

## **By BearingPoint**

Resource Unit Lifecycle & Rental Management based on SAP Cloud Platform and integrated into SAP ERP

Discover ETM.next on <a href="https://bearingpoint.services/etm/en/our-solutions">https://bearingpoint.services/etm/en/our-solutions</a>

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Prepared for

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## BearingPoint is a leading European Management and Technology Consultancy with a global Footprint







78

Countries in which BearingPoint serves Clients



12,346

Global alliance headcount



**77** 

**Global alliance offices** 



**176** 

**BearingPoint Partners** 



23

**BearingPoint offices** 



Key Figures 2019

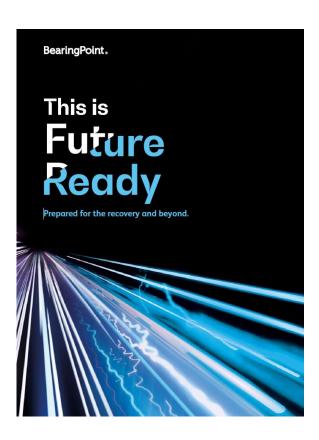
2009

Foundation date as BearingPoint European partnership



4,574

**Global BearingPoint headcount** 



#### ETM.next — a Joint Strategic Partner Co-Innovation Program by SAP & BearingPoint





SAP ETM is end of live in 2025 with no planned replacement by SAP, but ETM.next by BearingPoint

BearingPoint agreed to develop a modern new ETM solution on the SAP Cloud Platform, integrated with S/4 HANA to address SAP client's needs for a modern and sophisticated solution for their equipment and tools management processes

This initiative is managed as a joint strategic Partner Co-Innovation Program.



#### ETM.next as part of the SAP EC&O industry cloud offering

Supporting end-to-end processes in an intelligent and modular fashion

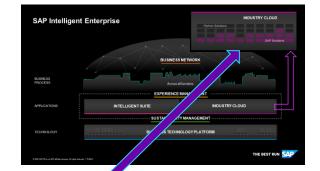
"Another interesting example is what SAP is doing with BearingPoint to reimagine equipment and tools management in the cloud. The new solution, known as ETM.next, is built on SAP Cloud Platform and offers next-generation capabilities that customers need to unlock additional value in equipment

fleets."

(Peter Maier, President Industries and Customer Advisory, SAP)





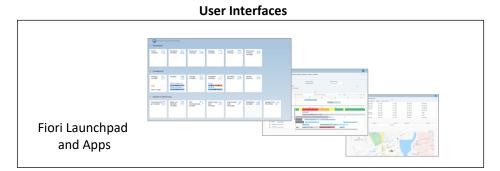




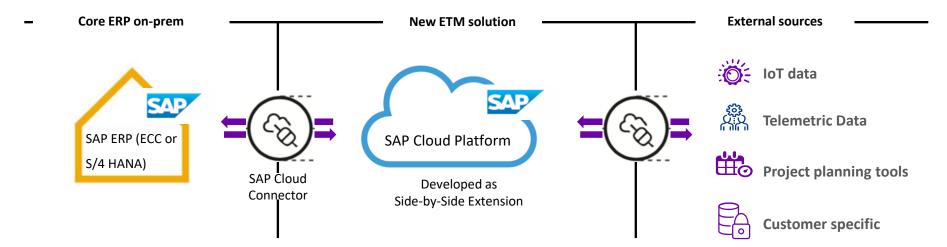


#### **High Level Architecture – synchronized with SAP main architecture principles**

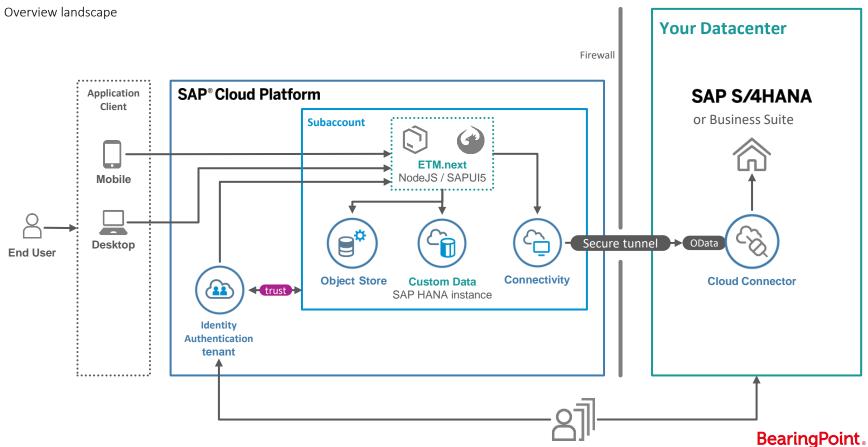
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#### **Solution architecture**



#### **SCP Services**

Used for IPs, Projects and prototypes







**SAP Hybris** 

**HTML5** Applications



**API** Management





**Platform** Identity **Provider** 











**Internet of Things** 

- HTML



**SAP HCI-DS** 







**UI Theme** Designer

**SAP HCI-PI** 



SAP C4/HANA

**SAP** Ariba

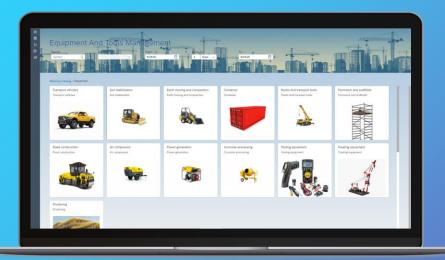
#### **Key success factors for SAP cloud offering**

- SAP Cloud Application Programming Model
  - ▶ CDS ( Core Data Services )
  - ▶ Multitenancy
- Cloud SDK
- OData V4 / OData V2 via proxy
- SAPUI5
  - ▶ Binding via OData Models
  - ▶ Smart Control / Annotations
  - ► Flexibility Service





Picture-guided Web Shop makes it easy to identify and request the right item without spending too much time for search



## High-level overview of functionalities for rental requests:

Easy resource identification

All resources in one shop

Categories according to catalogues

Display of all available resources at a glance

Filter functionalities

Request several rental units with one process

Master/Subitem requests to ensure related resources are requested together

Discover more on

https://bearingpoint.services/etm/en/our-solutions

and contact us for additional information!

Thank you!



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#### ETM.next – SAP ERP Integration





Various APIs for seamless process integration into SAP ERP solutions (S/4HANA and ECC)





- End-to-end solution containing rental unit lifecycle and both, internal and external rental processes
- Prepare equipment and tools management for the digital era, incl. IoT technologies, mobile app and up-todate user interfaces
- Comprehensive planning functionalities allow higher utilization rates of equipment and more adequate disposition of resources matching requests from business process owners
- Business functions like billing, pricing and cost allocation will be improved by more suitable aspects to erase pain points in daily business
- Handling of safety and compliance requirements will be performed by the solution and thus customers are enabled to easily follow and document legal rules and regulations
- Additional functionalities will show direct business impact by higher utilization rates, less manual adjustments, faster processes and more precise controlling
- Long-term commitment to both support and enhance ETM functionalities
- Cloud-based architecture independent from S/4 / ERP allows fast implementation of advanced ETM processes
- Side-by-side extension of ERP / S/4 using SAP's cloud offerings (SCP)





## Market Situation: Trends and Challenges for Equipment and Tools Management





#### How should the state-of-the-art solution for equipment & tools management be like?



#### Increase your Productivity

- Higher utilization rates for your equipment
- Provide the most appropriate equipment
- Decrease your stock, lower CAPEX



Integrated into your IT Landscape



Incorporate your Ecosystem

- Build up your own critical resources network
- Connect your business to rental companies, service providers, and market companions
- You have unused equipment available? Rent it to externals & be part of a digital ecosystem



**Support your Sourcing Decisions** 



Manage your Joint Ventures

- Hire or rent from your JV partners
- Bill JV rentals or allocate cost appropriately
- Plan your projects and sites together



Provide Cost Transparency



Digitize your Processes

- Avoid paper-based processes
- Use mobile app to perform tasks, e.g. scanning, picking, issuing, photo documenting
- Request equipment easy and picture-guided



Comply to HSE Requirements



### Fit to your Organization

- Have great usage experience independently from number of yards/warehouses, equipment, users or locations
- Manage your equipment independently from decentral or central organization
- Ability to grow with your company



**Expect more than a pure ETM solution** 

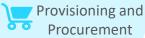
- Be integrated with your ERP
- Future-ready and easy to integrate with IoT
- Support processes like order/invoicing, asset or inventory management independently from the applications you use
- Use your own equipment whenever appropriate
- Rent what you need if it is commercially advantageous
- Buy or rent when there is no stock availability
- See total cost of equipment at all times
- Have an overview about site's stock and be able to return what's not nedded anymore
- Performance- and time-based rentals for precise billing / cost allocation
- Be well-prepared for audits on site
- Document inspections, checks, etc.
- Control your compliance to standards and regulations
- Track & Trace your equipment & tools
- Be ready for IoT and Telemetrics
- Enabling big data analytics
- Digital collaboration platform



#### BearingPoint's Resource, Equipment & Tools Management

#### **Resource Rental Unit Life Cycle**







Controlling



Maintenance, Repair, Cleaning







#### **Rental Process**

Demand and Resource
Rental Unit-Finder



Disposition and Planning



Order Management

Field/ Customer

Integration



Logistic & Transport management



, Billing and Settlement



Return/Inbound
Inspection



«Comprehensive planning is a substantial factor for being competitive. The comprehensive planning cockpit should simplify our planning processes throughout our wide-spread yards all over Europe.»

«We wanted to introduce a new and innovative pricing for our equipment. By delivering our use cases we could ensure that ETM.next will be able to manage it»

#### **Major benefits**



**Big Data** 



**ERP Integration** 



**Telemetric Data** 



SAP ERP & S/4 HANA readv



**Mobile Apps** 



**Asset Track & Trace** 

#### **ETM.next Main Process Flow**





#### Overview of selected functionalities for different users



### Resource Planning & Scheduling



- Individual, Pool & Group resources
- Planning Board
- Handling of inbound rental

#### Rental Contract Management



- Proposal / Individual pricing
- Cost separation / allocation
- Site / project-based contracts

#### Billing



- Time & performance based
- various price models & usage types
- SAP integrated (cost allocation)

#### **Yard Management**



- Capacity Management
- Inventory Management
- Utilization reporting

#### Asset

#### Management



- Maintenance Management
- Revenue & cost reporting
- Financial integration

## Safety & Compliance



- Equipment / Tool Compliance Management
- Checks & Document handling

#### Site

#### Management



- Resource overview
- Billing simulation / adjustment
- Mobile Apps

### Track & Trace Logistic



- Deliveries & Returns
- Track & Trace (RFID/BLE)
- Site to site transports

#### **Controlling**



- differentiated & rental item based
- ROI Analytics per asset
- SAP cost center, WBS, orders

## How ETM.next will improve and accelerate your processes by its new set of enhanced functionalities



Pain Points in daily business will be eliminated by functionalities beyond the regular scope of an ETM tool. What is it in particular?



Request / Web Shop

**Planning Functionalities** 

**Site Management** 

**Yard Management** 

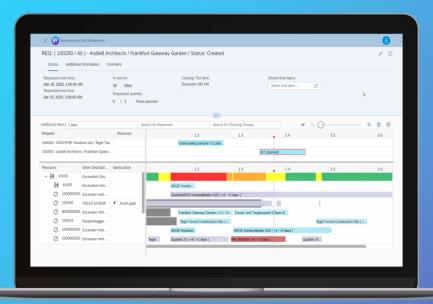
**Handover functionalities (Trace & Track)** 

**Billing / Cost Allocation** 

**Inspection, Safety & Compliance** 



Planning board supports employees in their day-to-day business and help reducing stocks through optimal planning



## High-level overview of functionalities for planning:

Easy resource planning via drag & drop

Planning for equipment, tools, material, multipart & personnel

Planning on group level possible

Display of all activities per item (PM/CS/compliance activities)

Rescheduling and adaption of requests in consultation with requester

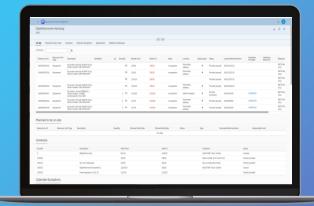
Contract view to review and adapt existing contracts

Master/Subitem planning to ensure related resources are provided together



Site Overview helps site managers to see all required information at a glance and supports reduction of rental cost





## High-level overview of functionalities for site management:

Site Overview at all times available

Site Calendar to adapt all site-specific events

Use mobile app to simplify processes for your site staff

Plan your returns and see your planned arrivals at a glance

Easy prolongation of rentals enables to flexibly react to dynamic schedules

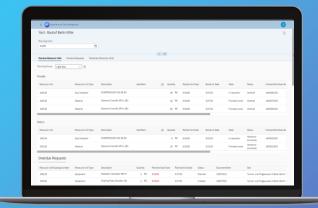
Manage multiple locations for storage and logistics purposes per site

See your site from a commercial perspective – Avoid avoidable cost



Yard overview helps to manage your storage location and to leverage your equipment's utilization





## High-level overview of functionalities for yard management:

Yard overview always available, see and fulfil all requests

Manage multiple storage locations

Use the mobile app to simplify your processes for your yard staff

See utilization of your assets and be able to report KPI's

Flexible warehouse structures possible

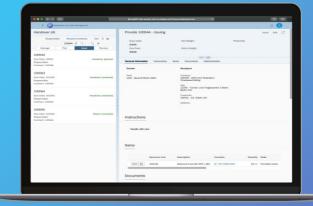
Scanning functionalities support identifying the appropriate resources

Integration into SAP ERP inventory management



Handovers support picking, issuing & receiving of your rentals and are digitizing your paper-based site and yard processes





## High-level overview of functionalities of handovers:

Execute your handovers with the mobile app (including offline version)

Be able to see rental history of your equipment and tools

See all physical movements of your assets

Document the relevant dates for appropriate billing of your rentals

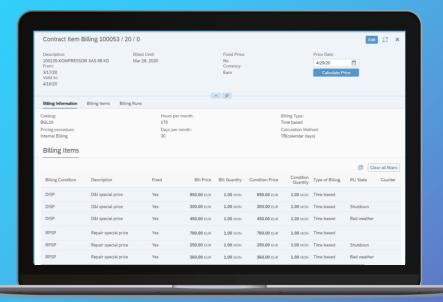
Attach photos or other files to your handover, e.g. to proof damages

Scanning functionalities support identifying the appropriate resources

Pick master items and corresponding subitems to issue complete bundles



## ETM.next versatile and customizable billing supports your every step on the way



## High-level overview of functionalities of billing:

Charge your customers as you wish on time based or/and performance based

Support for complex billing procedure, e.g. Joint Venture (ARGE)

Adjust pricing procedure to your needs

Joint-venture billing (internal): Two step billing process for affiliated companies

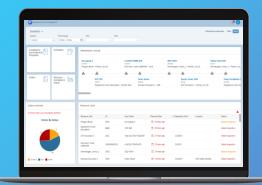
Manage your prices via conditions for customers, site, price groups etc.

Simulate your billing process and know the results in advance

Whenever necessary, be able to adjust or correct your billings manually

How to manage documentation, safety regulations, compliance requirements and maintenance needs in a dynamic environment - on site and in the field?









#### Overview of Inspection, Safety and Compliance module:

Manage inspections and safety requirements based on time schedule or utilization

Maintenance Journal allows planning of future compliance checks

Being audit ready everywhere - mobile app with all relevant documentation on hand

Fast detection of compliance issues and initiation actions

Filter compliances per status, per project or yard

Fullfill audit needs by documenting compliance checks by attaching manuals, safety instructions and checklists

Flexible template definitions and task planning with assignment to responsible persons



#### **ETM.next by BearingPoint**

Quotes of development partners why they joined the co-innovation program & supported the development with expertise and challenging business cases

'With ETM.next we can better manage our syndicate projects. It is supposed to handle internal as well as external rentals. We intend to emphasize that syndicate companies can share their respective equipment even in planning stage.'

'We wanted to introduce a new and innovative pricing for our equipment. By delivering our use cases we could ensure that ETM.next will be able to manage it'

'By having the chance to influence both design and scope of the solution we will be able to integrate our self-developed IoT solutions into the equipment and tools management solution.'

'Being part of such an innovative group will definitely enable all participants to reach a higher level of digitalization and thus, gain competitive advantage in the market.'

'Comprehensive planning is a substantial factor for being competitive. The comprehensive planning cockpit should simplify our planning processes throughout our wide-spread yards all over Europe.'

'We desire one solution for all project roles within our organization. Currently, we have different solutions in place, e.g. for yard managers, fleet managers, project managers or site managers. We still have no digital solution for our equipment operators.'