Evaluating automations (1/49/20)

The new era of digitalisation sees companies increasingly adopting new tools and automations to stay competitive in the marketplace. Yet before implementing any new tool or automation, the company needs to consider a great deal of factors that can affect or stop it from achieving the desired result. Those factors are unique for each company, line of business, and internal processes. Automations and new digital tools are not magic bullets and don't bring e-happiness. Each automation has its own criteria that must be met to maximise returns on the time and capital invested.

Installing new software or building a new automation comes with the following questions:

Criterion	Description
Development and implementation	How complex and long is the development and implementation of the automation? Is it compatible with other IT systems?
Potential for error	Does the automation create/eliminate errors? How easy is it to observe and correct an error?
Performance speed	How fast is the automation in performing the job? How long does it take for the worker?
Human involvement	How much is the worker involved in operating the robot/software?
Permanence	Can the automation operate permanently? Does it need regular maintenance or configuration?
Flexibility	How well can the automation be adapted to variable conditions (e.g. new systems, changes to the design of existing systems, changes to the data structure)?
User experience	How intuitive is the tool? Will a user without prior knowledge be able to use it fully? How long is the required training?
Future-proofing	How future-proof is the automation? Is it going to be replaced by another one soon? Would the need for it disappear if the functionality of other systems or the way the company is run were to change?

Process automation brings the biggest rewards in the following cases:

- The job to be automated is a regular one (performed daily/weekly/monthly);
- The deliverable is a form, spreadsheet, questionnaire or other uniform document. Of course, we can also automate the preparation of complex documents but the development process will be longer;
- The result is not a file or document to be prepared. The job involves systems maintenance, data input or any other process based on a lot of clicks without the need for human thinking, evaluation or decision-making;
- The solution has to process large amounts of data;
- The ratio of implementation/development time to manual performance time is proportionate. Certain processes are technically easy to automate but the development process needs to accommodate a great deal of variables – creating various deliverables, using various forms, considering many non-standard cases and other factors that make the development process exponentially longer. In those cases creating an automated solution simply isn't worth the effort because the time spent developing it is far too long compared to how much time the solution can save further down the road.

Various automation examples for brainstorming:

- Creating standardised documents such as powers of attorney, business trip orders, standardised contracts and agreements;
- Preparing reports, e.g. monthly financial management reports, VAT reports;
- Gathering, cleansing, processing and preparing data for use in IT systems;
- Internal auditing, e.g. comparing a record of hours worked against the schedule;
- Compiling data from several sources, budgeting, forecasting.

We can see that no matter the type of solution, whether it's some over-the-counter software or a home-made automation, the most important benefit from adopting it is improved work efficiency. No other indicator is relevant if work efficiency doesn't improve. All the criteria listed above are directly linked to cost cutting or increased efficiency by automating processes and eliminating or minimising manual work. Another thing to note is that automated processes reduce the risk of human error. This reduction is difficult to measure but it's a real benefit. While process automation is extremely useful, it's never the right choice universally for all jobs a company needs done. We can automate practically anything but in reality only processes that maximise rewards are worth automating.