



Corporate Real Estate and Facilities Management in the digital world

Applications of robotic process automation

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Virtually endless possibilities

Imagine a future where:

- Your Corporate Real Estate and Facilities Management (CRE&FM) time and talent are maximized
- Your team is focused on strategic insights and decisions, rather than on routine tasks
- CRE&FM data is harnessed real-time to understand how your portfolio, sites, and organization are performing
- Disparate data sources and systems are interconnected and optimized

Far from being an alternative reality, your CRE&FM organization could be operating this way now with the help of robotic process automation (RPA). RPA is a tool that can help CRE&FM organizations drive improved performance by automating repetitive manual tasks, traditionally performed by humans.

This Deloitte point of view is the first in a two-part series on how to apply RPA in the CRE&FM environment, specifically addressing:

01. What is RPA?
02. What does RPA do well?
03. Where can CRE&FM organizations leverage RPA?
04. How does RPA create value?
05. What are the elements of a realistic and executable RPA roadmap?

This first part addresses the initial three questions, and the second part will provide a deeper dive into specific RPA use cases, describing the value it can create, and presenting a practical RPA adoption journey.

What is RPA?

RPA involves the deployment of software robots, called “bots,” to lower the cost and increase the effectiveness of routine clerical processes.

For CRE&FM organizations, the RPA capabilities could be transformative too. Many CRE&FM organizations today have more business processes, data, systems, technologies, and regulatory requirements than ever before, but they don't have expanded IT budgets and personnel to absorb the extra work.

As an alternative, governed by pre-defined rules RPA solutions can perform routine, repetitive clerical tasks. By deploying bots to handle such tasks, CRE&FM organizations can reduce operating costs while reassigning the personnel's responsibilities to higher value tasks. RPA can become the foundation for more sophisticated applications of automation, such as cognitive automation and machine learning, which can augment human decision making and take on more complex tasks.

What does RPA do well?

RPA can be embedded in the traditional business operating models where bots could perform tasks, such as:

Figure 1. RPA common tasks

- Receiving and collating data via email/workflow
- Copying, pasting, and inspecting data
- Moving files and folders
- Logging into web and enterprise applications
- Filling in forms and transferring data to templates or systems
- Mining and extracting data from the web
- Performing calculations and pre-defined adjustments
- Extracting structured data from documents and source systems, and uploading, emailing, and reporting information
- Collecting social media statistics

RPA bots are most effective when the tasks and processes they perform have the following five key attributes, as shown in Figure 2.



Figure 2. The 5 key attributes for RPA suitability

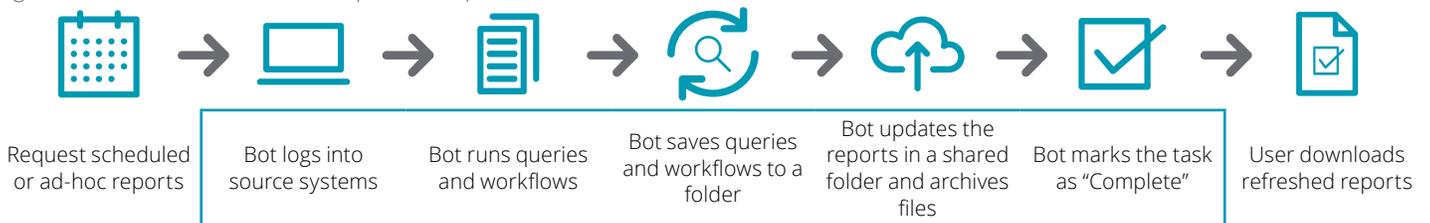


To illustrate the kinds of processes which are suitable for RPA and the impact that RPA can have, below are three real-world success stories from Finance and IT functions which automated similar activities commonly performed by CRE&FM organizations: generating reports, reconciling invoices, and maintaining asset classifications.

Success Story 1: On demand and periodic report generation. RPA bots were adopted by a global consumer products manufacturer to create standard, repeatable reports across multiple business units and disparate reporting systems (Figure 3). The process selected for automation was moderately complex, required four weeks of implementation and resulted in:

- **Increased speed**—reduced the time required to create reports from 120 to 30 minutes, leading to higher throughput
- **Increased accuracy**—reduced errors from manual data entry and calculations to zero
- **Shift in human focus**—reallocated capacity to develop new competencies and build expertise, by enabling employees to focus on making business impact rather than clerical work
- **Increased consistency**—generated centralized, on-demand and ad-hoc reporting, increasing quality and consistency of data, allowing for standardization of the process

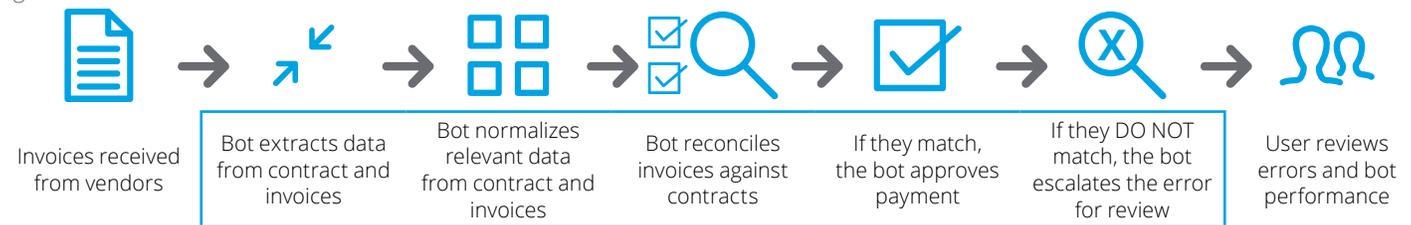
Figure 3. Generate on demand and periodic reports



Success Story 2: Invoice to contract matching / reconciliation. RPA bots were leveraged by a large US-based custodian bank to replicate highly manual invoice-to-contract matching in multiple languages (Figure 4). The process selected for automation was highly complex, required seven weeks to implement and allowed for:

- **Increased revenue**—reduced revenue leakage by 4%, by identifying situations where invoice amounts were higher than contractually allowed amount
- **Shift in human focus**—matched 96% of invoices to contracts on the first bot pass, requiring only 4 percent of exceptions to be processed by humans; FTEs were redeployed for exception handling, payment optimization analytics and cash flow management
- **Higher throughput**—automated 99% of reconciliations on a 24x7 schedule

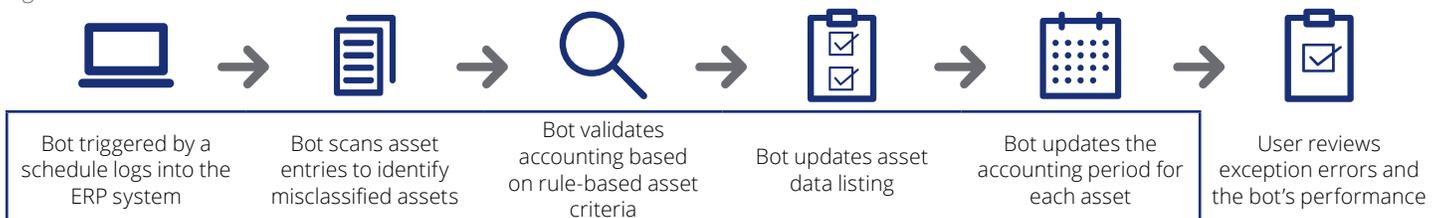
Figure 4. Match invoices to contracts



Success Story 3: Data maintenance. RPA bots were deployed at a US-based health care provider to automate manual tasks in the data maintenance process related to assets and their depreciation (Figure 5). The process selected was moderately complex, required five weeks to implement and resulted in:

- **Reduction in costs**—reduced cost of data maintenance by a run rate of \$125,000 per year driven by a decrease in FTE requirements
- **Increased accuracy**—reduced errors from manual data entry and incorrect classifications to 10%

Figure 5. Maintain asset data



Where can CRE&FM organizations leverage RPA?

Considering the RPA suitability attributes just described, multiple processes across the CRE&FM lifecycle are potential candidates for RPA (Figure 6), including:

- 01. Portfolio management
- 02. Facilities management
- 03. Workplace optimization
- 04. Capital projects management
- 05. Performance management
- 06. Program management

The suitability of RPA “bots” for a given process is expressed in terms of the percentage of tasks or steps, within an end-to-end process, that can be automated:

- **High RPA suitability**, means that more than 70 percent of steps in the process can be automated
- **Medium RPA suitability**, means that 30 to 70 percent of steps can be automated
- **Low RPA suitability**, means that below 30 percent of steps can be automated

Figure 6 below presents the RPA suitability heat map for selected CRE&FM processes:

Figure 6. RPA heat map for CRE&FM

Real Estate and Operations		Workplace and Capital Projects		Performance and Programs	
Real Estate Portfolio Management	Facilities Management	Workplace Optimization	Capital Projects Management	Performance Management	Programs Management
Compile legal and contractual documentation	Schedule facilities management activities	Monitor and refine workspace optimization	Report cost, schedule, scope, quality, safety, and risk	Manage purchase orders	Calculate carbon footprint
Manage and report critical dates and milestones	Process utility billing	Manage occupancy	Review and process payments	Manage relationship database	Report sustainability metrics
Manage portfolio data and documents	Monitoring utility consumption	Maintain space and occupancy data	Manage change order process	Conduct budget reconciliations	Develop Facilities and Administration rate
Abstract lease and associated documents	Create inventory		Complete asset documentation	Allocate cost to appropriate P&L	Develop labor rate
Manage payments and receivables	Manage Security Access		Archive documents		Perform billing
Conduct reconciliation and manage disputes			Perform financial contract closeout		
Conduct lease audit					
Report on compliance and FASB13 requirements					

Legend

- High More than 70% of activities can be automated
- Medium Between 30% and 70% of activities can be automated

At the task level, some notable examples include:

- Maintaining a real estate portfolio with up-to-date space, occupancy and cost data
- Uploading data to an integrated workplace management system (IWMS) or other portfolio management tools
- Assembling and organizing performance management data from multiple disparate systems to create regular reports
- Managing additions, edits, and deletions in security and building access systems
- Compiling utility bills, occupancy data, and weather reports to assess energy consumption and management
- Creating standard contracts for leases and constructions bids, especially those involving a large number of vendors
- Maintaining customer and vendor data

Call to Action for CRE&FM Organizations

Now that we understand what RPA is, there are a few questions for CRE&FM leaders to ask themselves to get started understanding RPA opportunities within the context of their own organization:

01. Are there routine CRE&FM processes which require significant manual labor to accomplish?



02. Does the CRE&FM organization have access to regularly updated portfolio data combining real estate fundamentals, lease status, personnel and financials? What is the manual work load to maintain portfolio data? How many different data sources are currently being aggregated and how often is the data updated?

03. Does CRE&FM utilize an IWMS system? If so, what is the manual work load to maintain updated and correct data?

04. Does the CRE&FM organization generate data (from building systems, facilities maintenance systems, work order systems) which are not used for anything yet because there is insufficient time or resources to organize and analyze the data?

05. Are other departments within the company (HR, Finance etc) already investigating or deploying RPA? If so, can CRE&FM leverage their leading practices/governance/capabilities to create a pilot?

Depending on the answer to each of these questions, the opportunities for deployment will begin to become clear. Robotic process automation is changing the way businesses are run, and soon it will change the way CRE&FM organizations are run. Are you ready?

Coming soon, part two of this series will take you through a deep dive into an RPA deployment in a CRE&FM organization and will present the roadmap through the RPA lifecycle to help you get started.

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