

INCREASED QUALITY IN MANUAL PROCESSES

When man and machine work together

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Automation with software robotics is not just a matter of optimisation, but also of increased quality in processes. Software robotics is well suited for establishing conducive co-operation between man and machine, but it requires an understanding of the strengths and weaknesses of robots as well as employees.

This article will describe why the quality of routine tasks is often challenged, how software robotics can accommodate these challenges and the practical benefits of co-operation between man and machine.

When man falls short

When the quality of processes needs increasing, complexity is often regarded as the primary challenge, but it is often the routine that trips us up. More and more processes are being digitised, and digital

administrative procedures provide opportunities for processing larger amounts of information within shorter time frames. On the surface, it is positive for the progress of organisations' processes, but the cognitive limitations of humans can also pose a risk to quality. This is due to the fact that the risk of error increases alongside the amount of information that we have to process. Quality is at stake in particular when we perform manual, routine processes, where one process is repeated several times, because here, we are tempted to carry out

the task in accordance with its character – in a routinely manner.

Performing routine tasks, such as entering data from several emails or cases into an IT system, occurs with fluctuating concentration. At the same time, we often try to get through the process as quickly as possible, while our ability to process information sets the speed limit in digitised administrative processes.

Digital routine tasks can be found in more or less all organisations, particularly in administrative support functions, such as HR, finance etc. When there is an error, it is often due to a moment of inattentiveness, which at best causes irritation and at worst can have extensive consequences. Quality control of these types of tasks should therefore acknowledge that humans fall short when large amounts of manual processes are carried out.

A constructive approach to acknowledging that humans need help could be to look towards the machine world.

The best of both worlds

In contrast to humans, machines are extremely well suited to processing large amounts of information quickly and precisely, as long as the process is rule-based. The atypical and unpredictable are, on the other hand, man's domain. From a quality perspective, rule-based routine tasks should therefore be performed to the widest possible extent by machines instead of humans.

Ideally, these tasks are performed by IT systems, but in reality, this is easier said than done. Organisations often have a number of different IT systems that do not communicate with each other, creating processes where employees enter data from one system into another with the risk of error. A solution to this challenge is system integration but at the same time, large IT projects constitute a significant organisational and financial risk and strain. Additionally, the organisational capacity for system integration is limited in most organisations, resulting in the

accumulation of system integration projects.

But what if instead we could leave the manual digital processes to a virtual employee, who possesses a machine's ability to perform rule-based tasks quickly and consistently? In that case, the right employee would then free up resources that could be focussed in areas where man is superior to machine: for quality assurance, professional judgement and processing atypical cases.

The quality of manual processes is increased in this scenario by combining the best of both worlds. This scenario can be brought to life by using software robotics to automate digital routine tasks in organisations.

A virtual workforce

Software robotics is a virtual workforce that is increasingly being used to automate processes. The technology has reached a maturity level which enables quick implementation and benefits realisation.

The often large savings potential can easily end up overshadowing the increased quality in processes, when the benefits of software robotics are assessed. Quality control should, however, be the focal point for co-operation between man and machine because in this context, process automation is about how software robotics can complement rather than replace humans.

Any co-operation between man and machine must involve rethinking organisational processes to find out where man falls short and where software robotics can advantageously take over. At the same time, the complete automation of a process should not be a goal in itself, as increased quality cannot be achieved by overestimating the ability of software robotics to perform the entire process.

The ideal co-operation lies in the correct division of the process in two parts. In one part, software robotics carry out the rule-



Software robotics in brief

Software robotics, also known as Robotic Process Automation or RPA, is a user-friendly software that functions on top of the existing IT landscape by integrating with applications, exactly like a human does.

There is no need for system integration or programming, and software robotics can perform all digital processes, as long as they are rule-based.

based work, which requires precision and consistency. In the other part, the employee checks the work with fresh eyes and carries out any professional judgement and authorises the process.

This approach provides three benefits:

1. Robots perform tasks based on a set of rules, meaning transparency is increased.
2. Robots do not deviate from the rules, which provides consistent quality in processes.
3. Robots pass on tasks, when a process does not fit the set of rules.

The value of data

When working with quality, documentation is a process requiring substantial resources, which in the worst-case

scenario can inhibit motivation and occupational satisfaction.

In organisations with large documentation needs, software robotics could meet a large part of these needs without employees registering anything, because software robots automatically document everything they do. If an error occurs in the process, it will appear on the list of processed cases and the robot can even categorise atypical cases that should be subject to further review.

A secondary benefit of registration is that a large amount of data is automatically generated which can be used for further quality control and documentation. Software robotics can therefore function as a springboard to making use of new technology by using accumulated data as input to, for example *Machine Learning*, *Business Intelligence* and other data-driven solutions.

FAST FACTS ABOUT IMPLEMENT

Founded: 1996
Number of employees: 800
Headquarters: Copenhagen
Offices: Stockholm, Malmo, Oslo, Zurich and Munich
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Increased quality in practice

In many public organisations, applications for subsidies for initiatives and activities within, for example, agriculture, the environment and culture are processed. The distribution of EU or national funds is subject to strict documentation requirements and uniform assessment of a range of more or less well-defined criteria.

Here, software robotics can complement employees by reviewing applications for objective criteria in a fraction of the time required by an employee. If an application meets the formal requirements, it is passed on to a case officer, who completes the processing.

This division of work reduces case processing time and increases quality, because software robots perform the preliminary work faster than a human could, while also being able to assess objective criteria in an error-free and uniform manner. In addition, quality is further increased as case officers can focus their energy on carrying out the necessary professional judgement.