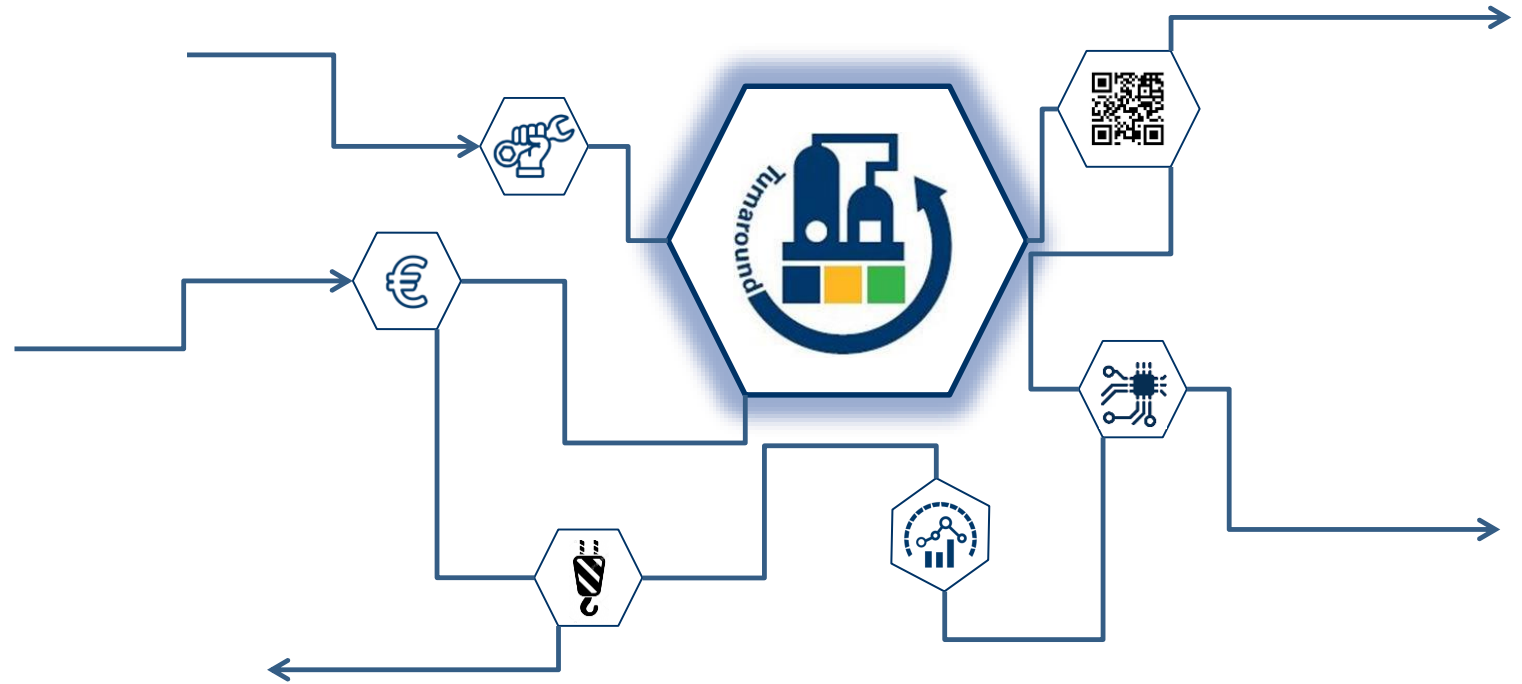


Electronic Turnaround Optimization Platform – eTOP

Valencia, October 2018



OMV Downstream

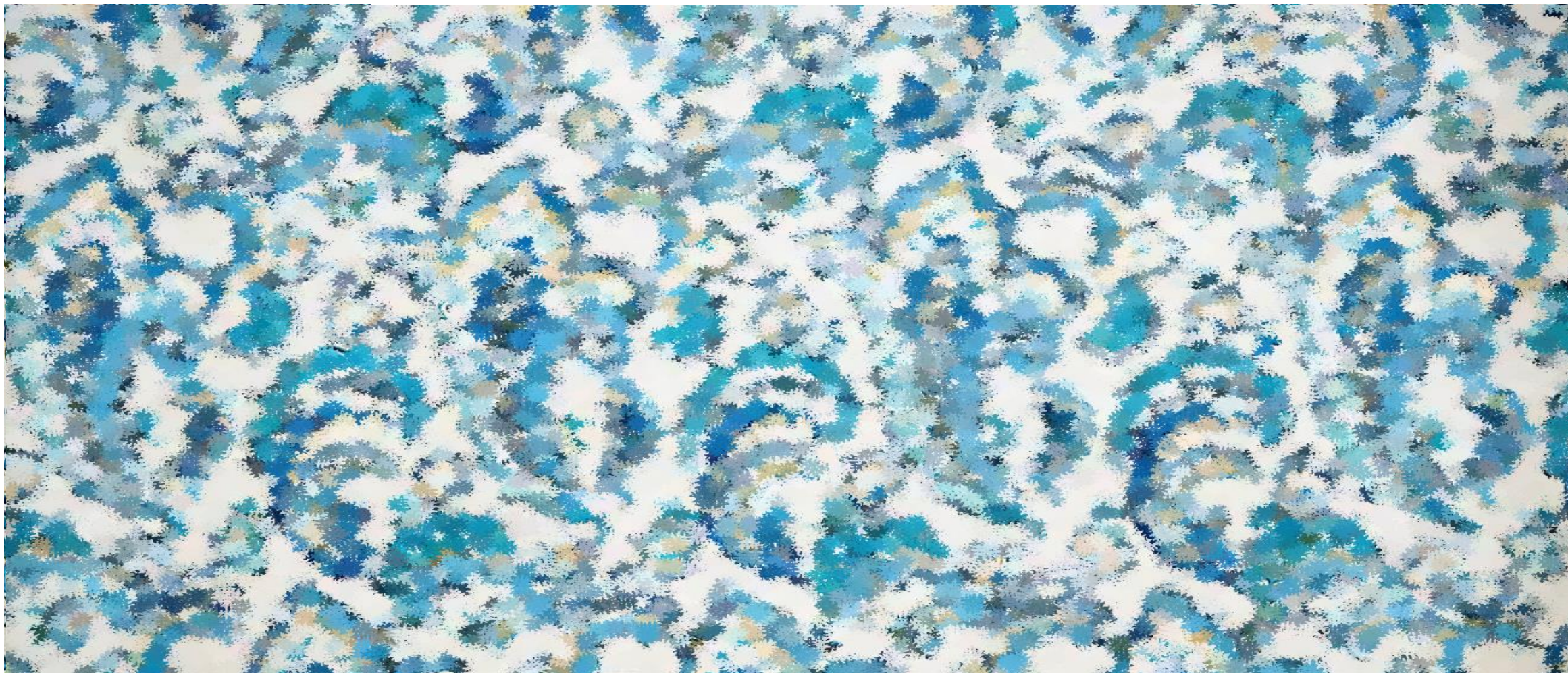
OMV Turnaround Management

Managing Complexity, Managing 3.000 People



Turnaround Execution Phase

Paper Based Wallpaper Coordination



Downsides & Consequences

Scrutinize Paper Based Wallpaper



- ▶ lack reporting quality/mentality
- ▶ complex data screening & reporting
- ▶ redundant progress tracking
- ▶ stationary info location



- ▶ lack of data quality
- ▶ realtime status accuracy
- ▶ resources coordination efficiency
- ▶ TAR goal attainment

Impact of „Gamification“

Change a „No“ to a „Yes“



Equipment	Inspektionsart	Demontage	Druckprobe
E5801A	IU+FP	<div>Fertig</div>	<div>Starten</div>
E5801A	IU+FP	<div>Starten</div>	<div>Starten</div>

Performance & Architecture

Process

Data Source

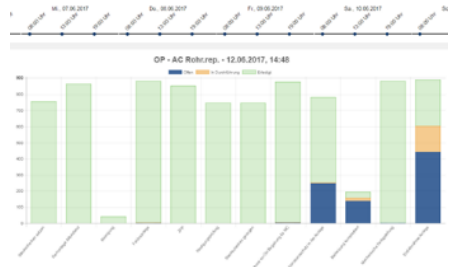
Online Realtime Data
& Front End loading

Ad-hoc Reports,
TAR process optim.

Architecture



Qualified IT Resources
familiar with New
Technologies
(e.g. SAP process
integration, iOS App)

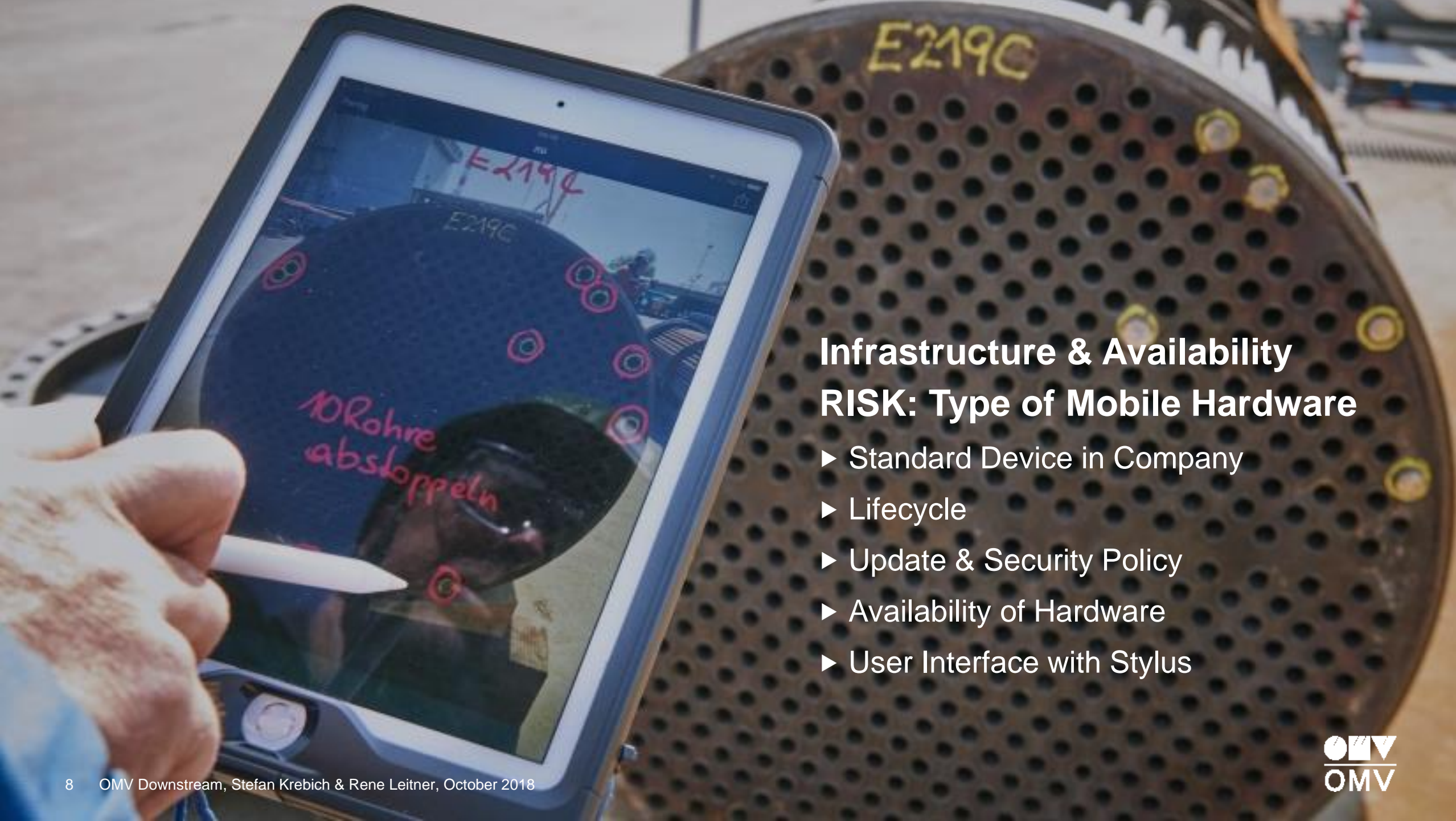


Infrastructure & Availability

RISK: Usage of Devices in Plants

- ▶ Management of Change
- ▶ Just allowed in Turnaround Plants
- ▶ Sub-Equipment for Exp Measurements
- ▶ Training





Infrastructure & Availability RISK: Type of Mobile Hardware

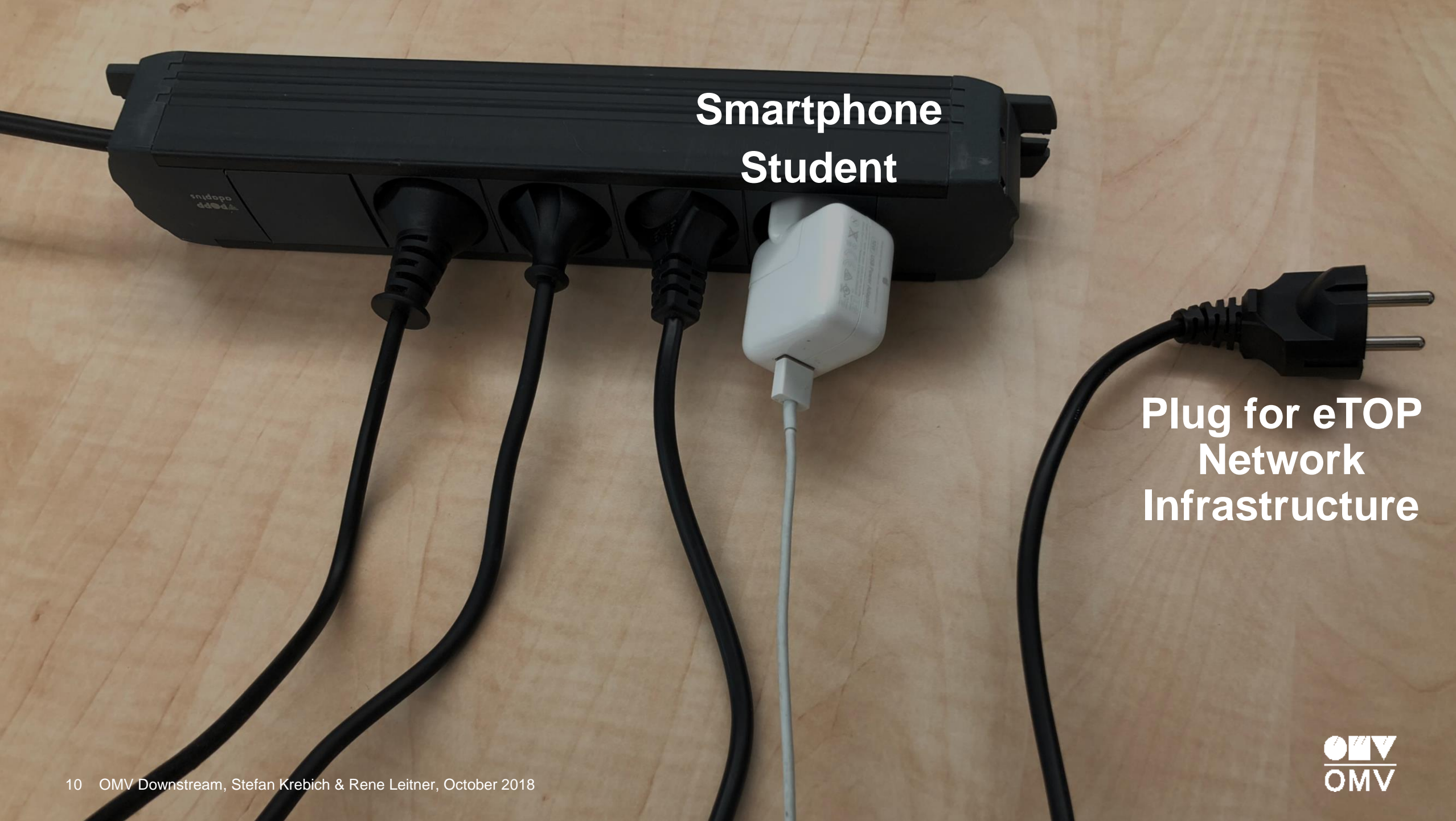
- ▶ Standard Device in Company
- ▶ Lifecycle
- ▶ Update & Security Policy
- ▶ Availability of Hardware
- ▶ User Interface with Stylus



Infrastructure & Availability

RISK: Availability of Network

- ▶ Upgrade Infrastructure (fiber wire)
- ▶ Data Cubes & LTE Antennas
- ▶ Backup Scenarios (Paper, Digital Upload)
- ▶ Spareparts



**Smartphone
Student**

**Plug for eTOP
Network
Infrastructure**

Security

RISK: Theft of Hardware, unauthorized Access

- ▶ Typing a password in field will not work
- ▶ User & Identity Management
- ▶ Smart log on/off at station
- ▶ Electronic Locks on Container
- ▶ Remote Lock/ Maintenance for (mobile) devices



Acceptance RISK - People have no experience

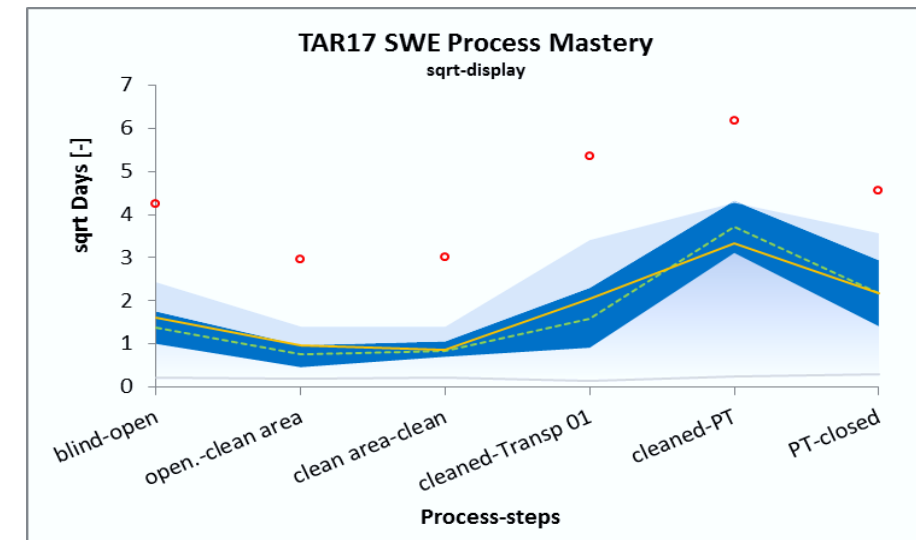
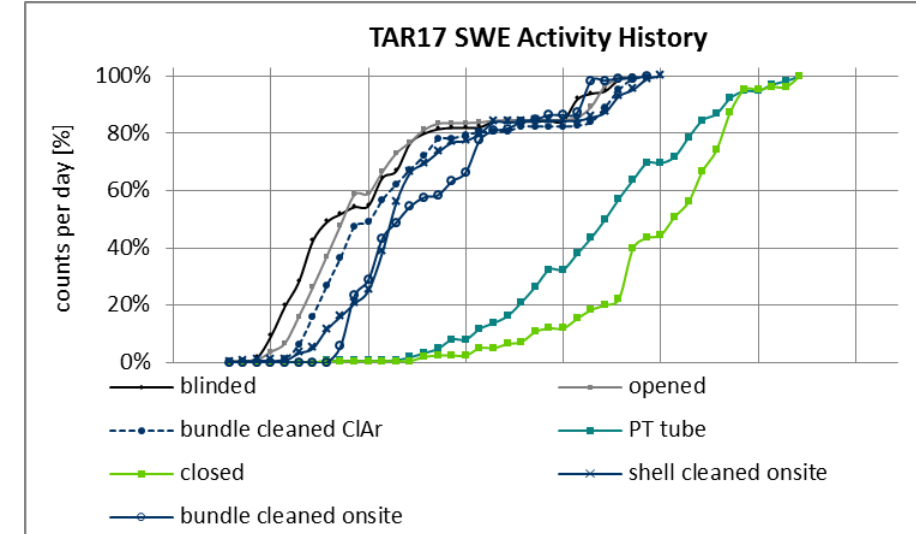
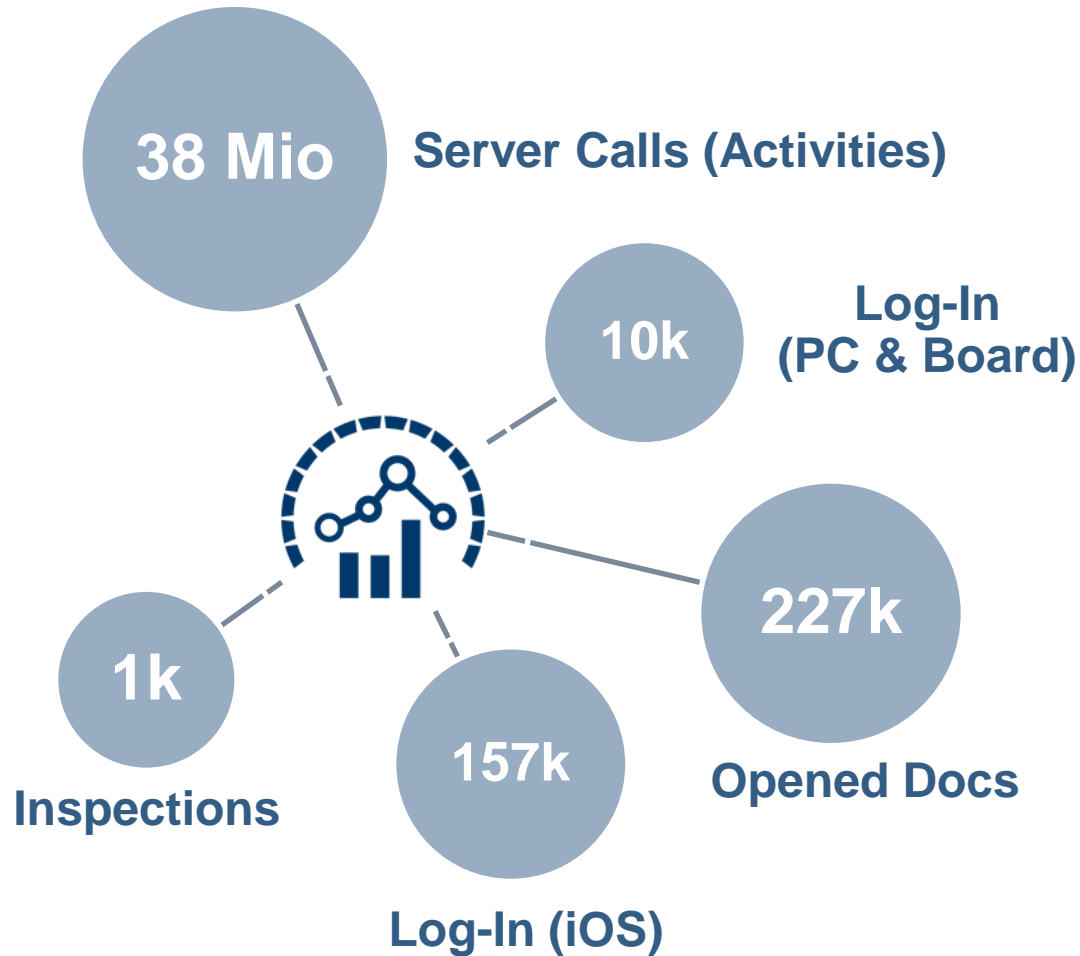
- ▶ Training on device
- ▶ Provide devices well before Turnaround
- ▶ Simplified User Interface
- ▶ Support in the field

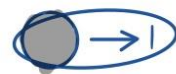
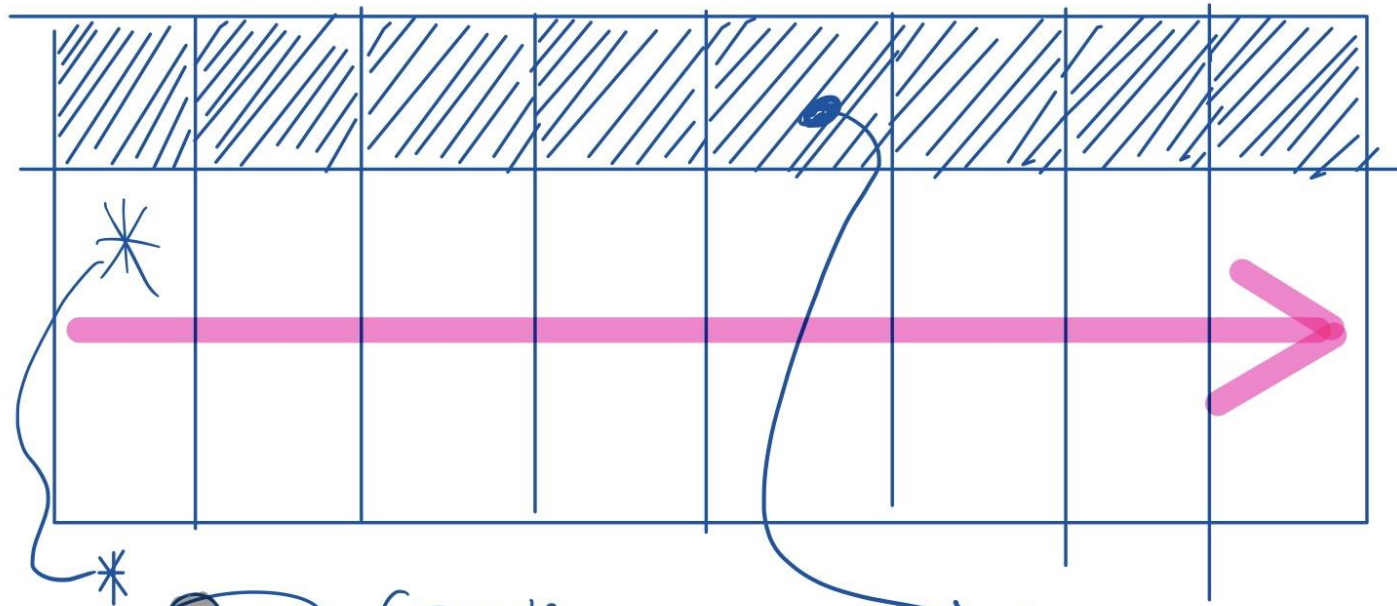
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161 von 161	0% 0% 100%	0% 0% 100%	0% 0% 100%	3.77% 0% 96.23%	0% 0% 100%	
Equipment Revisionsart Meldungsnummer Meldungskurztext Equipmentname Bauhauptgruppe STOPP Nummer	Öl/Kühl/Sp.syst. Ent.	Apparate abgesteckt	Apparat geöffnet	Reinigung Firma MS	Reinigung Firma RS	Rep. u. Erneuerungen
	Rotating Equip. MRAMS-R	Montage	Montage	Reiniger	Reiniger	Rep. Koordinator
B201 TÜV IU+FP 10429067 IU+FP HDS3-Splitter Ofen B201 Ofen Röhren AO: 0 von 4 offen A1: 17 von 19 offen		<input type="radio"/> <input type="radio"/> D <input type="radio"/> E	<input type="radio"/> <input type="radio"/> D <input type="radio"/> E	<input checked="" type="radio"/> <input type="radio"/> D <input type="radio"/> E	<input type="radio"/> <input type="radio"/> D <input type="radio"/> E	5 von 6 offen
☆ ⓘ		Joachim Weiß 15.05. 14:07	Joachim Weiß 15.05. 14:07	Stefan Kriebich 30.03. 08:11	Joachim Weiß 27.05. 09:41	
B201DUH TÜV IU+FP 10429068 Erneuerung Dampfüberhitzer in B201 Rohrschlange WT A1: 0 von 1 offen		<input type="radio"/> <input type="radio"/> D <input type="radio"/> E	<input type="radio"/> <input type="radio"/> D <input type="radio"/> E	<input checked="" type="radio"/> <input type="radio"/> D <input type="radio"/> E	<input type="radio"/> <input type="radio"/> D <input type="radio"/> E	1 von 1 offen

Acceptance RISK – New Processes

- ▶ Unit Management covered with SAP Standard Processes
- ▶ QR Technology / no RFID
- ▶ Risk Based Inspection Methods covered with SAP Standard Processes
- ▶ Using GPS Data

Statistics & Data Mining





STATUS

0... OPEN
1... CLOSED } SAP?

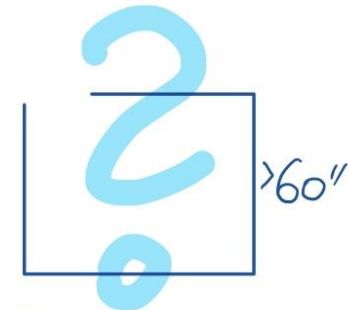
HEADER +

- FILTER
- TASK

SAP



EQUIPMENT
DESCRIPTION
NOTIFICATIONS
TYPE OF INSP.



TOUCH SCREEN

ELECTRONIC TURNAROUND
COORDINATION BOARD



iPAD + Pencil

TASK BAR

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OMV Downstream

Die Energie für ein besseres Leben.



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