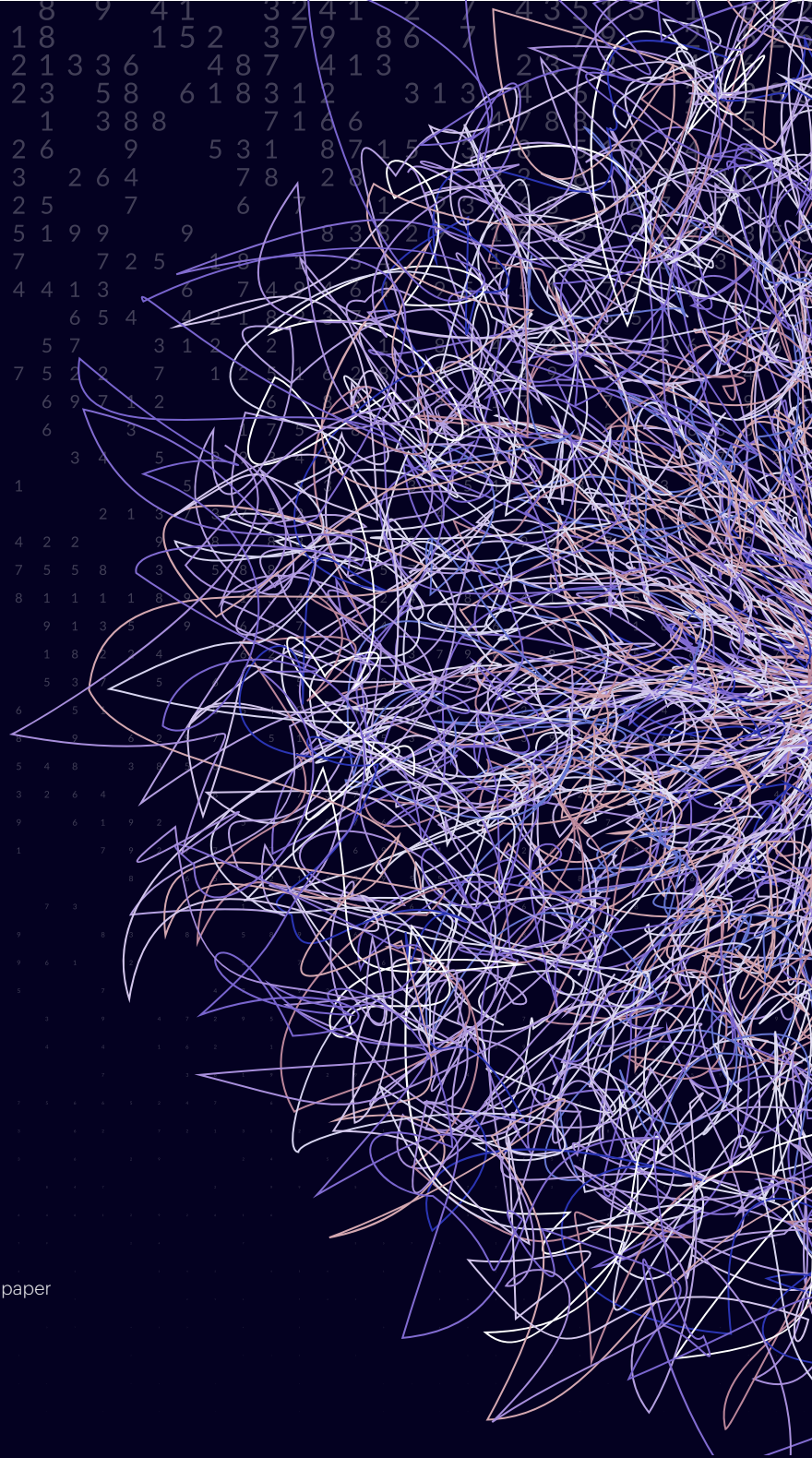


# The Executive Perspective

## Process Mining

The fundamentals of process optimization



# Table of contents

- 03. Executive summary
- 04. Business 1:1 - Why process mining matters
- 04. BI tells me we're doing fine
- 05. Deep Value business health status
  
- 06. Where do I start?
- 07. DTO and process mining – a perfect match
- 08. Map-Monitor-Manage: Bringing it all together
- 10. Use cases

# Executive summary

In theory, business processes should reflect real-world processes. But this can only be in an ideal world. In the real world, there is a huge mismatch between the drawing board and real-life operations. This creates inefficiencies, customer and employee dissatisfaction and in the end, affects your bottom line negatively.

## Why does it happen?

The wide range of digital technologies companies currently employ should make processes more efficient, shouldn't they?

The root cause of the problem is a disconnect between business management and technology management. And the solution to this problem is process mining – the continuous optimization of your processes by 25 to 60%. The beauty of process mining is that it is fundamentally scalable and applicable to any business model.

Process mining is designed to identify and eliminate the gap between fiction and reality of business processes by extracting knowledge available in your information systems.

The most compelling reason to consider process mining is that process inefficiencies are responsible for 25% of revenue leakage. Process mining can help eradicate unnecessary steps in your workflows and bring them to optimum performance.

In a recent research study, Gartner stated that process mining is the perfect starting point to optimize your business processes and coupled with a Digital Twin of the Organization (DTO) , it can help achieve true business transformation<sup>1</sup>.

Our experience at Deep Value confirms Gartner's findings to be true. In this white paper, we will lay out the business case of major costs savings and efficiency improvements for process mining and go over the steps that companies need to take to implement it.

<sup>1</sup>Gartner Market Guide for Process Mining - September 2020



# Business 1:1

## Why process mining matters

The first and, perhaps, most compelling reason to consider process mining is that process inefficiencies are responsible for 25% of revenue leakage<sup>2</sup>. Process mining can help eradicate unnecessary steps in your workflows and bring them to optimum performance.

The second and, in our opinion, equally important reason is the dynamic nature of each process that runs in your company. The worst mistake that we've seen companies make is to assume that processes don't need maintenance. In a world of constant change (new products, new services, changing buying behavior, acquisitions, etc.), each process changes as your company does.

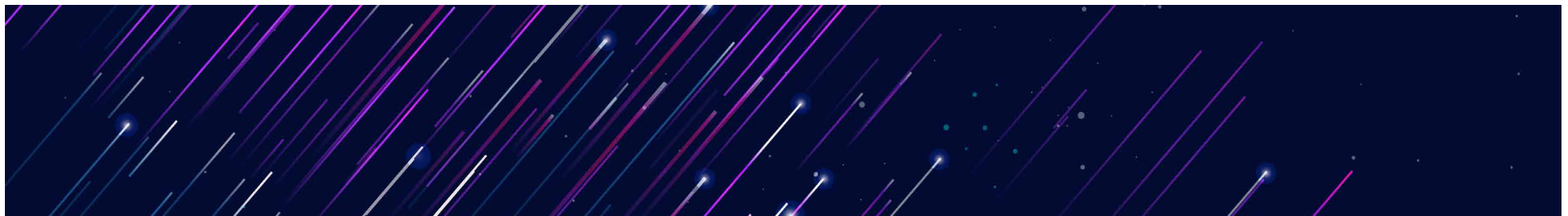
The companies that think last year's processes will still work today are stepping on dangerous territory and, unfortunately, they won't even know it. The trouble is that employees will 'bend' the process to make it work and the redundancies will be invisible.

## BI tells me we're doing fine

Of course, your numbers may still look good. But the key question is **"How do they benchmark against the real world?"**

BI is only showing what is visible and Deep Value finds that it is often the reason why companies stick to the (process) status quo. While BI is great for reporting, companies have a tendency to silo BI bottom up. BI can highlight process inefficiencies but cannot necessarily isolate their root causes and requires extensive analysis to identify improvement opportunities. This means that the insights represent just a fraction of the business and remain shallow when it comes to a "wide and deep" business health status.

If you do the necessary checks and identify the leakage described above, eliminating the invisible process redundancies may be the cheapest growth strategy you have ever done as an executive.



<sup>2</sup>Deep Value Customer Research

# Deep Value health status

## Map, Monitor, Enhance and Manage

The graphic shows an example of a purchasing process. We get this information when Deep Value experts run the process mining tool. The left side shows “the happy flow” in the ideal world where it’s a simple linear process that takes 9 days. The right side is the “**real flow**”.

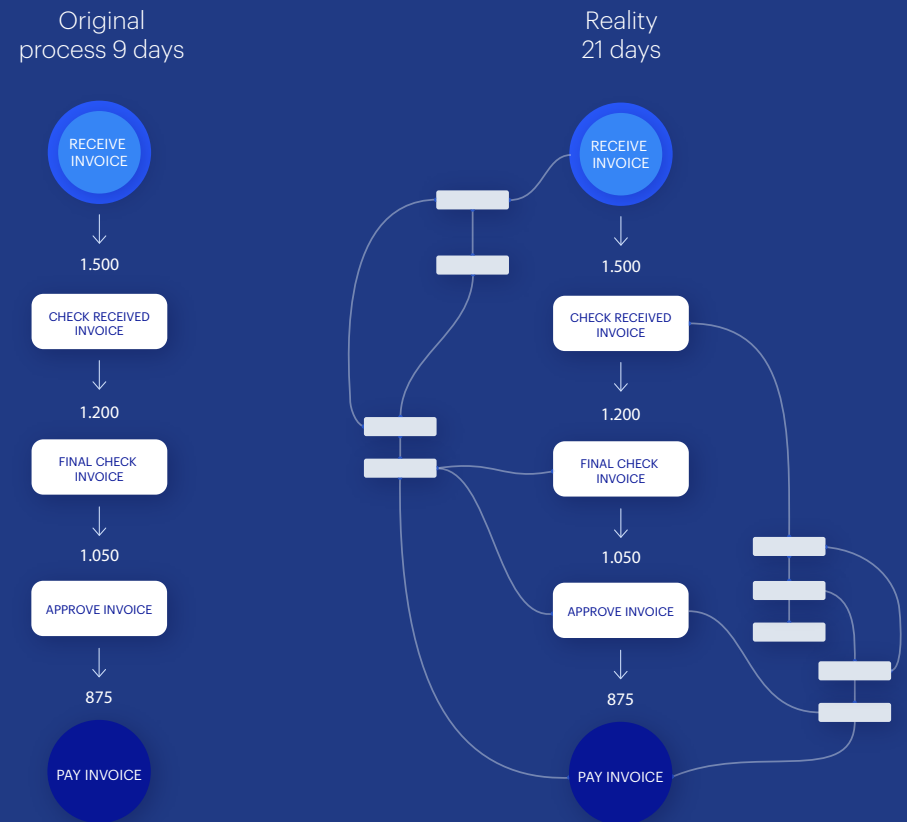
In essence, process mining is like a “reality check” – it shows you your processes as they are. It is fundamentally a data analysis that extracts knowledge from your systems’ log files and automates the discovery of reality.

Process mining enables you to understand and improve your processes based on what they truly are, not on what they should be. The analysis produces real process flow charts like the ones you can see in the graphic on this page.

**This allows you to compare your ideal flow to day-to-day reality.**

We call these steps of the process Map & Monitor. But it doesn’t end there. There is also a lot of hard work required to find the root causes of why your original process flow didn’t work out the way it was designed.

The next two steps in this process are Enhance & Manage. After you have seen how your processes really are, you can decide on the changes that need to be made and implement them. During these steps you are able to identify continuous improvement opportunities, automate manual tasks, reduce rework and errors up to 70%, and more.



# Where do I start?

- 01. Identify** the most critical processes that determine your key financial and quality results.
- 02.** If the process is complex, **slice the process** into the most critical parts (easily accessible data is always a good start).
- 03. Run** the process mining tool of your choice and go through the four steps: Map, Monitor, Enhance and Manage. This is the most critical step where Deep Value transformation partners can help (especially the first time you do this). Not only will we provide the expertise on process management, but we also have a good sense of which tools will do the job in your specific situation.

# Digital Twin of an Organization and Process mining — A perfect match

In the beginning, we mentioned that process mining is just the first step on this journey to business transformation. To reap all of its benefits, you need a **Digital Twin of your Organization (DTO)**.

**A DTO is a virtualization of your day-to-day business. It serves as a single source of truth, no matter the systems your company is running.**

Consider it a control center that allows you to visualize all company processes and shows instantly how (parts) of your business perform against your KPIs. The DTO helps you identify and find the root causes of non-performance.

This is exactly where process mining fits in. Deep Value customers start their journey with a DTO – an all-seeing eye, and use process mining to zoom in to particular areas and dig up the root cause.

Because the Digital Twin is based on live data from the underlying systems, it also allows you to model and run “what-if” scenarios and do scenario-based forecasting. Digital Twins embrace and extend your existing BI initiatives to create a reality where you cascade your company KPIs in a consistent manner, respond faster to market changes and run the company from one version of the truth.

## Digital Twin business dashboard

Includes: process visualization, KPI, charts, scenario forecasting and root cause analysis. You can easily navigate through your processes and compare the desired situation with reality.



# Map, Monitor and Manage:

## Bringing it all together

Although businesspeople are more tech-savvy than ever before, choosing the right technologies remains out of their comfort zone. Same story the other way around. Enterprise architects and IT leaders have a larger-than-ever toolbox to help them nail down business needs and translate them into technology that fits in. But, since businesspeople deal with business and tech people deal with tech, there is nobody that deals with the connection between the two.

The concept of Map-Monitor-Manage is a Deep Value transformation partners methodology to bridge this gap and give executives an “operating system” to run the company.

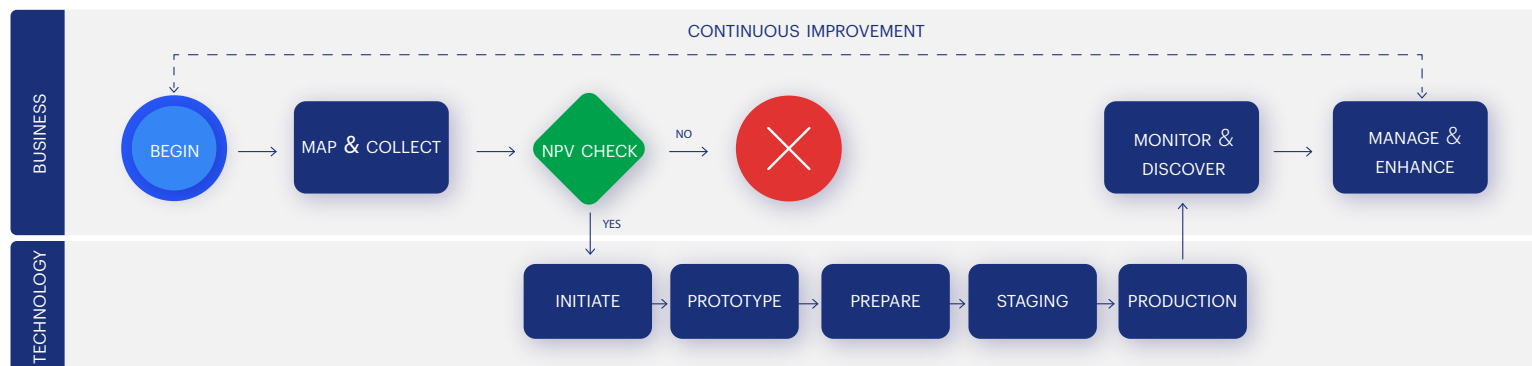
The concept is simple. We use the right technology to add a business layer where you do the things businesspeople need and understand: (1) define what is needed, (2) monitor, and (3) manage. We also add a technology layer where IT people can do the things they need and understand.

### Business layer – Map & Collect

It all starts with Manual Mapping. This is importing, amending, enhancing, and drafting your processes and KPIs. Sounds simple, right? Actually, this is the hard part because it involves a lot of manual work, as the name suggests.

That’s why Deep Value advises starting with a pilot (proof of concept). This is where data gets collected from the heart of the systems you run your company with, in real-time. The process mining technology then starts visualizing the processes based on the facts available in your information systems.

Using this initial data, we start defining what this exercise has to bring to you in return. Don’t think traditional ROI models, think Net Present Value (NPV) of cash inflows. In our experience, only NPV will give you the financial justification and greater insights in go/no-go scenarios. Once this small project proves successful, it’s easy to scale to the rest of your business processes.



# Map, Monitor and Manage:

## Bringing it all together

### Business layer – Monitor and discover

Deep Value believes that there should be one single version of the truth. That's why we configure our digital twin and process mining technology to continuously monitor performance against your strategic KPIs and objectives. If end-to-end visibility of the interactive value chain is important to you, we will provide that strategic overview and ensure that all areas of your organization—strategic, tactical, and operational—become linked through the business layer.

Our approach maps your business processes, workflows, roles and responsibilities directly into the overarching business layer, helping you focus on your priorities. KPIs are selected based on your business needs. Responsibilities are defined for each role, capturing your governance model. Using the insights from our process mining efforts, you can easily identify where the leakage in your process happens and drill down to the core issues.



*“DTO and process mining will give you high-wide-deep insight in minutes.”*

Pieter den Hollander, CEO Deep Value

### Business layer – Manage & Enhance

This is the step where you can design and implement process changes. But, instead of actually making these changes, you can first emulate a prototype of the process improvements based on real company data.

This enables you to capture your “as-is” model and shape the “to-be” model so you can see the impact of any changes in your way of working on your organization and plan accordingly. It also allows you to manage risk, advanced business intelligence or analytics, and operational performance.

Once performance indicators have been defined at strategic levels, they have to be consistently translated to tactical and operational levels. This is not a one-and-done event. It is an ongoing process that ensures the optimum performance of your business at all times. At this stage, process mining steps back in and helps as described above.

# Use case

## 01. Customer Operations

Process mining can be applied across many different areas in an organization. Therefore, it can have many use cases, and a multitude of stakeholders across the value chain. The process mining market can be segmented along five common types of use cases, each of which has its own stakeholders, roles, objectives, and related features and functionality. Finance stakeholders, for example, may benefit from process mining in the form of auditing and compliance improvements.

But let's look at some of the common use cases and see how companies have successfully used process mining to improve their performance.

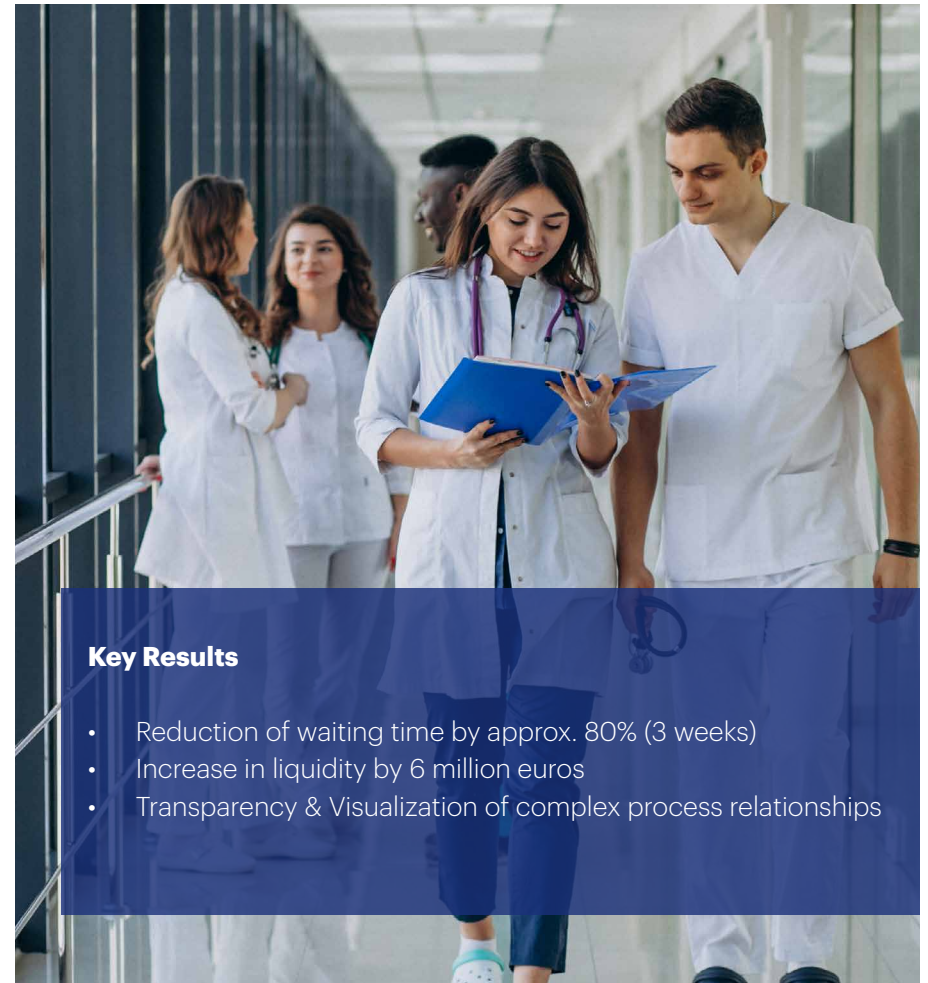
### Process mining for quality healthcare

Successful companies know the needs of their customers and do everything they can to provide exceptional service. Process mining plays a vital role in this. This is especially true in the healthcare industry, where improvements in processes can often be translated directly into noticeable quality of care. Alexianer GmbH, a German healthcare provider was able to do just that.

Case: **Alexianer GmbH**

Industry: **healthcare**

Process mining was implemented to improve patient-centered care and communication among different functions in the context of emergency hospitalization. Waiting time for patients decreased by 80% and overall patient-centered care was improved.



#### Key Results

- Reduction of waiting time by approx. 80% (3 weeks)
- Increase in liquidity by 6 million euros
- Transparency & Visualization of complex process relationships

# Use case

## 02. Auditing and Compliance

### Process mining as the operational backbone

Audits are traditionally highly manual, labor-intensive, and lengthy activities involving in person interviews, data sampling and the manual documentation of processes and risks. In the accounting domain large, external auditing companies have applied process mining techniques in their auditing services. Most of them have been experimenting for a while. One of those companies is Ernst & Young.

Case: **EY Ernst & Young**

Industry: **Audit Assurance**

More than 150 clients use process mining for auditing and compliance. EY reports that the client audit preparation time decreased by 50%. Furthermore, customer satisfaction was increased due to higher transparency and automated insights in audit risks and compliance breaches.

#### Key Results

- Full transparency on client business processes, allowing more complete audit assessment.
- Reduction in client audit preparation time by 50%.
- Automated insight in audit risks and compliance breaches.
- Performance monitoring across audit company's entire financial and operational supply chain processes.

# Use case

## 03. Accounts payable

### Process mining as a competitive advantage

Faced with tighter margins and increased pressure to meet KPIs, businesses are looking to optimize their accounts payable processes to help them achieve their goals. Nearly a third of organizations want to shorten invoice processing terms to take advantage of cash management programs. Not surprisingly, processing invoices efficiently and paying at exactly the right time can have a huge impact on working capital and operating margins<sup>3</sup>.

Case: **Chart Industries, Inc.**

Industry: **Energy and Industrial Gas market**

With the help of process mining, Chart was able to transform its core operational processes including accounts payable, accounts receivable, and purchase-to-pay processes. This has resulted in reduced manual rework, increased working capital, and a better experience for its customers. Chart Industries was able to realize more than \$6M in material purchase price savings through vendor price book compliance and recapture \$200K in annual missed cash discounts improvements.

<sup>3</sup> CFOs missing early payment discounts | [Barclaycard](#)



# How The Deep Value Digital Twin™ Can Help

Considering the pace of change in the world today, it is vital to continuously monitor and improve processes. That's why Deep Value recommends process mining and DTOs not just as nice-to-have capabilities, but as a way to stay competitive.

## We can help you:

- Understand how your business processes actually work in the world (not how they should work)
- Optimize your existing processes based on live data from your systems
- Simulate process changes, run "what-if" scenarios, and do scenario-based forecasting
- Implement an organization-wide source of truth that enables you to spot and fix process inefficiencies as they arise

Contact us if you want to get your own digital boardroom.

**We only charge for results.**

**Speak to an expert?**

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The Executive Perspective