Better results with SAP Business One

Manual for consultants

Jochen Clemens

Jochen Clemens GmbH, 76356 Weingarten (Germany)

We describe in a very clear way how dashboards are used to improve results

Dashboards help to set and track targets

Performance indicators measure success

Analytical dashboards provide statistical values if that helps to understand the processes

When companies implement SAP Business One they expect better processes and more productive production. But achieving and maintaining this is an ongoing process that goes beyond the implementation of an ERP-system.

Two approaches are included.
– One is the step-by-step structure of the dashboards.
– The second approach is to better evaluate key figures with statistics

This is a clearly defined way to provide the right information to the responsible employees.

This includes

- Dashboard with the company values sales, contribution margin, value added for the entire company
- Strategically important dashboards on customers, products and resources

- Customers, contribution margins as well as orders, delivery times, compliance with delivery times
- Products, contribution margins as well as quantities and productivity
- Resources, monitoring of orders, productivity, costs

Performance Gaps are identified by

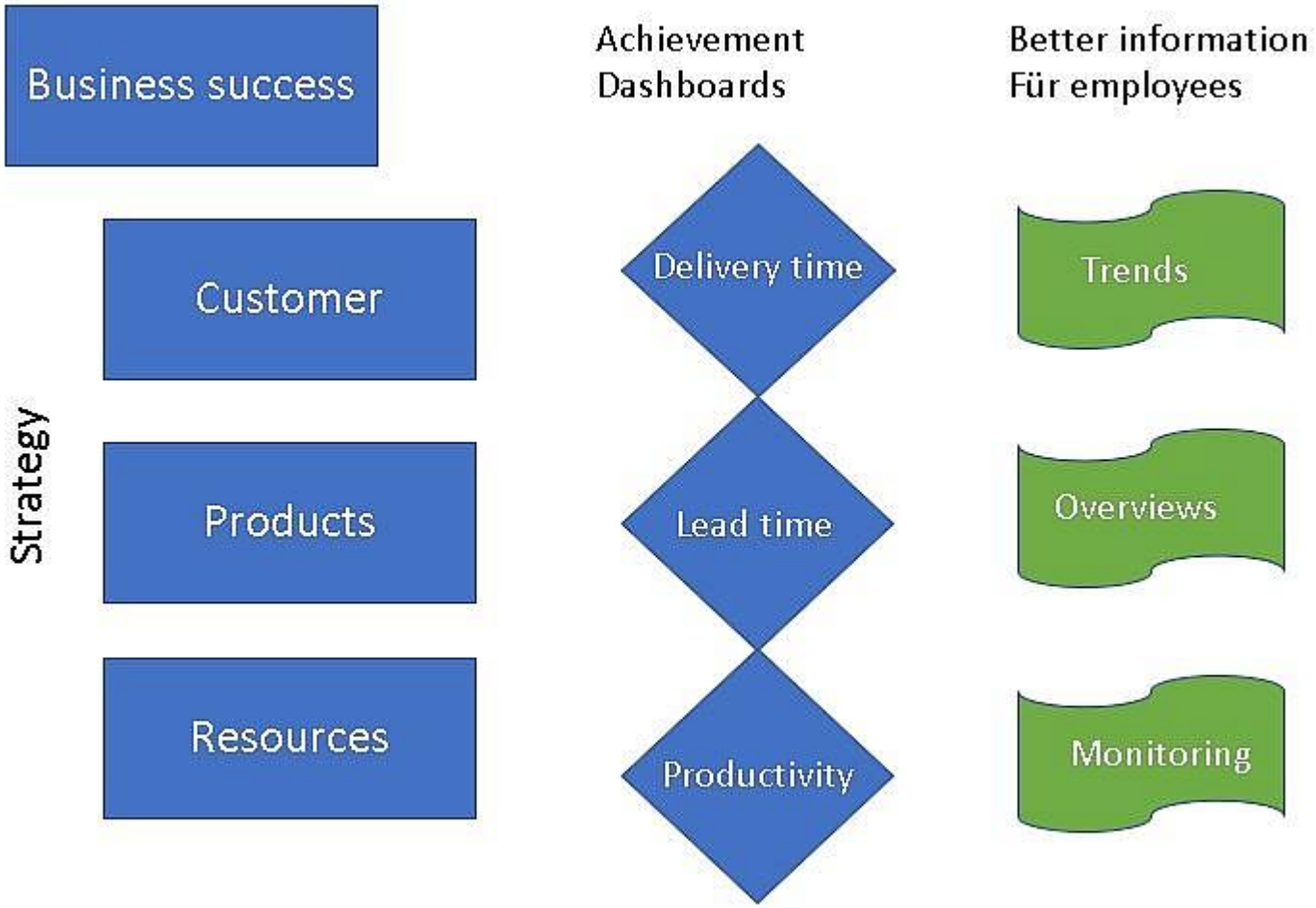
- Analysis of productivity (resources)
- Analysis of delivery times
- Analysis of throughput times
- Analysis of time spans for quotation processing, order processing, etc
-

The method is very simple.

With the strategy Dashboards you define the targets of the company.

The achievement dashboards control whether the processes are designed to meet the requirements

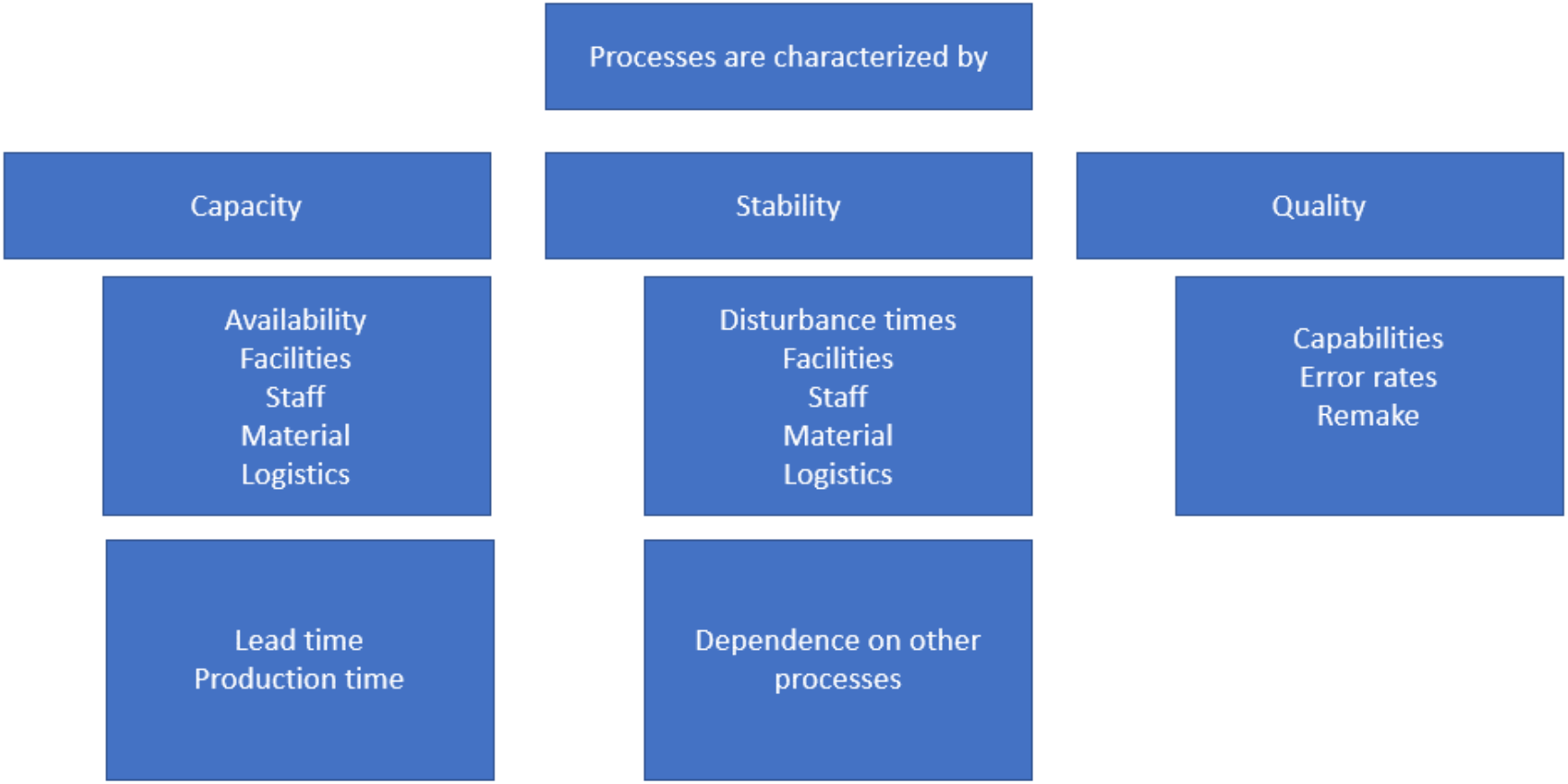
Functional dashboards support employees with information they need.


Business success
Strategy
Customer
Products
Resources
Achievement
Dashboards
Delivery time
Lead time
Productivity
Better information
Für employees
Trends
Overviews
Monitoring

All processes are characterized by capacity, stability and Quality

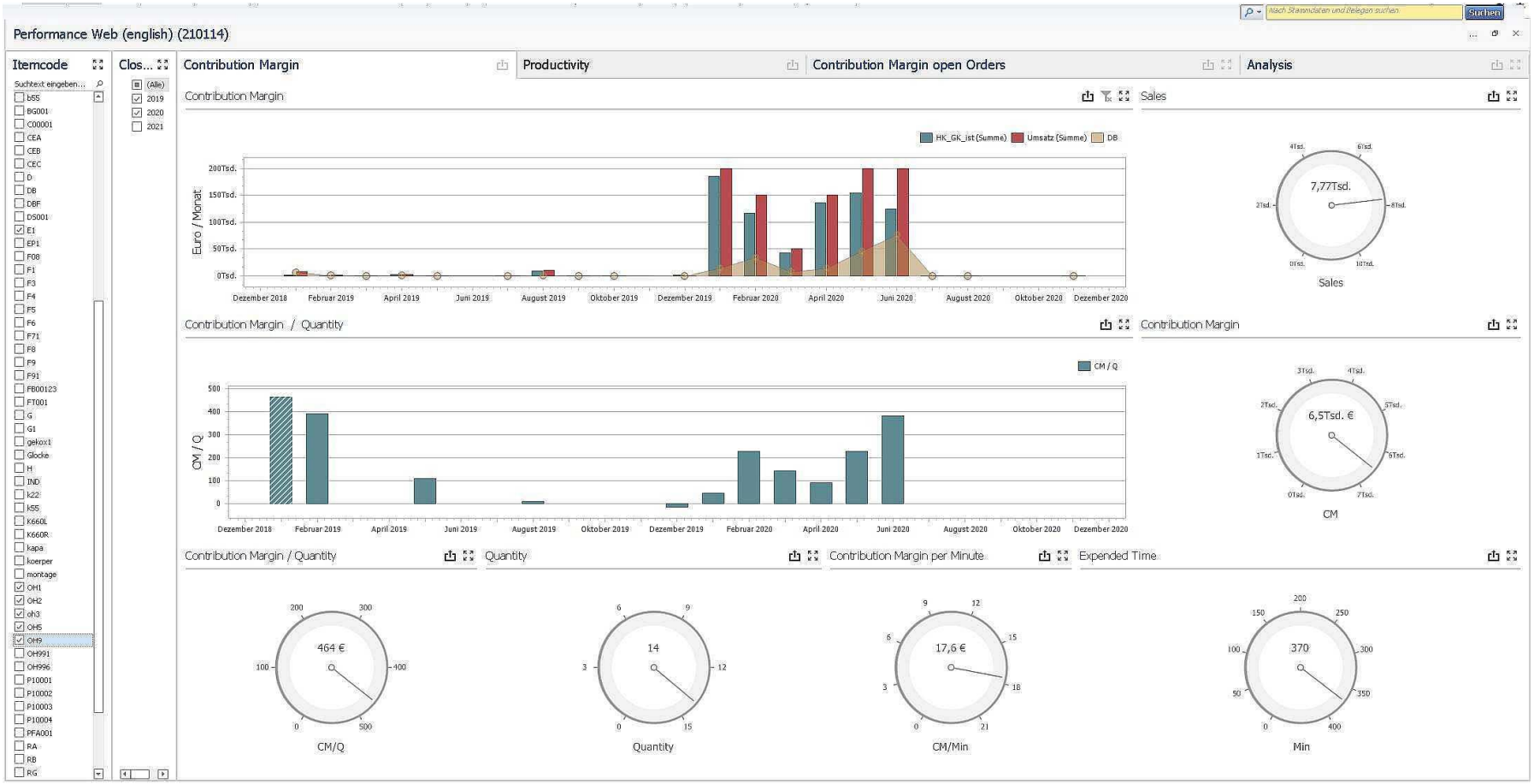
This applies to all achievement processes:

- Offer processing
- Order processing
- Logistic
- Production
- etc


Processes are characterized by
Capacity
Stability
Quality
Availability
Facilities
Staff
Material
Logistics
Disturbance times
Facilities
Staff
Material
Logistics
Capabilities
Error rates
Remake
Lead time
Production time
Dependence on other processes

You can start with dashboards at any point, with customers, resources, products or with the support of production control or the measurement of productivity or lead times.

The most sensible approach is to install a central dashboard that identifies contribution margins/sales and assigns other metrics to these central values. These could be: time spent to achieve sales, contribution margins per minute, contribution margins per unit, etc.


Performance Web (english) (210114)
Itemcode
Clos...
(Alle)
2019
2020
2021
Contribution Margin
Productivity
Contribution Margin open Orders
Analysis
Contribution Margin
HK_GK_ist (Summe)
Umsatz (Summe)
DB
Euro / Monat
200Tsd.
150Tsd.
100Tsd.
50Tsd.
0Tsd.
Dezember 2018
Februar 2019
April 2019
Juni 2019
August 2019
Oktober 2019
Dezember 2019
Februar 2020
April 2020
Juni 2020
August 2020
Oktober 2020
Dezember 2020
Sales
7,77Tsd.
Sales
Contribution Margin / Quantity
CM / Q
CM / Q
Contribution Margin
6,5Tsd. €
CM
Contribution Margin / Quantity
464 €
CM/Q
Quantity
14
Quantity
Contribution Margin per Minute
17,6 €
CM/Min
Expended Time
370
Min

If you are unsure which goals should be achieved, it is a good idea to introduce cost accounting. Cost accounting shows when hourly rates are too high, cost centers have too few productive hours, etc. This is especially evident when cost centers are planned and the differences to actual costs are shown.

Cost accounting, e.g. Business Performance, has a cost unit accounting. From cost unit accounting you can see the actual costs of the article groups and define targets according to the article groups.

Learn more about Business Performance
https://www.jochenclemens.de/en/business_performance/

Learn more about Activity based cost management

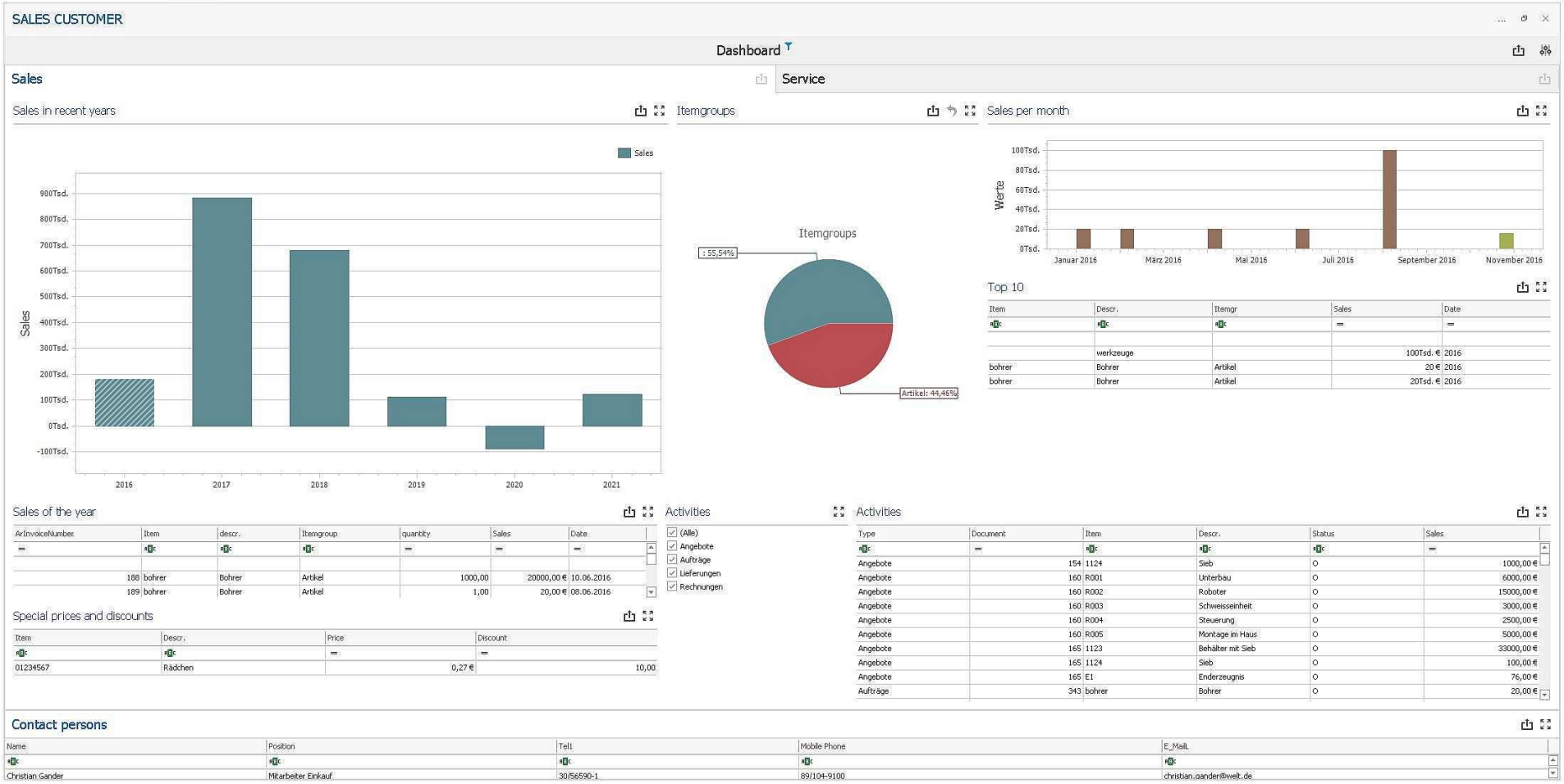
https://www.jochenclemens.de/en/activity-based-cost-management-created-with-boyum-dashboards/

Bezeichnung	Machinery	Tooling equipment	Housings	Valves and accessories	Pressure Sensors	Tubes	Summe aus Positionen
Revenues	137.000,00	41.000,00	36.000,00	44.000,00	38.000,00	43.000,00	214.000,00
Material	9.000,00	41.169,00	9.000,00	9.000,00	9.000,00	9.000,00	59.169,00
Contribution	128.000,00	-169,00	27.000,00	35.000,00	29.000,00	34.000,00	154.831,00
Production	9.935,72	9.935,72	4.967,85	4.967,85	9.935,72	9.935,72	24.839,29
Sales and administration	1.072,30	5.361,52	1.072,30	1.072,30	1.072,30	2.144,60	7.506,12
Profit	116.991,98	-15.466,24	20.959,85	28.959,85	17.991,98	21.919,68	122.485,59

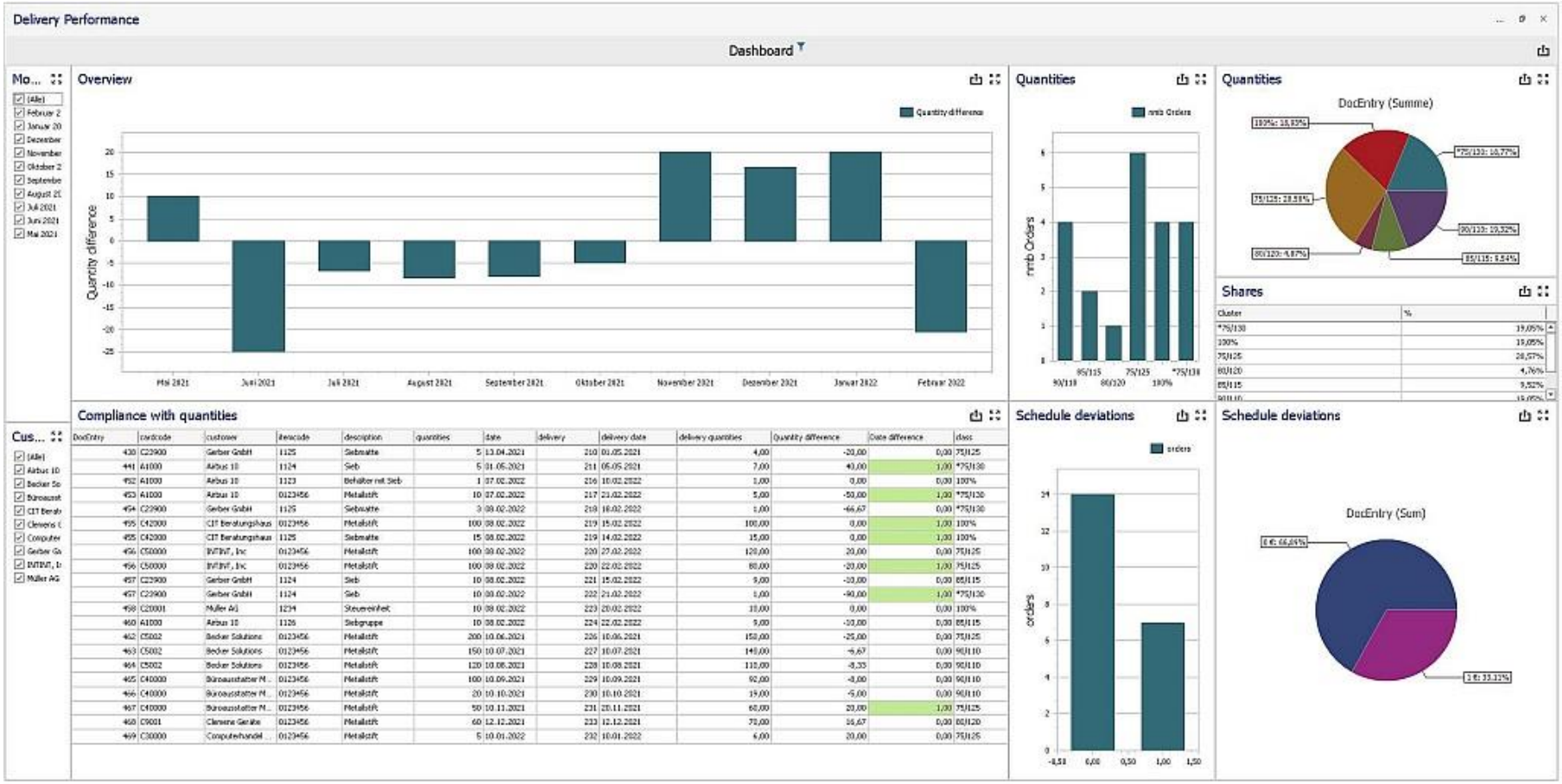
Better results with SAP Business One

Controlling	Customer	Item	Resources	Cost Center	Cost Objects
Sales Volume	■	■			■
Contribution Margin	■	■			■
Efficiency			■		
Utilization			■		
Added Value	■	■			■
P&L Statement					■
Product. Cash Flow				■	
Sales Volume Item		■			

Customers deserve your special attention. It should react quickly when changes occur. To do this, you need to consider what view you should have of customers. This is not only about sales but about all data that are valuable for the view on customers. Which article groups are bought, which activities are undertaken by the sales department. Which offers are currently being processed, which orders have not yet been delivered, etc.


SALES CUSTOMER
Dashboard
Sales
Service
Sales in recent years
Sales
900Tsd.
800Tsd.
700Tsd.
600Tsd.
500Tsd.
400Tsd.
300Tsd.
200Tsd.
100Tsd.
0Tsd.
-100Tsd.
2016
2017
2018
2019
2020
2021
Itemgroups
Itemgroups
55,54%
Artikel: 44,46%
Sales per month
100Tsd.
80Tsd.
60Tsd.
40Tsd.
20Tsd.
0Tsd.
Werte
Januar 2016
März 2016
Mai 2016
Juli 2016
September 2016
November 2016
Top 10
Item
Descr.
Itemgr
Sales
Date
werkzeuge
100Tsd. €
2016
bohrer
Bohrer
Artikel
20 €
2016
bohrer
Bohrer
Artikel
20Tsd. €
2016
Sales of the year
ArInvoiceNumber
Item
descr.
Itemgroup
quantity
Sales
Date
188
bohrer
Bohrer
Artikel
1000,00
20000,00 €
10.06.2016
189
bohrer
Bohrer
Artikel
1,00
20,00 €
08.06.2016
Special prices and discounts
Item
Descr.
Price
Discount
01234567
Rädchen
0,27 €
10,00
Activities
(Alle)
Angebote
Aufträge
Lieferungen
Rechnungen
Activities
Type
Document
Item
Descr.
Status
Sales
Angebote
154
1124
Sieb
O
1000,00 €
Angebote
160
R001
Unterbau
O
6000,00 €
Angebote
160
R002
Roboter
O
15000,00 €
Angebote
160
R003
Schweisseinheit
O
3000,00 €
Angebote
160
R004
Steuerung
O
2500,00 €
Angebote
160
R005
Montage im Haus
O
5000,00 €
Angebote
165
1123
Behälter mit Sieb
O
33000,00 €
Angebote
165
1124
Sieb
O
100,00 €
Angebote
165
E1
Enderzeugnis
O
76,00 €
Aufträge
343
bohrer
Bohrer
O
20,00 €
Contact persons
Name
Position
Tel1
Mobile Phone
E_Mail
Christian Gander
Mitarbeiter Einkauf
30/56590-1
89/104-9100
christian.oander@welt.de

If one wants to satisfy customers, one must ask oneself which adjusting screws can be used. This can be compliance with the required delivery quantities and/or delivery times. Or faster response to inquiries or better response to service requests. In SAP Business One you can find a lot of data that you can show to identify gaps and finally improve them. As an example delivery performance can be mentioned. We call these types of figures performance indicators. These figures help to improve the relationship to customers, help to improve products and help to improve the organization in the production department.


Delivery Performance
Dashboard
Overview
Quantity difference
Quantity difference
Mai 2021
Juni 2021
Juli 2021
August 2021
September 2021
Oktober 2021
November 2021
Dezember 2021
Januar 2022
Februar 2022
Quantities
nmb Orders
Quantities
DocEntry (Summe)
100%: 18,95%
*75/130: 18,77%
75/125: 28,58%
90/120: 19,32%
80/120: 4,87%
85/115: 9,54%
Shares
Cluster
%
*75/130 19,05%
100% 19,05%
75/125 28,57%
80/120 4,76%
85/115 9,52%
Compliance with quantities
DocEntry
cardcode
customer
itemcode
description
quantities
date
delivery
delivery date
delivery quantities
Quantity difference
Date difference
class
Schedule deviations
orders
Schedule deviations
DocEntry (Sum)
0 €: 66,64%
1 €: 33,32%

The dashboard delivery performance stands for

Customer complaint

Cycle time of the customer orders

Time to cash customer orders

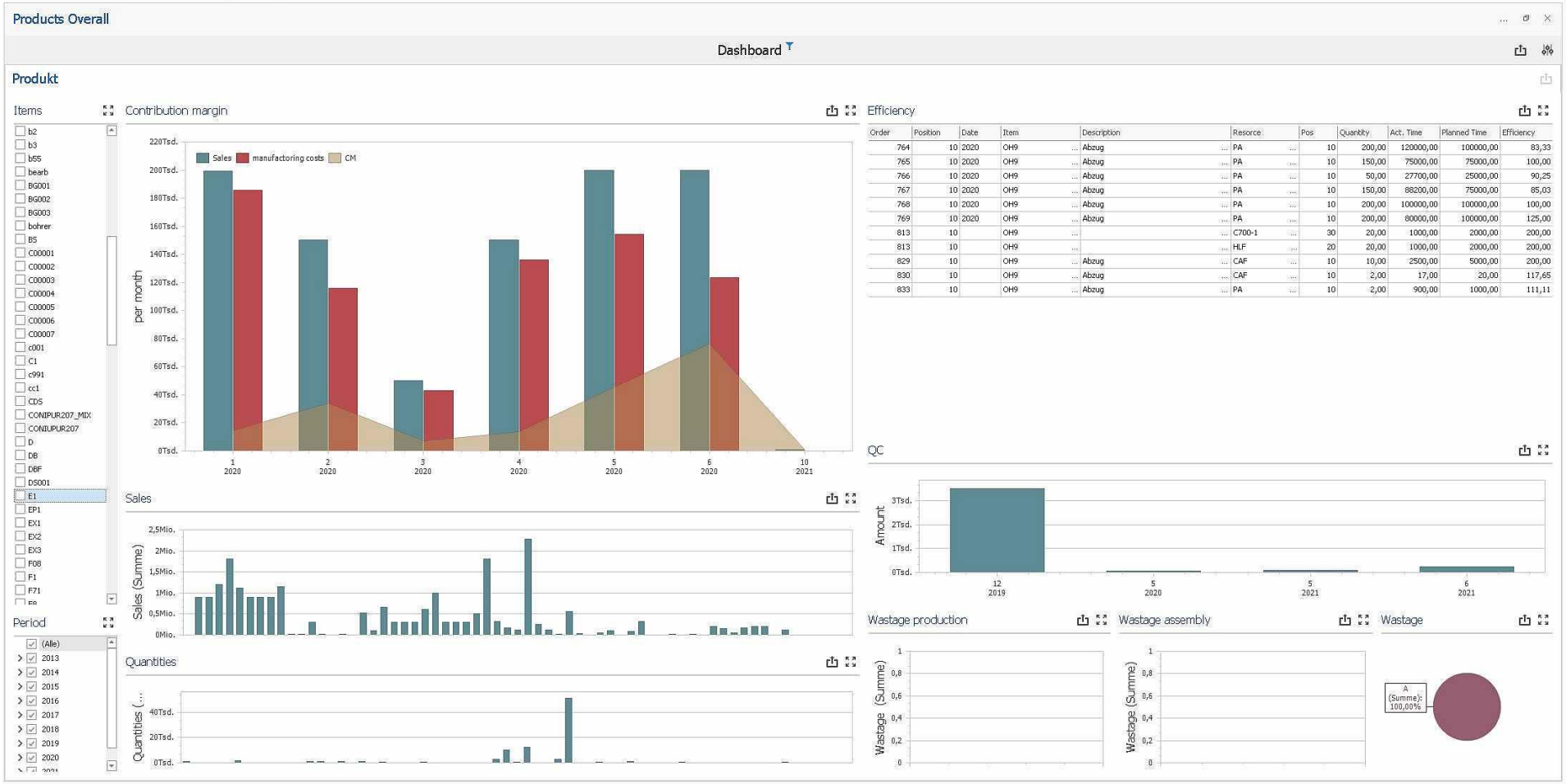
Customer satisfaction

Return shipments

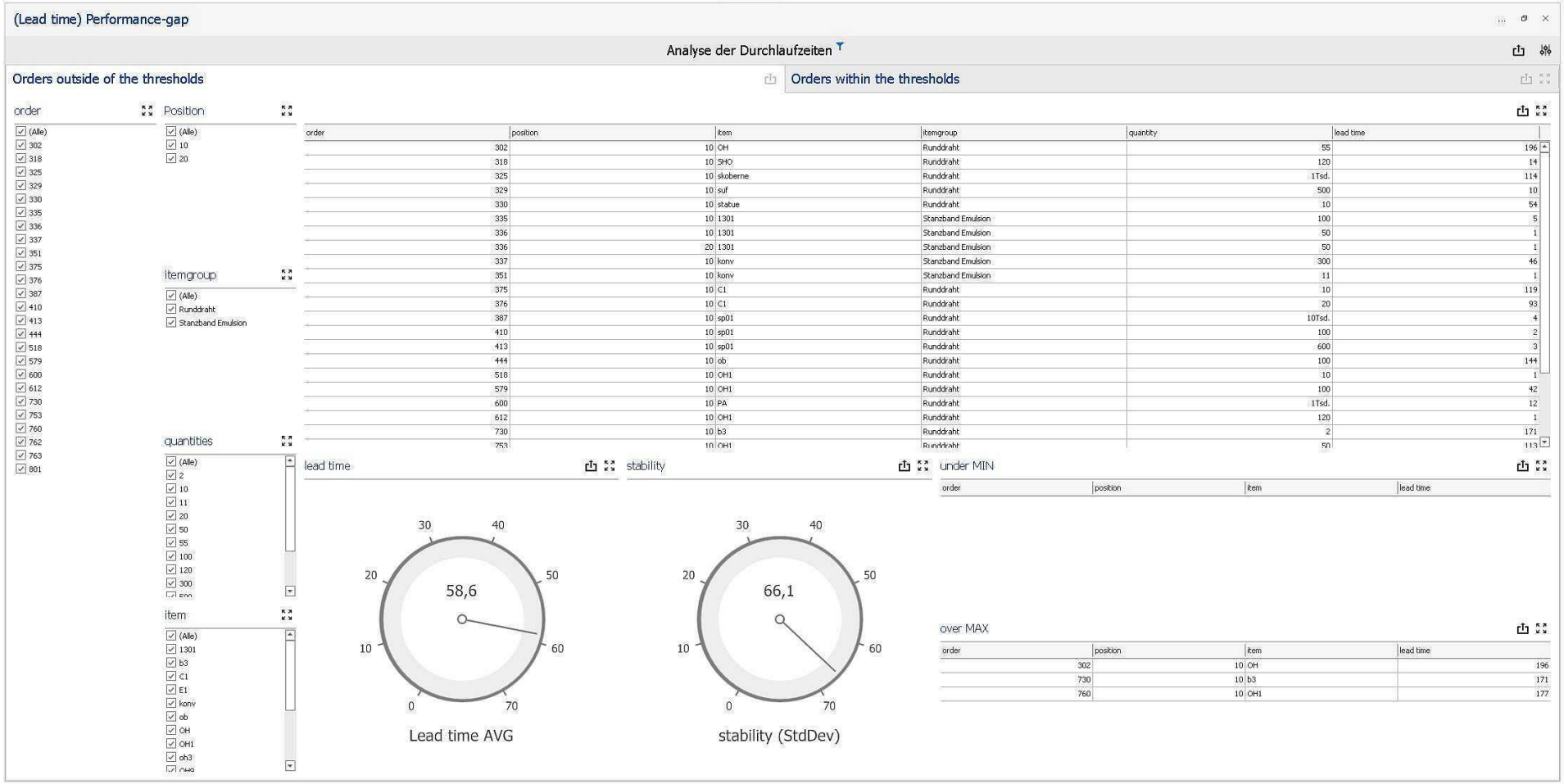
etc

Products

Contribution margin, efficiency and scrap are relevant performance keys for products.


Products Overall
Dashboard
Produkt
Items
Contribution margin
Sales
manufactoring costs
CM
per month
Efficiency
Order
Position
Date
Item
Description
Resorce
Pos
Quantity
Act. Time
Planned Time
Efficiency
764 10 2020 OH9 Abzug PA 10 200,00 120000,00 100000,00 83,33
765 10 2020 OH9 Abzug PA 10 150,00 75000,00 75000,00 100,00
766 10 2020 OH9 Abzug PA 10 50,00 27700,00 25000,00 90,25
767 10 2020 OH9 Abzug PA 10 150,00 88200,00 75000,00 85,03
768 10 2020 OH9 Abzug PA 10 200,00 100000,00 100000,00 100,00
769 10 2020 OH9 Abzug PA 10 200,00 80000,00 100000,00 125,00
813 10 OH9 C700-1 30 20,00 1000,00 2000,00 200,00
813 10 OH9 HLF 20 20,00 1000,00 2000,00 200,00
829 10 OH9 Abzug CAF 10 10,00 2500,00 5000,00 200,00
830 10 OH9 Abzug CAF 10 2,00 17,00 20,00 117,65
833 10 OH9 Abzug PA 10 2,00 900,00 1000,00 111,11
QC
Amount
Sales (Summe)
Quantities
Period
Wastage production
Wastage assembly
Wastage
Wastage (Summe)

Lead time


(Lead time) Performance-gap
Analyse der Durchlaufzeiten
Orders outside of the thresholds
Orders within the thresholds
order
Position
itemgroup
quantities
item
lead time
stability
under MIN
over MAX
58,6
66,1
Lead time AVG
stability (StdDev)

Lead time stands for

Costs per item

- Material
- Production
- Overhead

Stock

Stock turnover

Scrap

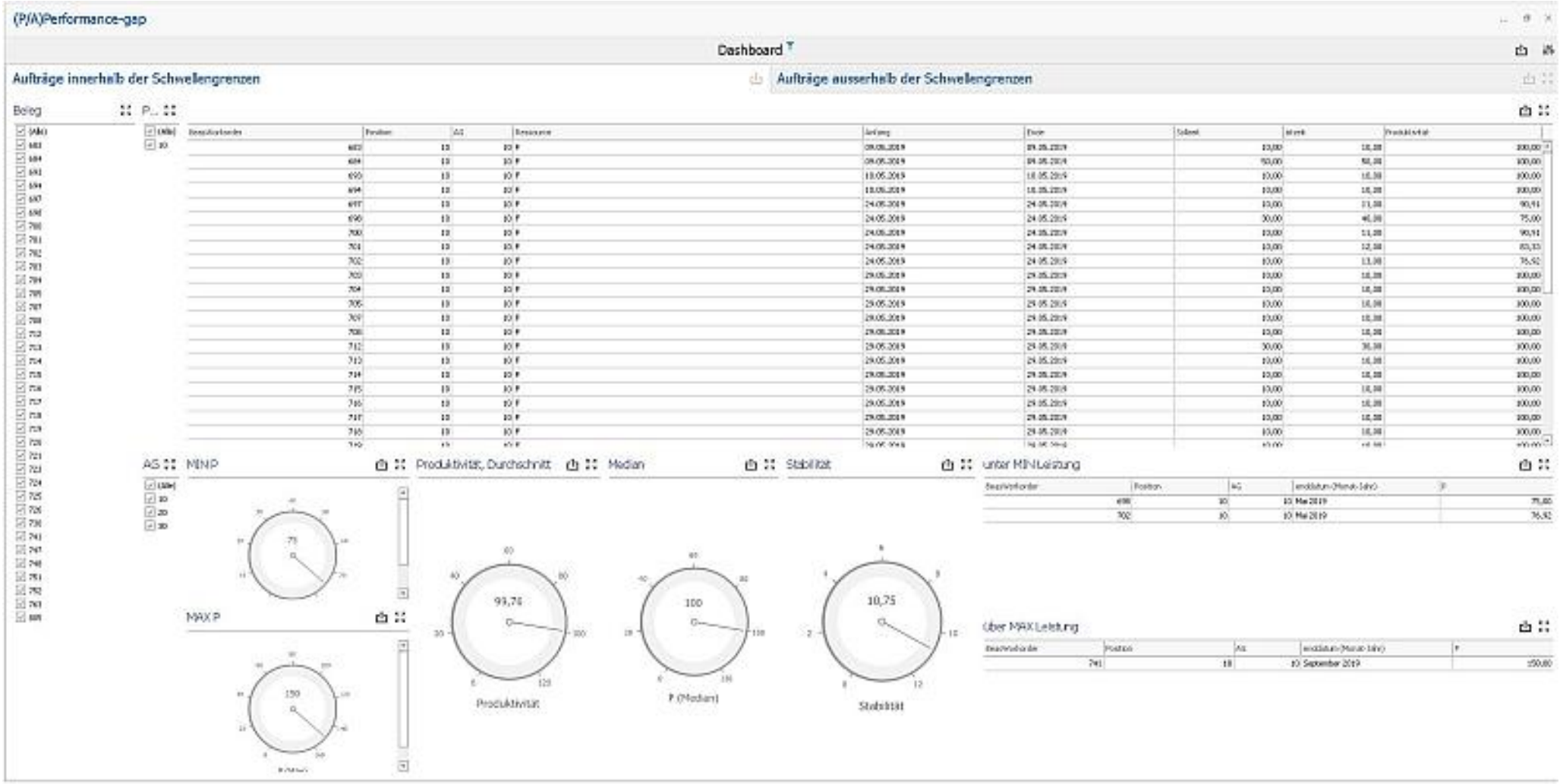
Eg

About resources one should know the productivity and the utilization. In addition, it is important which costs arise.


RESOURCE
Year, M...
(Alle)
2019
2020
2021
Efficiency
E Avg
200
150
100
50
0
2019
2020
2021
Utilization
Restzeit (Summe)
Restzeit (Summe)
160Tsd.
140Tsd.
120Tsd.
100Tsd.
80Tsd.
60Tsd.
40Tsd.
20Tsd.
0Tsd.
2019
2020
2021
Orders to be delivered to...
Nr
Customer
item
Descr.
open qua...
Deliv.Da...
Workorders
Num
Pos
Operation
Act.Time
Plan.Time
641 10 20 70,00 90,00
642 10 10 50,00 50,00
643 10 10 15,00 15,00
644 10 20 20,00 50,00
645 10 10 500,00 500,00
646 10 10 15,00 15,00
647 10 10 15,00 15,00
648 10 10 30,00 20,00
649 10 10 900,00 996,80
Resource
(Alle)
1
1212
2
4000
4100
4200
4400
Abfüllen
Benzinge
biegen
C120-1
C600-4
C700-1
CEB
Cebit
CED
CEF
CNC
CTX400
demo
Endbearbeitur
Euler
F
F1
F2
Processing Time
Cap
Actual
Planned
Werte
8Tsd.
6Tsd.
4Tsd.
2Tsd.
0Tsd.
Gesamt
Itemgroups
menge_verbrauch (Summe)
PC: 0,19%
MVS: 4,18%
Halbfabrikate: 0,27%
Artikel: 95,26%
Fertigung: 0,10%
Workorders
Res... workorder Pos Item Descr. Prio Actual Planned Remaining
CNC... 755 10 1123 Behälte... Std 0,00 1000,00
F ... 754 10 1126 Siebgru... Std 300,00 2000,00
F ... 802 10 E1 Enderz... Std 62,00 40,00
G ... 680 10 G G Std 5,00 10,00
gek... 817 10 xx1 Beispiel ... Std 420,00 0,00
HLF ... 820 10 OH9 Abzug ... Std 91,00 200,00
HLF ... 822 10 OH9 Abzug ... Std 60,00 1000,00
lack ... 709 10 DBF Baugru... Std 0,00 0,00
MA1... 421 20 FT001 Leiter A... Std 12,00 400,00
MA1... 746 10 OH2 Sägebla... Std 110,00 36000,00
MA1... 756 10 OH1 Sägebla... Std 22,00 100,00
MA1... 758 10 OH2 Sägebla... Std 100,00 10000,00
MA1... 761 10 OH2 Sägebla... Std 1380,00 40000,00
MA1... 795 10 9001 Projekt... Std 480,00 0,00
MA1... 809 10 gekox1 Produkt... Std 72,00 0,00
MA1... 810 10 gekox1 Produkt... Std 11,00 0,00
MA2... 421 20 FT001 Leiter A... Std 12,00 60,00
MA2... 756 10 OH1 Sägebla... Std 22,00 280,00
MA2... 757 10 OH1 Sägebla... Std 163,00 5200,00
MA2... 759 10 oh3 Gehäus... Std 240,00 24000,00
MA2... 795 10 9001 Projekt... Std 480,00 0,00
MA2... 809 10 gekox1 Produkt... Std 72,00 0,00
MA2... 810 10 gekox1 Produkt... Std 11,00 0,00
MA3... 756 10 OH1 Sägebla... Std 22,00 100,00
Currently beeing worked...
Resource Empl Name Order Pos Op
KS ... Cleme... CECL ... 508 30 10
MA2 ... Wehrl... 4 ... 295 10 10
MVSR2 ... Becker... 10 ... 298 10 20
of ... Becker... 10 ... 771 10 10
presse ... Becker... 10 ... 506 10 10
presse ... Becker... 10 ... 506 20 10
presse ... Becker... 10 ... 506 40 10
Promised deliveries
Efficiency
35
Eff.Scatter
Werte
400
300
200
100
0
Cost Rates
2,96

For critical processes, we show the standard deviation for the key figures, e.g. for productivity. The standard deviation indicates how the values fluctuate around the mean value. Strong fluctuation indicate unstable processes for which there are many causes. But you can find out this when you look at the orders. Therefore you can call up the production orders from the dashboard.

If you find causes again and again you can improve the organization. Step by step. And the fluctuations become smaller and smaller, the organization of the production will be developed to a new level.


(P/A)Performance-gap
Dashboard
Aufträge innerhalb der Schwellengrenzen
Aufträge ausserhalb der Schwellengrenzen
Beleg
P...
AS
MINP
MAX P
Produktivität, Durchschnitt
93,75
Produktivität
Median
100
P (Median)
Stabilität
10,75
Stabilität
unter MIN Leistung
Über MAX Leistung

The dashboard performance-gaps stands for

Utilization

Efficiency

Costs

Monitoring production orders

Lead time

Unfilled orders

Maintanance costs

etc

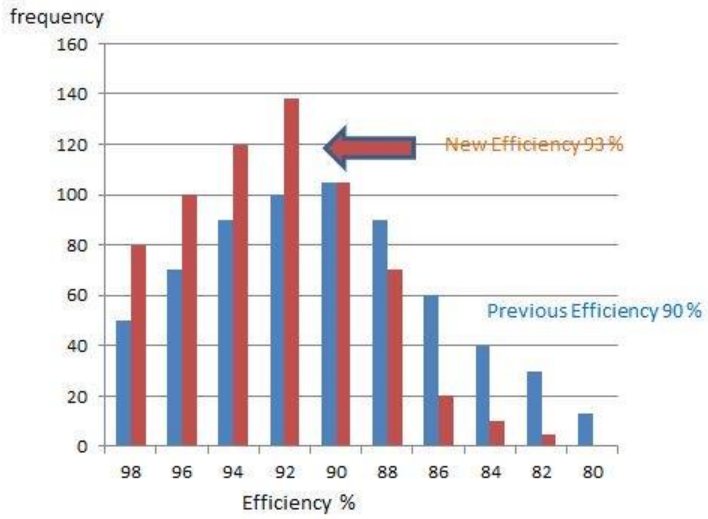
Reduce spread width – reliable processes

The Performance Gap dashboards calculate the standard deviation. This calculates the threshold average +- standard deviation. In the dashboard, you can see the orders below the threshold in one window and the orders above the threshold in another. Click on the row and see the order.

This applies to all processes, lead times, hourly rates, and costs.

And it is the best method to find out where the gaps are. If you have a wide width it may be that you have too much influences. It may be that you have different processes and it is better to separate the processes. Or there are disruptions in the process. It’s probably easy to minimize them. This method will bring you to a better process organization and therefore to better results.

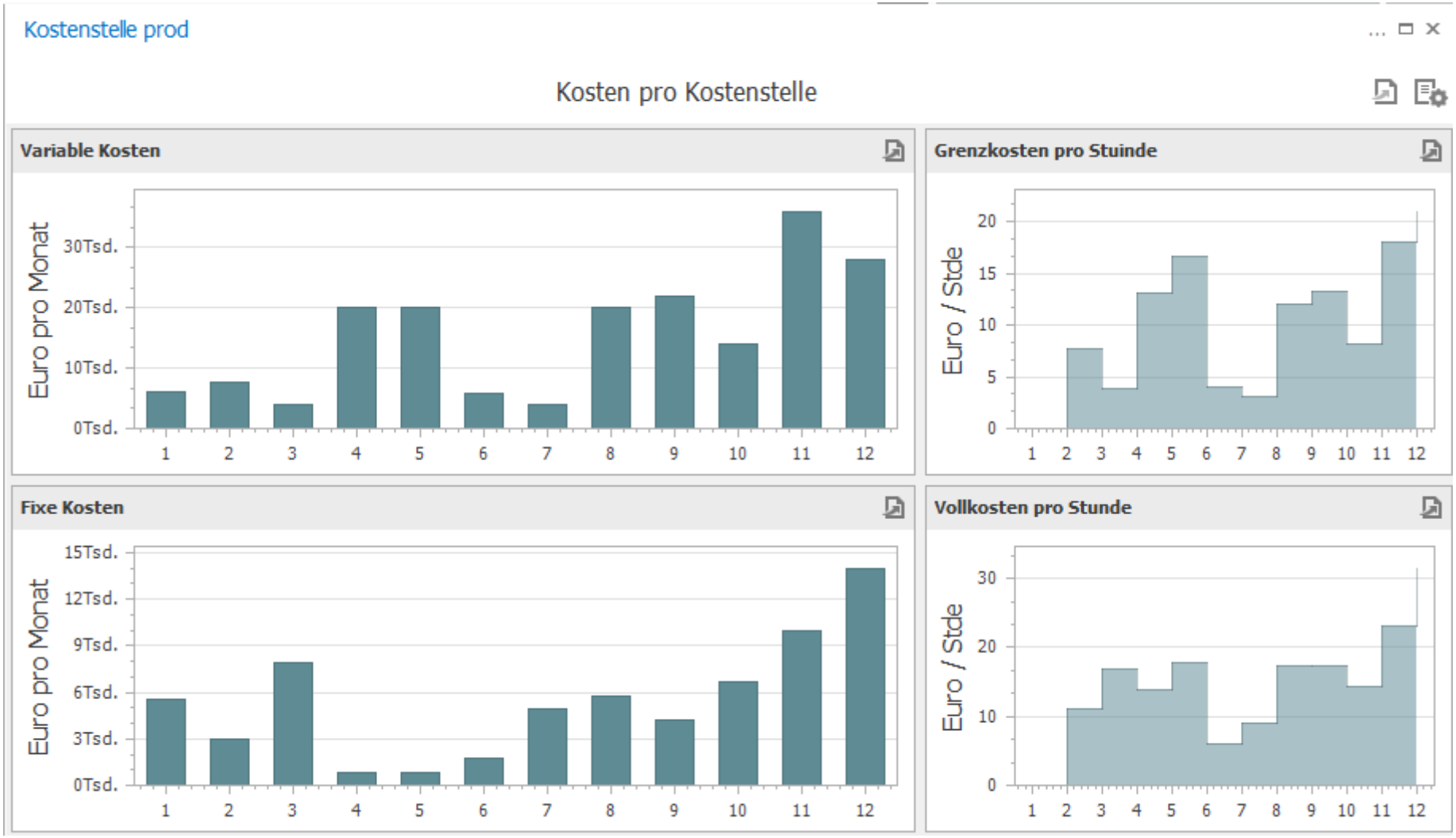
This methodical approach helps to define targets. Define targets according to the standard deviation. E.g. set the target for productivity to the average + X standard deviation. The advantage is that you can measure it.



Changes in the basic key figures have impact on other key figures

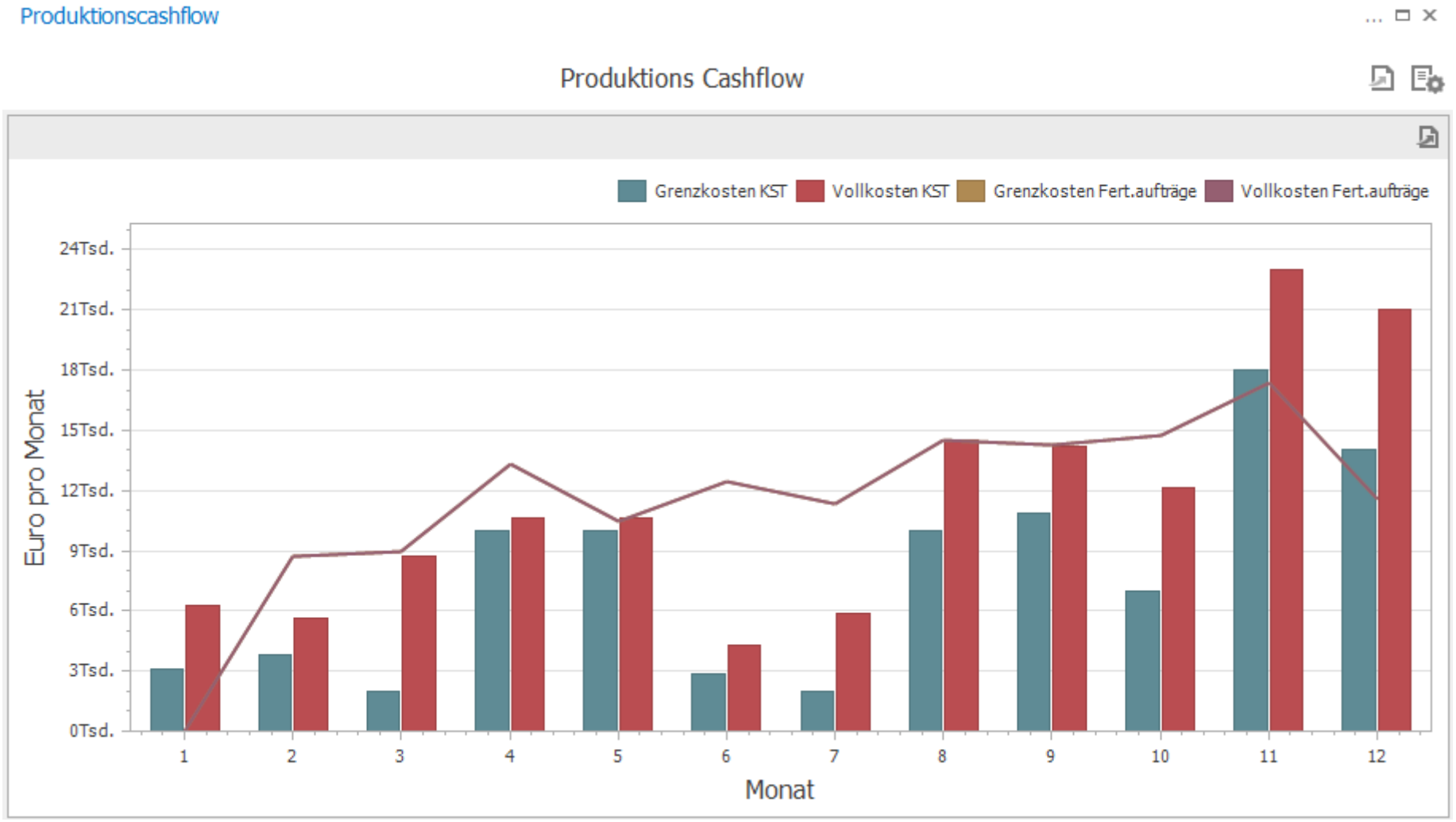
If we pay attention on productivity, we have an effect on cost rates. If we influence productivity we also influence cost rates.

But there is the same problem. When there are a lot of ups and downs, the rates fluctuate a lot, and you have to figure out the reason.

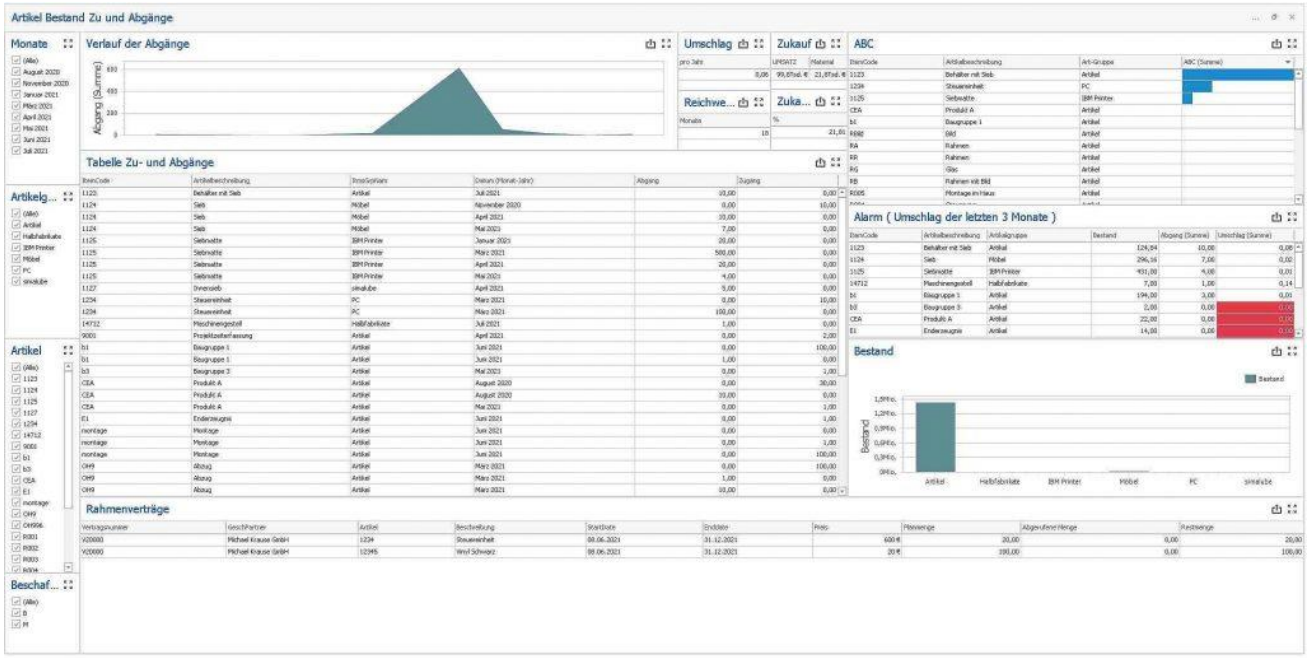

Kostenstelle prod
Kosten pro Kostenstelle
Variable Kosten
Euro pro Monat
30Tsd.
20Tsd.
10Tsd.
0Tsd.
1 2 3 4 5 6 7 8 9 10 11 12
Grenzkosten pro Stuinde
Euro / Stde
20
15
10
5
0
1 2 3 4 5 6 7 8 9 10 11 12
Fixe Kosten
Euro pro Monat
15Tsd.
12Tsd.
9Tsd.
6Tsd.
3Tsd.
0Tsd.
1 2 3 4 5 6 7 8 9 10 11 12
Vollkosten pro Stunde
Euro / Stde
30
20
10
0
1 2 3 4 5 6 7 8 9 10 11 12

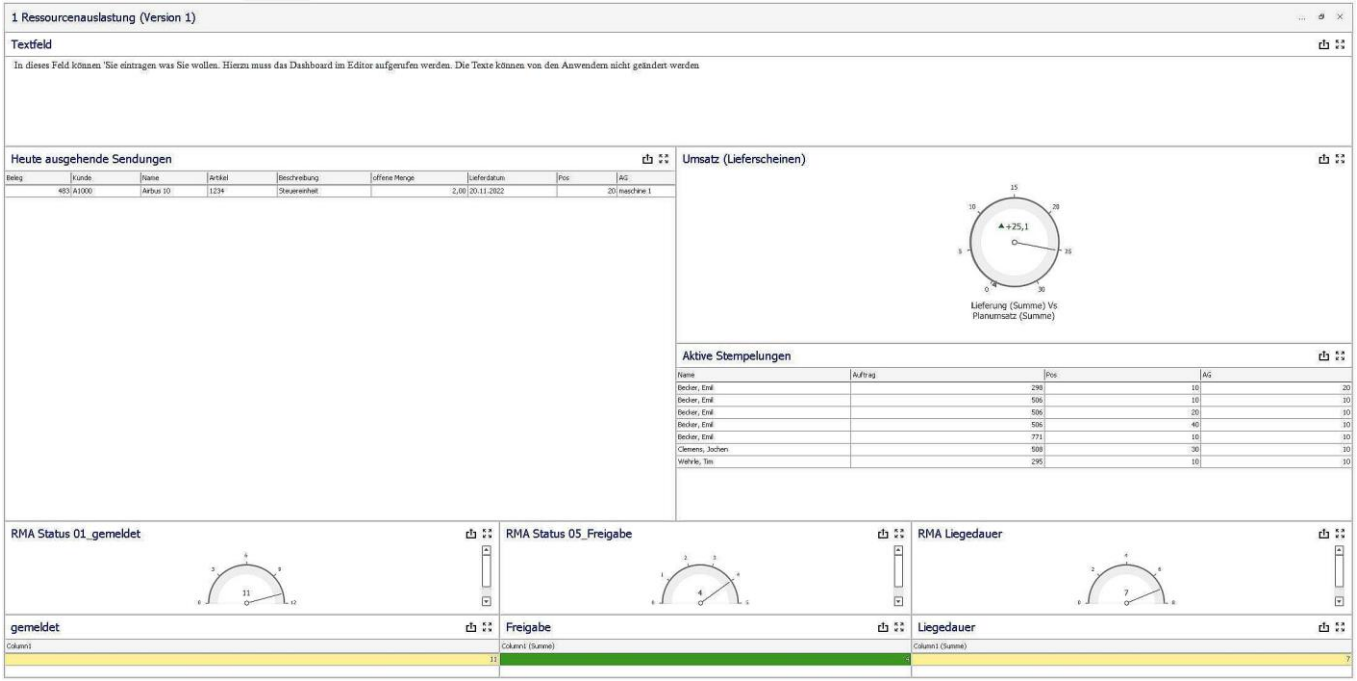
If you compare the actual costs of a cost center in the production department with the planned costs based on actual hours you see the result.

Produktionscashflow



Dashboards are mostly used to support transformation processes. Sometimes you need more information to impact KPI’s. With dashboards you can show what you need, in a very packed view. Your Employees will be motivated because dashboards will indicate the goals and when better information is needed, it will be provided.


Artikel Bestand Zu und Abgänge
Monate
Verlauf der Abgänge
Umschlag
Zukauf
ABC
Reichwe...
Zuka...
Tabelle Zu- und Abgänge
Artikelg...
Alarm (Umschlag der letzten 3 Monate)
Artikel
Bestand
Rahmenverträge
Beschaf...


1 Ressourcenauslastung (Version 1)
Textfeld
In dieses Feld können 'Sie eintragen was Sie wollen. Hierzu muss das Dashboard im Editor aufgerufen werden. Die Texte können von den Anwendern nicht geändert werden
Heute ausgehende Sendungen
Umsatz (Lieferscheinen)
Lieferung (Summe) Vs Planumsatz (Summe)
Aktive Stempelungen
RMA Status 01_gemeldet
RMA Status 05_Freigabe
RMA Liegedauer
gemeldet
Freigabe
Liegedauer