

DIGITAL

ROBOTIC PROCESS AUTOMATION - RPA

Make use of virtual assistants

Do you sometimes feel that the specialists you employ are wasting their time and talents on repetitive administrative tasks? Well, it's not just a feeling. Research shows that RPA software can automate as many as 40% (!) of manual tasks.

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Robotic Process Automation (RPA) is no short-lived technology hype. Instead, it's another step forward towards more comprehensive digitisation and an important contributor to an organisation's or company's competitive edge. Billy is proof of this assertion. Billy is the name of a collaborative software robot developed by a combined team of BDO Tax Advisors and BDO Digital Consultants. Billy has taken over all the monotonous, manual tasks from our human VAT specialist, Kelly. Now, Kelly and her colleagues are free to concentrate on exceptional cases together with their customers and provide them with advice on VAT regulations. What's more, by working together, the colleagues and Billy can now process customer files in under 30 minutes – which is nearly 4 times faster than before.

WHAT IS (THE ADDED VALUE OF) RPA?

Does the following process sound familiar? The accounting department receives an invoice, either on paper or by e-mail. It is then manually entered or scanned into an accounting program. After that, the invoice is submitted to someone else for approval,

either electronically or in printed form. Then, the print-out goes to the payment department, where an employee reads the invoice, checks that it has been approved, and enters the data into a payment program – perhaps after putting it in an Excel sheet. The invoice is now ready for payment in accordance with the previously agreed payment terms and conditions. Accounting prepares batches of various invoices to be paid, performs a final check, removes any duplicates, and submits the final invoices to the bank in bulk for payment.

The process described above takes place efficiently and with the support of integrated software – but in truth, not much of it is automated. Furthermore, despite extensive computerisation and digitisation, the integration of many companies' systems is not optimal. Moreover, to be able to execute business processes from start to finish, data from multiple systems and applications are retrieved or entered manually. Necessary, but not exactly efficient. Time for RPA, also called software bots.

Of course, the term 'robot' doesn't mean a metal humanoid that comes to sit by the employee's desk. RPA bots,



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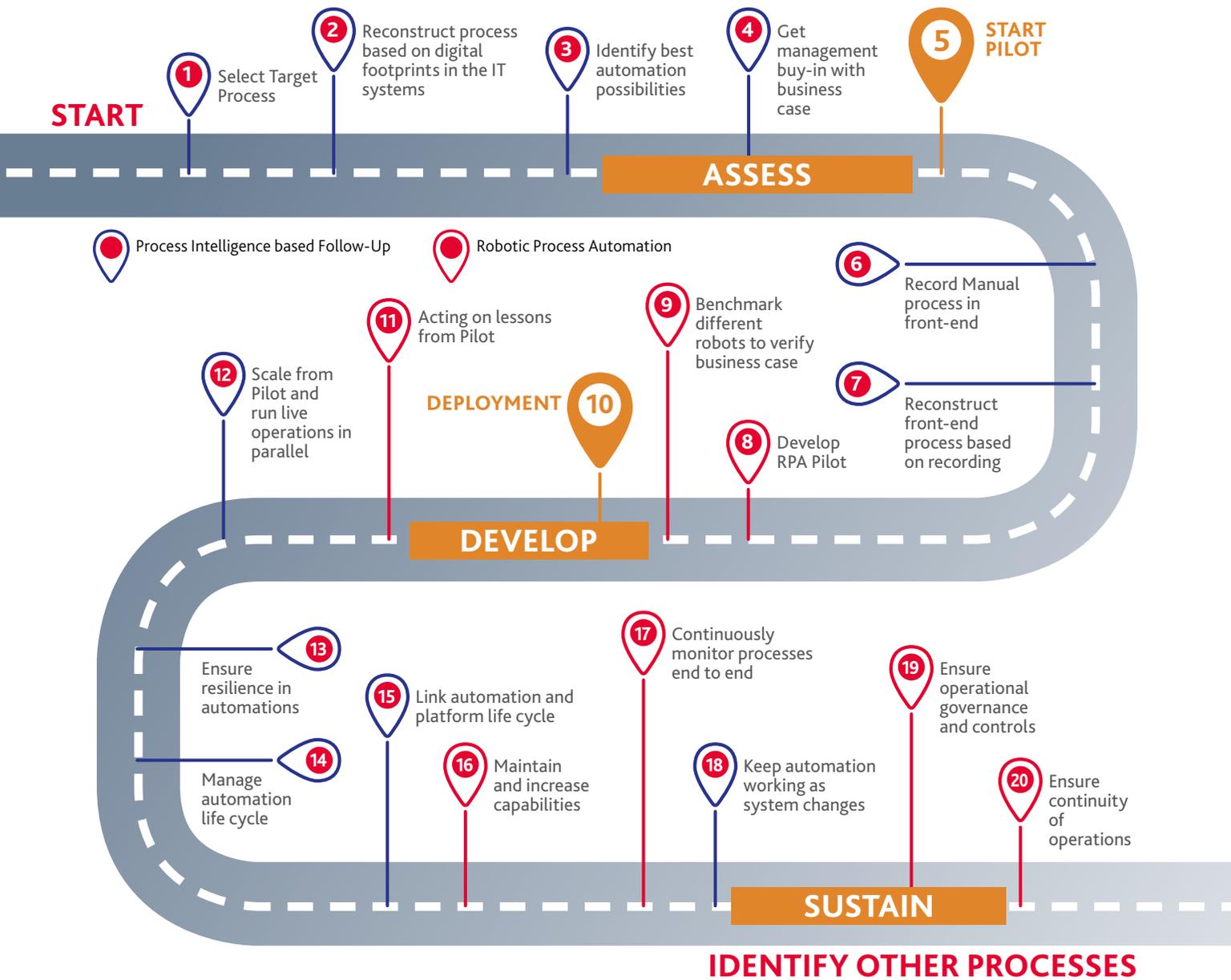
Walter Vanherle, Partner BDO Digital

DEFINITION OF RPA

The Institute for Robotic Process Automation (IRPA) defines RPA as “the application of technology that allows employees in a company to configure computer software or a ‘robot’ to capture and interpret existing applications for processing a transaction, manipulating data, triggering responses and communicating with other digital systems.”

THE FAST LANE TO RPA SUCCESS

THINK BIG, START CLEVER, SCALE TO CAPABILITIES



RESIDUAL AUTOMATION

RPA bots support automation without the need to abandon all existing software. On the contrary, in fact. RPA automates what 'key' applications leave undone and adds a layer that imitates employee actions. For instance, the robot learns key-presses, mouse movements, clicks and how to read information or screens (such as the contents of an Excel sheet). In short, RPA reads, interprets and processes information just as an employee would.

or software bots, use computer algorithms to take over routine tasks from humans and perform them as fast or faster, and more accurately. 'Reading' a PDF document or e-mail, retrieving data from different source systems, copying figures from an Excel sheet to an online application... These processes are all fine candidates for 'robotic automation'. Software bots are taught the sequence of actions and rules that the employee follows: they log in, read and copy the data, and then enter this data in the target

screen or other internal or external systems.

There are countless examples of possible applications in financial, HR or logistics administrative processes: preparing and submitting domestic and European VAT declarations, entering holiday and sick leave into social security systems (and uploading changes), transferring prices from transporters' online systems into the in-house planning system, transferring data between unlinked systems without an API

(Application Programming Interface or 'program-to-program' communication), and so on.

NO TO JOB DESTRUCTION, YES TO OPPORTUNITY

Despite what the doomsayers claim, RPA isn't equivalent to job destruction. RPA does affect our role as humans as it relieves us of 'boring' repetitive tasks, allowing us to focus on 'exceptions' and freeing up more time for the provision of advice. The latter are skills that RPA bots do not have immediately at their disposal. In other words, the technology's true potential lies in its ability to provide employees with room to take on different, more knowledge-driven, or creative assignments of greater added value. This does, however, involve redefining what jobs involve, which will require additional education and training. But with the right approach and guidance, RPA won't be a threat, but an opportunity.

(POSSIBLE) FEAR OF THE UNKNOWN

So, to demonstrate the RPA solution's real-life impact on the workplace and the changes it brings, our experts have



designed a specific RPA pilot focusing on familiar tasks that will generate little resistance from employees (both the 'senders' and 'receivers' of data or information). The pilot is intended to show them that, thanks to their virtual assistant, they can complete their duties rapidly, without errors and, therefore, more efficiently.

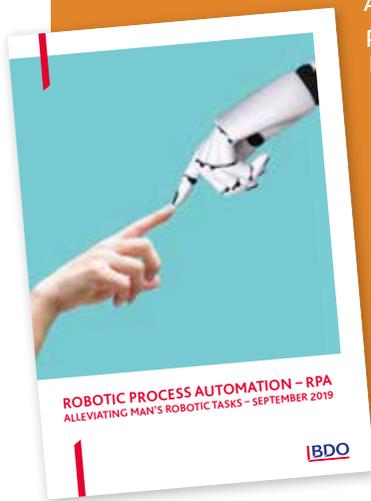
Simultaneously, we invite the managers of the various divisions and departments in the organisation to explore which similar processes and

tasks might qualify for RPA. We then assess the suitability of these tasks for RPA automation, taking the technical, process-related and financial implications into account.

Finally, in consultation with our experts, the RPA project business sponsor or sponsors (usually the business and IT managers) determine which processes or tasks will be the primary candidates for automation. Throughout each individual RPA process, we continually ask the

WHEN WILL AN RPA SOLUTION BE MOST PROFITABLE?

- 1 There is a standard process with known data sources and destination (whether single or multiple). The process is extremely labour-intensive and requires the frequent entry of many data points.
- 2 The process follows certain rules that do not require additional human reasoning.
- 3 The process must take place 24/7 (including holidays), exactly on time, at all times.
- 4 The process demands numerous on-screen actions, with long waits to change screens.
- 5 The process must interpret the contents of non-standard e-mail messages.
- 6 The on-screen actions take place in a Virtual Terminal Environment such as Citrix.



Also read our white paper 'Robotic Process Automation – RPA. Alleviating man's robotic tasks' at [advisory.bdo.be/rpa](https://www.bdo.be/rpa). Additionally, see the information sheet 'Ready for Robotic Process Automation?' included with this newsletter.

employees involved for their input and feedback. Management also communicates about the RPA solution's positive impact on job satisfaction and business results. Any resistance within the company or organisation is discussed and addressed through the illustration of practical benefits. After all, who wouldn't like a personal (virtual) assistant?

COST-EFFECTIVE INVESTMENT

RPA does not require a massive budget and can be implemented quickly. This is partly due to the fact that the existing applications ('legacy' systems) needn't be adapted (see 'Residual automation' insert on p 16). RPA bots can also offer complementary solutions or alternatives to non-existent or hard-to-implement data exchanges. BDO Digital has designed a specific business case approach. With regard

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AT LINEAS, 4 RPA BOTS ARE CURRENTLY HANDLING 20 TASKS

Lineas is Europe's largest private rail freight operator and convinces businesses to switch their goods transport from the roads to the rails, representing a boon to both mobility and the climate. The rapid expansion from a Belgian to a European market requires a scalable business model that can handle the necessary changes over both the short and longer term. The technological impact is significant and is made possible thanks in part to the use of RPA.

“RPA makes our organisation a more pleasant place to work, as it relieves employees from routine manual tasks and assignments that will shortly become impossible for humans to complete by themselves,” says Mark Geuens, CIO of Lineas. The RPA project began with a pilot scheme at the Cargo Operations Center. After this, the company brainstormed on the possibilities of RPA in other departments. “Currently, almost all departments deploy one or more RPA bots, with the main advantages being higher efficiency, increased procedural reliability, quality improvement and more motivated employees. Everybody wins.”

The immediate gains in efficiency, mood, cash or quality offered by each operational bot – we have 4 at the moment – are positive and are monitored closely and continuously. The 'downstream' benefits to the process (such as higher data quality and more comprehensive data) haven't been calculated yet, but they definitely exist. RPA bots are never the ultimate goal, but they can be very useful in an environment that's strongly committed to digital transformation. It must be realised, however, that such a transformation cannot be completed in just a few months. “With the use of 20 automated processes, a general break-even as to time and costs can be achieved in less than 12 months,” says Mark Geuens.

The decision to work with BDO Digital was influenced by both our technological expertise and our practical approach. After all, RPA implementation is about more than just the technology – deploying this technology correctly is at least as important. “It made sense to start by bringing together all the key figures. RPA experts joined forces with people skilled in process- and business-oriented thinking.”

Equally influential in opting for BDO Digital, according to Mark Geuens, was “The tiered approach, with a constant focus on the creation of added value for our business. Rapid assessments identified and prioritised the processes that would most benefit from robotization.”

to the revenue, our experts consider the direct and indirect advantages for the listed tasks and processes appropriate for RPA. These are often tasks from various departments (finance, logistics, customer relations, etc.). With regard to the expenses, we consider the investment to 'train' the robot in its tasks, the necessary RPA software and the IT infrastructure.

STEP BY STEP

As little to no coding or programming is involved, RPA technology can be implemented quickly. It can then expand to include more processes as these become financially feasible. Top tip: start with a single software robot to take over one assignment or task from an employee. A series of actions such as the entering of invoice data,



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for example. This solution can later be scaled up to include other tasks within the organisation, and these can then be further extended to encompass complete processes. If RPA is implemented on a large scale, a Centre of Excellence (CoE) becomes desirable. This team concentrates all the knowledge about the RPA project and consists of the business analyst(s), the infrastructure consultant, the RPA developers, and the project manager(s). ■

LIANTIS AND RPA AS A STRUCTURAL SOLUTION

Not so long ago, Liantis Sociaal Verzekeringsfonds voor Zelfstandigen (social insurance fund for the self-employed) and Liantis Ondernemingsloket (enterprise office) commissioned BDO Ideas at Work to carry out an extensive process optimisation project. That's when the possibilities of RPA first came up. "Detailed mapping of all of our processes made it clear how many of these processes contained repetitive tasks," remembers Karel Van den Eynde, Director of Organisation & Quality. "At the same time, we noted our teams' high workloads. That's when BDO proposed to address both of these issues through RPA."

"Things went quickly from there," says Michel Neirinckx from BDO IAW. "Within a few weeks, the social insurance fund had completed its first 'proof of concept', a fairly simple pilot demonstrating the RPA software's ability to run smoothly in Liantis's Citrix environment." "A sign we could proceed with the robotization of an entire process," Karel Van den Eynde continues. "We then automated all the repetitive tasks required to simulate pension calculations. Relieving our employees of these tasks freed them to concentrate on analysing the simulation and providing advice to our customers."

The success of that second step led to the next stage: searching for other tasks and processes suitable for RPA and making these a priority as well. Karel Van den Eynde: "Important criteria were time savings, process stability, and the impact on customer and employee satisfaction. This exercise resulted in 5 priority projects on our RPA wish list, which are now being successfully automated one by one."

The next step? In the future, RPA will become a structural solution for the robotization of repetitive processes for which traditional IT development would be too costly, or when the available IT resources are required for higher-priority projects. "Currently, at the top of our list is the creation of an RPA policy or RPA code of governance," says Karel Van den Eynde. "This will provide answers to such questions as: Which RPA expertise should Liantis cultivate in-house and what should we outsource? Which positions and processes will we need to manage RPA projects and maintain our robot portfolio?" In short, RPA has earned itself a permanent place at Liantis.

WHICH RPA FOR WHICH TASKS?

BDO Digital distinguishes 4 types of RPA bots:

- 1 Efficiency bots** relieve humans of monotonous, repetitive tasks, allowing them to work on assignments of greater added value. The benefit? Higher productivity within the same time period, and full, error-free process completion with all the concomitant 'downstream' benefits for the total process.
- 2 'Mood' bots** ensure a more pleasurable work environment. The business advantage? Better employee retention, thanks to lower job dissatisfaction due to the type of task. The expenses that are saved on recruitment and training are applied to the revenue side of the ledger.
- 3 Cash bots** provide a quick win, processing mountains of data at rates that would be unsustainable for humans. Therefore, cash bots often automate 'new' tasks that an employee or other solution could not have feasibly/affordably achieved before. Their implementation can be temporary (3 to 6 months), covering the time needed to roll out a more structural solution.
- 4 'Jumper' bots**, finally, are deployed for a one-time task, and can be implemented in a very short time thanks to the repurposing of subtasks from other RPA scripts. Examples include one-time data transfer or entry tasks and the measurement of response times for (online) applications.

QUESTIONS ABOUT A COMPLEX DIGITAL TRANSFORMATION?

Automation or RPA required? Need help selecting the right technology? Want a second opinion? If so, please do not hesitate to contact our specialists at BDO Digital or BDO IAW: walter.vanherle@bdo.be or michel.neirinckx@bdo.ideasatwork.be

They understand, and have experience with, the innovative possibilities offered by process analysis and automation, data processing and advanced analytics, as well as the required organisation and change management.