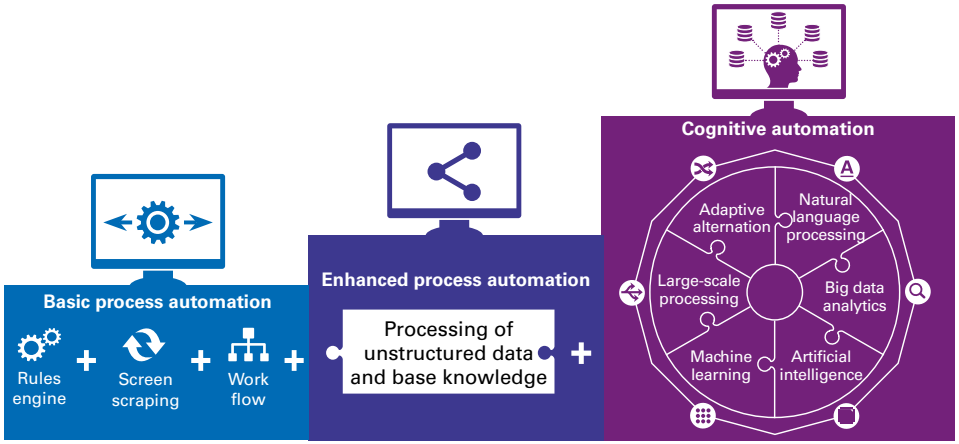


Figure 1: The Digital Labour Continuum

One of the key focus areas in digital labour for insurance businesses is claims processing. It is at this stage that the insurance company meets its commitment to its customers, sets standards of service, drives credibility, and fulfils its obligations.

Some of the other environments include finance, supply chain, shared services, customer contact centres, and risk and compliance. These environments are deeply reliant on process speed and accuracy to meet growing customer demands, and it involves layers of administrative, managerial, and customer service functions, marked by information intensive manual tasks and problematic document formats, including:

Manual inputs	Traditional claims processing depends heavily on manual labour. This makes the process increasingly inconsistent and prone to errors. The situation becomes worse when the workforce is outsourced. Companies often have to depend on unreliable and indifferently skilled workers, which increase the costs and the time it takes to complete the process.
Disparate input media	Paper, electronic documents, images, emails, and sometimes even the applications handling different stages of the process are different and not integrated. As a result, there is a distinct lack of transparency and accountability.
Legacy applications	Insurance companies are often trapped within the framework of the legacy applications that drive their core processes. These applications are sometimes outdated and do not interface well with newer, up-to-date solutions.
Regulation and compliance	Changes in regulations can greatly impact processing and the insurance industry is seeing an increased focus and change in their regulatory environment, notwithstanding the current compliance challenges. This becomes more of a conundrum with data exchange when considering operations across different countries, each with its own sets of laws and regulations.

Many insurers have already implemented some level of automation, be it basic automation like digital document solutions or more advanced automation of entire workflows. However, these solutions are often disparate or come with their own set of challenges that can further add to the complexity and difficulty of processing. The quality of output from these automations depends largely on the quality of programming. Every time there is a change in the process, programming may need to be updated / overhauled. Another shortcoming is that they still rely on manual input from human workers to process and navigate data between different systems, which burdens the process, leaving it exposed to risk of errors, and adding cost.

This is where Robotic Process Automation (RPA), as a more integrated automation solution assists in solving the abovementioned challenges. RPA works at the presentation layer, with a key characteristic being integration between applications and systems, including legacy systems, without creating significant disruption.

RPA is scalable according to necessities and its key features clearly enable reduced process handling time, turnaround and increased efficiency, amongst others:

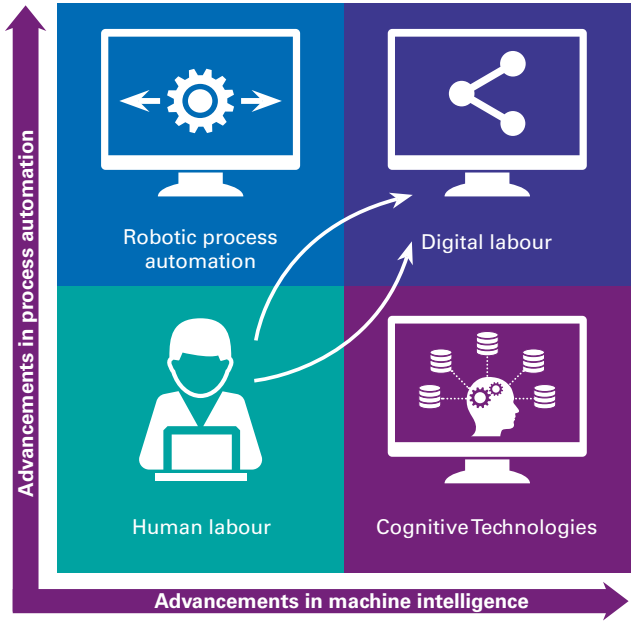
- **Seamless integration**
  Robots can seamlessly integrate different systems and software, including CRM, ERP, Helpdesk, claim application software, and more.
- **Operational accuracy and speed**
  Eliminate the margin of human error of manual data entry and speed up processing by streamlining work distribution and reducing dependencies that exist with manual process handovers. Automation can sometimes halve the average time it takes to process a claim, which greatly increases customer satisfaction as well as reduces costs.
- **Increased efficiency**
  With robotic automation, all the burdensome and repetitive tasks are taken care of automatically, so employees can be used more efficiently in processes and tasks that require higher level thinking and judgement.
- **Easy to upscale and downscale**
  While planning for automation, system architecture should make provision to have upscale and downscale. This approach will ensure that an organisation can be ready for adoption of regulatory changes or process improvement changes.
  In more mature states such as machine learning, cognitive and artificial intelligence, digital labour bots will "self-learn", "train" and update processes based on their analyses and judgement. A KPMG global CEO survey, sites global CEO's as highlighting cognitive as an area for key focus in the next year.

Are the robots coming?

This year through responses in the KPMG / Global Harvey Nash Survey (A global CIO survey) published on 22 May 2017[2], it's apparent that IT leaders are starting to make significant investment in this area. The convergence of robotics, machine learning and advanced analytics is certainly a good way of dealing with the challenge of 'big data' that many insurance organisations are still grappling with.

A quarter of respondents to the survey have indicated seeing very effective results. Technologies such as cognitive automation, together with both basic and advanced robotic process automation, seem to be areas where increasing numbers of organisations are investing. The robots, it seems, are certainly on their way.

RPA can help integrate various systems and automate transaction processing through software robots that work seamlessly with existing applications. RPA generally addresses an element of the Digital Labour Continuum. It is the foundational step whereby an organisation can unlock the benefit of increased automation and digitization of data. This also assists with enhanced and cognitive automation.



Key factors that impact adoption: degree of change/impact, data (structured vs. unstructured), costs, development and implementation timelines, and benefit realization horizon.

Are we there yet?

Robotic and cognitive automation are rapidly emerging, and are poised to drive exponential growth in the digitization of human tasks. Their maturation has been driven by significant advancements in machine intelligence, digital engagement, analytics, big data, social, mobile and cloud. Research suggests the market for AI and cognitive automation will be over $100 billion by 2020, and that it is quickly becoming a C-suite issue.

The power of machine learning is in parallel being explored with various providers, and will have massive value in automating some of the underwriting and claims processes, amongst others. Take for eg. Max – A KPMG developed ChatBot for Motor Insurance, this is the number one way people are connecting and consuming services today and conversations are becoming the new apps.

With this, it is often quite easy to get excited at the prospects of digital labour and cognitive. However some critical dependencies remain with regard to the extent to which data has been digitised. It is important to progress along the digitization journey with a view of sustainably digitising data assets and enabling cognitive applications whilst exploring cognitive and more advanced automation.

What can go wrong?

Based on the current explosion in innovation emergence, governance and risk are key considerations for any emerging technology, with much of the current focus within insurers being on business processing, such as claims processing and back office transformation.

However some are starting to turn to cognitive technologies and advanced analytics to eliminate manual processes. This is just the start of a greater trend to use robotics higher up the value chain as a more integral part of the business. And this trend will demand an even greater concentration on security and controls.

[2] www.kpmg.com/za/en/home/home/press-releases/harvey-nash-kpmg-cio-survey-2017.html

Key risk management areas such as 3rd Party Management, Program, Project and Change Management, Access Management, Secure Operations and Product Development, Data Security, Privacy, Compliance and Business Continuity are critical to ensuring a successful scaled RPA rollout and enterprise risk management with this emerging technology. In some environments, robotics are also being explored as an opportunity to innovate Risk Management processes and practices.

One of the key risks facing the rollout of RPA within an organisation is effective transformation of processes and the integration of humans and machines. Humans and machines are now closer than ever. The challenge is that the experience and transformation in the front office is being met with a lot less resistance than the back office. The Harvey Nash survey highlights "increases in Employee morale through the elimination of mundane tasks" as one of the key benefit areas that requires some work.

As organisations continue to invest and progress in this space, transformation and change management is going to be a key feature, and KPMG already see's RPA Centre of Excellences and dedicated senior accountability as pivotal to sustainable rollouts.

In conclusion – Welcome the Ro-Man era

Digital labour will demand changes in operating models, infrastructure and management. Human and digital labour will increasingly co-exist in organizations and this raises a challenge for leaders and HR professionals, because new and evolving organization models, along with demographic and labour market change, create significant uncertainty for predicting workforce requirements. This may also result in customer facing environments requiring customer engagement model changes.

Combined RPA and software approaches have already seen activity with benefits in cost reduction and efficiency. More advanced AI applications depend on the general advancements of AI. Human level interaction agents are not there as yet. There is great potential for the applications of these in the insurance sector and beyond.

There are immense opportunities for insurance brands to better engage with new audiences by becoming "conversational" in digital channels. Advanced chat bots, Natural Language Processing (NLP), voice and image recognition, and machine learning enabled, and machine learning enabled capabilities are all feasible through digitisation maturity. As we start along this journey to a digital future, there are many unknowns, but one thing is certain, it is a Digital Future.