

The logo for BARCO, consisting of the word "BARCO" in white uppercase letters on a red square background.

Smart Critical Control Rooms

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Smart visual decision making systems for CRITICAL INFRASTRUCTURE



Control Room - Operator Workspace



Remote/Mobile



Operator



Control Room - Overview Wall



Crisis room

Networked Services



recording & playback



collaboration



gateway



federation



data assurance & compliance



strategic alliances plug-ins



other



Solution Offering – Network Visualisation

Data Acquisition & Display Management

- Universal Sensor Interfaces
- Bandwidth Management
- Security-enabled

Operator Visualization

- Local desk visualization, OpSpace
- Large overview displays

Enterprise Communication

- Displays
- Roombooking
- Desktops

Integration & Services

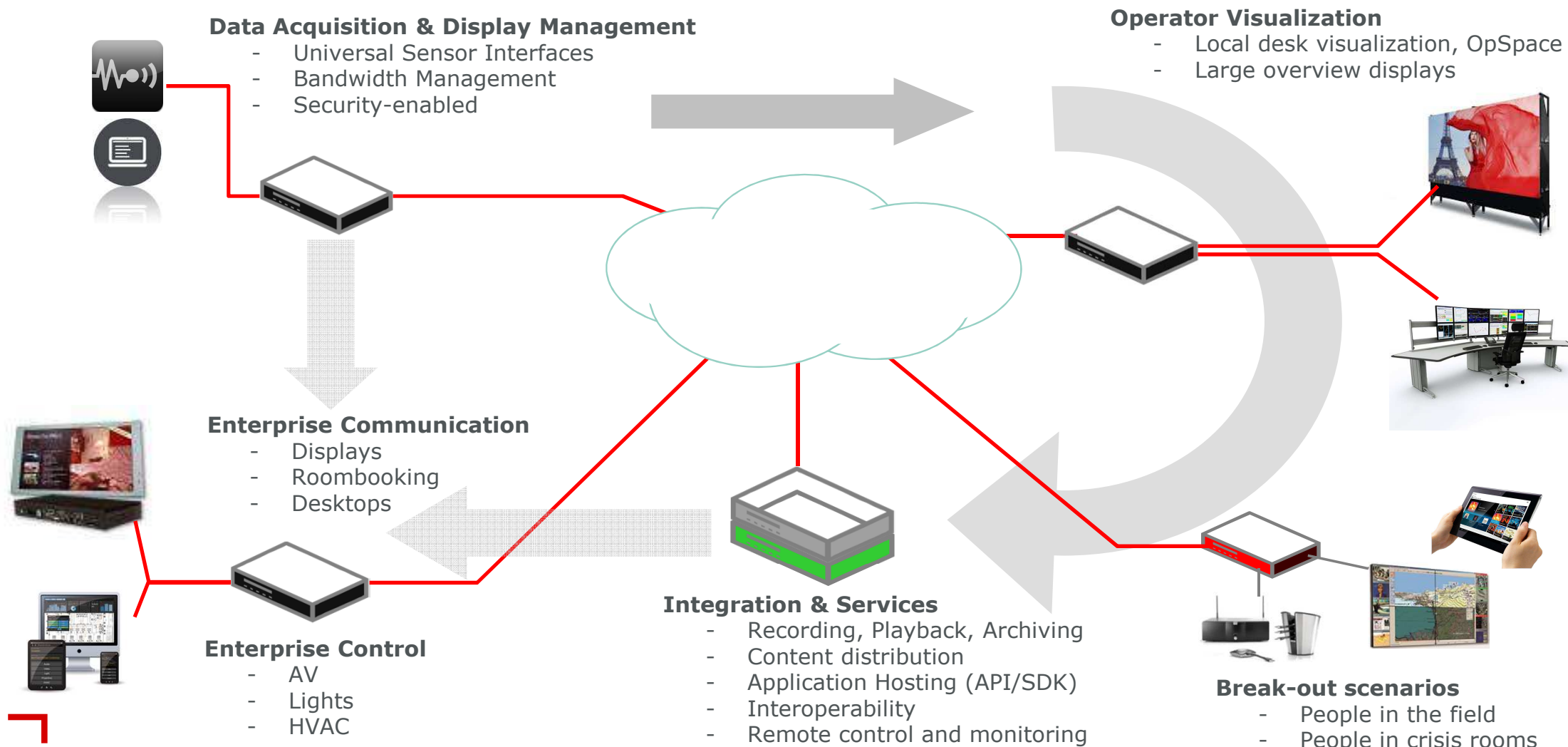
- Recording, Playback, Archiving
- Content distribution
- Application Hosting (API/SDK)
- Interoperability
- Remote control and monitoring

Enterprise Control

- AV
- Lights
- HVAC

Break-out scenarios

- People in the field
- People in crisis rooms



Barco's value play

Digital Transformation

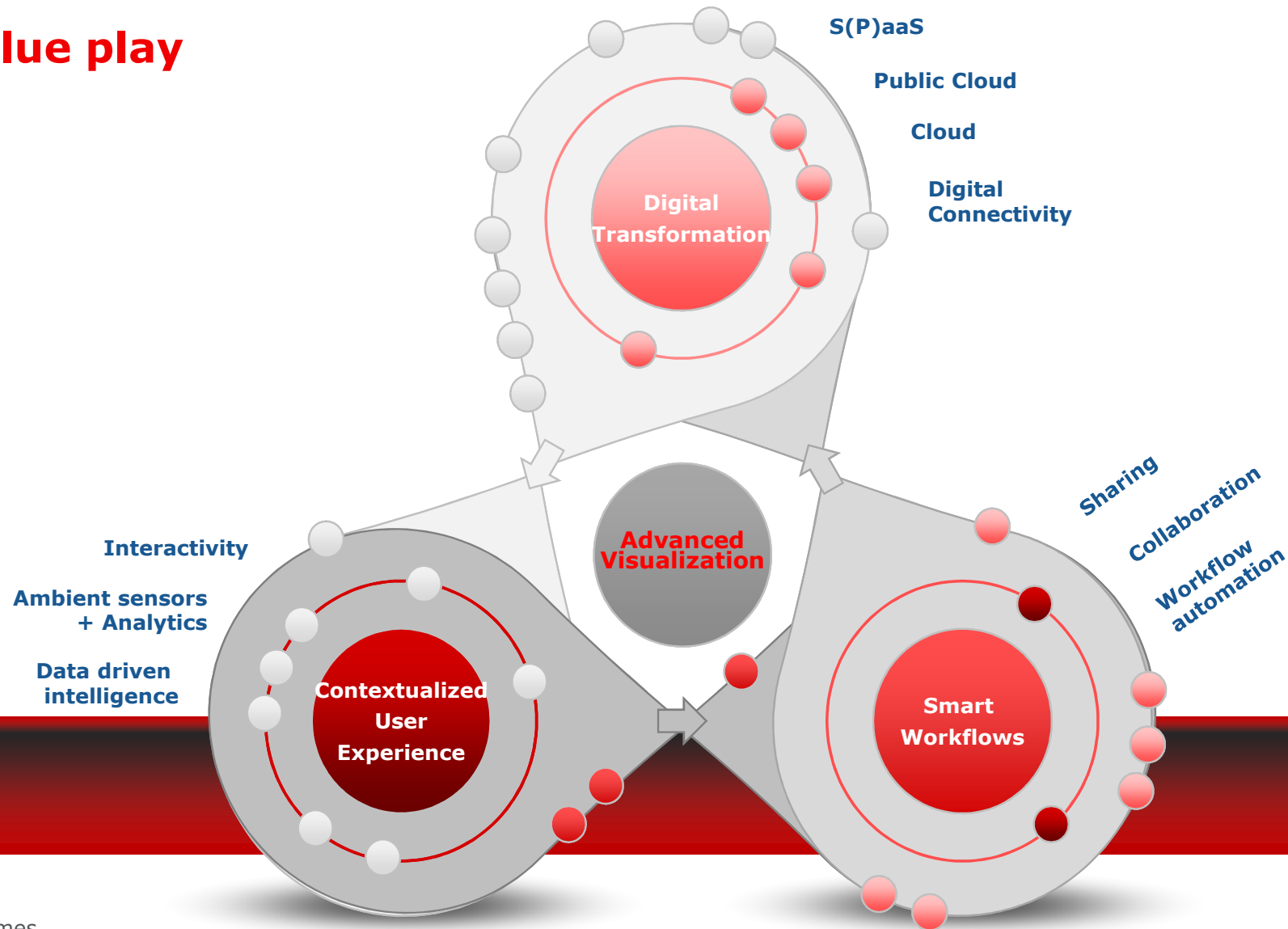
- Tech drivers:**
- IT
- Market Drivers:**
- Globalization, reach
 - Efficiency
 - CAPEX => OPEX

Smart Workflows

- Tech Drivers:**
- Networking
 - Video over IP
 - Machine Learning
- Market Drivers :**
- Efficiency

Contextualized User Experience

- Technology Drivers:**
- AI
 - Big Data
- Market Drivers**
- Mastering complexity
 - Efficiency, improved outcomes



Market challenges

Adaptive Surveillance & Monitoring

- ✓ **Always connected state**: information delivery (smart phones...) and changed models of interaction require an approach of "flexible mobile on the move" versus static and stovepiped.
- ✓ **Big data, analytics & fusion**: the right information at the right time, without information overload.
- ✓ **Wide Area**: comprehensive monitoring and control of networks, utilities, transport, energy, food...

Shared Situation Awareness

- ✓ **New workflows** need to be adapted to new smart alerting systems
- ✓ **Heterogeneous sources** and **new actors** in the system (e.g. IIoT, social media)
- ✓ **Operators co-operation**, in terms of typologies (# operators and flatter hierarchies & ways of working) and tools (tasks representation, assisted tasks allocation, assisted dialogue)
- ✓ **Interoperability** of systems deployed **in complex contexts** (# multinational ops, heterogeneous orgs...)

QoS

- ✓ **QoS through the chain**: real integrated suite of sensors across the chain (swarm of sensor systems)
- ✓ **Fault-tolerant infrastructure**
- ✓ **Harmonized certification and evaluation schemes** (CC EAL, ONVIF, ...)
- ✓ **Interfaces standardization** (HMI, API)
- ✓ **Quick experimentation** through joint simulated/test bed approach (integrating all of the above)







ENABLING BRIGHT OUTCOMES

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