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Robotic Process Automation at Xchanging

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Research on Business Services Automation

Research Objective:

The academic researchers at the Outsourcing Unit (OU) aim to assess the current and long-term effects of business services automation on client organizations. While using software to automate work is not a new idea, recent interest in service automation has certainly escalated with the introduction of new technologies including Robotic Process Automation (RPA) and Cognitive Intelligence (CI) tools. Many potential adopters of the new types of service automation tools remain skeptical about the claims surrounding its promised business value. Potential adopters need exposure to actual and realistic client adoption stories. Academic researchers can help educate potential adopters by objectively researching actual RPA and CI implementations in client firms, by assessing what the software can and cannot yet do, and by extracting lessons on realizing its value.

Acknowledgements:

"Robotic Process Automation at Xchanging" by Leslie Willcocks, Mary Lacity and Andrew Craig is the second working paper delivered from this research project. We appreciate and thank the customers, providers, and advisors who were interviewed for this research and to the participants of the Robotic Automation Advisory Council for their helpful discussion. We also acknowledge and thank Blue Prism as the launch sponsor of this research.

About The LSE Outsourcing Unit:

The Outsourcing Unit is part of the London School of Economics and Political Science (LSE), acknowledged as the world's premier social science university, and in business and management studies ranked first above Cambridge and Oxford Universities in a 2014 Research Assessment Exercise. The OU draws upon a 2,300 plus case study database covering all major economic sectors and countries, and provides independent, objective and rigorous, timely research, report and advisory services to business, government and third sector organizations. Previous research and published work can be reviewed on www.outsourcingunit.org.

Robotic Process Automation at Xchanging

"We are seeing those outsourcing providers who have incorporated automation into their services have a competitive advantage over their competitors through commitments to higher service levels and improved pricing. This is resulting in a rapid transformation in the marketplace, as more providers are incorporating automation into their services offerings. Additionally, we are seeing providers utilize automation as a method to satisfy their committed innovation requirements." – Rob Brindley, ISG, April 2015.[1]

Transforming Back Offices with Service Automation

"Back offices" are where the operational support systems for services are created, managed, and delivered. Back offices are always under pressure to contain costs in highly competitive industries like insurance and financial services, but cost efficiency must be balanced with other performance imperatives such as service excellence, business enablement, scalability, flexibility, security, and compliance. From years of research on back offices, we learned that low-performing back offices can be transformed to high-performing back offices through six transformation levers: centralize physical facilities and budgets, standardize processes across business units, optimize processes to reduce errors and waste, relocate from high-cost to low-cost destinations, technology enable with, for example, self-service portals, and automate services (see Figure 1).[2]

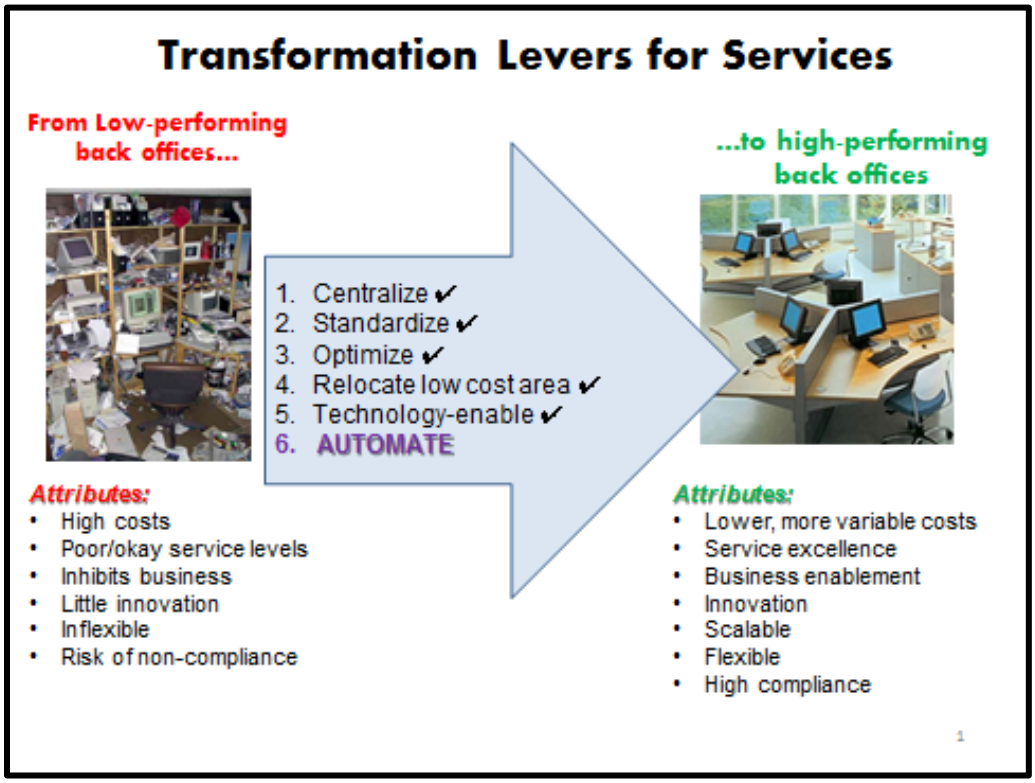

Figure 1: Six Levers for Transforming Back Office Services

For the past 15 years, large companies have widely adopted the first five transformation levers to the point that they have become *institutionalized*—that is, an accepted and normal part of managing back offices. However, it is only in the last few years that the real power of service automation has been unleashed. Some heavy service automation adopters we have studied have automated over 35 percent of their transactions. This service automation trend is called "Robotic Process Automation" (RPA).

Although the term "Robotic Process Automation" connotes visions of physical robots wandering around offices performing human tasks, the term really means automation of service tasks that were previously performed by humans. For business processes, the term RPA most commonly refers to configuring software to do the work previously done by people, for example transferring data from multiple input sources like email and spreadsheets to systems of record like Enterprise Resource Planning (ERP) and Customer Relationship Management (CRM) systems. To be clear—we are not talking about technology enablement where technologies like desktop scripts *assist* human agents but actual software automation that *replaces* some or all of the work previously performed by people.

Early adopters of RPA are finding that automation can radically transform back offices, delivering much lower costs while improving service quality, increasing compliance, and decreasing delivery time. But as with all innovations, organizations must learn to manage RPA adoption to achieve maximum results. In this case study, we describe Xchanging's successful implementation of RPA using Blue Prism software (see Table 1) and share the lessons it learned to attain significant benefits.

Table 1: Xchangings' June 2015 RPA Capabilities at a Glance

Number of processes automated	Number of RPA transactions per month	Number of Robots	Number of FTEs replaced	Typical cost savings per process	Other benefits
14 core processes	120,000 cases	27	Automation not about replacing people with technology but about continuous improvement	30%	• Improved service quality • High accuracy, low error/ • exception rates • Faster turnaround time • Multi-tasking • Scalability • Increased compliance • Strategic positioning

The Xchanging case challenges four common 'myths' about Robotic Process Automation[3] A myth is not necessarily false, but nor is it necessarily applicable to all contexts:

Myth 1: RPA is only used to replace humans with technology
Fact 1: RPA at Xchanging was used to do more work with the same number of people

Myth 2: Business operations staff feels threatened by RPA
Fact 2: Business operations staff at Xchanging welcomed the robots as valued "new hires"

Myth 3: RPA will bring back many jobs from offshore
Fact 3: Xchanging automated offshore processes and kept them offshore

Myth 4: RPA is driven primarily by cost savings
Fact 4: Xchanging had a mature understanding of multiple operational benefits and strategic payoffs, with cost efficiencies being one driver amongst many.

About Xchanging

To put the RPA journey into context, we here explain Xchanging's business background.

Xchanging is a provider of technology-enabled business processing, technology and procurement services internationally to customers across many industry sectors. Listed on the London Stock Exchange, at the end of 2014 it had over 7,400 employees (4,600 Business Process Services, 2,000 Technology, 800 Procurement) in 15 countries, providing services to customers globally. Net revenue for 2014 was £406.8 million, of which £282.4 million was from Business Process Services. Expected revenue reductions from exiting the Xchanging Transaction Bank, HR Services business, and London Metal Exchange were partially offset by full first year revenue benefit from MarketMaker4 (MM4) and the first contribution from acquisition of Agencyport Europe. Year-end net cash of £13.7 million (2013: £120.1 million) reflected £90.3 million of acquisitions and £43.4 million of capital expenditure. Adjusted operating profit of £55.8 million in 2014 (2013: £55.5 million), represented a 21.5 percent underlying year-on-year improvement.[4]

Xchanging was founded in 1998, specifically to address the relatively new Business Process Outsourcing (BPO) market. Its founder and first CEO David Andrews brought to market an innovative model of enterprise partnership – essentially a 50/50 joint venture model that created a third entity into which the client placed its assets, and Xchanging committed managerial capability in seven business competencies designed to drive innovation and continuous improvement. Xchanging began with four contracts – in HR and procurement with BAE Systems, and in insurance and claims services at Lloyds of London and the London Insurance market. By 2007, Xchanging had over 4,200 employees in seven countries, with customers in 34 countries. To capture a variety of customers Xchanging found it advisable to add four more offerings to its enterprise partnership model, namely, outsourcing (guarantee sustainable savings), products (seeking to offer best solution), straight-through processing (optimizing the value chain), and business support. In April 2007, the company went public, and was listed at 240p at the top end of the quoted price range, and raised 75 million dollars of primary capital. It

ended the year with a 17 percent increase in share price since listing and gave a 2 percent share dividend in May 2008.

However, over the next three years Xchanging began to run into problems, notably after the acquisition, in October 2008, of Indian-based outsourcing and IT group Cambridge Solutions Ltd for £83 million in cash and shares. By February 2011, Xchanging gave warning that underlying operating profits in 2011 would be 'below the lower end' of analyst expectations, as it cancelled its dividend and announced the departure of David Andrews, its founder and chief executive of 11 years. Ken Lever became the acting chief executive, taking up the post full time four months later. The new CEO's job was to restore profitability and increase revenues. He addressed quickly the problems associated with The Cambridge Solutions acquisition. A process of transformation ensued.

By 2015 Xchanging specialised in bringing domain expertise and technology-enablement to complex business processing. Deploying technology and innovation, Xchanging aimed to perform customers' non-core and back office functions better, faster and more cost-effectively, allowing customers to focus on strategic activities and adding business value. Xchanging's approach is to combine innovative technology with best-in-class process methodologies to address customers' back and middle office needs. Xchanging uses onshore, nearshore and offshore centres, and works across a wide range of industries building on domain strengths, particularly in insurance. Xchanging invests in product innovation, for example in 2014 with the launch and enhancement of new products such as the Xuber suite of insurance software, Netsett and X-presso. Xchanging's Procurement business has been called a global leader in its field, reinforced by the acquisition of eSourcing specialist MarketMaker4 (MM4) in September 2013, further developing Xchanging's presence in the US market.

In 2015 Xchanging as a business technology and services provider consisted of three interrelated divisions. The first was Business Processing Services, which during 2014 had further simplified its structure with full ownership of German business, Fondsdepot Bank, and Xchanging Italy. Meanwhile in 2014, Technology accelerated strategic development of its Xuber insurance software business with acquisitions of Total Objects (for a consideration of £11.5 million) and Agencyport Europe (for a consideration of £64.1 million), enhancing its ability to offer software products that met international and standardised customer needs. Thirdly, Procurement, by 2015, had repositioned its product and service offerings, underpinned by the MM4 technology platform, and acquired Spikes Cavell Analytic Limited (SCAL) in February 2015. After four exacting years, Ken Lever, Chief Executive, saw 2014 as a challenging year in which the transformation process begun in 2011 was completed:

'To address the future market we have re-defined and focused our range of higher value offerings, based around technology, both in its own right and as an enabler and differentiator, and driven by innovation and insight into our markets."[5]

'Xchanging is now a business technology and services provider. Our Technology and Procurement businesses offer the potential for higher growth and margin expansion, rebalancing our overall Group significantly in the future. Our foundation Business Processing Services business offers moderate growth, good margins and strong cash generation. Our focus for 2015 is entirely on driving the revenue and profit growth performance of the new Xchanging."[6]

Xchanging's RPA Journey

Context and Drivers

This paper focuses on how RPA was adopted in Xchanging's insurance business, as a basis for further usage group-wide. By 2015 Xchanging had two remaining enterprise partnerships, now called shared services, both in insurance. Xchanging Ins-sure services (50% Xchanging, 25% Lloyd's of London, 25% the IUA) had secured a further five-year contract (in 2012) to run the centralized Insurers' Market Repository (containing the market's claims, premiums, policies and related documentation) and all the back-office policy and administration processing for Lloyd's of London and the London Insurance market. Meanwhile, Xchanging Claims Services (a 50/50 joint venture between Xchanging and Lloyds of London) had a three year contract signed in 2014 to continue to manage claims processing. By way of background, Lloyds of London is the world's specialist insurance market providing insurance services in over 200 countries and territories. The London insurance market (LIM) as a whole comprises insurance and reinsurance companies, Lloyd's syndicates, P&I clubs, and brokers. The core of LIM activity is the conduct of internationally traded insurance and reinsurance business. The management and administration of policies, premiums and claims with literally hundreds of London market entities, and millions of end customers is a highly complex, high volume business, in which speed, reliability, consistency and accuracy are vital requisites. An overview of the London Insurance market, including Xchanging's role therein, is shown in Figure 2.

In these ongoing contracts Xchanging had already invested some 13 years of process innovation and continuous improvement. With Xchanging's stress on '*technology at our core*'[7] and with his own deep experience in technology services, for Adrian Guttridge Executive Director, Xchanging Insurance, the step into RPA seemed obvious, but prototyping was necessary. In early 2014 he placed his data and information manager, Paul Donaldson, in charge of an RPA project to identify and automate ten processes in the insurance business whilst establishing a long-term governance and support competency for the Group:

'We did not choose an IT person, and it had to be someone who understood process reengineering. Though I have an IT group of over a hundred people onshore and offshore many hundreds more, I put it into the business processing part under the Operations Director.[8]

Paul Donaldson saw two drivers that RPA seemed to address:

'It wasn't just the customer driver for more business value. It was Xchanging itself having continual improvement embedded in its culture. That's why we have dedicated process black belts'.[9]

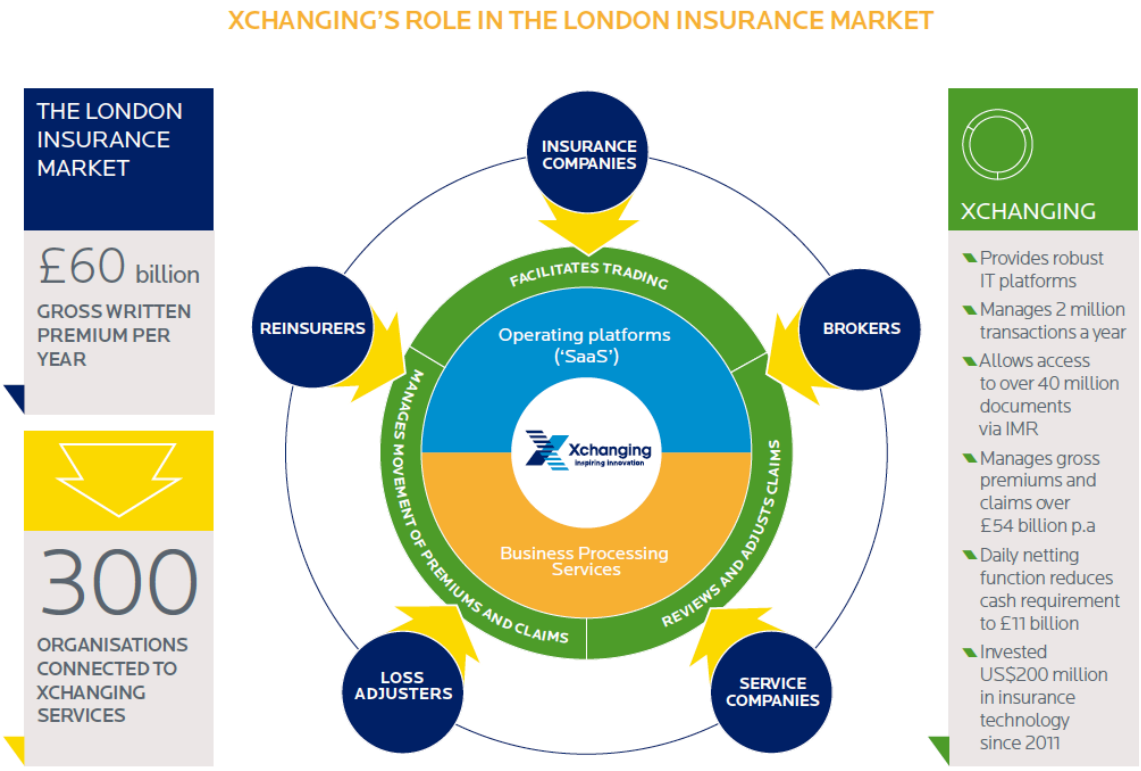

Figure 2 Xchanging's Role In The London Insurance Market

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Donaldson was a Six Sigma black belt himself, so a suitable champion for the project. RPA also seemed to fit well with Xchanging's core values, including customer focus, innovation, speed and efficiency, and people empowered to make a difference through teamwork[10]. Furthermore, RPA matched with Xchanging's offerings of innovation and technology, but also with the promise of new, valuable expertise working for the customer, together with added service delivery flexibility:

'If you think about flexibility in something like robotics, that hits a sweet spot. A robot can scale up and down and switch tasks. You'll train an application, a bit of software once, and if your contracts change, a robot can be trained quickly to adapt. You haven't got human resource type issues like induction time.' — Paul Donaldson, Xchanging[11]

There was another prize. If effective, RPA could also be exploited beyond insurance, thus tapping into Xchanging's relatively new Group-based focus:

'*Our deliverable wasn't only towards processes, but to put a framework in place that could be leveraged for the Group – to institutionalize it.'* — Paul Donaldson, Xchanging[12]

The Journey 2013-14: Start Out and Launch

According to the 2013 literature, RPA held out the promise of large cost savings – 20-40 percent often being touted – together with faster, more efficient, more accurate, labour saving process operations and, for a service provider like Xchanging, more business value and more timely and higher quality service delivered to the customer. But all these propositions needed careful checking against what RPA companies were actually providing. At Xchanging late 2013 saw a product evaluation of possible suppliers, together with the identification of candidate processes (see Figure 3). Xchanging has a huge amount of back office, high volume, repetitive data collection and processing tasks, many of them still manual, and many still taking data from non-integrated legacy mainframe systems. Moreover information is extracted from various sources e.g., Excel, Access, PDF, and input into another system or used to generate reports. There is a lot of manual comparison of information across different screens in a system before netting and closing a transaction can occur. Entry into a target system has to be based on certain business rules. Blue Prism RPA products seemed eminently suitable for addressing these issues and achieving efficiencies from moving data from any source system to one or more destination systems. In particular, a number of claims presented to Xchanging seemed attractive. Robotic FTEs could be one-third the price of offshored FTEs, and could work 24x7 without errors. It took only several weeks to automate, with no need for IT specialists. Super users in operations could train the robots. The robots do repetitive clerical tasks and fit into existing operations. Working in a virtualized environment off a secure, audited and managed platform, the robots would run in a virtualised environment and so could be scaled up and down rapidly while working in any jurisdiction[13].

Identifying processes for automation

The process of identifying ten candidate processes supported our finding in the Telefonica/O2 case: the RPA software seemed most suitable where degree of process standardization, transaction volumes, rules-based process and process maturity were all high.[14] Xchanging found it challenging to identify what 'high' meant, and made some initial miscalculations. A learning point was that you had to identify suitable processes: **RPA fitted more with high volume, low complex work.** As Telefonica/O2 found, there was an automatable band or range beyond which there was little business value. Once this was discovered, then Paul Donaldson found that it was not such a good idea to go straight to the business case, do that, then glide the processes in. On the contrary: *'If you define the right process, the RPA business case will naturally follow… the economics will usually add up. It's not going to cost you long-term to deploy.'*

Bringing IT on board

The business case was approved in early 2014 and securing the resources and mobilising the project became the main tasks to March 2014. At this stage one of the problems was the relationship with IT:

'There were a lot of skeptics in the technology space; it took a lot of convincing to allow business based operations to take some form of control over what is a decent sized IT change initiative, and a different way of operating for us as an organization'. – Paul Donaldson, Xchanging[15]

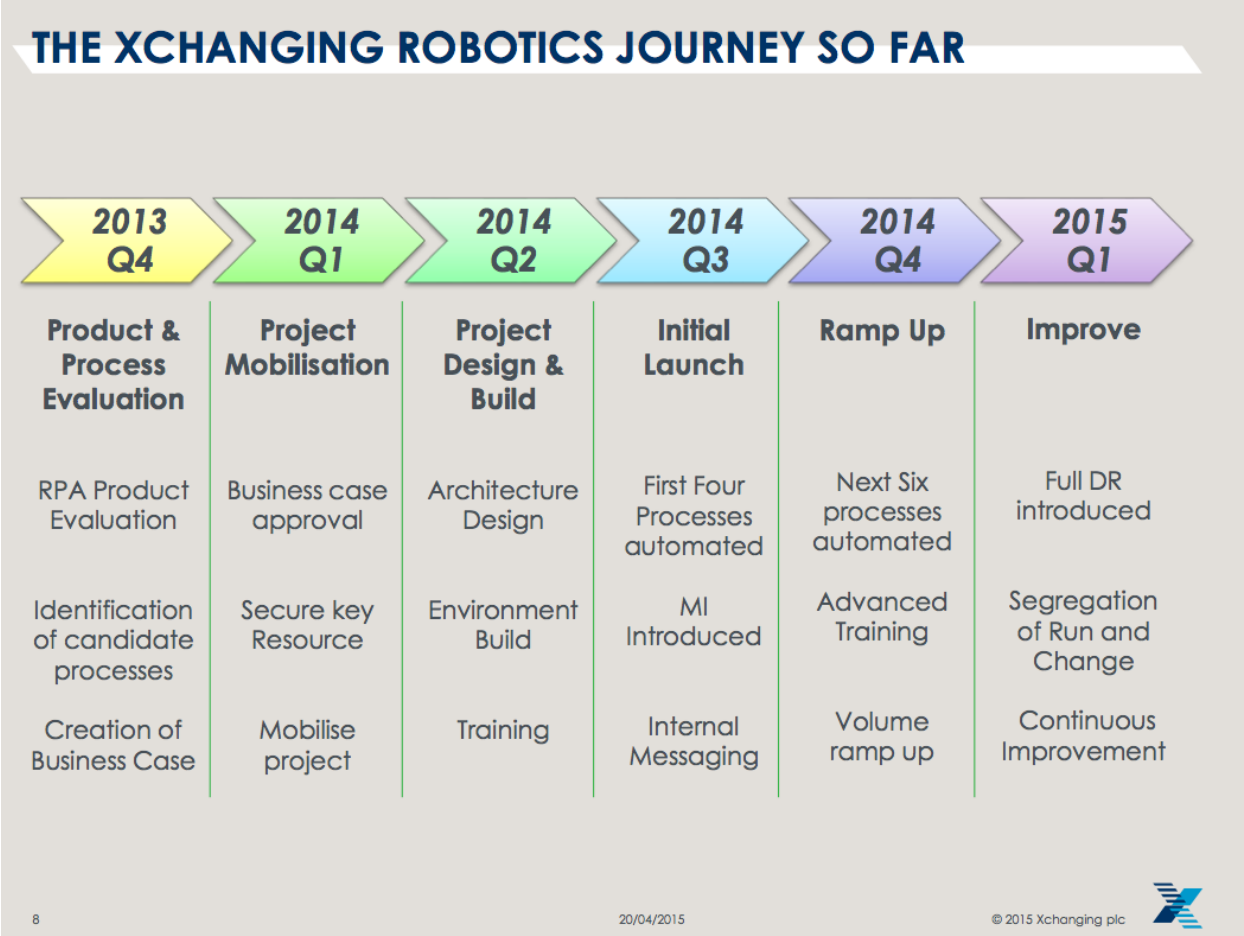

Figure 3 The Xchanging Robotic Journey (to May 2015)
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This was resolved by organizing RPA as a technology project with a business driver, being done for, and sitting in, the business. Technology was responsible for delivering the underpinning infrastructure and architecture. This got translated into how the project members were assembled and organized.

Assembling the RPA Team

The RPA initiative had 20 people involved at various times, sitting under the Head of Operational Change - ten from the insurance business and ten from Group technology. Initially, four were developed by Blue Prism to perform the key role of process modeller – basically trainers of the software and system, and owners of the change activity. A separate 'run' function of two people took changes into business operations. From Group technology there was a dedicated systems manager and two support staff, responsible for servers, architecture and technology policy. Project management staff was also involved, along with Paul Donaldson as project lead. Up to August 2014, when the project went live, Xchanging also utilised the RPA

provider, Blue Prism, led by their Engagement Manager Richard Hilditch, to educate and support, the plan being to build the in-house capability and become self-sufficient as quickly as possible.

Building the Robotic Operating Model

Xchanging gained implementation speed from selectively applying Blue Prism's robotic operating model (ROM) and Enterprise RPA Maturity Model (see Figure 4, and Lesson 6, below)[16] that, together, represented structured accumulated learning from previous corporate deployments at, for example, Barclays Bank, Shop Direct, npower, the NHS and Telefonica/O2.[17] Blue Prism's ROM is particularly strong on building solid foundations for the future:

'You have to plan for where this is going to be, not where it is now. You have to build a foundation for a tower block, not a bungalow.' — Patrick Geary, Blue Prism[18]

As such the ROM covered in detail seven areas: Vision, Organization, Governance and Pipeline, Delivery Methodology, Service Model, Technology and People.[19] Xchanging drew selectively on this Operating Model, and Blue Prism's advisory, operating and training resources together with Xchanging's own extant process/technology knowledge and resources to create a strong development and implementation roadmap and team.

Training the staff and the robots

During May-July 2014, the RPA group focused on technology design and build, including the architecture, and server and software support, as well as training the process modelers and all staff. A key part was designing and testing processes to get the most out of the robots, and making components efficient, easily maintainable and reusable:

'Once you've trained a robot to do one thing, let's say open or send an email, you could use that logic in tens if not hundreds of processes. You've not got to train the robot for every time you want to use it. But the process expert does need to verify that the robot is actually doing what is required. You give the robot a log-on, on-board the robot in terms of what it needs to do, and then – the big plus - other robots you want to activate will follow suit exactly'. –Richard Hilditch, Blue Prism[20]

By August 2014, preparations were sufficiently advanced to launch four automated processes using ten robots. A notable feature, unusual in other implementations we have seen, was Xchanging's own introduction of Management Information (MI) reports underpinning the operation of the four processes:

'We knew what success should look like and the great thing is that a robot gives you clear concise metrics every single moment. So there's no data capture quality issues at all. It's very black and white. You know exactly how you do, and will, perform. You see the patterns. Because of our Six Sigma background, there's a lot of Sigma-based technology to monitor and to optimize success'. – Paul Donaldson, Xchanging[21]

Automating Example: London Premium Advice Notes

An example will aid understanding here. One new robotized process was the validation and creation of London Premium Advice Notes (LPANs), which insurance brokers use to submit premiums to Xchanging for processing. Once an LPAN is created it needs to be uploaded to the central Insurers' Market Repository. The original process involved the customer sending Xchanging an unstructured data file. The file has to be opened and validated. The operator then has to collect additional data from a system called 'Account Enquiry'. Next, the LPAN is manually created and, with supporting documentation, uploaded to the Insurers' Market Repository. This is a high volume process that the operators did not really like doing, but Xchanging is contracted to do it.

Welcoming the robots to the team

Enter 'Poppy', a robot named by Xchanging's PAS technician Amanda Barnes after Remembrance Day 2014 – the day the RPA process went live.[22] In the automated process, brokers still submit premiums, and the human role is to structure this data into a standardized template, and hand it over to a pre-scheduled Poppy which reads the request. After various checks a human used to do, Poppy decides whether to complete or make an exception of the request. While Poppy creates the validated LPANs, humans check the exceptions. In this scenario, note that Poppy has to be trained correctly to carry out its tasks. Continuous improvement is also part of the work, with first time completion reaching 93 percent by May 2015. Where a 500 LPAN process previously took days, a properly trained robot can now do this in around 30 minutes, without error.[23] The robot can easily scale up and down to meet changing workloads, without human resource issues, e.g. staff availability, training, overtime cost.

Learning Lessons

What did Xchanging learn from automating this process? Four things:

1. Continuous improvement beyond deployment maximizes benefits. The ratio between robot and human process times increases significantly when no web-based applications are involved.
2. High volume, repetitive tasks are better performed by robots, not least due to removal of human error.
3. Operations staff did not fear robotization, but named and welcomed 'Poppy' as a team member, and indeed, asked if 'Poppy' could be trained up to do more work for them.
4. The robot can outperform a human on quality, speed, and error rate metrics but can only work at the pace the overall process allows it to work at.

The launch also saw an intensification of the internal messaging process with many roadshows in the UK and India. Donaldson recognized that people would see RPA as a threat, but Xchanging was never expecting to lose anyone from the business through redundancies, having seen automation coming and planned around it. The messaging was that RPA gave people the opportunity to move on to other, more interesting, work. The roadshows gave evidence of people taking on new, expanded roles. One example was administering static claims, i.e. claims that have not moved for two years. Previously this was handled by an adjustor who would verify with managing agents that the claim could be purged. Closing the claim involved linking with the CLASS claims system, following London Market purging rules and carrying out a lot of validation

checks. When this process was automated, the adjustors moved on to customer specific roles, while some became part of the RPA project itself.

While there is a big debate around whether automation would see the repatriation of work from offshore sites, Xchanging argued in its internal messaging that in its case there was no strong rationale for this. Xchanging had no quality problem with its many offshore sites that spanned work in Business Processing Services, Technology and Procurement, and repatriation would not produce a significant cost differential.[24] Offshore processing was already highly efficient. Rather, in practice, automation could be applied in those offshore sites to further improve performance where needed, for example in speed, and may well mean new job opportunities.

The Journey 2014-15 – Ramp Up, Improve and Beyond

In the ramp up period from September to December 2014, the RPA team automated a further six processes. Advanced training for all the operators took place, and volume ramp up occurred across all the ten processes:

'*Since really ramping up, we started to upskill our people even more and we've really started to escalate volume. We're working about 70,000 cases per month using our robotic workforce. We leave to human interaction about 7 percent of the processes we've automated - mainly business exceptions, or things process users don't want us to do. System exceptions are incredibly low, usually down time in the application or an unexpected behaviour."* – Paul Donaldson, Xchanging[25]

By May 2015 the automated processes were achieving a success rate of 93 percent against the original 80 percent target. That came from all the continuous improvement. During 2015 Xchanging started to institutionalise its RPA capability:

'Platform disaster recovery is in, with every robot having a robot friend sitting in another site somewhere; it's as simple as that. We've got an exact copy in a separate site. When we were a certain size it didn't make sense to divide the 'run' and 'change' functions but we're now growing to a stage where it makes sense. 'Run' is now an India-based team. The continuous improvement thing's been quite major for us. We did a whole raft of changes at the start of the year and we've just got more benefits out of the process that we'd never planned to at the start by really tweaking in a controlled manner.' – Paul Donaldson, Xchanging[26].

Automating Example: e-policy

From late 2014 on, there developed a growing demand for RPA from offshore site managers, as part of their continuous improvement efforts. As an example, one offshore process is e-policies, which originally, as a high volume business, took 20 FTEs to administer. E-policies have been in terminal decline, and the process was over-engineered. The RPA team removed waste and automated the process reducing the FTEs from seven to two, with still quite a lot of human resource needed, since e-policies were mainly business exceptions. Offshore automation was happening selectively, where there was a business rationale, but work was not being repatriated through automation.

By June 2015 the RPA team was doing a lot more work in insurance, looking to double what they had already achieved in the first quarter of the year. RPA had also become part of Group

operations, reflected in Paul Donaldson's appointment as Group Product Manager for Robotic Automation. Meanwhile the RPA initiative was being extended into the Procurement division of the Xchanging business. The F&A financial services area was also pushing hard to implement RPA.

Discussion and Lessons Learned

According to Everest Group, four key factors are driving the need for more cost-effective operations in the insurance market.[27] Macroeconomic pressures include low interest rates, low GDP growth and high unemployment ratios. Meanwhile post-2008, regulatory changes globally have been causing massive upheaval in the insurance sector. Thirdly, rising fraud incidents are increasing the cost of operations for insurers. Fourthly, as the modern consumer moves toward digital experience, insurers need to respond, this being translated into increased pressure for more efficient and cost-effective operations.

Business Process Service providers like Xchanging need to respond to these combined pressures. At one level of analysis, Xchanging had gone as far as it could with existing methodologies and technologies. The company's continuous improvement capability was still strong, but a lot of effort was needed for marginal improvement, while offshoring further work would weaken both the onshore presence, and also Xchanging's image in the London Insurance market. Meanwhile RPA fitted extremely well with Xchanging's three year 2011-14 transformation (offering a further improvement lever), and its strategic positioning against major shifts in the Business Process Services market. RPA also fitted well with its innovation and technology capability and messaging to demanding customers desiring those very attributes. Additionally, Xchanging could see, from previous implementations of the Blue Prism's software, that the operational payoffs were considerable, if it took the accumulated learnings, married them to their relevant in-house capabilities, and built an RPA capability for the organization as a whole, for the long-term. Interestingly, while RPA is sold most often on large savings on FTE costs, this did not emerge, in Xchanging's case, as a primary driver. Xchanging seemed to have a mature awareness of the multiple, even strategic payoffs that were possible, and in our view this gave RPA adoption dimensions of innovation, learning, and organizational acceptance - lacking in less successful cases.

In the experience of Blue Prism's Neil Wright, Xchanging shares three key features of success with implementations he saw at npower and Telefonica-O2 - cultural adoption across the board, IT engagement to ensure that the IT estate is scalable, and building in-house RPA capability. According to Wright, the first is particularly key for scaling RPA:

'Where it's gone exponential around the organization is where it's been culturally adopted, and the C-suite is pushing it and driving it forward. Where we see a lack of exponential growth, it's just divisional implementation pioneered at middle management level. The concept and technology are embraced but their breadth of influence over the organization is just not wide enough for it to go any further'.[28]

At Xchanging this view was digested and acted upon. In our further analysis, Xchanging did not have to face the major barriers to deployment encountered in less successful cases. Drawing on her Everest Group work, Sarah Burnett has outlined these as: legacy systems and service delivery; lack of adequate process documentation; lack of knowledge and/or buy-in;

employment sensitivities; and service provider hesitation (to protect their more traditional FTE-based pricing models).[29]

Xchanging has gained multiple benefits from its RPA deployment so far. Cost savings run from 11-30 percent depending on the process being automated. Meanwhile there is significant and still improving service delivery in terms of quality and speed, and better ability to manage, in terms of governance, security and business continuity. Meanwhile processing activity has become more flexible, scalable up and down, and across activities, within wide ranges. Starting in the insurance business, Xchanging is also extending RPA to Group-wide adoption, and planning strategic, competitive edge payoffs. Xchanging provides rich learning. As a pioneer of RPA with remarkable results, the Xchanging case offers, on our analysis, eight lessons for other companies considering automation.

1. RPA needs a sponsor, a project champion and piloting

Xchanging's approach and successful experience is consistent with our earlier findings on IT-enabled business projects.[30] Successful RPA projects need a senior sponsor, who might spend only 2-5 percent of his/her time on the issues, but who initiates the idea, underwrites the resources, and protects progress into business adoption and use. A project champion—like Paul Donaldson - will provide between 40 and 80 percent of his/her time. The role involves communicating the vision, maintaining motivation in the project team and the business, fighting political battles, and remaining influential with all stakeholders, including senior management. Drawing on its multi-site experience, Blue Prism's early message to Xchanging was:

'You need someone who is your head of robotic process automation and that person is going to be the evangelist, the person who owns and is responsible and is seen as being responsible within the organization for establishing this capability and then for growing it out across the Enterprise over a period of time.' — Neil Wright, Blue Prism[31]

Piloting, using a prototype 'time-box' approach and a suitably chosen multi-functional team has been a widely accepted, effective approach to delivering IT enabled business projects since the 1990s. Xchanging utilized something very similar for its RPA design and deployment. Project management is needed. RPA users will be trained and assigned full time, along with IT specialist support. External resources may be needed to mentor, advise and fill resource gaps. Certain users and managers from the business may need to be brought in to provide additional knowledge and reaction on an occasional basis. Co-location of team members also helps the key processes of team building, knowledge sharing and mutual learning. 'Time-boxing' gives a short deadline e.g., three months for a live business deliverable – in Xchanging's case, for example, the first four processes. If this is not feasible, break the project down into smaller 'dolphin', as opposed to 'whale', projects, each with a business deliverable.[32]

2. A culture of business innovation and technology accelerates adoption

Why was RPA adoption so fast at Xchanging? The answer lies in its fit with business strategy, and the long-standing imbeddedness of innovation and technology in Xchanging's culture. Xchanging's business strategy recognized that the outsourcing market was changing, as were customer demands. In BPO:

'Low-priced service provision is no longer enough. Service providers must add value for their customers. Innovation and technology-enablement are prerequisites for successful partnerships. Providers are turning to analytics and data manipulation to move from data

provider to knowledge creator, empowering decision makers within customer organizations. As the business process services market matures, becoming more sophisticated, enterprises are increasingly recognising value in signing deals with specialist, best-in-class providers' — Ken Lever, Chief Executive, Xchanging Annual Report, 2014.

The way forward for Xchanging was to make differentiated offerings through innovation, technology, and customer and industry insight that, together, unlock business value for the customer:

"We have invested significantly in our strategy to put technology at the heart of all our businesses.' — Ken Lever, Chief Executive, Xchanging Annual Report, 2014.

Indeed, the title of Xchanging's 2014 Annual Report is 'Putting technology at our core', with Xchanging seeing digitalisation as a significant driver amongst clients, and so offering technology to enhance the value of clients' complex back and middle office business processes. Having technology and innovation at its strategic and cultural core, Xchanging adopted RPA quickly and effectively. Without these prerequisites, other organizations will find RPA adoption more challenging.

3. RPA should sit in the business

All our respondents at Xchanging and Blue Prism were adamant: RPA must sit in the business. Thus Adrian Guttridge, Executive Director, Xchanging Insurance said:

'The technologists will back it up and provide support but it's got to be business driven, otherwise it would be perceived as being done to, not by, the business - not right at all'.

Paul Donaldson, the RPA lead, reinforced the message:

'It's in the innovation/business part very deliberately. I'm quite protective that it shouldn't sit in the technology arm. My concern would be if you made it a technology project, you would over-engineer the process and you would end up delivering very little.'

For Blue Prism this is totally consistent with previous implementations at a range of clients. Moreover, locating RPA in the business is the underlying premise in their Enterprise RPA Operating Model, representing that distilled experience.[33] The empirical studies of small-scale and major IT enabled business projects and of IT innovation for business value also support this finding over many years across industries and types of technology. Where there is a business goal, the technology is new to the organization, learning needs are high and a multi-functional participatory team is required then what Willcocks, Cullen and Craig (2011) call, in their book *The Outsourcing Enterprise,* an adaptive/innovative' as opposed to a 'technical' focus is the way to proceed.[34] IT leadership is best only where the objective is the efficient use of existing technical know-how; the problem is a technical one; the problem definition and the solution and implementation are clear; and a detailed contract can be drawn up specifying requirements and deliverables. This issue will be discussed in much more detail in a later paper focusing on the role of the IT function in RPA.

4. Standardize and stabilize processes before automation

In practice, Xchanging encountered initial problems identifying processes that were suitable for automation with the technology and software they wanted to run with. Several processes had to be rejected before the four most amenable processes were chosen. But Xchanging's prior excellence in process reengineering and continuous improvement addressed another element – unstable processes. Applying automation to an unstable and/or inefficient process would not do that much good:

'This is a big one for us and which, I think, a lot of companies don't really understand. Don't automate a process that's not ready to be automated. Stabilise it first. It's a basic Six Sigma principle. There's a lot of 'lifting and shifting' needed just to move a task from a human to a robot. In all of our processes, we keep a delivery lead in the process world, to standardize and streamline before we automate.' – Paul Donaldson, Xchanging.

5. RPA must comply with the technology function's governance and architecture policies

Xchanging, including its Technology people, needed a lot of convincing internally that RPA was not going to introduce new risks, for example an important piece of data leaking out of the business, high profile IT disconnects, or raising concerns amongst their insurance industry customers, who tend to have a conservative approach to innovation. Paul Donaldson told us two things. Firstly, consider your technology infrastructure as early as possible and implement and stabilize it a few weeks before going live. Secondly, have a dedicated IT systems manager working with a business lead from the start of the journey:

'*A healthy relationship between IT and the business is vital...I have a kind of 'partner in crime'. He's a systems manager that works in the technology world, and has worked for me from day one. I know the infrastructure can scale up and down. If our processes tripled next week in size, we could probably fulfill that delivery for the processes that have been automated.'* – Paul Donaldson, Xchanging.

Patrick Geary of Blue Prism extended this point:

'The minute we are engaged with the business owners, we insist on speaking with the IT function. We know that business owners care about the part of the RPA they see. But IT is concerned with the stuff under the water, as it were. We tell them that RPA is data center and enterprise centric; it's designed to meet IT's requirements for security, scalability, auditability and change management.[35]

As a corollary to Lesson 3 above, it is clear that RPA is not about not building process IT 'bungalows' but building within an overall IT architecture:

'With RPA you can go on a two day training course and be dangerous very quickly, if you aren't doing it in a managed way. There has to be an IT corridor of governance that sits around automation'. – Patrick Geary, Blue Prism.

Paul Donaldson was emphatic:

'*The way we modelled it was we had a business driver that sat actually as a technology project being done for the business; the technology guys were delivering the underpinning infrastructure and architecture. That's the mistake I see a lot of customers making - going alone*

as business. They will come unstuck because the technology just won't scale up and down. It will get them to a certain level and they're going to have a big problem to resolve'.

6. Build internal RPA capability to evolve, leverage scale and increase business value

It is clear that Xchanging did not see RPA as just a case of training the robots to run processes. Richard Hilditch of Blue Prism pointed out the comprehensive approach Xchanging adopted:

'It's the whole framework and capability around leadership, the methodology to select the right processes and prioritize those processes, getting the right governance approval boards in place, through to delivering the process in terms of the right people fully trained and organized, right infrastructure, the right support for that infrastructure and the right operating model to manage this new robotic workforce that they've hired.' [36]

Taking this approach, Paul Donaldson of Xchanging stressed the evolution of both capability and benefits achieved:

'What we launched in August 2014 is very different from what we have now. Anyone that deploys a process and just leaves it will not get the full benefit. It's only from seeing it live in practice where you find the unknowns that happen in the production world. You can simulate tests to your heart's content but can't really get all of those live behaviours. I can show you some great results where we've over-doubled the benefits. Simple tweaks in the process - for example simulating 'if I can save five seconds on that item by not logging out this way and logging in this way' - we can easily extrapolate that up and you can get that extra benefit from the virtual workforce because you can guarantee that behaviour will always be done in exactly the same way'. — Paul Donaldson, Xchanging.

Xchanging, guided by the Blue Prism and HFS RPA maturity models evolved quite quickly to the institutionalization stage shown in Figure 4:

'They needed people dedicated to manage these robots when they're running in production but Xchanging also need to allow their developers to focus on doing what they were good at and trained to do i.e. keep developing those processes. From November 2014 through to January 2015, they embedded that and extended their team. They delivered wave two themselves, and so had moved through the industrialisation stage. By April 2015 Xchanging were fulfilling our full Robotic Operating model blue print and so had reached our certification stage.' – Richard Hilditch, Blue Prism.

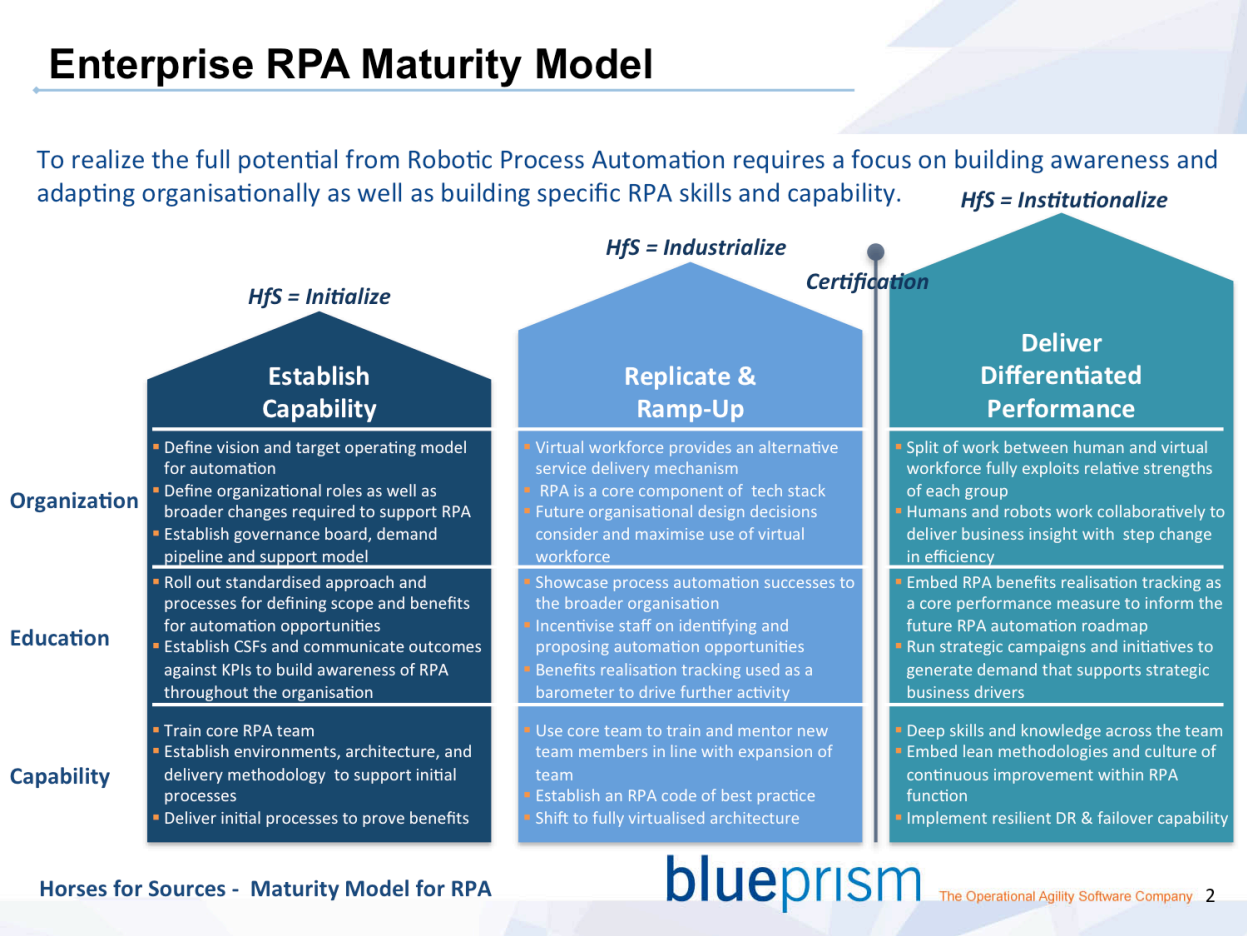

Figure 4 – The Enterprise RPA Maturity Model.

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It would seem, therefore that we have, in Xchanging, a strong example of how to go through those first two key stages of the maturity model - Establish Capability, then Replicate and Ramp Up – in a structured, controlled and professional manner.

The additional payoffs from this comprehensive approach were many. Once RPA was industrialized, Xchanging could engage hundreds of robots quite quickly if it wanted, because it had put in the right business and technical architecture to support them. Alex Bentley of Blue Prism also pointed out that, now that Xchanging has reached the 'institutionalized' stage, RPA could also be used to contribute to strengthening regulatory compliance, test out new business strategies cheaply and quickly, and address digital pain points in the organization.[37] Adrian Guttridge, Executive Director of Xchanging Insurance, was thinking even further ahead:

'There is an opportunity for us to do something more and go to market with a robotics automation capability that says: you're not a client of us today, why don't we come in and help automate some processes for you? Alternatively, outsource to us a back office function and we will automate and bring it to a completely different price point. We will underwrite costs and you mitigate risk with the option to take it back after three or five years.' [38]

The lesson? Begin with a larger business goal, as well as a requirement for operational improvements. The strategic benefits of building the capability, and industrializing and institutionalizing RPA will come through as RPA expands the reality of what is possible.

7. Multi-skill the robots

It is important not to implement points solutions per process. This lesson sounds small relative to Lesson 6, but is one Paul Donaldson, in particular, chose to emphasise. Why? Because, if you follow the approach detailed in Lessons 5 and 6, multi-skilling is relatively easy to do and produces notable benefits:

'The team leader makes sure all robots have turned up for work today, i.e. are logged in, and ready, then, driven by SLAs, allocates work and makes sure all the robots are kept busy. At Xchanging, because the first automation wave was well set up, and the robots well trained, they could reuse a lot of components in the new processes. Xchanging picked up quickly on reuse, switching tasks, and multi-skilling the robots, and needed us very little in the second wave.' – Richard Hilditch, Blue Prism.[39]

Paul Donaldson of Xchanging is adamant on the value he gets from multi-skilling the robots:

'Multi-skilling. I'm amazed people don't do this. No different from what you do in a human resource pool. Get all robots on your virtual servers able to do any process. You can get them doing stuff when they've got no other work to do, and it doesn't cost you anything extra. It's an easy win that few follow. I think it comes from designing processes and robots upfront and from 'fit' with technology infrastructure. So don't go it alone just because this is a business driven piece of software. Have a healthy relationship with the process and IT people'.[40]

8. Pay careful attention to internal communications

The most recent studies of the global business and IT services market suggest a rapidly changing market with rising customer demand for new technologies, cloud computing, analytics, for suppliers being closer to business needs, as well as for business innovation.[41] More than ever before modern BPO services providers like Xchanging need, amongst others, what we call a transformation competency, a key part of which is managing simultaneous technical, organizational and work change. With RPA, Xchanging had the advantage of possessing this competency from its original design in 1998, through its staffing of its Lloyds and London insurance markets insurance contracts in 2001, to the present day. More generically, service providers like Xchanging tend to be good at behaviour management and dealing with communications in times of change: with outsourcing contracts it is something they have to deal with routinely, and the costs of getting it wrong can be prohibitive. As a result, with RPA, Xchanging was well set up to manage internal communications, especially given its extant culture favoring technology and innovation:

'I thought there'd be a lot more resistance than there was. Paul (Donaldson) should take a lot of credit for that. Also when we brought in those processes, we've redeployed people and you have natural attrition anyway so just recruit less. So people have been very receptive, and also recognized it allows them to do more interesting jobs.' – Adrian Guttridge, Xchanging[42]

Xchanging took a very open approach to internal communications, making RPA visible across insurance operations, creating newsletters and road shows, saying in practice 'this is what's happening, this is when it's happening, come and see'. Donaldson also made sure the operations teams were engaged to support the project and understood what it meant for them six to twelve months down the line, in terms of opportunities. Richard Hilditch of Blue Prism fills out the picture:

'All the Xchanging people I spoke to were very excited. I think Xchanging positioned it very well, they had regular communications. It got very high visibility at senior management because of the benefits it would bring. They have Group-wide communications about where the project is, where they are on this robotic journey and what the robot's doing. They even had a competition to name the robots. You could go into their new main London office and see a massive screen that shows all the robots working just because they want to showcase what these robots are doing.' [43]

Naming the robots seemed to be a fairly natural process. According to Ann Manning, working in the static claims process, she called the robot Henry from day one:

'He is programmed with 400 decisions, all from my brain, so he is part of my brain and I've given him a bit of human character which works for me, especially when I'm working from home.'[44]

Working in the LPAN process, Amanda Barnes reported similar experiences, and also gave symbolic form to the robot Poppy, as shown in Figure 5. Both Xchanging employees said they had a list of further uses for the robots, essentially work they did not want to do, but to which the robots were eminently suited.[45] Clearly the named robots are an effective input and product of the internal communication process.

The lesson here is that while RPA went smoothly, Xchanging did have prior advantages on transformation capability and organizational culture. Nevertheless the company felt it necessary to be very active on internal communications. Other organizations may well not have such prior advantages and will need to be fully alert to the likely issues. Certainly Donaldson remained so, reflecting on jobs and the reorganization of work that:

'*there will be a challenge when you get to a certain scale and you cannot pull those levers of natural wastage, job enrichment and reassignment, and that's something we will have to adapt to in time.'*

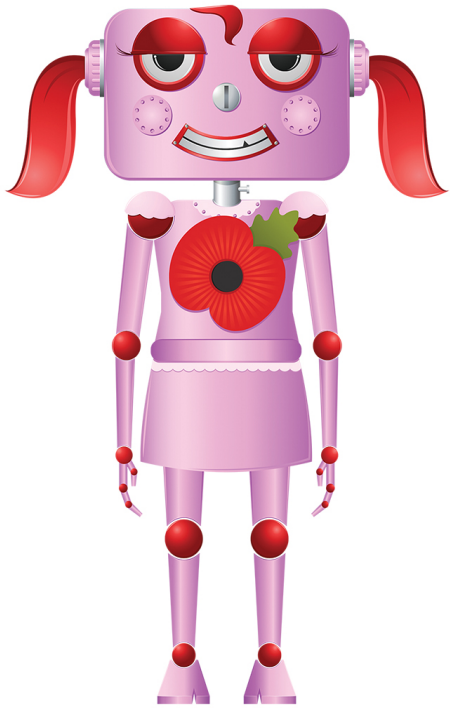

Figure 5 – RPA at Xchanging: "Poppy", the robot in the LPAN Process

Conclusion

This working paper has provided major insights into the deployment of Robotic Process Automation in the insurance sector, and has detailed eight lessons for those about to embark upon, or already undertaking automation. As such we provide some success benchmarks which, we believe are in fact applicable across sectors. Adrian Guttridge, Executive Director of Xchanging Insurance is very clear on the business value of RPA:

'I think RPA helps us hugely around error rates, consistency, volumes, speed and price point. For our existing contracts we will end up wrapping a service around it to our clients who can buy off the shelf as it were, but also it is something we can take to market. It also gives us an extra option than just pure offshore labour arbitrage. The other thing it does is demonstrate a level of innovation to our clients.'

But importantly, he also underlines something we detailed in our parallel cloud computing research, namely that all such technologies need to be placed in a broader context. In our book *Moving To The Cloud Corporation* we argued that a range of technologies will operate in combination with cloud and with each other to create massive impacts on individuals, organizations and business, economic and social life. These are mobile Internet access, the automation of knowledge work, big data./analytics, the Internet of things, robotics and digital fabrication[46]. Adrian Guttridge put it this way:

'If we look at automation more widely, then it isn't just about robotics. If you look at digitalization, mobility, analytics, and all those moving parts at the moment, RPA is just one part. You need to look at your overall technology strategy of where you're going and how this will figure with it. Businesses will need to clarify their own priorities, for example, is it to make their workforce mobile ? Or to put robots in the back office? Both? Or something else again?'[47]

About the Authors

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Endnotes

[1] Quoted in Lacity, M., Willcocks, L. and Yan, A. (2015). *Are The Robots Really Coming? Findings from the 2015 Outsourcing World Summit Service Automation Survey*. Pulse Magazine, April/May, 1-8.
[2] Lacity, M., and Willcocks, L., (2015), *Nine Keys to World-class Business Process Outsourcing*, Bloomsbury Publishing, London.
[3] Sales pitches, ideologies, rumours, beliefs and generalizations form what we collectively call 'myths' in RPO. A myth is not necessarily untrue. A myth may be true in certain circumstances, but the danger lies when these are generalized to everyone's situation. See Cullen, S., Lacity, M. and Willcocks, L. (2014) *Outsourcing – All You Need To Know.* (White Plume, Melbourne), especially the Introduction which gives examples of ten myths in outsourcing
[4] Figures from Xchanging Annual Report, 2014.
[5] Xchanging Annual Report 2014.
[6] Xchanging release "Xchanging 'Full Year Results 2014', February 2015.

[7] 'Technology At Our Core' is the title of Xchanging's 2014 Annual Report.

[8] Interview with Adrian Guttridge, Executive Director, Xchanging Insurance, May 18th 2015.
[9] Interview with Paul Donaldson, Xchanging, Group Product Manager for Robotic Automation, April 22nd 2015.
[10] Xchanging espouses six core values:

- Customer Focus, - 'We focus relentlessly on the customer. We provide flexible, practical and value added solutions. We deliver results by constantly taking the initiative'
- Innovation – 'We challenge the status quo and approach our business with creativity, fresh ideas, lateral thinking and a commitment to do things in a new way. We inspire innovation'.
- Speed and Efficiency - We act quickly and decisively. Speed is of the essence.
- Integrity - We are dependable and responsible people committed to being open, transparent, honest and direct in all of our activities.
- Excellence - We are dedicated to continuous improvement which is reflected in our leadership in technology, implementation, operations and quality standards.
- People - We create value, are empowered to make a difference and are responsible and accountable for our actions. We succeed through teamwork based on mutual respect and the desire to invest in each other's success. – website www.Xchanging.com accessed May 25th 2015.

[11] Interview with Paul Donaldson, Xchanging, Group Product Manager for Robotic Automation, April 22nd 2015.
[12] Interview with Paul Donaldson, Xchanging, Group Product Manager for Robotic Automation, April 22nd 2015.
[13] Interview with Patrick Geary, Blue Prism, Chief Marketing Officer, January 5th 2015.
[14] See Lacity, M. and Willcocks, L. (2015) *Robotic Process Automation at Telefonica/O2.* LSE Working paper 15-03, April.
[15] Interview with Paul Donaldson, Xchanging, Group Product Manager for Robotic Automation, April 22nd 2015.
[16] As can be seen, the model marries well with the Horses For Sources model which also influenced Xchanging's thinking. See Sutherland, C. (2014) *The Evolving Maturity of Robotic Process Automation*. Horses For Sources, Boston, November.
[17] See Lacity, M. and Willcocks, L. (2015) *Robotic Process Automation at Telefonica/O2.* LSE Working paper 15-03, April; and Lacity, M. and Willcocks, L. (2015) *Robotic Process Automation at npower.* LSE Working paper 15-05, July.
[18] Interview with Patrick Geary, Chief Marketing Officer, Blue Prism, March 15th, 2015.
[19] A more detailed account and analysis of the ROP model appears in the fifth paper in this series, published in Autumn 2015.
[20] Interview with Richard Hilditch, Engagement Manager, Blue Prism, April 19th 2015

[21] Interview with Paul Donaldson, Xchanging, Group Product Manager for Robotic Automation, April 22nd 2015.
[22] Poppy was named after the day the idea was thought of - Remembrance Day November 2014. Interview with Amanda Barnes, Xchanging May 2015.
[23] By May 2015 it was taking the robot five minutes to deal with 25 LPANS, which formerly took a human two hours and five minutes to do.
[24] In practice the goal of Blue Prism, who licensed the software, was not to be cheaper than offshore, but cost neutral at worst, but faster, more replicable and accurate and offering greater local control. Interview with Patrick Geary, CMO, Blue Prism, January 5th 2015.
[25] Interview with Paul Donaldson, Xchanging, Group Product Manager for Robotic Automation, April 22nd 2015.
[26] Interview with Paul Donaldson, Xchanging, Group Product Manager for Robotic Automation, April 22nd 2015.
[27] See Everest Group (2015). *Service Delivery Automation: The Business Case For RPA in Insurance Services*. Market Report, March 2015.
[28] Interview with Neil Wright, Director of Professional Services, Blue Prism, April 16th, 2015.
[29] Sarah Burnett, presentation at the Everest Group Webinar *'Service Delivery Automation: The Next `Big Thing'*, February 26th, 2015. The barriers are detailed in Everest Group (2015). *Service Delivery Automation: The Business Case For RPA in Insurance Services*. Market Report, March 2015.
[30] Willcocks, L. Petherbridge, P. and Olson, N. (2004). *Making IT Count: Strategy, Delivery, Infrastructure*. Butterworth, Oxford.
[31] Interview with Neil Wright, Director of Professional Services, Blue Prism, March 27th 2015.
[32] Our recommendation on IT-enabled business projects has been to go for 'dolphins not whales'. i.e. small projects based on iterative learning, with quick business payoffs, though the technology used must be consistent with the IT architecture and infrastructure of the organization. Large 'whale' projects tend to go over budget, experience time delays, and sub-optimise on delivery. See Willcocks et al.(2004), op. cit.
[33] A much more detailed discussion of the Enterprise RPA Operating Model appears in later papers, where the model will be compared against our analyses of a series of RPA case studies and their results.
[34] See Willcocks, L., Cullen, S. and Craig, A. (2011) *The Outsourcing Enterprise: From cost management to collaborative innovation* (Palgrave, London), especially chapter 5 'Collaborating to Innovate: The next phase.' Also Lacity, M. and Willcocks, L. (2014) *Nine Keys To World Class Business Process Outsourcing*, (Bloomsbury, London) especially chapters 8 and 10. Also Cullen, S., Lacity, M. and Willcocks, L. (2014) *Outsourcing – All You Need To Know*, (White Plume Publishing, Melbourne). The academic findings are remarkably consistent over many years. See for example Willcocks, L. Feeny, D. and Islei, G. (1997) *Managing IT As A Strategic Resource* (McGraw Hill, Maidenhead), especially chapters 6-10.
[35] Interview with Patrick Geary, Chief Marketing Officer, Blue Prism, January 5th 2015.
[36] Interview with Richard Hilditch, Engagement Manager, Blue Prism, April 19th 2015.
[37] Interview with Alex Bentley, Strategy Director, Blue Prism, April 16th, 2015
[38] Interview with Adrian Guttridge, Executive Director, Xchanging Insurance, May 18th 2015.
[39] Interview with Richard Hilditch, Engagement Manager, Blue Prism, April 19th 2015
[40] Interview with Paul Donaldson, Xchanging, Group Product Manager for Robotic Automation, April 22nd 2015.
[41] See for example Horses For Sources (2014) *Executive Report: The State of Services and Outsourcing in 2014*. (HFS, Boston), September. Also Willcocks, L., Venters, W. and Whitley, E. (2014) *Moving to the Cloud Corporation*. Palgrave, London).
[42] Interview with Adrian Guttridge, Executive Director, Xchanging Insurance, May 18th 2015.
[43] Interview with Richard Hilditch, Engagement Manager, Blue Prism, April 19th 2015
[44] Interview with Ann Manning, Associate Adjuster, Xchanging, May 25th., 2015.
[45] Interviews with Amanda Barnes and Ann Lamming, May 2015.
[46] Willcocks, L., Venters, W. and Whitley, E. (2014) *Moving To The Cloud Corporation*. (Palgrave, London).
[47] Interview with Adrian Guttridge, Executive Director, Xchanging Insurance, May 18th 2015.