# Decidedly Human: Looking at RPA Through an ROI Lens

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Robotics Process Automation (RPA) is bridging technology and business like never before. Organizations across all industries are racing towards this opportunity to build virtual teams to complement their human workforce and improve their operational effectiveness as a part of a continued digital transformation effort. The McKinsey Global Institute forecasts that 30 percent of tasks in most occupations can be automated and RPA is starting to seize the opportunity.[1]

RPA requires minimal systems integration as functional robots are 'trained' (i.e. programmed) to automate tasks as if a real person was doing them across applications and systems. By pursuing such a program, business and technology teams can collaboratively train and manage an entire workforce of robots to be used in conjunction with its own human workforce.

Forrester found that the RPA software market, while only $250 million in 2016, will grow to $2.9 billion in 2021.[2] This rapid growth reflects how CIOs and executives are chasing the significant benefits that an RPA transformation can unlock for their organizations and how to effectively manage headcount increases in a tight labor market with skill shortages in many business and technology roles.

Specifically, organizations are immediately drawn to impacts on quality, productivity, and cost of a given operation:

| QUALITY | PRODUCTIVITY | COST |
|---|---|---|
| • **Human errors are eliminated** as the robot only is able to operate within the rules of the function being completed <br><br> • **Improved compliance/auditability** as there is traceability around every task <br><br> • Teams that surround and/or rely on an RPA process are given **consistent and timely inputs/outputs from the robots** <br><br> • Leaders and teams are given **increased capacity** to focus on higher value work <br><br> • **Employee satisfaction and empowerment increases** upon removal of dull, repetitive computer tasks (approximately 10% to 20% of human work hours according to Data Hadoop)[3] | • Processes leveraging RPA may yield **40% improvement** in process handling time <br><br> • Robots are able to **work 24/7** and **without fatigue** thus significantly increasing workload capacity <br><br> • Organizations are finding a renewed ability to reduce focus on core operations and **expand their capabilities** into new areas <br><br> • Process analytics can be captured to drive **data-driven process improvement** opportunities and a future use of machine learning and artificial intelligence | • An average of **80% cost reduction** per process for operations using RPA software in conjunction with the human workforce <br><br> • **Payback** on the software and transformation investment in **up to 3 months** <br><br> • **Re-usable** RPA elements for future implementations[4] |

# In Failure Comes Opportunity

With such an extensive value proposition, many organizations have invested in an RPA transformation, but not many have seen true success. According to Business Today, the average RPA failure rate is between 30-50% [5] and McKinsey & Company reports that "several robotics programs have been put on hold, or CIOs have flatly refused to install new bots." [6] These facts and figures highlight that organizations are struggling to properly implement RPA software and create an effective virtual workforce. Specific RPA missteps have informed various tactful 'lessons learned' for current CIOs and executives to consider in their effort to unlock all that RPA has to offer.

| MISSTEP | LESSON |
|---------|--------|
| Organizations often deploy robotics technology POCs on partial processes and are unable to identify and realize the true ROI and benefit | Identify and capture end-to-end processes and data inputs to understand the complexity of the process and ability to fully understand what are the highest probable processes that will deliver the most meaningful results |
| Organizations fail to consider their internal ability to adopt robotics in their own environment | Incorporate process quality, environment complexity, infrastructure access, and robot maintenance in the decision-making process for deploying robotics technology |
| Organizations solicit ideas from business and technology without a robust ability to evaluate the ideas as real opportunities for robotics | Utilize a facilitated approach and evaluation tool with business and IT users to identify / prioritize business processes based on all one-time and ongoing implementation costs |
| Organizations successfully deploy chat bots to assist internal stakeholders and third-party advisors in basic communication and operational Q&A | Focus on deep evaluation of labor intensive processes that justify implementation of RPA software with the human workforce for substantial financial and productivity impact |
| Organizations deploy robotics automation too early without first considering using LEAN techniques to reduce process and technology waste | Evaluate processes with a LEAN lens in value stream mapping across the 7 types of waste to identify if process redesign should be adopted prior to implementation of robotics software |
| Organizations do not address the change management aspects of robotics change, including how specific roles and jobs change in the new environment working in conjunction with the human workforce | Identify specific process step changes, design for humans and leverage positive change management techniques that encourage the right behaviors and identify how new behaviors change in conjunction with robotics participation in a business or technology processes |

Despite various missteps and failed projects, the appetite for RPA is still strong. A recent survey of global operations leaders indicated that 45% of all organizations surveyed have implemented RPA solutions, and another 30% are planning to implement within the next 12 months.[2] In order for future RPA implementations to avoid common traps and missteps, leaders must think of investing in the technology in a fundamentally new way.

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3. Utermohlen, Karl. (2018). All the robotic process automation (RPA) stats you need to know. Towards Data Science. Retrieved from https://towardsdatascience.com/all-the-robotic-process-automation-rpa-stats-you-need-to-know-bcec22eaaad9

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5. Das, Goutam. (2018). Robotic process automation failure rate is 30-50%, says EXL CEO Rohit Kapoor. Business Today. Retrieved from https://www.businesstoday.in/sectors/bpo/robotic-process-automation-failure-rate-indian-bpo-business-process-outsourcing-exl-ceo-rohit-kapoor/story/267187.html

6. Edlich, A. & Sohoni, V. (2017). Burned by the bots: Why robotic automation is stumbling. Digital McKinsey. Retrieved from https://www.mckinsey.com/business-functions/digital-mckinsey/our-insights/digital-blog/burned-by-the-bots-why-robotic-automation-is-stumbling

## A Simple Rule

With budget being allocated to RPA, it has become challenging to know how to invest and what to spend in effort to actualize an RPA transformation. A simple rule should guide how transformation budgets are spent:

> **"Technology should pay for itself in one year."**

Any investment in a new technology has benefits that are both quantitative and qualitative. In exploring all opportunities, including RPA, leaders must utilize an ROI based approach to ensure that both the design and implementation are guided by business objectives, not technical excitement, marketing opportunities, competitive reactions or vendor promises. Technology and business innovations are happening too fast to invest in any opportunity without a solid business case.

An ROI approach to RPA transformational programs will ensure investments pay for themselves with immediate and continuous savings as well as fundamentally shift the way organizations define transformational success.

## ROI in RPA

At the core of a successful RPA program is selecting the right processes to automate. This fit is measured by 'automation potential' and is traditionally calculated by scoring processes against 4 core criteria: high volume, highly standardized, low human judgment, low technical complexity.

By this definition, many processes may seem like a great candidate for RPA, but when adding an ROI lens to measuring automation potential, the results can be quite different. For example, in operational reporting, a process to consolidate data from multiple sources, apply business rules and add judgments may seem like it has high 'automation potential' but it may not make sense for robotics.

The guardrails of an ROI approach ensure that organizations measure automation potential by factoring in additional qualitative and quantitative elements for each and every candidate process. Some quantitative elements for assessing process feasibility include time to complete process time, wait time, process errors and software maintenance costs in conjunction with running a future state process. Furthermore, the investment needed to run the future state process must be calculated and incorporated. Some qualitative elements for assessing process feasibility include the internal resource capacity and ability of an organization to adopt robotics, current state process maturity and the quality of process inputs and outputs.

Organizations that deploy RPA software without the ROI lens often leave CIOs and RPA executives with two key outcomes:

- Purchased software and a long list of potential processes to leverage for robotics
- A lot of ideas but no method to develop a data-driven roadmap and no evidence to substantiate the immediate and continuous savings that are needed for the investment to pay for itself in one year

## RPA Engine

Optimity Advisors has developed a consultative approach that puts ROI at the core of an RPA transformation. The approach consists of a holistic view that deeply assesses process feasibility, process design, a self-funding business case, a data-driven implementation roadmap, change management and organizational readiness. In support of the collaborative approach, Optimity Advisors has worked with RPA experts, engineers, architects, operations personnel, and LEAN teams to develop an RPA Recommendation Engine to optimize an ROI-centric RPA transformation. The engine has been used with global clients across various industries to determine which processes are truly the best fit for RPA software implementation and to calculate the true costs and benefits.

The engine enables business and technology users to collect detailed quantitative and qualitative process information against the organization's readiness for robotics. The engine can also be calibrated to customize qualitative questions based on an organization's process and technology environments that help determine realistic benefits and RPA implementation costs. As a result, a dashboard provides for each process an RPA recommendation with a LEAN waste score (to identify alternate outcomes) and a multi-year financial roadmap with annual cost savings and OpEx forecast.

Optimity's RPA Engine has been deployed for several purposes, including:

- **Identification of the highest priority process candidates** for RPA software implementation
- **Alternate process recommendations** (for example, determining LEAN process candidates prior to the implementation of RPA software)
- **Design new work processes** (for example, robotics in conjunction with future state process simulation software)
- **Estimate robot configuration resource needs**
- **Estimate RPA project resource needs**

## More Than a Recommendation

The RPA Recommendation Engine paired with the consultative and collaborative approach provides leaders with robust and high-value results. In addition to an identified set of processes fit for an RPA implementation, all the information needed to build a data-driven implementation roadmap and business case are captured.

The implementation of an RPA program is equally important as the design. The right sequence of processes to automate must be defined and customized for each organization based on a variety of quantitative and qualitative factors. The output from the engine can be synthesized for developing an implementation roadmap that uses business metrics to define a prioritization schema, funding requirements, and operational impact. Combining these allows teams to implement the right processes in the right sequence.

A data-driven implementation roadmap also contributes to a successful business case. The engine is designed to assess and define the right metrics to build a business case that shows a self-funding investment as well as a financial forecast to demonstrate immediate and continuous cost-savings. This critical output from an RPA assessment paves the way for a successful RPA transformation from the start.

RPA is a large market, a promising technology, and an exciting opportunity for organizations and industry leaders to pursue. For a successful transformation, an ROI based approach is to essential to unlocking the full range of benefits that RPA offers. This lens ensures that transformations and investments meet business objectives and that the right metrics are analyzed and collected to back it all up.

## Meet the Authors

*Ross Engelhardt* *has 7+ years experience as a business strategy and digital transformation consultant. He has led teams in strategy, design and implementation phases of digital projects, enabling a focus on end-to-end planning and success. He has an expertise in process engineering and waste elimination, is Six Sigma certified, and has delivered numerous target operating models for top global Financial Services firms. Ross has also been a senior digital consultant and engagement manager for programs in business process engineering, operating model design and implementation, workflow automation, roadmap development, change management, and micro-service design. Ross has experience with agile development, building reusable playbooks in multiple domains and has also developed and led workshops with cross-functional senior stakeholders.*

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# THANK YOU

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