



CONSULTING

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Case Study – Payroll Robotic Process Automation

1 CLIENT OVERVIEW

Our immediate client is a leading global outsourcer of HR and Payroll business processes. The end client is a top 5 UK retail business with some 150,000+ employees. The end client has been outsourcing its payroll and certain aspects of HR services to our client for some 20+ years.

2 CHALLENGE

Given the many years that the BPO service has been in operation, the processes and systems can be considered as legacy infrastructure: use of mainframe, outdated interfaces and many manual processes. Despite this, a high-quality service is being delivered to the end client via a dedicated team. During the past 20 years, the processes have been reviewed many times, systems changes have been contemplated and attempts have been made to move the work offshore - all to seek greater efficiencies, productivity gains and cost savings. However, each attempt has not been successful.

B2E approached the client with its Robotic Process Automation (RPA) consulting services. As is often the case in these situations, the client held a deep belief that all efficiency gains had already been made in the past 20 years and anything beyond that would need a significant multi-million-pound investment. However, after seeing a demonstration of how RPA could work in the situation, the client decided to make a small investment in a Proof of Concept (PoC) project to see if the savings of 56% identified at the pre-sales stage could be realised.

The Proof of Concept requirement was to automate one of many payroll processes that were labour intensive. In this case, 10,000 emails were received each month with requests for sickness related absence. These were manually processed by reviewing the request, making some human interpretation of the data supplied and then making a relevant entry into the payroll system.

The objective was to automate as much as possible of this process. Our high-level assessment of the process was that 80% of the process could be automated - the remainder being more complex cases that required further human assessment, or incorrect submissions that had to be rejected. Essentially this meant that the current 3.3 FTEs consumed by just this process could be reduced to 1 FTE.

For comparison purposes, in parallel with consideration of an RPA solution, a high-level assessment was also made by our client to create a system integration between the end client SAP systems and the payroll mainframe. The cost for this was estimated to be £2.3m (more than 50 times the cost of the proposed RPA approach).

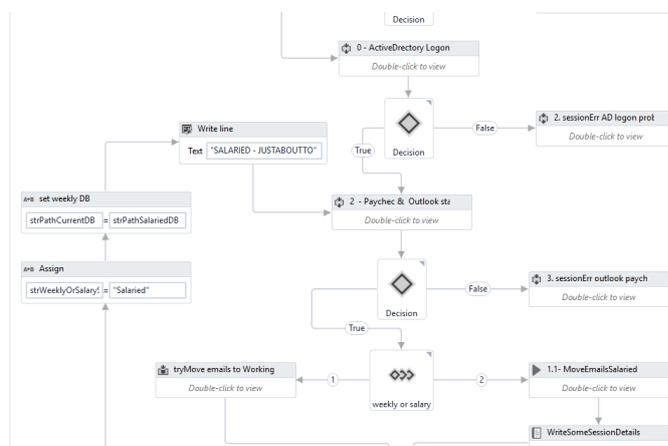
Our project was progressed in collaboration with the team that delivered the operational service and therefore had deep process knowledge.

3 SOLUTION

A small B2E team of 4 RPA specialists were assigned to the PoC project covering between them the roles of RPA solution architecture, RPA configuration, RPA testing, RPA business analysis, process design, project documentation, IT infrastructure advice, project management and account management.

The solution automated the following key tasks:

1. Reading of incoming absence request form data from a structured email as a batch into MS Excel (up to 1,200 per day).
2. Email data extraction and preparation using Excel macros to pre-format email data into the format recognised by the payroll system; rejection of any emails that were malformed.
3. Identification of employee and the entering of individual requests into a database front end application of the main payroll system; if the request did not meet specific validation rules, further rejection of emails at this stage.
4. Housekeeping tasks such as email archiving, database backups and reporting.



The PoC project took 3 months to design and develop, 3 further months to refine and test and 1 month to go live in a phased manner.

During the project, we found that far more absence requests were malformed (45%) than were expected (less than 10%). No consistent rule could be defined that would successfully submit the request as intended. In collaboration with the end client, it was agreed that these requests would be rejected back to the end client.

4 BENEFITS

Of the 55% of emails that were not malformed, 83% of the emails could be processed automatically. The 17% rejected were either too complicated (and thus requiring a degree of manual intervention) or were also malformed and had to be rejected back to the end client.

The PoC project therefore not only realised the initial business case objective (50% cost saving and a 7 month payback period), but also revealed the low quality of data being received from the end client. The process now requires <1 FTE to support the robot and to process any remaining rejected emails, achieving the predicted 1 FTE objective. The robot is currently performing its daily batch task and the end client is progressing a process improvement project to re-educate its branch staff to submit requests correctly.

		Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Savings								
FTE			3.0	3.0	3.0	3.0	3.0	
Process administrator	£ 23,000		£ 69,000	£70,380	£71,788	£73,223	£74,688	£ 359,079
Costs								
FTE		0.15	0.5	0.5	0.5	0.5	0.5	
Process administrator	£ 23,000	£ 3,538	£ 11,730	£11,965	£12,204	£12,448	£12,697	£ 64,582
Recruitment & train	20%							
Software*	£ 2,280	£ 2,280	£ 8,600	£ 8,600	£ 8,600	£ 8,600	£ 8,600	£ 45,280
Robot L3 support	20%		£ 6,800	£ 6,800	£ 6,800	£ 6,800	£ 6,800	£ 34,000
Process creation & transfe	£ 34,000	£ 34,000						£ 34,000
Total		£ 39,818	£ 27,130	£27,365	£27,604	£27,848	£28,097	£ 177,862
Summary		-£ 39,818	£ 41,870	£43,015	£44,184	£45,375	£46,591	£ 181,217
							Saving:	50%

* - Note that the software can be used for more than just this smaller project, but its full cost has been allocated

5 SO, WHAT'S NEXT?

Whilst the PoC project was being progressed, a parallel project was conducted to assess the automation potential across all of the BPO operational processes. This project covered a team of 330 FTE located in the UK and in an offshore operations centre. Interviews were carried out with each of the 6 key delivery centres and automation opportunities were collated and summarised into a business case.

Whilst further automation potential exists, the business case has identified an initial phase of automation covering a total of 27 processes, saving just under £1m p.a. in operational staff-related costs with an investment requirement of £250k (largely covering the automation team and RPA software licences). The project has started and is expected to take 2 years to implement. The table below shows the key processes identified for automation.

Proposed processes to be automated	Offshore				UK				Total
	Effort (mins/day)	FTE	Retained FTE	FTE Saving	Effort (mins/day)	FTE	Retained FTE	FTE Saving	
Expenses Management (Inspect Scans)	1,260	5.0	0.5	4.5	-	-	-	-	4.5
P45	243	1.0	0.1	0.9	533	2.1	0.2	1.9	2.8
P46 / New Starters (& leavers)	151	0.6	0.1	0.5	705	2.8	0.3	2.5	3.1
Data loading / imports / .csv / Excel	188	0.7	0.1	0.7	547	2.2	0.2	2.0	2.6
Data exports / GLs	-	-	-	-	153	0.6	0.1	0.5	0.5
Report Creation	3,134	12.4	6.2	6.2	549	2.2	0.2	2.0	8.2
Court Orders Input	438	1.7	0.2	1.6	433	1.7	0.2	1.5	3.1
Exception Handling / Health Checks	1,205	4.8	2.4	2.4	1,021	4.1	0.4	3.6	6.0
Salary Advances / Mailers	9	0.0	0.0	0.0	56	0.2	0.0	0.2	0.2
Disbursement Processing	95	0.4	0.0	0.3	118	0.5	0.0	0.4	0.8
Right to work inputs	462	2.0	0.2	1.8	-	-	-	-	1.8
Individual sickness / absence requests	76	0.3	0.0	0.3	301	1.2	0.1	1.1	1.3
Parental Pay	93	0.4	0.0	0.3	69	0.3	0.0	0.2	0.6
BACS Rejects	-	-	-	-	-	-	-	-	-
Position Change/Statement of Earnings/Parental Leave Return/Request a re	95	0.4	0.0	0.3	-	-	-	-	0.3
Payroll adjustments	1,558	6.2	0.6	5.6	-	-	-	-	5.6
Check List	254	1.0	0.1	0.9	-	-	-	-	0.9
P11D statement generation	-	3.8	3.0	0.8	-	-	-	-	0.8
EDI submissions to HMRC	7	0.0	0.0	0.0	-	-	-	-	0.0
Tips / Gratuities	-	-	-	-	19	0.1	0.0	0.1	0.1
Sysadmin	-	-	-	-	69	0.3	0.0	0.2	0.2
XML Import - Ops Support	42	0.2	0.0	0.1	-	-	-	-	0.1
Bulk Load - New Contract - Ops Support	12	0.0	0.0	0.0	-	-	-	-	0.0
Bulk Load - New Employees - Ops Support	36	0.1	0.0	0.1	-	-	-	-	0.1
Portal Bulk Load - Ops Support	12	0.0	0.0	0.0	-	-	-	-	0.0
Inbound - Ops Support	87	0.3	0.0	0.3	-	-	-	-	0.3
Outbound Files - Ops Support	73	0.3	0.0	0.3	-	-	-	-	0.3
Total	9,529	41.7	13.7	28.0	4,573	18.1	1.8	16.3	44.4
				22%				8%	13.5%

For more information about this and other Intelligent Automation advice, please contact B2E Consulting on 020 3475 2214 or info@b2econsulting.com.