

ViewPoint

BY OPTICOS

Annual Edition 2024



Leveraging Thought Leadership for
Maximising Business Impact

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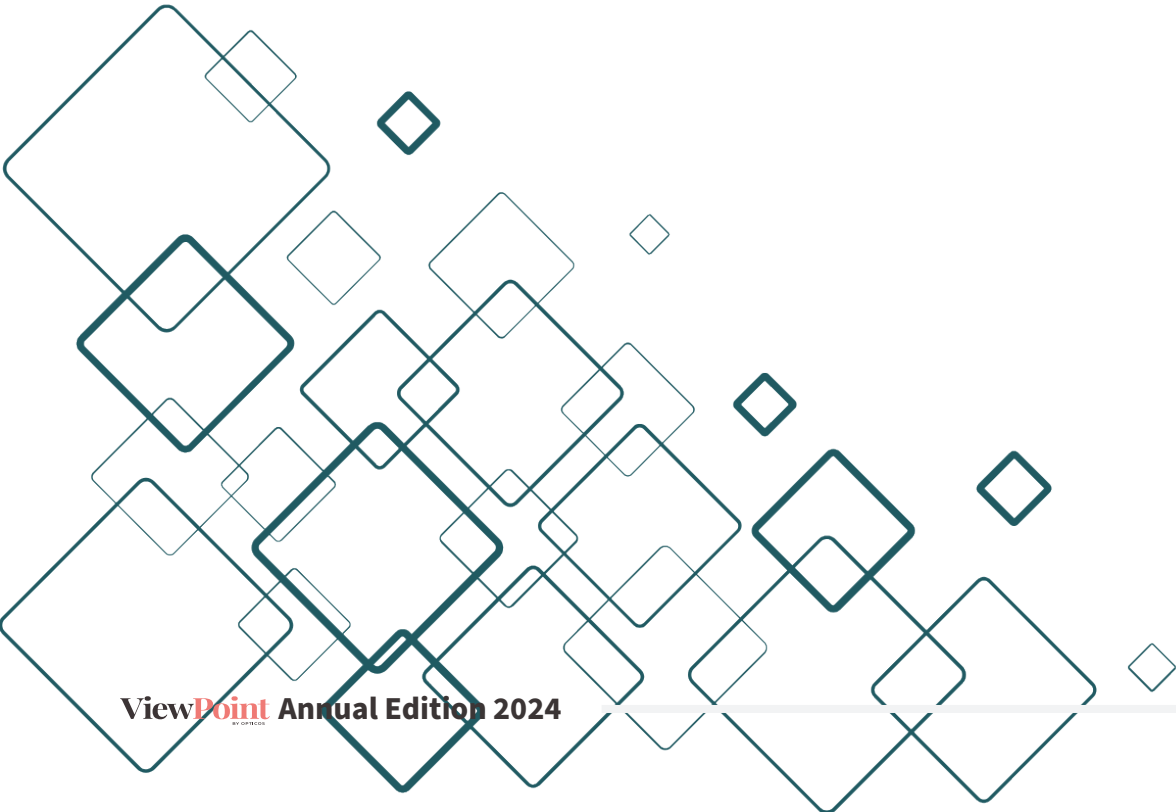
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Foreword

Building on the success of our previous edition, we are pleased to present the latest annual edition of ViewPoint—a collection of insights and perspectives developed by our expert consultant teams throughout the past year.

Over the course of the year, we have explored key challenges and opportunities shaping the business landscape, offering practical guidance in Strategy & Business Development, Digital Transformation, Strategic IT, and IT Sourcing & Procurement. The response to our insights has been overwhelmingly positive, reaffirming the value they bring to our clients and readers.

At Opticos, we believe that staying ahead in an evolving business environment requires continuous learning and informed decision-making. Our commitment to thought leadership is rooted in this belief, and we will continue to invest in research and expertise to provide actionable insights that help organizations navigate complexity with confidence.

As we look ahead, we remain committed to advancing thought leadership, ensuring that ViewPoint continues to provide relevant, independent, and execution-focused perspectives. Our goal is not only to inform and inspire but also to spark meaningful conversations that drive impactful decisions.

We sincerely appreciate your engagement and trust in Opticos as your knowledge partner. If you find value in these insights, we invite you to subscribe to our ViewPoint initiative at www.opticos.se

Fredrik Hallberg, CEO and **Rickard Holmkvist**, COO





Implementing and Maintaining a Global ERP Solution

In today's business environment, even traditional mid-market organizations have become global enterprises. More and more companies are implementing a global ERP to drive optimization and integrate data and information across multiple countries into connected applications. Developing and maintaining a global ERP solution comes with its own set of challenges – but with the right ERP strategy, companies can navigate through the barriers to meet their objectives.

For any organization, the typical goals of a global ERP Implementation can be as below:

- Standardized business processes on a global level
- Improved data quality and consolidated reporting
- Simplification of the IT landscape and reduction in operating costs

Before embarking on the ERP implementation journey, organizations need to have a clear vision of where they are and where they want to be. It is a huge transformation effort and involves significant changes to business processes, technologies, and culture. The success of the implementation does not solely depend on the technical aspects. It also requires detailed attention towards organizational change management.

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The ERP universe is ever-expanding, but ERPs can only deliver results when the fundamentals are in place. An executable strategy can maximize your return on investment and set your organization up for long-term success.

ERP strategy

A pre-study or a conceptual phase is often carried out to prepare for a large-scale ERP implementation exercise. In our experience, a conceptual phase can help in defining the scope, goals and expected outcome that can be communicated to all the internal and external stakeholders. Some outcomes are as follows:

- Clear vision and blueprint of business needs, alignment of all stakeholders
- Final scope, time plan and roadmap for the implementation exercise
- Program Methodology, Governance and Team Structure
- Sourcing Principles and Strategy
- Data Strategy and Key Design Decisions

1. Sourcing strategy

ERP programs are often very large investments for organizations and are associated with operational and financial risk and are a driver for major change. That is why it is essential to form a solid strategy for sourcing an ERP implementation partner(s) early on. There are many factors to look at – for instance, make versus buy strategy, pricing model, sourcing objects, supplier capacity, and capabilities to engage the right partner(s) in a timely manner and to help deliver on the transformation objectives.

These areas are generally part of an ERP Implementation Partner Sourcing Strategy:

- Strategic Drivers or Business Value
- Sourcing Direction (Sourcing Objects, Supplier Selection, Make or Buy decision)
- Application Maintenance and Support Services
- Program Governance
- Commercial Engagement Model

2. Data and reporting strategy

Today, many organizations are flooded with data and are looking for better ways to develop real time reports and insights. Technologies are often implemented without yielding the envisioned results and become overly complex to maintain. Why? To put it simply, it's the lack of an overall data and reporting strategy to integrate, synchronize and govern. What's more, while companies are inundated with data, much of that data is in disparate, non-integrated systems. Master data can be all over the map in global organizations with layers of different ERP systems. For multinational enterprises, this issue is further amplified by the number of subsidiaries.

A robust data and reporting strategy – focused on clean, consistent, and well-defined data – can assist companies to drive growth and overall competitiveness. To build a successful ERP data and reporting strategy, companies must start by accounting for different stakeholders across the organization.

Stakeholders

Executive Management

Senior Managers

Managers and Employees

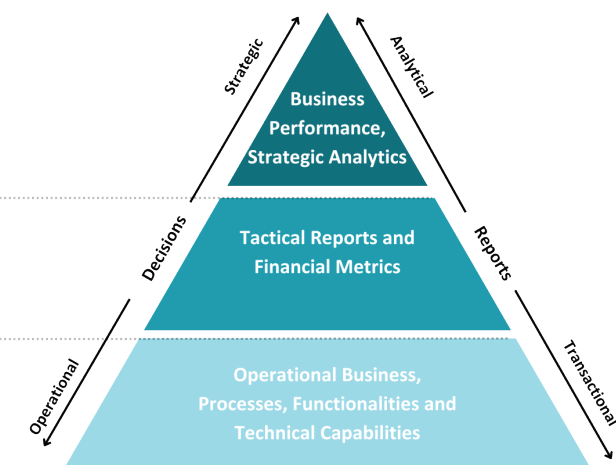


Exhibit 1: Data & Reporting requirements of Stakeholders involved

Program methodology:

ERP implementations are often multi-year initiatives that involve significant capital investments, long-term planning, and business process re-engineering. The implementation approach you select for your company must fit your company’s complexity and culture to maximize the chances of a successful implementation.

Many companies try to derive the best values out of different methodologies to identify a best fit for their organization. For instance, a waterfall approach can provide good structure and milestones which can then be combined with agile within each phase to iteratively create the phase deliverables. It is always a good practice to maintain an MVP mindset and try to get user feedback as early and frequently as possible.

- **Fit to standard:** Organizations now view ERP as a backbone for their operations. ‘Fit to Standard’ is hardly a new concept but there is a renewed focus on it as companies strive to reduce cost of ownership, implement best practices and create a clean core solution. A stable core is essential as it is relatively easy to add niche capabilities on top.

A Business change impact assessment, while building the strategy, can assist organizations to study existing processes and identify what they can or cannot live without. If needed, only the truly essential processes should be customized. This can give organizations a better control over their IT landscape and make way for easier governance.

- **Global template:** When you finally make the decision to implement an ERP solution, there comes a point when you need to decide whether deploying a global ERP template across multiple sites, divisions, and regions is worth it. The answer to this question can drive the overall strategy of design, development, and deployment decisions along with the long-term support services going forward.

International organizations often have non-stan-

dardized business processes and deciding to implement a global ERP system across any enterprise is not easy. For one, the decision to globalize or localize isn’t black and white. While standardization allows to scale for growth by consolidating business processes and driving operational efficiency, organizations also need the flexibility to serve diverse customers, employees, economies, and regulatory bodies. Striking the right balance between standardization and flexibility thus becomes essential

Program management and governance

Any ERP implementation is a complex and costly undertaking that requires careful planning, execution, and monitoring. Project management and Governance are thus key factors that can determine the success or failure of an ERP implementation. With global implementations, the complexity for the program management teams is higher as several projects run in parallel across different regions. Additionally, there may be several implementation partners working simultaneously leading to multiple participants and a need for an even better coordination. Organizations, thus need to have a set of governing principles that help them define the PMO teams and structure.

A key aspect of ERP project management and governance is to monitor and control the progress and performance of the project. Organizations need to use appropriate tools and techniques, such as dashboards, reports, meetings, and feedback to monitor and control the project. PMO needs to track and measure the key performance indicators (KPIs) and milestones of the project and compare them with the baseline and expectations and communicate it with all stakeholders – internal or external.

Another critical aspect of ERP project management and governance is to ensure the quality and testing of the ERP system. You need to verify and validate that the system meets the functional and non-functional requirements and complies with the standards and regulations. It is important to involve the end-users, business owners, and vendors in the testing process, and document and resolve any defects or issues.

Change management is critical

Human factors like organizational behaviour and training are often ignored but are just as crucial to a successful ERP implementation as addressing technological requirements. Local entities may be extremely resistant to globalized processes. They need to understand the reasons for transformation and how it will personally benefit them.

It’s important to create a communication plan that addresses how, when, and where you’ll communicate key updates. This includes adjusting your messages as required to accommodate different languages, cultures, and time zones. Communication is just one part of organizational change management.

A plan at the local and global levels is needed to ensure your organization is prepared for a global ERP rollout. Without properly training employees across headquarters and local establishments, it is nearly impossible for a global ERP rollout to occur smoothly.

Throughout the ERP programme, change management needs to ensure that organizations, leadership, and employees are:

- **Clear** on how the change will impact the existing ways of working
- **Aware** of why the change is needed and what are the benefits of change
- **Ready**, willing, and able to implement change

Application management services

Creating or implementing an ERP is not the end and organizations need specific expertise, robust operating methods and tools that seamlessly enable work across a global team environment. Decisions around AMS can have a profound impact on the total cost of ownership, user satisfaction, solution agility and ultimately the success or failure of the ERP solution.

Organizations should look to prioritize AMS while developing the ERP sourcing strategy and evaluate the benefits of different available options – Developing an in-house team, using an external supplier or a combination of the two.

Guiding you through your organizational change journey

A global ERP implementation is not just a technical IT project but a huge change effort. It is an organizational journey leading to new ways of working. Organizations therefore need to create a business change program and mobilize a team to focus on communication and change strategy.

While you may want to rush into it to maintain a competitive advantage or keep up with shifts in customer demand, it is important to ensure your business is prepared for this endeavour. The key is to create a balance between central and local requirements, prioritize communication, and strategize the rollout.

Drawing from our extensive client experience and proven methodologies, we can guide your organizational journey from strategy to implementation and support.

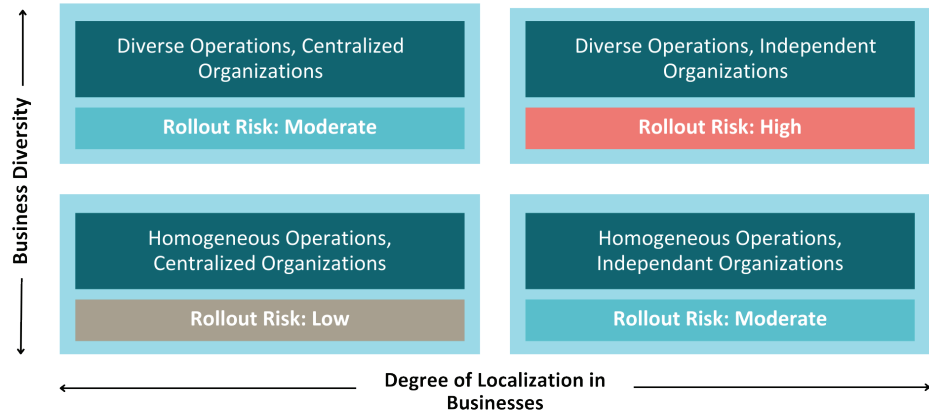


Exhibit 2: Risk for Global Template Rollout





Navigating Sustainable Transformation: Responsibilities Across IT, Purchasing, and Supply Chain Departments

Introduction

As the EU is preparing to transform into a greener future and with new directives being binding for member states, organisations will have to adapt both their daily operations and overall strategy. A holistic approach is important as IT, Purchasing, and Supply Chain Departments will play a critical role in assuring compliance with the new set of policies and initiatives becoming reality within the next years.

This article explores how your organization can navigate the tangled regulatory landscape following the EU Green Deal and introduces you to valuable tools and frameworks to get you started in your sustainability journey.

Traversing the terrain of the EU Green Deal

Going back to 2020, the European Commission approved The European Green Deal which comprises a series of policy measures designed to steer EU on the path to a green transition and achieving climate neutrality by 2050.

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The regulation was provisionally approved in December 2023 by the European Parliament and will be gradually implemented until 2030. It will affect both B2B and B2C businesses for most products on the market by requiring sustainability data across the value chain in the product passport. It also offers recycling guidance for secondhand transactions.

In parallel, in March this year the CSDD (Corporate Sustainability Due Diligence) was also provisionally approved and in January 2023 CSRD (Corporate Sustainability Reporting Directive) came into force. Together, they are the foundation for stipulating the importance of corporate responsibility and sustainability in business operations, particularly focusing on supply chain sustainability. The CSDD will obligate businesses to in-

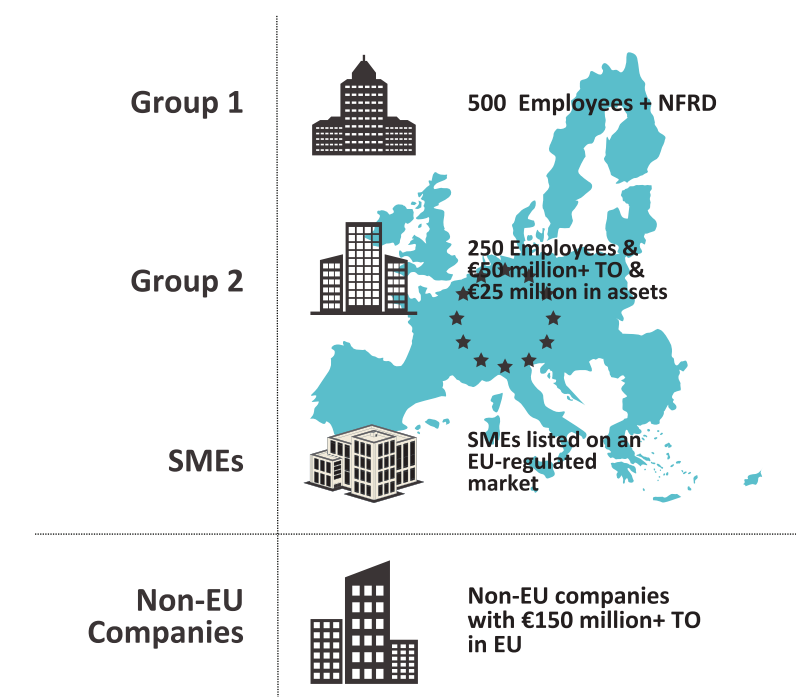
corporate both sustainable social- and environmental elements into their operations. The overarching goal is to guarantee that corporations commit to and take responsibility for their economic, environmental, and social impacts. It will be of particular importance to ensure compliance in the whole supply chain including the sub-suppliers.

CSDD will be implemented in multiple phases starting with large-sized corporations inside the European Union as stated down below.



Figures as of 2024-03-11 and might be changed by EU

CSDD is closely related to the CSRD, which aims to replace and improve the existing NFRD (Non-Financial Reporting Directive). CSRD will increase the scope of NFRD to a larger extent of corporations, including publicly listed and large private corporations as stated below:



CSRD requires corporations to report on environmental, social, and governance (ESG) aspects per ESRS standards. The directive will require a number of actions including (but not limited to): Publicly reporting on efforts to address risk related to ESG, taking responsibility for upstream and downstream supply chains, performing double materiality assessment, and conducting third-party audits by accredited auditors.

In summary, the EU is expecting corporations to adhere to and report on a large set of targets related to sustainability to reach the 2050 goals of climate neutrality. In the next sections, we will walk you through how your organization can be prepared.

Sustainability regulations from a Sourcing perspective

Clearly, the EU Green Deal initiatives are steering corporations to increase both strategic and operational sustainability efforts. With organizations being forced to disclose ESG impact and monitor activities regularly to reduce and remedy any environmental or social harm; sourcing will play a crucial role. At Opticos we have curated a “Sustainable Sourcing Approach” to help Sourcing departments aid their organizations in their compliance work by the following three pillars: Ensuring transparency, executing due diligence-focused outcomes, and Enhancing sustainability as a “way of working”.

Opticos triple sustainable sourcing approach

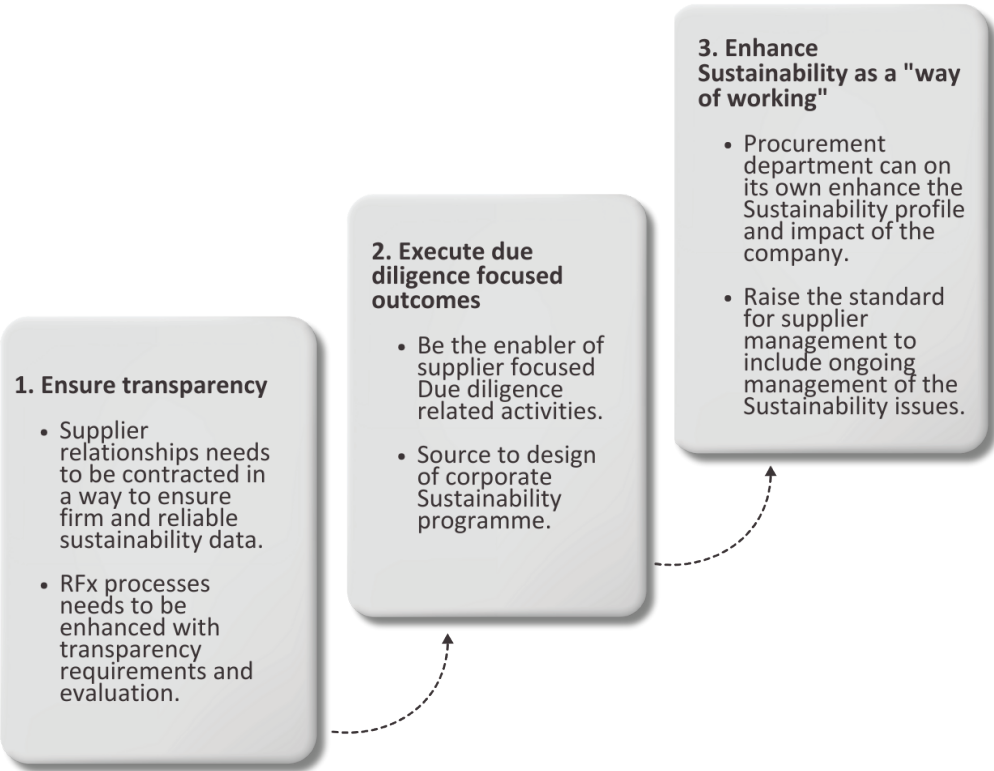


Exhibit 1: Triple Sustainable Sourcing Approach

Along with ensuring compliance with the new regulations throughout your sourcing processes, Opticos supports and empowers your company to proactively embrace sustainability throughout your organization. We help you align your sourcing strategy with the environmental and social sustainability obligations that come with the new legislation and help your organization reach its sustainability objectives.

Complementing the triple approach, Opticos has identified a multitude of activities, guiding the way to Sustainable Sourcing, together outlining a framework that can help your sourcing department adhere to the due diligence activities.

In the Sustainable Sourcing framework, two critical perspectives of sourcing activities come into play: Sustainability Compliance and Corporate Sustainability Target activities. The former is a reactive approach, focusing on adhering to legal requirements. The latter, a more proactive approach, goes beyond mere compliance. It involves investing in sustainability as a value for your company, striving for excellence rather than solely meeting obligations. By adopting our framework, your Sourcing department can achieve compliance while maintaining a forward-thinking, proactive approach.

Opticos sustainable supply chain assessment

The new regulations stemming from the EU highlights the importance of transparency and accountability in the entire value chain. The supply chain departments must thus comprehend the expectations set forth and acknowledge the important role they play in this context.

An initial supply chain assessment can provide valuable insights as well as form a baseline for evaluating the

current state of supply chain sustainability readiness and maturity. In addition, identifying and recognizing critical elements can help shape dedicated actions, or as a minimum, a firm understanding of the organizations risk profile supporting the relevant initiatives onward.

Exhibit 2 below displays Opticos framework for ESG assessment from a Supply Chain perspective with a focus on Environment, Social, and Governance.

Assessment Perspectives

Sustainability strategy and ambition	• Sustainability ambition and target breakdown to Supply Chain perspective. • Supply Chain metrics definitions and reporting procedures from a sustainability perspective. • Overall Supply Chain strategy and development plan alignment with sustainability targets.
Organizational structure and capability	• Current and future capabilities and competence requirements. • Process alignment with sustainability compliance (regulations) incl. monitoring and continuous improvement. • Roles, responsibilities, and mandates.
Risks, constraints, and critical elements	• Legal and regulatory requirements impacting Supply Chain activities, incl. reporting. • Identify major constraints, critical elements, and pain-points concerning sustainability efforts in Supply Chain. • Sustainability risk management process and principles, incl. identification of key risks related to sustainability/ESG.
Monitoring and traceability requirements	• Traceability requirements and lifecycle transparency. • Information management and quality control, incl. data availability and accuracy.

Exhibit 2: Sustainable Supply Chain Assessment

“By following the framework with the set processes, your Supply Chain organization can remedy risks of not adhering to the EU sustainability acts” – Anders Gullbrandson, Co-founder, and Chief Legal Officer at Opticos.

Simultaneously your organization can progress to greater monitoring and predictability of your suppliers by following the regulations.

The importance of digital product passport IT assessment

As stated, the EU mandates a Digital Product Passport (DPP) for the majority of European market products, supporting consumers in making sustainable choices by scanning a QR code. In this chapter, we will cover how the Digital Product Passport is set up and how your organization best utilizes it.

The digital product passport is an electronic record of a product that is stored in a database and accessible throughout the product’s life cycle. The product should have a link, as per present technology a QR code, to its passport database printed on it ensuring transparency and knowledge transfer to empower customers to make informed and green choices.

Opticos has designed an IT Assessment framework for the new Digital Product Passport, guiding how organizations can fulfil the requirements and be prepared for the ESPR regulation.

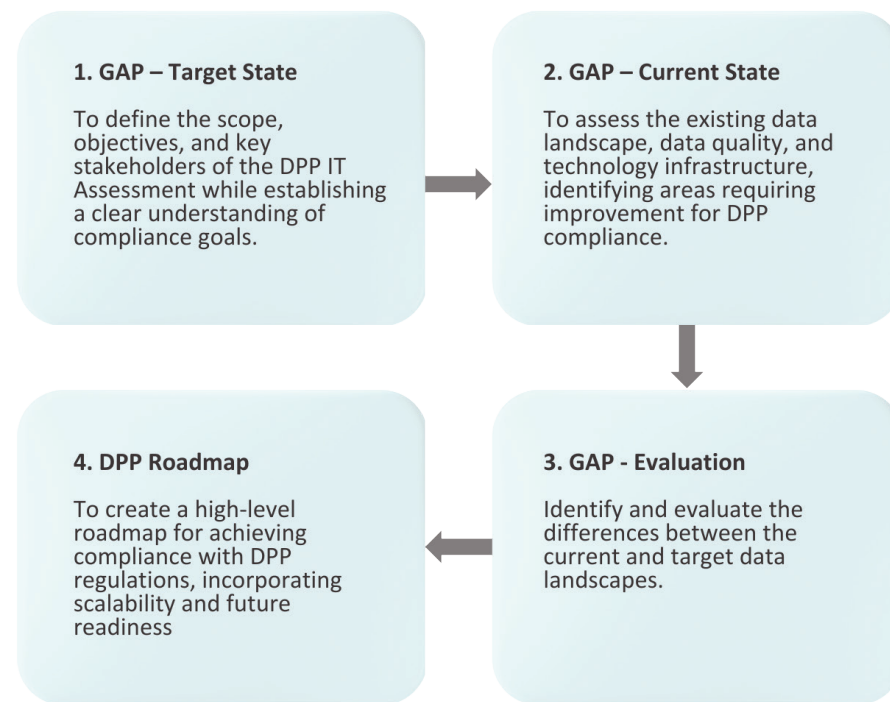


Exhibit 3: IT Assessment Framework for Digital Product Passport

The Digital Product Passport IT Assessment covers four critical phases, defining the target setup, evaluating the existing setup, identifying gaps, and culminating with a roadmap for seamless compliance with the Eco-design for Sustainable Products (ESPR) Regulation and Digital Product Passport (DPP) requirements.

Beyond mere compliance, conducting the assessment assists in optimizing processes, increasing transparency, and enhancing data management ensuing in valuable insights for your organization.

Conclusion

At Opticos, we believe that Sustainability needs to be at the core of any organizations business strategy, moving beyond the legal and reactive compliance approach to regulations. Our best practices and extensive experience in this area can augment your IT, Procurement and Supply Chain departments to successfully transition into these new ways of working in conformity with the EU regulations.

Irrespective of where you are in your sustainability journey, Opticos can add value in terms of advice, domain expertise, Green Deal adapted processes, Master data knowledge or introducing ways to increase transparency in your existing processes.

In this article, we have showcased three practical ways of preparing you to not only be compliant with the new sustainability EU legislation but also how to proactively approach it and use sustainability as a business advantage.



Enhancing Generative AI with Your Own Data

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Generative AI is great, but it lacks precision and can be very wrong

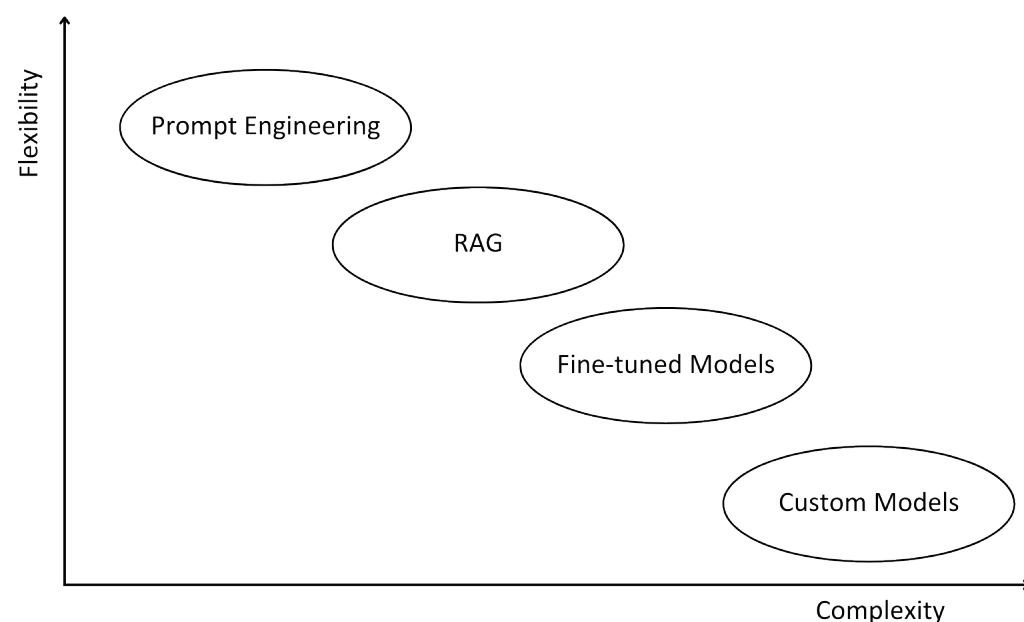
Since ChatGPT was introduced in November 2022, the subject of AI and its possibilities has gained significant attention in business and technology sectors. Our previously published articles and insights have explored both the potential business value of various AI types and the challenges associated with generative AI.

Generative AI, particularly Large Language Models (LLMs), can assist organizations with daily tasks and enhance product offerings by producing human-like text and answering general knowledge questions. Having been trained on large sets of data written by humans, these models perform rather well at these tasks. However, challenges arise when LLMs are supposed to handle queries beyond publicly available information or capture events after the data cut-off date. In addition to that, the assertive tone in LLM-generated text can be convincing for users despite the generated text being false, this is usually called hallucination.

In this article, we will explore the concept of Retrieval-Augmented Generation (RAG) as a method to address these challenges with LLMs. We start with an overview of different methods to address the challenges with LLMs before looking at what RAG is and how it works. We conclude by looking at the benefits RAG can bring to an organization.

Which methods can be used to get more precise and reliable results?

To improve the output of the LLM and address these challenges, several approaches can be employed. It's worth bearing in mind that no single technique is universally superior; the best approach depends on the specific context.



A commonly suggested way of increasing the accuracy of an LLM would be prompt-engineering. For some cases the interactions and phrasing of the questions may result in better output, however the output still relies on the data it was trained on. As a tool prompt engineering is a key capability within generative AI, but it does not solve the issue related to non-public data or data that was created after the cut-off date.

Both custom model and fine-tuned models will perform better for queries requiring specific data. There are however two major drawbacks: they are costly and the time gap between training and user prompting remains.

Neither custom models, fine-tuned models nor unmodified LLM models can provide text that is based on information that has been produced since the latest update of the underlying model. In these models the issue of being limited by the cut-off date remains, but if accuracy of the output is not dependent on recent information or the information may change slowly, these models may provide value for the user.

Between prompt engineering and custom or fine-tuned models is an approach which does not rely on training a model but still provides output based on data for a specific use case. This approach is called retrieval augmented generation, RAG. It is a combination of different types of AI where one part consists of AI technologies to retrieve your data that is relevant to

the prompt, the retriever, and the second part is generative AI, the generator.

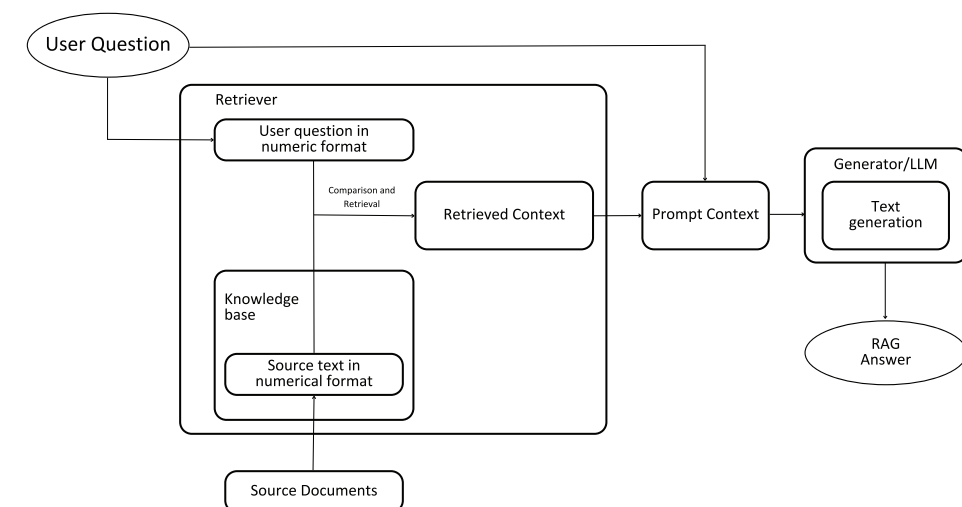
What is RAG?

When feeding the LLM with data through the prompt, a basic approach would be to input a section of text into a standard prompt with some prompt engineering. This provides context for the question the user wants the AI-generated text to be based on.

The essence of RAG takes this basic approach a step further. In a RAG method, the prompt is prepared with the context that has been retrieved from your own data source. Afterwards, the LLM answers the user question based on this prompt.

The idea of a retriever is getting a section of relevant text from your own source data in text format. To achieve this the text is converted into numerical format, capturing its meaning. This type of format allows comparison of different text sections based on their meanings. Both reference text from source documents, and user question undergo this conversion. The purpose of the comparison procedure is to select the section(s) of text from the source documents that are closest in meaning to the text in the user question.

An example where we have seen RAG being used is in chatbots for product support. It is common for product user guides and manuals to be kept in a knowledge/data base. When a user needs support, through a RAG app, the user query would be used to search for relevant information in the user manuals or product documentation. Information would be retrieved first, then provided to the prompt for the LLM to give the user advice on how to use the product.



The architecture above and the example described represent a basic form of RAG. There are various methods of creating RAG applications for different purposes, these methods vary in complexity. Generally, the more complex methods of RAG will give more accuracy at the cost of effort to create and manage the RAG application. Conversely, the simpler approaches will be less accurate but easier to create and manage.

What does this mean in the world of utilizing generative AI?

- **More trusted AI applications:** RAG would make it possible to get context-specific output from LLMs based on our non-public data and information, by

providing the LLM with this data and information as context in the prompt. It lowers the risk of hallucinations, and we should also be able to trust the output from the AI model to a higher degree than we normally can. We should, if we manage the knowledge base, know where the input to the context for the query comes from.

- **Accuracy and precision from RAG:** In the bigger picture, RAG offers a way to get more precise output from generative AI using our own data. It combines the strength of text generation in a human-like way from generative AI and other AI technologies to search for and retrieve relevant information. With this approach, RAG applications leverage different forms of AI specialized for different tasks, such as writing human like text or relevant finding text. This enables higher accuracy in the output than an LLM alone can produce.

- **Adaptability and flexibility from RAG:** RAG offers a relatively flexible knowledge base where the model does not need retraining or fine-tuning to be able to adapt when the context changes. It is still a less flexible way to work with generative AI than prompt engineering, because RAG still requires a knowledge base and will generate answers related to information in the knowledge base. With proper management of the knowledge base, we should be able to maintain and update the databases that are used as knowledge sources.

While this is something that requires effort, if we want to use generative AI when there is a requirement for information to be recent and provide insights on enterprise data, then having a RAG app with a maintained knowledge base is a possibility to get this up-to-date information.

Strengthen your data science and data management capabilities

RAG has existed as a methodology since the early days of generative AI. It offers a way to increase the accuracy and timeliness of information by leveraging the strengths of various AI models currently on the market. Additionally, this allows us to use enterprise or context specific documents to provide useful information to the generative AI model. However, the cost here is that in many cases there is a need for data scientists and data engineers to set up and maintain the RAG app, including the knowledge base and retriever. While this overview might give the impression that building a RAG application is easy, several considerations need to be carefully done to create a good RAG app. Once RAG is explored deeper, there are several ways to go about

building the app and optimizing the performance for the specific use case. An organization starting with RAG needs to understand its use cases and data needs, have proper data management practices in place and establish and maintain AI and data science capabilities.

At Opticos we enable organizations to leverage the business benefits of new emerging technologies. Drawing from our extensive client experience and methodology in business strategy, change management, data management and AI governance, we're here to support you in your AI journey from strategy to implementation. Through our strategic partnership with Algorithmia, a company offering data science and hosting services for AI, we provide end-to-end AI capabilities to our clients.



AI in Predictive Manufacturing

Authors:

This article is authored jointly with our strategic partner [Algorithmia](#), a pioneering strategy, transformation and AI firm committed to driving business impact through the latest in AI and tech.

Introduction

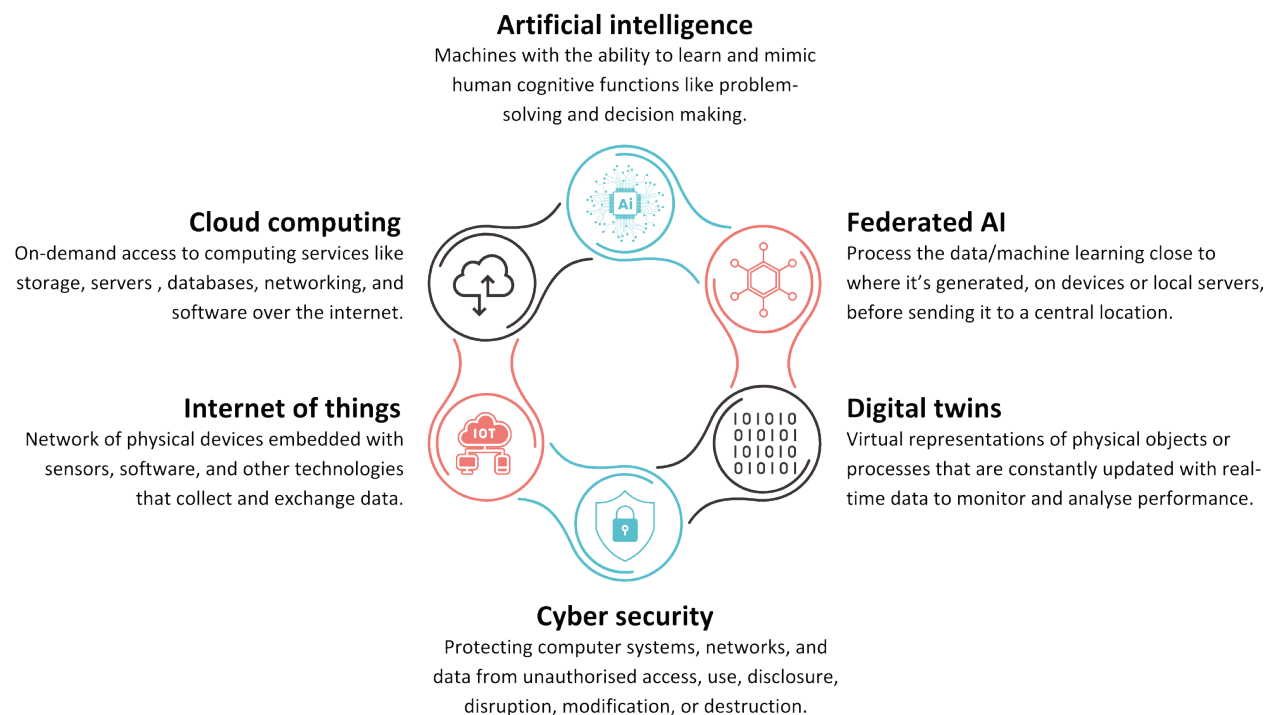
Manufacturing companies face increasing pressure to optimize operations, reduce costs, and enhance competitiveness. To meet these challenges, manufacturing and supply chain companies are turning to predictive manufacturing. This approach leverages advanced analytics and AI algorithms to anticipate disruptions, optimize production processes, and enhance overall efficiency.

Moving effectively towards predictive manufacturing requires a strategic approach and the right tech solutions. In this article, we'll explore the role of AI in predictive manufacturing, its key use cases, best practices, and steps for businesses to get started.

Industry 4.0 and predictive manufacturing

Industry 4.0 is the ongoing automation of traditional manufacturing and industrial practices using smart tech. It is a fusion of technologies that blur the lines between the physical and digital domains. Six primary technologies are driving Industry 4.0; internet of things, cloud computing, artificial intelligence, federated AI, cybersecurity and digital twins.

When manufacturing machinery are fully integrated with digital systems, real-time data collection and analysis becomes possible, and this data can then be used to optimize production processes, predict maintenance needs, and improve overall quality control. Automation enables process efficiency and predictive algorithms enable supply chain flexibility, ultimately where the entire supply chain becomes more agile to



Convergence of technologies enabling predictive manufacturing

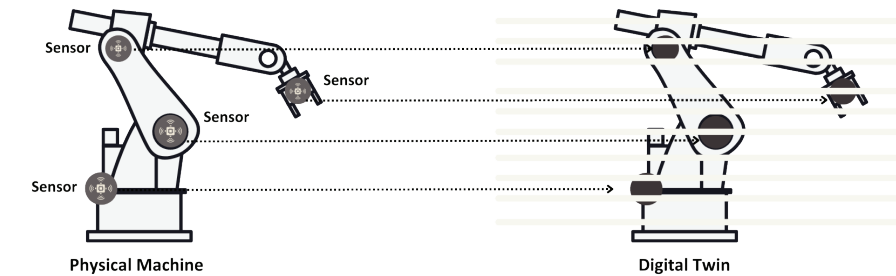
The convergence of these technologies creates a more intelligent and connected manufacturing environment, offering real-time analytics, increased flexibility and efficiency and customer-centric manufacturing.

Enabled by these tech developments, predictive manufacturing is a data-driven approach that uses historical and real-time data to forecast future events and outcomes in the manufacturing process. It involves leveraging advanced analytics techniques, such as machine learning and predictive modeling, to analyze data from various sources, including sensors, equipment, and production systems. By identifying patterns, trends, and anomalies in the data, predictive manufacturing enables companies to make informed decisions, optimize processes, and mitigate risks.

support customer-centric manufacturing.

Building a resilient, sustainable and efficient supply chains through digital twins

There are many applications and use-cases to be explored with these technologies, but the ability to build resilient, sustainable and efficient supply chains is perhaps one of the most interesting. Imagine a supply chain fully modeled as a 'digital twin', including the manufacturing process, where the physical equipment is fully integrated with digital systems, offering a real-time view of your supply chain flows. While this is a daunting task, value can be realized in a stepwise manner. For example, benefits can already be created with an isolated view of 1) the manufacturing process, or 2) with a limited extension down- or up-stream.



Digital twins leverage the data and connectivity of Industry 4.0 to create a dynamic digital counterpart that reflects the real world. This allows for better decision making, improved efficiency, and overall optimization across the entire manufacturing process. A digital twin is essentially a virtual representation of a physical object, process, or system. It's constantly updated with data from the physical counterpart using IoT sensors. This creates a bridge between the physical world and the digital world, allowing for better monitoring and analysis.

This can also be extended with concepts like federated AI/machine learning to further enhance dynamic adaptability, privacy and data security. In essence, the combination of federated AI and digital twins creates a dynamic and collaborative manufacturing ecosystem. Factories can leverage the power of AI and real-time data, while still maintaining data privacy, to optimize processes, improve efficiency, and drive innovation across the industry.

Creating value from digital twins

There are four pockets of distinct value to be explored: efficiency gains, innovation, supply chain resilience and sustainability. This value can be illustrated through a set of straight-forward use-cases; how to sharpen foresight, optimize production, securing delivery and reduce environmental impact.



"Digital twins are revolutionizing manufacturing by bridging the physical and digital worlds. They offer unprecedented insights into how machines are performing, allowing us to predict maintenance needs, optimize processes, and ultimately build a more sustainable and efficient future for manufacturing."

Jens Ekberg, CEO at Algorithmia

Sharpening foresight: AI for predictive maintenance

The factory utilizes digital twins for equipment health monitoring. Historical maintenance data is analyzed to identify common failure patterns and lead times for specific equipment types. This allows for:

- **Developing predictive maintenance schedules** based on equipment usage and sensor data from the digital twin.
- **Proactive stocking of spare parts** most likely to fail, minimizing downtime.
- **Optimizing technician training** by focusing on the most common maintenance tasks identified through historical data analysis.

Optimizing production: AI for efficiency

The factory leverages digital twins to track production processes in real-time. Data analysis from the digital twin identifies bottlenecks and inefficiencies. This allows for:

- **Simulating production scenarios** using the digital twin to test potential solutions for bottlenecks.
- **Investing in targeted automation solutions** to address specific bottlenecks identified by the digital twin.
- **Optimizing production line layouts** based on data insights to improve material flow and reduce processing times.

Securing delivery: AI for supply chain resilience

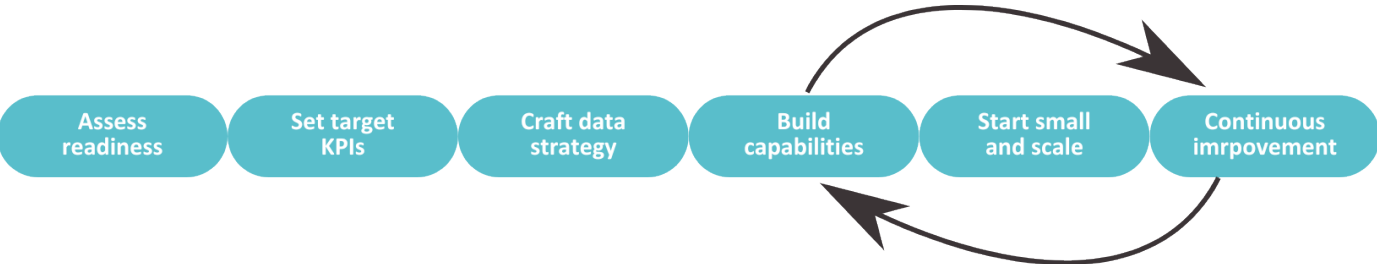
The digital twin tracks inventory levels and production capacity. Advanced data analytics are implemented on historical supplier and logistics data to predict potential disruptions. This allows for:

- **Identifying alternative suppliers** and negotiating backup agreements with the orchestrating party to ensure parts availability.
- **Maintaining buffer stock** of critical materials based on historical usage patterns and lead times.
- **Developing contingency plans** to adjust production schedules or source materials quickly in case of disruptions.

By orchestrating these parties, and leverage federated data and insights, this can strengthen the overall resilience and efficiency of the supply chain in a significant way. A collaborative approach would foster continuous improvement and pave the way for a more sustainable future for all participants.

Taking the first steps towards predictive manufacturing

The potential of AI in predictive manufacturing is undeniable. Transitioning to this data-driven approach requires careful planning and execution. AI and new tech is not a silver bullet and the necessary groundwork will increase chances of success:



Reduce environmental impact: AI for sustainability

The factory’s digital twin monitors energy consumption. Data analysis identifies areas for improvement. This allows for:

- **Investing in energy-efficient machinery** based on recommendations from the digital twin’s analysis of energy usage patterns.
- **Optimizing production scheduling** to minimize peak energy consumption periods.
- **Exploring alternative energy sources** like solar or wind power based on data on the factory’s location and energy needs

Assess readiness: Conduct a thorough evaluation of your current manufacturing processes, data collection capabilities, and infrastructure. Identify areas where data collection can be improved and invest in necessary sensors and IT systems.

- **Set target KPIs:** Clearly define your goals for implementing predictive manufacturing. What areas do you want to improve – efficiency, maintenance, sustainability? Establish key performance indicators (KPIs) to track progress towards these goals.
- **Craft data strategy:** Plan how you will collect, store, and analyze data. Ensure data security and establish a governance framework for responsible data use.

Now imagine the potential if this factory operates within a supply chain ecosystem together with other parties represented by similar digital twins. Each factory/party leverages a digital twin, a virtual representation of its physical machinery and processes.

- **Craft data strategy:** Plan how you will collect, store, and analyze data. Ensure data security and establish a governance framework for responsible data use.
- **Build capabilities:** Consider hiring data scientists or partnering with AI specialists who can help develop and implement AI models for predictive maintenance, process optimization, and supply chain management.
- **Start small and scale:** Begin with a pilot project focused on a specific area like predictive maintenance for a single machine or production line. This allows you to test the technology, refine your approach, and demonstrate the value proposition before scaling up across your entire operation.

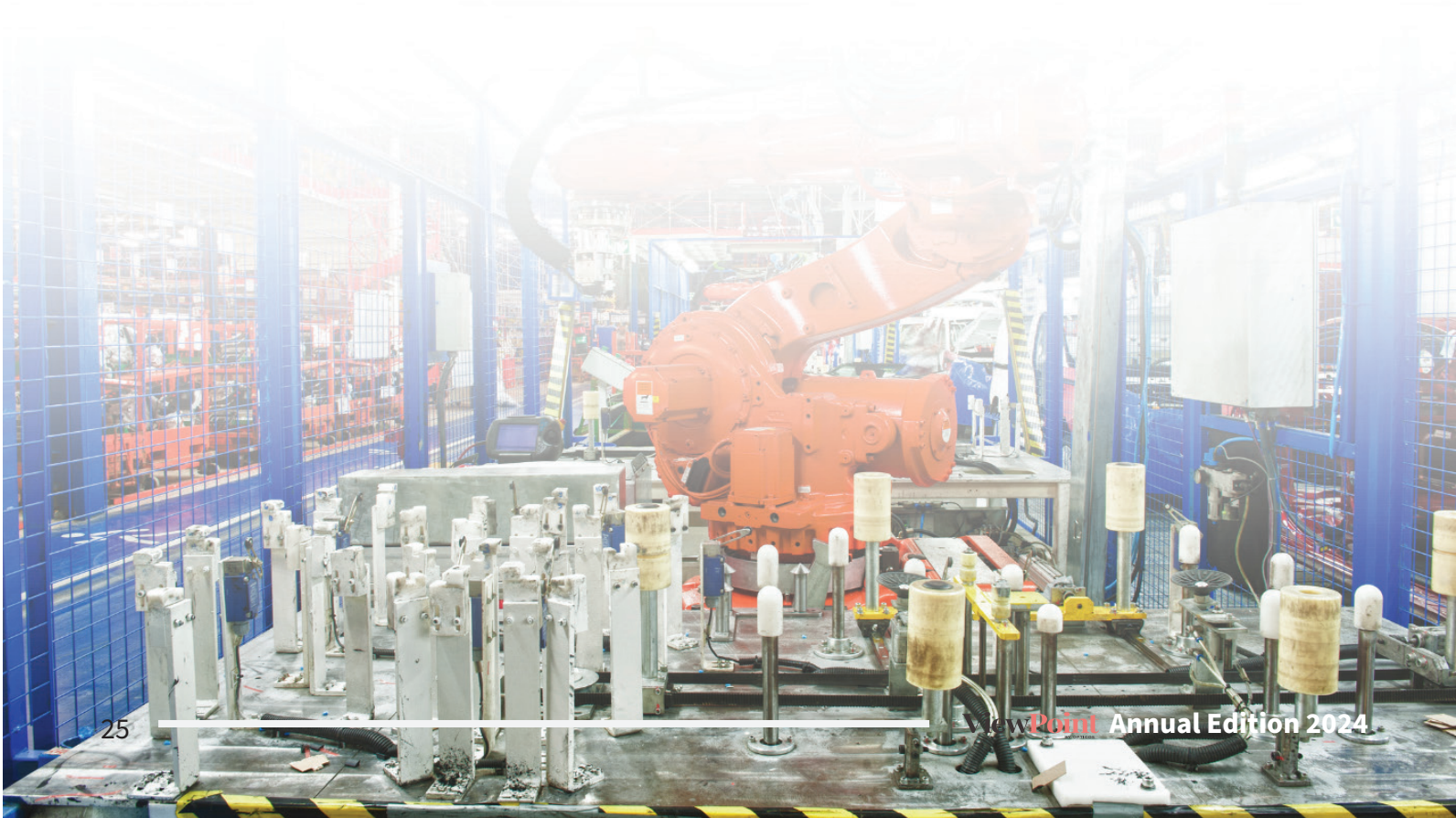
- **Continuous improvement:** Predictive manufacturing is an ongoing journey. Regularly evaluate your AI models and data analysis processes to ensure they remain accurate and effective. Be prepared to adapt and refine your approach as your needs and the manufacturing landscape evolve.

In addition, look beyond the boundaries of your own organization. The magic happens when connecting a series of federated model to create a dynamic, data-driven supply-chain.



“The true power of digital twins lies in their ability to transform data into actionable insights. By leveraging these insights, companies can optimize their operations, reduce costs, improve product quality, and gain a significant competitive advantage.”

Rickard Holmkvist, COO at Opticos



NIS 2 Directive

Are You Ready for NIS2?

The European Union’s NIS2 Directive (Network and Information Security 2), set to take effect in 2024, represents an evolution in cybersecurity requirements for organizations across member states.

As an update to the original NIS Directive, NIS2 expands the scope of industries and strengthens the baseline security standards for critical infrastructure, technology providers, and essential service operators.

In the simplest of terms: “NIS2 is about stricter cyber requirements and incident reporting”. For organizations, this brings both challenges and opportunities—enhancing cybersecurity frameworks, ensuring compliance and mitigating risk.

One aspect that is becoming increasingly clear is the shift of responsibility. Traditionally, cybersecurity has been viewed as an IT issue. However, with NIS2, it’s clear that cybersecurity is as much a governance and leadership issue as it is technical. The ultimate responsibility for cybersecurity is shifted from IT departments to company executives and boards. This puts increased emphasis on the need to educate the management in cybersecurity to better understand their role. At the same time, CISOs need to emphasize clear communication about cyber risks for the organization and direct the communication to the business.

Authors:



William Hansson
Senior Consultant



Madeleine Tornard
Senior Manager

“With NIS2, cyber is further established as a board-level issue”

What is going on now?
While the NIS2 Directive is still being interpreted and transposed into national law by each EU member state, companies are already starting to prepare to align with the forthcoming regulation and ensure compliance when the deadline arrives.

In our experience, engaging with clients, current NIS2 compliance efforts are not focused on groundbreaking technical enhancements, architectural changes or large investments. Rather, organizations focus on reviewing and aligning their existing policies and processes with the new requirements, integrating them into the broader cybersecurity management system and thereby laying the foundation for a risk-based continuous improvement approach.

that these are not always aligned. Processes and plans are often scattered in the organizations with various levels of descriptions and have untested dependencies across departments. To build resilience, organizations can unify these elements under a cohesive business continuity framework.

A business continuity framework provides a structured approach to manage and coordinate all activities related to maintaining business operations during and after a disruption. By formalizing the processes, roles, and responsibilities related to resilience, organizations can increase resilience and provide real business value while adhering to NIS2’s requirements. One key advantage with this approach is to be able to perform test, ensure effectiveness and continuous improvement.

BUSINESS CONTINUITY FRAMEWORK	
Core Components	
Business Continuity Strategy: A strategy that defines the direction of how to be resilient in the event of a disruption or outage within the IT environment. It includes possible ways to meet business continuity requirements	Prioritization & Recovery Sequence: Use a Business Impact Analysis (BIA) to determine the order in which business functions and systems should be restored, ensuring that critical assets are recovered first
Crisis Response Organizations: Establishing permanent and temporary crisis response teams, ensuring the right people and resources are mobilized in both short-term incidents and longer-lasting crises	Aligned Response: Define criteria and ways of handling incidents. For major incidents, outline a clear disaster recovery and business continuity activation plan, cascading all the way up to crisis management and communications
Clear Authority: Define when and how response plans are activated, identifying decision-making pathways. Specify who has the authority to escalate when running into issues, shut down operations, and initiate full crisis management mode	Communication Strategy: Having effective mechanisms for internal and external communications to reduce uncertainty and disorder during a disruption or outage, ensuring that information is distributed consistently, frequently and professionally
Supporting Components	
Cross-Functional Training and Simulations: Regular, cross-departmental training to ensure how to handle a crisis	Testing of Recovery Procedures: Regular tests of recovery processes for both infrastructure and applications

Aligning an organizational-wide business continuity framework

With The NIS2 Directive, there is a clear emphasis on resilience; the ability to withstand and recover from disruptions, this is also tied to the requirement on swift reporting to authorities.

While many organizations have processes in place for incident response, recovery, business continuity planning and communication strategies, our experience is

We propose the following key components for building an effective business continuity framework:

The sooner an organization starts to prepare for NIS2, the better. We are in contact with many organizations where the preparations are at full speed. If you wish to learn more about this, please don’t hesitate to contact us!

The Four Pillars to Succeed in Change Management

Introduction

Change management is a crucial process for any organization preparing to transition from one state to another. At Opticos, we understand that driving change means not just implementing new strategies but anchoring them within the organization to achieve long-lasting effects. Our experience in change management has shown us that the key to success lies in addressing four fundamental areas: Motivate, Involve, Enable, and Empower. These areas are applicable irrespective of the change management framework chosen, ensuring their universal relevance and effectiveness.

Motivate: Creating the drive for change

The first stage of any change management process is motivation. At Opticos, we believe in preparing minds through clear communication of the benefits and necessity of the change. This is done through:

- **Establishing a clear vision:** We develop a concise, inspiring vision of the future state that resonates with all stakeholders.
- **Aligning objectives:** By aligning the change with the organization's strategic goals, we ensure everyone understands its importance.
- **Creating enthusiasm:** Through inspirational leadership and communication, we generate excitement and commitment towards the change.

Authors:



Maria Ekberg
Partner



Jasmeen Kaur
Senior Consultant

Involve: Engaging stakeholders

Successful change cannot happen in isolation. Involving stakeholders at every level is crucial. We do this through:

- **Psychological safety:** We create a safe environment where team members feel comfortable sharing their perspectives and concerns.
- **Inclusive decision making:** By involving diverse viewpoints, we ensure decisions are well-rounded and widely accepted.

- **Infrastructure and resources:** Providing the necessary infrastructure and resources to support new processes and technologies.
- **Continuous improvement:** Implementing feedback loops to continuously refine and improve the change process.
- **Reinforcement:** Reinforcing new behaviours through recognition and rewards ensures that the change is anchored and becomes part of the organizational culture.

Driving change management means getting successfully from one state to another



- **Active participation:** Encouraging active participation from all stakeholders helps build ownership and accountability for the change.

Enable: Facilitating the change process

Enabling involves creating an environment that supports the change and makes it sustainable. Our approach includes:

- **Training and development programs:** Comprehensive training programs equip employees with the skills needed for new ways of working.
- **Support systems:** Building robust support systems, including mentoring and coaching, guides employees through the change.
- **Delegating authority:** Empowering teams with the authority to make decisions gives them a sense of ownership and helps accelerate the change process.

Empower: Equipping for success

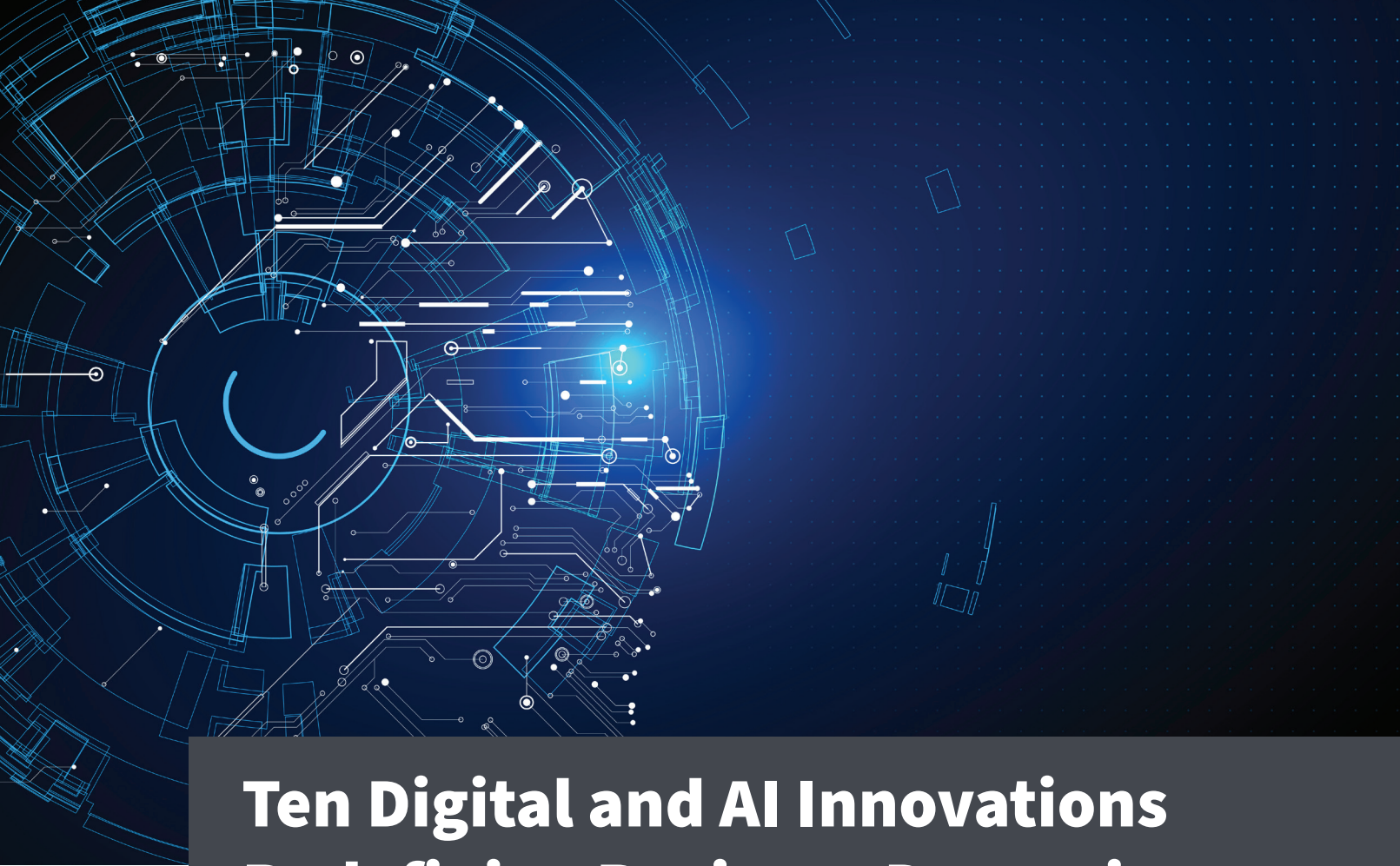
Empowerment involves providing the necessary tools, authority, and confidence to embrace change. We achieve this by:

Opticos proven framework

At Opticos, our change management framework is agnostic, allowing us to tailor our approach to the specific needs of each organization. We leverage well-known frameworks such as Kotter's 8-Step Process and Prosci's ADKAR model, integrating them into our unique toolbox to drive successful outcomes.

Conclusion

Change is not a straight line, and navigating it requires careful planning and execution. At Opticos, our expertise in motivating, involving, enabling, and empowering teams has helped numerous organizations achieve their desired business benefits through effective change management. Our commitment to sustaining change ensures that it goes beyond implementation and has a lasting impact on the organization.



Ten Digital and AI Innovations Redefining Business Dynamics

In the fast-paced realm of business, a silent revolution is coming in the form of a digital wave. Digital and Artificial Intelligence (AI) innovations are reshaping the landscape of how organisations operate, unlocking unprecedented efficiency, agility, and strategic insights. Digital technology now touches almost every part of our lives thanks to new technologies like cloud computing and artificial intelligence, along with new ways of building software. As long as technology keeps advancing, your business will need to adapt. So, it's important to see digital and AI transformation as something ongoing, not just a one-time thing. This journey involves constantly improving competitiveness by quickly adopting new technologies. As technology becomes more important, the difference between business and tech leaders will become less clear. That means all senior executives will need to know how to use technology effectively in their areas.

This substantial increase in spending, clearly suggests that organizations worldwide are increasingly investing in digital transformation initiatives to modernize their operations, improve efficiency, enhance customer experiences, and stay competitive in an increasingly digital world.

In this exploration, let's shed some light on the ten digital and AI innovations that are reshaping businesses worldwide.

Authors:



Ankita Bhargava
Senior Manager



Jasmeen Kaur
Senior Consultant

1. Generative AI: Data scientists globally are working on a special part of AI that focuses on making machines creative, like humans. These AI programs, called generative algorithms, can take different kinds of data – like videos, pictures, sounds, or even computer code – and use it to make completely new stuff that has never been seen before. One famous example is GPT-3, made by OpenAI. It can write text that's so similar to what humans write, you can hardly tell the difference. Another version called DALL-E can even make pictures.

In healthcare, AR is enhancing surgical precision and patient care while also transforming education through interactive learning experiences. The emergence of spatial computing, combining AR with AI, promises even more seamless integration of digital content into our physical world. As AR gets better and more popular, it's going to really change how we do things, learn, and talk with each other in the future.

5. Digital twins transforming industries and reshaping operations: Digital twins are rapidly becoming a key trend across industries, including manufacturing, where they are quietly rev-

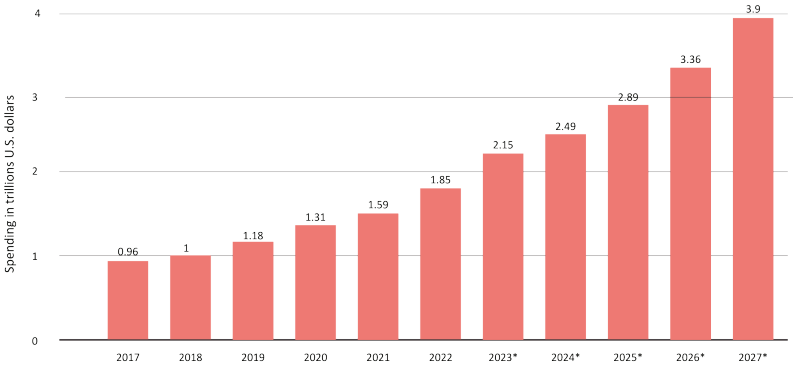


Illustration: Spending on digital transformation technologies and services worldwide from 2017 to 2027(in trillion U.S. dollars)
Source: Statista
In 2023, spending on digital transformation (DX) is projected to reach 2.15 trillion U.S. dollars. By 2027, global digital transformation spending is forecast to reach 3.9 trillion U.S. dollars.

2. Cybersecurity reinforced by AI: Business leaders worldwide see cyber-attacks as the biggest threat. In today's world where cyber dangers are growing, using AI for cybersecurity has been a game-changer. AI technology helps to examine large amounts of data to find any unusual activities or possible breaches, making our digital systems stronger against cyber threats.

3. Blockchain beyond cryptocurrencies: Blockchain technology is experiencing dynamic growth beyond its association with cryptocurrencies. While Non-Fungible Tokens have surged in popularity, redefining ownership in digital art and entertainment, decentralized finance (DeFi) platforms are reshaping traditional banking and finance systems. Alongside these trends, blockchain is quietly revolutionizing business operations by enhancing transparency and accountability in areas like supply chain management and secure data sharing. The integration of blockchain with emerging technologies such as artificial intelligence and the Internet of Things (IoT) is further fueling innovation and expanding its applications across various sectors.

4. Augmented Reality (AR): Augmented Reality (AR) is experiencing a dynamic evolution, marked by several key trends. It's revolutionizing retail with immersive shopping experiences and aiding remote collaboration across industries like manufacturing.

olutionizing production processes. By creating virtual replicas of physical assets, businesses can continuously monitor, analyze, and optimize operations in real-time, leading to reduced downtime and enhanced efficiency. Recent advancements in IoT sensors and data analytics have made digital twins more sophisticated, enabling predictive maintenance and AI-driven optimizations. Cloud-based solutions are also gaining prominence, facilitating remote access and collaboration among stakeholders. Moreover, digital twins are finding applications beyond manufacturing, such as in urban planning and smart city initiatives, where they allow authorities to simulate and optimize infrastructure projects before implementation. As digital twin technology continues to evolve, its transformative capabilities are poised to drive innovation and efficiency across various sectors. The digital-twin technology market is projected to experience a rapid annual growth rate of approximately 60 percent over the next five years, culminating in a valuation of \$73.5 billion by 2027. Companies have observed a 25 percent reduction in quality issues for products that originate as digital twins before entering production. Furthermore, nearly 75 percent of companies have embraced digital-twin technologies, with many achieving at least medium levels of complexity. Source : "Digital twins: The key to smart product development," McKinsey, July 31, 2023.

6. Cloud computing for real-time insights: Cloud computing is the very foundation upon which businesses can build their digital transformation initiatives. Its power is its agility, adjusting perfectly to workloads and adapting to the ever-changing markets, new customer demands and trends. With cloud, scaling applications up and down has been super-fast and easy, leading to much more efficient operations and getting your products or services faster to the markets than before. Cloud is the backbone of today's digital world and base for companies' digital transformation lift.

7. Big data analytics driving informed decision making: Data has become the very lifeline of every thriving business and is no longer an option. Big data analytics is emerging as a game-changer. By using historical data and advanced algorithms, businesses can use predictive analytics to predict future trends, customer behaviors, and market shifts. This enables informed decision making, minimizing risks and maximizing opportunities. Harnessing the power of big data is the key to surviving in the new age business world and leading the charge with every data driven step.

8. Natural Language Processing (NLP) and AI powered chatbots in customer service: AI-powered chatbots are increasingly being used in the customer service area. These chatbots can be used 24*7 and hence, enable businesses to respond to customer queries faster and in a more consistent way. Using Natural Language Processing in chatbots, businesses can engage in seamless conversations with customers. This innovation transforms customer interactions, providing personalized and efficient services. Overall chatbots have been a game changer in customer service by automating customer support tasks. This has enabled businesses to reduce their costs substantially in this area by automating standard queries and hence, saving time and resources to focus on more critical tasks.



9. Robotic Process Automation (RPA) in business processes: Behind the scenes, robots are taking on repetitive tasks, liberating human resources for more strategic endeavors. RPA is revolutionizing data entry, invoice processing, and other routine tasks, resulting

in increased efficiency and cost savings. This is helping businesses to scale their operations more quickly, and alongside, enabling them to take on more employees and transactions without adding more manpower.



10. Explainable AI for ethical decision making: The increased reliance on AI has resulted in greater accuracy observed by humans. However, the transparency and reasoning behind AI judgments are often more crucial for trust and reliability in both AI and human decision-making. Explainable AI serves as a bridge between humans and AI, offering a set of methods or processes used by AI to arrive at specific conclusions. The emphasis on interpretability to enhance decision-making accuracy is expected to become more pronounced in industries such as healthcare, human resources, and others. With AI becoming more common, it's crucial that its decisions are ethical. Explainable AI plays a critical role in ensuring transparency and understanding in the decision-making processes of algorithms, thereby mitigating the risks associated with biased or unethical outcomes.

While big news may focus on fancy new technologies, the real change in business happens quietly. These ten digital and AI innovations are like unsung heroes, changing how companies work. They're making things run better and smarter, while also thinking about what's right. As businesses keep growing, using these behind-the-scenes changes will be important to stay ahead in the digital world that's always changing.



Measuring the Impact of Digital Transformation Projects

Authors:



Abhishek Kale
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As digital business transformation becomes increasingly vital, management is willing to embark on initiatives that are expensive and both time and resource-intensive. But are these initiatives successful? How can progress and results be assessed? Many organizations invest heavily in digital technologies but are unable to determine if the investment has generated value or if they are headed in the right direction.

Digital transformation can go beyond technology and envelop the entire business. Successful digital initiatives require a strategic approach, strong leadership, employee engagement, and a focus on meeting customer needs. According to Harvard Business Review, although 89% of large companies globally have a digital and AI transformation underway, only 31% have captured the expected revenue lift and 25% have seen expected cost savings from the effort.

As digital projects become more complex and resource-intensive, it becomes necessary for organizations to quantify their impact effectively. A clear framework can help align initiatives with strategic goals, optimize resource allocation, manage risks, and make informed decisions. This in turn can foster a culture of continuous improvement and innovation. It can further ensure that digital projects not only deliver immediate benefits but also contribute

to long-term organizational growth. This enables the management team to prioritize scalable initiatives capable of substantially improving the organization's performance with fast, minimally viable outcomes that can be improved over time.

A measurement framework is key to digital transformation success

Unfortunately, this is an oversight that undermines many transformations before they even begin. It becomes easier to course-correct with a framework to identify weak points and monitor progress. A digital initiative is different for every organization and there are no universal metrics that can make it easy.

So, where do we start to identify the right metrics and KPIs? Organizations must focus on what they want to achieve with the transformation efforts and assess their digital maturity level to identify the right set of KPIs. Once the KPIs are identified, one must have the tracking and monitoring systems in place along with a robust reporting mechanism to enable analysis and decision making.

Focus on the right metrics to guide your initiative to success

Before introducing any KPIs, it would make sense to set the context by answering some preliminary questions. For instance, what are the key drivers for the digital project? Do we have the right systems to collect and analyse data necessary for the said KPIs? Organizations should understand their digital maturity levels and drivers for the project before establishing the right set of KPIs.

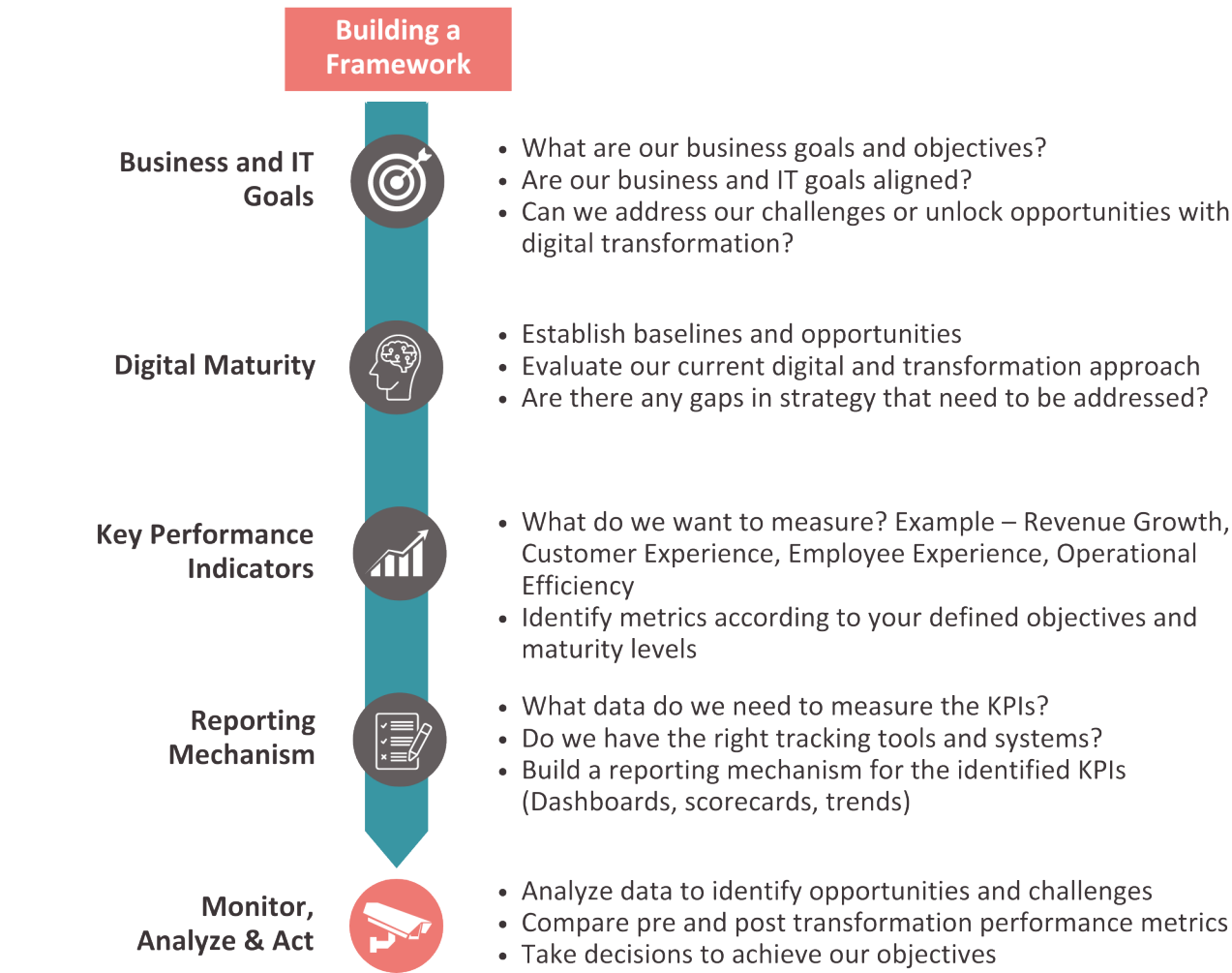
Organizations can have different objectives for their transformation initiatives, and they should begin by aligning KPIs with organizational goals, ensuring they reflect desired business outcomes. They can start by involving key stakeholders to identify relevant metrics that impact various departments. Every stakeholder may look at different metrics depending on their roles, and it is thus important to keep them informed, take feedback and incrementally course correct if necessary.

One of our clients, facing significant supply chain performance challenges, engaged us to address the issues through the implementation of an ERP system aimed at driving operational efficiency. Before initiating the implementation, we collaborated with the client to identify and define key business metrics that would serve as performance indicators throughout the project lifecycle. These metrics facilitated continuous monitoring and allowed for timely course corrections during regular monthly reviews. KPIs such as delivery precision, lead time reduction, and working capital optimization were established as benchmarks. These metrics were rigorously tracked even post-implementation to ensure the solution met the projected outcomes, thereby validating the long term success and sustainability of the transformation.

As the business objectives evolve, regular review and adjustment of KPIs can enable continuous improvement and successful digital transformation. When discussing the importance of measuring the success of any transformation project, we can draw on our experiences from previous projects at Opticos.

Opticos provides expert knowledge and helps organizations to develop successful frameworks, analyse current reporting mechanisms, establish robust KPIs and identify the right tools for measurement. Contact us to know more.

Every organization tracking its digital transformation progress will naturally employ various measurement tools. Given that the selection of these tools impacts the efficiency of measurement efforts, as well as the workloads and workflows of their users, selecting the right tools can significantly enhance the overall effectiveness of the transformation program.





Interview

The Changing Paradigm: Leadership Playbook for Success

Introduction

The global business landscape is evolving rapidly, marked by technological disruptions, geopolitical tensions, and a heightened focus on sustainability. As an independent Management Consulting firm supporting clients with their business transformation initiatives, we at Opticos felt the need to understand how companies, especially global corporates with roots in the Nordics, are navigating through turbulent change.

So, we decided to interview senior executives from four leading companies in their respective industry verticals: Essity, Trioworld, Securitas, and SAS. In these candid conversations, senior leaders shed light on their strategic vision, discuss the impact of Artificial Intelligence (AI) and automation, their approaches to mitigating risks amid economic and geopolitical uncertainties and various other business aspects.

Expert panel:

- Andrew Lord, Group CFO at TrioWorld
- Martin Althén, President at Securitas Digital
- Carina Malmgren Heander, Senior Advisor at SAS
- Ulrika Kolsrud, President, Health & Medical at Essity

The highlights of these discussions, including their insightful perspectives and forward-thinking ideas, are summarised here in this article.

CxO Profiles:



Andrew Lord
Group CFO at TrioWorld



Carina Malmgren Heander
Senior Advisor at SAS



Martin Althén
President at Securitas Digital



Ulrika Kolsrud
President, Health & Medical at Essity

1. Assessment of overall business climate in Sweden

The executives acknowledge the challenging business climate globally and in Sweden over the past few years, citing factors like the COVID-19 pandemic, inflation, supply chain disruptions, and changes in consumer behaviour stemming out of these factors. However, the leaders note that signs of economic recovery are showing and highlight their companies' agility and resilience in navigating these turbulent times.

Ulrika Kolsrud: "Regulatory changes, especially the Medical Device Regulation (MDR) in Europe, have burdened the health sector with significant adaptation costs. Inflationary pressures and rising costs have been especially challenging to manage in the regulated health care sector, characterised by long-term contracts and public funding. Despite these hurdles, Essity is in a better shape than ever, although it contends with customers opting for cheaper, lower-quality alternatives."

Andrew Lord: "Trioworld is in a great position at the market now, even as it emerges from a dynamic and uncertain business climate, with shocks such as COVID, changes in demand and consumer behaviour, and increased competition from cheap imports. Trioworld has successfully adapted to these challenges by being agile, restructuring, improving margins, and expanding in recycling and North America."

Martin Althén: "There has been a significant slowdown amidst high inflationary pressure over the past few years, with companies launching cost reduction programmes. However, even as interest rates start to reduce, we are now slowly leaving the high inflationary period into a more stable economy."

Initially, when borders reopened, there was a surge in leisure travel demand, with people prioritizing vacations and weekend trips. However, business travel patterns have changed. Despite economic downturns and high inflation, we've managed to maintain strong demand, with an 8% increase in travel compared to the previous year.

- Carina Malmgren Heander

2. Views on growing geopolitical uncertainties and mitigation strategies

Organizations around the globe have been facing turbulent situations due to ongoing geopolitical tensions. The executives expressed their concerns regarding

this and acknowledged the adverse impact on supply chains, operations, and related risks. At the same time, it presents a timely opportunity to implement strategies to monitor, mitigate, and address these uncertainties.

Ulrika Kolsrud: The growing geopolitical uncertainties and their impact on the business are a critical concern. Additionally, the Russia-Ukraine conflict disrupted supply chains, necessitating a reassessment of the supply chain in line with geographical expansion goals. To address the risks associated with geopolitical uncertainties, the company engages in scenario planning. This involves analysing macro trends and considering them in strategic and tactical decision-making processes.

The instability in the European market makes financial risk hedging increasingly important for Trioworld. We also offset the potential risks by using options a lot more now than previously. We have also changed our insurance portfolio as it now pays premiums for environmental protections which it did not previously.

- Andrew Lord

Martin Althén: "The geopolitical trends involving the rise of nationalist mindset, protectionism and artificial barriers to entry are hard realities that may likely get worse in the near future. In our business, we have actually stopped operations in 11 countries the past 2-3 years where we concluded we could not conduct good business aligned with our values, code of conduct and ethics."

Carina Malmgren Heander: "Geopolitical tensions primarily affect us through closed borders and overflight permissions. For instance, we currently can't fly over Russian airspace. However, we haven't seen a significant increase in fear of travel due to these uncertainties. It's more about practical considerations. We continuously monitor the situation and make adjustments."

3. Implications of AI and AI roadmaps

AI is viewed as a strategic priority for all companies, with roadmaps and initiatives in place to leverage AI for enhancing operations, efficiency, and customer experiences. While traditional AI is being applied primarily for optimization, generative AI presents new, uncharted opportunities. However, risks around AI governance, ethics, and cybersecurity remain primary concerns.

Ulrika Kolsrud: “AI is a high priority for Essity. The company has mapped out where it sees the greatest benefits of AI, whether internal or external, in daily operations or transformative game-changers. Essity views AI more as an opportunity than a threat.”

4. Companies’ sustainability efforts and alignment

Sustainability is a core priority that is deeply ingrained in decision-making processes of these companies. Efforts include environmental goals such as emissions reduction and waste management, social responsibility through ethical employment practices, and robust governance. Executives highlight sustainability as a competitive differentiator.

Sustainability has over the years transitioned from a buzzword to a key agenda item in boardroom discussions, aligning closely with the company’s vision. At Essity, Sustainability has been a major focus for a long time. It is integrated in the company’s strategy and decision making processes. We have established science-based and a net zero target, we’re collaborating with the UN to contribute to the SDG’s and are conducting life cycle analyses on products since decades.

- Ulrika Kolsrud

Andrew Lord: “Trioworld has a strong position in the market for circular solutions, as the EU legislation and the ESG agenda of the investors are driving the demand for recycled and low-carbon plastics. Trioworld has invested in innovation and technology to produce high-quality products from recycled materials and reduce its environmental impact.”

Martin Althén: “Sustainability has long been part of Securitas’ core values with demanding standards. More recently, we have expanded into areas like actively promoting diversity and inclusion as our industry has been historically male-dominated. Securitas was the first worldwide security company to sign the Science Based Targets initiative commitments.”

Carina Malmgren Heander: “Sustainability has been a priority for SAS for over 15 years. We’ve focused on optimizing flight routes, investing in more fuel-efficient aircraft, and participating in programs for developing electric and hydrogen-powered aircraft. We’re working with governments to incentivize sustainable aviation fuel (SAF) production and make it more accessible.”

CXO Perspectives

Talent strategies in the post-pandemic era

Global talent dynamics has taken a shift after the pandemic and when asked about the same Carina said, “During the pandemic, we had to furlough up to 90% of our workforce and lay off 5,000 employees. As demand rebounded, we faced challenges attracting and retaining talent, as many had left the industry. We’ve worked on enhancing our employee value proposition, offering remote and flexible working arrangements, and expanding our talent pool globally for specialized roles.”

Adding to this, Carina also spoke on how they are taking advantage of the AI boom to their advantage at SAS. “Leveraging AI to better match employee skills with assignments and create an internal talent marketplace” is listed as a key opportunity and challenge.

Securitas tech outlook: Opportunities in digital, AI, robotics

Securitas identifies several significant opportunities and risks that will shape their strategy in the coming years. Speaking about the top technological opportunities Martin said, “There are three key technology areas I see intersecting for us over the next 5 years – digital, AI and robotics. We are capturing more and more information delivery digitally. We will automate insights and response actions from that digital data through AI analytics. And we will increasingly deploy the appropriate robotic response option.”

One notable application is the use of AI as a verbal chat interface for security officers’ shift reporting. Guards can now report verbally in their natural language, increasing report frequency and detail. The AI then refines these reports, adjusting length, removing inappropriate content and sensitive information, and ensuring GDPR compliance. This system improves both the quantity and quality of reports, demonstrating the company’s commitment to leveraging AI’s potential across its operations.

Another major risk is deepfakes and other synthetic media becoming more and more real. However, for large enterprises like Securitas, we are investing in counter-AI capabilities to decrypt and detect synthetic media.

In essence, using AI to counter the threat AI.

- Martin Althén

The CFO’s roadmap for inspired leadership

Andrew talks about the leadership traits that are important for the businesses, and believes Trioworld excels at fine-tuning successful operations but acknowledges that addressing more challenging issues requires a different approach.

Adding to this he said, “Drawing from my own experience, I can assert that achieving turnarounds involves a hands-on approach. You need to identify and address problems swiftly. I value starting each year by clearly outlining goals and targets on a whiteboard to effectively communicate my vision to my finance team. This ensures everyone is aligned, inspired, and forward-thinking about the company’s direction and adaptability.”

Healthcare industry: Navigating turbulent waters

When we asked about the state of the healthcare industry, “It’s been a rough ride”, Ulrika told us. She went on to explain that it wasn’t just COVID-19 causing headaches. ‘You know, we’ve had these new regulations come in – the Medical Device Regulation in Europe. It’s been a real challenge to keep up our ambitious innovation agenda, when we’ve had to invest a lot of time and money to secure compliance.’

‘Then there’s inflation. Costs are going up, and when you’re dealing with long-term contracts like we are, that really squeezes you.’ Despite all this, Essity has emerged from this testing period stronger, with a sense of greater internal stability and looking to improve its position in the market for the longer run.

The final word

While many interesting aspects about business and leadership were highlighted and discussed, three things clearly stood out for us:

Innovation is one of the key levers to navigate through change: They may not necessarily be disruptive or path-breaking solutions but incremental changes that can create a positive impact on the business.

You may love or hate AI but can never ignore the transformative impact it will have on your business. If handled responsibly, an effective AI roadmap will deliver a sustainable competitive advantage for your business. Sustainability should transcend metrics and reporting to be a way of life. Business leaders should lead by example and take bold decisions to lead their companies into a sustainable future for the next generations.

Data Fabric: A Wet Blanket, or A Resilient Bedspread Over Your Data?

Introduction:

What if there was one place where you could go to get all the data you need? No matter what kind of data you are looking for you will find it in this place. It could be your company's master data, transactional data, analytics data, IoT data or even a document or a video. Sure, you will need to authenticate yourself and have the rights to access the data, but if that's the case, then you just need to look for it in one place. And best of all, you could rely on the data being presented in this place to be accurate. Like a bedspread wrapped over all your data assets giving shelter and at the same time providing a common interface to the surrounding world. Wouldn't that be wonderful? Well, that is the main idea behind the concept of "Data Fabric".

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What is data fabric?

Data Fabric as a concept has been developing during the past years as an answer to the increasing challenge of getting full benefits out of enterprise-wide data where:

- Companies are consuming IT services provided by multiple cloud platforms like AWS, Azure, GCP and of course, are using different SaaS more frequently.
- The amount of data generated by IoT, apps and social media is exploding.
- More evolving business models depend on the ability to have easy access to data and share more data with end consumers.
- End consumers evaluate products and services by the attached digital services as a key differentiator in their final selection.
- Data regulations like GDPR, DPP and AI-act are focusing on what specific data companies should share with regulating authorities and end consumers.
- Many companies still struggle with data in silos and locked-in legacy systems.

The ideas behind Data Fabric have been in development for many years. It started with collecting data in data warehouses, data lakes and BI platforms and was further developed by adding integration, security, data lineage and master data aspects. In the beginning, this was branded as Enterprise Information hubs or sometimes even as API platforms, but that was unfortunately driven by software vendors who had a hard time delivering upon their promises. So, the more general architectural pattern of Data Fabric was born, though the definition is somewhat blurry and depends on who you ask.

The figure below shows a conceptual architecture of the data fabric concept in relationship to other established concepts.

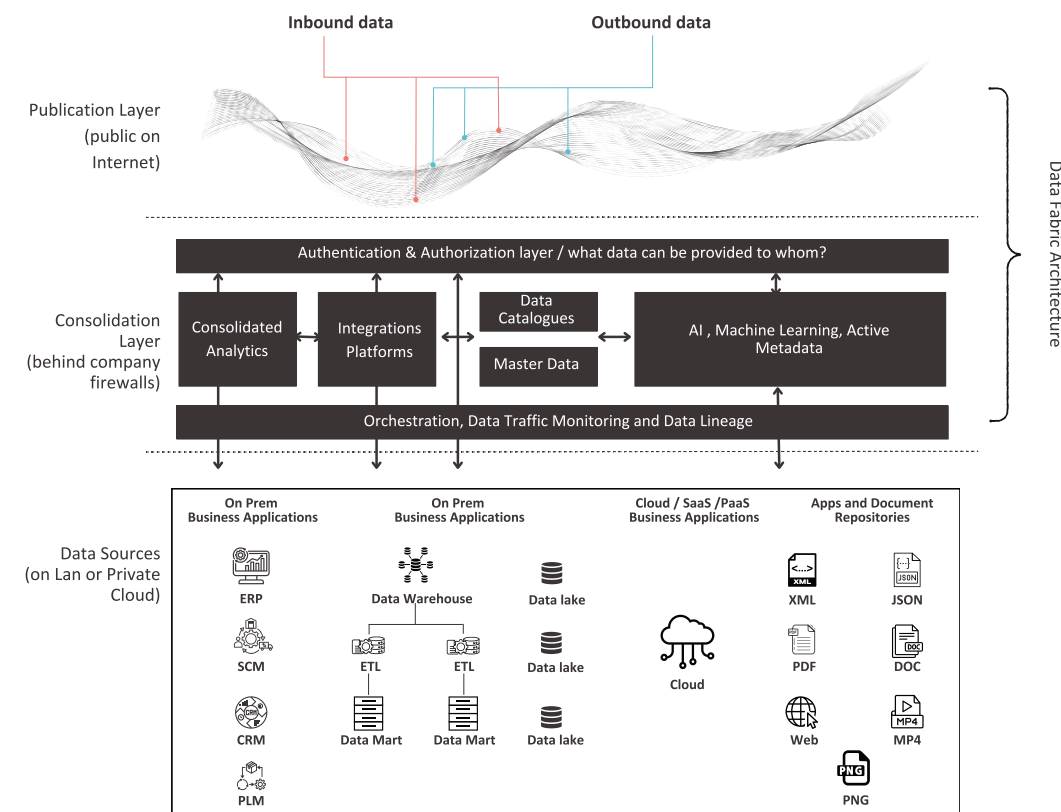


Exhibit 1: Conceptual architecture of the data fabric concept in relationship to other established concepts

For example, the exhibit below gives an interpretation of how different vendors in this area define Data Fabric:

Source	"X" = covered "-,-" = not covered	Concept Includes									
	LIFE-CYCLE STATE	DATA MANAGEMENT	INTEGRATION	BI & ANALYTICAL DATA	OPERATIONAL DATA	ML/AI	KNOWLEDGE GRAPHS	SEMANTICS ANALYSIS	ACTIVE METADATA	SOLUTION	ARCHITECTURAL PATTERN
Gartner	Emerging	✓	✓	✓	✓	✓	✓	✓	✓	-	✓
Forrester	-	✓	✓	-	-	-	✓	✓	-	-	✓
IBM	-	✓	✓	✓	✓	-	✓	-	-	-	✓
Informatica	-	✓	✓	✓	✓	✓	✓	✓	✓	-	✓
Qlik	-	✓	✓	-	✓	✓	✓	✓	✓	-	✓
Atlan	Emerging	-	✓	✓	✓	-	✓	-	✓	-	-
SAP	-	✓	✓	-	-	-	-	✓	-	✓	✓
HP	-	-	✓	-	-	-	-	✓	-	-	-
Denodo	-	✓	✓	-	-	✓	-	✓	-	-	✓
Cloudera	-	✓	✓	-	-	✓	✓	-	-	-	✓
Microsoft	-	-	✓	✓	✓	✓	-	-	-	✓	-
Google (GCP)	-	✓	-	-	-	✓	-	-	✓	✓	-
Ab Initio	-	✓	✓	-	-	-	✓	✓	✓	-	✓
Wikipedia	-	-	-	-	-	-	-	-	-	-	-

Exhibit 2: Interpretation of Data Fabric by different vendors

- As evidenced by the diverse interpretations provided in the table above, gaining a comprehensive understanding of the concept of Data Fabric is not straightforward, as it involves multiple perspectives from various sources and vendors. However, analyzing existing discussions surrounding the definition of a Data Fabric reveals a consensus that it serves as a mechanism for generating data pipelines and integrations from diverse sources within a unified platform. However, there are divergent views on whether a Data Fabric is considered an architecture or a broader concept encompassing various technologies and architectures.
- Furthermore, when it comes to looking at what creates a Data Fabric, some of the suggestions are pushing the idea that the Data Fabric is based around metadata and metadata analysis. In a metadata-based driven Data Fabric, metadata is used through activation and is then pushed towards the users when creating pipelines but is also suggesting new metadata when data is created from external sources. The metadata would also be enriched with semantics, putting meaning and context to the metadata through knowledge graphs. On these knowledge graphs, it would be possible to apply artificial intelligence and machine learning, and then we have achieved the concept of active metadata. The active metadata feature is considered one of the key features in

achieving a Data Fabric architecture, which is analyzed using semantics, knowledge graphs, artificial intelligence, and machine learning.

There are a few contrasting views of how Data Fabric is defined by market participants. While some call it a design concept which could be interpreted as architecture. Then there are others who view the data fabric as a ‘Solution’, thereby interpreting it as an instantiated architecture. Interestingly, most market participants agree that Data Management should be an integral part of the Data Fabric definition, however one goes as far as viewing data fabric as a data management approach which is a broad view which leaves a lot of room for own interpretations.

What challenges are the Data Fabric envisioned to solve?

One of the challenges in organizations is the diversity of sources and systems dealing with data. Data is generated at an increasing pace with the development of new technologies, regulations, and business needs. An increase in data volumes and number of data sources will make the landscape more complex and finding the right data, and understanding the data in context will therefore become more difficult. Additionally, with different systems and user groups, it is not unusual that data becomes siloed. Each system or user group will have access to and understand

the data within their respective silos. However, their knowledge about data outside of their organizational unit will be limited.

In addition, this may also lead to difficulties in harmonizing data and establishing consistent data categorization across the organization. Instances may arise where identical data objects exist in multiple locations but with varying identification formats, or worse, different taxonomies. A prime example of this is product or customer information, which may be scattered across numerous systems and often lacks consistency or sometimes, may even present contradictory information.

Another common problem is that the depth of the data architecture needed is underestimated. Large companies tend to strive to simplify the complexity of their own operations to be able to achieve a higher degree of freedom in their business processes. Consequently, processes are not adequately documented, and data is not captured and stored with the requisite granularity and quality. When these companies are faced with higher requirements on data quality by external parties like end-customers, regulating authorities or business partners, it could be a painful wake-up call. Attempting to implement a better order in the base data of a fully operating business is comparable to performing engine repairs on an airplane while it is airborne. Frequently, the solution involves implementing a new IT platform, such as a more robust ERP or master data platform. This enables the enhancement of data quality to coincide with the implementation of the new platform.

Yet another problem is simplifying data architecture work by putting it in the hands of large commercially available off-the-shelf platforms. To avoid tedious data management work, organizations rely on the data architecture presented to them by large solution platforms. The argumentation is that these platforms have many kinds of customers and hence they probably have already thought all data architecture aspects through anyhow. Later it’s not uncommon that these organizations discover the hard way that the complexity of their own business does not fit into this architecture. Then, costly adjustments are made to the solution platforms, data lakes are installed to bridge the gaps and analytical tools are installed to try to understand the data. If these mistakes are repeated frequently across the organization, the final situation

will be characterized by disorder and disintegration. Data Fabric has been presented as the cure for these problems, but the question managers should ask themselves is:

Will a Data Fabric really solve the problems, or will it rather attempt to minimize the damage done? Well, a Data Fabric focused on connecting all data in a business in an easy achievable platform in one place will mostly focus on damage control. To increase the data quality and reliability it is not enough to just connect the data with the surroundings. Here is where a structured approach to cleansing, normalizing, and analyzing the data on the fly can make a real difference. However, even if we could attain a higher level of data quality by incorporating capabilities for “on-the-fly-data-quality-improvement” such as AI, active metadata, and machine learning, it’s essential to maintain a skeptical approach regarding the reliability of the output. Data-driven decision-making assumes that the data is as accurate as possible. However, would you trust entirely machine-generated data to make critical decisions?

Given this rationale, it’s probable that Data Fabric architectures will initially see implementations in domains characterized by high-volume public data flows. In these contexts, data can be interpreted and acted upon with a lower risk of serious consequences in the event of faulty actions. However, as algorithms improve, Data Fabric architectures are likely to ascend in the value chain, eventually becoming a substantial data source in executive decision-making.

Another common problem is to establish and operate a working data governance organization. Many consider working with data governance to be a tedious and time-consuming task that often does not receive adequate attention. Furthermore, even when prioritized, it is frequently assigned to individuals with limited understanding of the potential business consequences of poor or inaccurate data. By implementing a sophisticated Data Fabric Architecture some of the problems generated by poor data governance could potentially also be addressed by establishing a self-healing active metadata architecture. While it may seem utopian at this moment, accomplishing this feat would yield significant potential.

What data fabric related technologies are there on the market?

When it comes to technologies related to Data Fabric, these can be classified into different categories:

- To start with, there are metadata technologies, such as data catalogs. Providers of data catalogs, such as Atlan and Informatica, tend to view meta-data as a central part of the Data Fabric. These companies also seem to have come the farthest in AI capabilities related to Data Fabrics.
- Other companies like TIBCO, IBM and Microsoft tend to view data pipeline platforms or data integration platforms as central to Data Fabrics.
- Companies like Denodo and Cloudera which have a legacy in data virtualization over several cloud platforms provide offerings that tackle the issue by handling data across multi-cloud environments.

Not surprisingly the different vendors tend to accommodate the Data Fabric concepts as much as possible into their own domains. In the table below we highlight some of the vendors in this domain and their current offerings in the Data Fabric area.

How, and to what extent, do these technologies address the challenges above?

Depending on how we view Data Fabrics, and what we need to get out of them, we could look at the following three components:

- A data discovery part, which in essence means a metadata model which can push information to the user.
- A data pipelining/integration part, where data is pulled from the source system and prepared and served to the user that needs the data.
- An active metadata part, where the organization might cater and compensate for some of the worst data quality issues in the underlying data by actively and virtually create the metadata from inbound data instead of matching inbound data against static metadata in the background.

However, merely focusing on data discovery and automation for data pipelines would only address part of the issue as outlined earlier. The common perspective is that a Data Fabric platform should encompass data discovery, data catalog, and hybrid integration tools to effectively tackle these challenges.

Some experts offer AI capabilities to achieve the active metadata setup and argue that without this, it cannot really be considered a Data Fabric platform. The main argument is that if we are aware of which data assets exist and what level of quality those data assets hold, then we can address data quality issues in real-time using AI and machine learning to provide a shield of automated data improvements that will result in improved quality compared to the underlying sources. Nevertheless, to make decisions based on this aggregated data, you must have a high level of trust in your algorithms.

Working with metadata has traditionally been a time-consuming and relatively static process, involving the analysis of required attributes and characteristics of data objects. However, in the future, advancements in technology could enable machines to interpret metadata dynamically, analyzing input data and utilizing AI algorithms to meta-tag data based on similarities with previous instances. This would undoubtedly represent a paradigm shift in data interpretation, capture, and analytics, unlocking the potential for advanced data handling in a fraction of the time compared to current methods.

Some providers are also taking this one step further and are integrating AI tools to create a spoken natural language interface to the data discovery module making the data even more accessible.

What do we see as challenges with Data Fabric?

Implementing a seamless data layer on top of a large and scattered data landscape brings its fair share of challenges. It is likely that organizations with complex IT/data landscapes will be those with the most to gain from investing in a Data Fabric architecture. On the other hand, the implementation of such a fabric project could be an arduous and time-consuming process, increasing the possibility of failure.

While legacy issues such as data accessibility and presenting the data in a consumer-friendly format remain, modern hybrid platforms have the tools built-in to address them.

Provider	Product	Type	Solution
IBM	Cloud Pak	Data pipelines, Data Catalog	Two main components: data pipelines and data governance.
TIBCO	Agile Data Fabric	Data integrations, Data pipelines	Mainly integrations and pipelines across a distributed data architecture
Informatica	CLAIRE, Data Catalog, Data Prep	Data Catalog (incl. Data Discovery)	A set of different technologies which are relevant to a Data Fabric. Their data catalog and data prep pieces of software are pushed as components in the Data Fabric, and also using the AI model CLAIRE to discover data.
Atlan	Data Catalog	Data Catalog (incl. Data Discovery)	The product is not considered a Data Fabric, rather that it as a data catalog can enable a Data Fabric. Atlan’s view of Data Fabrics is quite close to the view of Gartner. There is an Atlan AI announced, which is supposed to be a natural language data discovery tool.
Qlik	Talend Data Fabric	Application, API and data integration	A platform for data pipelines, which allows data governance and data integrity evaluation as well as integrating the different applications and APIs that produce and consume data.
SAP	Datasphere	Data integration, Data catalog, Data Virtualization, Semantic Modelling	Virtualized/connected data sources (SAP and non-SAP). Single source for data integration, cataloging, semantic modelling, data warehousing, and virtualization.
HPE	Ezmeral Data Fabric	Data Virtualization	Access, manage, and analyze data from different sources, (edge, cloud or on-prem). Acts like a data virtualization software that works across cloud, hybrid and on-prem systems.
Denodo	Denodo Platform	Data Virtualization	Data virtualization platform that works in multi cloud environments, there seems to be possibilities of adding AI and semantic layers, allow multiple sources. Denodo states that it provides a base for a Data Fabric while not stating that it is a Data Fabric.
Microsoft	Microsoft Fabric	Data pipelines	Combination of a data tools that are seemingly quite easy to use with lower barriers to analyze and get data. With the Onelake datahub it is possible to connect and explore data. Pipelines can be created through either Azure Synapse or Data Factory, which both are part of the MS Fabric product. Some questions remain concerning whether there is a data discovery part and how the integration concept works.
Cloudera	CDP, SDX	Hybrid Cloud Data	Cloud platform that allows integration between different data sources, such as multiple cloud platforms. Several data modules including a central data catalog contribute to a Data Fabric using Cloudera products.

Exhibit 3: Offerings of different vendors in Data Fabric area



If a company has successfully implemented technologies for data access and publication, the primary challenge moving forward will be ensuring the trustworthiness of the outcomes. It is tempting to think that an enterprise's common Data Fabric is seen as a cure for the bad underlying structure. What you achieve by implementing a Data Fabric on top of this mess is that you get a centralized mess where you easily can access the underlying bad data. This makes the poor data quality more visible rather than being restricted to a backbone legacy environment, translating into business decisions likely being taken based on incorrect data!

So, the real concern will be around data quality. The most effective approach to addressing this concern is by improving data quality at the source through processes such as data cleansing and enrichment. Further, an understanding of metadata and data structures will be required. AI can assist in automating manual and time-consuming tasks, not only in tidying up data sources but also during real-time data consumption.

What are our conclusions and recommendations?

To summarise, we feel the following observations are note-worthy:

- Consider Data Fabric to be an architecture rather than a tool.
- Currently, we do not observe any vendor in the market offering a comprehensive tool or platform for building a Data Fabric architecture. However, several vendors provide platforms and tools that could serve as essential components of your over-all Data Fabric architecture.
- Investing in a Data Fabric architecture must be seen as a research proposition where parts of the investment can be attributed to building knowledge and gaining experience. Prepare for the need to replace components in your architecture later, as the technologies mature.

Data Fabric architecture will find its first successful and cost-saving implementations in organizations with a high volume of data exchange with the external world and where the quality level of the data exchange is not critical. For example, the distribution of reviews on hotels, products and restaurants to many different sites and platforms.



Sourcing of Agile Development with Shared Risk

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Introduction

In the evolving landscape of digitalization, agile development has become a preferred approach for delivering high-quality solutions. The flexible and iterative nature of agile makes it an attractive approach in an environment where requirements often evolve over time. However, this flexibility can also introduce uncertainty in delivery timelines, costs, and outcomes for an organization.

Challenges

When sourcing Application Maintenance and Development (AM/AD) services in an agile context, through external suppliers, a common challenge arises. Agile teams and development services are generally sourced on a time and material basis – often without a common supplier strategy. Time and material contracts allow for a great deal of flexibility as suppliers provide resources based on the number of hours worked, and customers adjust priorities as new insights emerge during development. However, this approach places the bulk of the risk on the customer, as they are paying for the supplier's time, regardless of the quality or functionality delivered. Without a common supplier strategy there is also a risk of misalignment between the suppliers (in situations where they may have different objectives) as well as with the customer's objective.

A more effective approach to outsourcing agile AM/AD services is through contracts focused on risk sharing, clear responsibilities as well as commitment to common ways of working.

These risk-sharing focused contracts can include outcome-based milestones or other mechanisms that align the supplier's performance with delivery success.

- **Increment-level follow-ups:** At the end of each increment (typically four to six sprints), both parties conduct a formal follow-up on sprint delivery. These follow-ups serve as checkpoints where committed delivery within the increment is compared with actual delivery. By tying payments to the performance over an increment, the customer can better control costs and ensure predictability.
- **Increment delivery precision:** An increment delivery precision is a powerful risk-sharing tool. It holds the supplier accountable for delivering to, at

- Fixed price bundling of base-services: To achieve a high degree of predictability, base-services such as upgrades, incident management, planning and reporting, could be bundled together as a fixed price commitment for the supplier. This would also put a pressure on the supplier to automate and simplify services within the fixed price scope.

This shared risk approach motivates suppliers to deliver value while safeguarding the customer from overpaying for underperformance. Additionally, by linking full payment to outcome, organizations can ensure that their investments yield tangible results, promoting both cost efficiency and high-quality results.

For organizations looking to gain the benefits and flexibility of agile development, while still maintaining predictability and cost control, shifting to a risk-sharing contract model is a key strategy when sourcing application maintenance and development services from external suppliers.

The ultimate goal of these mechanisms is to enhance cost efficiency in agile AM/AD sourcing by ensuring predictable delivery and creating a fair distribution of risk between the customer and suppliers. By focusing on agreed team and scope, performance-based payments, and rigorous follow-up mechanisms, customers can limit the financial risk of delays or scope creep while still benefiting from agile's adaptability.



Below are some examples of mechanisms that could be introduced to ensure that both predictability and shared risk are built into the agile sourcing agreements:

- Preferred suppliers with a formal responsibility to enable and support the customer's transformation or innovation agenda
- Agreed team size and cost: The customer and supplier agrees on a baseline for the configuration and size of the agile team(s) – and thus a fixed running cost for the team(s). Changes to team configuration or size, and thus running cost, should be agreed upon between both parties.
- Handshake agreements at the sprint level: At the beginning of each sprint, both the customer and

least, a pre-agreed percent of the functionality in the sprint handshakes and pre-agreed quality level, as a condition to full payment. If the delivery falls short, a part of the payment could be deducted. The size of the deducted payment could be dependent on both the quality and functionality delivered. e.g quality and delivery performance. On concurrent increment under-performance, an even larger amount could be deducted.

- Earn-back mechanism: the supplier could be given the possibility to recover part of the deducted payment if the supplier's performance significantly exceeds the committed delivery during an agreed number of increment follow-ups after one follow-up resulting in payment deduction due to under-performance.





Preparing for ESPR Compliance

The DPP Chicken Race: Key CIO Challenges and Strategic Actions for Digital Product Passport

Introduction:

In July 2024 the European Parliament made a historical decision to approve years of work going into the legislation named “Eco-design for Sustainable Products Regulation” (ESPR). This will have large-scale effects on the requirements put on by companies selling or producing products intended for the European market. One requirement that is part of ESPR is that products should have a so-called Digital Product Passport (DPP). In this viewpoint, we at Opticos describe ESPR, DPP, and the potential challenges it might be to a manufacturing company CIO.

In short, these CIO will enter a waiting game, where they can act as forerunners, risking going wrong or followers risking being late. So, the CIO will find themselves in a DPP Chicken Race.

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Background on ESPR

The proposed ESPR legislation is a cornerstone in the European Commission’s strategy to establish environmentally sustainable and circular products as the new norm. This will be achieved by requiring companies to provide sustainability and circularity data on their products using a Digital Product Passport (DPP), leading to voluntary data sharing and expansion to other sustainable aspects under Union legislation.

Uncertainties remain about what product groups will initially be prioritized. Some groups are expected to be impacted as early as 2027, identified by the EU identifying as suitable first movers. Most industries and product categories, however, are expected to be subject to regulation by 2030. The legislation will be equally applied to products intended for consumers (B2C) as

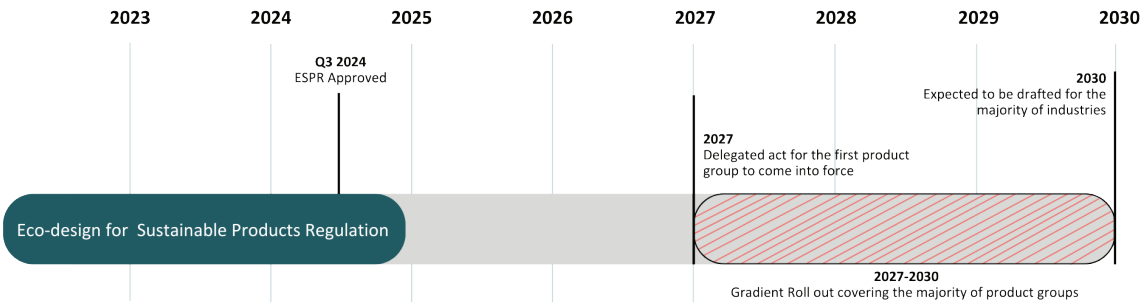
turers to level up their game and still be able to export to regions with legislation in place. Of the followers, the expected upcoming US legislation will most likely be the one with biggest impact.

As noted, the ESPR regulation is currently in development, implying several uncertainties such as:

Scope: How should requirements vary based on company size, and what is the appropriate level for applying Digital Product Passports?

Technology: Questions arise about the storage and management of data, the choice of carriers, and the methods for accessing data

Data: What specific information will be required, and to what extent? Additionally, considerations include identifying who will be responsible for collecting, updating, and verifying the data



well as for professional (B2B) markets.

The first delegated act specifying the product groups is expected to come into force soon. These groups will likely include those highlighted in the Circular Economy Action Plan (CEAP), such as electronics and ICT, batteries and vehicles, textiles, plastics, construction, and buildings. Although packaging is mentioned in CEAP, it is not expected to be covered by a separate delegated act.

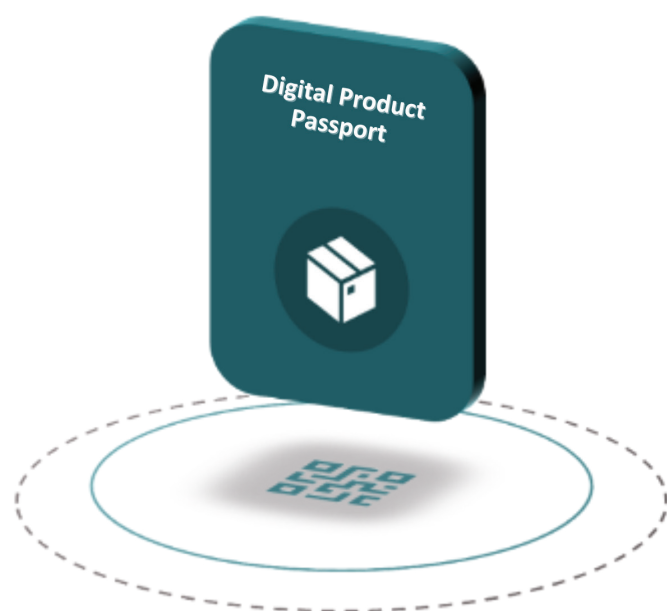
Furthermore, even though the ESPR is European legislation, it is expected to have a global impact, given the inherently global nature of supply chains, it is also likely that other regions will follow. This is partly due to political ambitions on fighting climate change, but also due to making manufacturing companies competitive. Since European legislation is implemented in a way that if you want to still sell or supply the European market you will need to follow the ESPR. By introducing similar legislation, pressure will be put on manufac-

These aspects are still evolving and will be clarified as the ESPR regulation progresses. This makes it difficult to accurately balance your efforts now. As a CIO it’s essential to be prepared to act and understand potential challenges ahead.

Digital Product Passport overview:

A Digital Product Passport (DPP) serves as a tool to gather and share information about a product throughout its entire lifecycle. It helps identify what product it is and showcases basic information as well as detailed data on sustainability, environmental impact, and recyclability of a product. The DPP records data from the entire supply chain, detailing where the raw materials come from and how the product was made. This information is then shared among different stakeholders, unlocking product insights and highlighting advantages and practical applications.

The data can be shared using different methods such as QR codes, barcodes, or NFC technology. The most likely option initially is using QR codes, given their widespread adoption across diverse industries. This preference is attributed to their common usage, ease of use, strength, and flexibility in connecting with smart devices. QR codes have potential security risks due to its simplistic nature with weblinks that can easily be exchanged by just adding an exchanged QR code on top of the original one, where users end up in fraudulent sites. It is therefore likely that more robust technologies will be developed over time.



All information requirements for a digital product passport should be relevant and serve a purpose. Each piece of information should have a clear scope and provide tangible user benefits throughout the product life cycle. At this stage, there are uncertainties regarding the information required for different industries and product groups. However, the European Commission will further elaborate on this in delegated acts, aiming to enhance the following product aspects:

- Product durability and reliability
- Product reusability
- Product upgradability, reparability, maintenance and refurbishment
- The presence of substances of concern in products
- Product energy and resource efficiency
- Recycled content in products
- Product remanufacturing and recycling
- The product's carbon and environmental footprint
- The product's expected generation of waste material

On top of this, producers might use the digital product passport for linking to relevant documentation on the products such as user manuals, support pages, software download pages, etc.

Challenges for the CIO

In most companies the implications this new legislation will create will not be owned by the CIO or the IT organization. The ownership will likely land in R&D, Product management, Operations or the Legal or Sustainability departments. However, like what happened in the case of the GDPR legislation that was owned by HR and where many of the required actions landed on

the IT organization to resolve, it is logical to assume this will be the case also with the ESPR/DPP legislation.

Business requirements on R&D, Operations and Legal will be broken down into IT requirements and will be put towards the IT department as change or transformation requests.

Like other major legislative agendas have done in the past (e.g., GDPR), the ESPR will significantly impact the IT landscape of large companies. It will affect applications that handle product data. In organizations focused on developing, manufacturing, and selling products, experience at Opticos indicates that this typically encompasses 30-40% of their total IT landscape [3]. In large manufacturing companies, this can equate to hundreds of applications. While not all applications will be affected, many may need to be adjusted to contribute data to the Digital Product Passport (DPP).

What kind of changes might be needed in those systems?

Product Data Architecture: To keep and publish product data to end consumers as regulated in ESPR and DPP the ability to keep consolidated product data in one place and being able to publish this is essential. When multiple applications handle data to be used in a publication platform like this, establishing a consistent metadata structure and standardizing attributes, both in terms of descriptions and data content, become essential. This can pose a significant challenge for large companies, particularly those with competing silos of product information, often a result from historical factors or mergers

Product Data Identifiers: To ensure accurate data retrieval, each product requires unique identifiers, such as model numbers, article numbers, and serial numbers. The combination of these identifiers should be unique within the company and, ideally, globally. Standards exist in this area, such as GTIN from GS1; however, it is worth noting that some of these standards are published by organizations with commercial interests

Product Data Quality & Supply: Even after addressing the challenges related to product data architecture and unique product identifiers, the most significant hurdle remains; populating product data with high-quality information for critical attributes. While this may seem straightforward, many of these attributes likely consist of data not directly controlled internally, requiring input from suppliers. Ensuring both the delivery and quality of this data will necessitate updated contracts with suppliers, as obtaining this information can involve substantial efforts on their part. Most manufacturers and their suppliers may even need to trace several steps down in value chain to gather data on metrics such as CO₂ emissions or water usage

Even with strong efforts to address the challenges outlined above, implementation within existing IT systems can still encounter obstacles, particularly with older legacy applications that may be unable to handle necessary changes without disrupting other operational functions. Additionally, there is the question of how much to invest in outdated platforms, especially those that are already past their intended lifecycle.

Many companies will investigate mitigating solutions, building translating and aggregating data lakes / data fabrics instead of fixing the issues in the source systems. This might work for publishing the DPP data to end consumers, however it will introduce other is-

sues. These data lakes / data fabrics might become business critical solutions for other departments that have direct access to the customers like product documentation and aftersales. These departments need to see the same information that the end-consumers see and suddenly, these solutions have become part of the day-to-day operational IT solutions creating transactional data like tickets and spare part sales. Getting these normalized and aggregated solutions to provide data in a non-normalized and de-aggregated structure to these operational solutions might be quite cumbersome. However, for many companies these aggregated solutions built on top of the old backbone will be needed to at all be able to meet the requirements put by DPP in time. When establishing these solutions, it is important to understand the long-term risk in those solutions.

Our recommendations for the CIO and initial actions

So how should you as the CIO go about taking on these challenges? Opticos has a 7-step approach that can give you a better understanding of the challenges ahead for your organization. Step 1 is understanding the stakeholder situation and step 2-7 is to understand the magnitude of the data and IT challenges. Even if the ownership of the data challenges most likely resides in the business it's not likely that the business themselves will have the capability to conduct the analysis required in step 2-7. That's why it's likely that the IT department will be involved and as the CIO it is wise being prepared for this.

The 7-step approach:

- Investigate how and when ESPR will affect your company. As a CIO this might initially mean understanding who is responsible for this question and how your company's products are affected.
- Get an understanding of what data you need to publish and what potential gaps you have in supplying them
- Understand if data is needed on the product model/article level or on the individual product level. The latter increases complexity and demands of traceability quite dramatically and if it's possible to avoid this then big efforts can be avoided
- Understand and set the data architecture needed to achieve the requirements and understand if this architecture can be achieved with existing data sources, modified data sources or new data layers aggregating and transforming the data into the architecture you need

- For the data you already have available investigate if the format and granularity are consistent over different data sources and in line with expectations on the ESRP publishing formats
- For the data you don't have available, investigate if this data can be supplied internally by your suppliers and if the latter start discussions and negotiations with them to get that data provided in the future
- Secure that the data collected and published is of equivalent quality, since it's going to be visible to end-consumers and authorities and bad data will lead to a bad market reputation in the same way as bad product quality

The time these challenges will require depends on your as-is situation, as well as the complexity of your PLM/ERP landscape. It is also dependent on how big and complex your product portfolio is and lastly how big your network of component suppliers is. For a large-scale manufacturing company, selling complex and assembled products, we at Opticos estimate that this is years of work rather than months. Therefore, good advice is to start sooner rather than later to meet the regulation timeline.

Business enablement and risks

The legislators in the EU are mostly motivating this type of legislation with decreasing environmental impact and fighting climate change. However, there is also a competitive advantage for companies to adopt this in a timely and appropriate way. By adopting the legislation companies can protect their products from being banned on the European market. Furthermore, if other less serious competitors' products are banned then there will be less competition in the market. So, less competition can be expected for those that do this right. Long term when governments or legislating bodies in other parts of the world eventually put similar legislation in place, the companies with this infrastructure in place will have an advantage over those that chose not to make these efforts up front.

The primary risk for companies starting early and attempting to be early adopters is that they might invest in solutions that do not ultimately fulfil the actual requirements, once clarified and formalized. Solutions in this field remain relatively immature, and there are opportunistic players aiming to be first on the market, often without offering effective, comprehensive solutions. Conducting thorough evaluations and relying on neutral, unbiased advice is essential to avoid missteps.

Being an early adopter also means risk overinvesting if legislation in the end has lower requirements than was originally being communicated. However, simply waiting for an industry standard to emerge also carries significant risk, as delays could ultimately lead to products being barred from the European market due to non-compliance. From Opticos we believe that our 7-steps approach as described above is a balanced way of preparing without making unnecessary commitments and investments early on.

Conclusion

Aligning with ESRP requirements is crucial for companies aiming for sustainability and market success. CIOs as well as other business leaders should strive to be well prepared for upcoming challenges. ESRP/DPP will for most manufacturing companies require substantial system upgrades or changes and enforced data management. It will also require a completely new level of supplying data from suppliers. Acting proactively as a CIO in accordance with Opticos recommendations in this viewpoint will lead to reduced risk of IT ending up on the critical path for future compliance. A proactive CIO will also gain trust in the business and strengthen the position as a strategic partner.

For CIOs or business owners seeking guidance in streamlining this process, Opticos offers expertise to navigate ESRP compliance effectively. Please reach out to see how we can support your organization in this sustainable production transition.



Tools for Managing Cultural Differences in Global Teams

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In today's global business environment, companies increasingly partner across borders, forming diverse teams that bring together different nationalities and cultural perspectives. While these collaborations offer significant opportunities for innovation, they also present challenges, particularly when it comes to managing change. Ensuring the success of change initiatives in culturally diverse teams requires businesses to address the unique hurdles posed by cultural differences, communication styles, and geographically dispersed teams.

From our consulting experience, we've seen that managing these challenges demands structured approaches that address cultural and communication barriers. It's not about prescribing a one-size-fits-all solution but finding the right tools to adapt to the specific cultural contexts of the teams involved.

Common Challenges in Global Teams

Global organizations often face recurring challenges when working with culturally diverse teams. Some of them are:

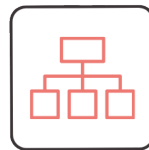
Different Approaches to Decision-Making

Some cultures prioritize consensus and group involvement, while others favour speed and decisive leadership. Balancing these expectations in global teams requires a thoughtful approach.



Varied Communication Styles

Direct communication is effective in some cultures, but others may prefer indirect, nuanced ways of conveying messages. This mismatch can lead to misunderstandings or conflicts.



Perceptions of Hierarchy and Authority

In certain teams, hierarchy plays a central role, with strict deference to authority. In contrast, some teams operate within flatter organizational structures, emphasizing collaboration and equality.

Managing Cultural Differences in Practice

Here are some practical tools and strategies that we've found effective in managing cultural diversity:

- **Cultural Awareness Workshops:** Cultural awareness is more than a formality—it's an essential starting point for collaboration. We've found that offering targeted cultural awareness training helps team members understand diverse perspectives and workplace behaviours. For example, in hierarchical cultures, employees may defer to authority, while in more egalitarian cultures, decision-making tends to be participatory. By educating employees on these differences, workshops enable better communication across hierarchical and cultural divides.
- **Social Engagement and Team-Building Activities:** Building trust and rapport is crucial for change initiatives to succeed, particularly in collectivist cultures where group harmony is prioritized. Organizing social activities or team-building exercises helps break down barriers and fosters a culture of openness. These activities also contribute to work-life balance in more indulgent cultures, improving team satisfaction and cohesion.
- **Establishing Ground Rules and A Common Vision:** Establishing clear ground rules—such as prioritizing the company's success, encouraging account-

ability, and fostering collaboration—ensures that all stakeholders are aligned and working towards the same goal. This helps streamline interactions and creates a structured framework for effective teamwork across cultural boundaries.

- **Stakeholder Mapping and Engagement Plans:** Identifying key stakeholders and understanding their influence is vital in high power distance cultures, where leadership approval may hold significant weight. In cultures with high uncertainty avoidance, early and frequent stakeholder engagement reduces resistance to change. Effective engagement plans ensure that stakeholders are kept informed and that their feedback is integrated throughout the change process.
- **Unified Communication Platforms and Escalation Processes:** Clear communication is a cornerstone of managing change. A unified communication platform allows teams to share updates, raise concerns, and provide feedback, no matter their location. In high uncertainty avoidance cultures, defined escalation processes offer security and clarity, while in more individualist cultures, such platforms empower team members to voice concerns directly.

- **Empowering Local Leadership and Change Agents:** Local leadership plays a key role in bridging cultural gaps. Leaders' familiar with local customs can adapt change initiatives to meet their team's expectations. In hierarchical cultures, empowering local leadership ensures that change efforts respect the existing structure, while in collectivist cultures, local leaders can foster group consensus and collaboration, making change more sustainable.
- **Feedback Loops and Continuous Improvement Mechanisms:** Regular feedback loops are essential to address concerns early and adjust change initiatives based on real-time input. We've found that continuous improvement mechanisms are especially effective in long-term-oriented cultures, where gradual growth is highly valued. In high uncertainty avoidance cultures, frequent feedback reduces fear and builds confidence in the change process.

Case Study: Managing Collaboration Across Multiple Stakeholders in a Global Transformation

In one of our recent engagements, we worked with a client facing the challenge of managing collaboration across multiple stakeholders—both internal and external—spanning several regions, including the UK, Sweden, the US, and India. The complexity of this setup was compounded by the fact that different cultures, priorities, and working styles needed to be aligned for the transformation to succeed.

To address these challenges, the company implemented several ground rules that ensured effective collaboration:

- **Put the Company First:** This principle guided all stakeholders to prioritize resolving business problems over individual disagreements. It helped to maintain focus on the company's overall success.
- **Be Accountable:** Everyone was expected to demonstrate accountability for their roles and responsibilities. This fostered a sense of mutual responsibility, encouraging transparency and ownership.
- **Work Collaboratively:** The mantra was simple but powerful—everyone's efforts collectively contributed to the company's success. This reinforced the importance of partnership across internal teams and external suppliers.
- **Share Knowledge:** Knowledge sharing was empha-

sized as essential to the success of the transformation. All stakeholders, whether internal or external, were encouraged to ensure that no part of the ecosystem was left unprepared.

Alongside these ground rules, we facilitated cultural awareness training to help the teams understand the diversity in communication styles, decision-making processes, and approaches to authority across different regions. This holistic approach—combining structured ground rules and cultural sensitivity—ensured that all stakeholders, regardless of location, could work together cohesively and achieve the desired outcomes.

Conclusion: Communication, Relationships, and Psychological Safety as Catalysts for Success

Managing cultural differences in global teams requires more than just awareness—it demands flexibility, trust, and a commitment to continuous learning. From our experience, the most successful teams are those that understand the pivotal role of communication and relationships in bridging cultural divides. Open, flexible communication fosters trust and builds psychological safety, where team members feel comfortable expressing their ideas and concerns without fear of judgment. This environment of psychological safety is crucial in diverse teams, as it encourages open dialogue and supports collaborative problem-solving.

Equally important are the relationships within the team. Strong personal connections, built through both formal and informal interactions, help break down barriers and create a sense of unity. These relationships make it easier for team members to navigate cultural differences and collaborate effectively, even in high-pressure situations.

By embedding communication, psychological safety, and relationship-building into the core of your change initiatives, organizations can turn cultural diversity into a strength. When teams embrace cultural differences as an asset, not a challenge, they unlock the full potential of their global workforce. This inclusive, adaptive approach not only enhances collaboration but ensures the long-term success of your initiatives.



Value Realization in a Modern IT Organization

Introduction

In today's rapidly evolving digital landscape, IT and technology have become pivotal to business success and as a result, navigating IT investments has become a critical challenge for modern organizations. Aligning these investments with business strategy has become not just a necessity but a strategic imperative to ensure that each investment not only supports but also drives strategic objectives.

Furthermore, funding from continuous improvements and operational excellence initiatives driven within the business or IT organization are often expected to drive out cost, releasing funds that can be used for transformation and change rather than operation.

In this article, we will present an introductory overview of the Opticos model, designed to address these key challenges. The model assists organizations in adopting a value governance approach for IT investments. The aim of the model is to create a comprehensive model that supports the reader in connecting tangible business values to IT investments ensuring a clear connection between technology initiatives and business strategy. This alignment is crucial for realizing the full potential of IT in driving business success.

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We'll explore how the Opticos model facilitates this alignment, transforming IT investments into strategic assets that propel organizational growth and operational excellence.

The Opticos Model

The Opticos model is an evolution from common concepts addressing areas such as value governance, portfolio and investment management, and business impact value tracking, in combination with customer assignment experiences.

Opticos has built its service offering and advisory around the three-step approach and the four key dimensions. The foundation of the model is depicted in a three-step approach that when done right will ensure that IT investments within an organization will always support the strategic objectives of the business, and by so doing ensure the realization of business values. The four key dimensions are interconnected and essential to drive business value by identifying and prioritizing what IT investments will support the business the best based on its priorities. Both these concepts will briefly be introduced in the following.

The three-step approach

The three-step approach can be used regardless of operating models or organizational design. However, it is important to keep in mind that to navigate through these steps, different tools need to be used to successfully implement the model, and that the tools are chosen with regard to organizational procedures and existing governance.

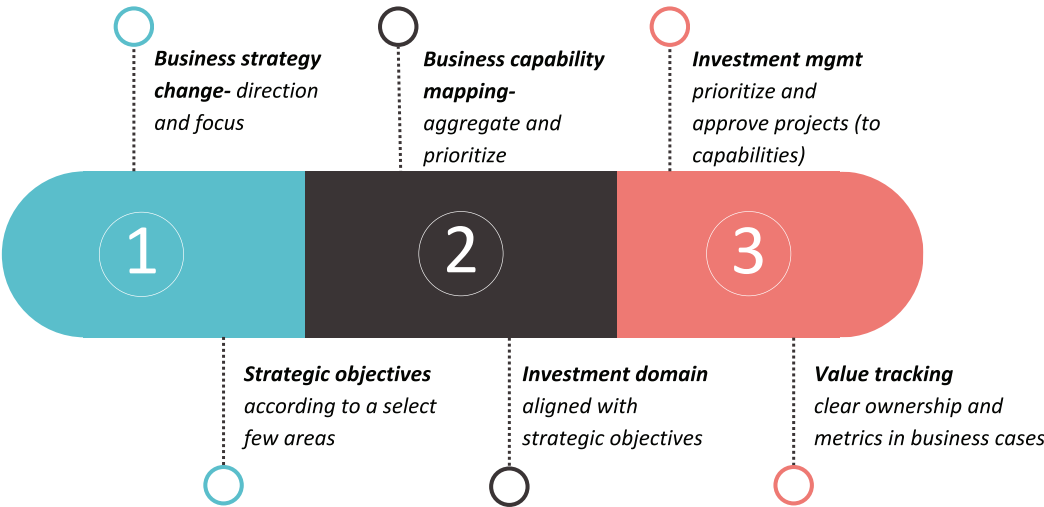
What the three-step approach offers is a structural approach to aligning IT investments with business strategy and ensuring that each investment has been approved and that it is providing the value that was intended by value tracking through the entirety of an investment's lifecycle.

1. Business strategy change implies that each organization's business strategy normally contains elements where change initiatives have been identified as required for the strategy to materialize and be achieved

2. Strategic objectives define the requirements for executing the identified changes into a select number of objectives that can be further detailed and prioritized. These objectives can put focus on any function or area within the organization such as HR, Sales, Supply, R&D, ESG, etc.

3. Business capability mapping breaks down the strategic objectives from a business capability perspective, and by doing so, also provides the foundation for what IT needs are required to secure the business capabilities at an enterprise

4. Investment domains define the specific IT requirements at a platform or solution level, closely aligning with the conceptual mapping of business processes. This approach ensures that the IT investments support the operational and strategic needs of the business



5. Investment management is where the investment domains within IT have been converted into specific IT solutions, platforms, domains or transformation activities that will support the strategic objectives to materialize and subsequently enable the business strategy to be fulfilled.

At this stage, identified change initiatives have been converted into programs or projects that need to be priced in order to be prioritized. To facilitate this, an initial business case is typically required. This business case should originate from the originally envisioned business benefits and expected value outcomes.

6. Value tracking is needed during the entire lifecycle of each investment in order to ensure that the expected values identified and showcased in the approved business cases are realized. For this, clear ownership and metrics are key.

Four dimensions

The four dimensions can be used to manage IT-driven change where IT is leveraged or required to fulfil the business strategy and the expected values. The tool can be used as an end-to-end process to ensure value realization as well as a tool to transform the current IT organization focusing on operational efficiency and the release of IT funding that can

be used for transformation instead of operations.

DEFINE: The desired outcome of the business strategy provides guidance for how funding should be allocated to ensure that the expected business values can be realized. To ensure the right focus, the three-step approach can be used to convert the business strategy into tangible strategic objectives, and business capabilities that are easily mapped to enablement and requirements within IT

TRANSFORM: Focuses on achieving operational excellence and cost optimization within both the business and the IT organization. Traditionally, standardization, consolidation, and sunseting of the current IT landscape contributes to release funding by lowering operational cost that can be used for change initiatives requested by the business

INVEST: This dimension is the culmination of DEFINE and TRANSFORM where available funding is distributed to IT investments that contribute to fulfilling the business strategy and the strategic objectives set by the business. By doing so, IT investments will only be realized where tangible values have been identified that in a cohesive way can be measured and tracked

TRACK: Focuses on accountability and responsibility for the investment, business case ownership, and tracking value realization over the entire lifecycle of the investment. It is not uncommon for organizations to focus on the project phase and take control over project execution, capitalization, and cash flow, but lose themselves in the actual operational phase of the outcome from the investment in question.

It is important to, for instance, reflect over: “Did we manage to automate the intended processes so that x number of FTEs could be used elsewhere? Did we manage to decrease our storage footprint by consolidating and lifting local storages to the cloud and applying active management of the solution?” just to give a few examples. Securing the full potential of value realization is only possible by adopting a lifecycle perspective

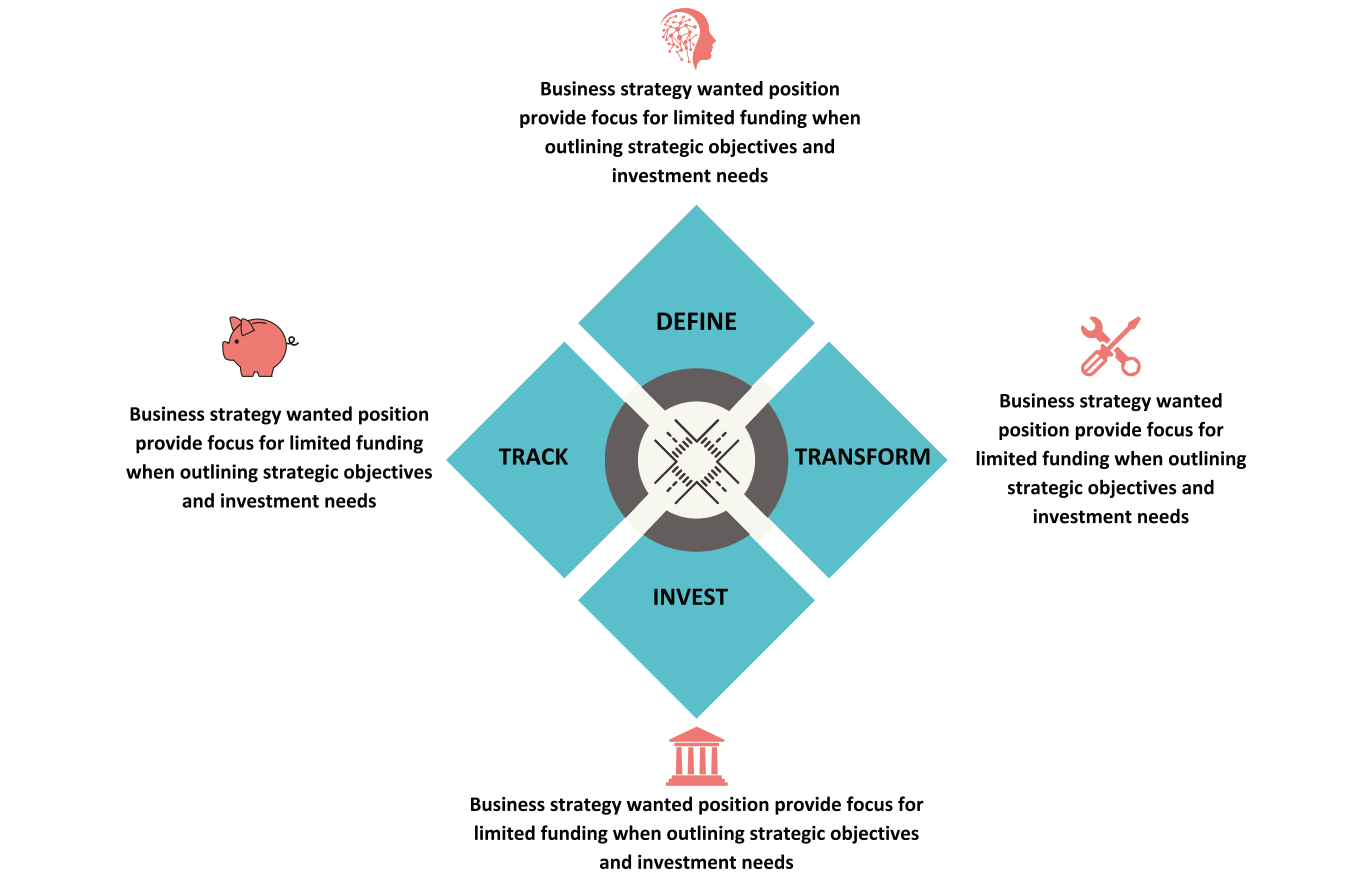
Putting it together

Jointly, the three-step approach and the four dimensions offer a powerful toolset that can be used to align IT investments with the business strategy where transformation requirements are driven or leveraged through IT and new technologies. While the three-step approach addresses how the business strategy in a structured way manifests itself in IT investments, measured and prioritized by business value, the four dimensions put the realization of the business strategy in an IT strategic and operational perspective.

Given the output from the three-step approach, how should IT (and the business) distribute its funding given current operational requirements and future transformation expectations? How should the IT organization balance funding of its own service portfolio to the portfolio of investment, e.g. portfolio, program, and project management, and how should the expected and realized values be quantified, prioritized, and tracked? With the Opticos model, the users can choose to apply the whole model as well as cherry-picking relevant or prioritized parts. The model can be used as a toolbox of governance activities and metrics as well as a means to build understanding and collaboration between IT and the business.

Summary

Organizations of today need to ensure that IT investments are made based on what business values they will contribute to realizing. Strategic objectives of the business strategy need to be linked to business capabilities, processes and supporting IT solutions. With limited funding, only investments in IT that contribute to fulfilling strategic objectives should be approved and prioritized. To raise and enable funding, many organizations need to optimize and streamline their current business and IT operations, often through digital transformation or automation, consolidation, and modernization. Regardless of where you are in your business transformation journey, scaling and leveraging new technologies and IT to become more competitive, more innovative, or more agile, Opticos can help you ensure that your IT investment portfolio is governed, tracked, and aligned towards your long-term strategic objectives of your business.





Strategic Considerations While Addressing Your Operating Model

Introduction

Companies on a growth journey often come to a point when taking the decision to set aside time to refine and/or reassess its operating model. Initiating such a program is often associated with multiple challenges but would also bring multiple benefits if successful. Regardless of whether your business model is built on flexibility and tailored solutions or aimed at streamlined operations focusing on efficiency, volume, and cost – a well-oiled operating model is needed and can help your business in the execution part.

To help getting off to a good start and to make sure an operating model program keeps on track, several factors need to be addressed. The complexity and scope of such a task may be daunting. To help power program efficiency and limit the risk of not reaching the desired target, we propose paying extra attention to a number of aspects as listed below.

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Laying the Groundwork: Defining Processes, Scope, and Objectives

1. Agree on a high-level process landscape

Without strong agreement on what your company’s key business processes are, there is a high risk of getting stuck in debates on scope, (functional) responsibilities, and overall ambition level with the Operating Model program.

Ensure agreement of scope with key stakeholders early on and assign ownership to each of key process to help make sure key decisions are taken in the work with developing future state. Below is an example on how a high-level process landscape might look like for one company. However, what is considered a supporting process for one company can for another be considered a core business process.

for applying for corporate credit cards and lack of personnel to handle the requests.

3. Tackling High-Impact Areas First: Do not try to solve everything at once

Trying to solve everything (all at once) and not just the most important pain points may probably result in a prolonged and inefficient operating model program and the desired target may not be achieved.

Build your future state by continuously focusing on the true pain points and manage your scope to ensure progress (e.g., in sprints). It is not possible to address all management processes, core business processes and supporting processes at once. If, for example, finance is considered one of the areas with most urgent pain points, it should be addressed first and later pain points within other areas can be addressed.

MANAGEMENT PROCESSES	Financial Management	Strategic Planning and Management	Operating Model Management	Project Management
CORE BUSINESS PROCESSES	Core Business 1	Core Business 2	Core Business 3	Core Business 4
SUPPORTING PROCESSES	HR	Communication	Compliance & Legal	Indirect Procurement
	Finance	IT	Sustainability	Innovation & Dev.

2. Identify and Address Core Pain Points

Understanding and prioritising the real pain points across the organisation is important to ensure that focus is on solving the most pressing questions that help the business see the true value of the work.

Engage with people in the organisation to identify, categorise, and prioritise pain points in appropriate categories (e.g., process, people, IT, governance). Typical pain points within e.g., the travel & expense process in finance, might be a time-consuming process for handling expense receipts, a document intensive process

4. Collaborative Redesign: Involve relevant stakeholders

Cross-company involvement is vital to ensure that the organisation understands what the desired target is and the expectations on them as well as their contribution in capturing current issues that they experience (which would need to be addressed). Change is embraced best when you feel involved.

Make sure to involve people across the business, ensure that there is a combination of functional representation and operations.

For instance, when addressing a process such as order to cash, many stakeholders (finance controller, treasury, tax, project manager, etc.) need to be involved as they are all part of the process.

5. Set up a Governance Framework

Inefficiencies and unclarities often come down to issues related to decision-making at various levels in the company. Agree on what key decisions there are, who should take them and when. Avoid bottleneck situations and limit the number of roles involved when possible.

For example, within finance there are many processes and the processes in turn have multiple decision points or approvals. There should be one role responsible for the order to cash process to ensure that the process runs smooth and without bottlenecks. The decision points within the process can have other roles assigned to them, e.g., treasury to decide on funds flow.

Conclusion

In summary, to ensure program efficiency and achieving the target when reassessing the operating model, make sure to agree on a high-level process landscape, find the true pain points, address what is important and do not try to solve everything. Try to involve the business as much as possible, and secure that governance and decision-making are clear in the processes.

At Opticos, our team of experienced management consultants specialize in guiding companies through complex operating model transformations. With our strong background in IT management and business process optimization, we offer tailored solutions to align your strategy, people, processes, technology, and governance for sustainable growth. If you’re embarking on an operating model reassessment, Opticos can be your trusted partner.

Thanks for engaging with us

For the latest insights, visit our website
www.opticos.se/viewpoint
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