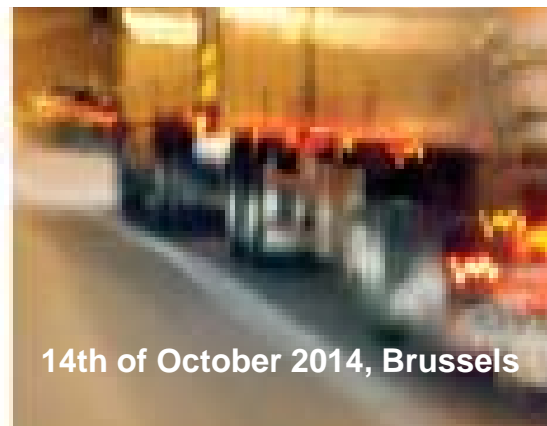




# "Digital Logistics, Innovations and Policy recommendations"



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# EU Logistics Freight Transportation Growing challenges : Call for action

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**Growth rates exceeds Economy's growth (50% between 2000 and 2020)**

**Predicted in some EU countries that goods transportation could double by 2050**

**Logistics costs at up to 12% of final costs in manufacturing and 20% in Retail**

**Congestion costs up to 1.5% of GDP. Increasing trend.**

**Congestion leads as well to pollution and GHG**

**Efficiency of freight logistics impacts product prices and security of supply chain**

**Transportation growth leading to more fuel import (31% of total EU Energy consumption)**

**Urgent need for an action plan focusing on :**

- Innovation, simplification and quality,
- Green transport corridors / TEN-T
- Updating of the regulatory framework
- Next generation of Logistics : **Real Time Digital Logistics**

# The Current Logistics Market Reality : Business wise



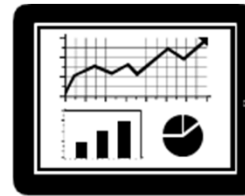
## Customers

- Rising expectations regarding service quality, price, convenience, transparency, and speed
- Increasing importance of e-commerce and B2C business
- Choice of flexible delivery options and interaction via multiple channels
- Increasing awareness of ethical and sustainable business practices (social, ecological/green)



## Globalization

- Promising opportunities to grow in emerging markets
- Need for resilient supply chains to proactively mitigate risks
- Global regulatory compliance (cargo security, customs)
- Manage cross-border e-commerce (customs, duties, taxes)



## Digitization

- Need for technology to gain insights and ensure better decision support in real-time
- Desire to gain customer intimacy by having a detailed, 360-degree view across all touch points
- Leverage technology as a source for innovative business models
- Threat from new competitors



## Profitable Growth

- Drive standardization of product portfolio on a global platform
- Increase process harmonization and automation to drive efficiencies
- Provide granular view into performance and profitability across all lines of business
- Bring new products and services to market quickly

# The Fact : Logistics Business Network operates as one

## IT

- Enable accurate reporting across disparate systems
- Increased visibility for regulatory & compliance reporting

## Operations

- Visibility to fuel used
- Tighter integration procurement / Operations
- Partner enabled solution
  - Solarc

## IT

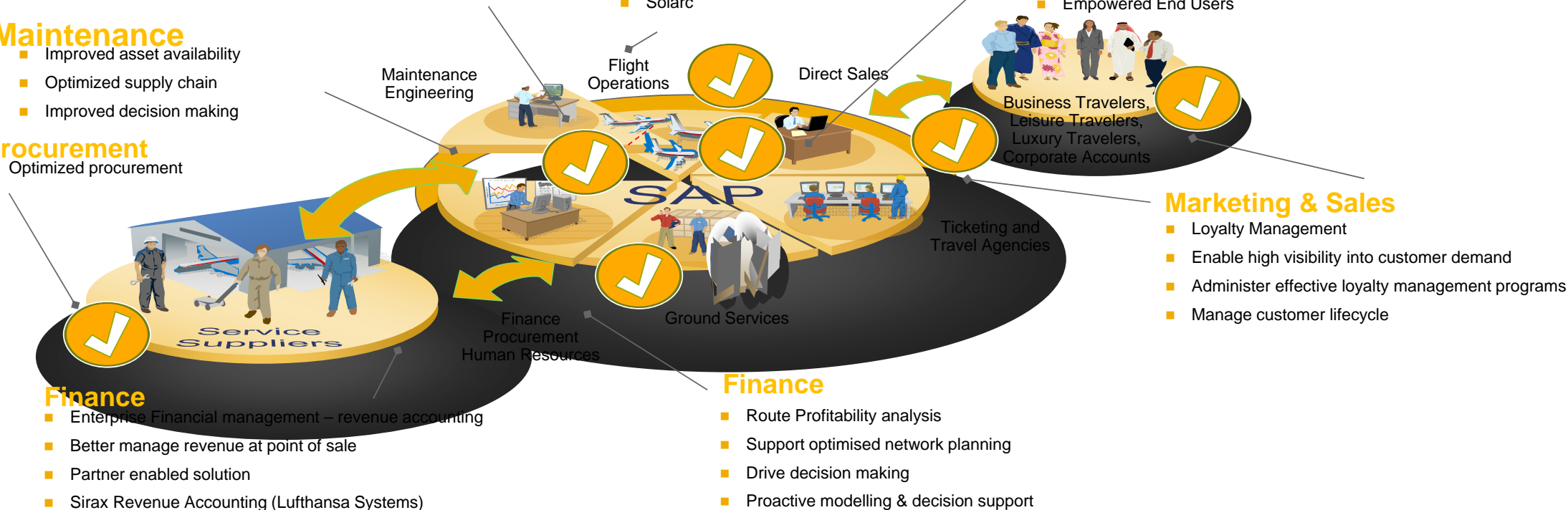
- Access to Real-Time Information
- Data Agnostic, Access to Multiple Data Sources
- Align and Enhance Data Management Strategy
- Empowered End Users

## Maintenance

- Improved asset availability
- Optimized supply chain
- Improved decision making

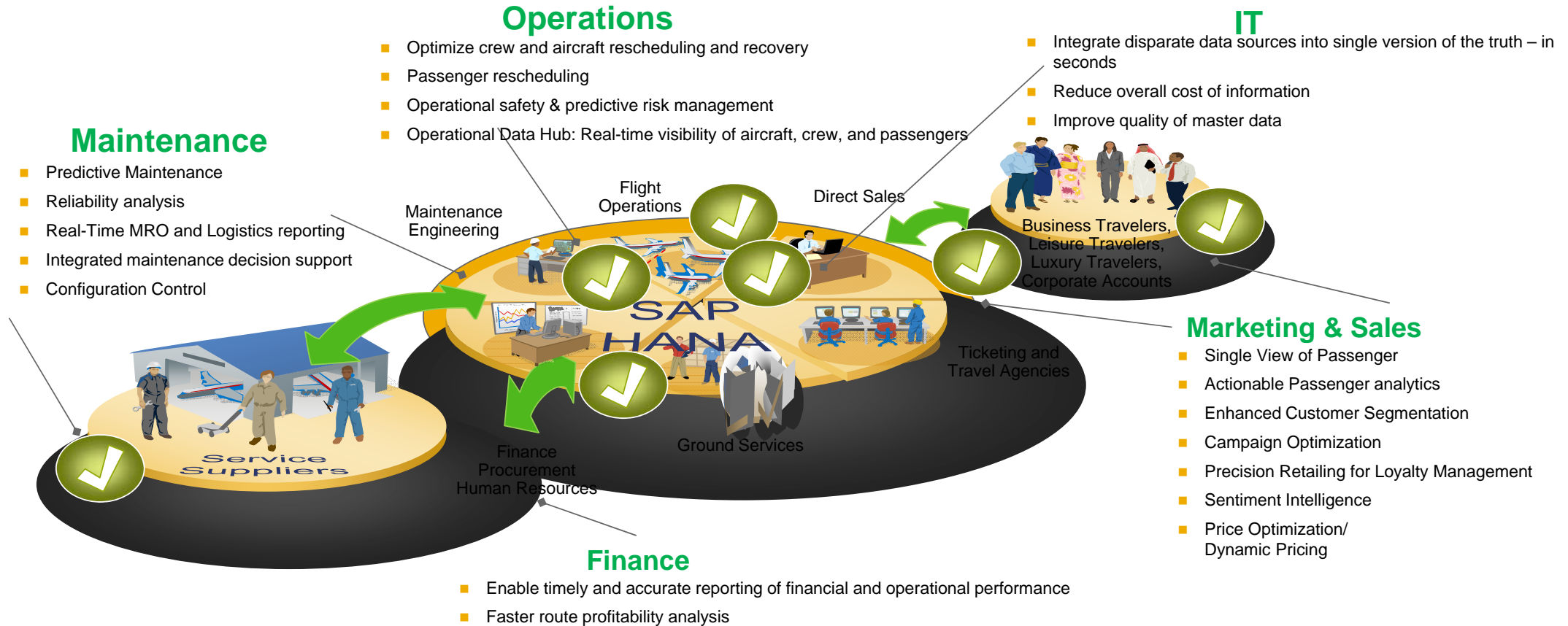
## Procurement

- Optimized procurement



Predicting *AND* Preparing for Change is the new Opportunity

# The Solution : Business Network needs to operate in **Real-Time Digital Logistics (using Big Data / HANA)**



**Real-Time Business Network on SAP HANA**



# Surveys show that Insight, Business Intelligence, Predictive Analytics, Big Data and Real Time are a must have in Logistics



**20%**

Through 2015, organizations integrating high-value, diverse, new information types and sources into a coherent information management infrastructure will outperform their industry peers financially by more than 20%<sup>1</sup>



**48%**

Of organizations foresee a need for predictive modeling and optimization techniques based on Big Data analysis<sup>2</sup>



**80%**

Of decision makers think access to the right information at the right time is critical to their business<sup>2</sup>

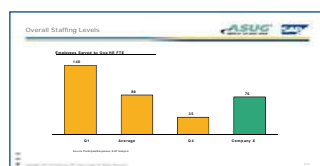
<sup>1</sup>Gartner, "Hype Cycle for Information Infrastructure, 2012," Michael Blechar, July 31, 2012, <sup>2</sup>SAP performance benchmarking

# Transportation & Logistics : Digital Logistics can provide innovative unique services in Real Time !! 23 examples

Airlines/ Passengers	Hospitality	LSP/FF/Route	Rail	Ocean Liners
<ul style="list-style-type: none"> <li>▪ 'Day of Ops' for Passenger Recovery</li> <li>▪ Predictive Risk &amp; Safety Management</li> <li>▪ Single View of Passenger</li> <li>▪ Sentiment Analysis</li> <li>▪ Customer Segmentation</li> <li>▪ Price sensitivity and optimization to adjust fares</li> </ul>	<ul style="list-style-type: none"> <li>▪ Revenue/Yield Management</li> <li>▪ Real-Time Booking for Tour Operators</li> <li>▪ Bigpoint: Player Behavior and Real-Time-Offer management in gaming</li> <li>▪ Dynamic Booking and Service Offering for Hotels</li> </ul>	<ul style="list-style-type: none"> <li>▪ Smart Fleet Analytics to analyze mobile/sensor data obtained from vehicles</li> <li>▪ Customer Operational reporting</li> <li>▪ NRI: Traffic management of Taxis in Tokyo using GPS signals</li> <li>▪ Predictive Fleet Maintenance</li> </ul>	<ul style="list-style-type: none"> <li>▪ Analysis of crane pulls/ movements at terminals</li> <li>▪ Analysis of Load Factor/ Cargo Mix</li> <li>▪ Spare Parts Optimization</li> <li>▪ Accelerate Financial Close</li> <li>▪ Predictive Maintenance/ Safety</li> </ul>	<ul style="list-style-type: none"> <li>▪ Yield/Network Optimization to allocate cargo on itineraries</li> <li>▪ Empty Container Repositioning</li> <li>▪ Operational Planning including Inland feeder network</li> <li>▪ Maritime Location Intelligence (Anomaly Detection)</li> </ul>

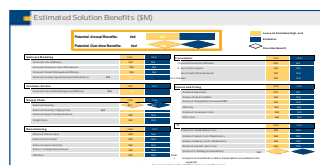
# Benchmarking, KPIs and Benefits of Digital Logistics

**Performance  
benchmarking**



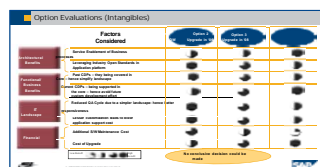
**How do we  
compare?**

**Benefits  
assessment**



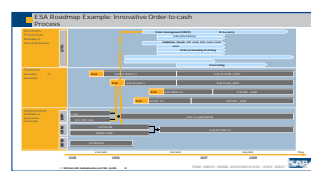
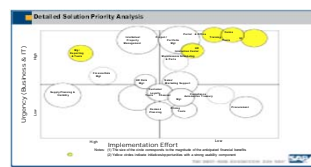
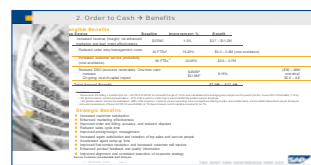
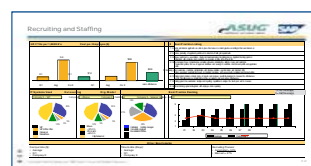
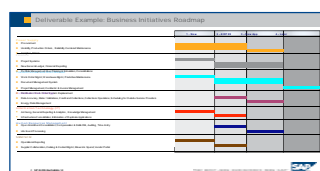
**What is our  
potential?**

**Initiative  
prioritization**



**How do we  
enable?**

**Roadmap  
development**



**How do we  
get there?**



# Performance Benchmarking Database is available : we collected the largest number of KPI data on the market

## SCALE



**15,000+**  
PARTICIPANTS

4,000+ companies  
Global: 60% of  
participants  
outside of U.S.

## CONTENT



**50+**  
BUSINESS  
PROCESS  
ASSESSMENTS

3,000+ KPIs/  
best practices

## PLATFORM



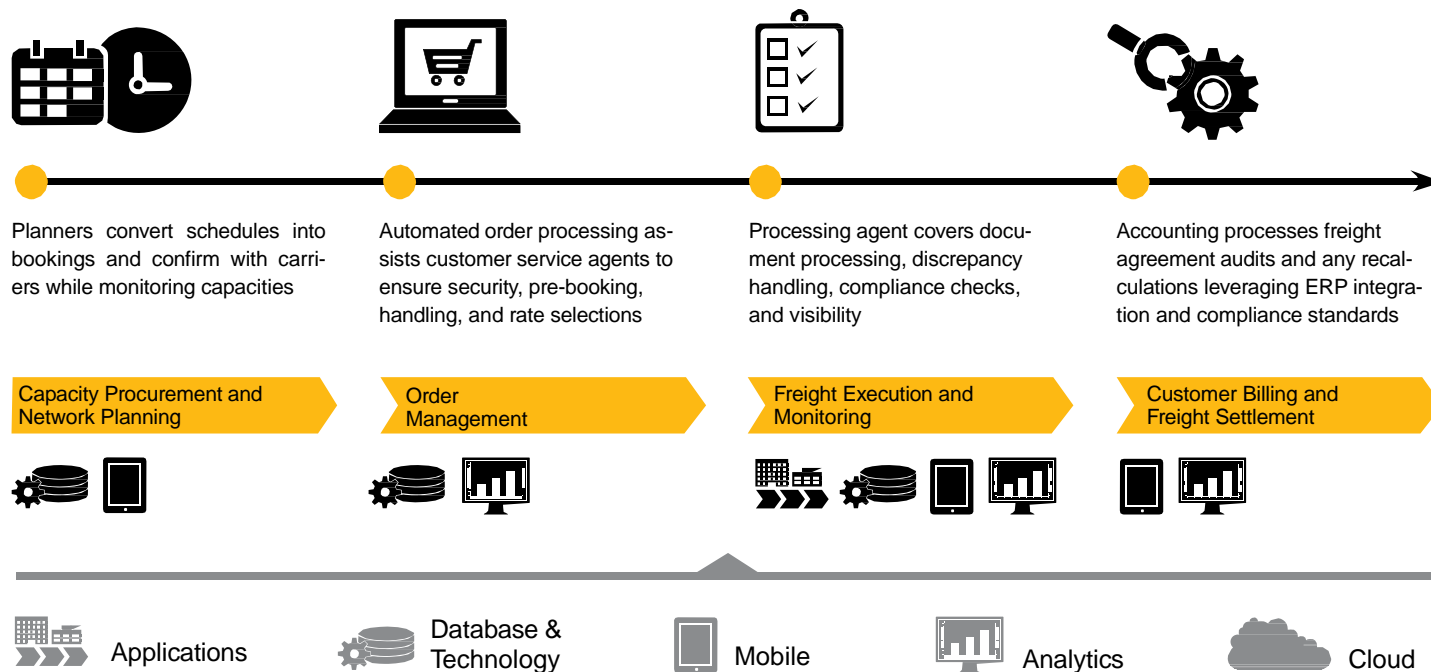
**on-Demand**  
ANALYTICS

With flexible peer group  
assessments

Online self-service  
survey completion

# Benchmarking highlights high-impact strategies that can be enabled by Logistics innovations

Integrate and automate the logistics freight transportation through a single and real time platform



# Some examples of Value KPI benefits measured by our Benchmarks in Transportation Logistics



**10%** decrease in cost of goods transported



**75%** increase in planned transportation orders



**50%** reduction in distribution branches through cost-effective transportation



Increased productivity and quality with central rate and charge management

## Solution Capabilities

### Planning and Execution

- Assign predefined or optimize network routings and bookings to shipments through the routing engine or use ad-hoc bookings through tendering.
- Optimize the capacity automatically or manually across all transportation legs to increase margin

### Contracts and Charge Calculation

- Integrate your quotations or contracts (customer, carrier or internal) and use them to automatically calculate charges

### Settlement of Charges

- Use TM integrated with world-leading ERP financials for forwarding order and freight order settlement

### Improve Customer Service

- Provide excellent customer service with extended shipment status visibility and manage potential or actual incidents

### Event Management – Track & Trace

- Proactively monitor and manage all routings and shipments.

## Benefits

- Superior internal and external customer satisfaction levels by delivering the "perfect order"
- Reduced overall transportation spend
- Reduce processing cost per shipment
- Improved user experience using a modern, configurable technology

# Conclusion

## KEY MESSAGE

- Critical factors and challenges can be overcome by the power of Digital Logistics innovations
- We can do real time predictions, analysis and monitoring of Logistics flows the we never thought is feasible
- Big Data, In-Memory technology (HANA) and Real Time Predictive Analytics through 50+ new real time services
- Logistics can become collaborative, adaptive, Green, Intelligent and Transparent empowered by Digital & Big Data

## Critical Factors and Challenges

Continued Urbanization

Increased customer demand

Continued fragmentation across transport modes

Limited energy resources

Environmental prioritization

Europe's competitive and innovative edge

## Digital Logistics innovative Solutions

Collaborative Supply Chain Logistics

Adaptive Logistics

Green & Sustainable Logistics

Intelligent Logistics

Interoperable & Roaming Logistics

Transparent Logistics



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