

ABOUT

McCarthy Labs has recently embarked on an Intelligent Process Automation Improvement project with a major manufacturing tool supplier headquartered in the United Kingdom. The supplier has a catalogue of over 100,000 items and a multitude of storage locations, to meet orders from its growing customer base, they needed an intelligent solution.

CHALLENGE

Inside its cavernous Customer Service Centre, the Industrial Tool Provider decided to implement Robotic Process Automation and Artificial Intelligence, to enable its Support Staff to process the continuous stream of orders that were coming in daily. Performance KPI's indicated that their workers were struggling to process orders from their 25k strong customer base under mounting pressure. The staff attrition rates began to increase, and staff retention became a battle they were not winning and so it was decided to free team members to do more value-added, engaging tasks within the organisation.

The supplier also noticed that their team frequently lost time on part-processing orders that were invalid or lacking key details because of the unstructured format in which orders came in from their customers.

The objective was to reduce waste by reducing human processing time and growing the total number of cases automatically handled by 'quick-win robots', enabling the human team to concentrate on more tricky orders. The dual objective was to enhance the working lives of the Support Staff by using software robots to automate the tedious, mind numbing detail extraction and input, whilst allowing the humans to perform roles that required more finesse and artistry. In essence an Industrial Tool Provider provided an industrial software tool to provide the means to take the pain out of customer orders. The result being that almost every order received could be sent to the robot.



SOLUTION

Having selected Automation Anywhere as the Automation System as the vehicle for their process transformation journey, they engaged with London-based RPA vendor McCarthy Labs to help them realise their vision.

In collaboration with the McCarthy Labs team, it was determined that they needed to make sense of their high-volume, highly unstructured payment order processing data to help them completely automate their payment order processing.



The decision was taken not only to prioritize the migration of data to their CRM platform, but to tackle the unstructured documents themselves by using the best-in - class AI innovations in computer vision , natural language processing and machine learning – the IQ Bot.

By opting to use the whole kit on Automation Everywhere, the Industrial Tool Supplier is now beginning to reap the advantages of Robotic Process Automation and Intelligent Process Automation.

STORY

The Industrial Tool Supplier started on its Robotic Process Automation journey in early 2020, a few months before the world was hit with a global pandemic. With the added pressures brought to the business and the uncertainty felt around the world, they decided to cautiously advance with the transformation project, targeting only 3 processes over the next year. They identified need in their Customer Service Centre and decided to target the following processes: Weekly/Monthly Reporting of Invoices, Updating their Pricing team and Processing Payment Orders.

The Largest of the 3 processes being their Processing of Payment Order. This process involves Customer Support Agents taking Payment Orders from a maximum of around 25,000 customers, averaging out to a total of around 1,500 orders a day, all with different Payment Order Templates. A team of around 150 Customer Support Agents were processing these documents manually through on a 'Same Day' service level agreement.

The deeper dive into the process saw the Customer Support Agents manually going through an allotted list of Orders on their cloud system – Salesforce and entering them into their core system – Merlin Business Software. To do this the Agent would need to manually go through the case in Salesforce, reading Reference Number, Contact Names/Email and complex alphanumeric codes relating to specific order items. This was tedious, repetitive, and depended on a critical level of focus to get these codes, quantities, and prices right. If mistakes were made in this process, it could result in the wrong stock leaving the warehouses, a client could be wrongfully undercharging or overcharging for stock, all leading to a growing despondent client base.

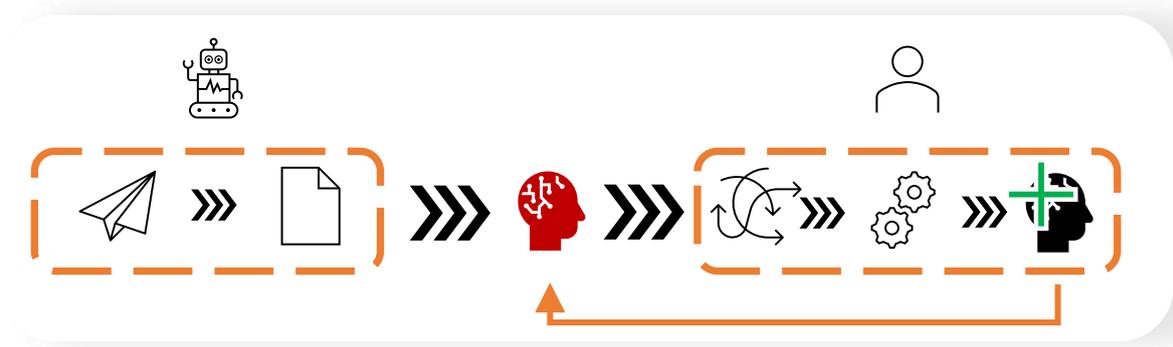


McCarthy Labs have been able to transform this process into genuinely scalable intelligent automation by using intelligent automation. The McCarthy Labs have been able to divide the process into 3 parts using a two-bots and one IQBot Learning Instance: to retrieve and validate every case in Salesforce; to use the IQ Bots Machine Learning algorithms to process unstructured details; and finally to move structured information from their warehouses to Merlin.

The first and last phase of the process transformation is a stereotypical usecase for robotic process automation, taking data from one system, formatting, converting, and entering data into a second system. McCarthy Labs has a large back catalogue of out-of-the-box solutions and personalised solutions. The main point of this approach, however, is the provision of artificial intelligence that can make sense of the unstructured "dark data."

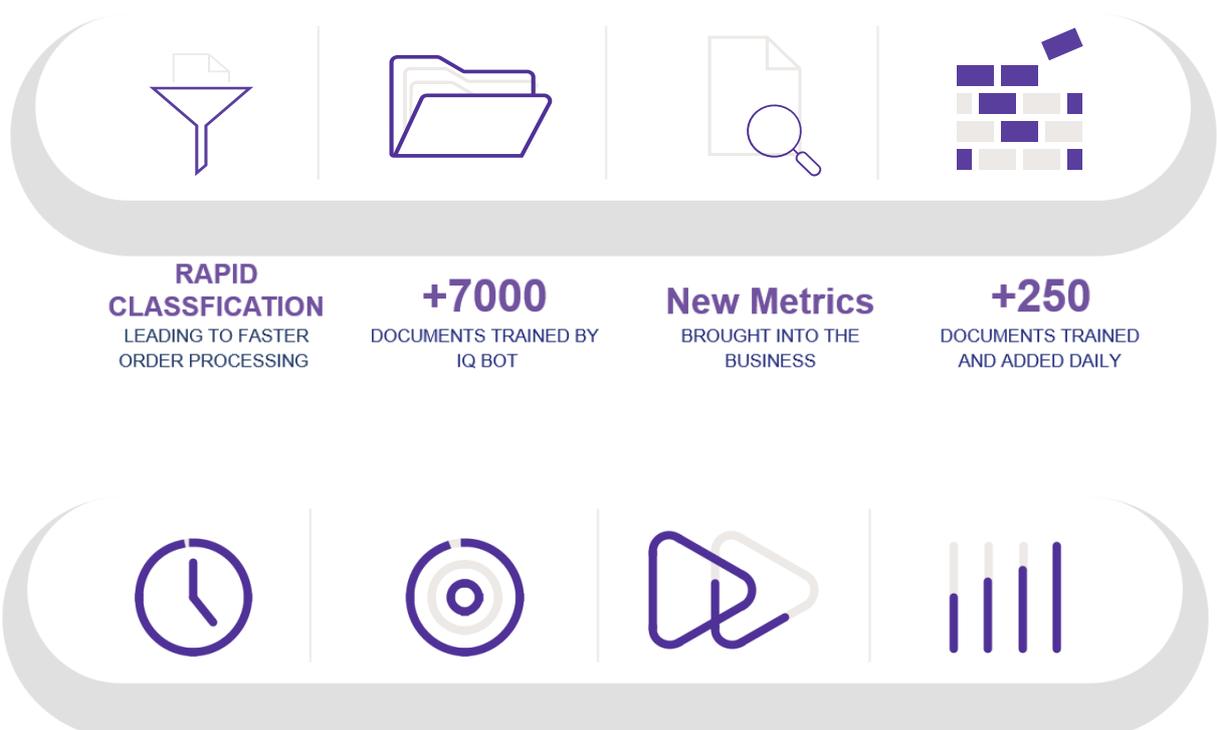
The IQ Bot exists within a particular subsection of Machine learning, termed 'Assisted Learning', which essentially means it need to learn from being 'taught'. For the tool supplier this meant that the IQ Bot would need to be guided on how to process Payment Orders from its 25,000-customer base before it can process them. ***This monolithic task was undertaken by McCarthy Labs, utilising its offshore, inhouse development pool capable of training upwards of 250 differing "document shapes" in a single day.*** The IQ Bot began to become smarter and more adaptable every day, with each document trained it was able to

gain global insight and learn about other documents.



The training of the IQ Bot was even incorporated into the process flow of the Payment Order automation, this subprocess was deemed 'R.O.B.' – the Rejected Orders Bot. **Rob's job was to hand over documentation that the IQ Bot had struggled to process into a structured format to a human team.** This documentation would go through the McKarthy Labs Jira service desk and be picked up by the team and they would begin complementing the Assisted Learning process with this extra document. This process was seeking to further supplement the teaching the IQ Bot was going through, and by transplanting this newly trained IQ Bot 'Brain' at the end of each day, it allowed the process to work that document the next time it arose.

RESULTS



24/7

ORDERS PROCESSED
BY OUR AI AND BOT

100%

REDUCTION OF HUAMN
ERROR

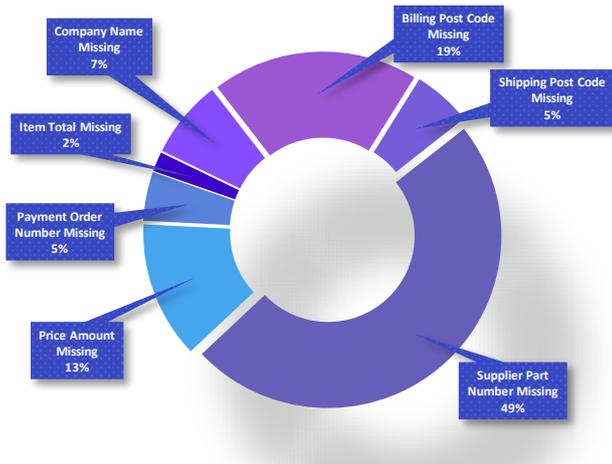
5x

INCREASE IN SPEED OF
PROCESSING

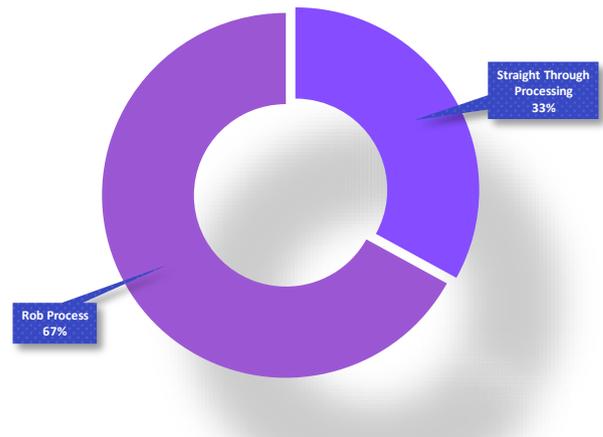
95%

ACCURACY OF AI IN
READING DOCUMENTS

Payment Order Issues



Cases through IQ Bot & ROB



FUTURE

The Payment Order process was designed with an agile methodology in mind. What this meant for the Industrial Tool supplier was that they were able to target the core of the process first; often large and complex Robotic Process Automation projects are delayed and struggle to achieve sign off by the larger business.

This process had a well-defined core, however due to the unstructured nature of the input there were a wide range of different issues that could occur (i.e. Customers not putting correct prices against Stock, putting incorrect alphanumeric stock codes, incorrect delivery addresses). McCarthy Labs used this agile methodology to define the Most Valuable Product (MVP) to tackle the lions share of the process first, with plans to go after the next MVP within the process after that. This cycle will continue until the organisation are happy with the level of processing the Payment Order process can achieve.

Currently planning their third and fourth instalment of MVP, The Industrial Tool Supplier look forward to a bright future with Robotic/Intelligent Process Automation thanks to McCarthy Labs and Automation Anywhere.

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If you would like to learn more about McKarthy Labs and our extensive RPA/AI capabilities, please contact either

Phil.bd@mckarthylabs.com or James.b@mckarthylabs.com

**Level 6 First Central 200
2 Lakeside Drive
Park Royal
London
NW10 7FQ**

+44 (0) 0203 813 1944

