

On-line workshop:

# ‘La digitalizzazione nei cantieri navali’

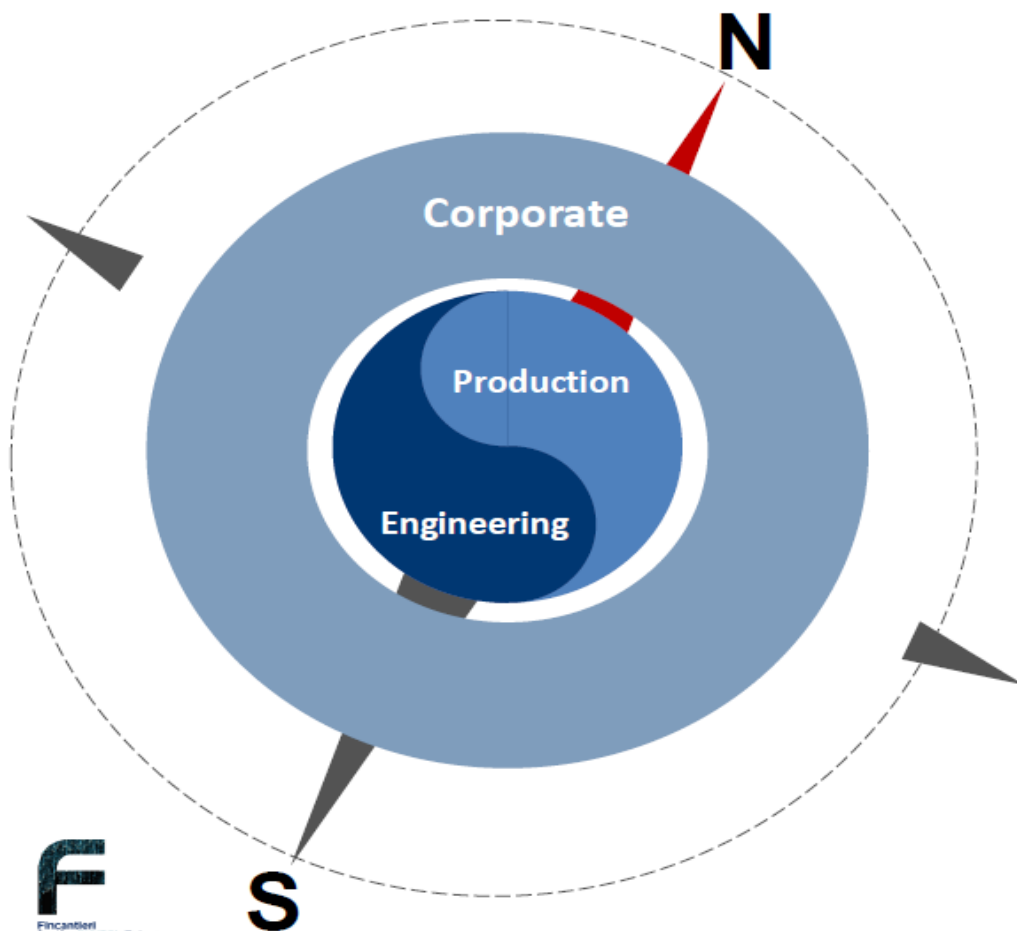
04 Febbraio 2022

# **‘Fincantieri for the Future: il cantiere digitale’**

**Dott. Tharsis PILUTTI NAMER**

**Fincantieri spa**

# FINCANTIERI'S VISION



## ENGINEERING



Integration of all design phases and disciplines adopting a full 3D approach; design process extremely focused on the simplification of the production operations

**TODAY FOCUS**

## PRODUCTION



Adoption of a bespoke automotive model based on constant workload, just in time logistic, automatization of the low value tasks and workforce specialization.

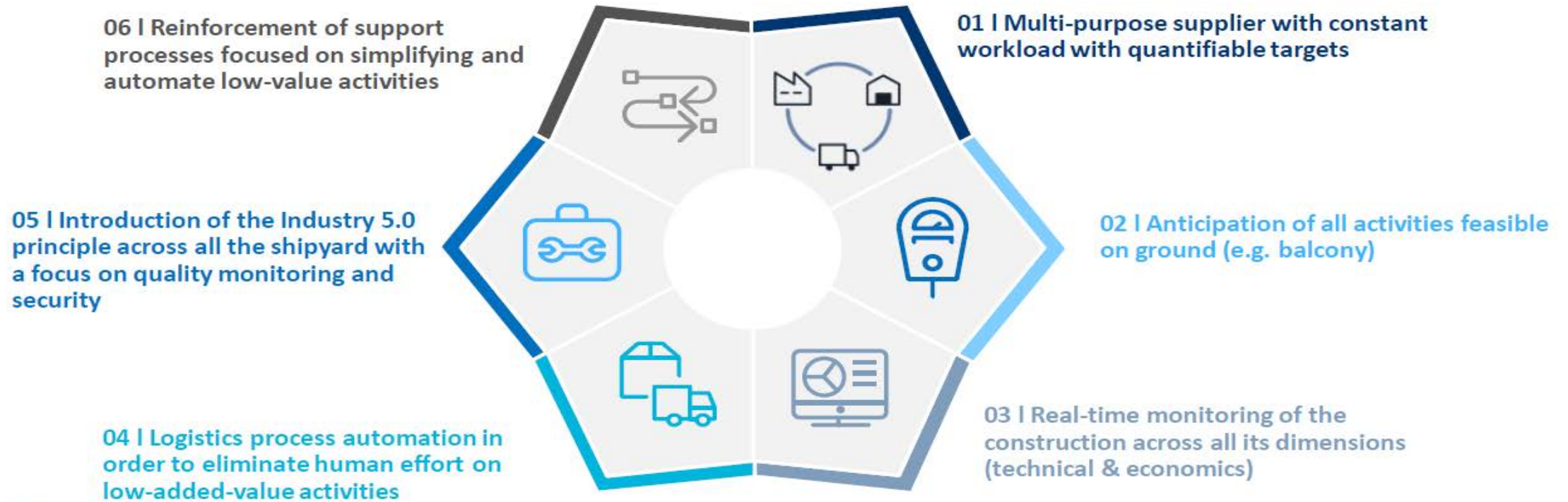
## CORPORATE



Drive the factory of the future strategy across all the company dimensions and regions. Enable and serve both production and engineering with lean and digital processes, adopting a data driven approach

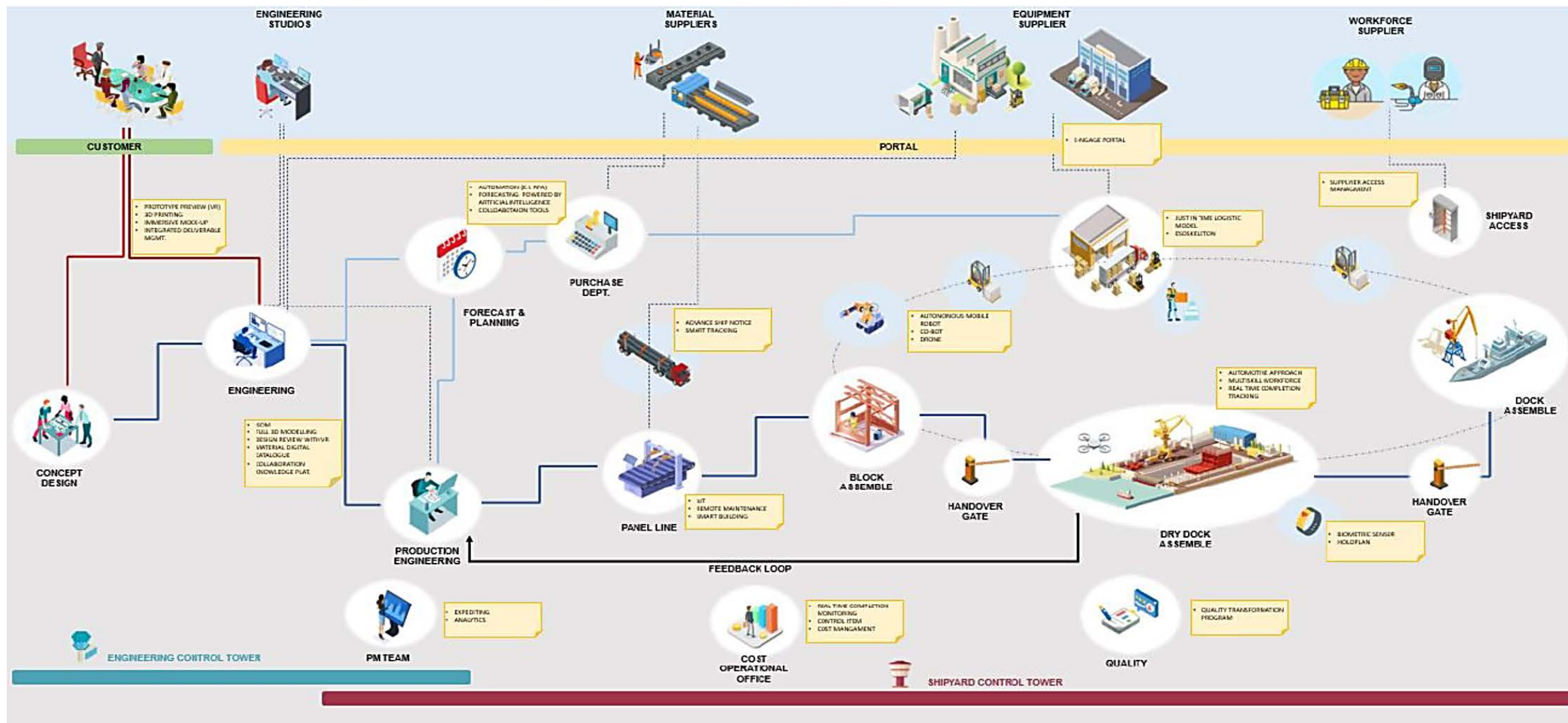
# PRODUCTION: EVOLUTION PILLARS

Fincantieri's vision for production aims to apply automotive model to shipyards, converting work onboard in work executed on the ground. This allows to introduce agility, improve efficiency and reduce overall costs.



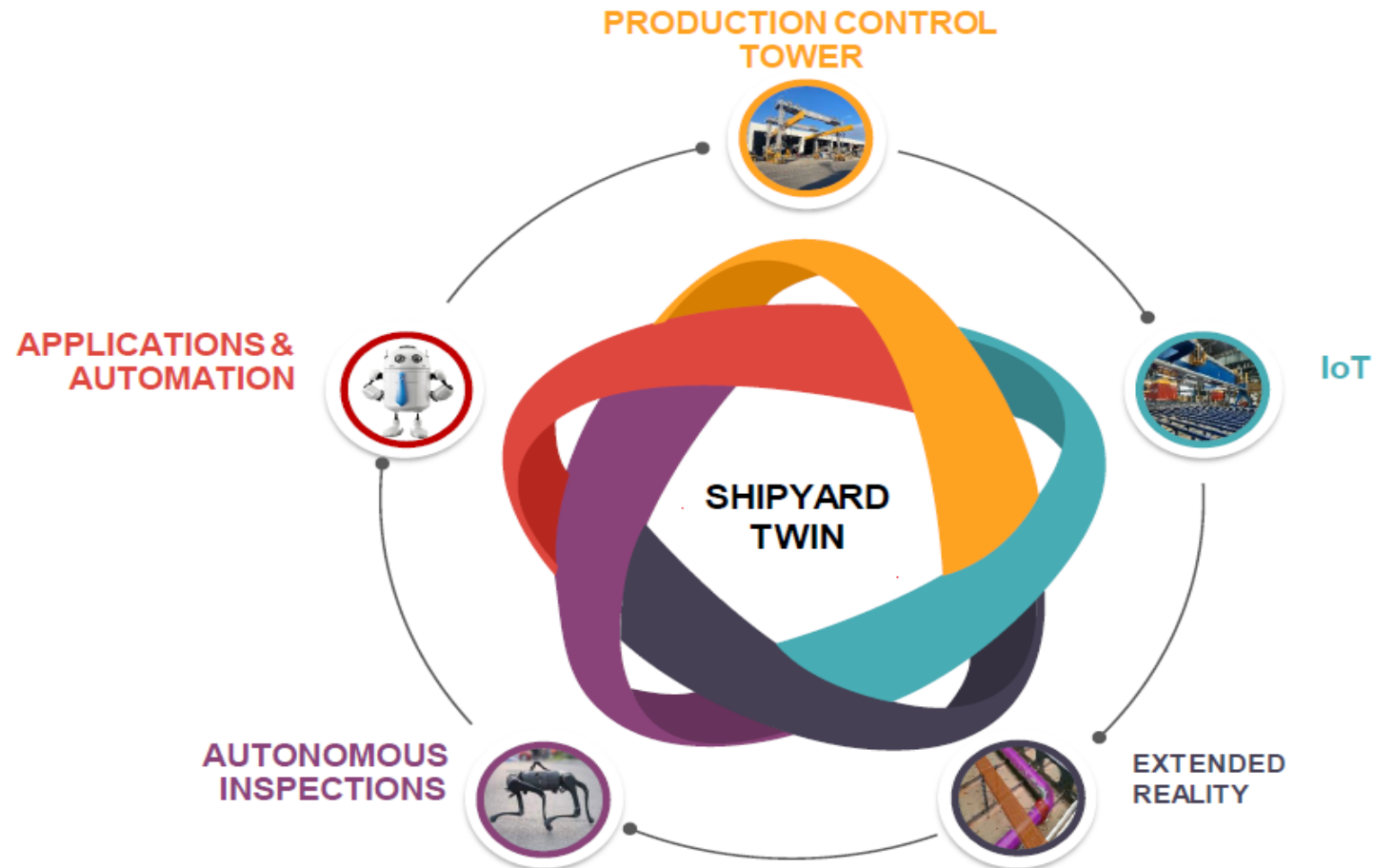


# 2025: THE SHIPBUILDING JOURNEY



# SHIPYARD TWIN: BUILDING BRICKS

MULTIPLE TECHNOLOGIES WHICH WORK AS A SINGLE APPLICATION



# PRODUCTION CONTROL TOWER

BUILD AN **ECOSYSTEM OF TOOLS** ABLE TO **SUPPORT THE OPERATORS ACROSS THE ASSEMBLY ACTIVITIES**

THE PRODUCTION CONTROL TOWER IS A **TOOLBOX** WHERE EACH APPLICATION IS BOTH FOCUSED ON **SOVING A SPECIFIC NEED** AND **CONNECTED WITH THE OTHER APPS**, IN ORDER TO RETURN A **HOLISTIC VIEW OF ALL THE PROCESS**



**ASSEMBLY  
TRACKING**



**PIPE LIFE CYCLE  
MANAGEMENT**



**SUPPLY CHAIN  
MANAGEMENT**



**PRESS FITTING  
MANAGEMENT**



## THE FIRST STEP OF THE PRODUCTION CONTROL TOWER JOURNEY

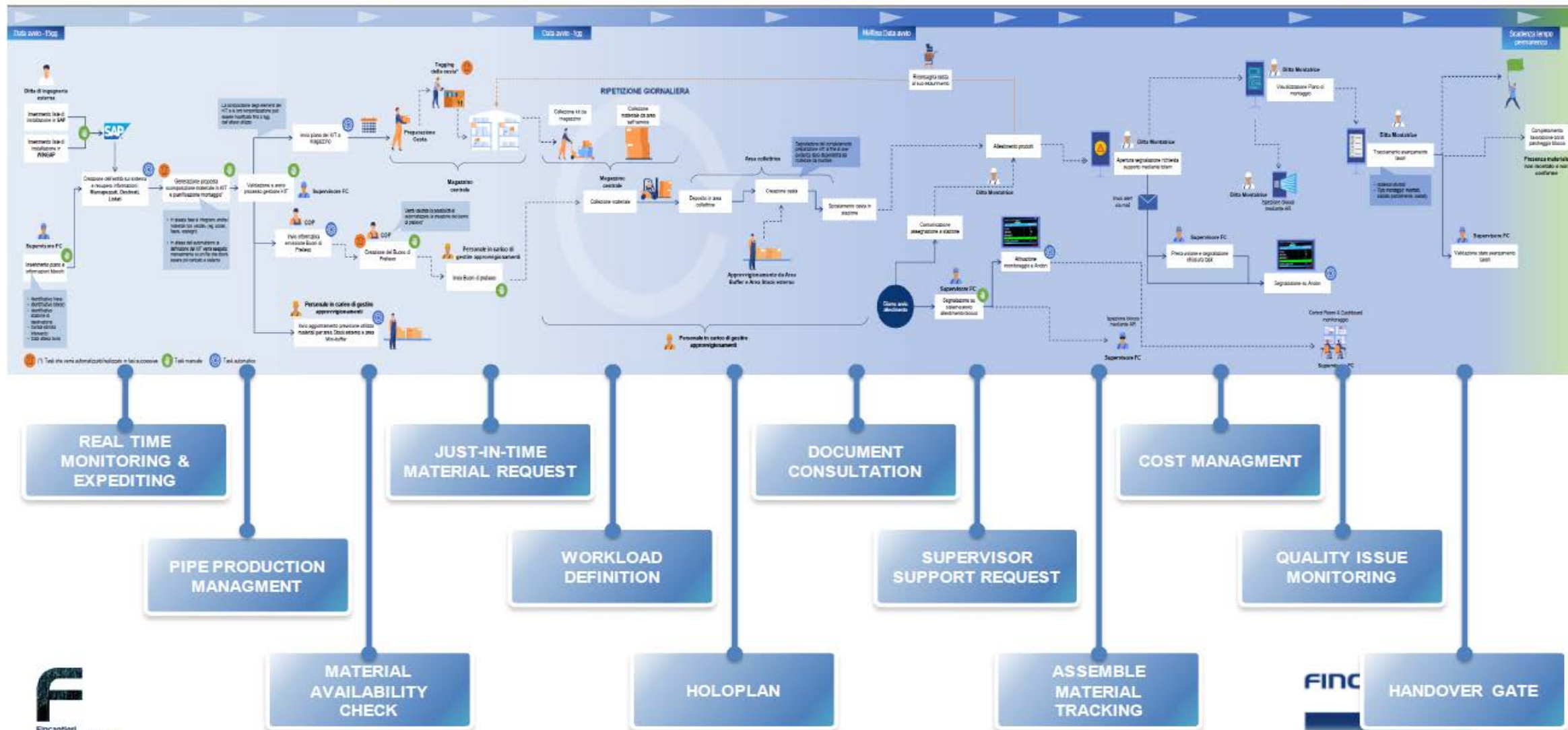
**15 WORKING STATIONS IN  
MONFALCONE SHIPYARD FULLY  
DEDICATED TO THE BLOCK ASSEMBLY  
ACTIVITIES POWERED BY**

- **JUST IN TIME LOGISTIC**
- **HIGH SPECIALIZED WORKFORCE**
- **REAL TIME MONITORING**





# PRODUCTION CONTROL TOWER: MAIN FEATURES

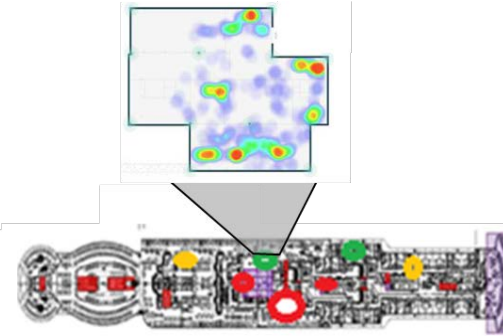


# Fincantieri ShipYard IoT examples:

## Smart Buildings



## Smart Tracking



## Assembly Plant monitoring



## Always CONNECTED Plant



### ONBOARD FULL CONNETTIVITY

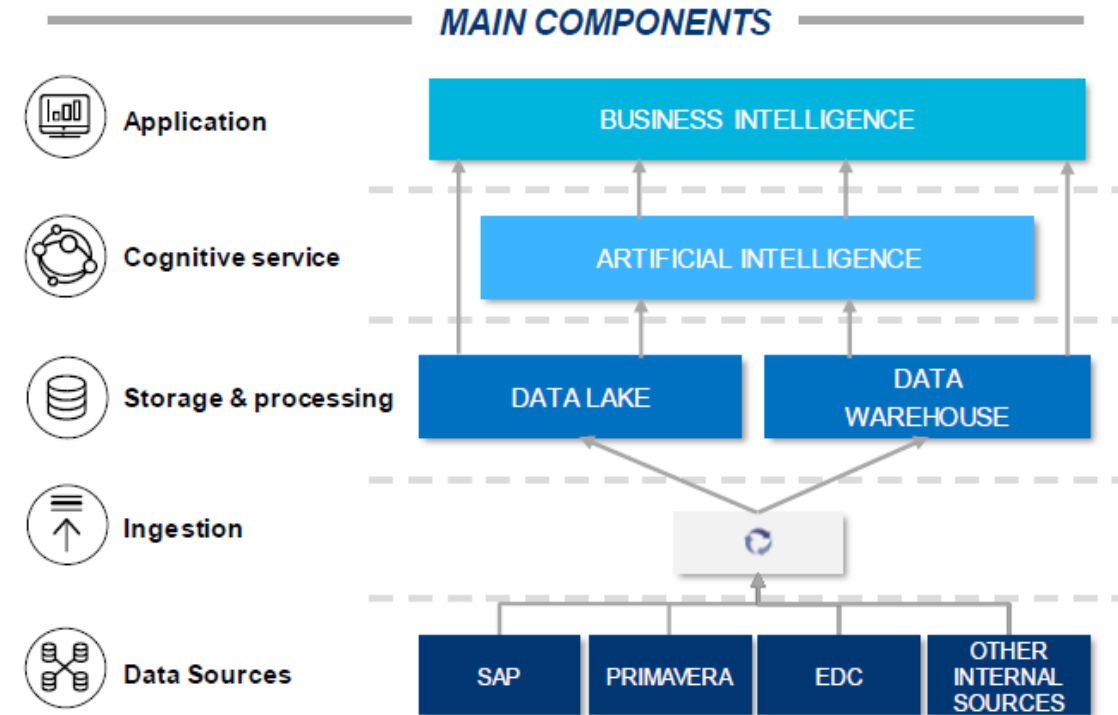
THE ABILITY TO HAVE DATA COVEREGE WILL ENABLE TO DEPLOY OF A WIDE RANGE OF USE CASES (IoT, SECURITY, VoIP COMMUNICATION...)



# INTELLIGENCE PROCESS AUTOMATION



# BUSINESS INTELLIGENCE & ANALYTICS



# AUTONOMOUS MOBILE ROBOT (AMR)

EVALUATION AND TESTING IN REAL ENVIRONMENTS OF NEW ROBOTIC TECHNOLOGIES TO SUPPORT COSTRUCTION ACTIVITIES BOTH IN DANGEROUS AREAS AND LOW VALUE TASKS REPLACEMENT



**SUPPLY CHAIN**

- Inventory consistency check
- Material transportation
- Material picking
- Material sorting

**ENVIRONMENT  
MONITORING**

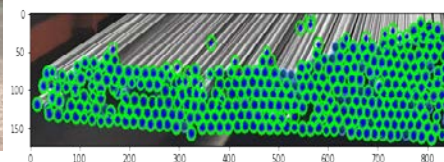
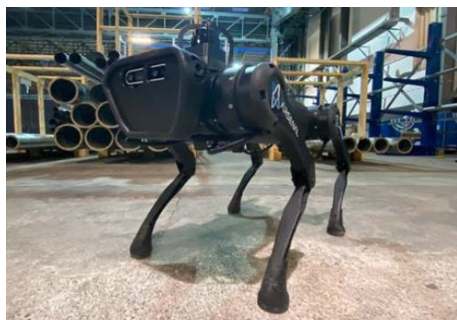
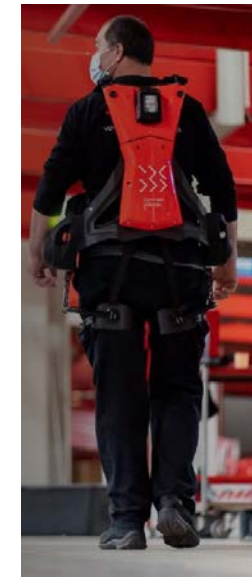
- Air quality monitoring
- Metal presence on the ground

**INSPECTION IN  
DANGEROUS AREAS**

- Inspection in high altitude
- Accessibility check in double bottom and tanks

**CO-BOT**

- Remote control of a robot arm featured with haptic sensors





# THANK YOU

