
Achieving Success in the VUCA world

Embracing the Potential
of
Cyber Physical Intelligence

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What we are used to...

Operators and partly automated Machines



Mechanized Operations

Improved productivity over Manual operations

Vital Process parameter control

Quality can not be predicted

Data Analysis is not a key skill set

Safety standards are soft

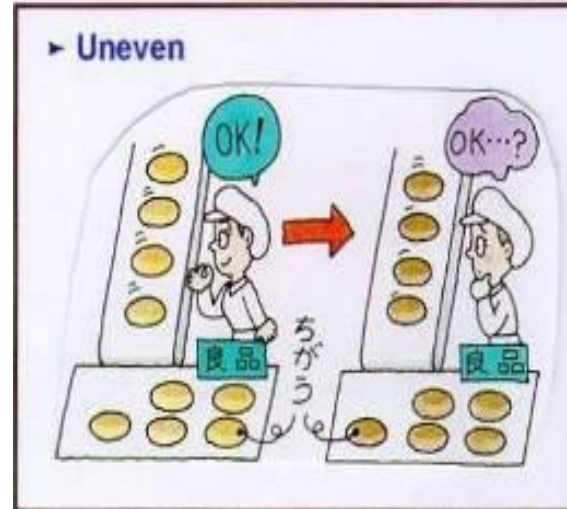


What we have to be conscious about...

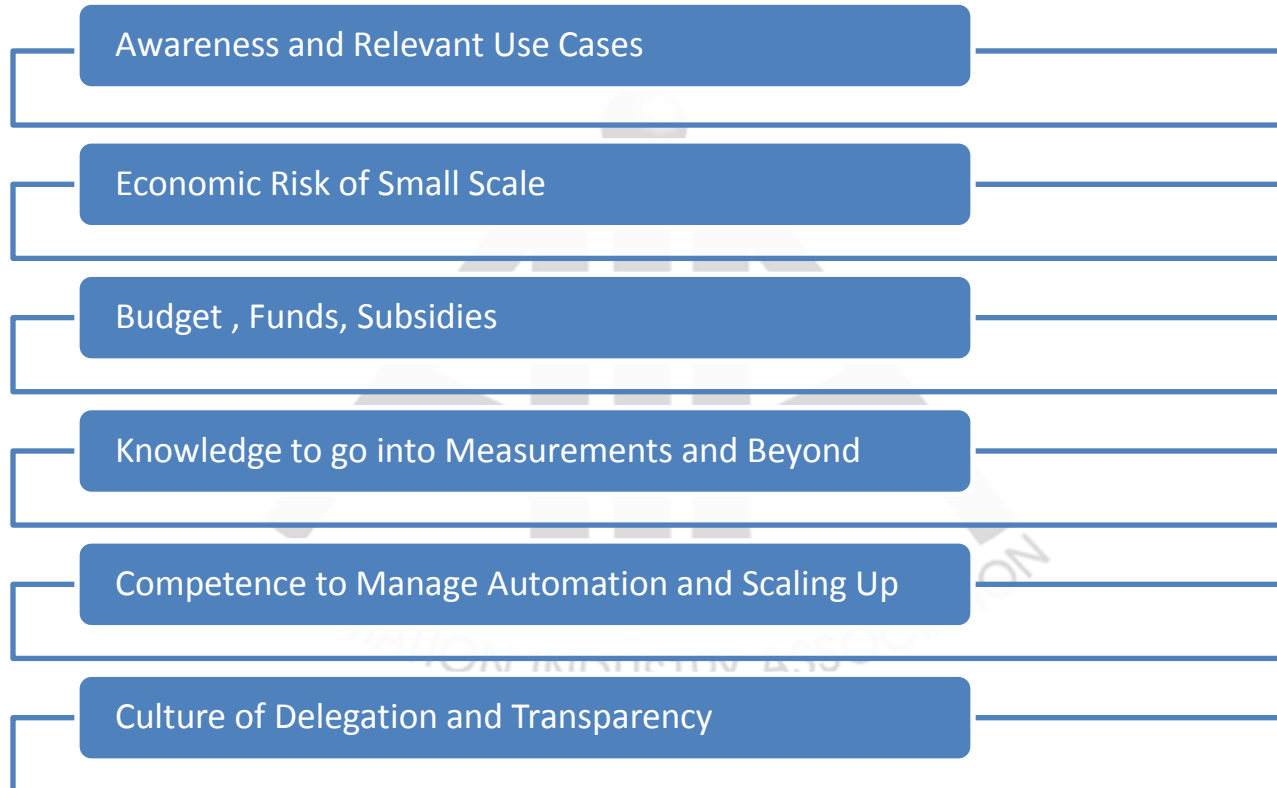
- GDP per person hour worked in India is about **1/5th of Germany**
 - Means we are doing the lowest end jobs
 - And that too, most inefficiently
- “The world is dangerously open”. Innovators and R&D teams need to be mindful of **technology obsolescence**.
- High technology execution demands having smooth control of parameters like
 - Throughput
 - Quality
 - Consistency
 - Predictability
 - Rate of improvement of above
 - **Getting everything RIGHT faster than before**



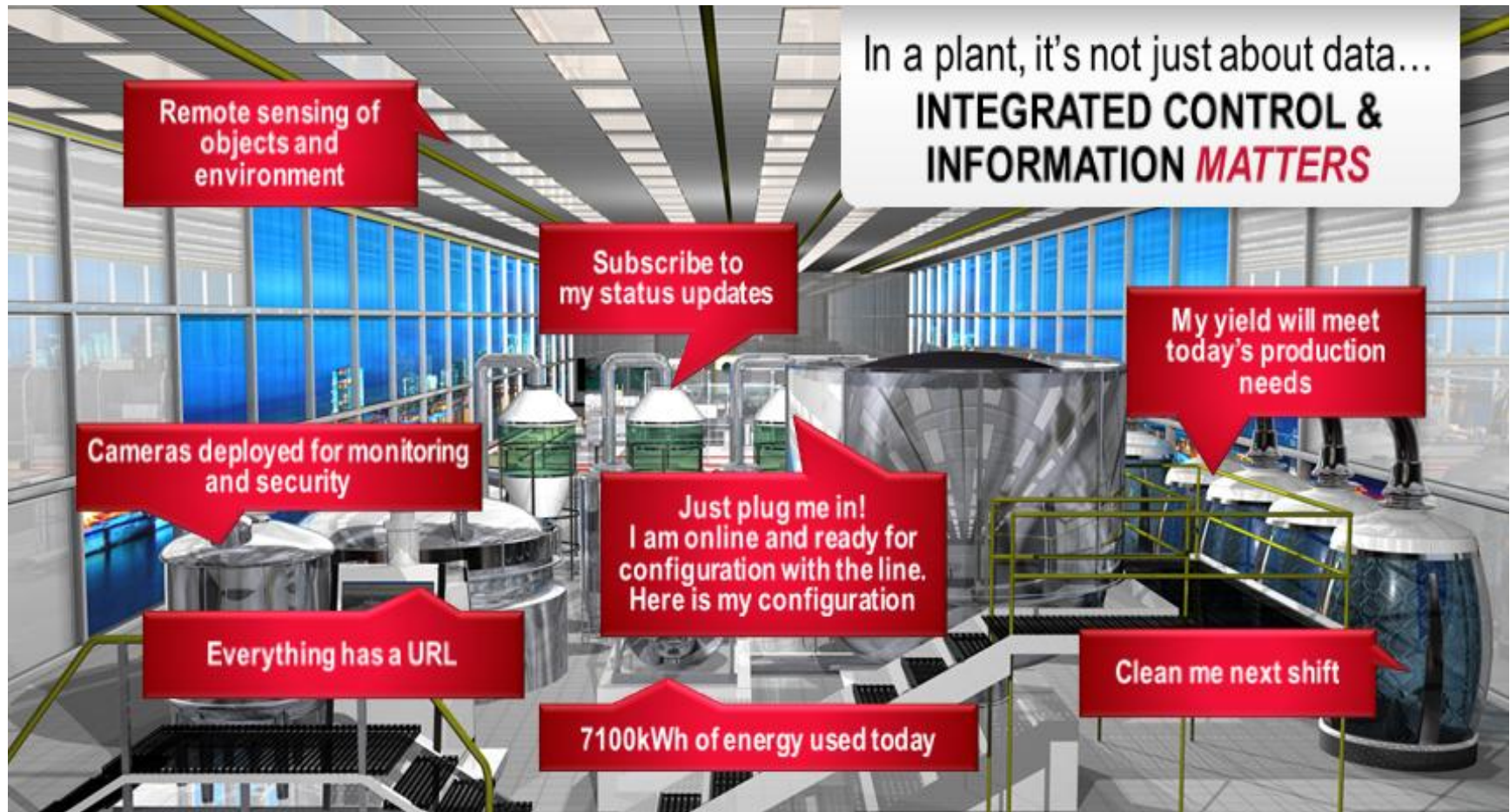
Future of low wage is UNCERTAIN



COMPLEX Challenges



Winners Embrace Smart Ways



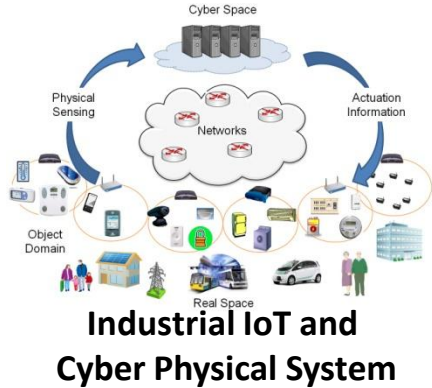
It is a DIFFERENT TERRAIN

- [VIDEO 1](#)
- [VIDEO 2](#)

The NEW GAME is very aspirational and requires new competencies



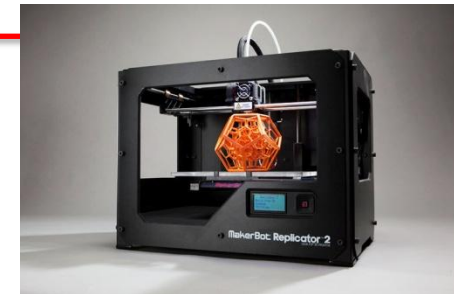
Interplay of Technologies



Collaborative Robots



Smart Sensors, Actuators & Controllers



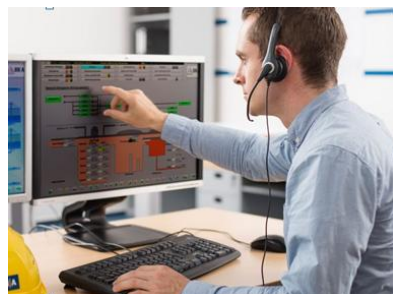
Rapid Prototyping and Tooling



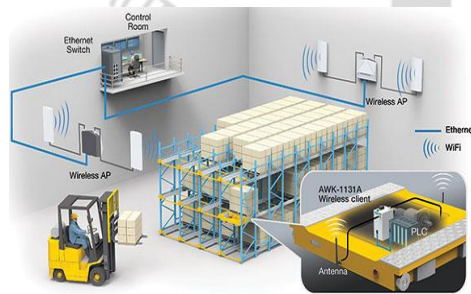
Augmented Reality



Advance Simulation, Digital Twin



Remote Maintenance



Wireless Instrumentation



Cyber Security, Mobility

Connect and Collaborate



The CEFC at FSM supports and facilitates
Users, Digital Business Architects, Digital
Manufacturing Integrators & Master Trainers

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