Innovation Story Workforce Management

The all-in-one vehicle for service technician

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T · · Systems ·

REFERENT

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Robbi, Tobbi
und das Fliewatüüt
Special Edition

AT

THE DAILY ROUTINE OF A SERVICE TECHNICIAN
THE INTRODUCTION

processing of more than 100,000 orders per day

up to date

multiplatform

allways connected,
offline capability

electronic logbook

high secure

optimized work processes

time tracking

innovative

automatic work report

warehouse managemet

robust

end2end responsibility

standard

dirty & bright enviroment

THE DAILY ROUTINE OF A SERVICE TECHNICIAN

YESTERDAY: WORK ORDER

Start at company side

get the work order

print the work order
and start the journey

THE DAILY ROUTINE OF A SERVICE TECHNICIAN

TODAY: WORK ORDER

Start at home

get the work order
and start the journey

THE DAILY ROUTINE OF A SERVICE TECHNICIAN

YESTERDAY: ROUTE PLANNING

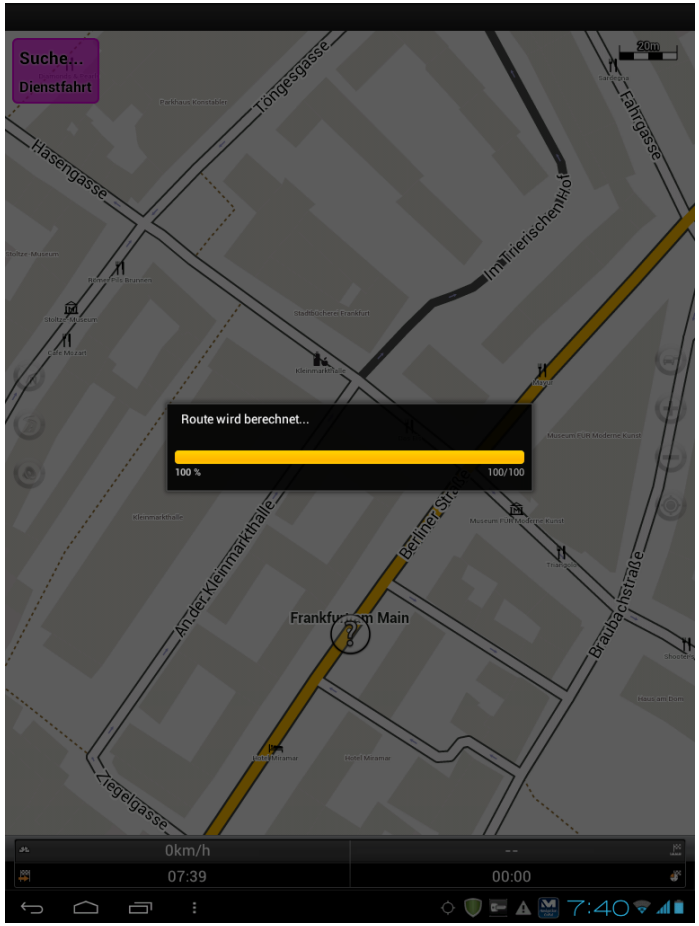
seperate route planning

no flexible adaption caused by urgent issues possible

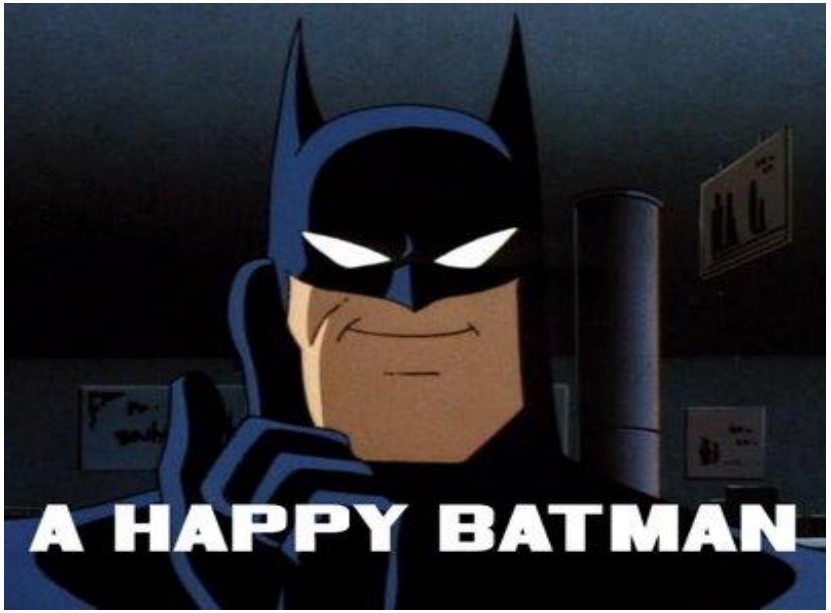
Attention, Deutsche Telekom
Batman speaking
Caused by a storm, I urgently need a replacment of my damaged LTE submitter to protect Gotham City!

THE DAILY ROUTINE OF A SERVICE TECHNICIAN

TODAY: ROUTE PLANNING



- Flexible route planning
- direct out of the work order
- including urgent issue integration



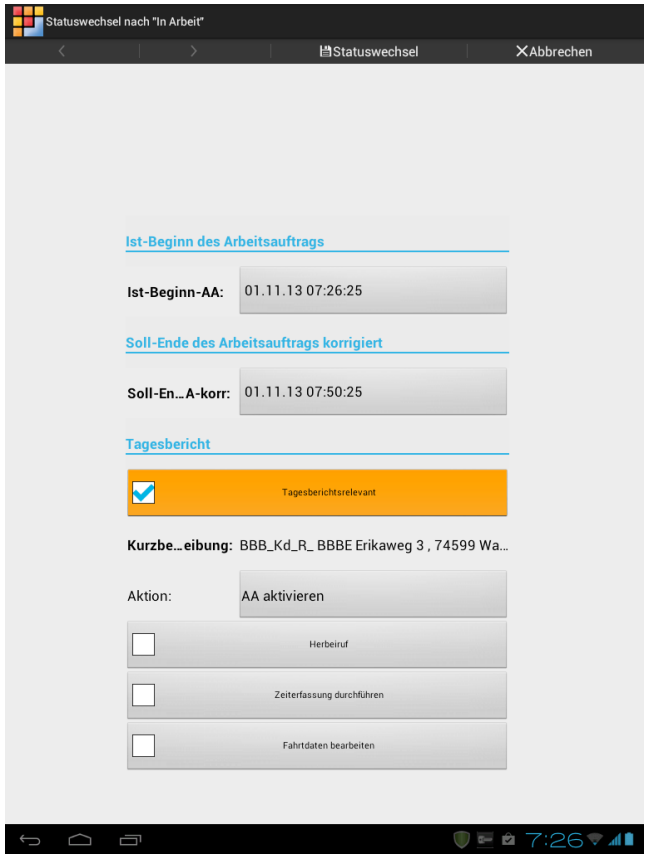
THE DAILY ROUTINE OF A SERVICE TECHNICIAN

YESTERDAY: DRIVERS LOGBOOK

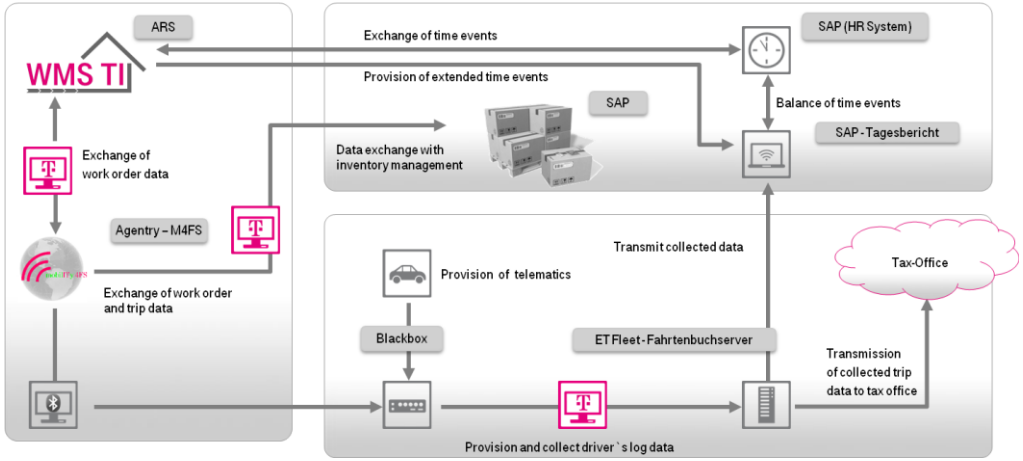
written and
evaluated manually

THE DAILY ROUTINE OF A SERVICE TECHNICIAN

TODAY: DRIVERS LOGBOOK



filled automatically by integration
into the backend systems



THE DAILY ROUTINE OF A SERVICE TECHNICIAN
YESTERDAY: DAILY REPORT

Name: Week Beginning (Date):

Day	Record of Activity	Initial Approaches	Presentations (10-15 per day)	Sales	Service Visits	Sales Manager To Do: Initial Approaches turning into Presentations	Sales Manager To Do: Presentations turning into Sales
Mon	/ / X / / X / X / S / / / X / / X X X X X X / X / X /	30	12	4	1	40%	33%
Tue							
Wed							
Thu							
Fri							
	WEEK TOTAL	30	12	4	1	40%	33%
	DAILY AVERAGE (divide total by number of days worked)	30.0	12.0	4.0	1.0		

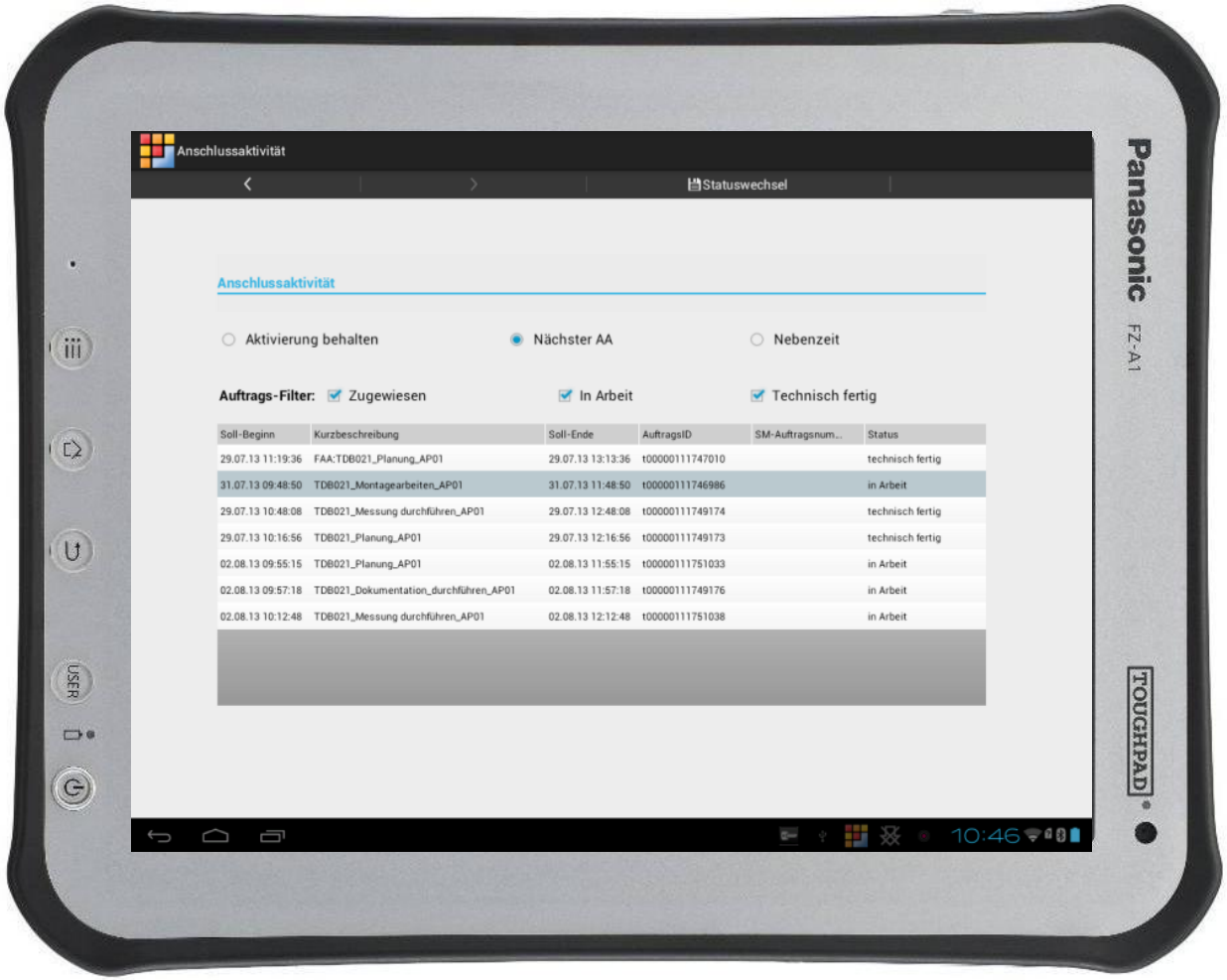
/ = Initial Approach X = Presentation X = Sale S = Service Visit

manually written

and manually typed into the system

THE DAILY ROUTINE OF A SERVICE TECHNICIAN

TODAY: DAILY REPORT



direct integrated into the system

THE DAILY ROUTINE OF A SERVICE TECHNICIAN

PAPER: THE DINOSAUR THAT WON'T GO EXTINCT

- 4 from 5 IT and buisness professionals anticipate a need for paper-driven workflows for another decade (Harris Poll online survey, May 2014)
- paperless processes can reduce the time to respond to customers by 75%

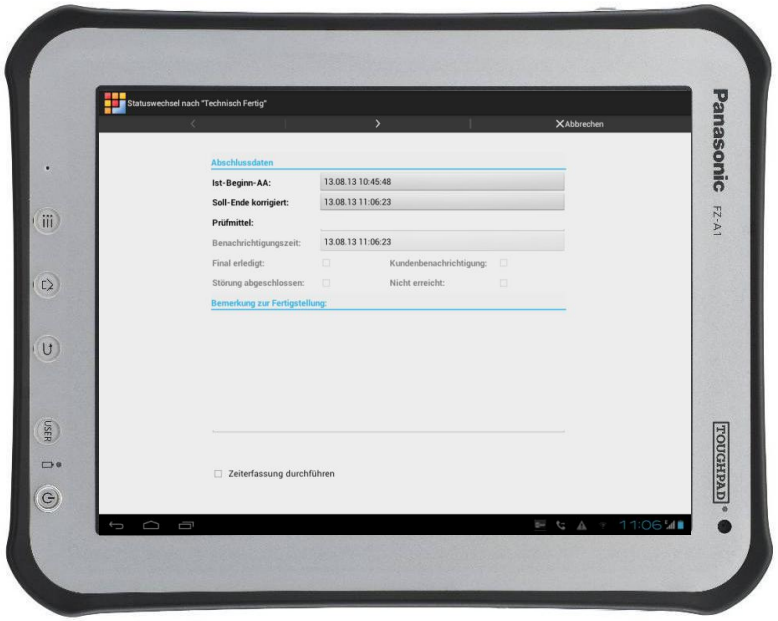
THE DAILY ROUTINE OF A SERVICE TECHNICIAN

YESTERDAY: INVENTORY MANAGEMENT

go back to the office and get the used material

THE DAILY ROUTINE OF A SERVICE TECHNICIAN

TODAY: INVENTORY MANAGEMENT



used material will automatically be ordered

Relax
YOUR WORK IS DONE
?

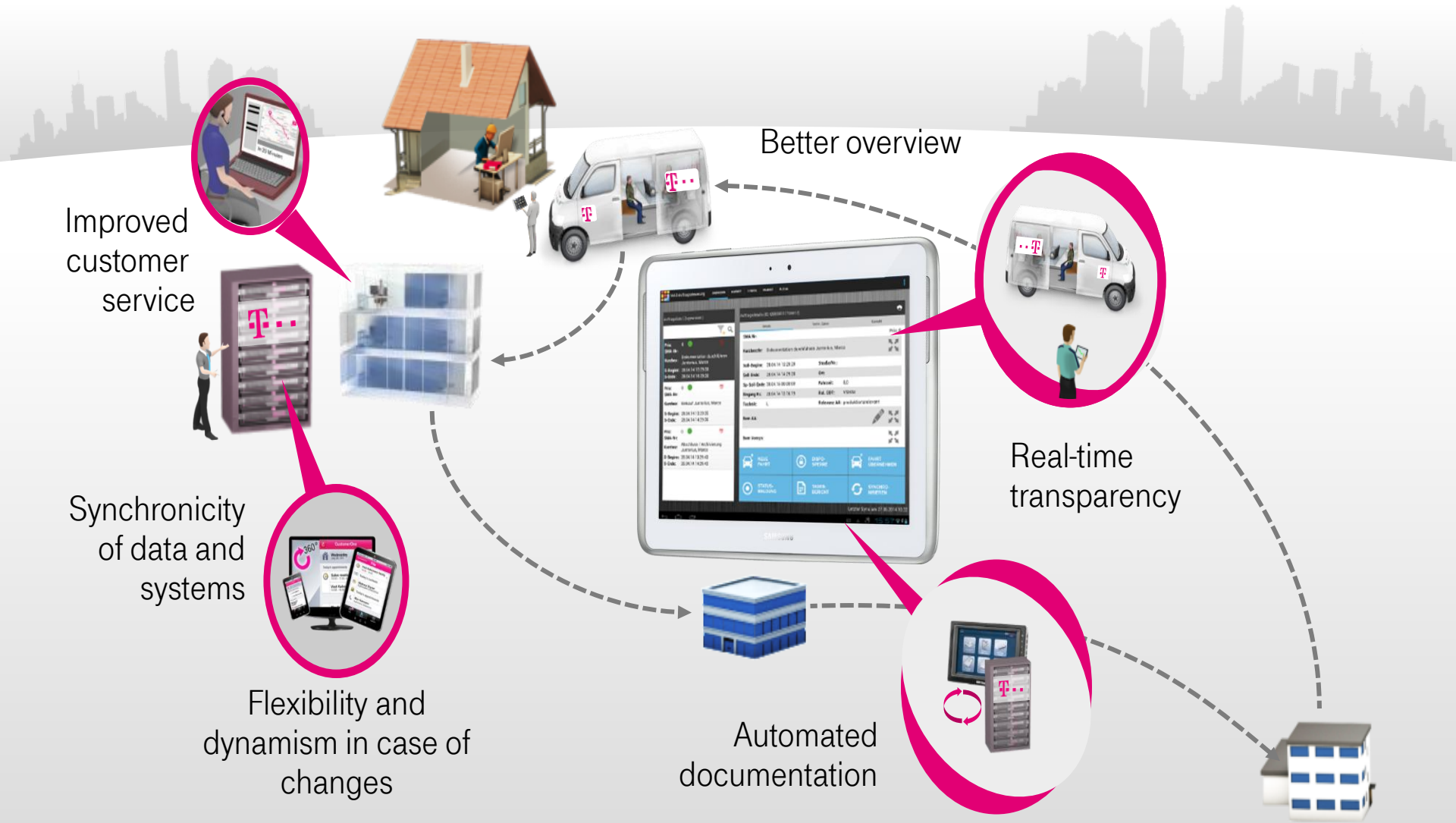
THE DAILY ROUTINE OF A SERVICE TECHNICIAN

THE DELIVERY OF THE USED MATERIAL

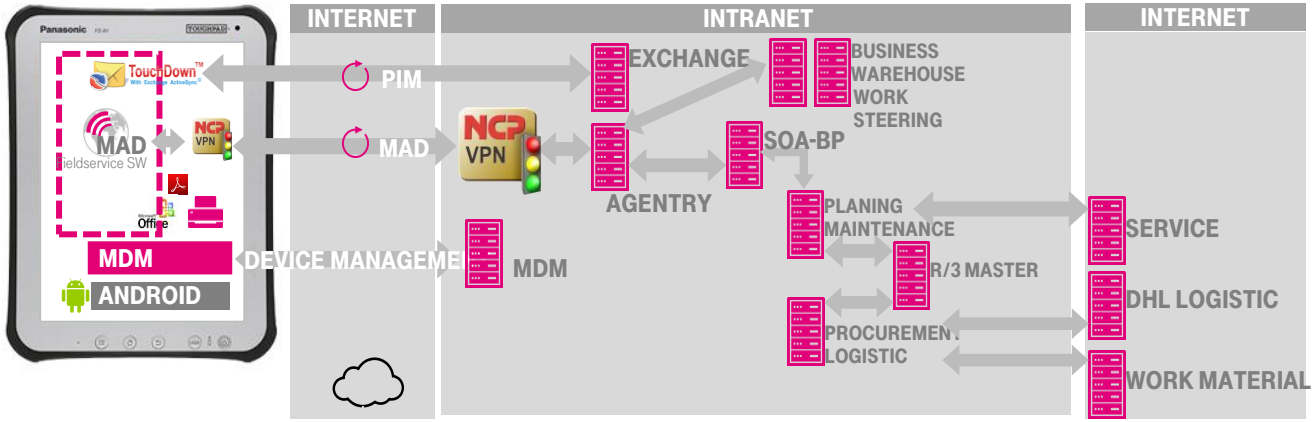
Relax
YOUR WORK IS DONE

TODAY: PERFECT MOBILE INTEGRATION

DISPATCHER AND FIELD SERVICE ALWAYS SYNCHRONIZED



THE DAILY ROUTINE OF A SERVICE TECHNICIAN
THE SOLUTION AT A GLANCE



BUSINESS APPLICATION

- Mobile order processing
- Central warehouse management
- Integrated driver's logbook and navigation system
- Automated daily report
- Time posting

GENERAL INFORMATION

- Rugged hardware (IP65, MIL 810, etc.) for 2,000 users
- Certified VPN security solution for company access
- Enterprise Mobility Management Service from T-Systems
- Complete lifecycle management from a single source
- Use of SAP Syclo Agentry technology
- Paperless work process
- Integration of the entire workstation

WHAT ARE THE BENEFITS FOR THE CUSTOMER?

- Modern, innovative solutions for field service staff
- Optimization of maintenance process
- End-2-end solution from a single source
- Use of modern hardware and software, such as
  - LTE
  - Robust, modern tablets
  - SAP mobile middleware
- Improved field service effectiveness

THE DAILY ROUTINE OF A SERVICE TECHNICIAN
PRODUCTIVITY COMPARISON

OLD SOLUTION

- Sensitive hardware
- More complex handling
- Paper-based orders
- Daily report, driver's log not automated
- Separate inventory management

PRODUCTIVITY GAIN

NEW SOLUTION

- Rugged hardware
- Integrated inventory management
- Automated daily report
- Electronic log book
- Order management
- Dynamic route optimization
- Mobile printing

ENABLES

OBJECTIVE

- Focus on the user
- Map the entire daily routine
- Avoid media discontinuity
- Generate additional benefits

TIME SAVINGS OF DAILY
APPROX. 30 MINUTES PER EMPLOYEE

30

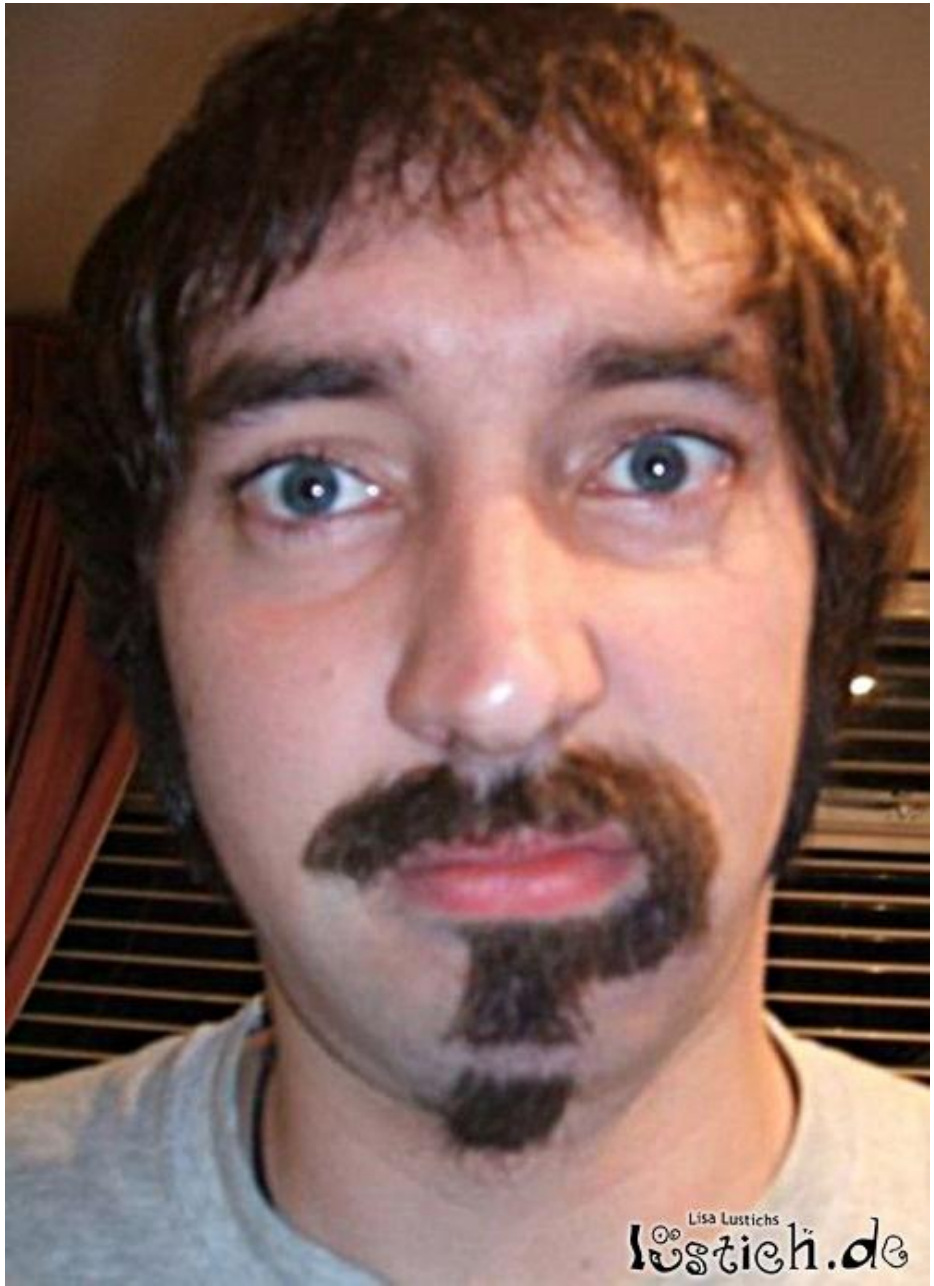
WITH 2,000 EMPLOYEES THIS MAKES
OVER 28.000 DAYS A YEAR

28.000

THIS WOULD BE A SAVING
UPTO € 15 MILLION PER YEAR!!

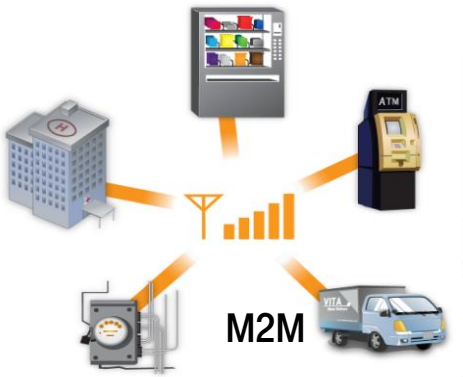
15

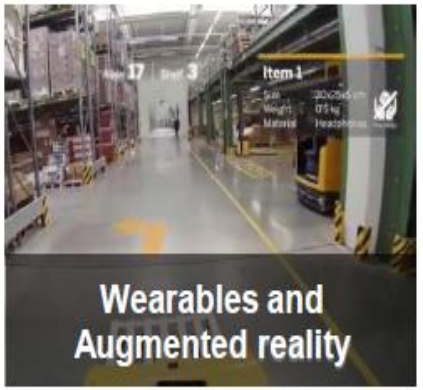
WHAT COMES NEXT?

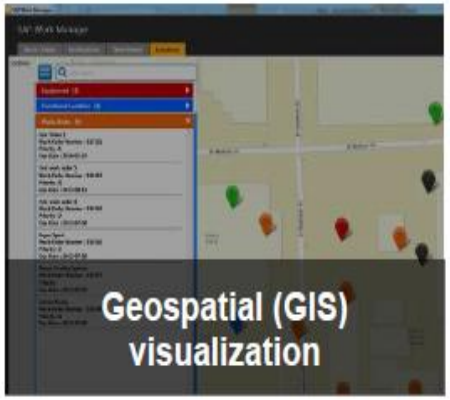


INTEGRATION ON ANOTHER DEVICE

FURTHER EVELUTION

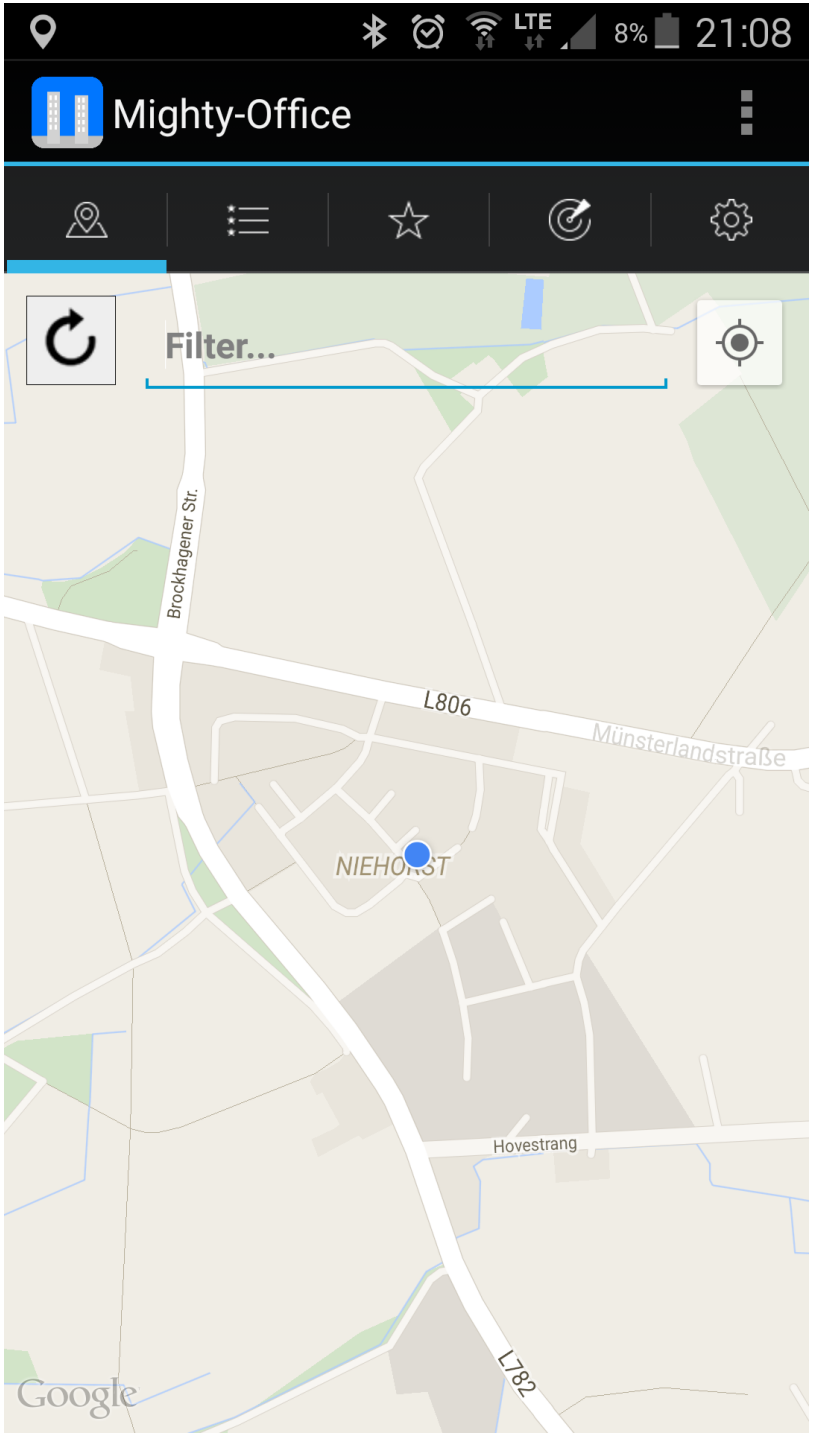




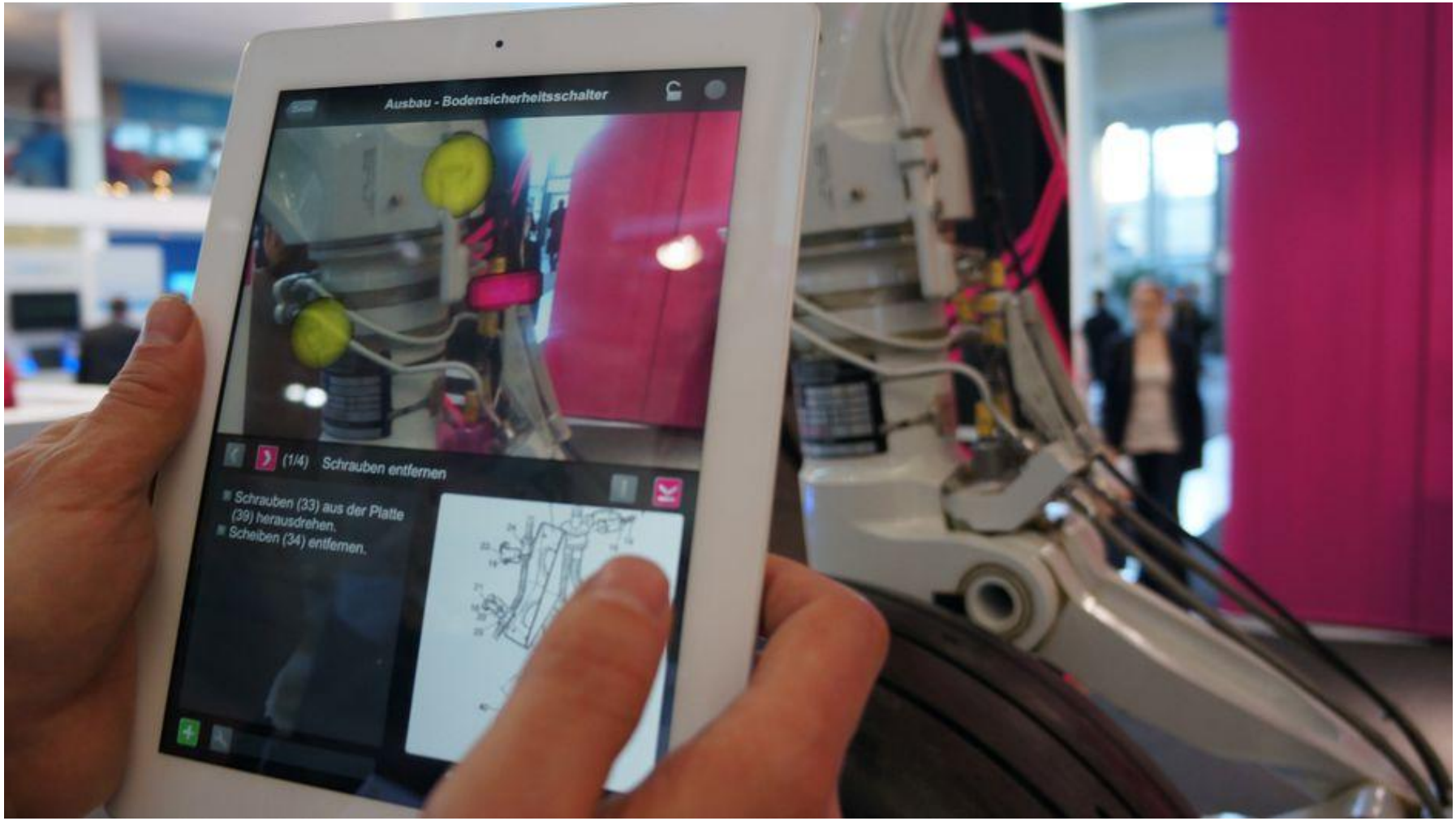


GEOSPATIAL VISULIZATION

Location of different types of cabinets, at the moment done by a 3rd party application, called Mighty-Office


8% 21:08
Mighty-Office
Filter...
Brockhagener Str.
L806
Münsterlandstraße
NIEHORST
Hovestrang
L782
Google

AUGMENTED REALITY



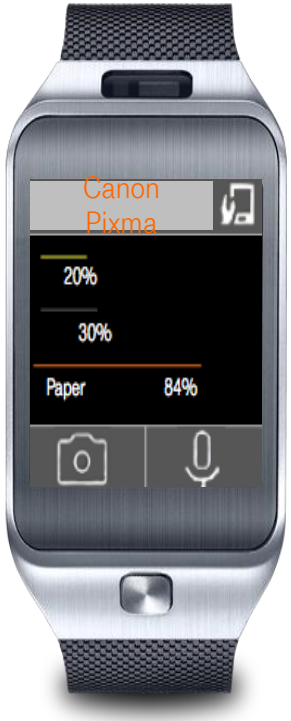
SMARTWATCHES
THE NEXT BIG THING?

SMARTWATCHES
MOBILITY 4.0

SMARTWATCHES
AN INNOVATION STORY

- **Frank Schmidt is 42 years old and a skilled electrician**
- **He works as a maintenance technician for a large manufacturer of printers and is responsible for the Southern Bavarian area**
- **His tasks include**
  - Regular maintenance of printers at customers‘ premises
  - Delivery and refill of consumables
  - Delivery of original spare parts
  - Troubleshooting of urgent technical problems
  - Delivery and setup of printer systems

USE THE SMARTWATCH AS ANOTHER DISPLAY



SMARTWATCHES
SHOWCASE TECHNOLOGY

SAP MOBILE PLATFORM 3.0

HTTP REST
standard protocol that decouples the dependency on SAP released SDKs

+

OData
standard model that decouples backend and frontend developers

Samsung Gear 2

Custom App using
Tizen SDK for Wearable

Samsung S5 / Android 4.4

stick‘n‘find iBeacons

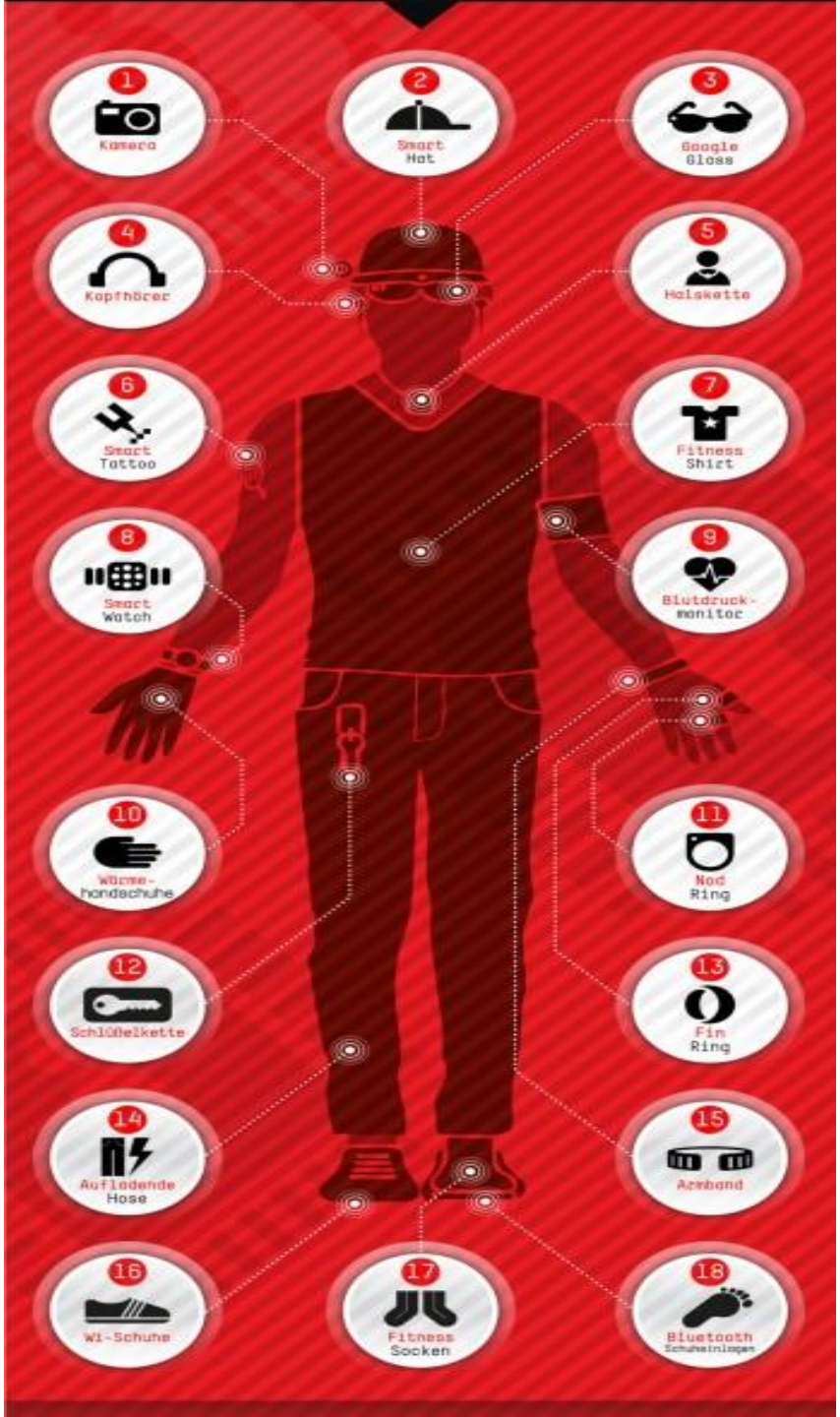
Cordova
combine SAP's enterprise plugins with any other plugins from 3rd party

+

HTML5
use any web tooling you want on SMP3

Hybrid Cordova App with SMP Kapsel & iBeacon plugins

User interface: Open UI5

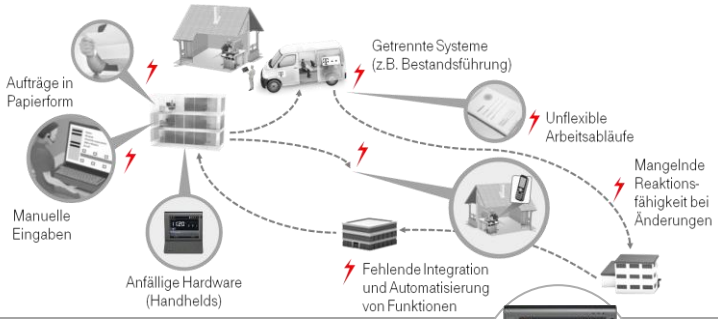

1
Kamera
2
Smart
Hat
3
Google
Glass
4
Kopfhörer
5
Halskette
6
Smart
Tattoo
7
Fitness
Shirt
8
Smart
Watch
9
Blutdruck-
monitor
10
Wärme-
handschuhe
11
Nod
Ring
12
Schlüsselkette
13
Fin
Ring
14
Aufladende
Hose
15
Armband
16
Wi-Schuhe
17
Fitness
Socken
18
Bluetooth
Schuheinlagen

THE TERMINATOR
ILL BE BACK
Troll.me

MOBILE WORKFORCE
FROM YESTERDAY TO THE FUTURE

Before: paperbased processes

Media breaks cost time and flexibility



Old Solution

- Error-prone hardware
- complex service
- Paper-based work orders
- Daily report, logbook not automated
- Separate inventory data management

Produc-tivity increase

Now: Perfect mobile integration

Disposition and staff are always synchronized

New Solution

- Robust hardware
- Integrated inventory management
- Automated daily report
- Electronic driver's logbook
- Workorder handling
- Dyn. route optimization
- Mobile printing

Time savings per day **30 minutes/employee**

With 2,000 employees this makes over 28,000 Days a year

Profitability increase of **15 Mio €** per year

THANK YOU!