

Leverage Software Robotics to Enhance Employee Productivity



Executive Summary

Competitive pressures have intensified to an extent that the average lifespan of a company in the S&P 500 has dropped from more than 60 years in 1958 to just 18 years today. If this pace of change continues, 75% of the companies in today's S&P 500 will be replaced by 2030. With customers demanding greater speed and quality of service, companies that leverage automation technologies to improve their business processes, manufacturing, supply chain, etc., will possibly be the only ones to survive in this fast-changing world.

In the future, this customer demand will fuel the increased adoption of robotics within industrial and consumer segments. This paper explores how automation drives the demand for robotics along with examples of successful robotics solutions and how software robotics is driving employee productivity.

Introduction

The pervasiveness of digital technologies has created a business landscape driven by demand – the demand for faster service, omni-channel experience, device-agnostic applications, integrated systems, hosted business processes, etc. Over the past few years, companies have taken many routes to digitizing the front end of their business to create seamless customer interactions – for instance, building mobile apps that make it easier for customers to, say, order clothing or open a bank account. To ensure greater success with these efforts, it is important to digitize the back-office as well to ensure a truly seamless experience for customers across all touch-points and engagements. However, the potential for human labor (due to high touch interventions in existing back office business processes) to deliver such superior quality and speed is limited, driving the need for aggressive automation.

Aggressive automation has created a new market – robotics. However legacy systems and processes are what inhibit “digital-ready” transformations. Disconnected enterprise systems with only partial profiles of customers have long been the bane of efforts to transform the customer journey from end to end. Companies that enhance their front-end digital experience merely to keep up with industry trends and address customer demand will end up further complicating their back-end technology picture.

Today, the increasing sophistication of machines and adoption of automation pose key questions for organizations:

- Where can we apply automation to achieve higher efficiencies?
- Will robotics threaten the position of human resources?
- How do we reconcile the heavy investment in robotics and automation with the need to reduce costs?

Software Automation as a driver of productivity

During the industrial revolution, lathe machines were the first to introduce automation for more output. Since then, the manufacturing sector has been leading the adoption of automation. Today, software robotics or specifically Robotic Process Automation is a game-changer that can enable both the front and back office to leverage robots without being concerned with legacy inhibitions to carry out typical high-touch low-complexity processes with remarkable efficiency and accuracy. Later – when coupled with quantitative and qualitative data on bottlenecks encountered during robotic processing – entire processes, user experience and communications can be re-imagined and redesigned.

Contrary to popular opinion, automation plays a key role in enhancing employee morale for two key reasons: it boosts

productivity and measures employee output. In most offices, employees spend considerable time creating protocols that comply with changing regulatory standards. Thus, the rules meant to streamline productivity inevitably compromise output. Automation allows organizations to eliminate manual work-hours and effort spent on mundane and repetitive tasks for regulatory compliance. Employees are better able to focus on the core business to improve profitability, thereby enhancing productivity.

Further, the adoption of connected machinery is helping enterprises leverage databases that can track individual productivity against group output. Organizations can carefully measure each employee’s contribution against that of their team and ensure incentives are awarded to the right personnel, thereby boosting employee morale.





Transforming business with automation and software robotics

Let us take a look at the front office to see how software robotics can transform real-world business. Adding live chat to assist customers can also provide self-service options using pre-defined special characters. For instance, in telecom services, “&Recharge” can help customers recharge their prepaid accounts in a step-by-step manner. In the banking industry, “&Balance” can provide users their account balance; in the insurance sector “&Plan” can help prospects find the right insurance plan.

Now, let us move to the back office:

- Invoice processing in a retailer’s back office involves validation of invoices, purchase orders (PoS) and shipment records before approving payment to vendors. Although most of the matching is done in the invoice processing

system, there are many invoices that require considerable procedural steps and manual matching due to business complexities, errors in PO/ invoices, etc. This matching process is extensive, complex and time-consuming. By translating these manual steps into a logical flow controlled by robotic software, end-to-end process automation can be achieved.

- Another area that can benefit is healthcare insurance claims. Adjudication systems are highly automated up until the process hits the two-claim review criteria that requires a manual review step. Some of the key questions are: Were the treatments appropriate? Is there a logical outcome of the facts and conditions shown in the medical record? Does the claim

information provide any reason to believe the services provided were not accurately reported? By weaving simple business judgment rules into robotic software, this step – and thus the entire adjudication workflow – can be completely automated.

Despite the obvious benefits, many enterprises are apprehensive about robotics. Most manufacturers believe that robotics will become a viable business option when the cost of operating and maintaining a robot is 15% lower than that of managing human labor. Such enterprises are concerned about incurring high costs of maintenance, power, security, and software. Further, ongoing debates regarding customer sentiment towards the humanoid appearance of robots elicit reactions ranging from acceptance to revulsion.

Robotics in the future

Some companies provide robot maintenance services to help enterprises address the issue of cost when adopting robotics. A key consideration here is comparing the cost to company – employing a welder in an automobile plant can cost the company US \$25 an hour including health and insurance benefits, pension, breaks, vacation time, union dues, etc., while the cost for employing a robot is US\$8 an hour. Additionally, new business models allow organizations to forego heavy long-term investments in robotics by leasing robots

similar to renting storage on cloud. Virtual chatters in call centers or automated greeters in large retail stores can be rented from companies that manufacture them.

Today, the early adopters of automation and robotics are already gaining insights that have yielded significant business benefits. For instance, a company discovered that its employees who handle machines that schedule meetings spent only four work hours in a day, thereby allowing them to save US \$15 million annually by not overpaying contractors. Another company

discovered unused user desktop licenses that were being paid for by the software annual maintenance contract (AMC), thereby saving US \$25 million per year.

Despite the potential benefits of robotics, most enterprises are concerned that the robot's ability to measure human output may lead to displacement of employees. Retaining human talent within an organization requires a change within its culture where such employees are encouraged to improve their productivity through motivational tools and on-the-job gamification techniques.

Conclusion

Aggressive automation and the demand for superior quality and enhanced output are paving the way for increased growth within the robotics industry. Between 2013 and 2014, robot sales witnessed a compounded annual growth rate (CAGR) of 17%. As robotics makes deeper inroads into manufacturing, automotive and electronics industries, the impact it is having on productivity cannot be overlooked. The next evolutionary step – Robotic Process Automation or software robotics – is a potential game-changer that can transform front as well as back office operations across industries. Despite concerns that robots may displace human employees, several enterprises are leveraging robots and automation for jobs that require repetitive tasks, thereby freeing up employees to focus on the core business. By measuring human productivity, robotics can help organizations identify low performing workers for further training and good performers for incentives. Thus, in the long run, robotics and automation will emerge as drivers for increased employee creativity, innovation and productivity, thereby improving business profitability.

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