



Path to a Digital Future

Ken XU | Moovintech Automation
16th, Apr. 2024
HKSSMA Seminar



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01 / INTRODUCTION

ABOUT Us



Ken XU | Managing Director
Co-Founder

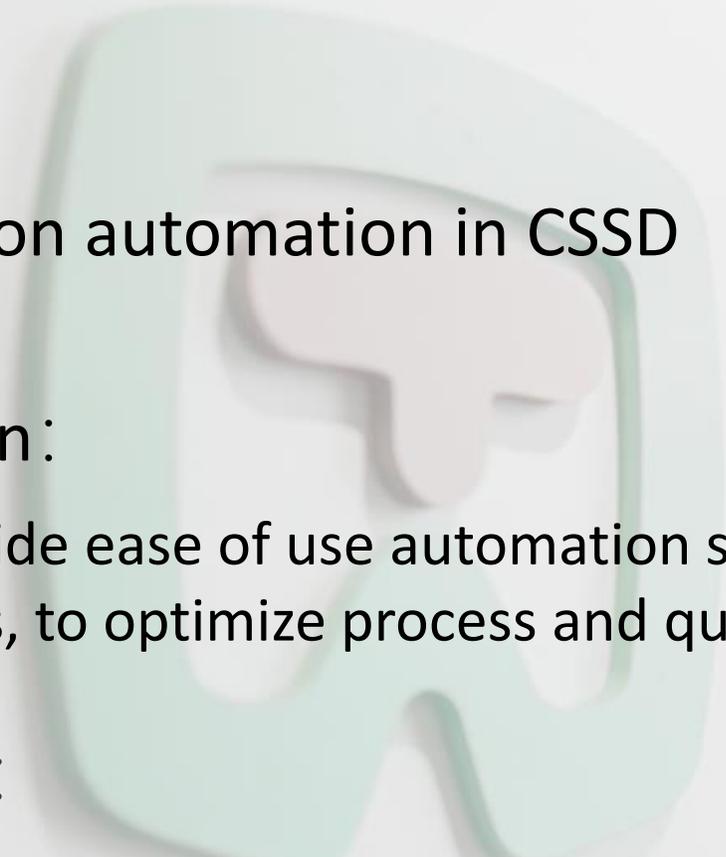
- ◆ Focus on automation in CSSD

- ◆ Mission:

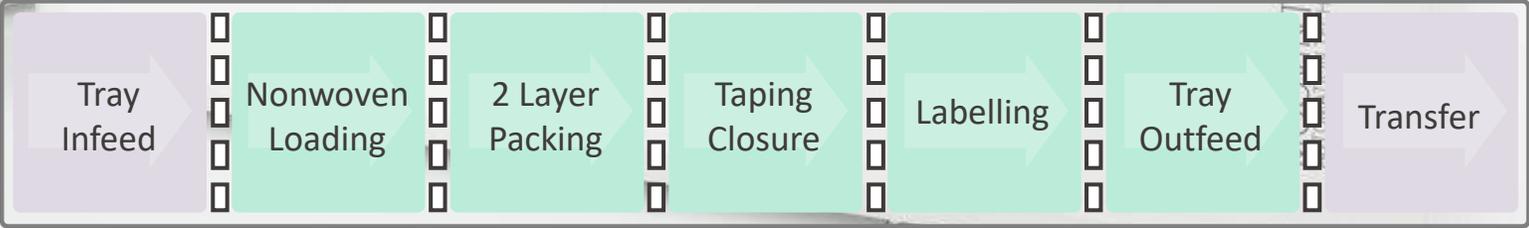
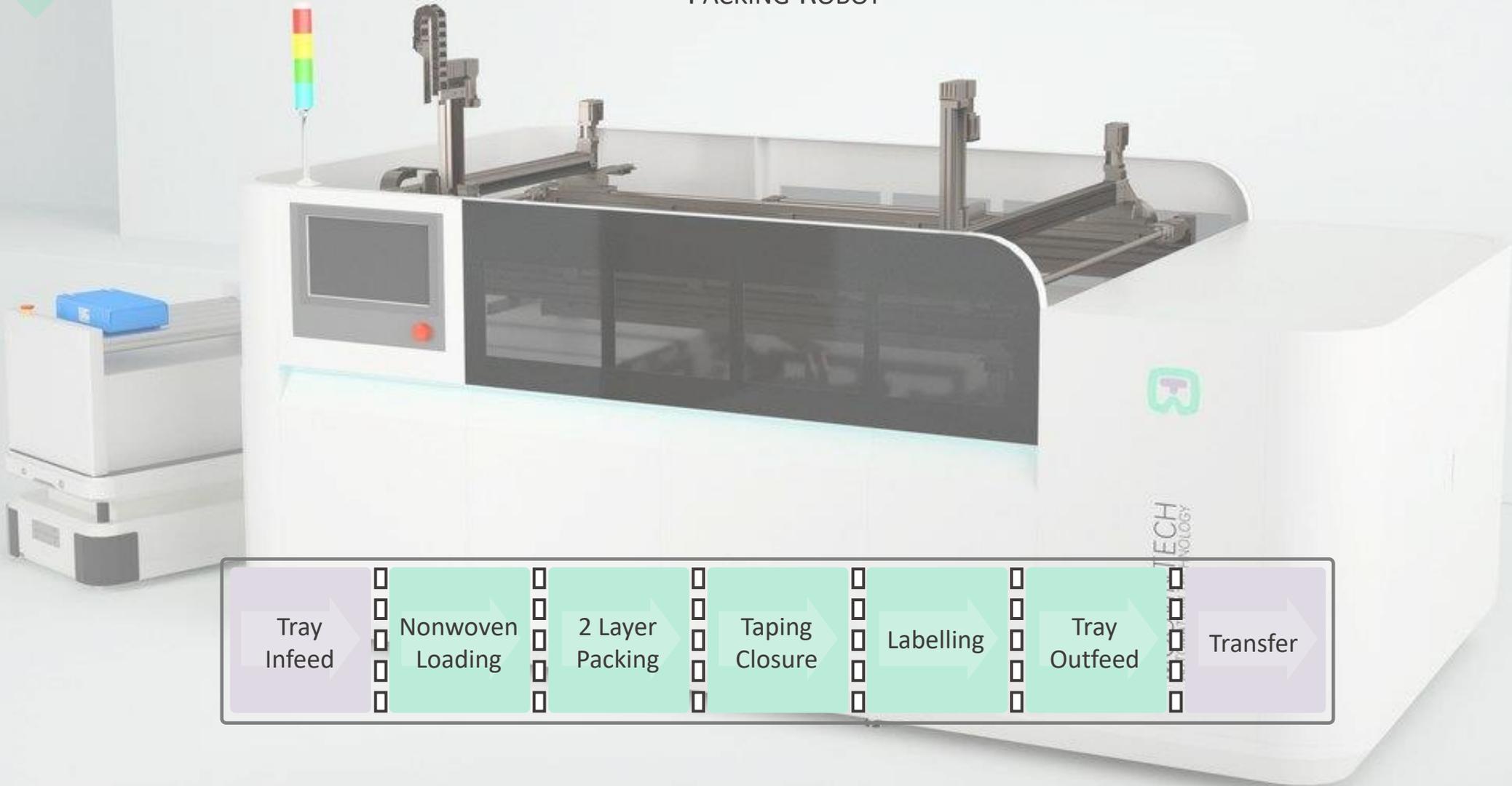
To provide ease of use automation solutions, robots and intralogistics systems, to optimize process and quality.

- ◆ Vision:

Build a smart CSSD with customers



PACKING ROBOT



PRODUCTION ENVIRONMENT



Ken XU



Bachelor's Degree, Mechanical Design & Manufacturing and Automation
China Agricultural University



Master Degree, Master of Business Administration
Tongji University



Master Degree, Master of Business Administration
Mannheim Business School

WORK EXPERIENCE



 Packaging Material



 Food and Medical Packaging



 Line Integration & Robotics

02 / DIGITALIZATION



Digitalization is to accomplish something with the benefit of digital tools.



Sounds simple enough, right?
Let's fix that



Plans require a who, what, when, where, and how.

A digital strategy is a plan to accomplish something with the benefit of digital tools.



A digital strategy is a plan to
accomplish something with
the benefit of digital tools.

An objective has to be **measurable** and **actionable**.



A digital strategy is a plan to accomplish something with the benefit of digital tools.



What is **digital** and what are the **benefits**, exactly?



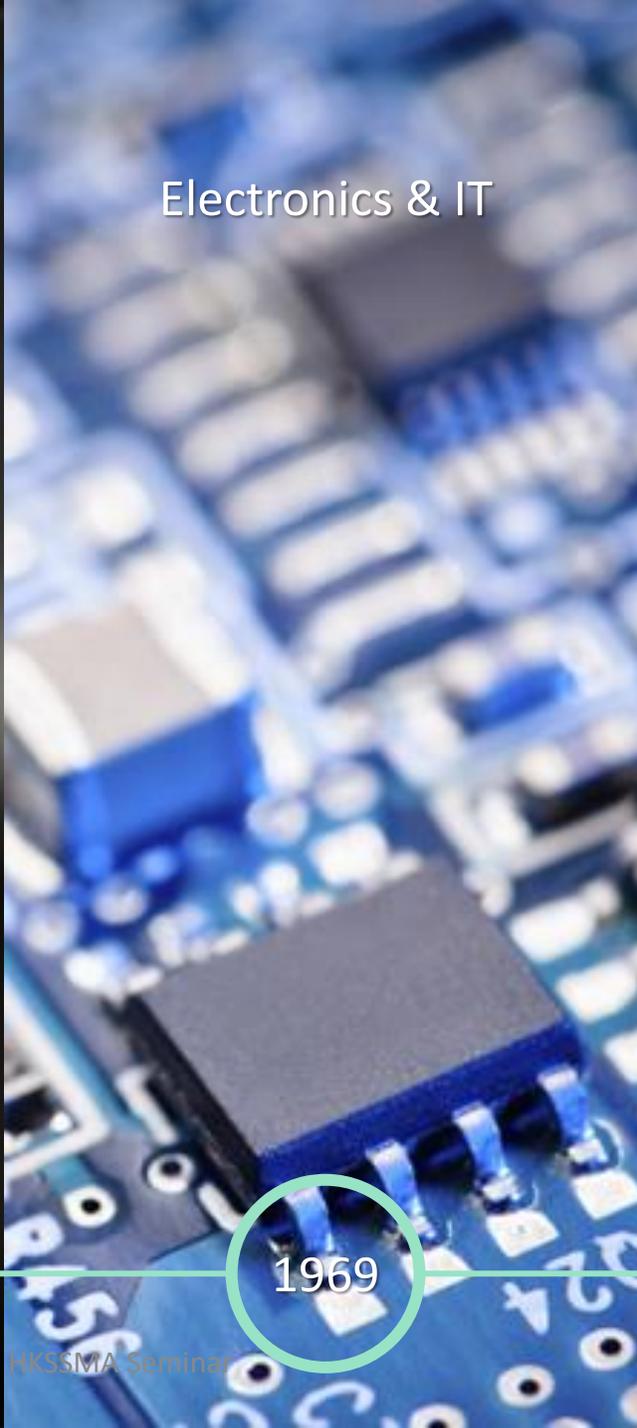
Steam

1764



Electricity

1870



Electronics & IT

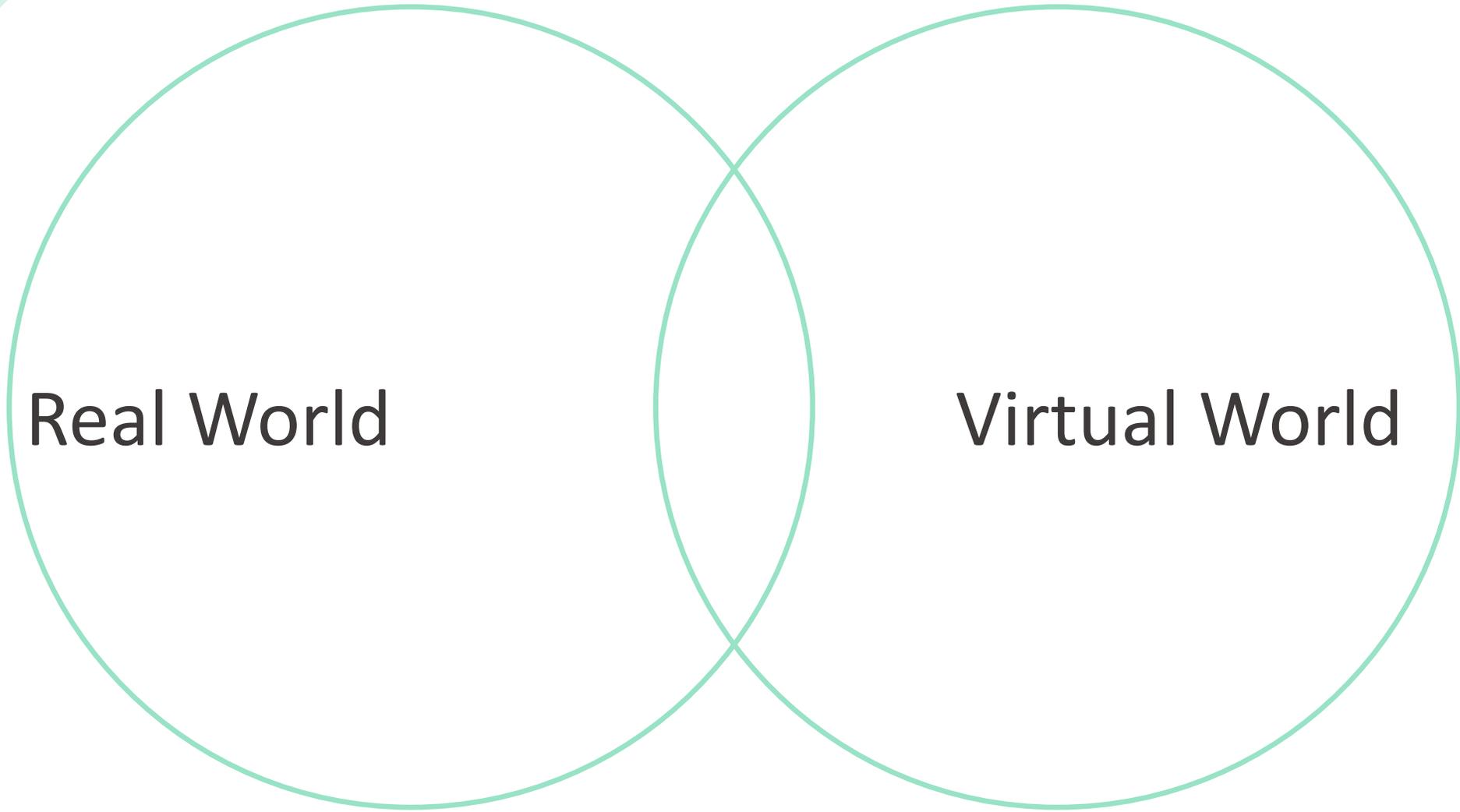
1969

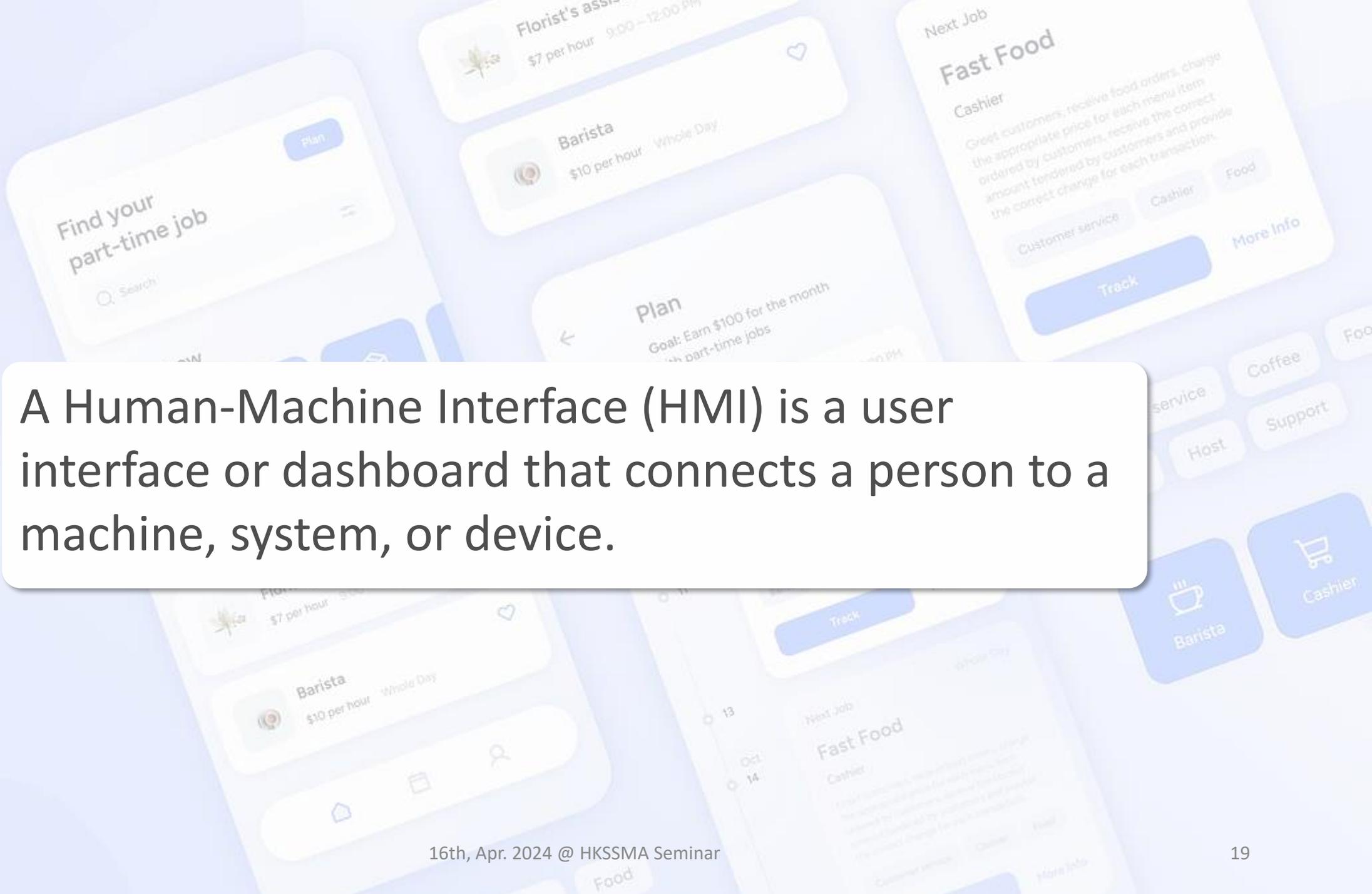


Digital

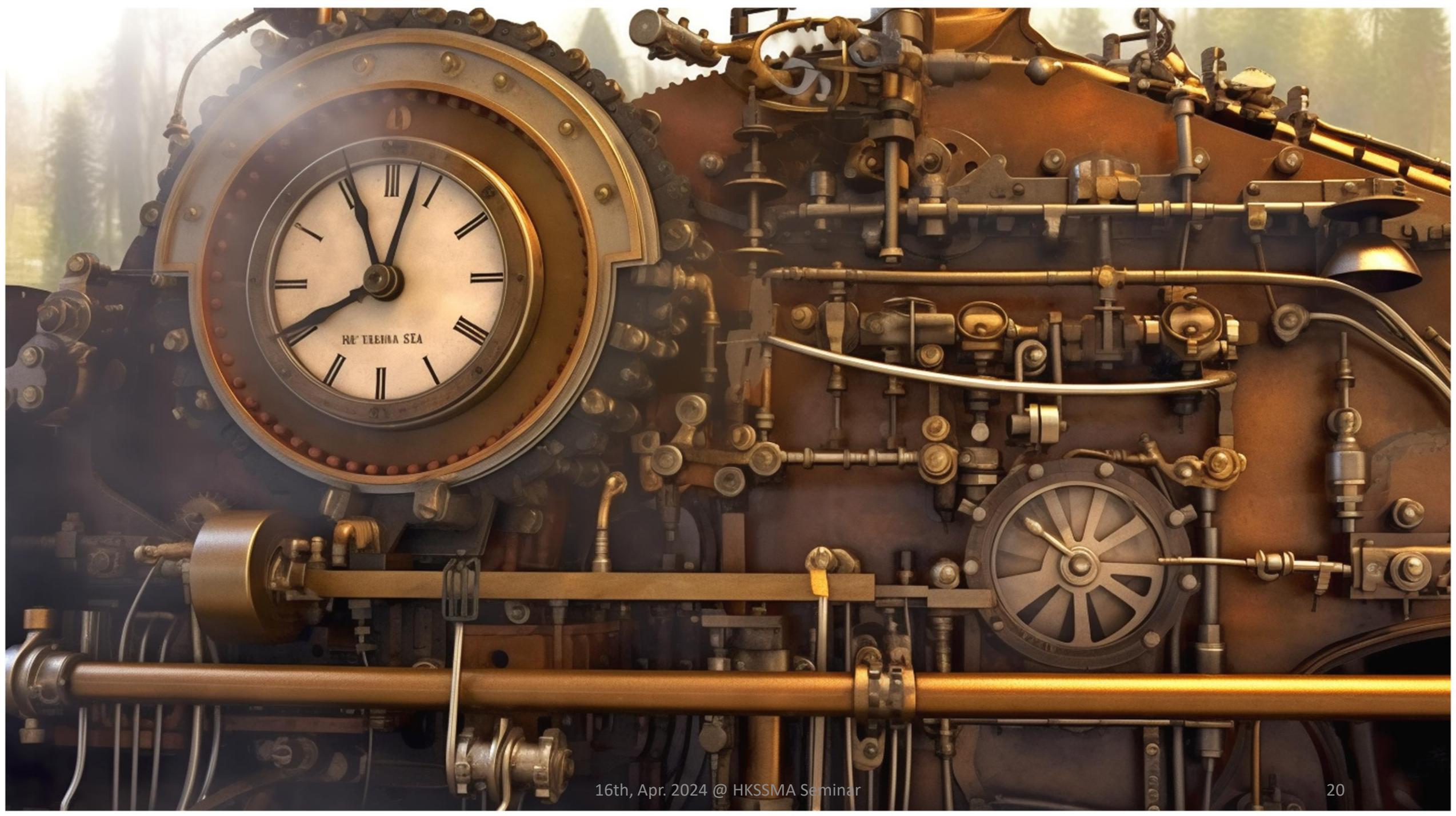
2016

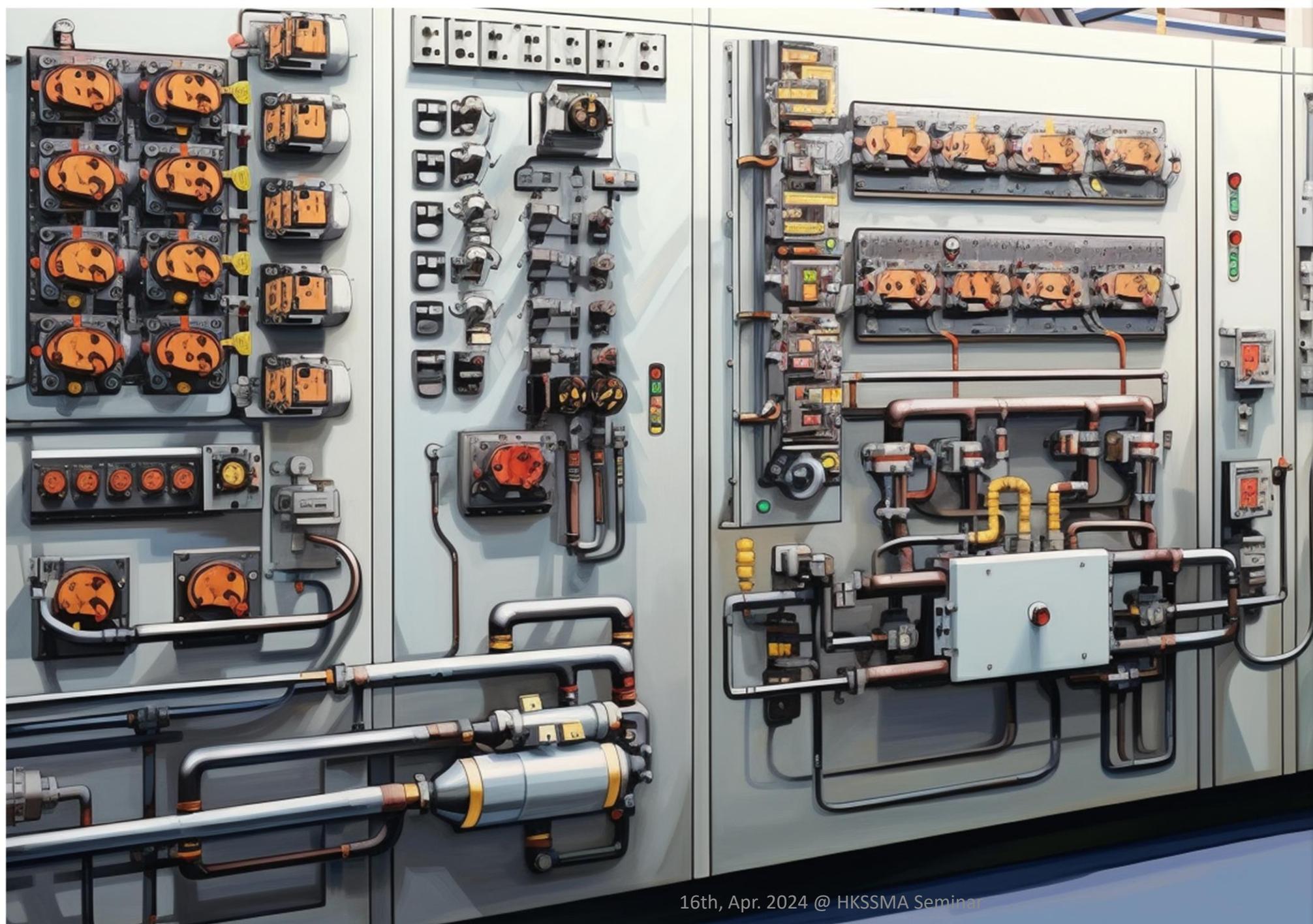






A Human-Machine Interface (HMI) is a user interface or dashboard that connects a person to a machine, system, or device.



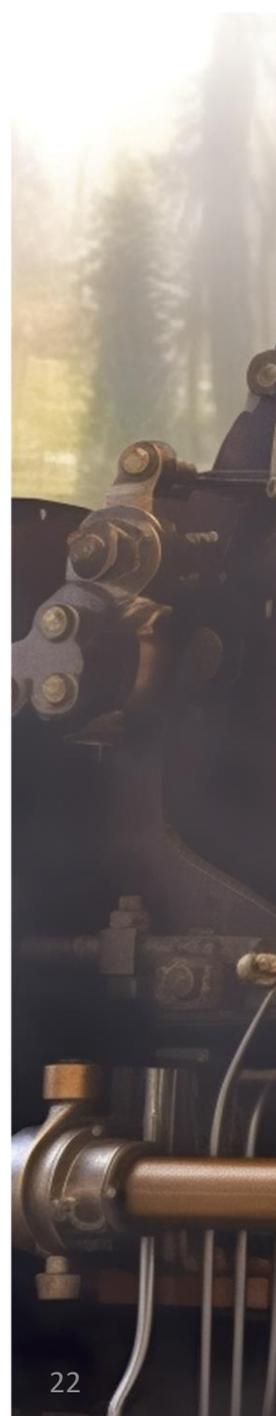


16th, Apr. 2024 @ HKSSMA Seminar





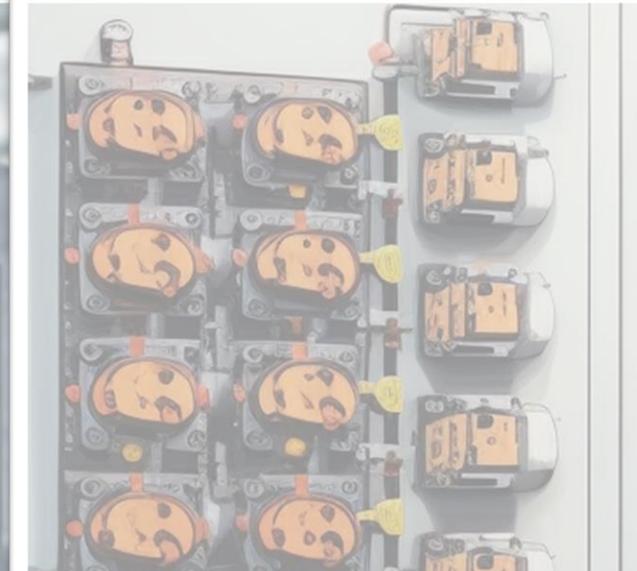
16th, Apr. 2024 @ HKSSMA Seminar



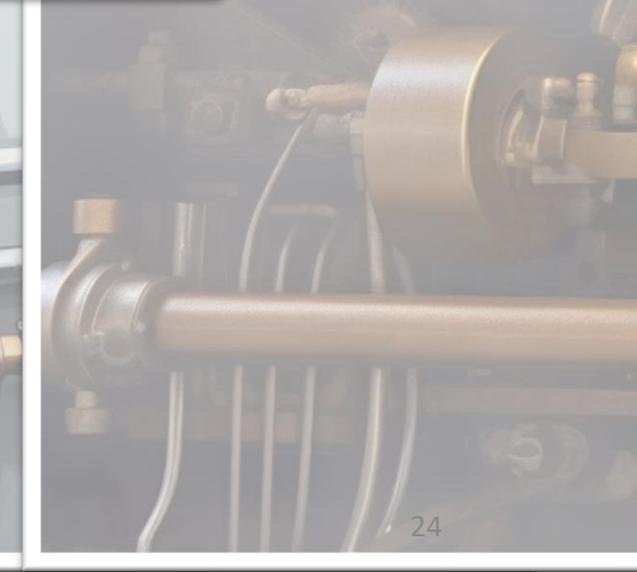


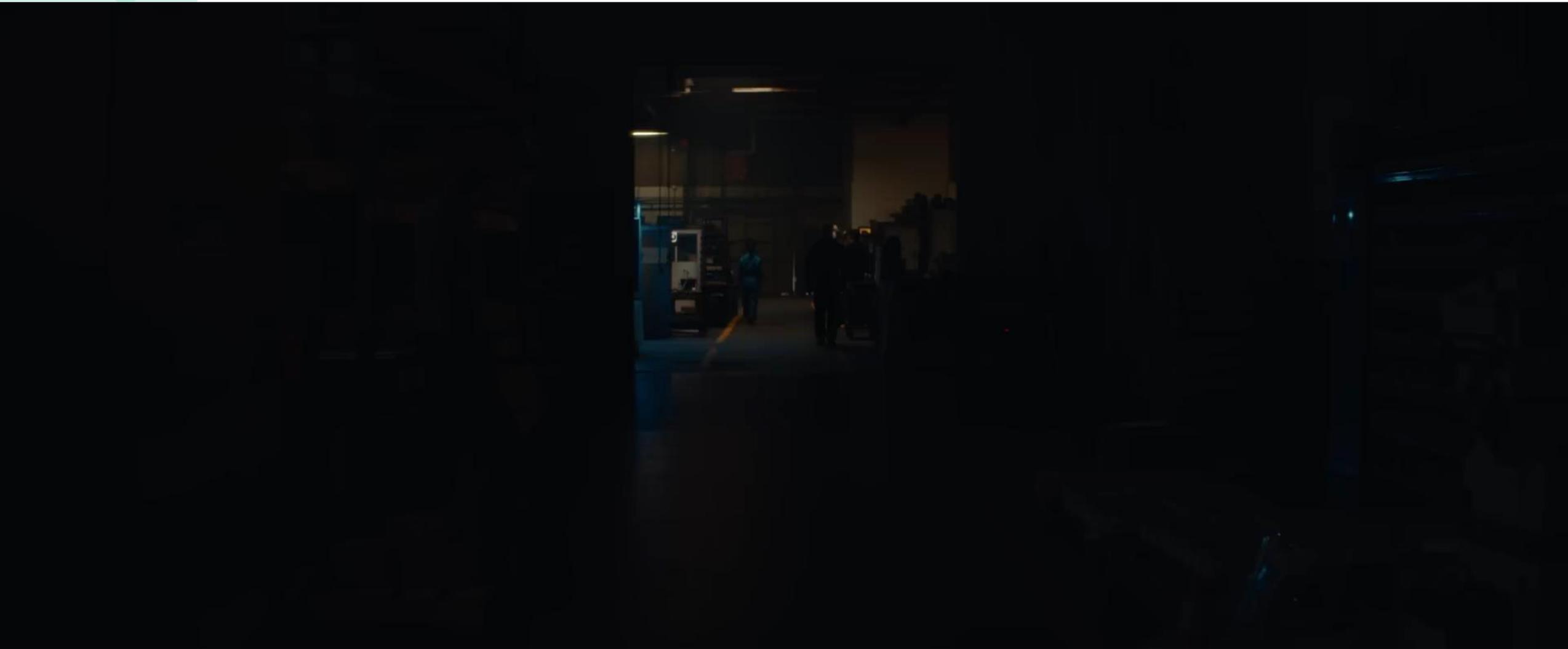
10th, Apr. 2024 @ HCSSMA Seminar



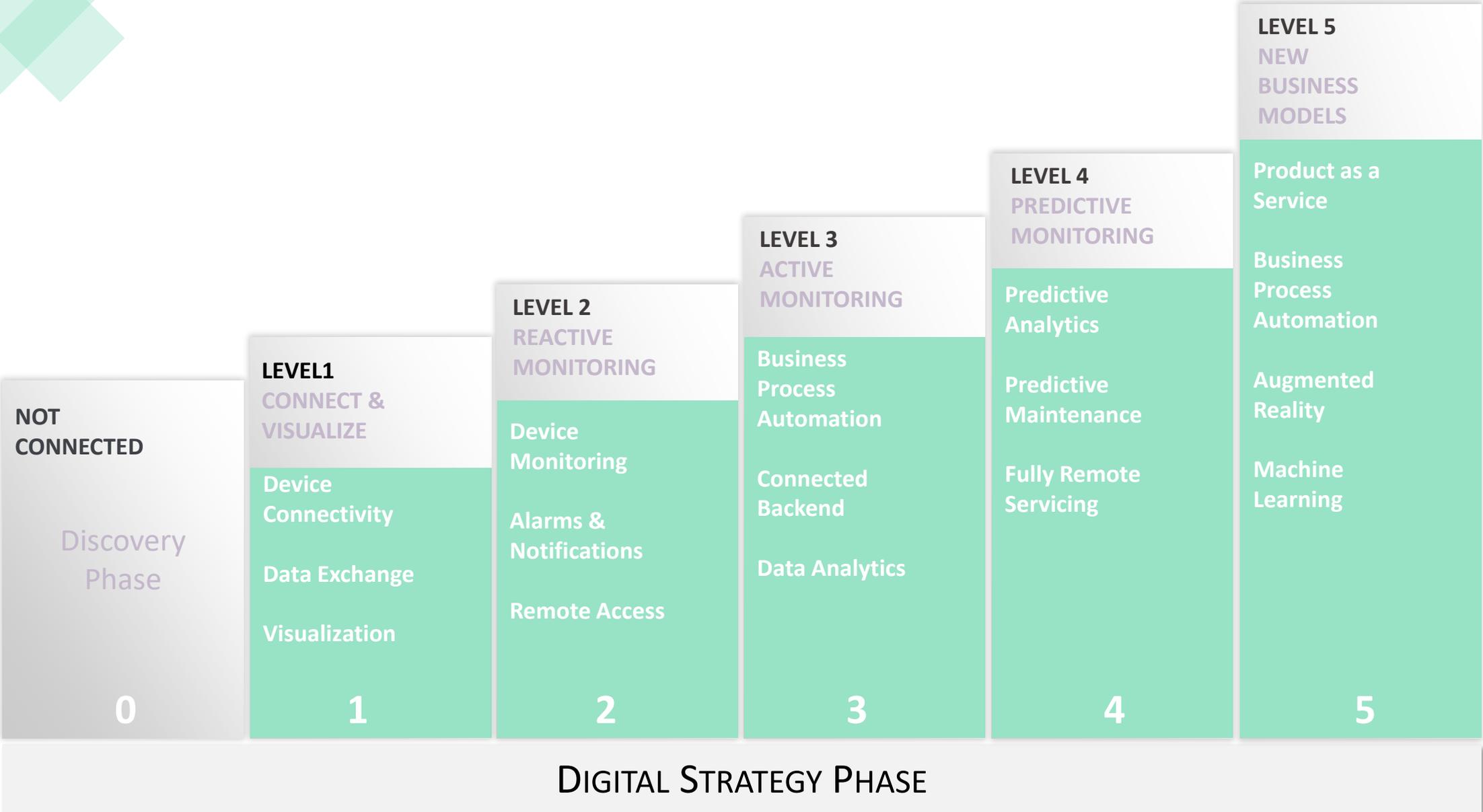


The overall direction is more functionality, versatility and fluid.





DIGITAL STRATEGY



DIGITAL STRATEGY PHASE

Using **analytic intelligence** to create a virtuous loop that delivers **continuous improvements** to services for other departments.

This enables CSSD to rapidly refactor operations, improve existing offerings, bring new **data-driven services**.

03 / WHY DIGITALIZATION

CHALLENGES

- Labor shortage
- Physical strain
- Errors
- Inefficiency
- Lack of traceability
- Waste

WASTE OF IN PROCESS



Motion



Transport



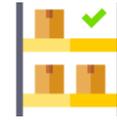
Waiting



Extra
Processing



Over-
Production



Inventory



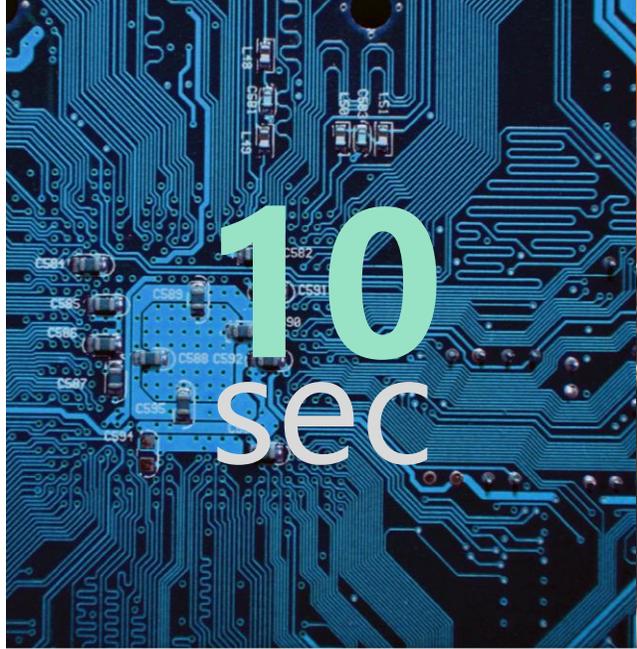
Defect



BENEFITS

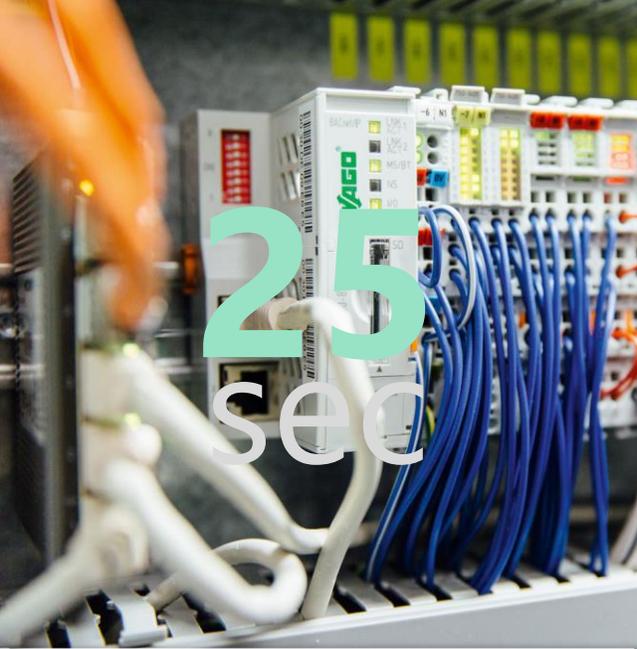
- Improved resource utilization
- Streamlined production processes
- Increased production consistency
- Reduced downtime
- Enhanced quality control
- Increased scalability
- Improved machinery and plant maintenance
- Improved safety
- Increased flexibility
- Enhance service quality

TOTAL TIME



10
sec

Reading Diagram



25
sec

Wiring



0.5
sec

Cutting



0.5
sec

Stripping



1
sec

Crimping



TOTAL TIME

10
sec

25
sec

0.5
sec

0.5
sec

1
sec

TOTAL TIME

19.25
hours

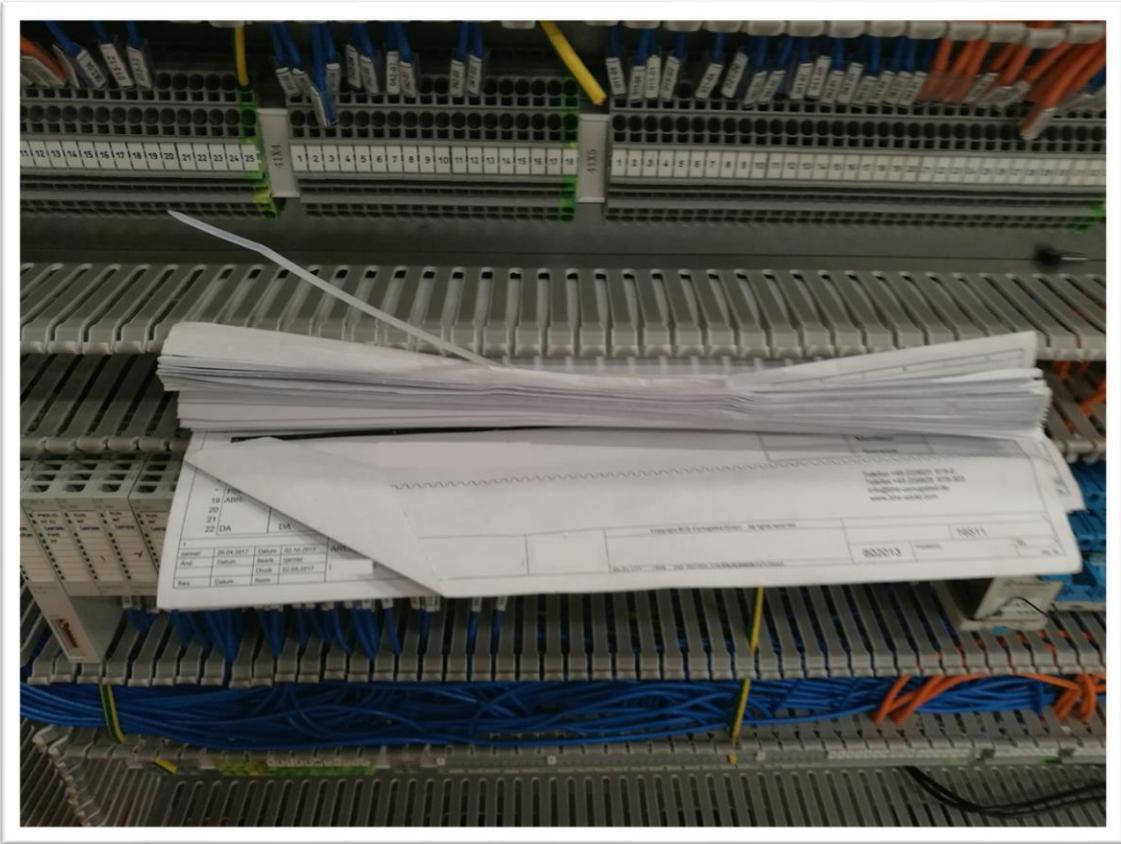
TOTAL TIME

3.3
hours

A nighttime photograph of a city street with light trails from cars. The scene is illuminated by city lights and building lights. A white rounded rectangle is overlaid in the center, containing the text '6X Faster'.

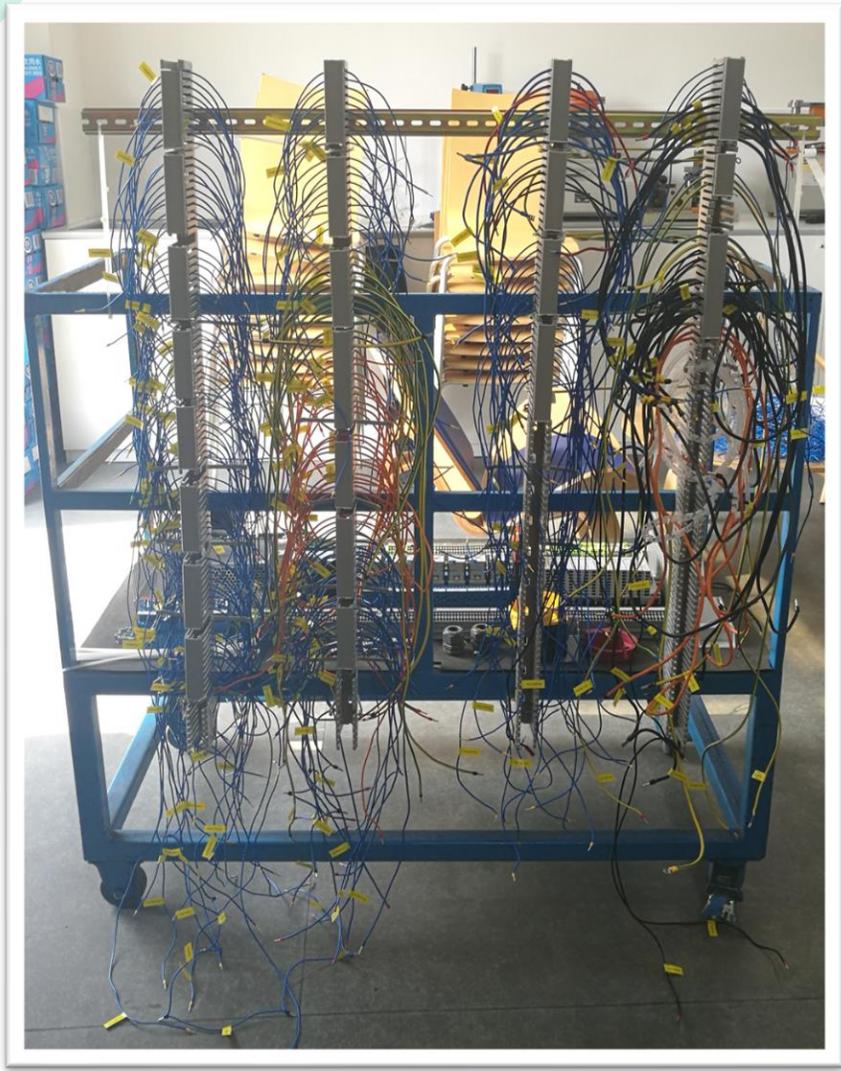
6X Faster

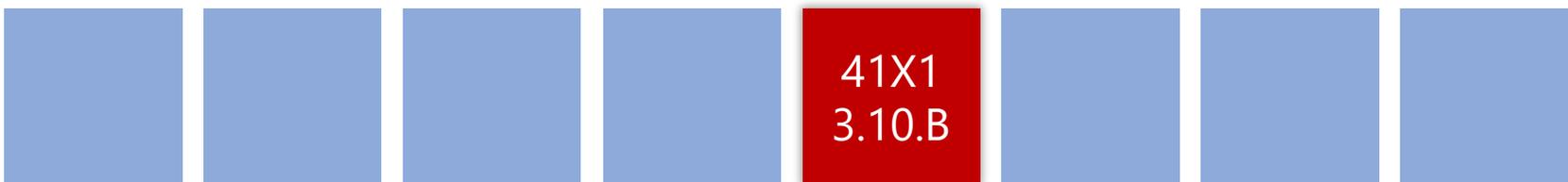
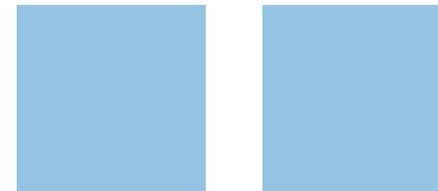
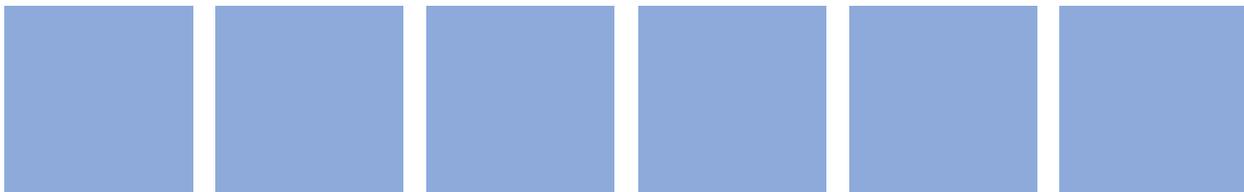
BEFORE





AFTER

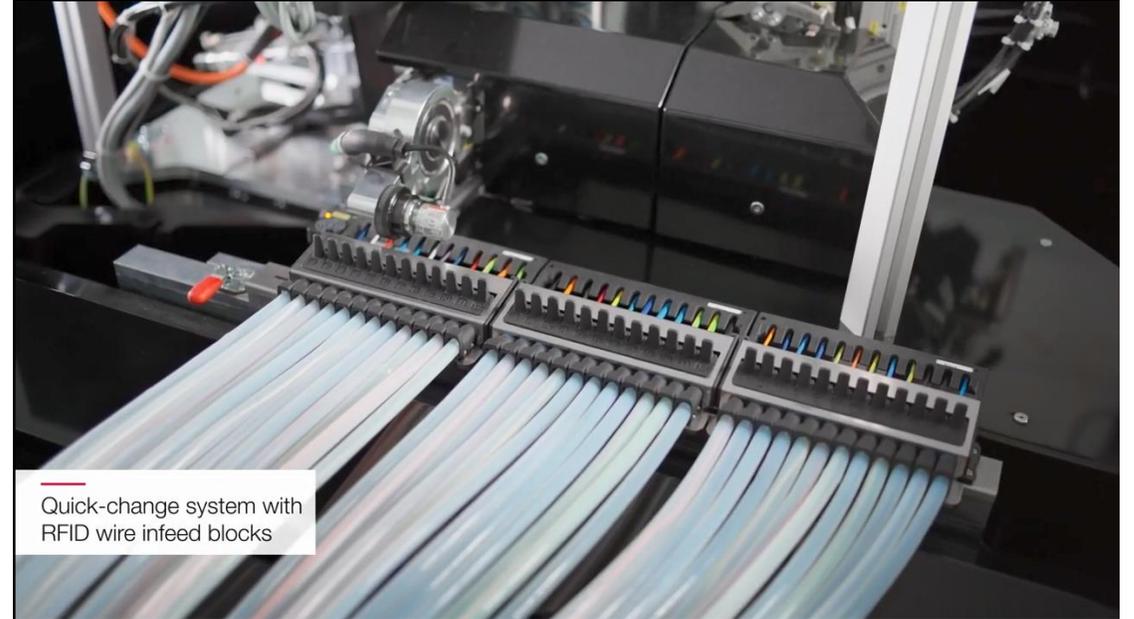




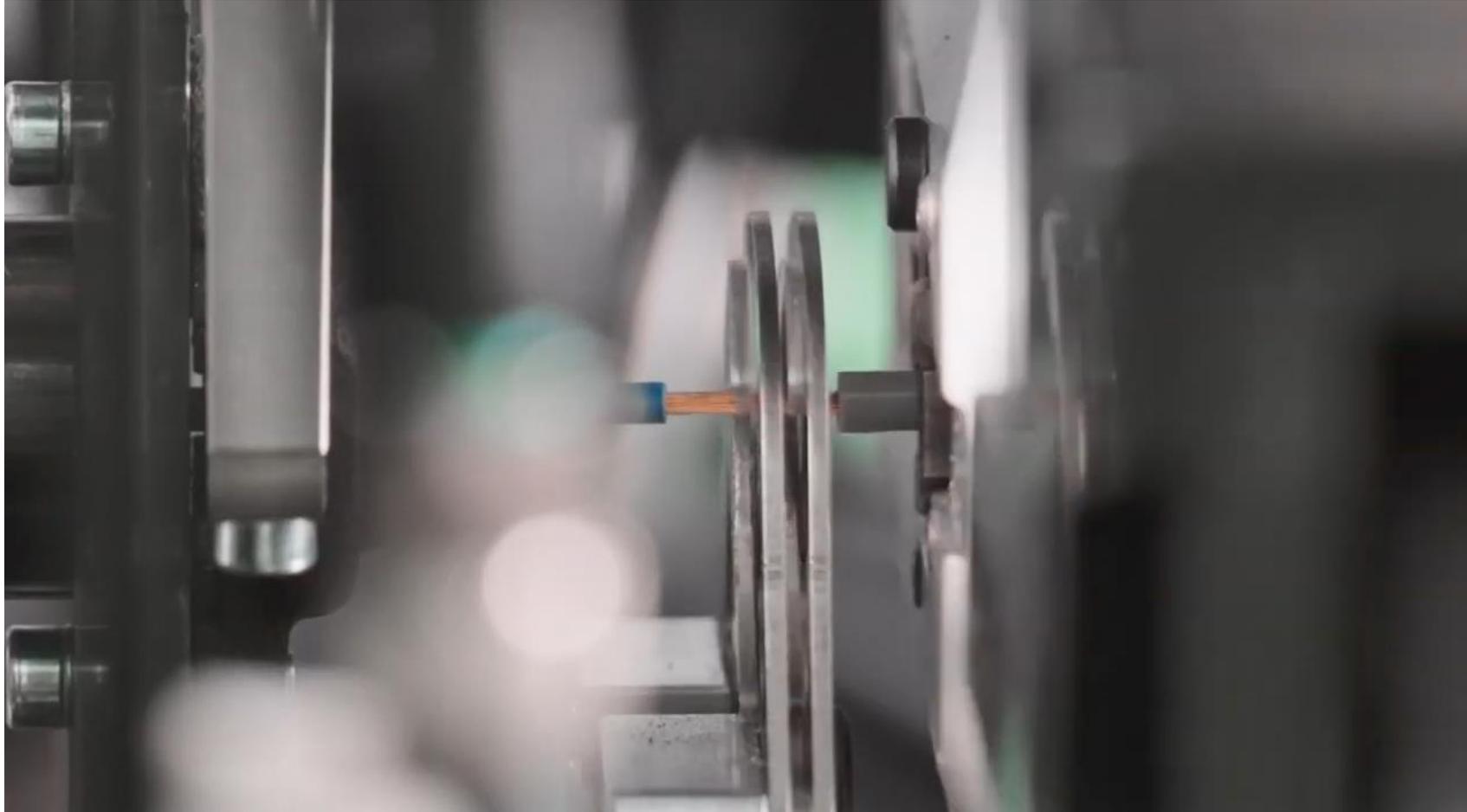
Wire Terminal WT C

Fully automated
wire processing machine





Quick-change system with RFID wire infeed blocks







a fully automated process with real-time production and process monitoring, using software systems keep production running with minimum human supervision.

04 / ASK THE RIGHT QUESTION

It is a basic proposition or assumption that cannot be deduced from any other proposition or assumption.

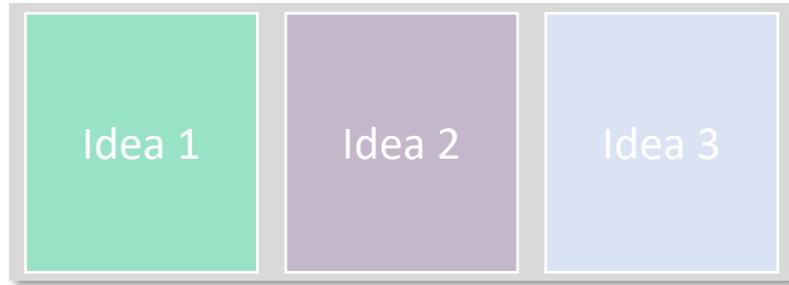
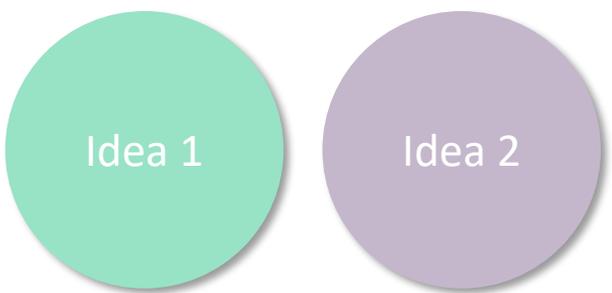
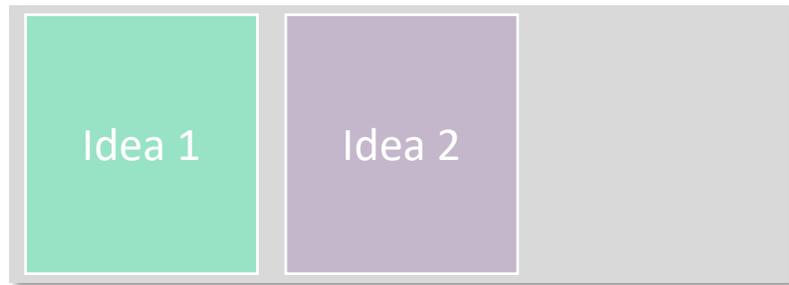
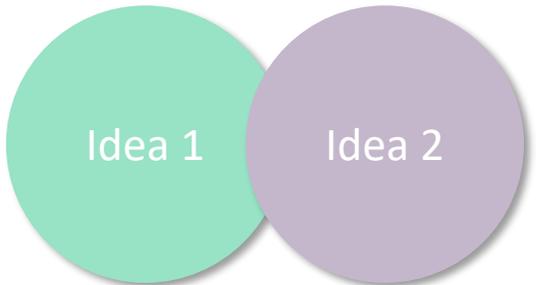
EXAMPLE - SPACE SUITE FOR APOLLO 11

- Maintaining enough pressure to keep body fluids in a liquid state
- Providing oxygen and removing carbon dioxide
- Keeping a comfortable temperature
- Ensuring flexibility for all human joints
- Allowing finger mobility to handle tools
- Protecting against meteor dust
- Avoiding flammable materials
- Minimizing suit weight





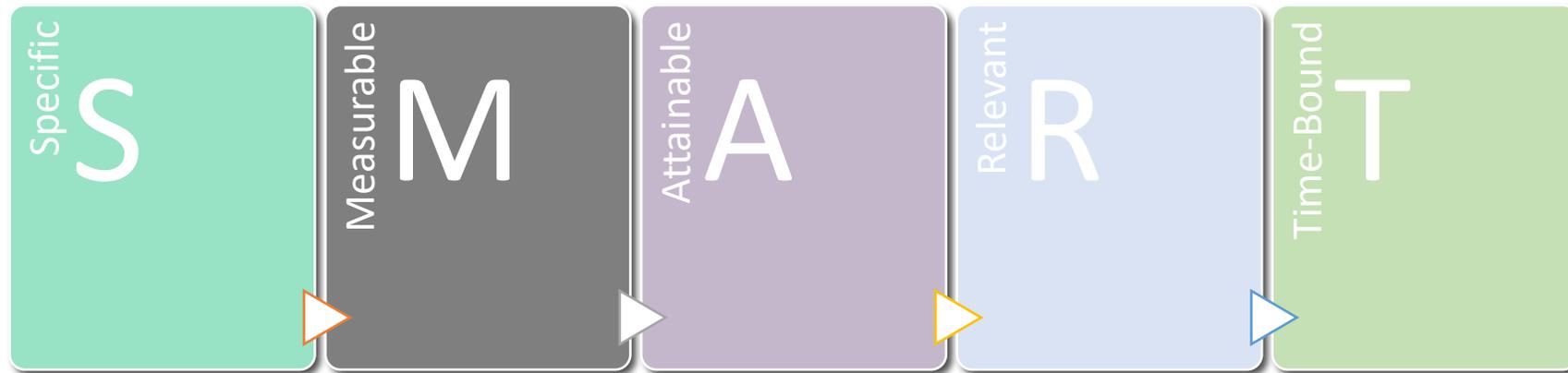
Mutually Exclusive Collectively Exhaustive



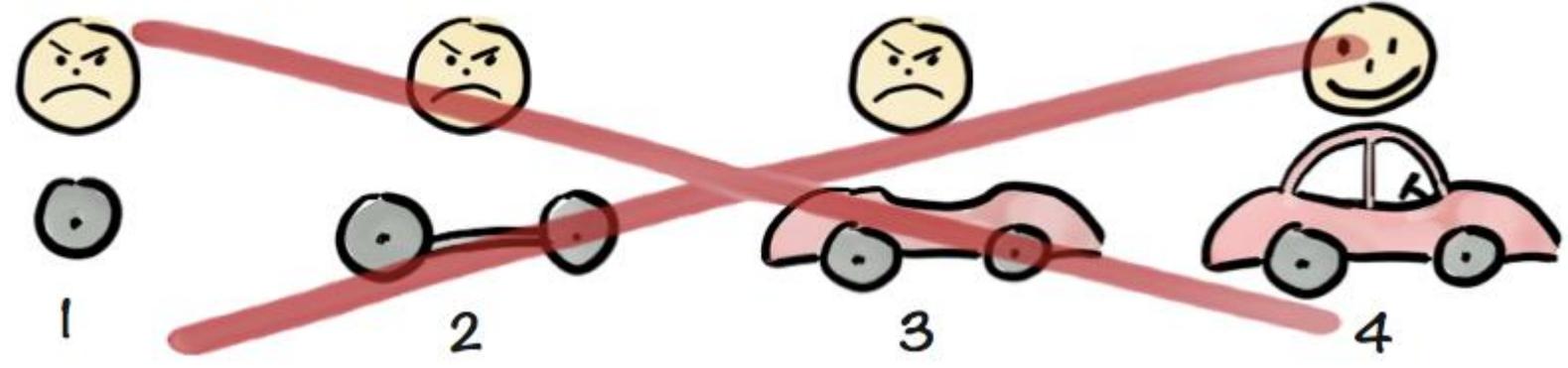
05 / HOW TO MOVE FORWARD

- Is digitalization the right direction
- Who are the stake holders
- How it will be used
- What are the things to be avoided

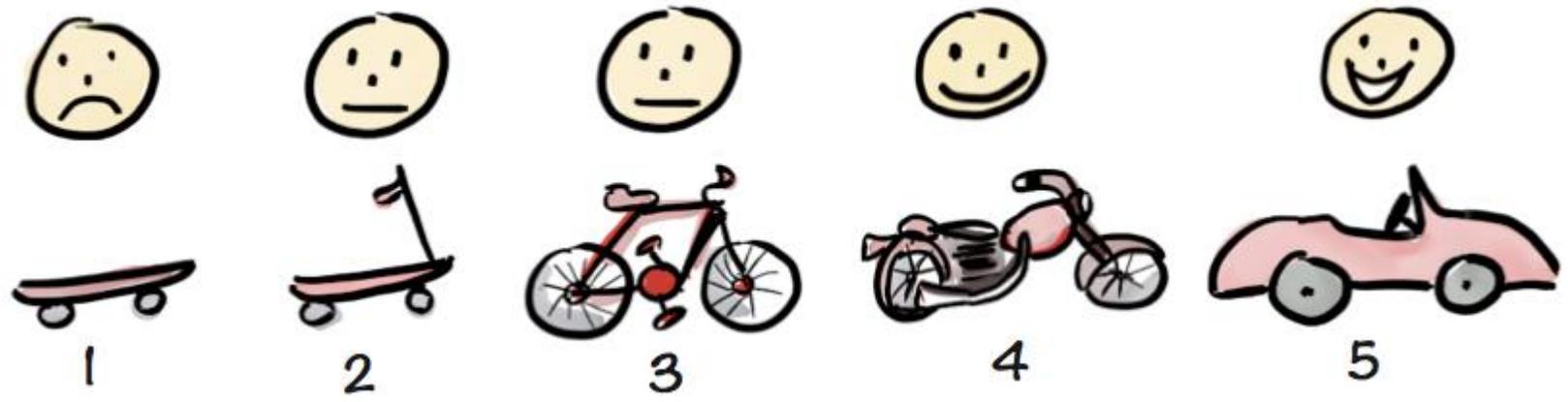
SETTING THE GOAL



Not like this....

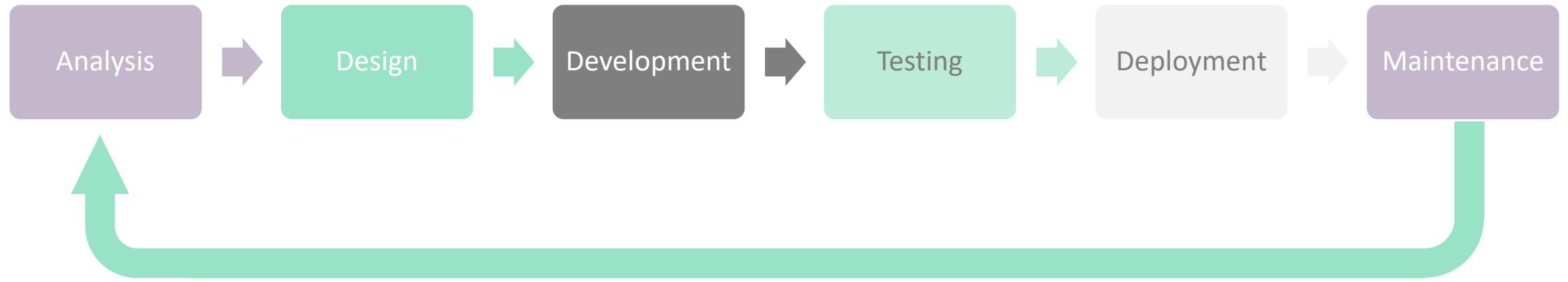


Like this!



Henrik Kniberg

STAKE HOLDERS



- Manager
- Technicians
- Assistants
- Administrators
- Doctors
- Nurses
- Facility Management
- IT
- Equipment Management

CONNECTING THE DOTS



Tracking System



Planning System



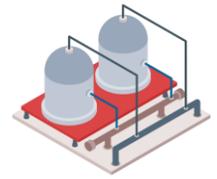
Washer Disinfector



Packing Robot



Sterilizer



Process Equipment



Conveyor

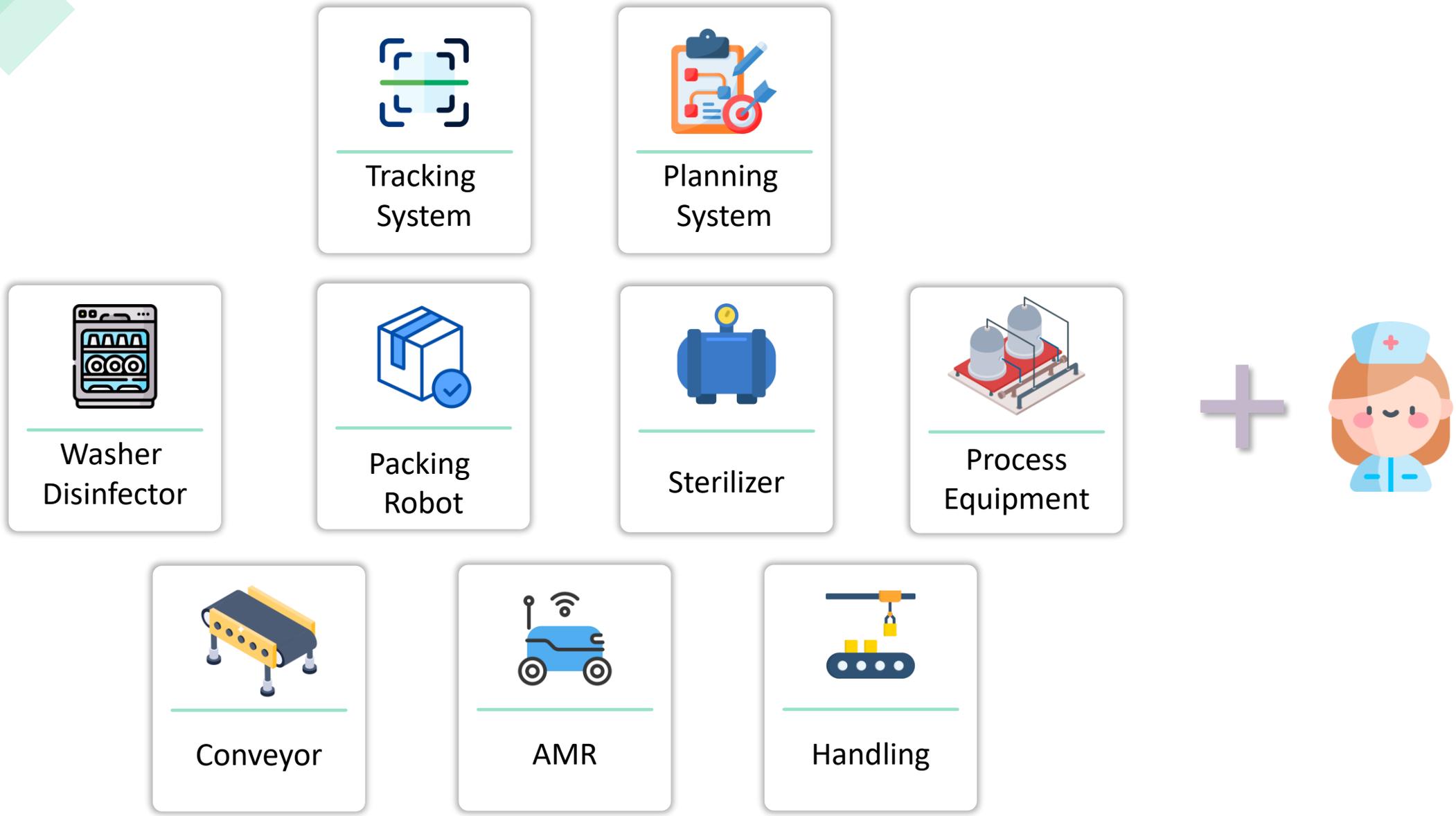


AMR

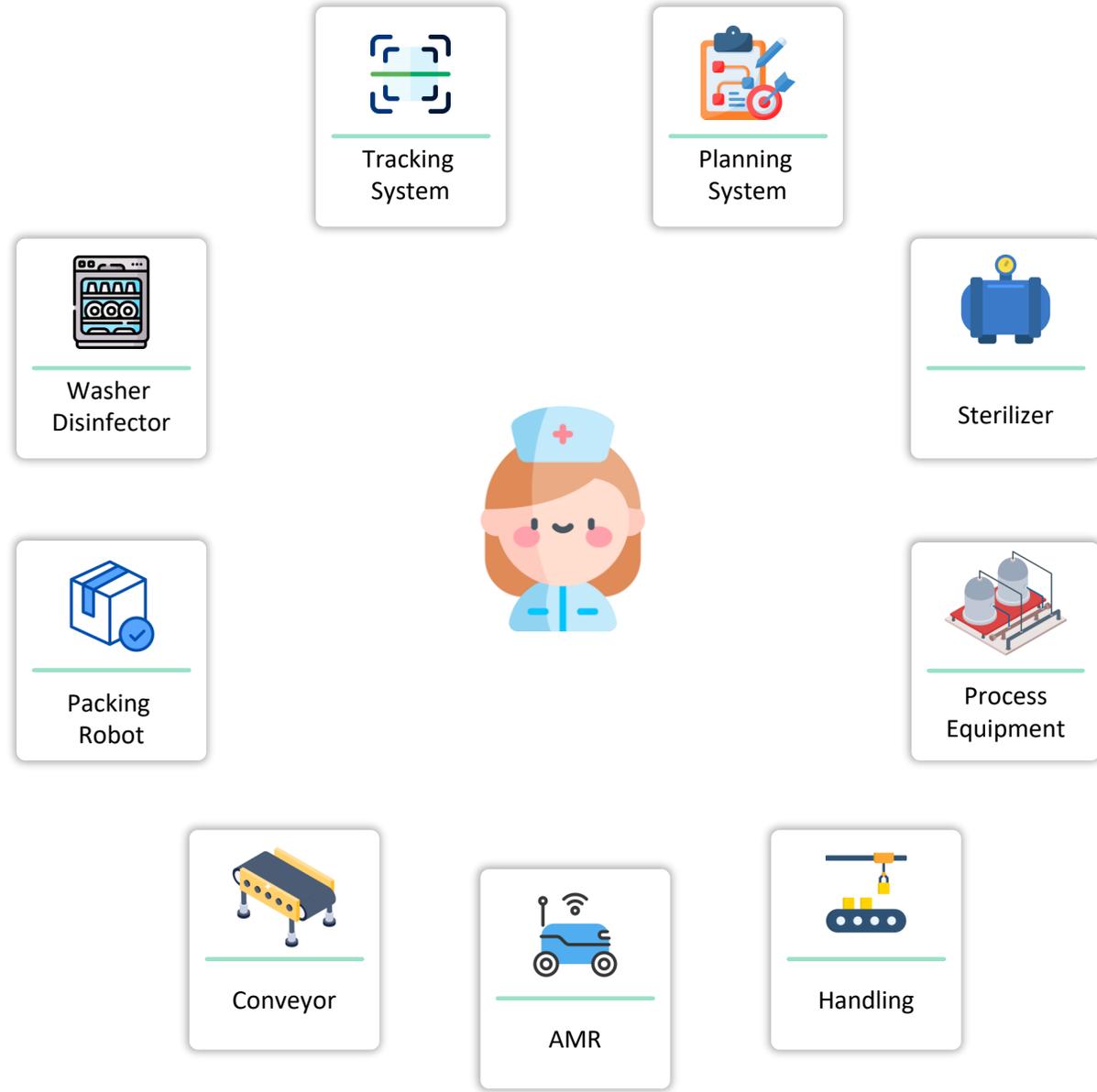


Handling

CONNECTING THE DOTS



CONNECTING THE DOTS



Cloud is not an after-thought

Data is the new oil

No-Data No AI

TAKE AWAY



Values

Philosophy of the Organization

Strategy

Tactics & Products

Q&A

