
PwC software robotics

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... Resistance is futile, are you ready?

62% of Finance Leaders either agree or strongly agree that the advancement of process automation will impact their business in the next 12 – 24 months*. How are you positioned to adapt to the changing environment?

What is PwC Software Robotics?

PwC's Software Robotics Solution uses smart software to replicate tasks and processes that are performed by humans.

This has become popular for transformational programmes because of the following reasons:

- **Non-Invasive:** The software is deployed on the existing technology architecture so underlying systems/applications remain unchanged
- **Rapid deployment:** time to implement is “weeks” and not “months”
- **Early payback:** Return on investment is typically 1 to 2 years (*sometimes sooner*) depending on type of process and volumes – which is fast when compared to automating FTEs in low cost offshore locations

Software robots reduce the cost of delivery and reduce error rates by automating rule based, high volume activities. This has been the ‘mantra’ for the past 15 years in support of outsourcing/offshoring – the difference now is faster implementation, even lower costs, without the onshore / offshore debate. All of which make it a compelling proposition.

What does the market look like?

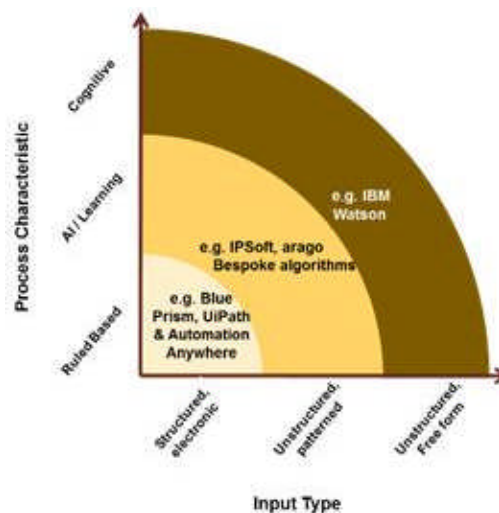
The rule based market for automation software is fairly mature with Artificial Intelligence (AI) and Cognitive very much still evolving.

- At one end of the spectrum you have companies that automate processes with defined business rules, structured inputs and outputs e.g. invoice processing, standard monthly reporting packs etc.
- At the far end you have AI based solutions using complex algorithms consuming unstructured inputs and data to produce an output, evolving and improving their performance through learning e.g. a cancer research hospital in the US

has deployed IBM’s Watson solution to provide information and analytics, enabling doctors to make a decision on the best course of cancer treatment.

In-between these two points are the hybrid solutions that combine elements of AI on rule based processing.

PwC’s Software Robotics focuses on rule based automation – a practical first step towards embarking on a digital journey.



Source: GenFour

How does Software Robotics differ from traditional ERP based automation?

The principle difference is that ERP based automation is reliant on programming skills, connectivity, configuration and extensive testing at a system/application/ERP level vs. Software Robotics solutions that replicate human interaction with the system following set business rules.

The Software Robotics route is usually quicker and lower in cost when compared to ERP based automation including any maintenance related changes.

What are the benefits of Software Robotics?



1. Rapid deployment: 12 – 18 weeks, subject to process complexity



2. Non-invasive: Deployed on top of your current systems and applications and interacts as the user would, only faster and with near 100% accuracy



3. Deployed on your architecture: There is no need to change the underlying systems or technology



4. Highly scalability: An easily expandable workforce, instantly trained and deployed; a system that can be scaled and worked restlessly



5. Available 24/7: Capable of processing around the clock completing the work that, up until now, humans have been doing. Limited only by the availability of your systems (typically 16 hours/day)



6. Reduced costs: Overall operating costs are a fraction of an off-shore FTE



7. Increased quality: Quality of outputs is increased, no reworking required due to human error

Which finance processes are typically appropriate for automation?

The following processes are the most appropriate candidates for automation using PwC Software Robotics*:

- Payments/invoice processing
- Supplier simple query management response
- Time and expenses auditing
- Order management
- Periodic credit check through external credit rating agencies
- Regulatory report production
- Management reporting/Board reporting pack production
- Performance report production
- Trade processing i.e. Asset Backed Securities Processing, Asset servicing/Billing
- Data validation checks/Data migration testing
- Master data management

**Before embarking on any process automation all processes will undergo a diagnostic to assess its feasibility to be automated.*

Cost 3:1 Off-shore FTE: Robotic FTE

**Source: Raconteur Media & Blue Prism*

35% of current jobs in the UK are at high risk of computerisation over the following 20 years ...

Source: BBC Survey 'Will a robot take your job?' September 2015

Case study: On-boarding process

Client: A leading international Service Delivery firm delivering back office HR services through a combination of onshore and offshore delivery centres.

Client issue: A combination of 200 onshore and offshore FTEs were managing the end to end recruitment process for the client for its US operations and approximately 10-30 FTEs were handling approximately 19,000 new joiners/annum. The service delivery centre was tasked with a ‘do more with the same’ challenge by the governance board. Due to cost pressures there was no budget available to increase the size of the team.

Approach:

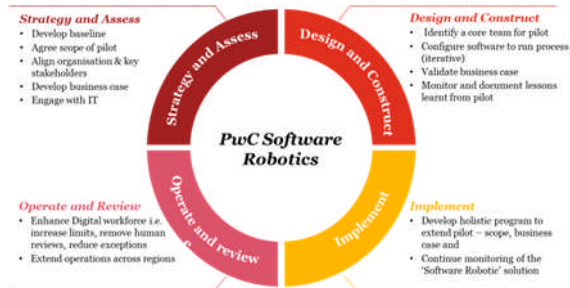
- **Assessment:** The PwC team undertook an assessment of all the key recruitment processes in terms of volume, complexity, effort hours to identify a short list of processes that would benefit from PwC’s software robotics solution and we agreed with the client to undertake a ‘Proof of Concept’ (PoC) for the on-boarding process.
- **Proof of Concept (PoC):** A joint team of client process owners and the PwC software robotics team worked through several workshops and the team mapped in detail the separate activities for the on-boarding process.
- **Solution:** The design, build and testing of the automated solution was performed off-site within the client’s test environment. It took a total of 10 weeks elapsed time to deploying the solution on the client environment.

Benefits Gained

- ✓ Estimated savings of between 10–15 FTEs of the initial 30 onboarding team members. This allowed the service delivery centre to focus on customer facing aspects of the recruitment process
- ✓ Processing quality improved many times over allowing the team to focus on “exception handling” and not re-work
- ✓ On-boarding costs were reduced (i.e. flights, training., hotels, IT) due to improved quality of data accuracy
- ✓ Improved reporting through the software tool enabled the team to identify trends in exceptions and bottlenecks. This enabled further successful process improvement projects

The PwC approach

PwC has a tried and tested methodology as part of our transformation toolkit to provide a comprehensive solution to our address our client needs. We have deployed this within our Shared Service centre and is now integrated into our Global Shared Services and outsourcing methodology – the diagram below outlines the key components:



This methodology is for an end to end deployment for PwC’s robotic software solution, however for enterprises looking to pilot this technology, we focus on the ASSESS phase to identify the short list of processes, technology and business case for deployment.

PwC's point of view

Adopting a software robotics solution is the first step towards embarking on a Digital Finance transformation – it's not a question of **if** but **when**. Our observation in the market is as follows:

- ***We are only at the beginning of the Software Robotics revolution***

Software Robotics has a foothold in Industry, but we are only at the beginning of a journey to fully understand its potential. Technology is advancing at a rapid rate, standing still and not investing in your systems is not an option, if you don't move quickly you will lose competitive advantage.

- ***Software Robotics is low investment and quick to realise ROI***

This is a business led investment and initiative. However unlike traditional on-site implementations, it does not require the extensive investment or time associated with build, deployment and testing. Business users can learn how to run, maintain and deploy Software Robotics in weeks.

- ***Implement a Pilot programme and trial the benefits in your business***

The market is buoyant across all sectors and there is an overwhelming desire by our clients to 'see, touch, and feel'. Enterprises are embarking on a pilot to initially comprehend this solution and its applicability within their business.

- ***To get the most out of Software Robotics you have to think holistically***

Businesses have experienced a reduction in operating costs through deployment of Software Robotic solutions. However enterprises that adopt "best in class" process characteristics in parallel will experience enhanced gains across cost and quality metrics performance.

- ***Don't forget about your sourcing strategy!***

If you have an existing SSC infrastructure you should deploy Software Robotics. If you are considering sourcing you cannot ignore the robotics approach. For in-scope processes, the underlying economics of a robotic solution are radically more compelling vs. a low cost SSC option

Conclusion

Over the past 20 years various models have evolved which have challenged how we deliver a quality service to the business, customers and our employees. Robotic Process automation is the fresh challenge for the digital age and it is a compelling one. However, this is just one step into an even more exciting digital journey, where deploying Software Robotics/Artificial Intelligence solutions is at the heart of businesses beating the competition.

Several organisations are on this journey already. The question you have to ask is – ***are you ready?***

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