

Thought Leadership

Robotics: A Multi-Billion Dollar Market Because it Provides Savings and Efficiency



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Robotic is a surging, multi-billion dollar market because it provides businesses incredible savings and efficiencies. While recent innovation has focused on industrial automation in the automotive industry, there is a definitive shift to Robotic Process Automation for consumer and business applications which are expected to become a \$8.7 billion market by 2024, according to Grand View Research. So, why are businesses that traditionally look so closely at their balance sheets making such a significant investment? Because RPA has proven it can provide these firms tremendous savings and efficiency.

Take a simple business example that many financial services firms and individuals experience no matter where they fit within the organization - building a customized PowerPoint deck. While this may seem simple, consider the thousands of unique slides available across the organization, the compliance marketing disclosure requirements needed, the customization required, and this simple example has become a time-intensive, repeatable task that could be significantly streamlined through automation. While a number of document management systems exist to store these slides, existing systems are merely a repository for information. Robotic Process Automation would allow the presentation to be assembled automatically based on the business

content, products, services, disclosures, operations, regulations, and other factors through a rules engine.

This thinking lays the foundation for automation in processes that can then be further enhanced and made intelligent. The same approach can be applied to much more complex and high-value business processes, whether it is client onboarding where identity verification checks are required to prevent fraud and support know your customer (KYC) requirements or other processes across the business.

As Robotic is giving way to Robotic Process Automation, businesses should consider these four things to take advantage of the opportunity:



Business requirements

As with any new project, the company should think about whether the problem they have in front of them is one worth solving and if the proposed method is the right solution. How does this fit with the business strategy, does it help increase efficiency, save cost, reduce fraud or deliver repeatable value to the business? The answer to this question must be yes to proceed.

People processes

Robotic Process Automation's core value is to take tasks previously done by humans and automate them with technology, but the goal is not to replace humans. People will still be needed to review the auto-generated work, and as the workflow is re-engineered, these people will be freed up to focus on higher-value activities. Therefore, if there's a 4-person team, RPA can augment a portion of their work and allow them to focus their attention on delivery.

Operations

RPA focuses primarily on automating workflows, therefore, businesses need to think holistically about what other data, functions, departments and operations touch this workflow to gain

economies of scale from the project. In the earlier example, does the marketing PowerPoint need to be archived in a back-office system that touches the process, and can that be done automatically?

Technology

The key considerations to keep in mind on a technical level are:

- **Data:** Business data could be structured or unstructured. In addition, the data could be available across multiple sources instead of a single source. Depending on the business use case, the RPA technical solution is generally capable of processing data – including screen scraping, parsing documents and emails, image recognition, access to a server or website, etc.
- **Workflows & Rules:** The ideal candidate workflow for Robotic Process Automation is where the business rules for the processing of transactions is clear and unambiguous. Once the RPA technical solution has been trained to capture and interpret the actions of specific workflow processes and business rules, it can then manipulate data, trigger responses and communicate with other systems autonomously.

- **Level of Intelligence:** The level of intelligence would decide the maturity of the RPA solution especially from an AI point-of-view. RPA solutions could vary all the way from zero intelligence (basic automation) to pattern matching (intermediate level) and all the way up to sophisticated machine learning algorithms (including NLP and cognitive based computing to emulate human-like decision making).

RPA tools can be a first step toward more sophisticated and intelligent, automated data solutions. By combining Robotic with other AI techniques like Knowledge and Perception, we get innovations like self-driving cars. Similarly, AI and elements of machine learning can be combined with RPA for a more powerful solution.