

Manufacturing Plant Boosts Efficiency with IoT and UWB

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Continental Group Structure

Continental Group

Ontinental

Group Sectors



Automotive Technologies



Rubber Technologies



Powertrain Technologies

Business Areas

Autonomous Mobility and Safety (AMS) Vehicle Networking and Information (VNI)

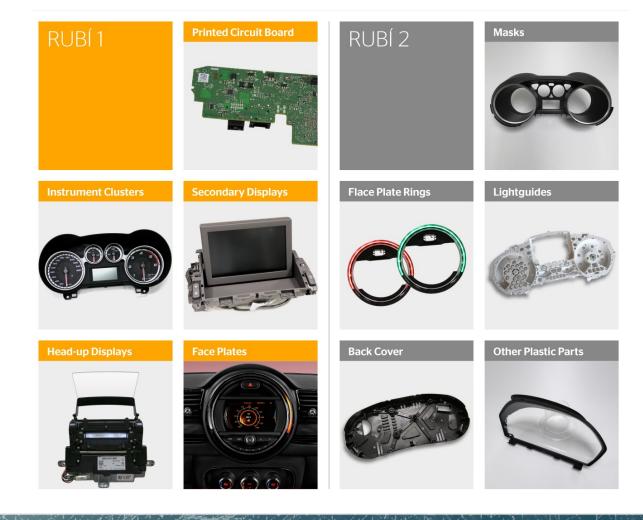
Tires

ContiTech

Vitesco Technologies



Continental – Rubí Plant

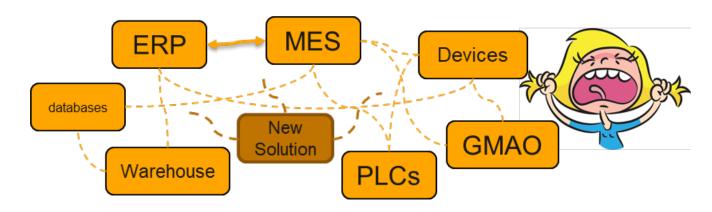






Innovation approach Which are our pains doing projects

 Usually a new projects is done with new partners. This leads to repeat efforts to interface segregated systems again and again



 Once solution is finished, customer needs have changed (or will change) and the project needs a new development in order to adapt to the new scenario



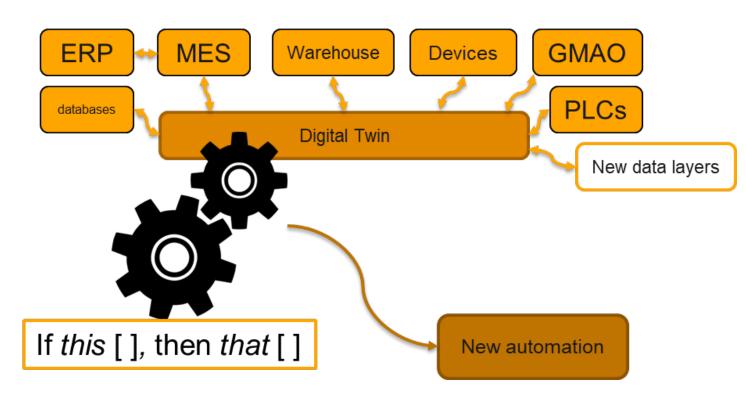




Digital Twin Focused on solving our pains once and for all

 Defined as an open platform to gather all possible data layers from our business

 Including a user-friendly Rules Engine that will enable our process owners to deploy their own automations







Digital twin and Industrial Internet of Things (IIoT) platform **4ACTION**

Solution for the integration of IT-OT-EMPLOYED data, real time event detection based on these data and configurable rules, and finally launching defined actions for them

- > CONNECTS all assets and integrates all IT, OT and employee data into one platform
- > DEFINES the key events in the process that require an automatic response from the system
- > Easily CONFIGURES the system responses to these events in the 4ACTION rule engine
- > ANALYZES both historical and real-time data to make the correct decision
- MANAGES, establishing priorities that optimize the work by the teams and the efficiency of the resources

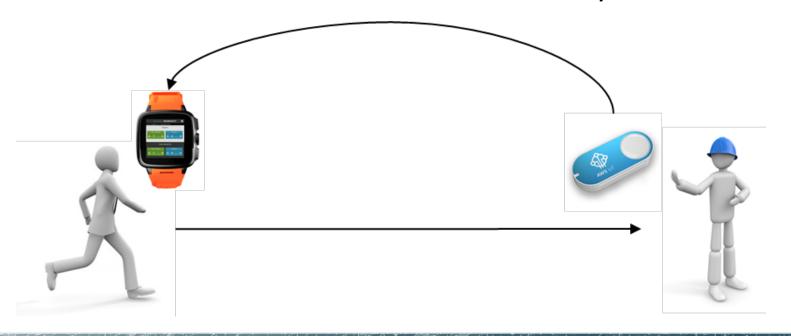






Digital Twin Ok, sounds nice... some examples, please

- Task request button
 - Wearables and AWS IoT Button data layers added



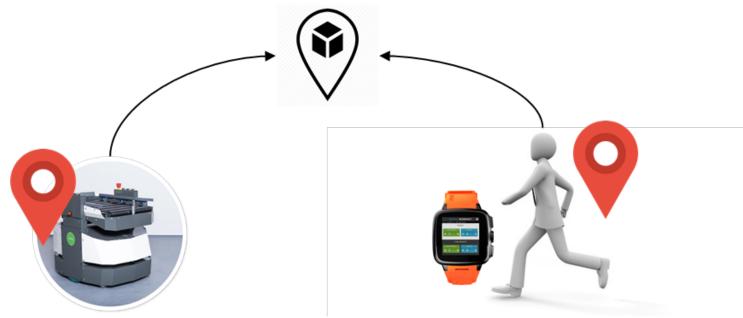
- Fast deployment, not meant for long term use (battery)
- Lots of operator minutes saved



Digital Twin That was easy, something cooler?

• Logistic operator and Logistic shuttles syncronization

UWB Geolocation and ERP data layers added





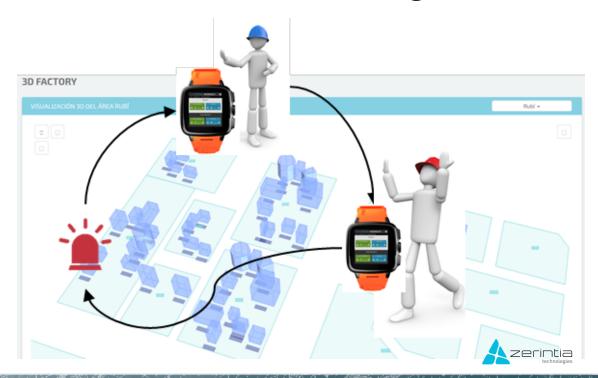
- Lots of operator and machine minutes saved
- Lack of material stops dramatically reduced





Digital Twin Wow, something else?

Maintenance Incident Management



- Management based on production priorities, incident severity and techinician expertise
- > Terrific KPIs to improve maintenance,



Main challenge?

Not technology, once you find the right support

People's acceptance





How to deal with it?

- The tools needed to deal with it are quite old
 - Communication, feedback, empathy, trust, acknowledgement, transparency...

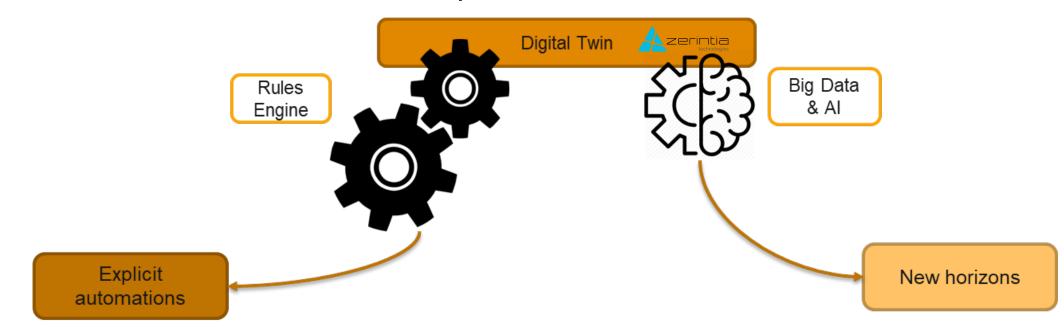
 Include all actors from the beggining and empower them to build their own automations with the system





Digital Twin What comes next?

• With lots of data on the same place, makes sense to use it





Takeaway #1 Avoid FOMO

FC·MO Fear of Missing Out





Takeaway #2 Start with simple concepts







Takeaway #3 Take people into account from the beggining







