

MASTERING THE CHALLENGE OF UNSTRUCTURED DATA

A recent IBM report found that we now create over 2.5 quintillion bytes of data every day and that 80% of the data gathered by organisations is unstructured. The challenge that organisations have is making sense of this plethora of information as it flows in to their business operations through many different channels.

In this article we interview Gary Harrold, UK CEO of Swiss Post Solutions, one of the world's leading business process outsourcing specialists and Andrew Anderson, CEO of Celaton.

Q: How can companies make sense of unstructured data and why is it important to do so?

GH: Most of the communications that flow into businesses, twenty-four hours a day, contain unstructured information. This has to be managed quickly and effectively into the appropriate business processes so the correct action can be taken promptly and the customer has a positive customer experience. Sixty percent of customer dissatisfaction starts with back office inefficiency according to a Capgemini survey, which is a measure of why the ability to manage un-structured information is so important. It's also a very significant cost overhead, which has relied on manual processing. For SPS, working with Celaton and its inSTREAM platform enables us to help our clients make sense of their unstructured data. In combination with our best in class processes we capture and process unstructured data in a way that wasn't possible with basic OCR; captured data is then placed into a structured format making it possible to use Robot Process Automation (RPA) to carry out rules-based, automated processing.

Because the information is available digitally, across the business, it greatly enhances collaboration. Automated categorisation is aided by machine learning. This means that the task can be routed to the appropriate team more quickly and with all the relevant information, in the form of a structured data file, that can be enriched with information from other systems. This means a faster, more accurate response, but it also means that as part of a holistic SPS service, we can provide our customers with information that was previously invisible, supporting analytics and improved decision making.

AA: Organisations make sense of the unstructured data they receive every day by relying on people to read and make judgements based on their experience. With the help of intelligent automation technologies such as machine learning, natural language processing and neural networks, this manually intensive effort can be significantly reduced because the software learns by monitoring the actions and decisions of people to make more accurate and consistent judgements.

It's important because organisations are expected to meet the ever more demanding expectations of their customers and their regulatory obligations while reducing costs, they simply cannot achieve that without intelligent automation.

Q: What are the benefits of managing unstructured data?

GH: Managing unstructured data is one of the biggest challenges our customers are facing today. Being able to automate the management of this kind of unstructured data accelerates and takes cost out of the document processing cycle, but it's also the foundation for the automation value chain. Without this foundation, businesses won't be able to realise the further benefits offered by RPA. The combination of Artificial Intelligence and RPA means that whole processes can now be automated, freeing staff to focus on more complex customer interactions.

AA: By managing unstructured data organisations gain a clear understanding of what their customers, suppliers and employees mean in their communications and means they can deliver better service faster. They can recognise key data to enforce check and measures which means they are more compliant and they gain visibility of data and information that may be critical to decision making.

Q: How are Intelligent Automation technologies being applied to unstructured data?

AA: Intelligent Automation is a broad term that encompasses technologies from rules based robotic process automation, to artificially intelligent applications that have the ability to learn without being explicitly programmed. AI enabled systems especially, have been deployed that can handle conversations and web-chats. Celaton's inSTREAM platform is designed to handle data that flows in through 'off-line' channels such as post/paper, fax, email, social media and electronic data streams. It can understand meaning and intent, recognise and extract key data, verify and enrich that data from other systems and then determine and execute outcomes that may include responding to customers or updating other systems. It is used to great effect in handling enquiries, complaints, correspondence, invoices and sales orders.

GH: IA technologies are applied where labour intensive repetitive tasks absorb a large amount of resource. Take the Finance department for example. Processes like Supplier/Catalogue Maintenance Three-way Matching, Billing/Invoicing and Invoice Matching/Settlement, all involve high volumes of unstructured data and manual categorisation. This means that skilled specialists are spending much of their time on administrative work. Artificial Intelligence (AI) software is now being used to capture unstructured data and for categorisation, reducing the manual, repetitive workload by an estimated 60%. Within a process where both speed and accuracy are vital AI software is delivering on both. More than 90% of Finance Directors expect to see faster processing times and reduced costs from applying AI. The machine learning capability means that change can be handled without disruption. Applying IA technology means that Finance professionals can focus on more strategic tasks armed with better information to drive decision making.

Q: How is Intelligent Automation impacting BPO service providers?

GH: The development of Intelligent Automation has driven a great deal of change in the BPO market. Traditionally BPO organisations delivered cost and labour intensive on-site services using labour arbitrage to reduce costs. Customers are now increasingly looking for innovation and agility from BPO providers.

With access to AI and RPA technologies BPO's are able to provide integrated, end to end vertical process management rather than horizontal solutions that stop early in the process. These much more sophisticated offers still deliver cost savings, but they do so by revolutionising the way organisations work rather than simply using critical mass to do the same thing at a cheaper price. The fact that BPO's now manage entire core business processes, like claims management, reflects not only the capabilities that are on offer, but the trust of clients, who feel comfortable that these processes are being managed well, allowing them to focus on other challenges.

AA: Intelligent automation enables BPO providers to deliver even greater value to their customers. It's no longer acceptable to take a 'your mess for less' approach because organisations can deploy intelligent automation themselves which has negative potential for BPO's. Instead, BPO's must deploy intelligent automation to achieve the benefits available and share that benefit with their customer.

Q: What are the main challenges for organisations adopting intelligent automation?

GH: According to recently published research by HFS "proper planning, requisite talent, skillsets, or clear definition of the goals required for deployments" are the challenges that are stalling AI implementations. These are interdependent and goals are certainly critical. Understanding where IA will deliver benefits is essential, this means identifying the processes that are high volume and labour intensive, where there are repetitive tasks and where improved speed and accuracy are important measures of success. This especially applies where specialist staff are tied up in non-specialist administrative tasks. They must also be prepared to review and potentially adapt current processes. Automating a bad process will not deliver the best results and whilst automation works with existing systems and processes, the processes need to work well. It's important to look at the big picture. If businesses are going to contemplate handing over a vital business process they need the right partner, with the right expertise that spans all the components of BPO.

AA: Understanding the problem you want to solve is essential. It's not relevant to look for intelligent automation and then try and find a problem to solve with it. There are many different platforms, tools and approaches and each will solve a different challenge. It's therefore important to understand what is possible by talking with others who have done it before. It's important to bring in all stakeholders to the conversation early as even a few dissenters can have a negative impact on the outcome.

Q: What are your predictions for the future?

GH: Smaller more agile BPO providers will start to take an increasing market share linked to their agility and innovation focus. I also think we will see an acceleration in the adoption of IA as the talk becomes reality and organisations watching their peers start to see results being achieved. Relying on expensive and inefficient manual processes when competitors have moved forward could be the difference between the winners and losers. There is no doubt that business conditions remain tough and change is a constant. This requires a high level of management focus, so I think we'll also see more organisations taking advantage of the opportunities to outsource end to end processes via smaller more 'bounded' projects with shorter ROI's.

AA: The playing field is being levelled for small and big players to compete for the same business. Those that survive will be the ones that embrace technologies for the benefit of themselves and their customers, such as SPS who have successfully adopted an innovative and agile approach to new technologies.

One thing is for sure, it will soon be considered irresponsible for any organisation to operate without the help of intelligent automation. The rate of acceleration is being skewed by invention for invention sake but the foundations are already in place for technology to deliver efficiencies that were previously out of reach. What we once considered artificial intelligence soon becomes the new normal.

