Unearthing the under-tapped potential of Cognitive Process Automation



connected customer experience

he steps of any rules-based, non-subjective process, IT support or back office work can be automated to eliminate human error and improve business velocity. High volume, repetitive tasks such as checking a ticket in a metro station, issuing a purchase order or creating credentials to access an online service can be automated using Robotic Process Automation (RPA). RPA conserves resources, creates scale, reduces cycle time and dramatically improves process outcomes. Given the benefits, organizations naturally gravitate towards it. But in many ways, RPA has already become yesterday's headlines. Tomorrow belongs to Cognitive Process Automation (CPA), a technology that is garnering attention for its ability to assist very complex, and sometimes ambiguous, processes to interact flawlessly at lightning speed.

Decision-making made simple

Many processes have unknown metrics and vectors. Some present a challenge in terms of data availability. Despite these complexities, decisions must be made. A simple example is of a doctor who examines a patient for a rare condition, checks the patient's historical records, takes a second opinion from peers and then recommends treatment. This requires a complex blend of language, context, reasoning, representation, perception, hypothesis, etc. This process is more challenging to automate than business rules-based processes. However, the science of Cognitive Process Automation (CPA) can do this. In fact, it can go a step further by providing the doctor with details of how the medical condition is being treated across the geography, the results of such treatment and experiments that have been conducted to improve outcomes. By doing this, CPA improves outcomes and simplifies the process of reaching reliable decisions.

CPA is now being applied to solve ambiguous business problems across industries—from healthcare to manufacturing and from financial services to retail. Industries are being quickly drawn into a new era of Cognitive Intelligence where software closely mimics human behavior. Not only does CPA manipulate data, but it also presents decisions and actions, just like you and I would, but several times faster than we can.

How CPA connects front-to-back office

A process that is ripe for CPA is Know Your Customer (KYC) in financial institutions. KYC is a regulatory obligation. When onboarding an institutional or private investor, the KYC process captures a wealth of customer information to address risk and compliance issues. Forms are filled in, stacks of official and public documents with no predictable structure are acquired from disparate sources, and sent by the customer and the Relationship Manager (RM) to the middle and back office for parsing and validation. When gaps and anomalies are identified, everything is sent back to the customer or the RM. The back-and-forth communication between the customer and the organization introduces enormous delays in cycle time. Meanwhile, business is being lost, or worse, an impatient customer walks away to competition. For processes like KYC, CPA can create the gold standard by re-engineering and executing sub-processes for middle and back offices in real-time with the assistance of cognitive bots to increase transparency and reduce cycle time.

Imagine a mobile app prompting and guiding the RM through each step of the KYC process. As the RM uploads the documents, CPA bots extract information and ontologies to give meaning to data, allowing the system to reason its way through problems. The traditional manual "form-filling" routine is replaced by a series of supple taps on the mobile device. The result is accurate and complete data is recorded in the FI's system. When a gap in information is identified, a CPA bot presents logical options for the RM and the customer to pick from. CPA implements machine-learning and natural language processing, and the IT systems are trained to understand the business problem.

CPA as a game changer

CPA holds a special place in a world where the Internet of Things (IoT) is becoming a reality. In a data-rich IoT environment, customer expectations will continue to grow and will eventually reach a point where they will expect intuitive problem-solving. For example, when you feel a change in the throttle response of your car, thanks to IoT, the manufacturer will already know there is a problem with air intake in the fuel injection system. Normally, you would take the vehicle for a check-up to the dealer, which would lead to identifying the problem, completing warranty checks, requesting spares and initiating the replacement processes.

Thanks to CPA, the process becomes infinitely

smoother and faster. CPA presents the right solution, simplifies time-consuming warranty checks and validates parts availability with the vendor against contractual agreements. The manufacturer proactively sends you a message on the mobile with details of the problem, asks which dealer you'd like to take your car to, sets up the appointment, and ensures the dealer has the spare covered under warranty along with the right fix details when the car is taken to the dealer.

The manufacturer's IT system is continuously learning and uses this common knowledge base to perform the right decisions across all customers. The end-to-end automation involves multiple parties (dealer, manufacturer and part vendor) and the automation scope extends beyond the manufacturer's boundary. Notice that the automobile manufacturer created a highly efficient and immersive experience with no paper work or annoying phone calls using CPA to sense, learn, infer, interact and guide subsequent actions. This end-to-end capability of CPA is game changing.

A global research organization that specializes in examining the attitudes and behaviors of customers found that a fully engaged customer represents an average 23% premium in terms of share of profitability, revenue, wallet and relationship growth compared with the average customer. With these types of outcomes falling within the grasp of organizations, can the power of CPA be ignored for long?

About the author

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