Re-thinking Enterprise business processes using Augmented Intelligence

How would you rethink Enterprise business processes using Augmented Intelligence?

To put the basics into perspective: we consider a very 'grassroots' meaning of AI. AI is based on Deep Learning. Deep Learning involves automatic feature detection using the data. You could model a range of Data types (or combination thereof) using AI:

a) Images and sound - Convolutional neural networks

b) Transactional - ex Loan approval

c) Sequences: including handwriting recognition via LSTMs and recurrent neural networks

d) Text processing - ex natural language detection

e) Behaviour understanding - via Reinforcement learning

To extend this idea to Process engineering for Enterprises and Cities, we need to

a) Understand existing business processes

b) Break the process down into its components

c) Model the process using Data and Algorithms (both Deep Learning and Machine Learning)

d) Improve the efficiency of the process by complementing the human activity with AI(Augmented intelligence)

But this just the first step: You would have to consider the wider impact of AI itself

So, here is my list / 'stack':

* New processes due to disruption at the industry level (ex Uber)

* Change of behaviour due to new processes(ex: employees collaborating with Robots as peers)

* Improvements in current Business Processes for Enterprises: Customer services, Supply chain, Finance, Human resources, Project management, Corporate reporting, Sales and Logistics, Management

* The GPU enabled enterprise ex Nvidia Grid but more broadly GPUs Will Democratize Delivery of Modern Apps, More Efficient Hybridization of Workflows, Unify Compute and Graphics

* The availability of bodies of labelled data

* New forms of Communications: Text analytics, Natural language processing, Speech recognition, chatbots

What Does Blockchain Technology Mean for the Procurement Industry?

It's easy to treat new technologies with a degree of skepticism. After an initial wave of excitement and expectation - accompanied, invariably, by many botched rollouts and protracted implementations - many of these supposedly game changing advances become bitter disappointments.

But this isn't necessarily the technology's fault. Indeed, many of these advances are - when divorced from the Gartner hype cycle and placed in their proper context - exactly as exciting and game changing as they seem, if not more so. Blockchain is a high-profile victim of this phenomenon: as a distributed ledger technology, that promises faster, more secure payments, many industries have been exploring its possibilities.

Procurement is no exception. And while Blockchain technology may have limited application in other professions, in this one, it looks set to live up to the hype. As a means of reducing costs, improving efficiency, controlling fraud, and boosting transparency, it has tangible, real-world benefits for procurement functions - whatever the market or business they

work within.

Blockchain automates trust

Trust is the cornerstone of every business relationship. On a fundamental level, you need to believe that the other person is whom they say they are - and they need to believe the same of you.

In an age of phishing, malware, and general cyber security attacks, however, this seemingly simple principle becomes complicated. Login details can be stolen and turned to criminal ends; hackers, who then persuade other parties to release vital funds, can impersonate high-level executives; the sheer scale and variety of crime is incredibly hard to counter.

Blockchain provides a means of automating trust. By using permanently retained historical data to authenticate everyone involved in a deal, each side can be assured of the other parties' trustworthiness: the seller and buyer alike are always who they say they are, and the product is the right product. What's more, because prices cannot be modified, invoices will effectively be rendered obsolete.

This greatly simplifies the complicated, multi-faceted transactions that make up modern supply chains - maximizing security and reducing the risk of fraud.

Blockchain is fast

Procurement functions will benefit from the speed and efficiency of Blockchain technology. For one thing, it's fully digital: by taking the more time-consuming elements of a conventional transaction out of the equation, you immediately save time and resources that would have been spent on these tasks. Shared access databases mean that it's no longer necessary to manually scan invoices - dramatically accelerating the reconciliation process as all parties are allowed to view the same transaction.

Blockchain effectively cuts out the intermediaries. By removing all intermediaries, it makes the processing of payments and transactions much faster: purchase order data can be exchanged on the Block-chain at a far speedier pace than current levels will allow. This technology can also identify the nearest and most cost-effective vendors: decreasing lead and work time, and improving your operational efficiency.

Blockchain creates strong audit trails

Blockchain technology stores every detail of every transaction at every level of the supply chain. This will - as mentioned above - facilitate greater fraud control, and it will also offer transparency into issues of legality such as money laundering and the use of child labor.

And though it's a digital technology, Blockchain will also assist with the tracking and recording of physical items. As they are transported across local and international borders, they can be identified at each location - creating a strong and fully documented audit trail. This kind of end-to-end visibility ensures that delays are rare and that missing items are found and allocated to supply routes more easily. This allows you to manage and optimize these supply routes with maximum efficiency - ensuring that no space is wasted and no customer disappointed.

The full potential of Blockchain technology is hard to articulate in one article, even when we are just talking about the procurement and supply chain management industries. The impact it has on other markets will vary, but they may well feed into the benefits it offers yours. This is a good thing, but it makes a full impact prediction a somewhat complicated task.

Nonetheless, even if we cannot quite gauge its full significance, it is clear that Blockchain will have a significant influence on the procurement industry. The advantages of being able to streamline business processes, secure payments, and lighten your workload should not be understated. Do the research, ensure that your business is using it correctly, and you will benefit - today, and in the future.