

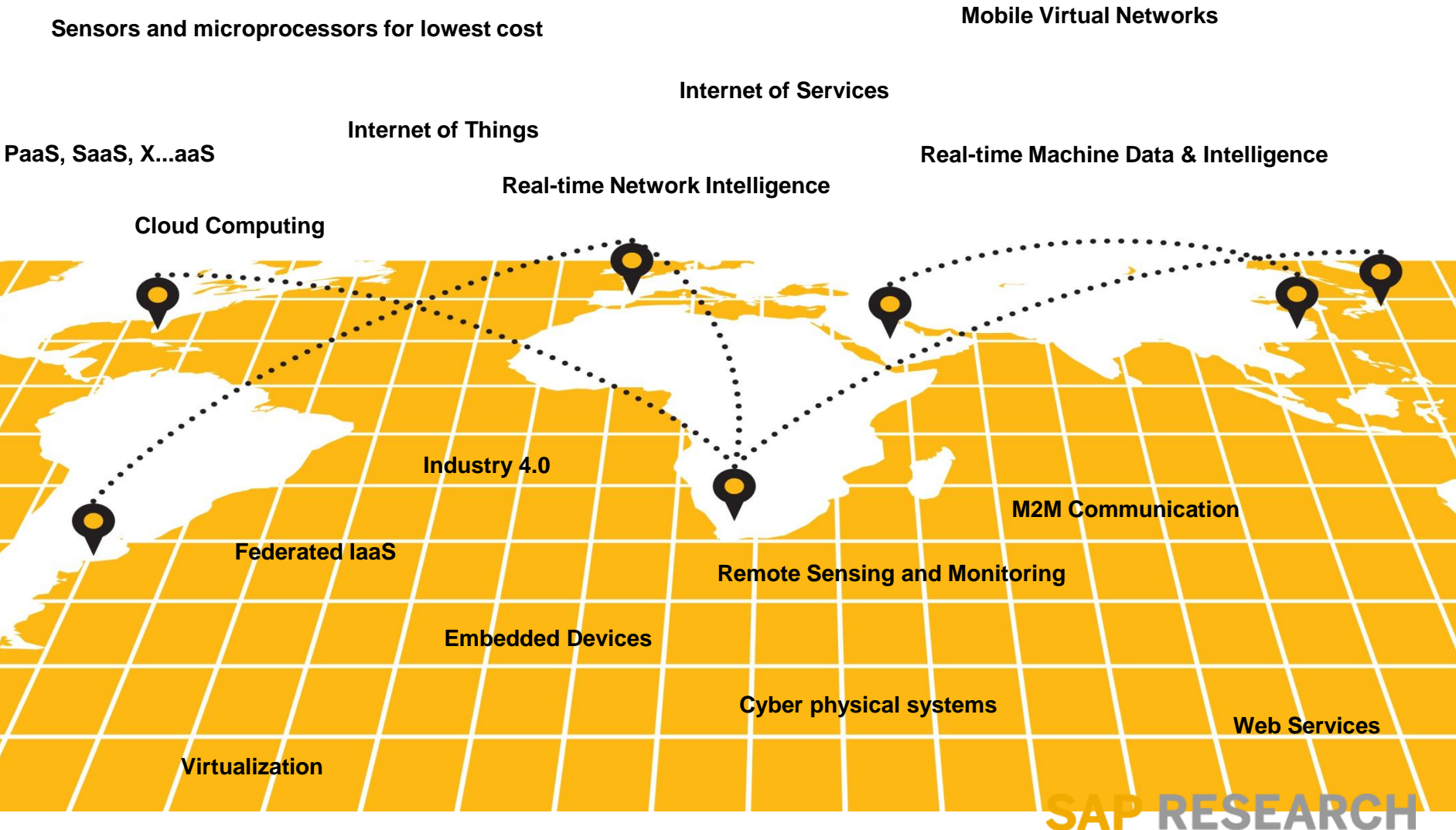
Real-time, Remote, Predictive, Cloud et cetera: Buzzwords or Reality for Enterprise Asset Management?

Dr. Barbara Schennerlein, SAP Research
May 2012

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The World Today



Many technological news, BUT ...

- What are the needs for business process improvements?
- What are the needs for a sustainable business growth?
 - Which technology can support the improvement of processes?



NEW BUSINESS MODELS AND SERVICE APPLICATIONS IN A CONNECTED WORLD

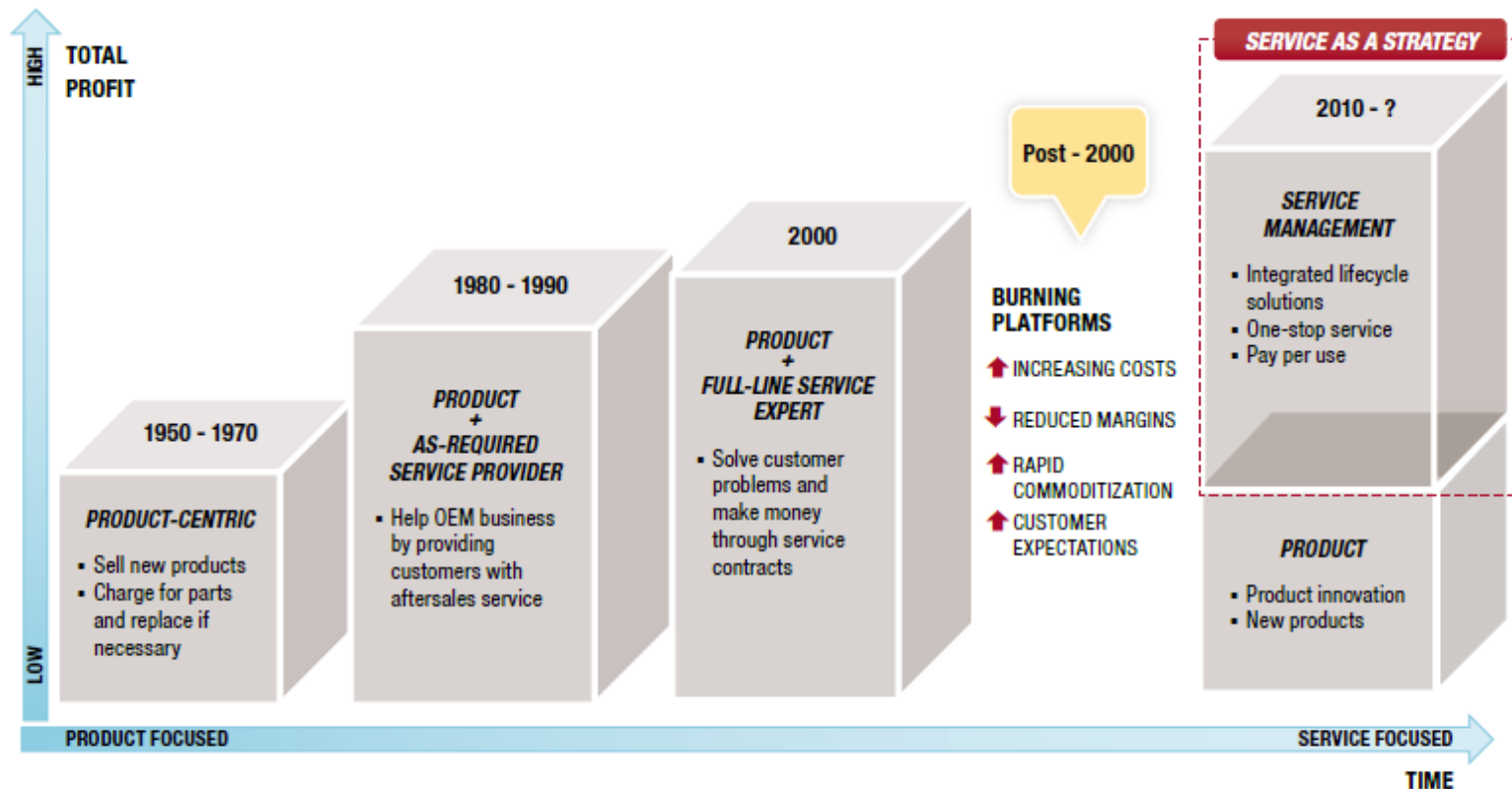
Once machines are networked, we're only limited by our imagination.

Yiru Zhong, senior industry analyst, Frost & Sullivan

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What are the needs for business process improvements?

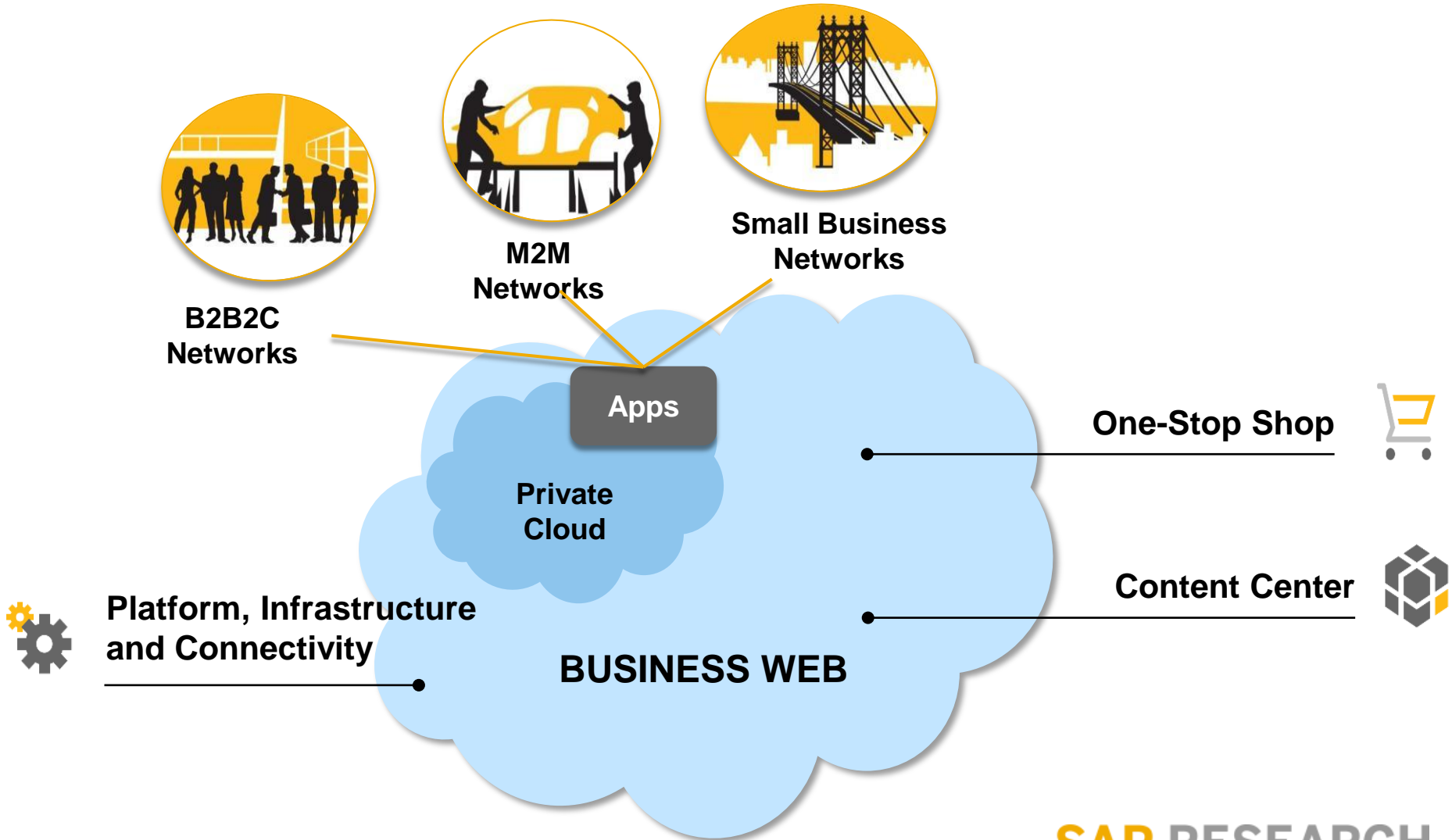
- Global trends in manufacturing industries
- Transition from reactive to active service offerings
- Collaborative processes



Source: Capgemini

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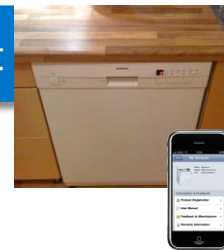
The Business Web Vision



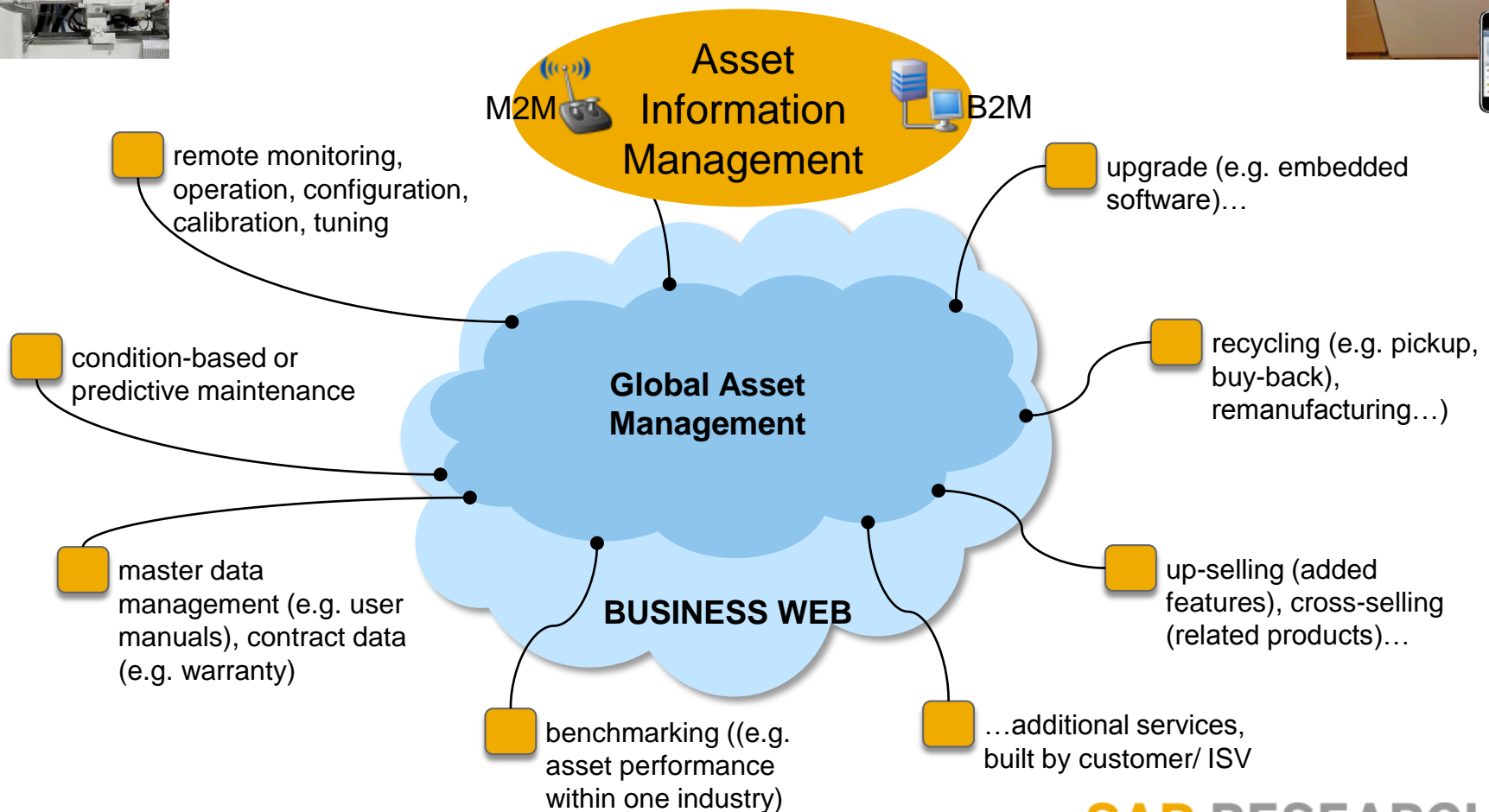
Vision: Offer After Sales value-added Services in the Asset Life-Cycle



Industrial Environment

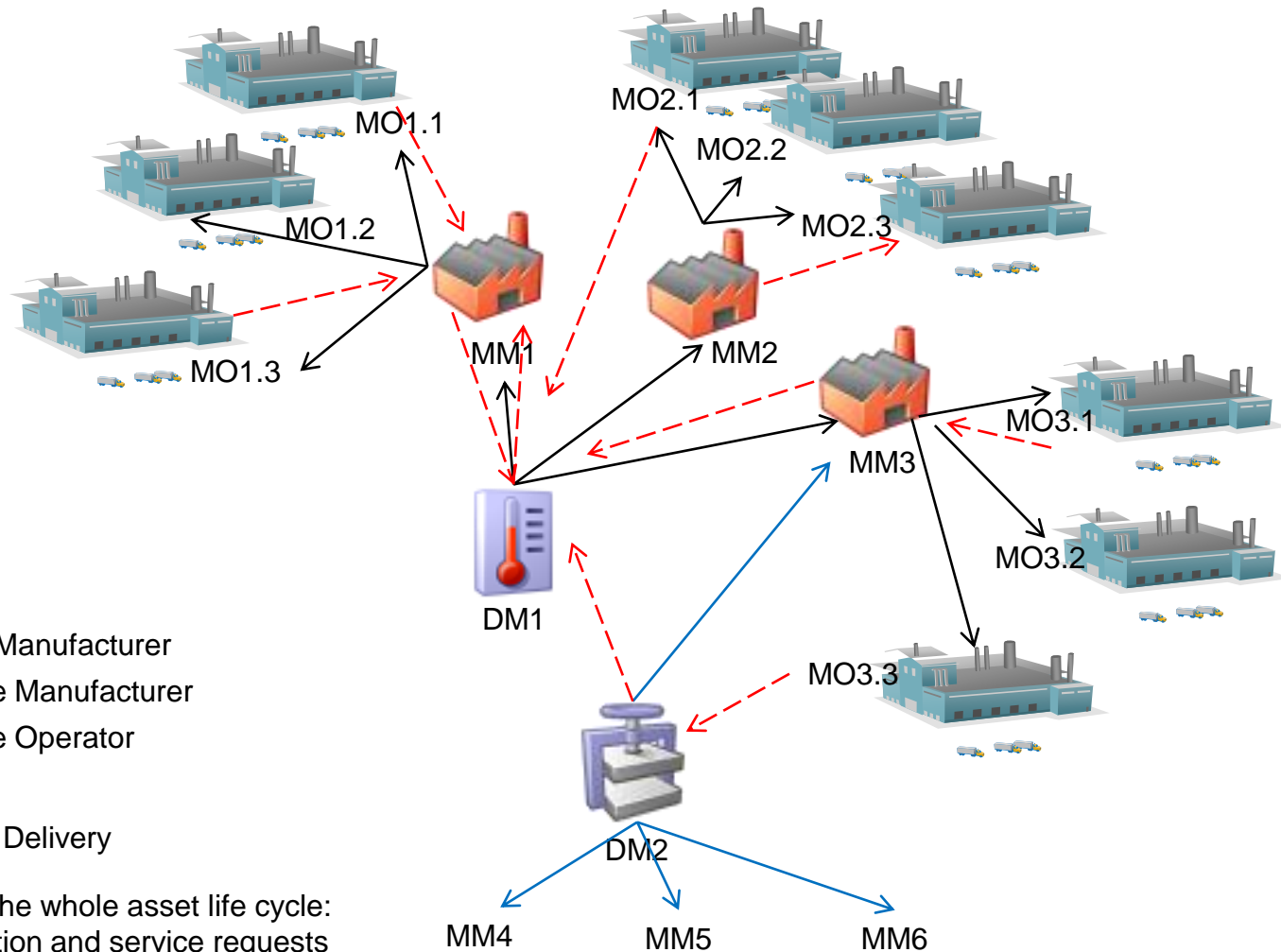





Consumer Environment




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SAP Customer Scenario Today



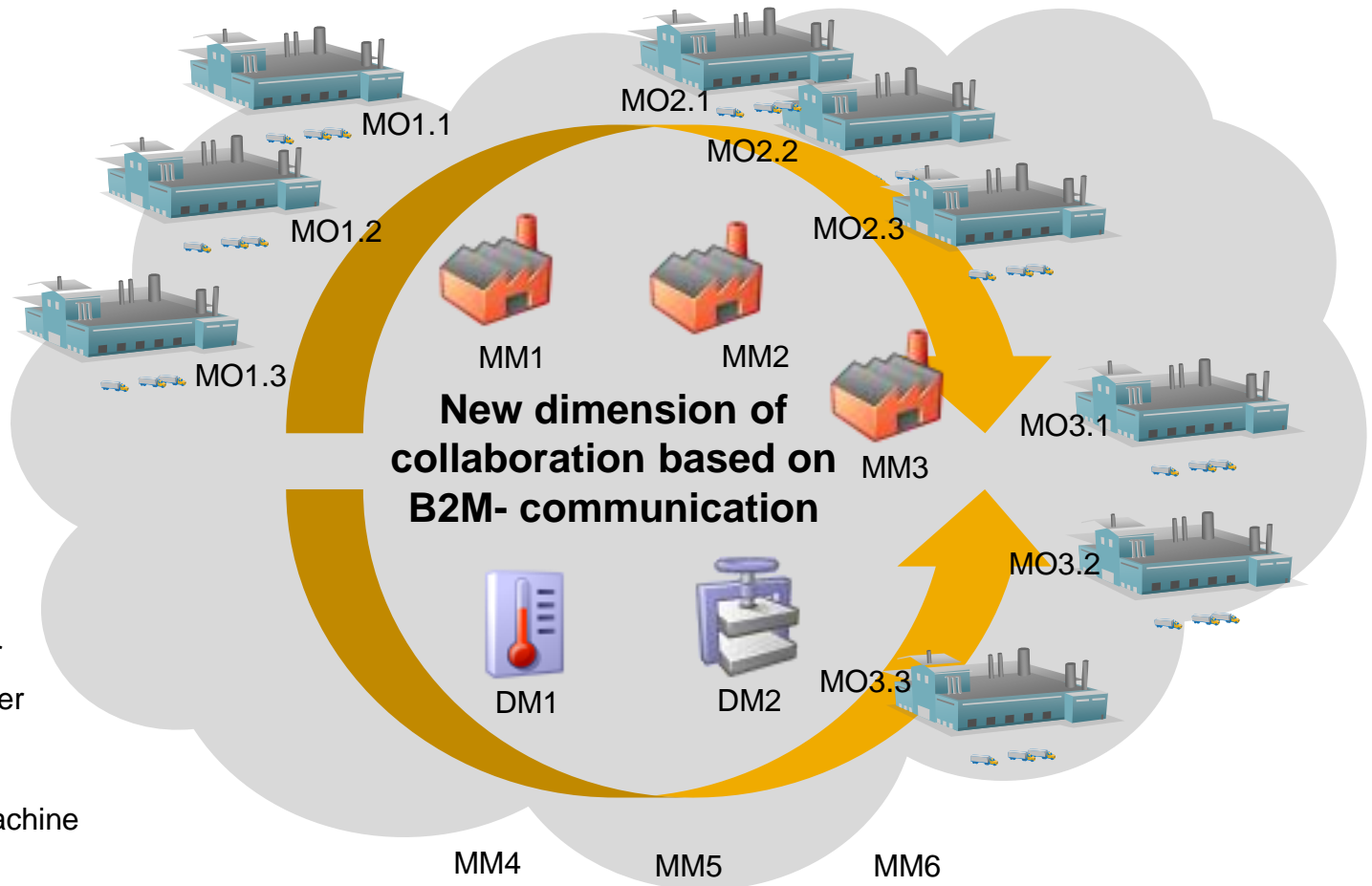
-  – Device Manufacturer
-  – Machine Manufacturer
-  – Machine Operator

 Product Delivery

 During the whole asset life cycle: information and service requests with **many media breaks**

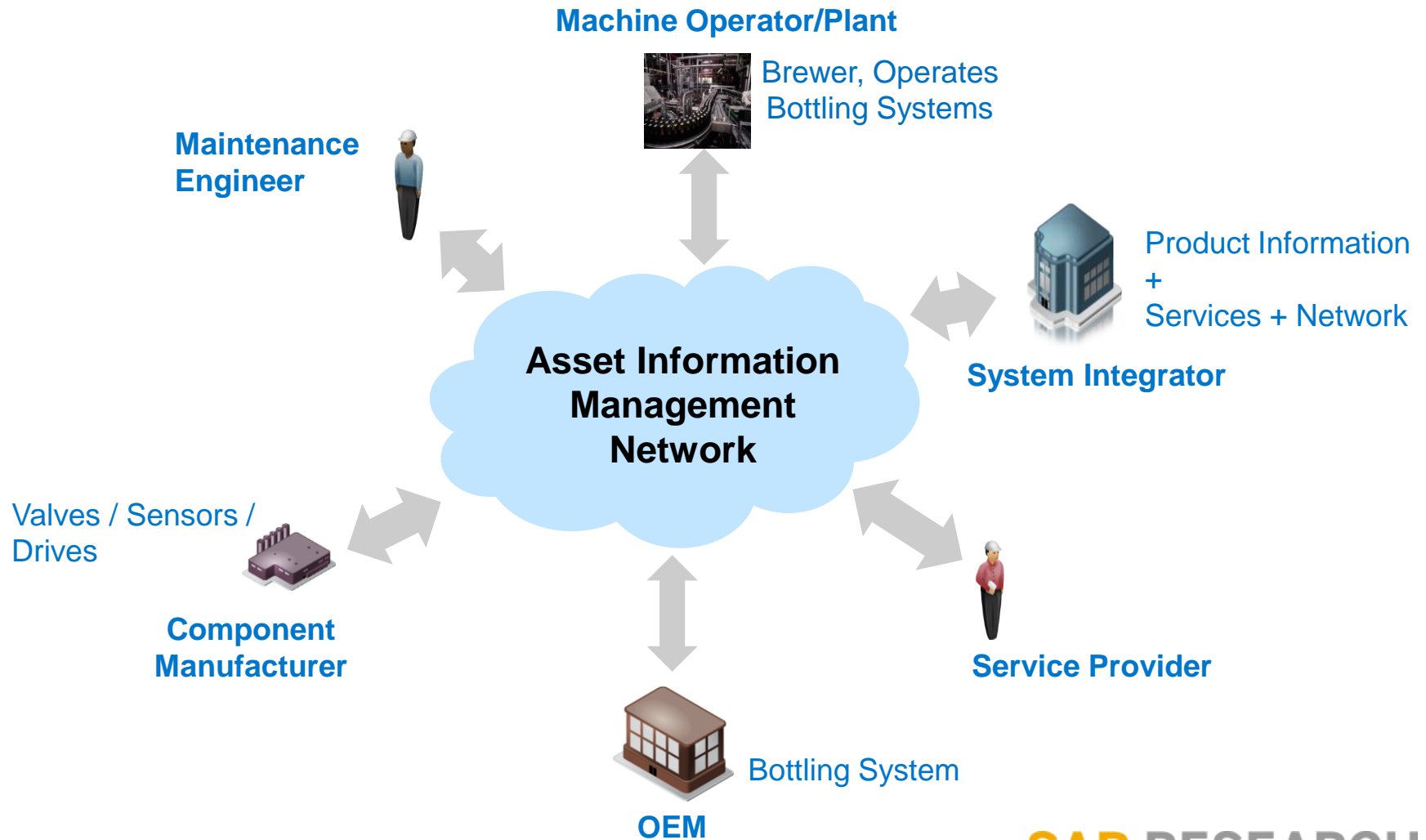
SAP Customer Scenario

Tomorrow – Asset operation through Business Web



Real time access to the devices and to device information enables all stakeholders to deliver value-added product services (e.g. solution provider models, remote service management)

Asset Information Management Scenario

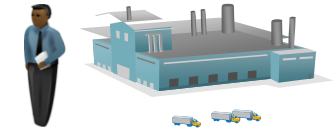


Asset Information Management

User Story (1)



MM



MO

A service engineer of the machine manufacturer has to carry out a general overhaul of the machine at the operators site. He wants to know the real historic abrasion information of all assets of the machine.

- Today: As much as possible of parts will be changed to ensure the save and long-life machine running with highest availability
- Tomorrow: With the knowledge of real abrasion the service engineer will change only the necessary parts. This has impact on spare part management (which and how many parts must be hold on stock → cost savings)

Asset Information Management User Story (2)



During an unforeseeable problem a maintenance engineer of the operator needs supplier information about the broken asset for fast repair.

- Today: Mostly operator has out-dated supplier asset information. Access to current information is associated with media breaks, i.e. repair takes too much time.
- Tomorrow: Fast access to current supplier information reduces the repair time → higher asset availability

Asset Information Management - Opportunities



ASSET INFORMATION MANAGEMENT

- necessity for new competitive service offerings in the industrial environment
- lots of information and service requests with many media breaks during the whole asset life cycle

M2M App

M2B App

INCREASED ASSET AVAILABILITY

- Shorter mean time for repair of assets
- Longer use and later recycling of assets
- Real-time access to machine events allows to offer remote services like condition or predictive monitoring

IMPROVED ASSET LIFE CYCLE

- Stronger differentiation through bundled product-service offerings
- Reduced efforts for asset data management due to cross-company access to information
- Reduced carbon footprint due to reduced travel of maintenance engineers

CLOUD COLLABORATION PLATFORM

- Easy merge of cross-company asset information like ERP data and real time device information
- Cost efficient on-demand service for each stakeholder without media breaks
- Asset information management as a basis for further services like predictive analytics



Thank You!

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