**29 September 2020** 

# Why a Digital Twin of Your Organization is critical to Your Operational Resilience

Marc Kerremans

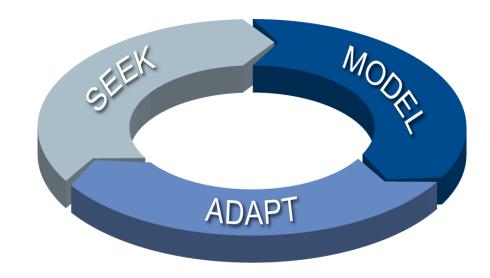
© 2019 Gartner, Inc. and/or its affiliates. All rights reserved. Gartner is a registered trademark of Gartner, Inc. and its affiliates. This publication may not be reproduced or distributed in any form without Gartner's prior written permission. It consists of the opinions of Gartner's research organization, which should not be construed as statements of fact. While the information contained in this publication has been obtained from sources believed to be reliable, Gartner disclaims all warranties as to the accuracy, completeness or adequacy of such information. Although Gartner research may address legal and financial issues, Gartner does not provide legal or investment advice and its research should not be construed or used as such. Your access and use of this publication are governed by Gartner's Usage Policy. Gartner prides itself on its reputation for independence and objectivity. Its research is produced independently by its research organization without input or influence from any third party. For further information, see "Guiding Principles on Independence and Objectivity."



## **Operational Excellence to Operational Resilience**

Find and document patterns

Interpret, analyze pattern impact, and define scenarios



Act on the results as appropriate at appropriate speed

**Operational resilience** enables enterprises to adapt by:

- Establishing relevant and achievable goals
- Breaking down complexity
- Facilitating collaboration
- Creating organizational capability for resiliency
- Defining measurements and adjusting





Do You Know and Understand What Is Going On?



## **Key Topics**

- 1. What is a Digital Twin of an Organization (DTO)?
- 2. DTO in practice.



## **Digital Twin**







#### What If ...





## What Is a Digital Twin of an **Organization (DTO)?**



## Digital Twin of an Organization (DTO): Blending the Digital and Physical Worlds



#### Model

A model of the "thing"



#### **Data**

E.g., identity, status, context ...





#### Uniqueness

Each physical thing has at least one unique twin



#### **Monitor**

Query state, obtain notifications



#### **Analytics**

Rules, predictions, algorithms ...



#### **Control**

Twins can control the "thing" they represent



#### **Simulation**

Simulate the real-world "thing"





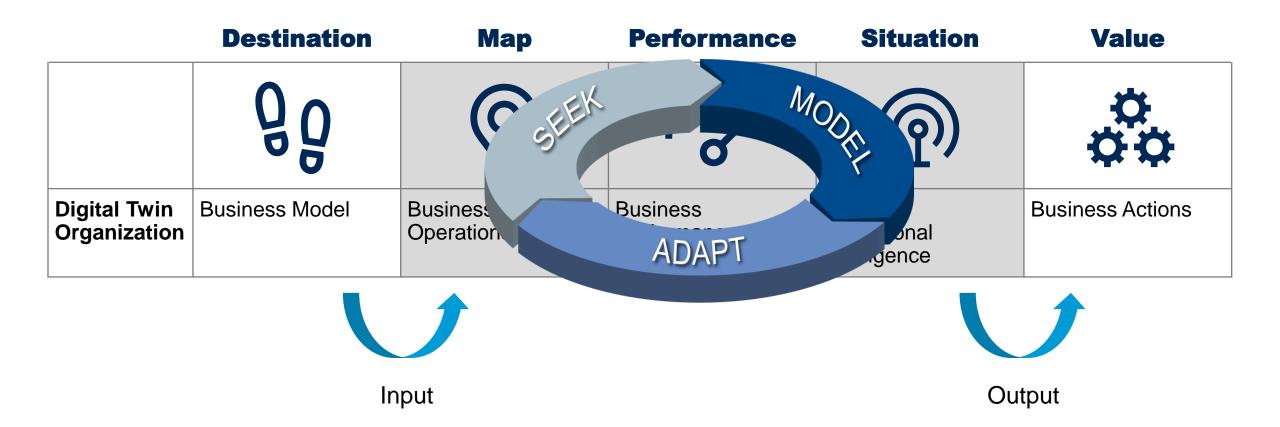
Organization
People, Process,
Technology



## The Constituents of a DTO — Think of a Navigator



## **Digital Twin of an Organization**

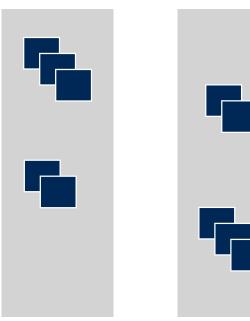




## **Map** — Business Operations Model



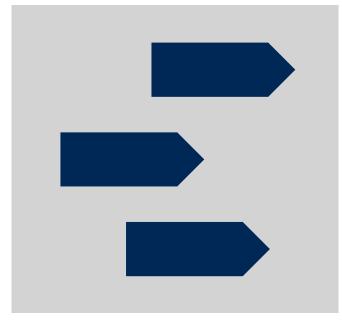
**Suppliers** 



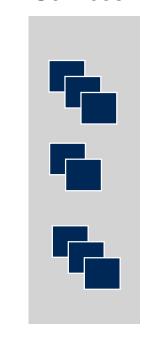
Interactions



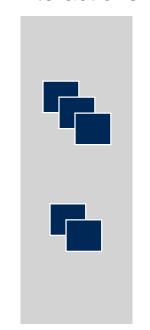
Operations



Products/ Services



**Interactions** 



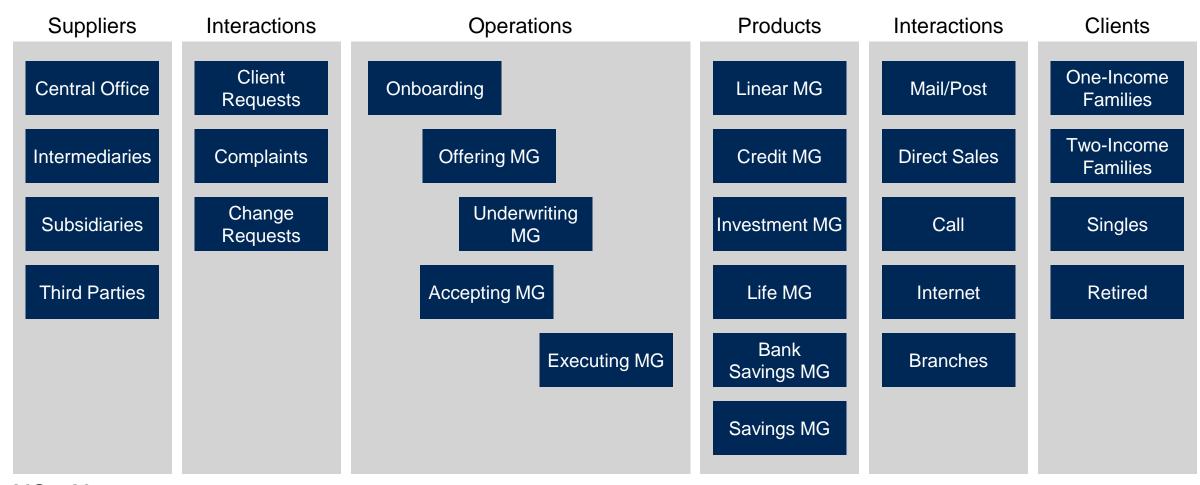


Resources





#### **Example**



MG = Mortgages

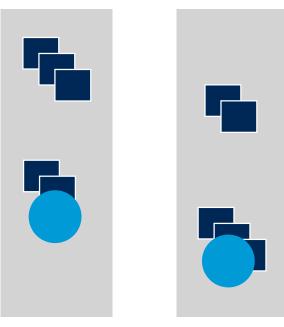


## **Performance** — Business **Performance Management**

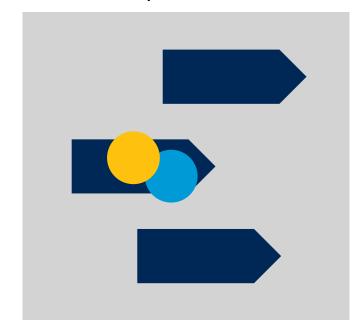
**Interactions** 



**Suppliers** 



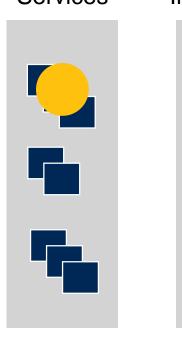
**Operations** 



Resources



Products/ Services



Interactions Clients



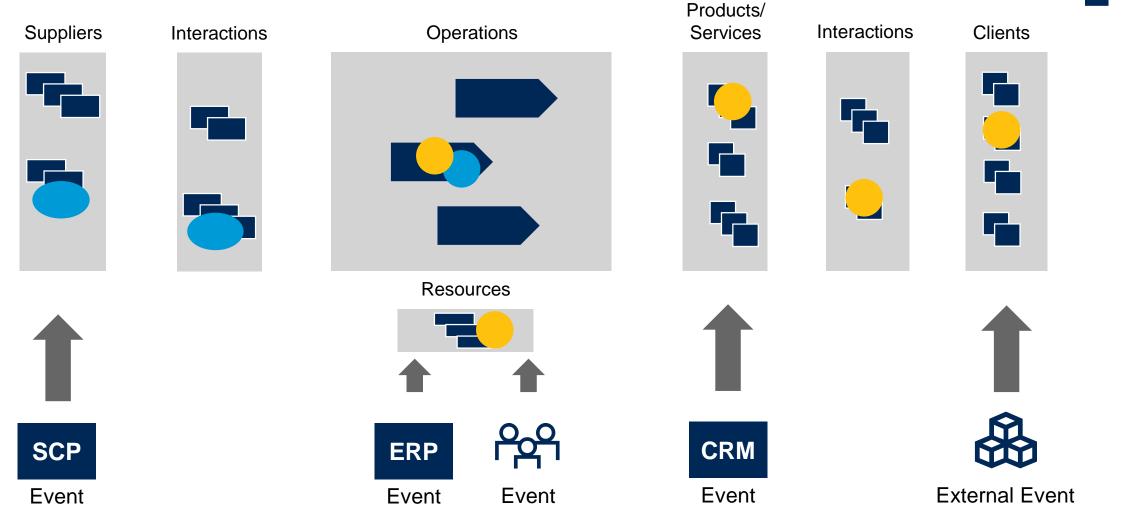






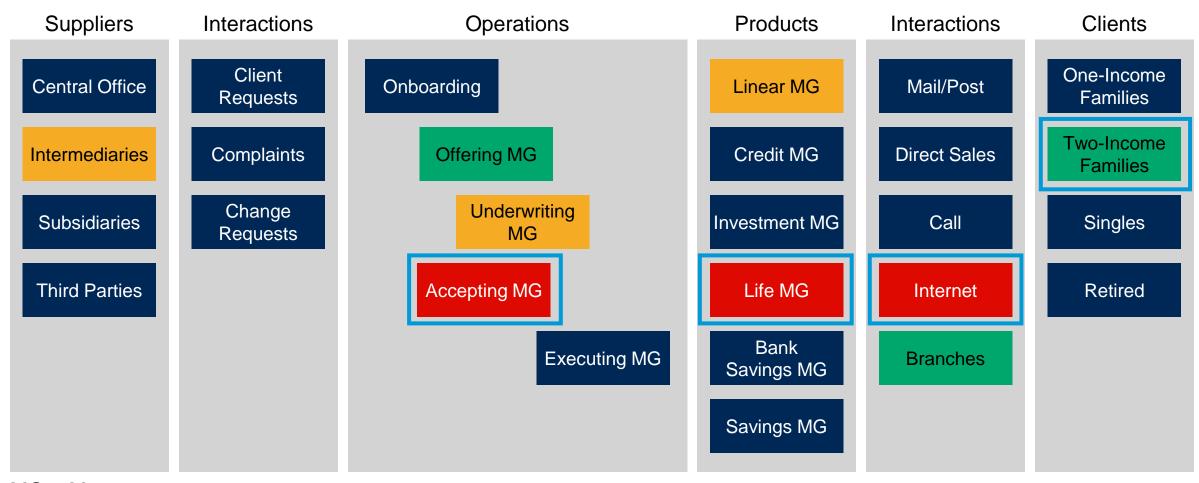
### Situation — Continuous Intelligence







### **Example**



MG = Mortgages

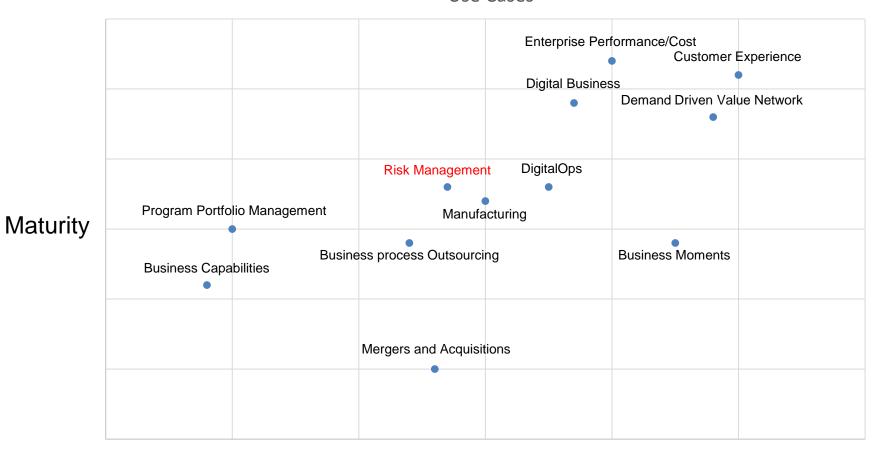


#### **DTO in Practice**



#### **Use Cases**

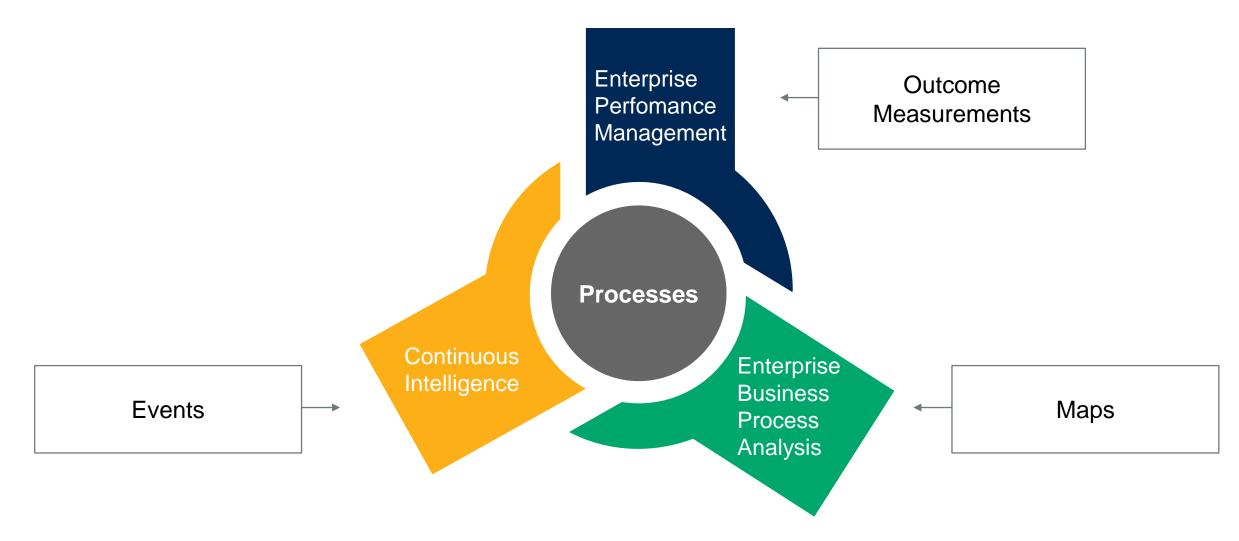
#### **Use Cases**



Adoption

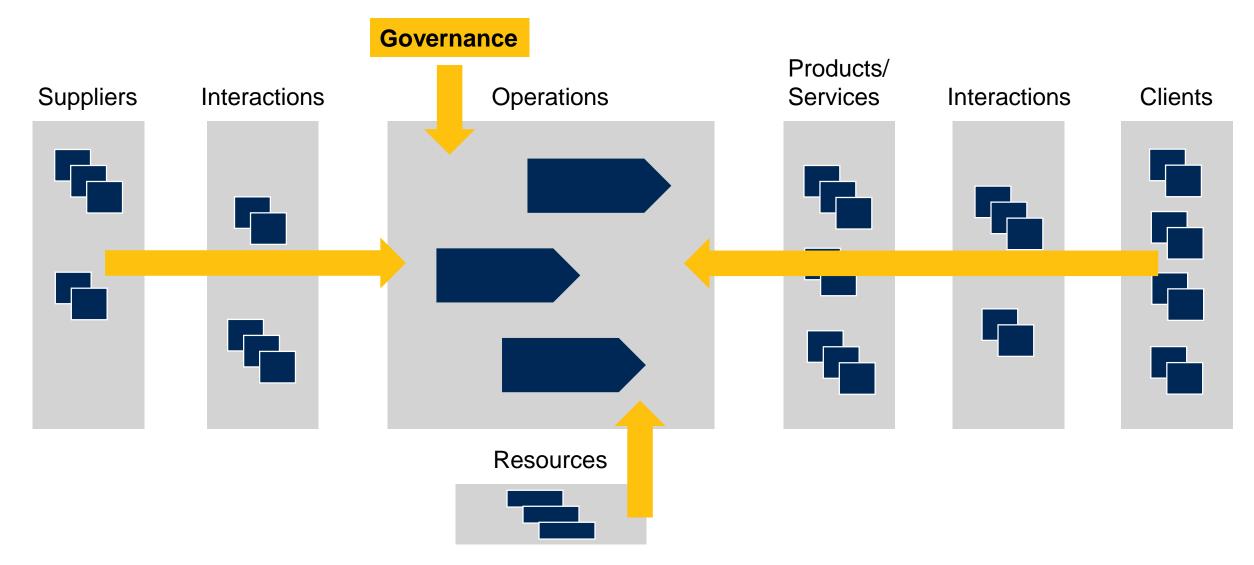


## **Technology Supporting a DTO**



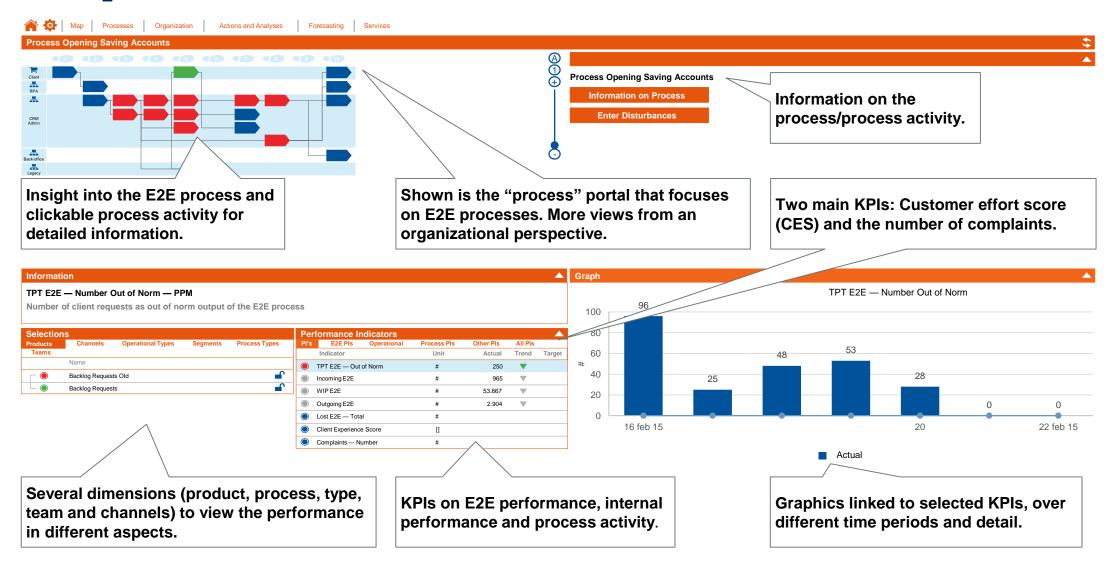


## **Start With Operations — Process Mining**



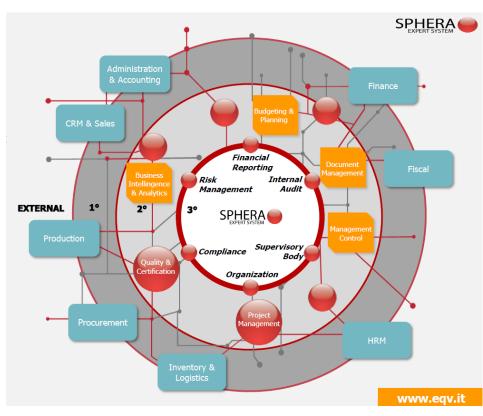


#### **Example of Use**





### Case — SPHERAes: DTO applied to IRM



#### **Use Case**

 The concept and technology behind the DTO are able to realize the shift from the old GRC perspective to the new **Integrated Risk Management** 

#### Solution

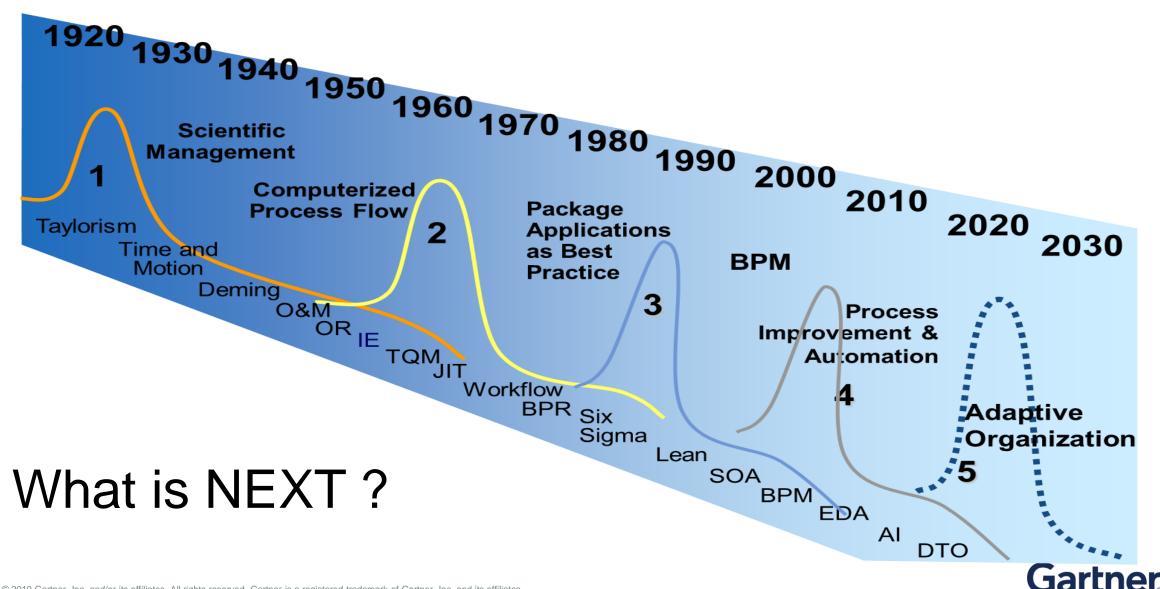
- Thanks to the adoption of a DTO within the IRM use case, it is possible to implement the complete Auditing operating cycle: Audit scoping, Audit risk assessment, Audit project management, Time and expense management, Audit work paper management, Audit evidence management, Reporting, Issue Tracking, Internal Audit performance management.
- The optimal DTO solution in this scenario should be a unique and uniform tool to manage its processes in an organic and integrated way, with decision-making support based on Artificial Intelligence (AI) algorithms and monitoring of the KPIs / KRIs associated with the various processes, business units and entities involved.

#### **Outcomes**

 The DTO allows to monitor and act in real time on every aspect of the organization: the progress of the individual processes; the use of resources allocated and their impact on other processes; the forecast of possible critical issues and the need to reformulate the operational plans; the fulfilment of regulatory requirements and internal policies; automatic and controlled drafting of documentation ensuring high levels of safeguards.



## 100 years of process management



#### Recommendations

- Use a DTO to guide business leaders in managing their operational resilience initiatives by connecting the organization's objectives with the organization's operations and providing the relevant monitoring in order to make smarter decisions.
- Start with a limited market/offering/process organization such as a department or a business unit, and build from there.
- Emerging technologies that support a DTO, such as process mining provide a first step to discover optimization opportunities in a very fast manner and to prepare for the next level of maturity expanding further into the organization.



#### **Action Plan for the TI/EA Leader**

#### **Monday Morning:**

- *Identify* a transformation initiative within your organization.
- Create an operational performance management team.

#### **Next 90 Days:**

- Apply process mining related to a selected client offering.
- Communicate the results.

#### **Next 12 Months:**

- Investigate supporting technology.
- Grow the DTO by instantiating more client offerings.



#### **Recommended Gartner Research**

- Optimize Digital Business Transformation by Creating a Digital Twin of Your Organization
- ▶ 12 Powerful Use Cases for Creating a DTO
- **►** Market Guide for Process Mining
- ► Market Guide for Technologies Supporting a DTO
- How Process Mining can support Operational Resilience in times of a Crisis

