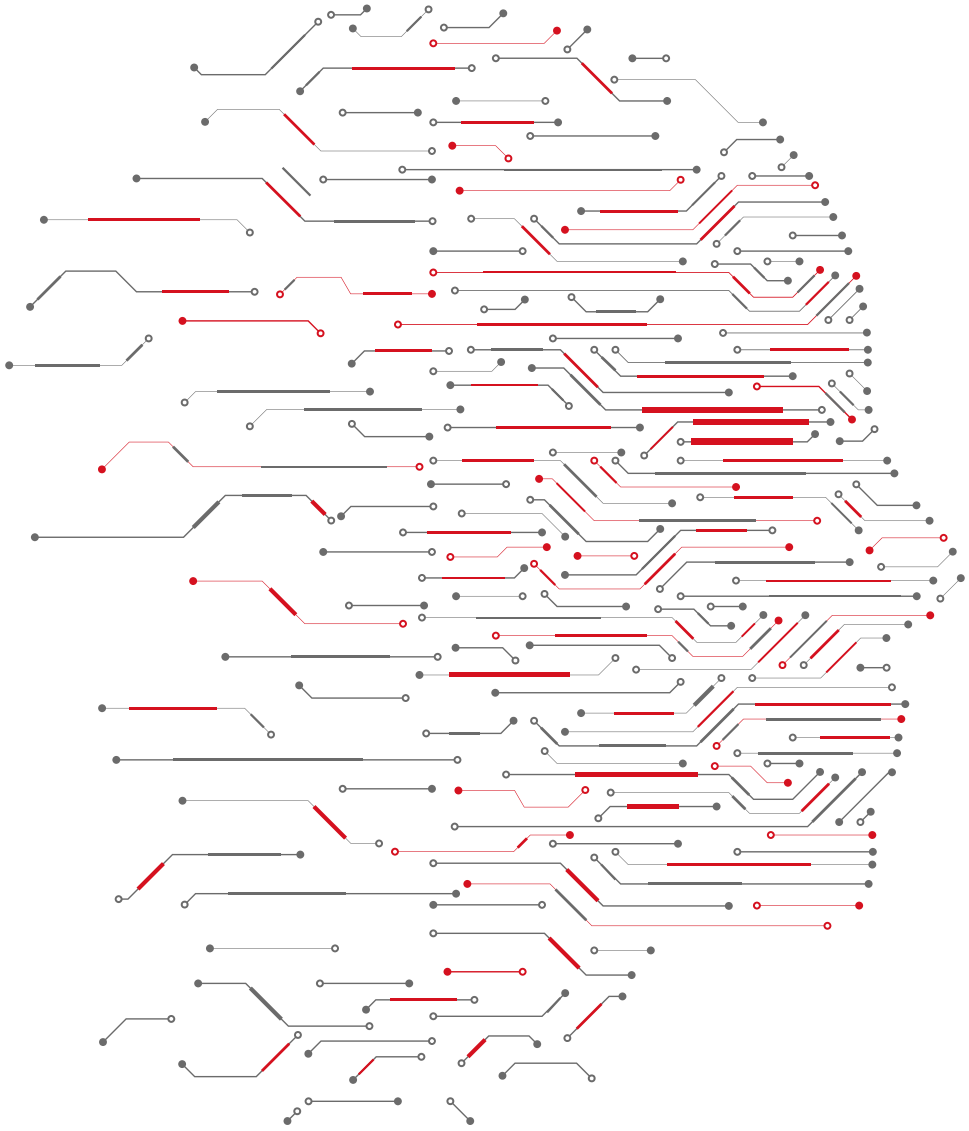
Digital Transformation



The Path towards the Self-Driving Enterprise

How to Automate your Corporate Supporting Functions

Porsche Consulting

Strategic Vision. Smart Implementation.

Core Hypotheses to become a Self-Driving Enterprise

As technology advances, and particularly as artificial intelligence is no longer the exclusive domain of a few large companies, any enterprise has access to the tools and know-how to embark on the journey to become a Self-Driving Enterprise (SDE). Digital transformation, and with it the automation of tasks and entire business processes, is one of the crucial levers to become a high performance organization.[1]

The end point is a layer of machine intelligence that proactively engages with relevant users and provides analytics with real-time recommendations for decisions. It fosters collaboration to increase the efficiency, quality and speed of team work, and that eventually matures into a cognitive system that understands business contexts and uncovers opportunities to improve financial and non-financial performance.

Due to this technological progress, organizations are increasingly able to reallocate resources from standard, often routine tasks to those with high human value-add and higher strategic relevance. Repetitive tasks can be successfully automated to a large degree across all supporting functions of an enterprise, from IT operations and procurement to finance, human resources and legal. The resulting efficiency gains range from 20 to 60 percent.

From a technological point of view, the time to embark on this journey is now. Technology-enabled transformation typically starts with (digital) process redesign, followed by applying robotic process automation (RPA) tools to administrative tasks. At a later point, machine learning-based systems augment and, to a varying degree, even substitute complex human activities requiring intelligence and creative thinking. We expect such AI-based systems to be monetized at scale in 3-5 years.

The sooner an organization develops a strategy of how to apply AI to its supporting functions and creates an inclusive culture of experimentation, the easier it will be to overcome internal resistance and be ready to reap the significant opportunities already on the horizon.

This report explores the value that can be captured through technology-enabled automation in major corporate supporting functions, highlights top use cases and best practice examples, and suggests how companies should start their transformation journey towards a Self-Driving Enterprise to overcome typical roadblocks.

At a Glance

- Automation of corporate supporting functions can yield efficiency gains of up to 60 percent
- The necessary technology is available, so the time to act is now
- Already commercially available tools like RPA provide quick wins
- Artificial intelligence-based systems will be fully monetized in 3-5 years
- Enterprises need to think big but act pragmatically
- The corporate immune system is the biggest roadblock – a clear strategy and lighthouse projects help overcome resistance

[1] An HPO is an organization driven by the willingness and ability of the organization and its employees to consistently deliver superior results, now and in the future. See our whitepaper "Five Practices to Accelerate Your Organization to High Performance" for more details.

Digitalization is a Key Driver of High Performance Organizations

Corporations today are in a race to transform their organizations and processes for a thoroughly digital and connected world to boost their efficiency and reap competitive advantages. Massive advances in artificial intelligence and its sub-discipline of machine learning in particular have laid the foundation for accelerating technology-driven change.

But corporate transformations still have a dismal success rate, with experts reporting that three out of four fail because they don't deliver the expected benefits or are abandoned entirely. Business leaders therefore need to develop a transformation strategy that ensures their enterprise evolves into a high performance organization (HPO). High performance thinking tries

To achieve High Performance five HPO design levers can be used

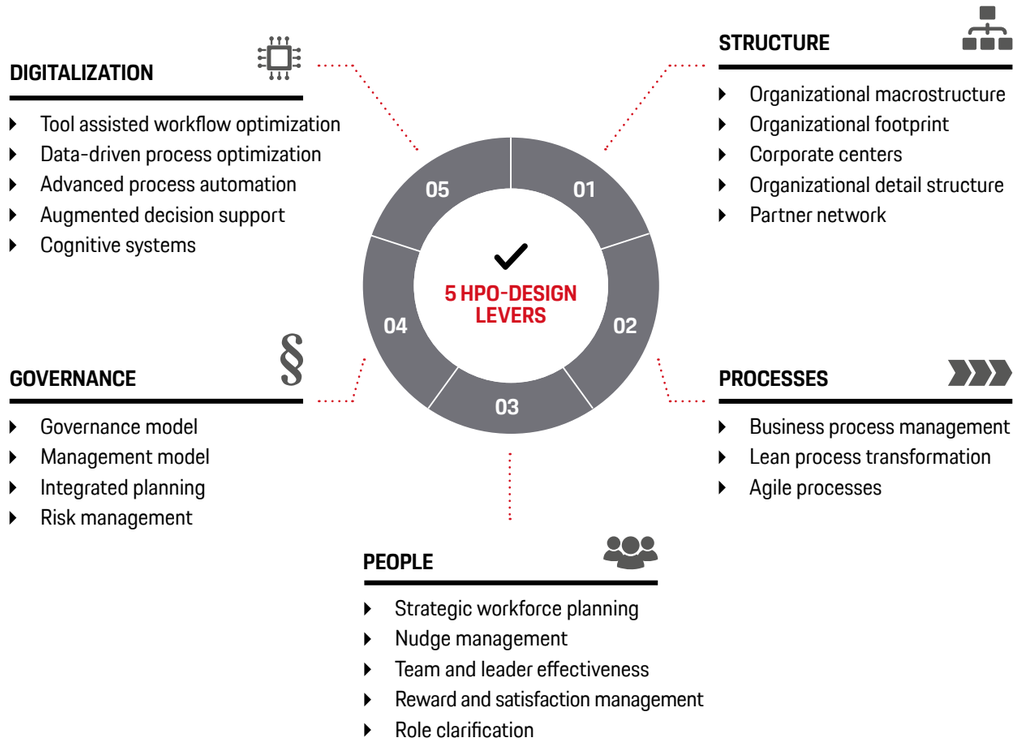


Figure 1: High Performance Organisation design levers

to prevent costly failures from the outset by focusing on the willingness and ability of an organization and its employees to consistently deliver results – today and in the future.

Digitalization is one crucial lever of achieving high performance since it helps the enterprise automate and speed up its processes. Exploring and implementing smart systems will enable data-driven decision making in areas from financial planning and budgeting to setting strategy. By thinking big and acting pragmatically now, an enterprise can start with automating repetitive, transaction-based processes and move forward with building and training neural networks to explore promising more complex use cases that will pave the way for a truly Self-Driving Enterprise.

By that we mean an enterprise that leverages the continuously growing power of cognitive systems to augment human intelligence tasks and that will eventually be able to collaborate with humans on truly complex and creative tasks such as strategy development. While those benefits won't be monetized at scale for at least another three to five years, it is crucial to start with AI exploration immediately.

AI used to be the domain of a few privileged companies with deep pockets and an equally deep bench of talent, but it is now becoming widely available through cloud services, compute power on-demand and open source frameworks and tools. Steadily improving algorithms and open source activities that benefit all members of the AI community, from academics and startups to established enterprises, are the tell-tale signs that the time to take advantage of this "democratization of AI" is now.

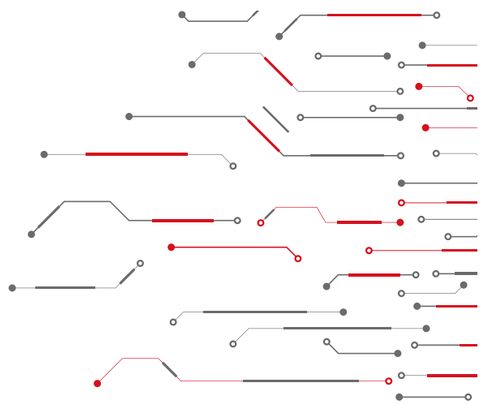
This new and emerging technology space can be summarized as "systems of intelligence." It is a new layer in the enterprise stack that converts the shortcomings of existing front and backend systems into new opportunities, connecting human interface systems such as email or chat to a company's ERP, CRM or other systems of record. Systems of intelligence offer several benefits, among them gaining contextual, real-time insights across silos to exploit untapped business opportunities, or smart process "hacks" without the need to change legacy systems, thereby increasing ROI and implementation speed.

Methodology

This report is based on interviews with technology experts at companies that are already applying the relevant technologies, vendors that provide automation tools (e.g. RPA), as well as talks with relevant automation and AI startups. Additionally, we looked at venture capital deal flows to monitor the ever-changing technology landscape.

Best practice examples, which are mentioned in short breakout sections, provided another valuable source. The report also incorporates the extensive expertise of functional experts at Porsche Consulting who possess hands-on experience with technology-based transformation projects and relevant use cases.

The SDE concept does not assume we are approaching a world of "lights out" factories where robots are left to their own devices, but instead a fluid collaborative scenario in which humans embrace technology where it is most advantageous to drive efficiency and keep a competitive edge. This report will describe in detail several such high-potential use cases to let organizations leapfrog their competition when it comes to better managing cost, risk, efficiency, insights and compliance.



The Path towards a Self-Driving Enterprise along Five Levels of Digitalization

Analogous to the development path of autonomous vehicles, the advent of the Self-Driving Enterprise advances along five levels of automation characterized by increasing intelligence and complexity. Before getting into details, it's worth defining what exactly the SDE means. In short, a Self-Driving Enterprise takes actions autonomously for all those tasks at which machines are more efficient and provide superior quality.

Reflecting the impact levels of a high performance organization, the SDE also touches all layers of an enterprise. On the level of the individual employee, it proactively engages with relevant users and provides them with analytics complete with real-time recommendations for what decisions to take. At the team level, the SDE fosters collaboration to increase the efficiency, quality and speed of the team's work. Zooming out to the corporate level, an SDE is able to understand business contexts and can surface opportunities to improve both financial and non-financial performance.

The guiding principle behind this journey must be to free resources now spent on standard, must-do tasks that "keep an organization's lights on" and dedicate them to tasks where humans provide a bigger value-add. While automation efforts in a first

Guiding principle of a Self-Driving Enterprise is the shift of resources from standard, but must-do tasks to high human added-value tasks

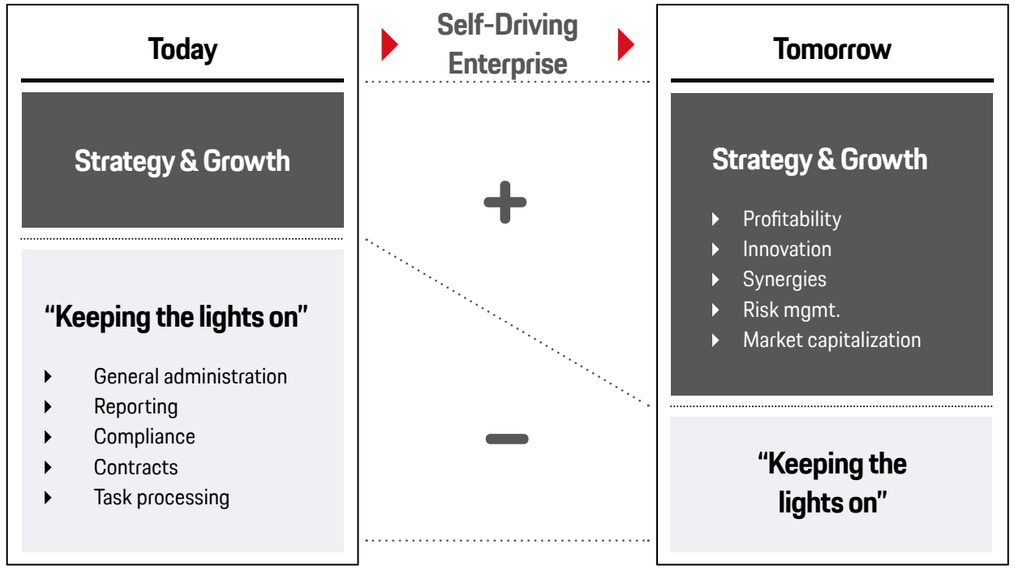


Figure 2: Guiding principle of a Self-Driving Enterprise

Across all task types automation can help capturing significant potentials

TASK TYPES	MAINLY ADDRESSED BY AUTOMATION TYPE	AUTOMATION POTENTIAL*
CREATIVE TASKS Creativity-based tasks involving lateral thinking in highly unstructured environments, e.g. strategy development	**COLLABORATION** Humans remain in the lead(for now), but potentials for improved collaboration	**5–15%** Automation in narrow sense not possible
HUMAN INTELLIGENCE TASKS Combination-based tasks involving contextualization in unstructured environments, e.g. financial planning & budgeting	**AUGMENTATION** Focus on human augmentation, but can be automated to certain degree	**10–30%** Tasks partially automatable
LOW HUMAN ADDED VALUE TASKS Reactive tasks focused on execution of repetitive & rule-based, tasks, e.g. payroll and invoicing	**SUBSTITUTION** Fully automatable tasks (technically); selected tasks can even be eliminated	**80–100%** Tasks fully automatable

*Technical automation potential

Figure 3: Task types and automation potentials

step aim at reducing efforts for general administration, reporting, compliance, contracts or task processing, the SDE – at full deployment – can support and empower humans in areas such as strategy and growth. The effect will be to boost profitability and innovation firepower, to uncover and unlock synergies and to enhance risk management, ultimately pushing shareholder value.

Regardless of what level of digitalization an organization has achieved, we can distinguish between three types of tasks and corresponding types of automation. At the bottom rung, we find low human added value tasks, meaning they are reactive and focused on executing repetitive and rule-based tasks. Payroll and invoicing are two good examples. Technically speaking, 80 to 100 percent of these tasks can be automated where machines substitute humans to complete the various duties. A prime example is the use of robotic process automation to automate data entry and consolidation from several legacy systems.

Next are tasks requiring human intelligence to combine and contextualize data sources and other input, often in unstructured environments such as financial planning and budgeting. Automation of these tasks should focus on augmentation via assistance systems that empower the human workforce to complete their responsibilities more efficiently. Examples are real-time assistance systems that can master natural language to guide contact center agents when fielding customer inquiries. We estimate that only one-tenth to one-third of these intelligence tasks can be automated.

Creative tasks sit at the top rung of the ladder. They call for lateral, open-ended thinking in highly unstructured and dynamic environments such as strategy development. Humans will remain in the lead here for now, and given the complexity of creative work, automation will likely not exceed 5 to 10 percent. Automation at this level primarily takes the form of collaboration, providing digital support for several individuals to communicate and jointly accomplish tasks. One use case is a virtual supplier room driven by product lifecycle management technology in which various companies can collaborate.

The Path towards a Self-Driving Enterprise along five levels of digitalization

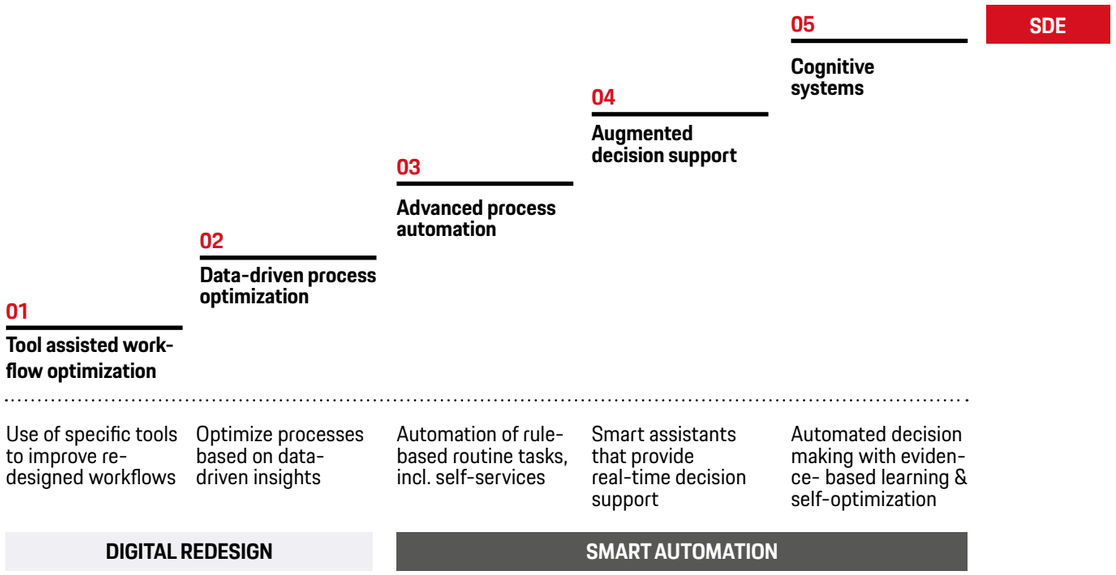


Figure 4: Five levels of digitalisation towards the Self-Driving Enterprise

No matter the type of task, it is worth pointing out that deploying automation will only yield the desired benefits if organizations are willing to redesign their processes and workflows.

The path to the SDE consists of five levels of digitalization that build upon one another. While the first two levels primarily focus on the aforementioned digital redesign of processes and workflows, levels three to five add smart automation elements to it.

The starting point, or level one, is tool-assisted workflow optimization, a step that many organizations have already taken. Typically, it comprises business process management and business intelligence tools for automation and collaboration tools or social networks to promote human interaction.

Climbing further up along the digitalization path to level two, organizations tackle data-driven process optimization. Machine augmentation adds more compute-intensive approaches such as process mining, data visualization as well as self-services to the mix. At its fullest implementation, humans collaborate in virtual workspaces, use enterprise content management and knowledge management systems to quickly identify and solve complex, high-value questions.

Level three is defined by advanced process automation. Rule-based routine tasks are automated via RPA. Augmentation at this level includes augmented reality-based AR-based systems and chat bots that take care of the basics. Humans can avail themselves of data and collaboration platforms that connect

multiple, previously siloed data stores into one whole, often across more than just one institution.

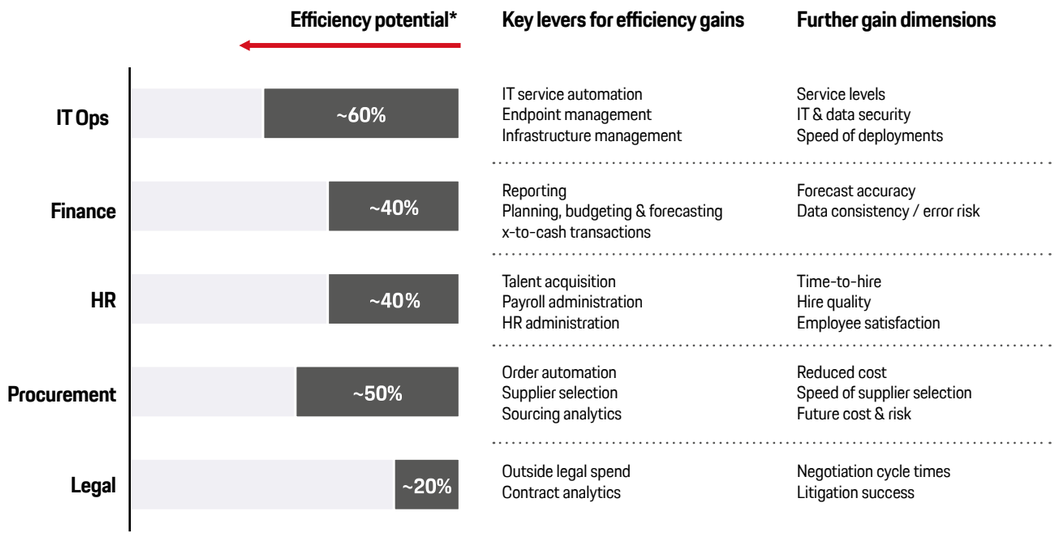
Smart assistants provide augmented decision support at level four. Humans can leverage virtual agents and tools such as predictive models and scenario analysis to excel at their jobs.

At the fifth and final level of automation, cognitive systems will automatically make decisions powered by evidence-based learning and self-optimization. Employees tap into recommendation engines and behavioral analytics powered by continuously learning AI. Working at this level means routine access to cognitive assistants and cognitive collaboration platforms, for instance in R&D environments.

High Potential Use Cases to Realize Leapfrog Efficiency Gains

The overall efficiency gains that can be unlocked by automation vary greatly depending on the supporting function. They are lowest in legal, with about 20 percent, followed by finance and HR at around 40 percent. The two functions with the highest potential for efficiency gains are procurement and IT operations with 50 and 60 percent, respectively.

Overall efficiency potential of selected supporting functions



* Efficiency potential: % of FTE spent on activities that can technically be automated by adapting current and conceivable technologies along the dimensions substitution, augmentation and collaboration. Realized efficiency potentials depend on more factors and are company- and environment-specific

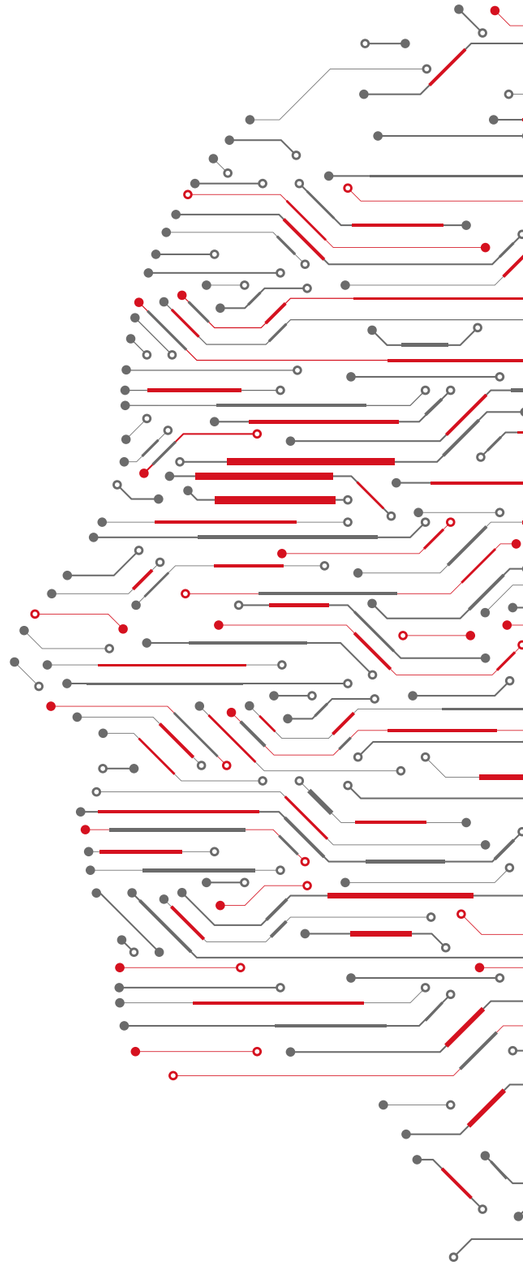
Figure 5: Overall efficiency potential of selected supporting functions

These high numbers are due to powerful levers that an organization can push or pull in each function. In IT, those key levers are service automation and endpoint management, with further gains coming from IT and data security and a higher deployment speed. Finance can leverage automation in reporting, planning, budgeting and forecasting. Digitalization will boost forecasting accuracy and data consistency.

Main levers for HR are efficiency gains by (semi-)automating talent acquisition as well as HR and payroll administration. Further gains are within reach by cutting down on time-to-hire and increasing the quality and fit of new hires. Procurement stands to benefit from automating the ordering and supplier selection process, with additional efficiency gains coming from reduced costs, speedier vendor selection and a better handle on managing future costs and supply chain risks.

The legal function finally can leverage automation to manage its external legal spending and analyzing contracts. Automation can further help shortening negotiation cycle times or impoving success rates when litigating.

We have identified more than 40 use cases that have the biggest potential to let an enterprise experiment and gain experience with automation and intelligent systems. These technologies let them unlock added value by automating increasingly demanding tasks corresponding to digitalization levels three to five. They cover the five major supporting functions of an organization. A subset of 25 use cases promise the most substantial efficiency gains from our point of view.

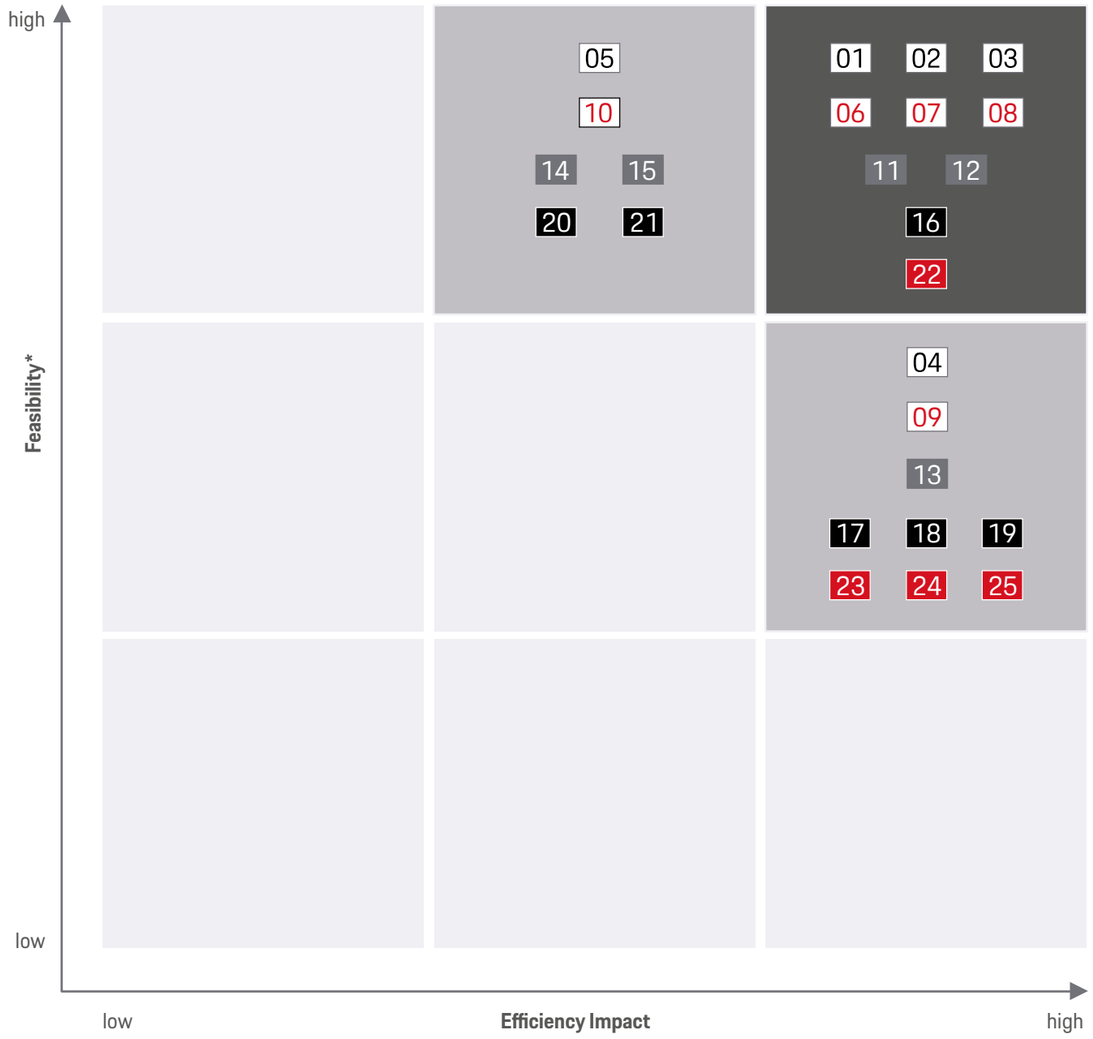


Top 25 use cases for the Self-Driving Enterprise

	USE CASE	
IT Operations	01	IT service desk automation with self-service & cognitive agents
	02	Automated test, deploy & patch management for applications
	03	Data management-as-a-Service for auto. governance & backup
	04	AI-based self-learning problem solving hub for IT service operations
	05	Self-service identity, account & access management
Finance	06	Self-service report factory
	07	X to cash workflow automation (Quote-2-cash, Invoice-2-cash)
	08	Automated financial close, consolidation & reporting
	09	Integrated real-time planning & financial analytics platform
	10	Automated tax & customs administration
HR	11	RPA-based automation of operational & administrative tasks
	12	All-in-one human capital management cloud platform
	13	AI-automated sourcing & assessment of best-fit recruiting candidates
	14	Employee-centric retention platform w/ individual benefit programs
	15	Holistic KPI-driven tracking & mgmt. of employee performance
Procurement	16	Data-driven category management & analytics platform
	17	Augmented negotiation of contract terms
	18	Smart workflow to semi-automate procure to pay process
	19	Automated bot-driven supplier interactions
	20	Self-service supplier master data management
	21	Automated strategic reporting cockpit with analytical drill-down
Legal	22	Analytics-driven legal spend & matter management
	23	AI-based contract / document analytics
	24	Data-driven and semi-automated IP lifecycle management
	25	Prediction and avoidance of warranty risks

Figure 6: Top 25 use cases for the Self-Driving Enterprise

RELEVANCE OF USE CASES



* Feasibility assessment based on currently demonstrated technology and required implementation effort Source: Porsche Consulting

Deep Dive: IT Operations

Imagine you had an AI-based self-learning hub that can automatically solve IT problems as they emerge. This scenario is one use case that can unlock upwards of 80 percent in efficiency gains and speed up the execution of varying and therefore non-repetitive IT tasks by a factor of 20+.

An organization can get there by automating its endpoint[2] and infrastructure management, for instance by using machine learning for application management and automating service level monitoring and reporting. Further, the corporate IT help desk can be included to automate ticket resolution.

To build an AI-based self-learning problem-solving hub for such IT services, we can identify four distinct process steps. First, an organization has to set up and train a self-learning AI algorithm by codifying human problem-solving strategies into small, quasi atomic-level pieces of contextual information. That way, the algorithms can store and later draw on the salient experiences and best practices of human IT experts.

Once this knowledge graph has been built, the AI engine can analyze incoming IT tickets, automatically classify them by problem type and then combine different pieces of knowledge into a tailor-made resolution graph. That opens the way for machine-driven problem solving. The AI engine will automatically find the best path to a solution based on the codified knowledge and interact with admin systems as well as users when needed. Through reinforcement learning techniques[3] the AI engine continuously learns from each step and its success rate to improve the efficiency of future resolution graphs.

Best Practice Examples

Swiss bank UBS is one enterprise that since 2016 has been implementing an AI-based problem-solving platform by Arago across its global IT department. It is able to address 80 percent of all processes that are usually handled by full-time employees (FTE) and saw a 50 percent reduction in scope.

An unnamed multinational tech conglomerate replaced its previously manual patch management[4] for 1,200 different applications with an AI-based system. The measure yielded a 90 percent reduction or total savings of 20,000 man-hours and turned out to be 8.5 times faster than before.

Deep Dive: Finance

Smart automation can unlock combined efficiency gains of 40 percent through three different points of attack: betting on reporting via a self-service report factory, automating financial planning with an integrated real-time planning and analytics platform, and automating the x-to-cash and accounting close functions.

[2] Endpoint management lets an enterprise centrally manage, patch, and control the configuration and network access for all its various endpoint devices such as desktops, laptops and mobile devices.
[3] In machine learning, algorithms use statistics to find patterns in massive amounts of data. Machine learning comes in three varieties: supervised, unsupervised and reinforcement learning. In supervised learning, which is still most common, all data is labeled before being fed to the machine, while in unsupervised learning, the data has no labels. Reinforcement learning is considered the latest frontier in AI because the algorithms use a human-like trial and error approach to achieve a pre-defined goal.
[4] Patch management allows a company to test and install updates to its various software applications and tools whenever code changes occur (e.g. new versions are released, bugs or security holes are fixed).

An integrated platform for real-time financial planning and analytics offers the single biggest upside, freeing up 30 percent of currently required staff and offering 20 percent faster reporting consolidation while forecast accuracy improves and risks of human error decrease.

Automation starts with fully connecting the financial impact of strategic choices in real-time across the P&L statement, balance sheet and cash flow, which allows for a multi-dimensional analytical drill-down. At the planning level, strategic and operational planning can be partially automated with unlimited dimensions matching top-down and bottom-up planning. Collaboration features in the budgeting function improve the interaction of the finance department with business partners when it comes to budget allocation and target setting for metrics such as sales quotas. Forecast analytics based on historical trends and insights will improve accuracy, while scenario analysis shows impacts in real time. Having such a system in place boosts reporting capabilities, ranging from automated consolidation in real time to variance reporting and self-self-service reports with automated interfaces instead of traditional slide decks or spreadsheets.

Best Practice Examples

Intel Security implemented an integrated real-time planning and financial analytics platform to revamp the quota management and sales compensation system for its 1,500-plus strong sales force. As a result, reporting and review times dropped from 48 hours to seconds, yielding an ROI of more than 400 percent within six months.

US-based carrier United Airlines replaced its system for forecasting, budgeting and variance reporting that previously ran on Microsoft Excel spreadsheets and a Microsoft Access database with a cloud service provided by Anaplan. The airline saves about two months of work on an annual basis and is benefiting from advanced decision making with what it calls “a one-stop shop for our operational partners”.

Deep Dive: Human Resources

Particularly two main fields of application in the human resources arena account for about three-quarters of potential efficiency gains: Core HR functions and recruiting. The solution to accomplish this is an all-in-one human capital management (HCM) platform in the cloud, which allows an enterprise to radically redesign highly individualized legacy HR processes and introduce lean and integrated best practices and workflows.

An HCM platform from providers like SAP SuccessFactors or Workday can boost efficiency of operational repetitive administration processes by up to 80 percent by dramatically cutting organically grown processes. Additionally, they are the basis to enable faster processes and ensure 100 percent accurate employee data by eliminating sources of human error caused by manual interfaces and media breaks.

For HR, the path to smart automation may start with deploying a bot-based digital assistant that interacts with employees via web, mobile or other chat channels to handle general inquiries, such as how to handle the onboarding of a new intern. As a second step, RPA can be applied to check the consistency of constantly changing employee data.

HCM platforms – as a single big transformation step – pro-

vide multiple advantages in all those scenarios. With all data residing in one single system, talent management requires no more extra administration and can be handled by management alone. Employee development can also be largely automated by pushing and tracking events and content such as training modules. Payroll administration is automated with embedded deep learning to detect likely but non-obvious paycheck errors. Compared to human handling, an AI-powered payroll performs at near 100 percent accuracy.

Another promising HR use case leverages AI to automate the sourcing and assessment of candidates, yielding efficiency gains of 90 percent and cutting the time to hire by 70 percent, all the while raising the quality of applicants. Other digital solutions can automate timely candidate sourcing, e.g. job listing optimization. Machine learning assists in candidate screening by automatically surfacing relevant insights from video interviews and online assessments down to the choice of words or body language. Repetitive workflows for the following onboarding process of a new employee can also be automated to save time and human effort.

Having a look into the performance of the workforce, tools that analyze social channels using AI will predict an individual's performance. Demand forecasting and predictive analytics to identify who might leave the company can boost employee retention.

Best Practice Examples

German insurance company Allianz is using chat bots to manage HR enquiries. French pharmaceutical firm Sanofi has reduced the administrative burden for the HR function since it successfully engaged employees and management to work with a cloud-based HR solution. It also uses embedded HR analytics to improve its planning and decision-making.

San Francisco-based hospitality marketplace Airbnb uses machine learning systems to qualify its applicants and as a result reports faster hiring of better qualified candidates. Car manufacturer Nissan has rolled out a data-driven integrated talent management system that gives the company a better chance to make the most of its in-house talent.

Deep Dive: Procurement

Infusing the sourcing process with machine intelligence can yield efficiency gain and incremental savings in the areas of order processing, sourcing analytics and supplier selection, thereby increasing savings per buyer.

One example is a smart workflow to automate the procure-to-pay process, freeing up 60 percent of employees or reducing outsourcing cost while reducing cycle times by the same amount. In this scenario, bot assistants interact with users to check for complete and correct information before automatically generating an order. A smart rules engine then reviews the order based on individual approvals, spend budget and other constraints. For approval, a neural net can draw on training data to mimic human decision behavior and take action on valid orders. Advisors only perform random checks on decisions and can focus on dealing with exceptions and anomalies. An algorithm finally triggers the order placement or invoice payment and interacts with users who enquire about the order status.

Relying on machine learning to generate sourcing insights also creates significant efficiency, cycle time and cost advantages. Self-service automation tools combined with human-guided machine learning can be used to connect and align different datasets into a unified schema. Algorithms prepare the data by cleaning, normalizing and de-duping it before human-guided machine learning classifies all records to fit the organization's taxonomy, which will allow for better analysis downstream. Using a self-service analytics platform, employees can get holistic insights into sourcing transactions. It lets them design supply bases, simulate allocations, run sensitivity analysis on contracts, optimize pricing and terms or track performance. Based on reinforcement learning, the platform continuously improves and learns from feedback, so errors can be corrected instantly instead of requiring time-consuming manual reworks later.

Best Practice Examples

Mobile network operator O2 has automated 15 core procurement processes which account for more than one-third of its back office transactions. Each RPA bot saved about ten FTEs, paying for itself within a year. Total benefits over a three-year period came to more than €1 million.

US conglomerate GE uses a holistic sourcing analytics platform by Boston-based startup Tamr, pooling more than 270 different sourcing and record systems. The company reports $80 million in savings in a one-year period and is planning to realize more than $200 million in savings over the coming years.

Deep Dive: Legal

Legal processes have comparatively lower potential for savings through automation. The most promising areas of deployment are the generation and negotiation of contracts and legal documents as well as support processes via analytics-driven legal spend and matter management when collaborating with external counsel. We expect efficiency gains as high as 20 percent and speed improvements in the 15 percent range, reducing the risk for budget overruns.

Automation can be used for managing RFPs as well as data-driven counsel selection and benchmarking. Platforms to manage matter and run a shared document repository allow for streamlining processes, as does invoice management through text analysis. A compliance engine tracks task handling, while reporting tools drive budget analytics, including forecasts and alerts when overruns occur.

Best Practice Example

An unnamed financial services company successfully uses an AI-based platform to analyze its outside counsel spend. It was able to reduce its annual $1 billion spend on external legal services by almost $400 million p.a. based on the insights gained through the platform.

Roadblocks and Mitigation Measures to Unlock the Benefits of a Self-Driving Enterprise

If an enterprise truly wants to capture the automation potential laid out in the various use cases, it has to take into account the reaction of the corporate immune system before rolling out any new initiatives. At the same time, there is no "one size fits all" solution for a successful automation strategy which should be considered as a multi-part journey.

It requires starting today with RPA tools. Companies can already choose from many ready-to-use solutions that enable direct efficiency gains in combination with process redesign. But in order to rise to automation levels three to five and eventually arrive at cognitive automation, an enterprise has to embark on experiments with machine learning at the same time. Only then can you acquire substantial training data and time to have these systems perform at scale a few years out.

Address corporates' immune system reactions to fully capture automation potentials

ROADBLOCKS	MITIGATION MEASURES
Missing automation strategy & digital governance	▪ Develop **visionary AI strategy** & pragmatic implementation roadmap ▪ **Evolve existing governance system** as new "traffic rules" for the Self-Driving Enterprise as base for disruptive process transformation
Unclear responsibilities & organizational links	▪ Build **centers of excellence for RPA & AI** with top mgmt. commitment ▪ Establish **clear product owner role** with strong links to business owners to push successful implementation
Limited talent availability	▪ Source talent for RPA implementations by **complementing centers of excellence in offshore regions** ▪ **Collaborate with startups** and other corporates for cognitive solutions
Fear of the unknown	▪ Build **lighthouse cases** for RPA and cognitive solutions and foster internal communication, e.g. with roadshows ▪ **Integrate workers council** early on, accompanied by continuous change management
Striving for perfection	▪ Implement a **failure culture** based on fast learning to build up internal capabilities and capitalize on collected experience ▪ Foster a **pilot-focused implementation approach** instead of striving for perfect solutions

Figure 7: Roadblocks and mitigation measures

Before these efforts are conceptualized and rolled out, an enterprise should think about and proactively address the typical reactions of any organization's innate immune system. Otherwise it will be difficult or even impossible to fully capture all the benefits smart automation has to offer.

We have identified five main roadblocks and suggestions how companies should mitigate. First is a lack of automation strategy and digital governance. To counter it, an organization should develop a visionary automation strategy and a pragmatic implementation roadmap. It further needs to update its organizational guidelines that are currently written for humans performing processes and tasks to evolve into new "traffic rules" for the Self-Driving Enterprise. By that we mean rules that capture how to handle decision making and accountability by machines as well as how to embed ethics for the era of automation. These rules will form the basis for a successful technology-enabled transformation.

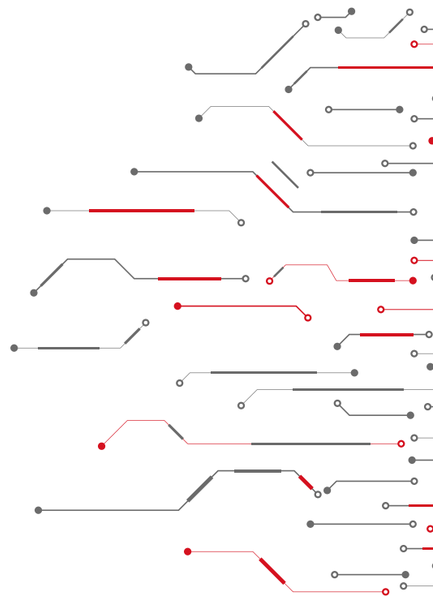
The second roadblock consists of unclear responsibilities and organizational links. A suitable solution is to build centers of excellence that drive experiments and build up the required technology stack for RPA and AI tools as well as focus on the right scaling strategies — all with the full support from top management. An organization has to establish clear product owner roles with strong links to the respective business owners in order to push for a successful implementation and roll-out of relevant use cases.

The third obstacle is limited talent availability, but it can also be overcome. RPA implementation, for instance, requires relatively lower skill levels that can typically be sourced offshore, e.g. in India. To discover, devise and deploy cognitive solutions enterprises should open up to collaborate with startups and other companies.

„Fear of the unknown" is the fourth big hurdle to technology-driven change. Lighthouse cases are the proven way to allay this fear and secure buy-in throughout the organization. Employees need examples for automation they can see, touch and relate to when it comes to their work environment. These lighthouse cases should be shared broadly and widely within the enterprise with a communications outreach and accompanying roadshow. It also helps to integrate workers councils and relevant change management stakeholders early on to proactively counter resistance.

The tendency to seek perfection instead of going for fast pilots that always carry the risk of failure is the fifth and final roadblock. To address it, organizations must create and nurture a corporate culture that tolerates and even celebrates failures and learning from them, fast. Only then can it build up the necessary internal capabilities and experience to implement and scale suitable use cases.

Implementing lasting change through smart automation does not require perfection at every turn. But it does call for the curiosity and willingness to launch trial balloons and always keep an open mind when it comes to learning from them. The vision of the Self-Driving Enterprise, after all, is about one thing: to empower everyone in an organization to achieve high performance, now and in the future. Automation can get you there, by driving better decisions, better collaboration and uncovering new opportunities. It's time to get on the road.



Further reading

Porsche Consulting regularly publishes reports and articles on major trends, innovations, and ways to keep companies competitive.

Strategy Paper
How Companies become High Performers

Strategy Paper
Digital Machinery Decoded

Strategy Paper
Digital MedTech Transformation

Strategy Paper
Innovative Working Atmosphere

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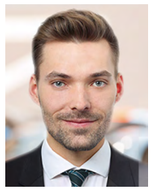

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