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# Addressing common RPA implementation challenges

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 For more on RPA, see Robotics/AI an increasingly potent lever to boost operating efficiency (http://www.nri. com/~/media/PDF/global/opinion/ lakyara/2017/lkr2017262.pdf).

# **Executive Summary**

The RPA boom has spread beyond Europe and the US to Japan. Japanese companies, being culturally averse to directly cutting payrolls, tend to have more difficulty justifying the overall cost of adopting RPA. The following looks at challenges they encounter when implementing RPA and how to best address them.

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## **RPA's rapid growth and common challenges**

Robotic process automation (RPA) is booming even outside of Europe and the US. In Japan, since late 2016, many companies across a broad range of sectors have launched proof-of-concept (PoC) initiatives to determine whether RPA would be cost-beneficial for them, following in the footsteps of earlier RPA adopters in the financial sector.

RPA's biggest selling points are that it is easier to implement, less costly and pays off faster than conventional IT system development<sup>1</sup>). Such benefits are driving impressive PoC results, in response to which companies have started to deploy RPA in live environments faster than imaginable under previous system development paradigms. However, RPA's ease of adoption has a downside. Namely, companies tend to decide to implement RPA without cross-organizationally clarifying what they aim to accomplish by doing so and how RPA will fit within the larger scheme of things. As a result, companies are encountering a number of unanticipated difficulties once they start to implement RPA following a successful PoC.

One such difficulty is deciding which business processes to automate with RPA. This decision, an essential step in implementing RPA, often boils down to whether to automate high-frequency, labor-intensive processes only or to also include processes that are inefficient but relatively low-frequency and lightly staffed. The former is preferable from the standpoint of maximizing RPA's cost-efficiency, preventing haphazard automation and reducing monitoring requirements. The latter, however, is conducive to improving operational efficiency and reducing workloads, both of which are often objectives of implementing RPA. The most inefficient processes in practice are low-volume, high-variation ones such as miscellaneous routine tasks performed by few personnel. Some believe that unless

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RPA is used to automate such processes, it is not sufficiently worthwhile. Deciding what to automate entails tough trade-offs.

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Another thorny issue is determining the extent of any controls to be imposed on RPA. Some IT professionals have recently started to advocate contingency planning for RPA-run processes and managing RPA as a system risk in addition to deciding as usual how to deal with the impacts of any modifications of RPA-operated systems and who will be responsible for monitoring robotically automated processes.

The more stringent such controls, the more likely they are to detract from RPA's benefits by increasing implementation and/or operating costs. This trade-off raises the question of how to best assess RPA's cost-effectiveness inclusive of all costs from implementation through ongoing monitoring. Many RPA early adopters in Europe and the US have based their RPA cost-benefit assessments on short-term cost savings from efficiency gains due to headcount reductions<sup>2</sup>). Japanese companies, being culturally disinclined to directly pursue labor cost savings, are prone to use vague criteria and timeframes for quantifying RPA's benefits. They consequently tend to have more difficulty assessing whether those benefits justify RPA's implementation, operating and monitoring costs.

## What is aim of implementing RPA and how does it fit within bigger picture?

Initially, one way that such issues were commonly addressed was to treat RPA as a sort of end-user computing, like a turbo-charged Excel macro. This approach reflects that companies often adopted RPA at the request of front-line organizational units seeking to quickly, conveniently and inexpensively improve their operating efficiency by maximally leveraging RPA. Such companies regarded RPA as a handy tool. Given such a mentality, the business processes they robotically automated included, at users' request, low-volume, high-variation ones. Additionally, they delegated RPA implementation and monitoring mainly to their own front-line personnel. They aimed to limit consultants and RPA vendors' involvement to the initial stages of the implementation process and subsequently fly solo. Even when selecting RPA solutions, they tended to do so based primarily on price and ease of configuring automated workflows<sup>3</sup>.

This approach had several drawbacks. For one, it was overly focused on benefiting individual front-line organizational units. As such, it paid short shrift to broader, longer-term considerations such as RPA implementation policies and how

2) While many such early adopters evaluated RPA based on the extent to which it would reduce their FTE (full-time equivalent) headcount, they recognized that RPA also has secondary benefits such as improving processing accuracy and facilitating monitoring.

3) Quite a few users have in fact reported that they found RPA tools to be more difficult to use than initially expected and/or that they were unable to deploy RPA for complex tasks. To the extent that a user adopts such an approach, being able to at least minimally manage RPA solutions easily through effective monitoring and/or management tools becomes all the more important. Many early adopters, however, failed to adequately recognize this point, perhaps because their decision-making was fragmented among individual organizational units.

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RPA should fit within the bigger picture. Moreover, it did not adequately involve IT staff. In light of these shortcomings, this old approach is now increasingly being supplanted by others that treat RPA as a component of IT systems and implement and evaluate it within the context of existing systems' life-cycle management frameworks. A case in point is a Japanese financial institution that decided to implement RPA throughout its organization in response to its PoC results. It placed its IT department in charge of the project and formed a specialized RPA team staffed mainly with IT personnel. It plans to have its IT department select not only RPA vendors but also the business processes to be automated and intensively manage RPA's operational risk as part of its IT systems.

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While this approach is becoming more common in Japan, it has been established as the norm in Europe and the US, which are ahead of Japan in terms of RPA adoption. For instance, one major US financial institution has launched an RPA program headed by an offshore IT subsidiary. The subsidiary is selecting RPA tools, deciding where and how to deploy them and otherwise supporting RPA implementation on a group-wide basis. Such an approach not only standardizes RPA implementation and monitoring throughout the group, it also builds a repository of know-how that can be shared among group companies<sup>4</sup>. Meanwhile, financial institutions' existing IT system providers are starting to offer RPA as an expedient way to upgrade existing systems or rectify their deficiencies. In such cases, the vendors develop and manage RPA services based on their existing business models and infrastructure.

By thus incorporating RPA into the same framework that existing systems inhabit, RPA users can more easily navigate the challenges discussed above. This approach of course reduces flexibility in terms of RPA implementation, but given the difficulty of scrapping RPA once it has been implemented, building a far-sighted framework is essential.

When conducting a PoC, prospective RPA users often merely compare RPA tools based on their pricing, functionality and/or popularity. They should instead focus first and foremost on what they want from RPA from a cross-organizational, longer-term standpoint, looking ahead to when the RPA goes live. I look forward to increasingly in-depth discussion of system-wide best practices for application systems utilizing RPA.

4) Some BPO (business process outsourcing) providers have become RPA specialists with business models predicated on turnkey RPA of financial institutions' back-office operations. Such service providers are committed to amassing and leveraging workflow configuration/management knowhow to deliver RPA's benefits to their customers.

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