



Forecasting and Allocation in Supply-Chains

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◆ Forecast and Planning situation

- Supply Chain Structure
- Methods / Conflicts

1.a) Definition of Goals and Functionalities in SAP R/3

1.b) Realisation with SAP R/3

2.a) Definition of Goals and Functionalities in SCM-DP

2.b) Realisation with SAP SCM-DP

3.a) Definition of Goals and Functionalities in SCM-SNP

3.b) Current Project Status SAP SCM-SNP

3.c) Next Steps



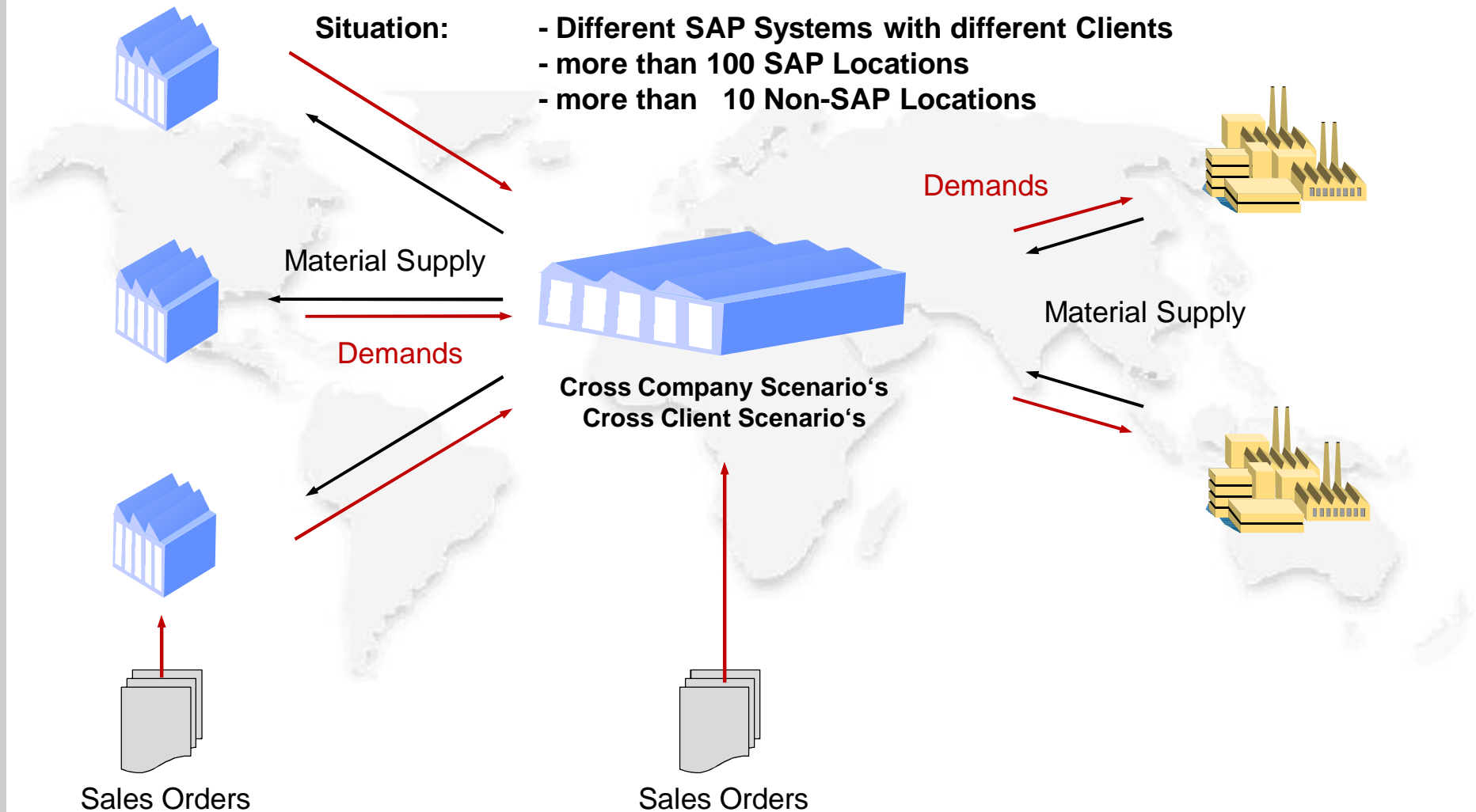
Forecast and Planning Situation

Forecast and Planning Situation – Supply Chain Structure

Logistic Center

Central Warehouse

Production Sites

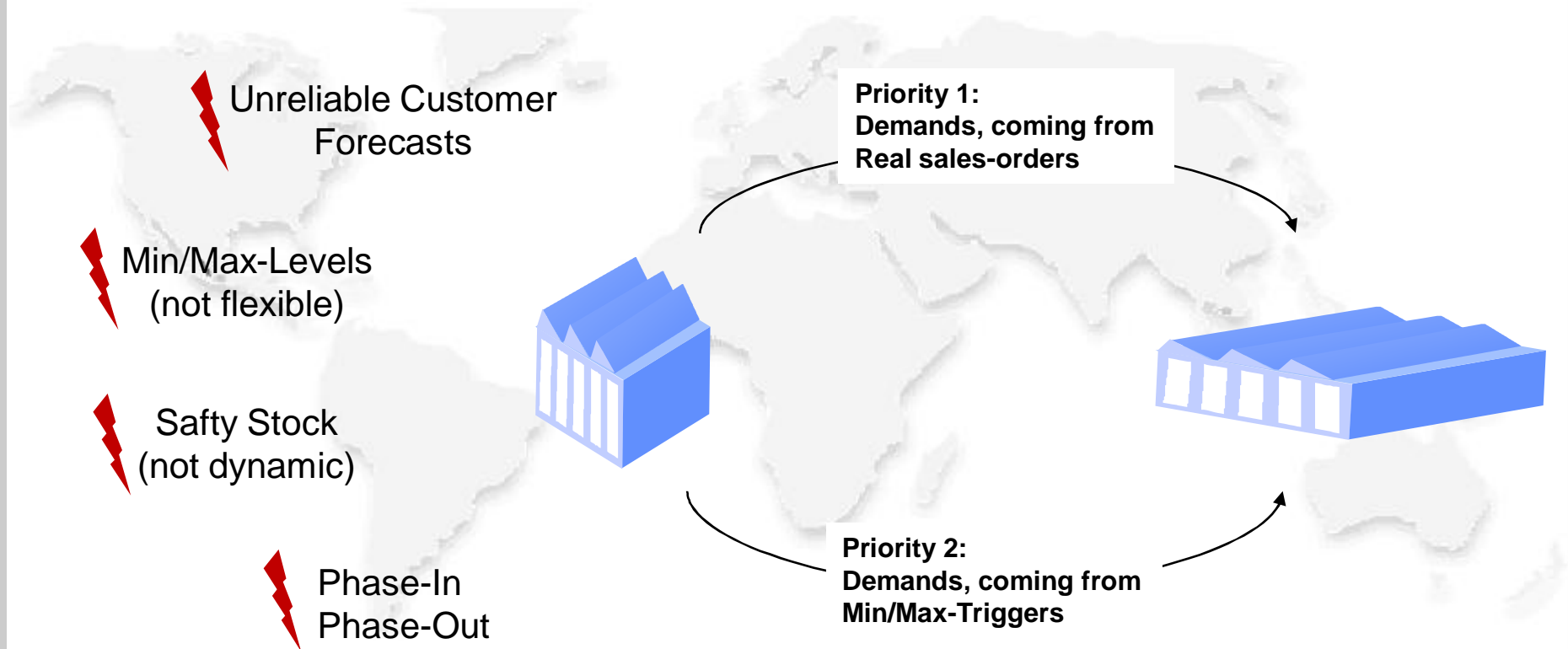


Logistic Center

With Stock-Responsibility

Central Warehouse

With Stock-Responsibility

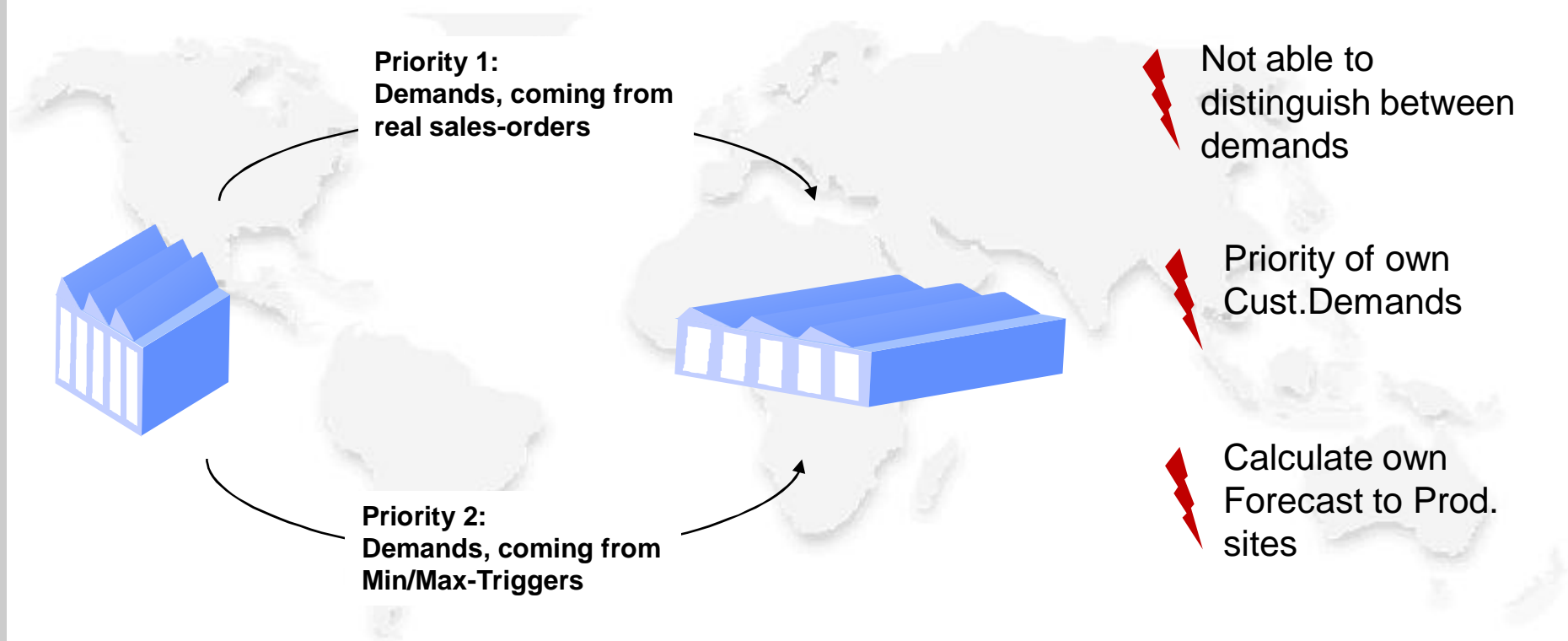


Logistic Center

With Stock-Responsibility

Central Warehouse

With Stock-Responsibility





1.a) Definition of Goals and Functionalities SAP-R/3

„Reduce Stocks in Logistic Center by replacing manual Reorderpoint Planning with automatic consumption based forecasting“

- ◆ **Automatic Calculation of consumption based Forecast-Figures**
- ◆ **Forecast-Figures and PIRs on weekly basis**
- ◆ **Consumption of Forecast with Sales Orders**
- ◆ **Automatic Transfer of Forecast-Figures to MRP**
- ◆ **Automatic Creation of Transfer P.O.s after MRP**



Realisation with SAP R/3

SOP

Projects an „Independent Forecast“ by week based on 52 weeks usage history. This forecast is transferred to Demand Mgt. where it is converted into Planned Independent Requirements

Demand Mgt

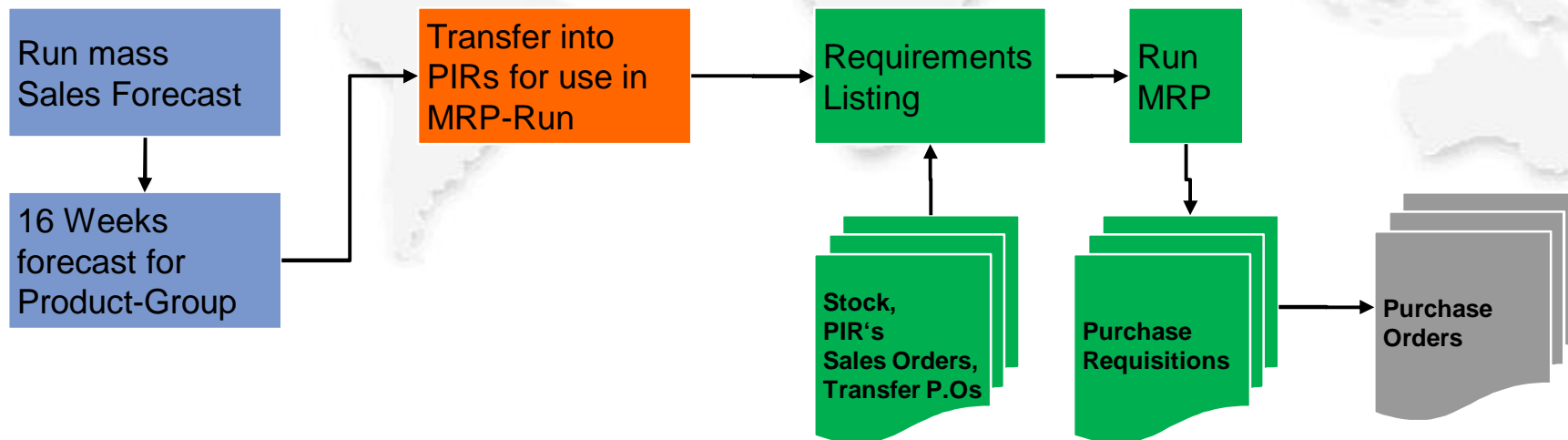
Manages rules for the impacts on “PIRs” and for adjusting “PIRs” accordingly
 → Consumption by Sales Orders

MRP

Keeps track of impacting transactions and PIR's.
 Calculates “Net Requirements” for the Coverage period, based on Demand Management figures.
 Produces Purchase Requisitions

Purchasing

Purchase Requisition will be automatically converted into Purchase Orders according to replenishment horizon



◆ Still open Issues

- No global view on stocks and Planning Situation (Cross System, cross Client and Non-SAP Systems)
- No Alert Functionality for critical Stock-Levels / Stock coverage
- No possibility to track the Requirements (Customer orders / Stock refill)
- No automatic mass processing in SOP for new products
- “Isolated” Planning of single Logistic Centers
- No Consideration of “non-working” periods



2.a) Definition of Goals and Functionalities for SCM-DP

Definition of Goals and Functionalities in SAP-SCM

A.) “Get Global view on stocks and planning situation”

- Integrate all SAP-Systems/Clients and Non-SAP Systems
- Define Alert Functionality for Stock-Levels and Stock coverage

B.) „Replace R/3 SOP-Forecast with SCM-DP Forecast and provide Key-Figure for SNP-Planning“

- Consider plant holiday in Forecasting mechanism
- Include new Products automatically for Forecasting
- Use Phase-In / Phase-Out Functionality

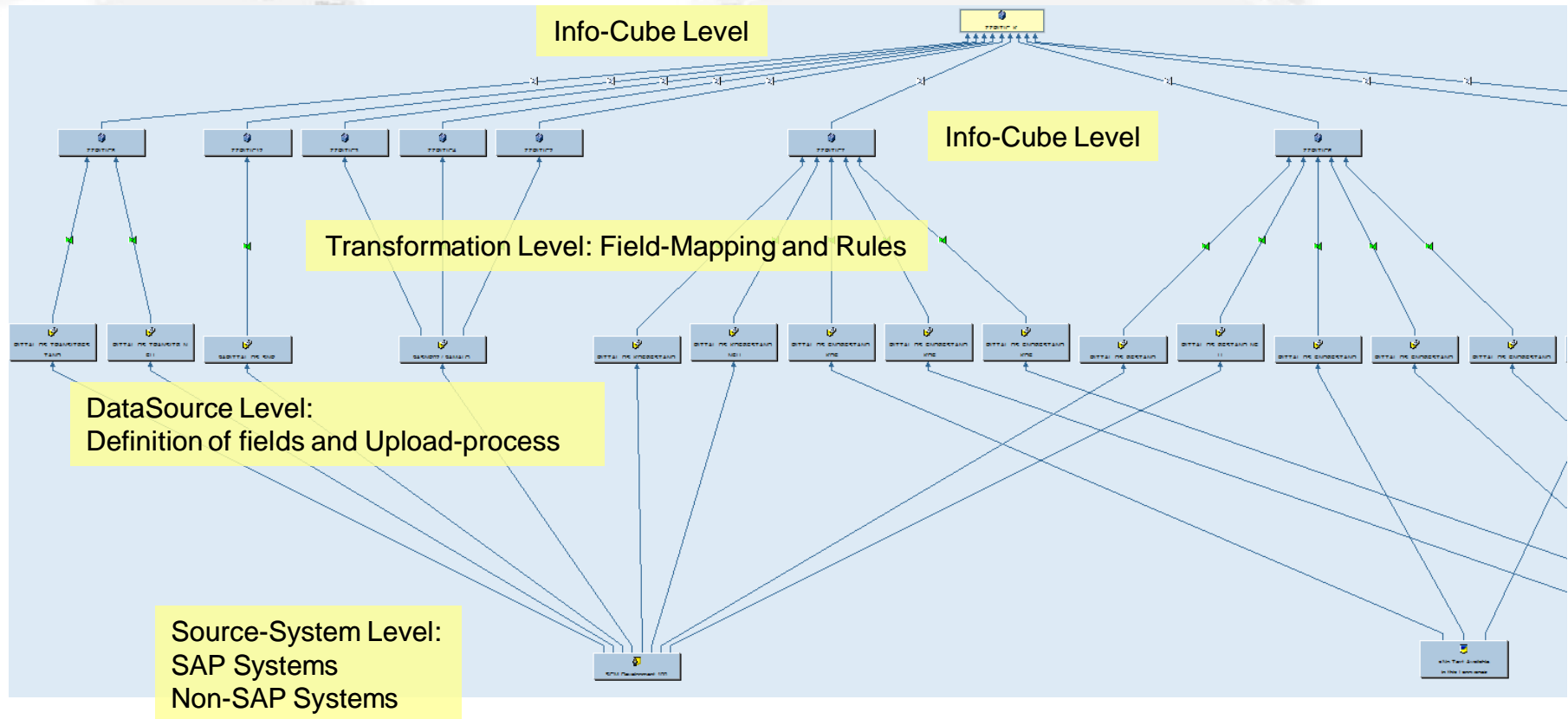


2.b) Realisation with SAP SCM-DP

2.b) Realisation with SAP SCM-DP

A.) “Get Global view on stocks and planning situation”

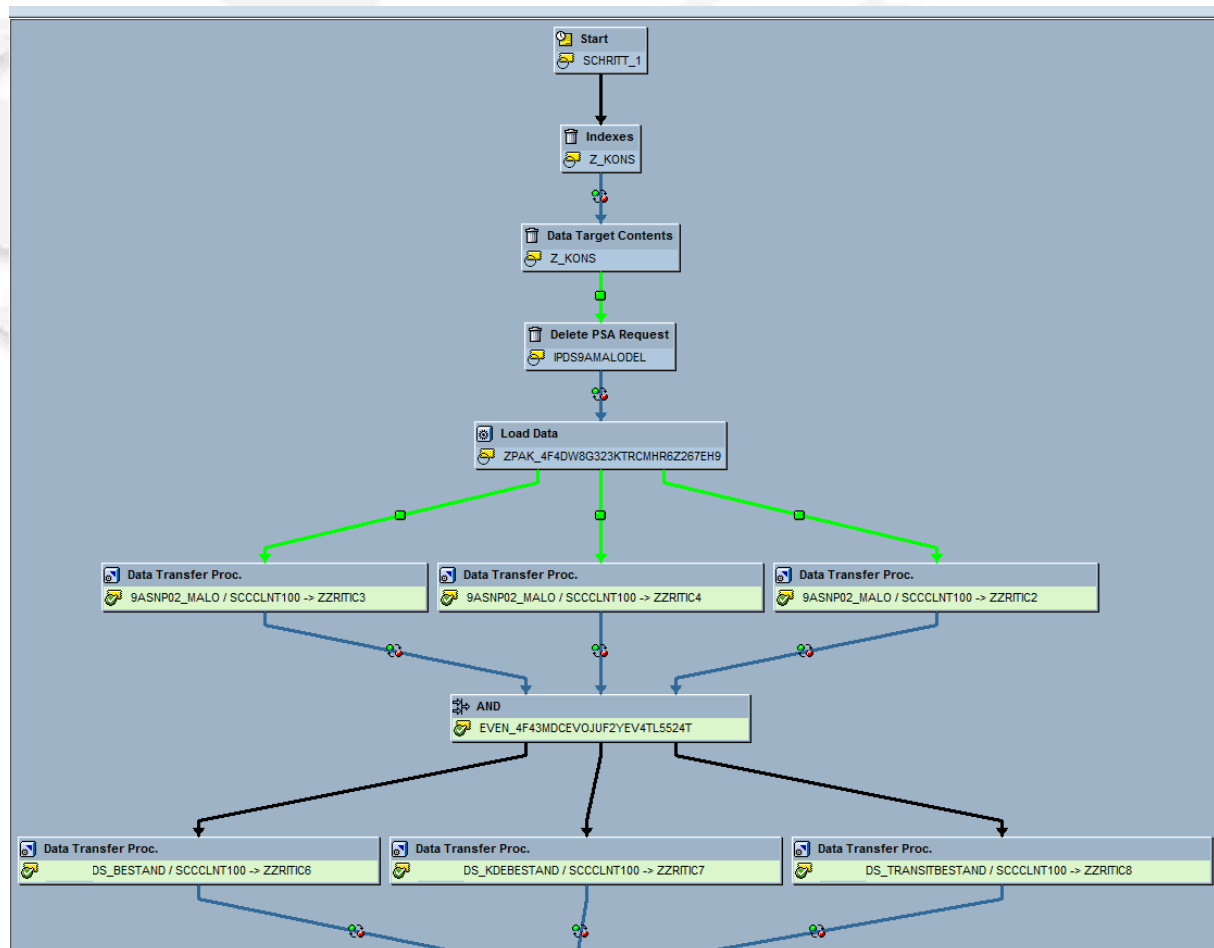
1. Definition of Data-Flow model



2.b) Realisation with SAP SCM-DP

A.) “Get Global view on stocks and planning situation”

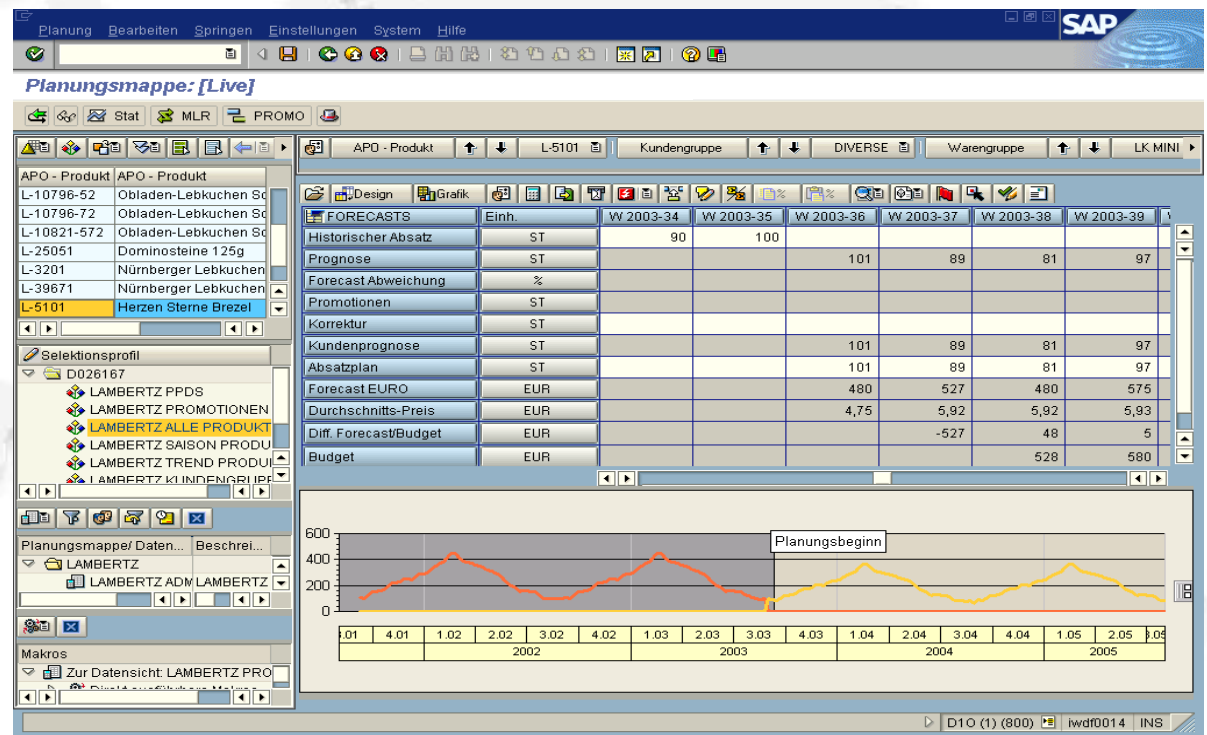
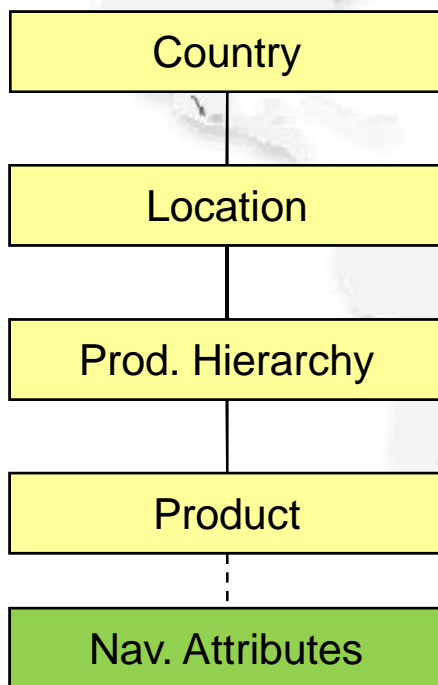
2. Definition of Process-Chains and upload cycles



2.b) Realisation with SAP SCM-DP

A.) “Get Global view on stocks and planning situation”

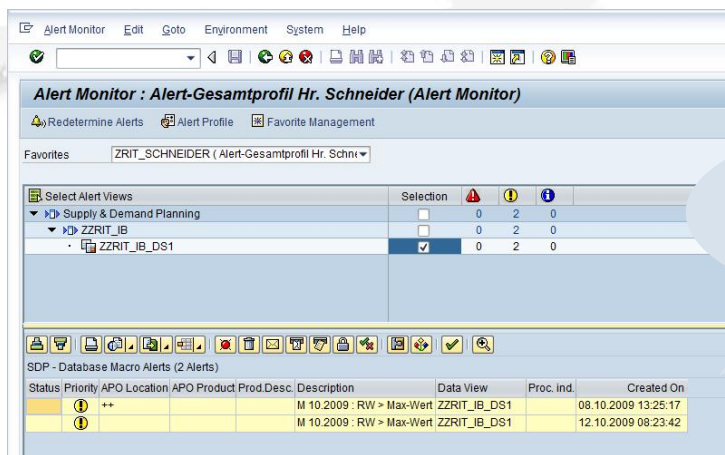
3. Definition of Tableau



2.b) Realisation with SAP SCM-DP

A.) “Get Global view on stocks and planning situation”

4. Definition of Alert-Monitor and Alert-Handling



Alert Monitor : Alert-Gesamtprofil Hr. Schneider (Alert Monitor)

Redetermine Alerts | Alert Profile | Favorite Management

Favorites: ZRIT_SCHNEIDER (Alert-Gesamtprofil Hr. Schnei)

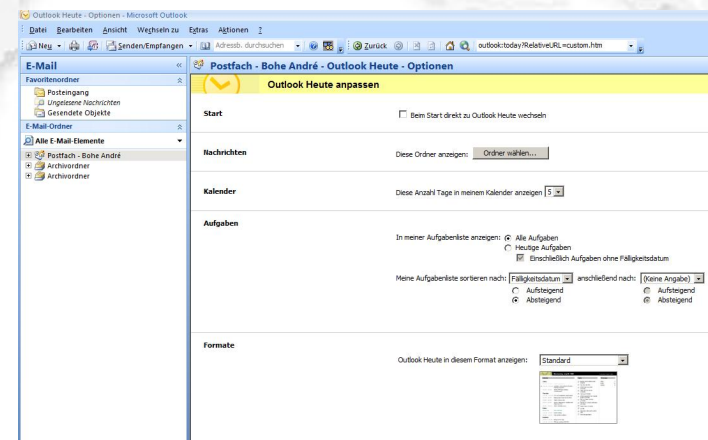
Select Alert Views	Selection	!	!	!
Supply & Demand Planning	<input type="checkbox"/>	0	2	0
ZZRIT_IB	<input type="checkbox"/>	0	2	0
ZZRIT_IB_DS1	<input checked="" type="checkbox"/>	0	2	0

SDP - Database Macro Alerts (2 Alerts)

Status	Priority	APO Location	APO Product	Prod.Desc.	Description	Data View	Proc. Ind.	Created On
!	+++				M 10.2009 : RW > Max-Wert	ZZRIT_IB_DS1		08.10.2009 13:25:17
!					M 10.2009 : RW > Max-Wert	ZZRIT_IB_DS1		12.10.2009 08:23:42

Alerts, created after Macro-Calculation and Result-Check

Mail, triggered by Alert Creation



Outlook Heute - Optionen - Microsoft Outlook

Postfach - Bohe André - Outlook Heute - Optionen

Start: Beim Start direkt zu Outlook Heute wechseln

Nachrichten: Diese Ordner anzeigen: Ordner wählen...

Kalender: Diese Anzahl Tage in meinen Kalender anzeigen: 5

Aufgaben: In meiner Aufgabenliste anzeigen: Alle Aufgaben Heutige Aufgaben Einmalig/Aufgaben ohne Fertigkeitsdatum

Meine Aufgabenliste sortieren nach: Fertigkeitsdatum anschließend nach: Keine Angabe Aufsteigend Absteigend

Formate: Outlook Heute in diesem Format anzeigen: Standard

2.b) Realisation with SAP SCM-DP

B.) „Replace R/3 SOP-Forecast with SCM-DP Forecast and provide Key-Figure for SNP-Planning“

1. Enlargement of existing Settings by Forecast Key-Figures and -models

- InfoArea, InfoObjectCatalog, InfoObject
- Planning Object Structure
- Planning Area (expand with Forecast-Figures)
- Planning Tableau (expand with Forecast-Figures)

2. Creation of Forecast Profile

2.b) Realisation with SAP SCM-DP

Realised Functionalities:

- ◆ **BW-functionality to collect data from Non-SAP systems**
- ◆ **Process chain to define update and upload procedures**
- ◆ **Global view on Stocks , Stockranges and other Key-Figures (across Clients, across Systems) with Planning Tableau possible**
- ◆ **Extended Planning structures and levels (clearly arranged Display of Key-Figures and Graphics)**
- ◆ **Automatic Integration of new products to be forecasted via Core Interface**

2.b) Realisation with SAP SCM-DP

Realised Functionalities:

- ◆ **Individual Calculation of Key-Figures with Macro-Technology**
- ◆ **Automatic Alert-Creation → Mail to responsible Person (direct link)**
- ◆ **More forecasting methods available (e.g. Statistical Forecast, causal analysis, Croston, Holt-Winters)**
- ◆ **Considering Factory-Calendar in Forecast-Calculation**
- ◆ **„Like-Modelling“ in Case of Phase-in /Phase-out Products**

„SCM-DP is easier to handle more flexible and offers much more functions and possibilities compared to R/3-Functionalities“



3.a) Definition of Goals and Functionalities for SCM-SNP

“Planning of entire Supply-Chain based on DP Forecast Key-Figures with Prioritisation of actual Demands ”

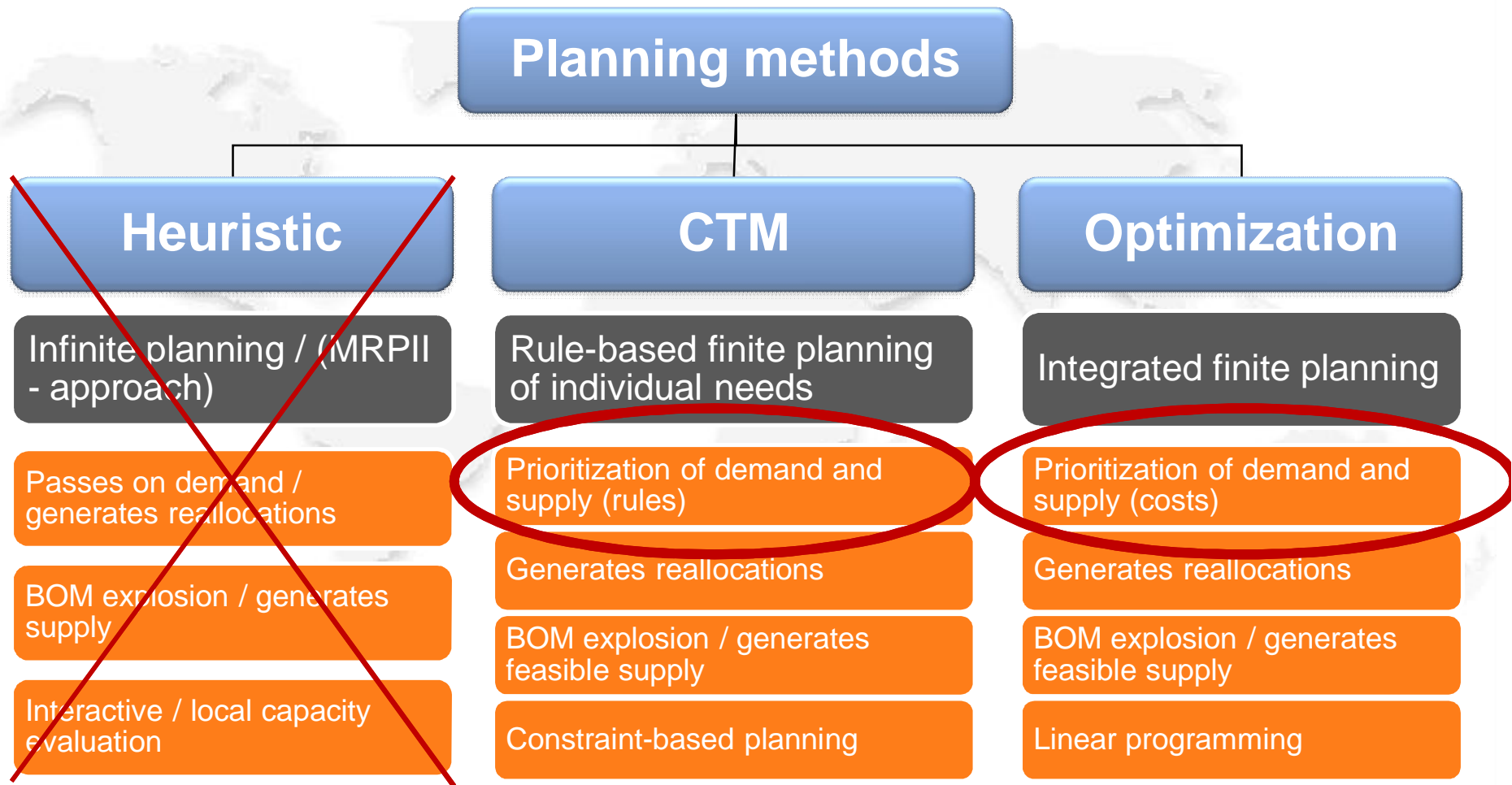
„Calculate and allocate quantities for production plants

„Reduce Costs in entire Supply Chain”



3.b) Actual Project Status SAP SCM-SNP

Decision-Process for CTM or Optimization because Prioritization of Demands necessary



~~Optimization~~

- With Optimzier it is only possible run a bucket-based planning
- Character based Optimization is not provided (Variant Configuration)
- Optimizer does not „know“ Make-to-Order production

→ Decision pro

CTM



3.c) Next Steps

To Do:

- 1. Create Prioritization rules for different demand categories (sales orders; PIRs; Transfer P.o.)**
- 2. Create Prioritization rules in between sales orders (material availability date; delivery priority; receiving location)**
- 3. Define CTM-Planning Parameter with link of prioritized demands to prioritized receipts**
- 4. Create PP/DS Alerts (Quantity + Scheduling – Alerts) for open demands after CTM-Run**
- 5. Check Possibility to change CTM results with BEx-Analyzer and copy back to SNP-Planningtableau via IP (integrated Planning)**

Thank you for your Attention

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