

Building the most comprehensive, reality-accurate, and flexible solution for optimizing business processes with causal process mining

What is the **situation**?

78%

of business leaders said they can save 3 hours of work a day – *Work Market*



...but how?

16h

per week are used by executives on administrative work – *Service Now*



...but why?

50%

of employee time assumed to be used for menial data entry – *MIT Sloan*



...but where?

54%

of employees believe they can save 2 hours each day through automating tasks – *Work Market*



...but which?

“If you can’t describe what you are doing as a process,
you don’t know what you’re doing.”

~ W. Edwards Deming



What are **problems** with existing solutions?

No real transparency



Processes are only viewed from one perspective and causal interrelationships are ignored, which leads to **unrealistic and incorrect conclusions**. The resulting prioritization of problems leads to poor decisions.

No tangible outcomes



Analyzing process data accurately **requires experts, a lot of time and an external consulting budget**. The results are usually still insufficient and the procedure starts all over again for even small adjustments or the next process.

No context intelligence

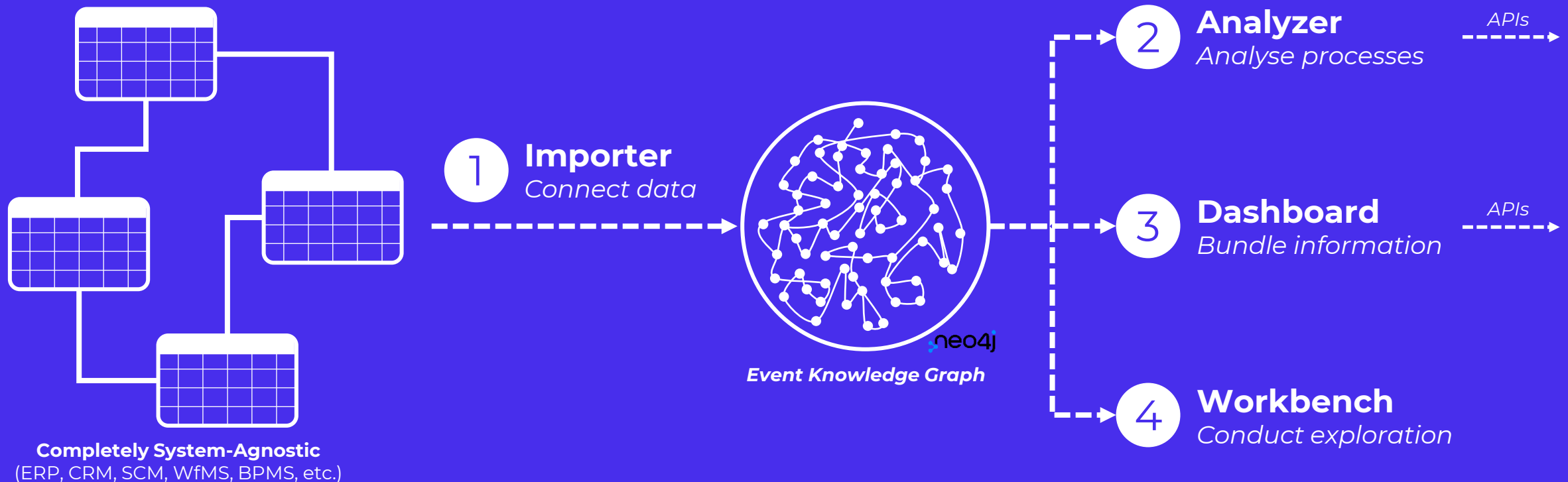


The valuable domain knowledge of employees is completely ignored. As a result, it is not possible to work continuously with the analyses because there are no working assumptions that can be compared with the data.

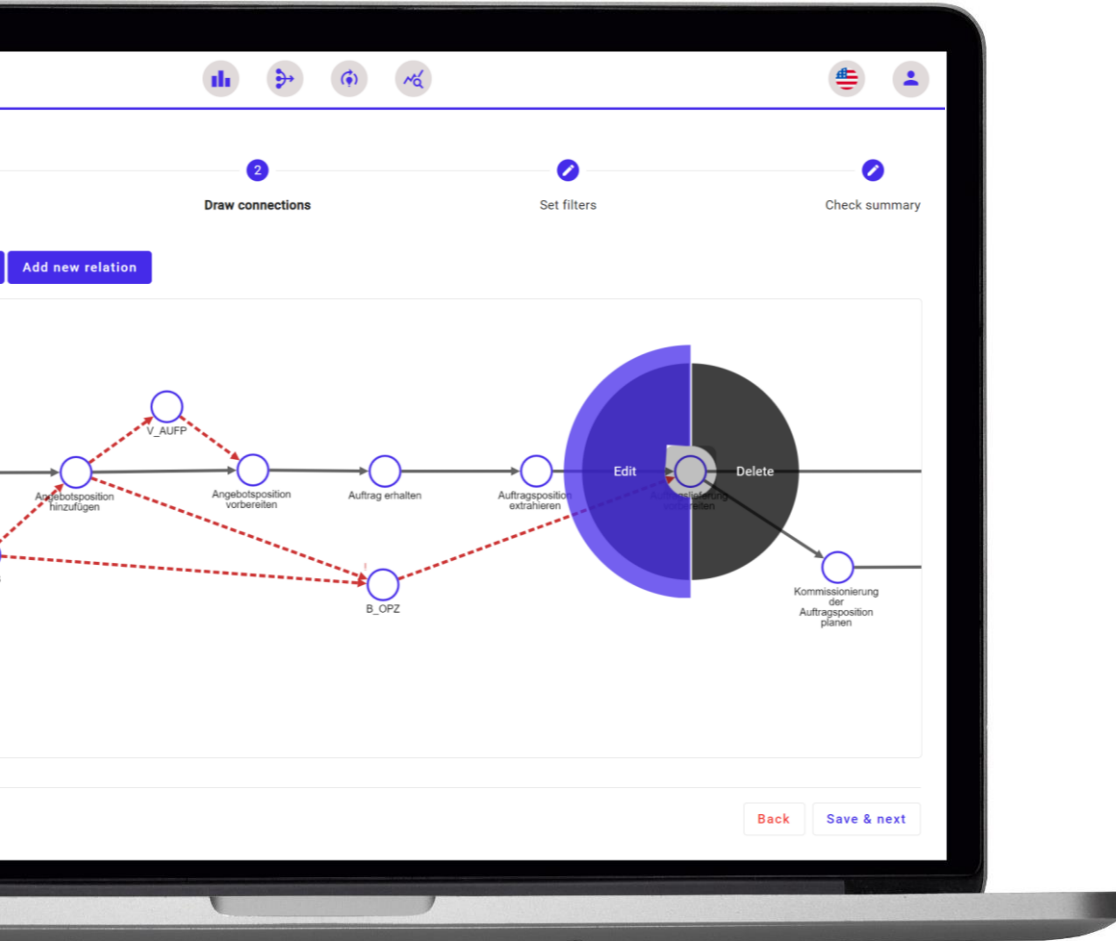


What **solution** do we provide?

Noreja Process Intelligence
bundles four different features ...



What features do we offer?



The Importer:

Instead of requiring costly extracted event logs, our Importer puts the power in your hands, letting you configure your hypothesized process model and add meta-data as and when you want, all at the click of a button.

- Import multiple process dimensions
- Connect directly to your source systems
- Include domain expertise of humans right at the import

>85%

have to outsource event log creation to external consultants.



What features do we offer?

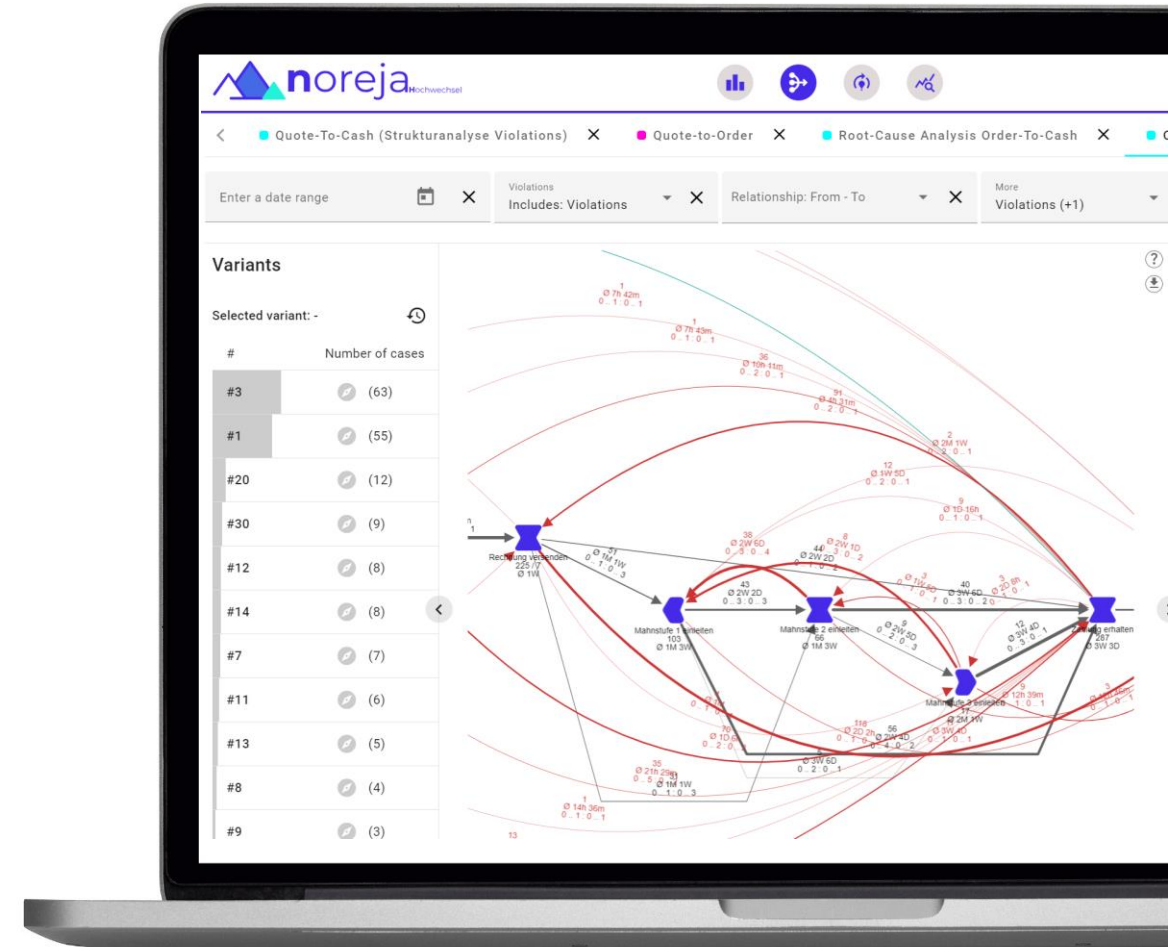
The Analyzer:

The Analyzer lets you deep dive your processes, improve your understanding of your organization and its ways of working, and find out exactly how to address the issues you find.

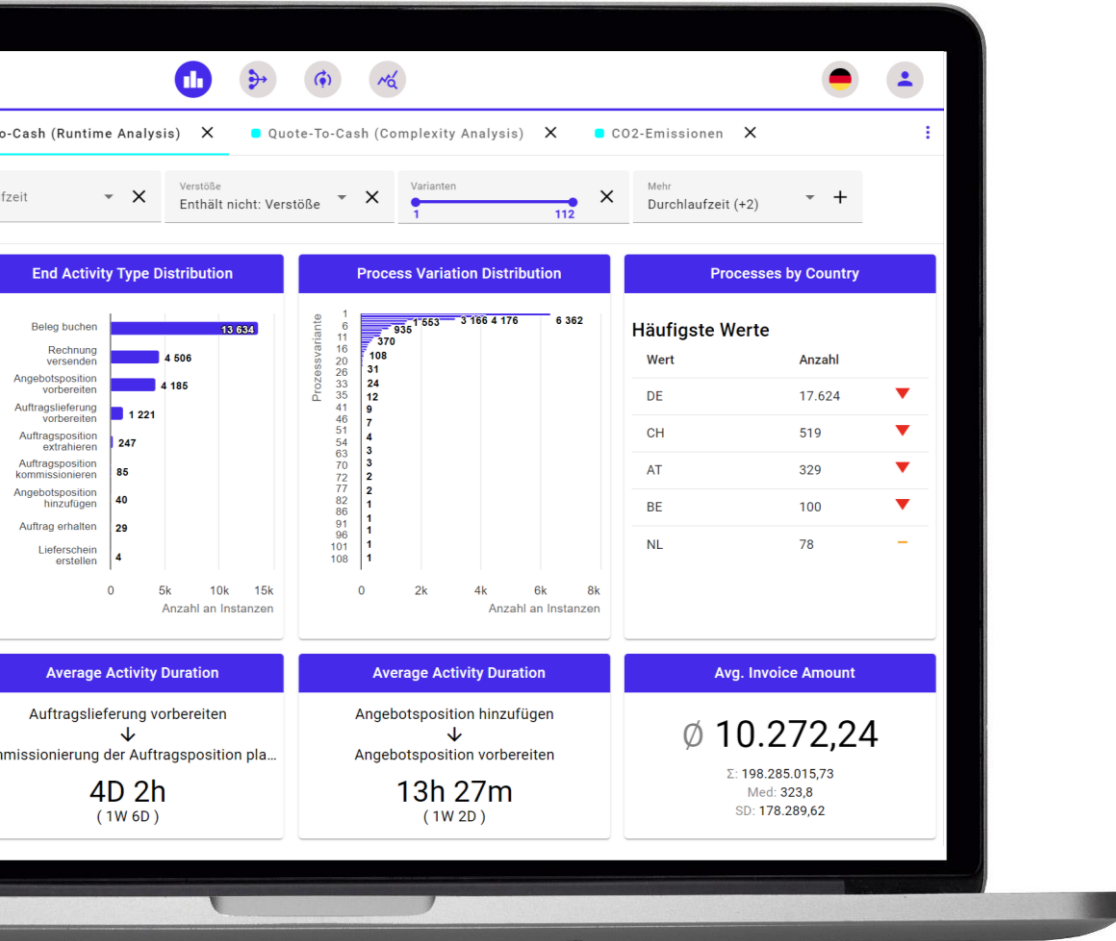
- Dive into the structure and variants of your process
- Find bottlenecks, compliance issues, rework, and blocker
- Check out more views like timelines, dotted charts, etc.

>60%

of first-time users of existing process mining tools don't know how to interpret the results.



What features do we offer?



The Dashboard:

Our fully configurable dashboard allows you to distill down just the important information for your colleagues and stakeholders in a familiar, easy-to-understand way, or monitor your own process performance indicators for changes and improvements.

- Visualize data with graphical widgets
- Use custom filters to highlight only what you need
- Monitor your KPIs in real-time

>45%

of executives have reported that they have no time to look at classic, complex mixed-format dashboards.



What features do we offer?

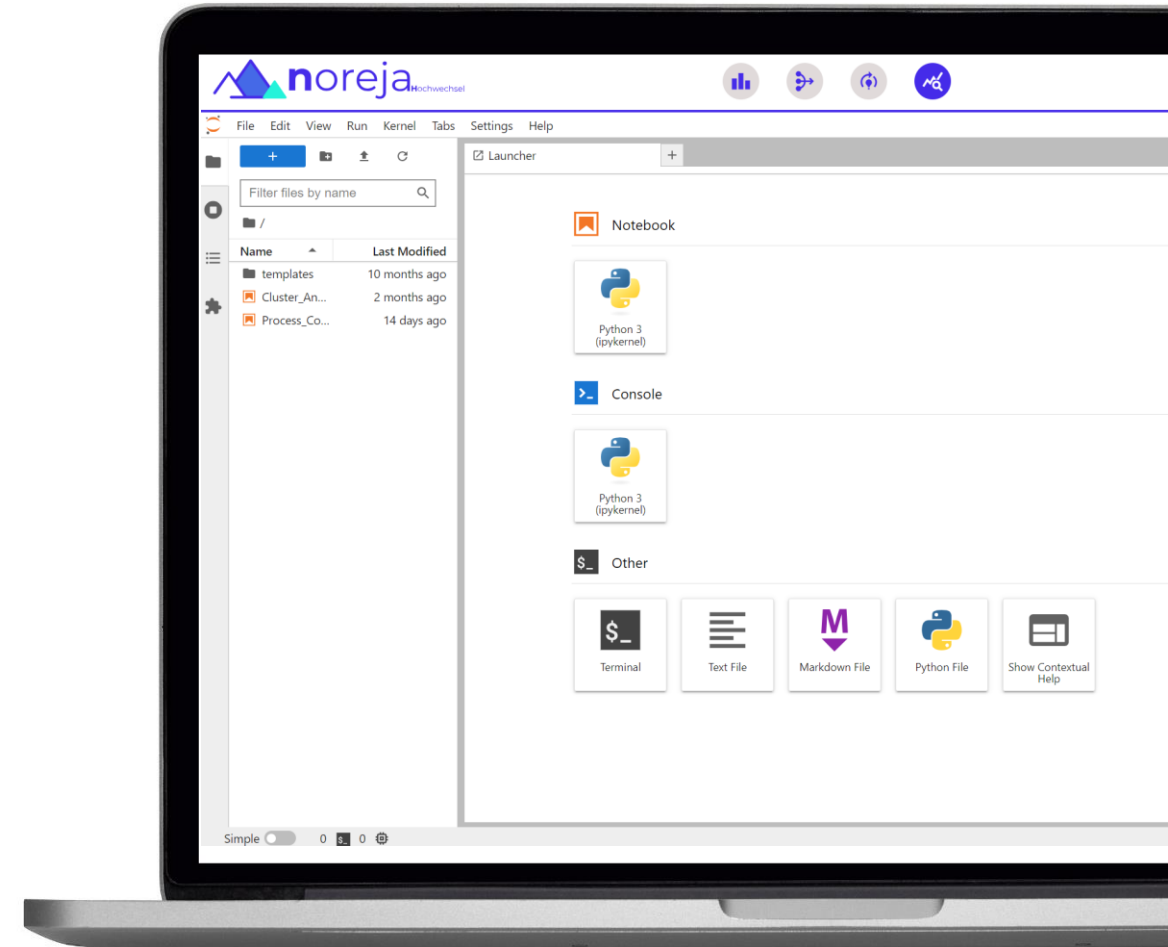
The Workbench:

Our embedded Jupyter Notebook lets you or your data scientists write their own scripts – all without leaving our application. With us, your data is always yours and in your total and complete control.

- Write Python code directly connected to a graph database
- Leverage graph data science libraries
- Save, store and reuse individual scripts

>70%

of data scientists prefer their data to be in one central location instead of siloed systems.



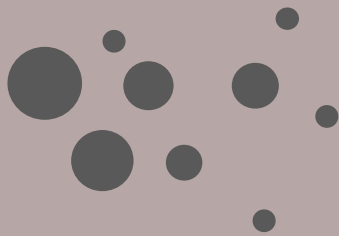
What do we do differently?

Focus on causal relationships and context intelligence



Single Dimensional

Multi-Dimensional



Focus on directly-follows relationships



What is the **value**?

Speed of implementation without expert knowledge



The data connection works without intermediate steps like an event-log. The importer is based directly on the source data of the (relational) database. This **accelerates the data connection** enormously compared to conventional solutions.

Reality-accuracy based on causal relationships



The process analysis considers complex interrelationships of the data schema of the underlying source systems. This makes the analyses on the dashboard and analyzer **more realistic and bypasses weaknesses of conventional solutions.**

Multi-dimensional perspectives



The process analysis can be carried out with a **multidimensional view of the process.** Users can add additional views based on individual business objects, such as an order number, a user ID or an invoice number.

Integrated context and domain knowledge



By integrating domain knowledge, a direct **comparison can be made between the TARGET and ACTUAL states** of the process. Different path types such as return paths, shortcut paths or hypothetical paths can be shown and hidden.

Improve



Problem-To-Cause

Cause-To-Change

Change-To-Impact



How to get started?



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1

Industry Insight: Insurance

Opportunities

The insurance industry epitomizes a high degree of process orientation, a quality essential for its efficient and effective functioning. At its core, insurance is about evaluating, accepting, and managing risk, necessitating a strong reliance on structured processes to handle these tasks consistently and accurately. Process orientation in insurance manifests in several key areas:

1. Risk Assessment

Insurers must meticulously evaluate potential risks associated with policyholders. This requires a systematic approach to gather and analyze data, involving algorithms and actuarial models that assess risk profiles and set premiums accordingly.

2. Claims Processing

Another cornerstone of process orientation in the insurance sector. Upon receiving a claim, insurers follow a rigorous procedure to verify, assess, and settle claims. This process is critical to ensure fairness, accuracy, and compliance with regulatory standards. It involves steps like claim verification, damage assessment, and liaison with stakeholders, all requiring a high level of procedural adherence.

3. Compliance and Regulatory Adherence

Paramount in the insurance industry. Insurers must navigate a complex web of regulations, necessitating processes that ensure compliance with legal requirements, protect consumer rights, and maintain data privacy and security.

4. Customer Service

Inherently process driven, CS focuses on providing timely and accurate information and support to policyholders. This involves standardized procedures for customer interaction, policy management, and resolution of queries or disputes.

In conclusion, the insurance industry's heavy reliance on processes is evident in its critical functions – risk assessment, claims processing, compliance, and customer service. This structured approach is vital for maintaining accuracy, efficiency, fairness, and regulatory compliance, all of which are crucial for the industry's success and trustworthiness.



Feasibility



Process volume



Digitization



Process variability



2 Industry Insight: Manufacturing

Opportunities

The manufacturing industry is the epitome of process orientation, embodying a structured and systematic approach that is pivotal for its operational efficacy and product integrity. Manufacturing requires orchestrated design, production, and quality management, demanding a robust process framework for precision and consistency. Key process domains in manufacturing include:

1. Product Development and Design

Require a meticulous process of conceptualizing, prototyping, and refining products. This involves the use of detailed blueprints, computer-aided design (CAD) software, and iterative testing to develop products that meet specific criteria and functional requirements.

2. Production Workflow

A testament to the industry's process-driven nature. From raw material procurement to assembly line operations, manufacturers implement tightly controlled processes to ensure efficient resource use, time management, and labor allocation and to minimize downtime and waste.

3. Quality Control

Through a series of checkpoints and standards, manufacturers ensure that products adhere to quality specifications. This rigorous oversight includes the use of statistical process control, inspections, and audits to maintain product integrity and customer trust.

4. Supply Chain and Logistics Management

Integral to manufacturing & involving a complex network of suppliers, distributors, and retailers. Effective process management is vital for synchronizing supply with production demands, inventory management, and delivery schedules, ensuring that operations are lean and responsive to market needs.

In conclusion, the manufacturing industry's foundational reliance on processes is clear in its fundamental operations – product development, production workflow, quality control, and supply chain management. This methodical approach is crucial for safeguarding product quality, operational efficiency, and competitive advantage, all of which are indispensable for the industry's robustness and reputation.



Feasibility Digitization



Process volume

Process variability



3 Industry Insight: Finance

Opportunities

The realm of finance within a business context is fundamentally process-oriented, with a particular emphasis on the precision and accuracy required for fiscal responsibility and integrity. Three key financial processes - Order-To-Cash (O2C), Purchase-To-Pay (P2P), and Record-To-Report (R2R) - are pivotal in illustrating the degree of process orientation in financial management:

1. Order-To-Cash

This process epitomizes the financial cycle, starting from the order entry through to the receipt of payment. This process encapsulates several steps, including order management, credit management, billing, and collections. Each step is defined by structured procedures to ensure timely and accurate invoicing, payment processing, and cash flow management.

2. Purchase-To-Pay

This process is equally crucial, encompassing the entire procurement process from the initial purchase order to the payment of the invoice. This process is integral for controlling expenditures, managing vendor relationships, and ensuring that payments are processed in compliance with contractual terms. It requires stringent processes for requisition, purchasing, receiving, and accounts payable to ensure efficiency and cost control.

3. Record-To-Report

This process is the cornerstone of financial reporting and compliance. It involves capturing financial data and transforming it into meaningful financial reports. This process-oriented approach includes journal entries, general ledger postings, trial balance reconciliation, and the preparation of financial statements and reports. These steps are critical for providing stakeholders with accurate and transparent financial information.

In conclusion, financial processes within a business are meticulously designed to ensure order, compliance, and strategic financial management. The O2C, P2P, and R2R processes are testament to this, each constituting a series of carefully crafted steps to maintain financial integrity, support decision-making, and uphold regulatory compliance. The reliance on these processes is indispensable for a business's financial success and sustainability.



Feasibility Digitization



Process volume

Process variability



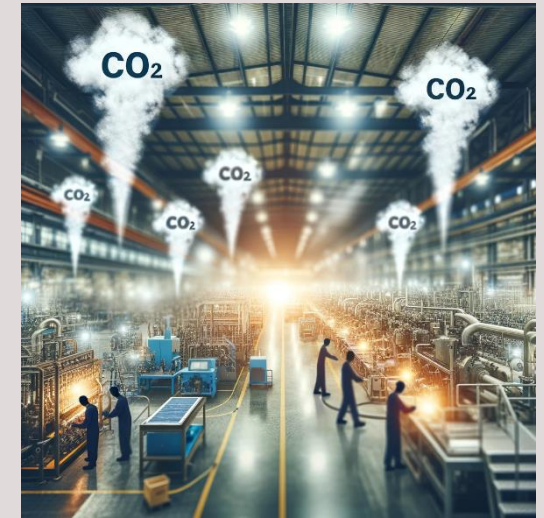
4 Industry Insight: Sustainability Management

Characteristics

Sustainability management represents an intrinsic commitment to process orientation, ensuring that environmental, social, and economic responsibilities are met with due diligence. Within this realm, the deployment of structured processes is essential to harmonize the long-term objectives of businesses with the pressing need for sustainable practices. Process orientation within sustainability management materializes in several key facets:

- 1. Environmental Impact Assessment** is the cornerstone of sustainability management. Organizations must engage in comprehensive evaluations of their operations, products, and services. This requires systematic data collection and analysis on emissions, resource consumption, and waste generation, followed by implementing processes to mitigate negative impacts.
- 2. Sustainable Supply Chain Management** is another critical element. Companies must ensure that their suppliers and partners adhere to environmental and social standards. This involves processes for supplier selection, monitoring, and engagement, as well as the development and enforcement of sustainable procurement policies.
- 3. Regulatory Compliance and Reporting** are paramount in sustainability management. Businesses must navigate an intricate lattice of sustainability regulations and standards. To this end, they establish procedures for legal compliance, sustainability reporting, and stakeholder communication, ensuring transparency and accountability in their sustainability initiatives.
- 4. Innovation in Sustainability Practices** is process-driven, focusing on the development and integration of eco-friendly technologies and methods. This encompasses processes for research and development, cross-functional collaboration, and the continuous improvement of products and operations to reduce the environmental footprint.

In conclusion, the reliance on structured processes within sustainability management is clear across these four fundamental aspects. These processes are crucial for embedding sustainability into the core strategy, ensuring that organizations not only minimize their impact on the planet but also contribute positively to societal and economic well-being, securing their place as responsible and forward-thinking entities in the global market.



Feasibility Digitization



Process
volume

Process
variability

