Robots Battle Fluctuating Barrel Prices

Battling fluctuating oil barrel prices, Deloitte’s client, a multi-national petroleum company, sought to digitize its enterprise to increase competitiveness and contain costs. We estimated that robotics process automation (RPA) could reduce manpower in back-office processes by 25-35 percent, potentially reducing 30,000 man hours per year in supply chain tasks alone.

The first step in our barrel-battle was enabling back-office staff to focus on more strategic and value-added tasks by using RPA to automate manual processes. Our client identified supply chain onshore and OBP requisition to purchase (RTP) processes as good places to start. The processes’ existing cycle time was three days, and their associated manual activities often resulted in data quality issues, given the large volume (500+ monthly) of requests.

Our project team completed a fast-paced, 10-week proof of concept (PoC) to automate the two RTP processes. We began by creating future-state onshore and OBP RTP processes to capture the detailed design necessary for the automation. Once the processes and requirements were documented and refined, we developed the automations using UIPath, an automation software tool, and tested the automations in various use cases.

The PoC automations reduced manual efforts by 65-80 percent for this client, with robots processing RTP order transactions four times faster (reducing cycle time to less than five minutes) and saving 1,700 man hours per year. In addition, combination of automation with analytics and artificial intelligence initiatives improved overall data quality by more than 98 percent. And the payback period for the initial investment in the PoC automations is less than 12 months for our client.

The RTP automations were just the first step in our client’s enterprise digital journey. The company is now focused on standing up a digital Center of Excellence and Automation Factory that can help it stay ahead of competitors by proactively identifying and implementing digital solutions.

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