

White Paper

A photograph showing a person's hands working at a desk. On the left, a hand is on a laptop keyboard. In the center, another hand is typing on a keyboard. On the right, a hand is holding a pen over a document. The background is blurred, showing office shelves.

Logistics Audit

Identify opportunities to Optimize Costs,
Service and Quality - respond to COVID-19
and plan for the future

A White Paper by Stephen Klein,
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Digitization and automation require constant assessment to optimize performance and ensure alignment with cooperate objectives

Introduction

The current crisis requires an immediate response to reduce operating costs and focus on the post COVID-19 era.

Can productivity and space efficiency be improved? How can the warehouse throughput time be reduced? Is it possible to increase throughput or improve quality in an established structure?

These are a few the questions that can be answered in a logistics audit. Covid 19 which requires an immediate response to reduce costs and improve efficiency and flexibility is a trigger event for a logistics audit focusing on how to improve your current operation whilst focusing on the post Covid-19 operational needs.

Regardless of the current challenges, logistics and supply chain structures have grown over the years through acquisition and expansion, leaving the network, very often, needing urgent evaluation and adjustment.

For many companies the requirements and framework of logistics conditions have changed significantly: Shorter service times, an increase in returns, global sourcing, and increasing digitalization and automation demand a constant review of the logistics operation to ensure efficiency, responsiveness, sustainability, and adaptation to corporate goals.

The Miebach Logistics Audit examines and optimizes the logistics performance of a company on a number of different levels and identifies opportunities to improve the efficiency of the operational processes. During the audit we will also, evaluate the use of innovative technologies and control and planning systems e.g. AI-supported operative systems.

This white paper provides an insight into how potential improvements can be identified, quickly and robustly by a logistics audit and how the necessary short and medium-term implementation steps can be planned and prepared.



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A Holistic Approach to Logistics

By conducting the logistics audit, cost reduction potentials are identified, and competitive advantages are maintained or developed.

An audit offers the potential to reduce logistics and supply chain total costs. Regular audits increase process transparency and draw attention to deviations from defined processes and objectives. The quality of logistics, such as delivery service, will be improved and cost drivers, such as too long lead times or delays, will be identified and eliminated.

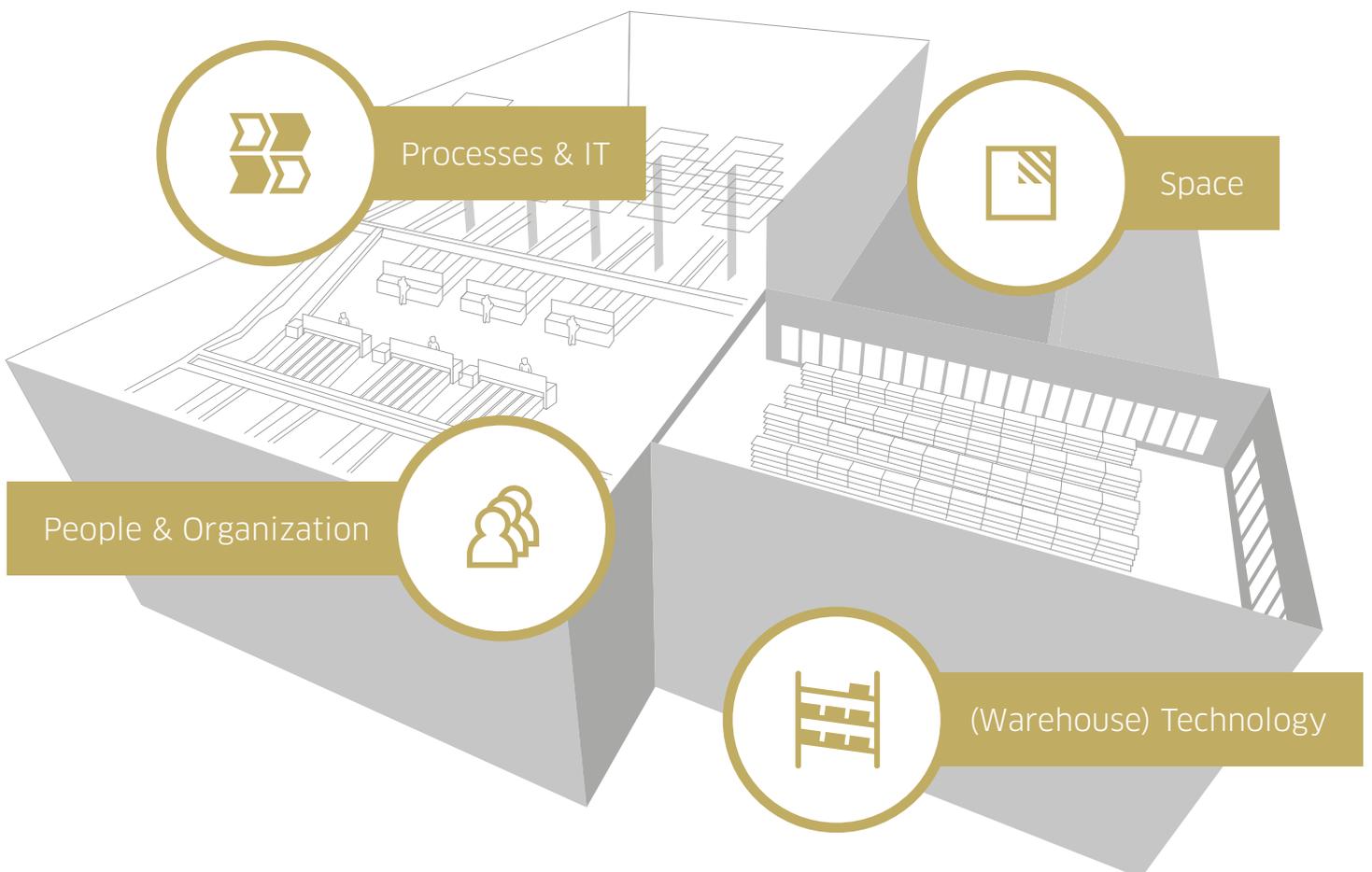
Potentials for cost reduction, service improvements and quality across the logistics network are identified and evaluated using a holistic approach, taking the market and the corporate environment into consideration.

The analysis includes the need to address the post Covid 19 social distancing and safety at work measures and includes different potential and future scenarios. In addition to medium to long-term measures, quick wins are identified, which can be implemented quickly and lead directly to cost reductions or performance improvements. Organization and structure are essential prerequisites for a successful audit, ideally it is an independent project carried out on a fixed schedule.

Organizing and structuring the project are essential prerequisites for a successful audit.

Achieve Optimum Results Using Integrated Analysis

Analyses of current situation, vulnerabilities, and potentials -
in short: logistics audit



1

Situation Analysis and Visualization

Project participants, which should include relevant members of the companies team, should be invited to an audit kick-off meeting to discuss, determine and align on

the project objectives, goals and procedures. A flow of materials chart should be created, based on current data, to identify the primary flow of materials. Additionally, the order structure and the stock situation should be analyzed. For a holistic view, it is important to consider quantity scenarios

required post COVID-19, as well as growth scenarios that have already been estimated and any planned changes. Depending on IT support and the availability of data (data warehouse, big data) data/process mining tools can be used to access the process data directly.

2

Identification of Bottlenecks and Vulnerabilities

The first step should be an inspection of entire location, conduct process interviews and the data analysed to fully evaluate all cost and service drivers. Relevant KPIs (key performance indicators / performance metrics) should be collected and benchmarked with comparable best-in-class processes for the industry. This is an enabler to identify opportunities for significant cost reduction to be estimated.

During the process examination phase of the project processes should be analyzed for anomalies and vulnerabilities. The focus can be on process-related, infrastructural, or organizational aspects.

Among others, the planning process up to the operational control of the warehouse should be evaluated using modern (AI-based) control intelligence (especially IT systems). Weak points and bottlenecks will be prioritized based on their potential to enable the audit to focus on and eliminate the most costly non value adding activities and processes to be eliminated.

3

Identify Potentials for Improvement, Evaluate Options for Action and Secure the Future

Using the prioritized list of opportunities based on economic impact (qualitative and quantitative impact) solutions to address the identified issues will be designed and tested. This enables the project team to make an informed decision on the appropriate course of action. A joint workshop will select the solutions to be pursued further, which are grouped by solution concept, cost reduction and perfor-

mance potential. The estimation of cost/benefit of modern control systems (e.g., AI procedures for slotting or batching, as well as general forecasting methods for estimating consignment and sales volumes) will also ensure the future orientation of the warehouse. Miebach will contribute to use cases from specialized suppliers to the discussion.

4

Implementation Roadmap

Having identified the drivers of cost and designed and agreed the appropriate solution a more detailed solution specification should be prepared. Miebach recommend the creation of fact sheets for each solution containing an explanatory

description of the measure and a cost and benefit estimate. The next step is to agree an implementation schedule contingent on their duration and possible interdependencies with existing projects or other considerations (e.g. other projects

or contract terms). Finally, the Logistics Audit results will be shared in a master plan to enable successful implementation.

The Benefit of a Logistics Audit

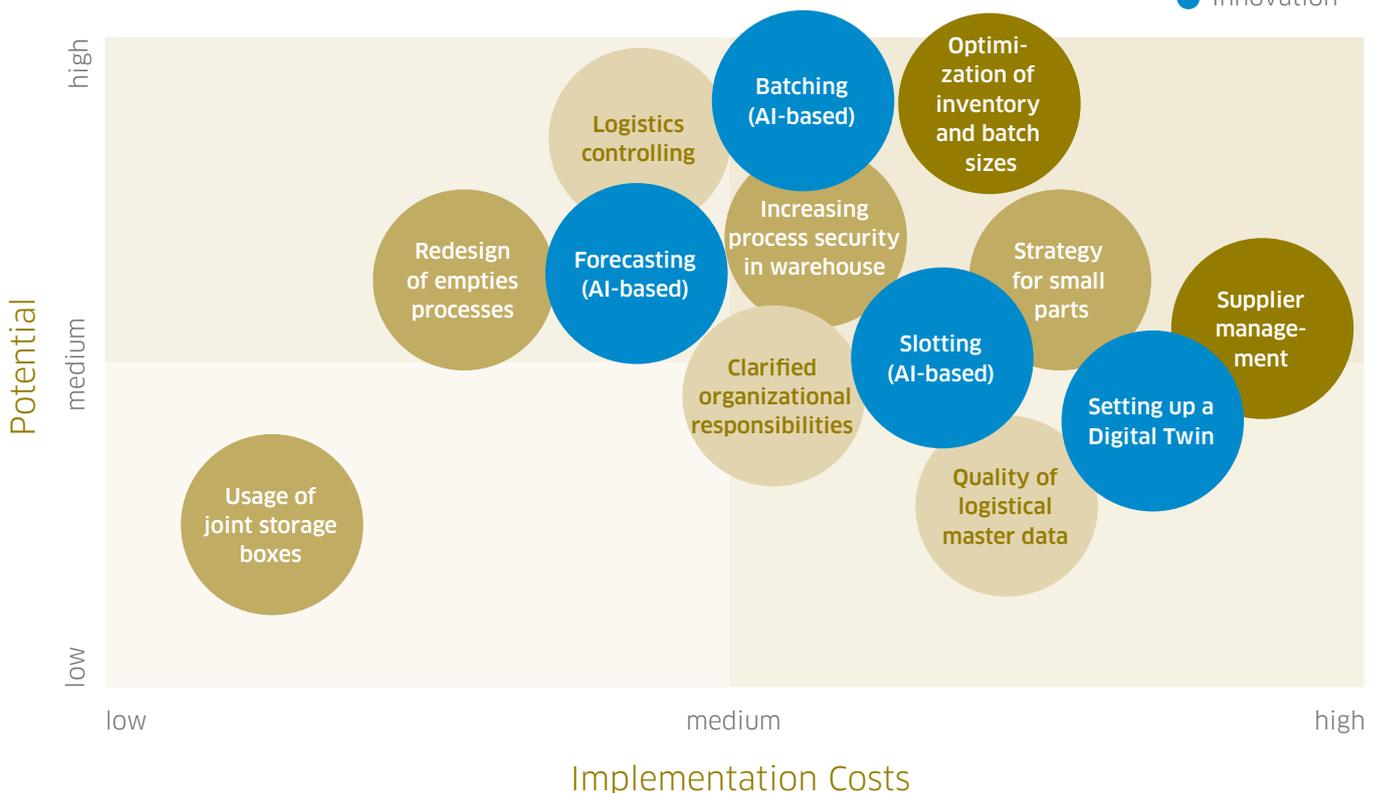
A Logistics Audit, including all of the processes and activities from inbound goods to dispatch forms the basis of an efficient and effective project. The project approach proposed here identifies the critical processes with the greatest potential for improvement. The structure within the organization is also detailed and further developed. The improvement measures are prioritized based upon profitability, and the best solutions and concepts are incorporated into an implementation plan. Based on Miebach's project experience, the cost of a logistics audit has a payback of 3-4 months. Many of the solutions can be implemented in short to medium term.

A logistics audit will eliminate process bottlenecks through restructuring and improve service levels and quality.

The logistics audit is an excellent first step to developing a sustainable improvement plan for a location or network that ensures that the post Covid 19 ways of working and social distancing are at the heart of the operation.

Project Example to Evaluate Potentials and Courses of Action

- Process
- Infrastructure
- Organization
- Innovation



Logistics Audit Success Factors

-  Quick estimation of potentials through benchmarks & project experience
-  Quick implementation to achieve efficiency enhancements/savings
-  Independent perspective
-  Standardized procedure with checklists, comparison with common weak points, predefined visualizations
-  Project management by experienced warehouse planning experts with indepth knowledge of processes, technology and IT

A person's hands are shown holding a tablet computer. The background is a blurred industrial factory floor with various equipment and machinery. The text is overlaid on the tablet screen.

**A logistics audit
is the first step to
sustainably improve
the location.**

Miebach Consulting: The Supply Chain Engineers



Miebach Group

Founded in 1973 by Dr.-Ing. Joachim Miebach in Frankfurt, Miebach Group offers international supply chain consulting as well as logistics and production engineering to large and medium-sized companies.

At Miebach Consulting, we are successfully advising our clients in all areas of supply chains for almost 50 years - we have only achieved this because we deliver a fundamentally excellent quality of advice and are recognized thought leaders and innovators in the industry.

We employ only highly qualified and experienced experts for all areas of warehouse and supply chain optimization with individual industry or methodological expertise. We plan sustainable best-in-class supply chain structures and intralogistics - from conception to successful handover to the customer - from global strategy to the "smallest screw". We let the success of an implementation measure ourselves.

As Miebach, we see the trend from "landed costs" to "life cycle costs" in the supply chain to reflect adjustment costs and costs for risks that have occurred.

Our consultants are our most valuable asset and are regularly happy and happy to be associated with our company for many years - only in this way can we "live" customer relationships over decades. At the same time, we develop consistently and quickly - we live digitalization and agility in our consulting work. We are excellent networkers to recognize trends and innovations early, to evaluate them, and recommend them if necessary. Big-Data and Data-Analytics have always been the basis of our work and analyses - here we stay one step ahead of the development. We enter into technology partnerships with selected providers and also develop our proprietary systems/procedures.

Our technological footprints can be found in many global supply chain structures and control systems.

As Miebach, we see the trend from "landed costs" to "life cycle costs" in the supply chain to reflect adjustment costs and costs for risks that have occurred.

Industry Specialization

Miebach Consulting offers consulting services covering a wide industry range. We think that industry specialization is essential to exactly understand the specific requirements and processes of our customers. But we also believe that the exchange of expertise between industries is the ideal way to develop innovative and best-in-class solutions for our customers.

2020

- 24 offices worldwide
- 380 employees

We will be gladly available to discuss this topic
with you in person and more.

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