Increasing the productivity of white-collars "RPA"

Initiatives are required to improve the productivity of white collar workers by delegating the routine tasks to a robot (RPA).
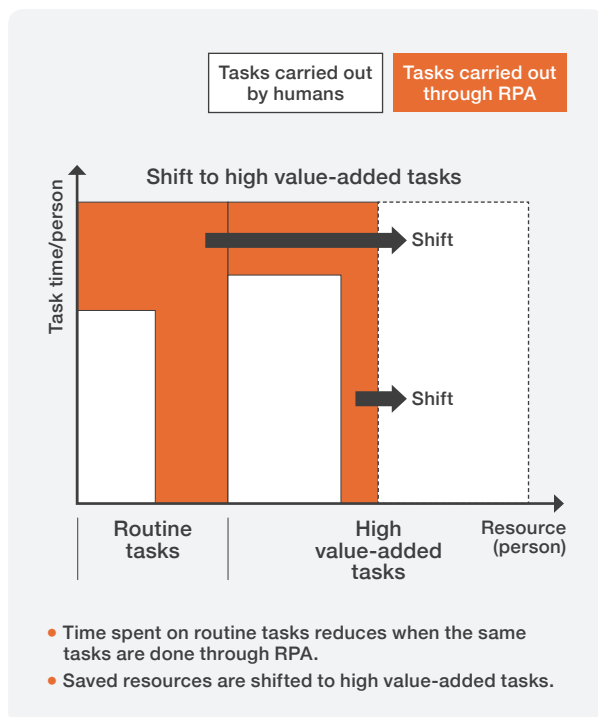
In addition to improving productivity, RPA will also develop services linked with AI in the future
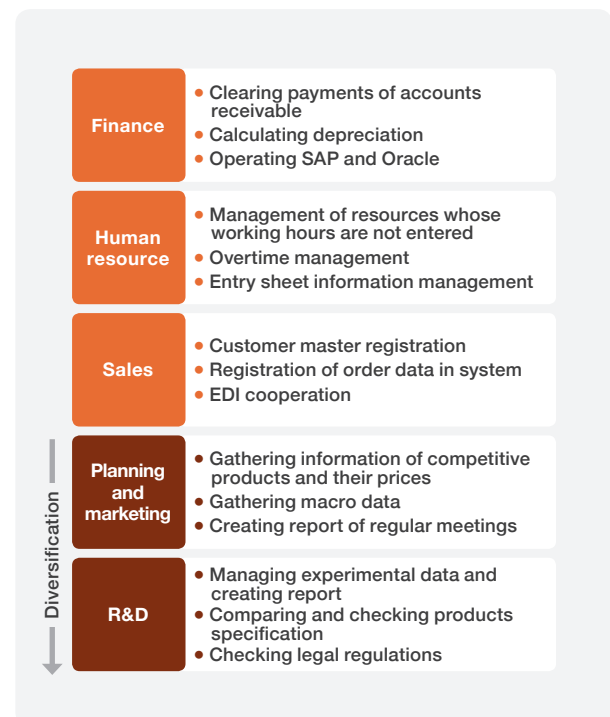
Japan's working age population is declining and Japanese organizations need to take countermeasures for continuous labor shortage. Following that, Robotic Process Automation (hereinafter, referred to as RPA) that can automate the routine tasks is drawing attention. RPA is a technology to automate routine tasks that require humans to perform on computer screens with a computer robot. Since 2016, financial institutions and service industry in Japan that have many routine tasks to do have been adopting RPA solution. As a result, RPA helped in shortening the time, enhancing the tasks and improving the quality of tasks (reduces mistakes). Going forward, it is expected that this technology can execute higher-level tasks by linking it with the development of AI related technologies.

RPA will be introduced in the R&D activities of manufacturing industry

Since 2017, RPA has been introduced in various industries. The success stories concerning RPA can be witnessed not only in the domains, such as general affairs, human resources, finance, and back office tasks, but also in R&D activities of manufacturing business. In the R&D department, there is always a resource crunch of development engineers. As an instance, it was anticipated that RPA will be introduced in routine tasks such as transcription of experimental data by engineers. Moreover, RPA is becoming more widespread in cases where there is a mismatch between the human resources and the operations being performed, such as routine tasks being performed by management-level workers. Even in the R&D department, there are examples where the routine tasks were automated through RPA and it is expected that through this, the saved resources can be put to higher value-added tasks.

■ Results of introducing RPA

- Time spent on routine tasks reduces when the same tasks are done through RPA.
- Saved resources are shifted to high value-added tasks.

■ Diversification of tasks where RPA is introduced

Finance	• Clearing payments of accounts receivable • Calculating depreciation • Operating SAP and Oracle
Human resource	• Management of resources whose working hours are not entered • Overtime management • Entry sheet information management
Sales	• Customer master registration • Registration of order data in system • EDI cooperation
Planning and marketing	• Gathering information of competitive products and their prices • Gathering macro data • Creating report of regular meetings
R&D	• Managing experimental data and creating report • Comparing and checking products specification • Checking legal regulations

Diversification

NRI provides integrated solutions, from formulating a plan for RPA implementation to its development and carrying out operations with an aim to bring workstyle and digital reforms.
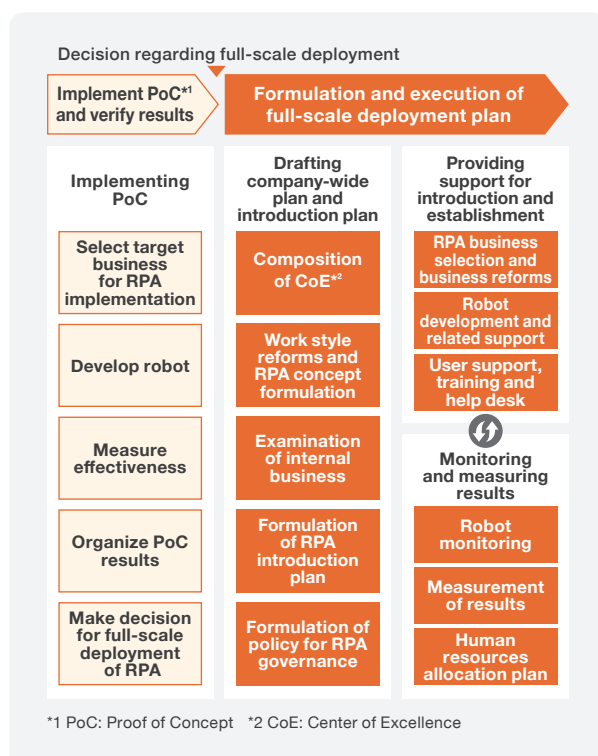
We support creation of an ideal organization that promotes business reforms using RPA as production site initiatives

One of the advantages of RPA is that it is easy to use. Until now, the RPA was introduced by only information system department to develop IT systems, but now it can also be introduced under production site initiatives. RPA can transform a workplace into an ideal organization that enables employees to improve their work efficiency. However, the ease of introducing RPA may backfire as it involves various risks, where RPA developed at the production site can put load on the server, causing the server to slow down, and can increase management cost when different tools are used by different departments. Moreover, there is a risk that RPA may collect or misuse the confidential information of the company. Therefore, for company-wide deployment of RPA, it is necessary to establish its control rules.

NRI provides integrated solutions, from formulating a plan for RPA introduction to its development and carrying out operations after considering the risks peculiar to RPA.

Case: Effective to build and operate a centralized system 'CoE' that allows smooth introduction of RPA

In order to implement RPA, in addition to the production site and IT departments, it is essential to cooperate with the operational reform divisions as well. NRI aims at effectively introducing RPA at necessary locations by treating RPA as a tool of business reformation rather than setting the number of robots in KPI.

In order to promote RPA utilization and improve operations throughout the company, NRI has been proposing continuous business improvements beyond the introduction of the RPA tool, we have built the center of Excellence (CoE), which is a dedicated group of professionals required for reformation. CoE aims at systematically managing the knowledge of RPA gathered at each production site as explicit knowledge to be accessed in entire organization. It can prepare for risks by centralizing company-specific governance matters. Through this, companies will be able to deploy business improvements and utilize RPA throughout the company using knowledge accumulated in CoE.

■ RPA introduction process in NRI

■ Specialized units for business improvement and RPA introduction form CoE

Functions of CoE
- Accumulate business reforms and RPA-related knowledge that can be used company-wide
- Promote standardization across business divisions
- Nurture RPA experts within the company
- Systematic management of robots

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