

The Growth of **RPA** in the Energy Industry



We sat down with **Martin Ruane**, Programme Director, Data Science and Innovation Team at Engie who shared his insights on the Growth of RPA in the Energy Industry.





Martin, can you tell us a little bit about your professional background, leading up to and including your current role as Programme Director, Robotic Process Automation, at ENGIE?

My background is very much in the Public Sector, that's where I started off, and then I moved on to work in process improvement at a company called Arvato, a business processes outsourcing organisation. I did a lot of Lean Six Sigma work, I have my Black Belt, and I was involved in strategic work as well.

“ **I came across Robotic Process Automation in its infancy.** ”

It was something I brought with me when I joined ENGIE in 2014 as Programme Director for a Local Authority contract in north-east England. Our goal was to transform the business operating model by digitising the customer interface, and then with that new interface, use the digital information to automate any transactions with the back-office applications.

Robotic Process Automation (RPA) is software that allows you to effectively copy a user's actions on any application. When given user credentials, it logs in as you or I would log into an application. It then navigates the streams as a user would, inputs the data, and pulls data out. It effectively does what a human would do on an application, and thereby we can automate business processes as we go forward.

By the time I had joined ENGIE, RPA products had matured enough that it made sense to invest – so we did. Now, I'm Programme Director at ENGIE, leading our robotic process automation programme across our UK business.

We started small, and by August 2015 we had our first proof of concept live. We spent a year incubating the technology, using it, and building up the necessary standard operating procedures. After this we launched our Training Academy and the Centre of Excellence for Robotic Process Automation, and at this point we were ready to scale the technology across ENGIE's wider business operations. From 2017 forward, my role has been focused on this RPA roll out.

What does operational excellence mean to ENGIE?

Operational excellence is about driving excellence across people, processes and systems. ENGIE is really focused on this, and we have a programme of work that's looking at standardising and automating processes across the company – that's where I fit in.

It also involves initiatives like developing core training and standard operating procedures for our key roles, smart spending, and procurement. Operational Excellence involves a range of functions to ensure that we really optimise what we deliver.

ENGIE is currently undergoing a digital transformation. Can you tell us more about this and the Centre of Excellence that you helped establish for the company?

We launched the Centre of Excellence for RPA in 2016, after a full year of incubating the technology. We got some things right at the very start, but we also made mistakes that we learned from and amended as we went. During this incubation time, we learned how to use the technology effectively and developed a standard approach, and perhaps more importantly a standard change management approach to using RPA.

We started the Training Academy as well, which is important because it means that we can very quickly take somebody from novice to expert ourselves, and make them very productive. We built up to a place from which

we were able to launch the Centre of Excellence.

It has been a really sustainable approach to deploying this technology. We've developed experience and expertise, and now we are completely self-sufficient in using RPA. We've won three UK national awards for this technology, and this year we've been shortlisted for a BIFM award – so I guess we've been quite successful in our Centre of Excellence!

How are you applying RPA technology to business operations at ENGIE?

At ENGIE, we are in year two of a five year plan to deliver, by 2022, £10 million in business efficiencies by automating 200 business processes using RPA. We are identifying standard processes across all of our contracts in order to apply the technology across the board. We're also doing bespoke work by looking for any opportunities where these technologies can be applied and where automation can free our staff to do more value-add work, and that value gets transferred to the business and our customers.

Overall, our standard operating model hasn't really changed. It is to digitise any interface or any information that we can, and then use the RPA technology to automate processes to drive full end-to-end automation and processing. For example, we've applied this to a billing process in our Facilities Management business. Effectively, we have to produce an invoice with some supporting information (hours worked etc.) to create a billing pack for our clients to approve, and then release the funds for the work



that we've done.

Though it is a simple process, it can be fairly labour intensive and time consuming. Now, we have a robot going into our Facilities Management system to pull out the necessary information, put it into the billing system, download the invoice and produce the small billing pack. It sends the billing pack off the client and we get paid.

As a large Facilities Management provider, there are many of these billing packs being produced, and in turn a lot of manual and repetitive work. This is really where RPA comes into its own. It is very useful for automating low value, high volume type of work like our billing pack process. It has helped release staff to do far more value-added work in the company.

Though you encountered challenges along the way, ENGIE's RPA programme has been quite successful – to what do you attribute this success?

There are five critical success factors that have been instrumental for ENGIE and this programme. First, this was treated like a change management programme. Leadership and top level buy in, involvement, and communication are extremely important here. This isn't only a technology roll-out, and industry research suggests that organisations who failed in effectively deploying this technology did not treat it as a change management programme.

Secondly, it's important to have a strong partnership with IT. We had to work with our ICT (ENGIE's IT) not only to ensure that we had platforms that could support the implementation of RPA, but to figure out what to do if the application or infrastructure fails. Who is responsible for what parts? We created a full support document to identify everyone's roles and responsibilities. On top of this, all of our processes go through the ICT Change Advisory Board and go under scrutiny from the ICT team. We work very closely with our security teams as well.

Another key in the implementation of an RPA program is the attraction and retention of the right people who can develop the technology. It is an industry-wide challenge, as there is a global shortage of RPA developers out there. We found this to be quite difficult, as we were training

people up and losing them very quickly. Where many companies might resort to using third parties, we developed a retention strategy that targets ICT graduates. We ensure that we have the right psychological contracts that include development, flexibility, and career structure. With this we were able to improve our employee retention and overcome some of this challenge.

Another factor in our success was our ability to clearly spread the RPA message across the organisation. It is essential that everyone, from top to bottom, understands what it is, what it can do, and what it can be used for. We created a case study video for every process, enabling our colleagues to consume the RPA information in 2-3 minutes. These videos demonstrated how RPA improves the process, making it easier to understand. We also attend a lot of town hall sessions and interact with our colleagues as much as possible to ensure that RPA is known throughout the company.

“Finally, and maybe most importantly, is the continuous improvement.”

We try to challenge ourselves as much as possible, by means of customer feedback, staff feedback, internal audits, benchmarking and a whole range of things that enable us to improve what we do on a continuous basis. We feel this is really important when it comes to long term success.

Can you tell us about how you're using artificial intelligence and RPA together to improve business processes?

We're very much in the early stages of this. We're investigating chatbot technology and how we can, again, digitise the customer interface. This time through a voice channel using a chatbot, and then using the RPA technology to process any transactional information.

A Chatbot is essentially a web app that can work across different channels, and it enables you to create smart conversations by installing a knowledge base from which the bot can draw information for the conversation. Amazon's Alexa is an example of this, though it doesn't necessarily have to be voice, it can be text using something like Facebook Messenger. There are all kinds of interactions that you can do and we're

looking at applying it to our business functions to create additional channels for customers.

We've identified four potential proof of concept processes on which we would like to use this technology. We're hoping to develop a business case this year to invest in this across the UK business.

What's the next step in ENGIE's digital transformation?

ENGIE is huge on innovation – we generally invest millions of pounds on it each year. We also run a global innovation competition, called the Innovation Trophy, that attracts about 600 submissions from within the company, 40 of which get shortlisted for further funding and research.

As a large, global energy and services organisation, we always have a lot of work going on. Some of the innovations we are currently working on are restoration of the tightness of nuclear fuel rods, brakes for large steam turbines, producing more wind energy but with reduced noise, automation of biomass boilers, and using drones for inspections. ENGIE is looking at a range of things as we move into a digital future.

“It is essential that everyone, from top to bottom, understands what Robotic Process Automation is, what it can do, and what it can be used for.”

- Martin Ruane

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