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Corporate Real Estate and Facilities Management in the digital world

Part Two: Robotic process automation benefits and adoption journey

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Welcome back

Welcome back to the second part of the Deloitte article series on 'Corporate Real Estate and Facility Management in the digital world.' In part one of our series, we discussed what robotic process automation (RPA) is, what RPA does well, and where corporate real estate and facilities management (CRE&FM) organizations can leverage RPA.

As a reminder, RPA is the deployment of software robots called "bots," which can lower the cost and increase the effectiveness of routine clerical processes. Bots are most effective performing tasks that are highly transactional, time consuming, scalable, and low in complexity. In addition to generating efficiency gains, bots can become the foundation for more sophisticated applications such as cognitive automation and machine learning.

In this second article, we describe how RPA creates value using examples from successful implementations and what the elements of a realistic RPA adoption roadmap are.

How RPA creates value

Efficiency

- Bots operate 24x7, leading to high throughput with reduced rework per step of a process
- Processes and tasks automated are typically performed by the bots in a fraction of the time taken by humans
- One organization's cross-functional departments using RPA has seen an average cost reduction of 10 to 40 percent in their 1st generation deployments

Quality and compliance

- Bots can perform tasks with a high degree of accuracy, preventing or reducing human errors and often improving quality
- RPA streamlines, standardizes, and optimizes processes, which can help improve consistency and compliance
- Robotic platforms are designed to be secure, audited, and managed within an IT corridor of governance (i.e. ISO, COBIT, ITIL)

New expertise and control

- Processes can be automated within weeks or months (depending on the size and complexity of the process)
- Bots allow employees to shift their focus to high-value activities while off-boarding the low-value activities, making room for new competencies and expertise
- Automation provides greater control over processes by enabling in-house service capabilities (alternative to outsourcing) and reducing the impact of seasonal hiring due to workload spikes

Competitive advantages

- RPA can provide high potential return on investment and a short payback period
- RPA improves the quality of collected data, which can lead to structured analytics and insights
- RPA is already developing a track record of success creating cost structure advantages for those who deploy (Figure 1)

Figure 1. Illustrative testimonials of RPA benefits and outcomes from early adopters

Examples of RPA Implementations in CRE&FM

Comprehensive property tax billing and maintenance

A large multi-national organization undertook an organization-wide evaluation to understand some of the highly manual and repetitive tasks prone to error and inefficiency. One of the key processes identified as a potential automation candidate was property tax billing for large equipment customer leases. The organization pays property tax on behalf of tens of thousands of its customers. The ability to recover property tax from each customer was a manual effort that took thousands of hours per year in processing, submission, validation, and tracking time.

The organization had less than a 50 percent success rate in prior years in processing those bills because the process was highly fragmented, cumbersome, and inconsistent. The entire process from data extraction to customer billing and reporting was determined to be fully automated using RPA (Figure 2).

Deloitte supported the design of the automation, which took one week; the build of the bot, which took ten weeks to complete; and deployment into production, which resulted in:

- **Increased efficiency** — reduced the time taken for customer reporting, data extraction, and data manipulation from 45 hours per month down to only one hour
- **Increased control** — completely removed the need for seasonal FTE support during peak processing times for month and quarter end
- **Shift in human focus** — redeployed more than five FTEs that were previously dedicated to manual customer billings
- **Increase in revenue** — achieved 100 percent billing for all eligible customer property expenses in a standardized and repeatable process

Figure 2. Generate on demand and track property tax bills in customers' systems

Bot interfaces with tax mgmt. system	Bot extracts data to spreadsheet	Bot manipulates data and populates monthly filings	Bot validates customers' eligibility, status and equipment list	Bot creates invoice within customers' ERP systems	Bot captures invoices submission confirmation details	Bot generates monthly report and distributes to team

CRE&FM data update and maintenance in real-time

Many CRE&FM organizations use integrated workplace management systems (IWMS) to manage real estate portfolio, infrastructure, and facilities' assets. Maintaining an up-to-date master database is a critical task of IWMS platforms and sometimes a difficult task when it comes to project and facilities maintenance monitoring, status updates, budget approvals, and decisions for all up-coming and in-flight construction.

To execute projects on-time and on-budget, access and real-time updates to location and contacts data are required for the sites with up-coming or in-flight projects. CRE&FM organizations typically deploy dedicated personnel to update and maintain the portfolio database, since it is a repetitive and manual task.

Deloitte assisted a global CRE&FM organization in automating the tracking and management of thousands of portfolio records to enable personnel to focus on more value-add activities. The steps taken over by the RPA bots are described in Figure 3 below. The automation allowed for:

- **Reduction in IT costs** — reduced cost of implementing IWMS, as it can be deployed as an out-of-the-box solution rather than attempting to customize it to handle portfolio data management
- **Increased efficiency** — improved efficiency of non-customized IWMS, with faster processing and reduction in errors due to complex coding, software patches, and system upgrades
- **Improved quality and standardization** — reduced entry errors, resulting in accurate, consistent, and up-to-date data
- **Shift in human focus** — freed up resources to handle more complex tasks since the bots can handle daily data management tasks

Figure 3. Receive and change customer portfolio data via email

Bot identifies and copies relevant information from email into spreadsheets	Bot checks the data for accuracy of format	Bot logs into IWMS and opens/creates record	Bot submits relevant data from the spread-sheet tracker into the IWMS master data record	Bot marks the item as complete in the spreadsheet tracker	Bot notifies the requestor of the update

Planning the RPA Adoption Roadmap for CRE&FM Organizations

A successful RPA transformation begins with a holistic vision of what activities and resources are required, and how they are sequenced and organized.

CRE&FM organizations can start the RPA journey by:

- Intaking RPA opportunities and defining the possible cost-benefits across processes
- Implementing a detailed project plan to build bots and then deploying through a robust testing protocol
- Operating the automated process and sustaining value through a continuous performance methodology

Below are some broad steps for deployment; to help increase the effectiveness of the adoption roadmap, we have noted some key activities and success factors for each step (Figure 4).

Figure 4. RPA lifecycle stages

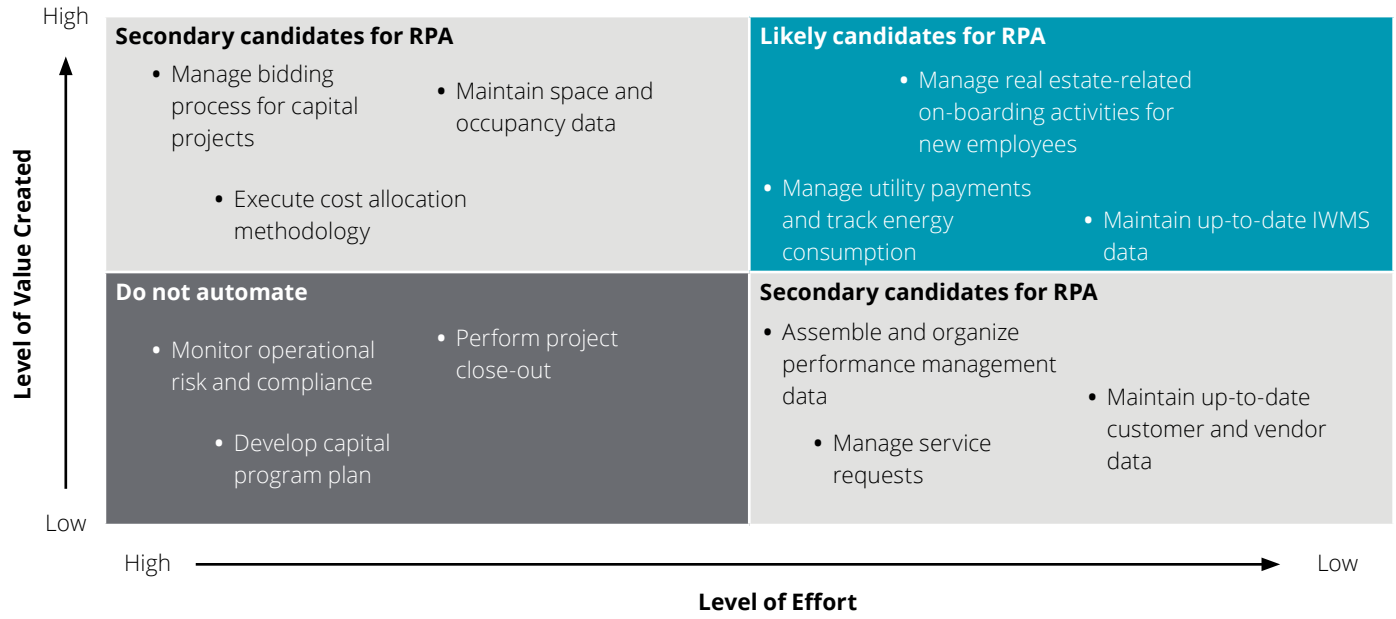
Intake and define	Implement and deploy	Operate and sustain
Sourcing and prioritizing RPA opportunities and conducting a formal assessment to qualify the opportunities	*Configuring the automation, testing, and migrating the automation into a production environment*	*Configuring the automation, testing, and migrating the automation into a production environment*
Key activities		
• **Assess** opportunities from CRE capabilities and evaluate processes for level of automation potential and complexity using a holistic RPA cost-benefit model	• **Mobilize** CRE, IT, sourcing and change management resources to create project plan and procure infrastructure, systems, and applications required	• **Stabilize** performance of automation in production and conduct knowledge transfer to support, business process, and operations teams
• **Define** scope/roadmap, engage stakeholders, and prioritize options using the opportunity matrix in **Figure 5**	• **Build** automation and ancillary functionality according to the business and technical requirements	• **Run**, monitor, and assess performance by tracking analytics and modifying automation, as needed, following incidents
• **Design** the functional and technical aspects of the automated target state and develop list of automation enablers (systems access, hardware/software)	• **Test** scenarios according to plan in both test environment and production environment, and refine if gaps are identified	• **Optimize** through continuous process improvement, communicate cost-benefit of automation, and explore opportunities to expand automation impact, value, and scope
Success factors		
Where possible, **leverage other departments' RPA experiences** to develop governance, scoring models, IT specifications, and vendor selection criteria	**Scope the time and method for delivery** to efficiently implement these new bots into the production environment, including time to modify the coding, to cover all potential process scenarios	**Embed process metrics, benefits tracking, governance, continuous improvement tactics, and RPA innovation gate checks** throughout the life cycle of the automation scope

As mentioned above, one tool that can be leveraged in the selection and prioritization of processes for automation is the RPA Opportunity Matrix (Figure 5). The matrix allows each assessed process to be plotted based on the assigned Level of Effort score and Level of Value Created score. The organization can set its custom scales for these two scores or simply use the standard High, Medium, Low scale.

The Level of Effort score represents the effort and complexity to automate and is dependent on the number and types of inputs and interactions within a process (people and systems), the number of steps in the process, the amount of data to be handled, the alternative paths a process might take when executed, and the level of RPA software integration into the current IT landscape.

The Level of Value Created score represents the size of the benefits of automating a process and is dependent on the potential to allocate resources to handle more valuable tasks, the reduction in cost from automating, the volume an activity is performed, and the size of the benefits generated through easier access to correct and consistent data.

Figure 5. RPA opportunity matrix



Automation candidates that have a high level of value creation and require a low level of automation effort should be prioritized first; Figure 5 depicts some illustrative examples of processes' potential and representative levels of effort and value, but each organization should evaluate its own processes for level of effort, level of value created, and overall return on investment impact.

Now is the time

RPA represents an exciting opportunity for CRE&FM organizations to reduce costs and drive higher levels of performance. Thanks in part to other enabling functions, which are already leveraging RPA to impact both cost and quality across large scale deployments, CRE&FM organizations can become "fast followers" in the RPA movement.

RPA is a readily available capability with the potential to create a significant shift in a CRE&FM organization's cost structure while improving responsiveness to internal client demands. As part of a broader journey, RPA can also lead CRE&FM organizations to use analytics and machine learning capabilities, leveraging data from across the enterprise to improve operations, occupancy levels, service delivery, and workplace experience.

The future is now. It's time to get started.

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