

Unleash the potential of automation in Healthcare

Automation by using technologies can be the answer to increasing costs and shift the paradigm to a patient-centric and outcome-based model that dramatically changes the entire industry. Considering the complexity, e.g. in regulatory processes, and therefore high required documentation effort, automation technologies can yield significant time and effort savings. In the following, we answer three key questions to outline benefits, a successful implementation approach, and relevant Healthcare use cases.

BY HERBERT HENSLE AND JULIAN JONTZIK

Digital transformation is rapidly expanding through all industries and lead to radical impacts on all parts of a company's value chain. Therefore, it is needed to focus on technologies, which add significant value to a company's processes, tasks, and its employees. To achieve such progress in a timely manner, one can use already existing technologies to enhance the digital transformation journey. The implementation of automation technologies (e.g. robotic process automation) can lead to significant quick wins and ultimately to an achievement of a competitive advantage.

1. What are the benefits of automation technologies?

Accelerating and improving processes

By automating repetitive, standardized, and time-consuming tasks, the execution time can be dramatically decreased. Put differently, an automated process can be 32 times faster than performing it manually. Directly after its implementation, automation technologies (e.g. software robots) autonomously execute their choreography without

interruptions, quick, and traceable.

Eliminating risk of errors within tasks

Moreover, manual human work will inevitably lead to errors due to lack of attention that is majorly caused by carelessness of employees. To avoid and quickly counteract that, the adequate implementation of automation technologies and its flawless performance is crucial to ensure full accuracy and reliability. Hence, automation technologies can lead to a high data quality.

Embarking virtual employees supporting daily activities

Increasingly growing complexity and therefore higher documentation effort requires additional workforce that can deliver constantly reliable results. For this, virtual employees (e.g. automation bots) can be hired to enable fast and significant organizational growth. Beyond that, headcount reduction is not the primary focus for automation technologies. They rather release employees from mundane tasks and can support employees to save time and to reinvest on valuable tasks.

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Increasing employee satisfaction

Focusing on valuable and sophisticated tasks attended by using more intellectual reasoning can yield higher satisfaction among employees that leads to a higher engagement and a lower churn rate. Given the most recent Forrester report, employees become more engaged by 57% and their churn rate decreases by 25% when automation technologies are adequately implemented.

Boosting user experience

Beyond employee satisfaction, even customers or users can be attracted by an improved automation experience. Being used to a digitalized world enhances the demand after quick responses and problem-solving. By providing automated real-time answers (e.g. through chat bots), users can be satisfied by receiving quick answers and, if needed, can be supported by a

better customer service of humans.

Payback within a few months

Due to its ease of implementation with relatively low required investment and the already described quick wins, return-on-investment can already be achieved within year 1 and a successfully implemented program can lead to a significantly positive NPV. Our O&C Lab analyzed that a 1€ investment can return into savings up to 14€.

2. How to successfully implement an automation program?

Automation program implementation approach

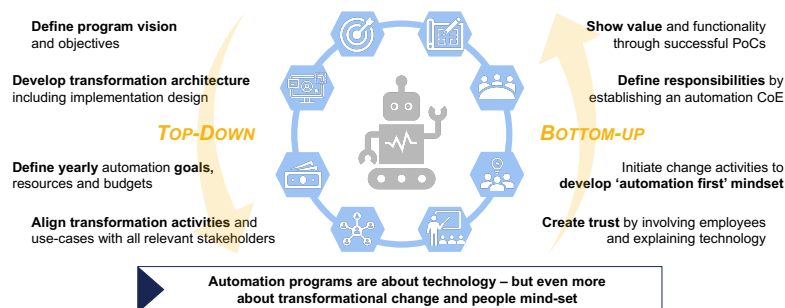


Figure 1 Automation program implementation approach

A great advantage of automation technologies is the variety of application areas within and across business functions e.g. Research & Development, Marketing & Sales, and Supply Chain. Considering that, an automation program needs an orchestrated set-up across the entire company to create a positively tangible impact and avoid only implementing single use cases. Figure 1 shows a successful approach that harmonizes the strategic and operational set-up.

Top-down – strategic set-up

First, for a successful implementation of automation technologies and its following transformation of operations a high commitment, involvement, and support of senior leadership is essential. To achieve this, an automation vision with clear objectives needs to be defined, and an “automation first” strategy is to be developed. Next, developing a solid transformation and an organization change model is key to define responsibilities, a governance structure, and a

Also, it is crucial to define operational responsibilities within the entire automation program and openly communicate achieved value and functionality.

In the following, crucial elements will be explained to provide some key learnings on how to run a program installing automation technologies.

Establishing a change model with change agents

As already learned, automation technologies change the daily way of working and a new mindset needs to be created that does not focus on current activities and hierarchies but on the future growth and value-adding activities instead of performing repetitive tasks. This change of mindset requires to establish a comprehensive change management program across all affected functions, teams, and all individual contributors.

Moreover, change agents need to be selected and trained who are majorly responsible for supporting change activities and developing meaningful use cases. To ensure continuous communication and bundle the required technical capabilities, an automation office that interacts with the functions and especially its change agents need to be established. This automation office transfers its automation and change capabilities into all relevant functions and their teams as well as comprehensively monitors the automation program’s process.

Bottom-up – operational set-up

Second, trust needs to be created among employees by further developing and operationalizing the defined change management activities.

Conducting automation workshops

To successfully transform risk avoided thinking into the already outlined “automation first” mindset, the creation of awareness for benefits, commitment, and engagement across all hierarchy levels is needed. First, the future automation vision, the goals and an “automation first” strategy should be developed in a joint

Automation Workshops

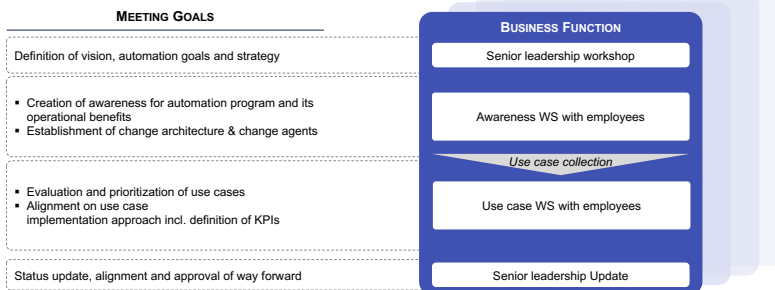


Figure 2 Automation Workshops

workshop with the entire leadership team. Once endorsed, awareness workshops per function/teams should be conducted to create full understanding of the technology and its advantages. Furthermore, awareness for the initiated program and its operational benefits for the employees should be created by transparently communicating the strategic and operational goals as well as showing value of first use cases. Both, the senior leadership, and the team workshops are crucial to sustainably mitigate concerns among employees and therefore initiate a mindset change. Based on this mindset, use case workshops can follow. After a comprehensive collection of use cases by the established change agents, they will be evaluated and prioritized against predefined criteria (e.g.

achievable benefits, simplicity and velocity of implementation). Simultaneously, the senior leadership and teams align on a use case implementation approach and define KPIs that ensure an accurate measurement of the implementation progress and the program’s success. This should be reviewed by a senior leadership update meeting to also investigate the current status, adjust the implementation approach, if needed, and align the way forward based on previous learnings. This

comprehensive and successful workshop conduction approach is illustrated in figure 3.

3. What are promising use cases in Healthcare?

The Healthcare industry and in particular the Pharma industry is continuously under tremendous pressure to launch new products and services due to expiring patents and high competition in all markets. The demand pull in certain therapeutic areas requires ground-breaking innovations, delivered fast and reliable. Major players have already recognized that the next step in digitalization is needed to meet this demand of their stakeholders and ultimately survive in the market. Hence, several use cases of automating processes and tasks have been recently occurred in different

business functions, starting in administrative functions like Finance but also now moving into value chain functions like Supply Chain, Marketing & Sales and Research & Development.

Volatility in demand for medical supplies, tests, and equipment can expose inventory and lead to supply chain gaps. To avoid such circumstances, automation technologies can support to handle a high order processing effort. Standardized orders can be directly transferred by a bot into ERP systems that enables an anticipative and fast planning of resources. Beyond that, several bots can communicate with each other to maintain a live status quo that can be helpful for both the sales representative and the customer. Therefore, the sales representative can focus on and improve the customer relationship.

Furthermore, use cases with significant potential can also be found in R&D. As example, due to the complexity of regulatory requirements in Development, the documentation effort is tremendously high and further increasing. Getting a fast approval for new products requires both editing and managing a high number of documents and ensuring data consistency and quality. This can be achieved by the variety of application and adaptability of automation technologies that enable an accurate deployment.

Regarding clinical trials, it is necessary to maintain and store specific documents in an electronic Trial Master File (eTMF). These documents can require different activities by different parties within a different timeframe. Therefore,

these processes are not standardized, with many variances and use of multiple systems from trial to trial. The implementation of automation technologies can directly and significantly support to deliver documents in a timely manner by checking due dates and autonomously inform the team e.g. via a chatbot. Also, the team can directly communicate with this bot to request status reports based on predefined criteria. To enable the employees' focus on value-adding tasks, a bot also uploads and archives documents accurately after precisely defined rules.

An exemplary overview of use cases in Healthcare is illustrated in the appendix, annual 1.

Summary

Automation use cases are easy to implement and can therefore lead to quick wins and ultimately to a competitive advantage. Furthermore, it can yield a significantly increased employee satisfaction due to reduced repetitive tasks and a clear focus on sophisticated problems to foster innovation. However, a balanced top-down, bottom-up approach is needed to initiate a transformation by defining goals and a vision that must be aligned and lived by the senior leadership, and to change the mindset to “automation first” by eliminating concerns among employees. Awareness workshops can help to explain the technology and show its operational benefits. Furthermore, a comprehensive change model will ensure the transfer from an automation office into the relevant business functions, the exchange of experiences, and a continuous and well prepared communication to all stakeholders.

The high potential of automation use cases is represented by several examples in the Healthcare industry. Hence, more and more players foster automation technologies in their business to increase the velocity, accuracy, and quality of their processes and therefore gain competitive advantage.

You are interested in further information of automation technologies or want to share your thoughts with us? Reach out to us:

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Appendix

Annual 1 – Automation use cases samples in Healthcare

Automation use cases in healthcare

Finance & Accounting	HR Management	IT	Marketing & Sales	Procurement	Research & Development
Bank account data consolidation	Absence reports cross-check	Backup and patch management	Calculation of sales	Capturing emailed invoices	Data checks/ entry in research lifecycle
Bank statement data extraction	Aggregating CVs	IT helpdesk requests	Customer order management	Delivery receipts cross-check	Experiment monitoring
Financial report preparation	Employment history verification	Password resets	Email processing and automated response	Invoice data extraction	Quality assurance
Financial planning & analysis	Handling sickness certificates	Sending user notifications	Invoice creation and delivery	Vendor record set up & updates	Setting up protocols
Tax filings	Employee payroll administration	User account management	User preferences updates	Work order management	Updating electronic notebooks
Budgeting and forecasting	New employee onboarding	Cybersecurity diagnostics	Marketing strategy	Inventory management	Plausibility check
Cost center updates	Workforce data administration	Data migrating	PR and communications	Purchase orders creation	R&D strategy

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<https://www.automationanywhere.com/rpa/robotic-process-automation>