

# White Paper



## Managing Digital Processes in Supply Chains: The 5 Principal Tasks

A statement from the perspective  
of Gabriela Penabad, Miebach Consulting

**“The main function  
of a Data Governance Committee  
is to understand  
the information flow within  
the company in order  
to reduce the risk of disruption.”**

# Introduction

With the technology dependency rapidly increasing in business activities and the customers demanding close to immediate responses; having a technical disruption even for a short period of time, has only negative connotations.

The interconnection among the different technologies must be understood, documented, and monitored so that the information flows and the processes perform as expected. Who is responsible for this? A Data Governance Committee that understands not only the technology, but also the processes and the users.



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# Industrial revolution 4.0 – keeping data flowing

**The fourth industrial revolution began in 2013 and has been characterized for interconnecting technologies and almost eliminating the human intervention in processes.**

The first industrial revolution, back in 1780, turned manual to mechanized production when water and steam driven technology was introduced. Mass manufacturing and electricity marked the second industrial revolution around 1870, and when we began to produce with automated electronic technology after 1969 the third industrial change took place.

Unlike the almost 100-year gap between each of the first three revolutions, only 35 years were required to witness the fourth; thanks to the speed in which technology, devices and processes became “smart”, a term used to define when one of these is connected to another through a network and interacts with very little human intervention.

Because it is not as obvious to visualize the flow of information as to see the movement of materials, and because every day we rely more on IT technology, companies need to establish dynamic and collaborative ways of managing their processes.

Updating a version, deploying a new technology or disconnecting a system to replace it with a better one is a process that needs to be analyzed, requires validation and must be planned.

Altering the flow of information without going through the analysis of possible impacts in other supply chain areas or departments can cause chaos in the operation, paralyze information-dependent technologies in the later stages of the process, increase the manual processes and consequently generate delays and extra costs. In addition to tension between the users, problems with the customers and headaches within the Systems Department can be the consequences.

In order to create smooth, efficient working processes in the digital supply chain, an end-to-end management approach is needed. The five guiding principles (see next page) can help realizing this goal.

# smart

A term used to define when technical devices are connected through a network and interact with very little human intervention.

# The 5 Principal Tasks of managing digital supply chain processes:

**1**

## Check flowcharts

Check that the flowcharts have been updated correctly when changes are made to processes; so that it is clear what data is needed to operate, where it comes from, what information is generated and how everything is interconnected with the rest of the processes in the operation.

**2**

## Update ERD

Check that the Entity Relationship Diagram (ERD), the blueprint that shows where the information is stored and how it is interconnected in the database, has been updated.

**3**

## Create catalog

Create a catalog which:

- Identifies and documents the characteristics of each of the fields that are handled in the processes.
- Establish which users can create, view, edit, or delete each field.
- Describe the policies, formulas, business rules and how the information will be maintained.

And like the two previous points, validate that the updates are done.

**4**

## Analyze new projects

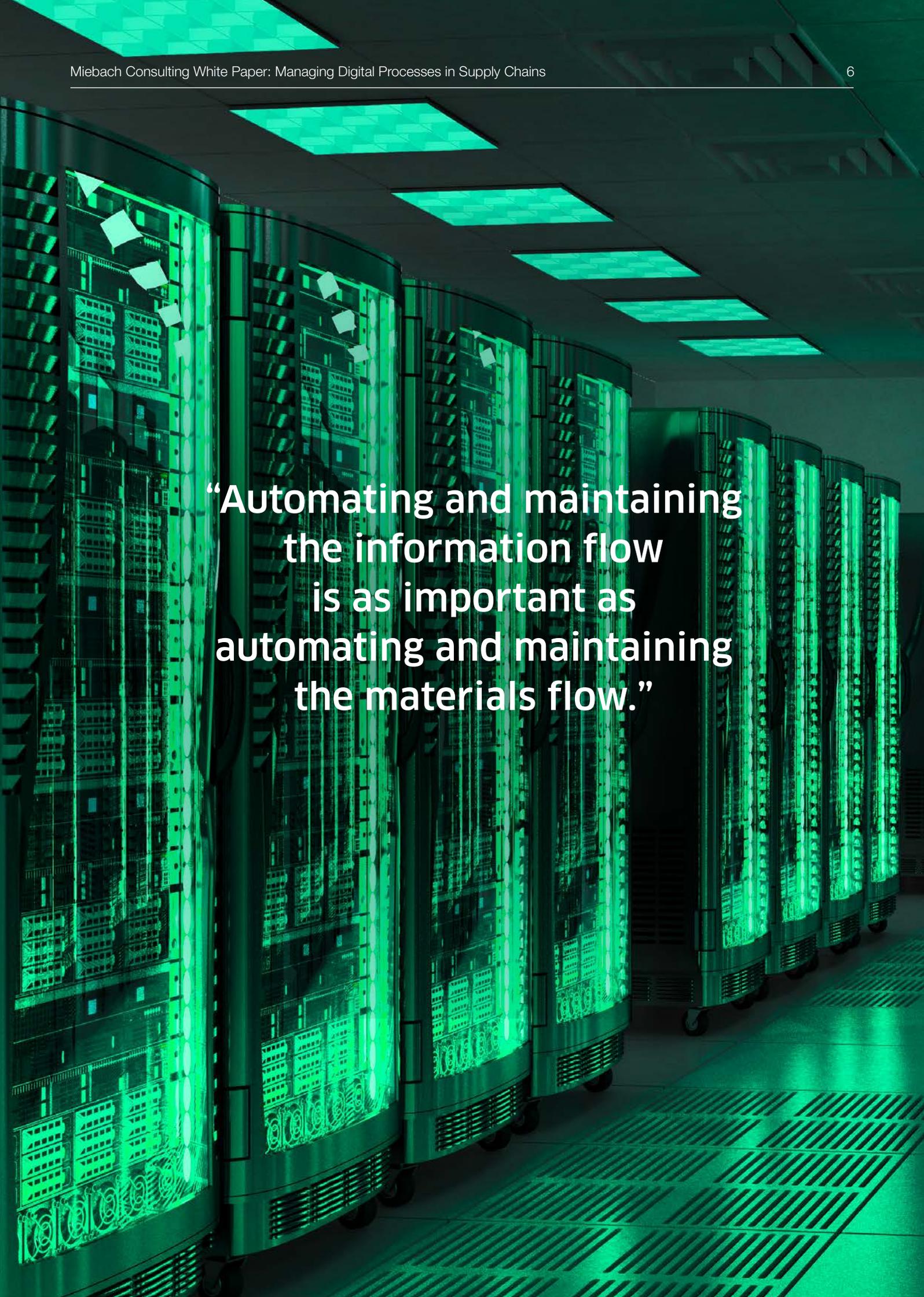
Analyze how the new projects will affect the current information flow, identify risks, approve contingency plans and authorize and monitor implementations.

**5**

## Identify improvements

Identify opportunities to improve the current processes and promote the creation of projects that systematize the capture, processing, and automation to generate and manage information through technology.

One continuous improvement for managing digital supply chains should be to increase the level of supply chain visibility with the help of integral processes, interfaces and suitable software tools.



**“Automating and maintaining the information flow is as important as automating and maintaining the materials flow.”**

# Miebach Consulting: The Supply Chain Engineers

## Miebach Group

The Miebach Group was founded in 1973 by Dr.-Ing. Joachim Miebach in Frankfurt to offer international supply chain consulting and engineering services to large and medium-sized companies in logistics and production.

The experience gained in over forty years and countless projects have led to the methodical approach of “Supply Chain Engineering”, which creates network structures, processes and intralogistics along the supply chain. Strategy and technology are equally and holistically considered, since only the integration of both elements can represent an optimal result.

As a consulting company we offer our services in 24 offices around the world. With a total of 350 employees Miebach is one of the leading international consultancies for logistics and supply chain design. Our presence in the key regions of Europe, Asia, South and North America can support our global customers with local background knowledge.

## Expert know-how

For over four decades we have been developing innovative logistics solutions with the competences required for efficient and functional supply chains.

The strength of Miebach Consulting is the integration of these core competencies in order to offer comprehensive solutions that exceed the expectations of the customer. We design strategies, develop economically viable concepts and specify IT solutions as well as technical installations down to the last detail. We assume responsibility and implement the developed solutions. We also support our customers from commissioning to “fine-tuning” in live operation. We believe that the extra service helps us to realize the visions of our customers as good as possible. Our perennial R&D initiatives often lead to directional innovations.

## Sector specialization

Miebach consulting offers consulting services across a wide range of industries. We consider the industry specialization as a must in order to precisely understand the specific requirements and processes of our customers. We also consider the exchange of expertise between the different industries as the ideal way to develop innovative and best-in-class solutions for our customers.

# 2017

- 25 offices worldwide
- 350 employees

Please feel free to contact me for further information.

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