



Industrial Revolution v4.0





Hello!

I am Luja Shakyia

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A decorative graphic on the left side of the slide consists of a cluster of hexagons in various shades of blue and cyan. Some hexagons contain white icons: a lightbulb, a thumbs-up, a smartphone, a magnifying glass, and a gear. A network of small circles is also visible. The central hexagon is the largest and contains the number '1'.

1

Revolution

Let's start with a BigBang in Industrial state.



Before learning 4.0

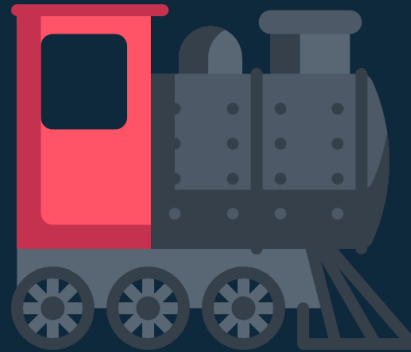
Let's start with
1.0, 2.0, 3.0





Industrial Revolution 1.0


- ◇ New manufacturing processes using water and steam
- ◇ Steam and Coal





Industrial Revolution 2.0

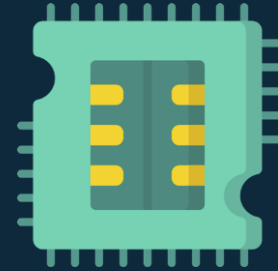


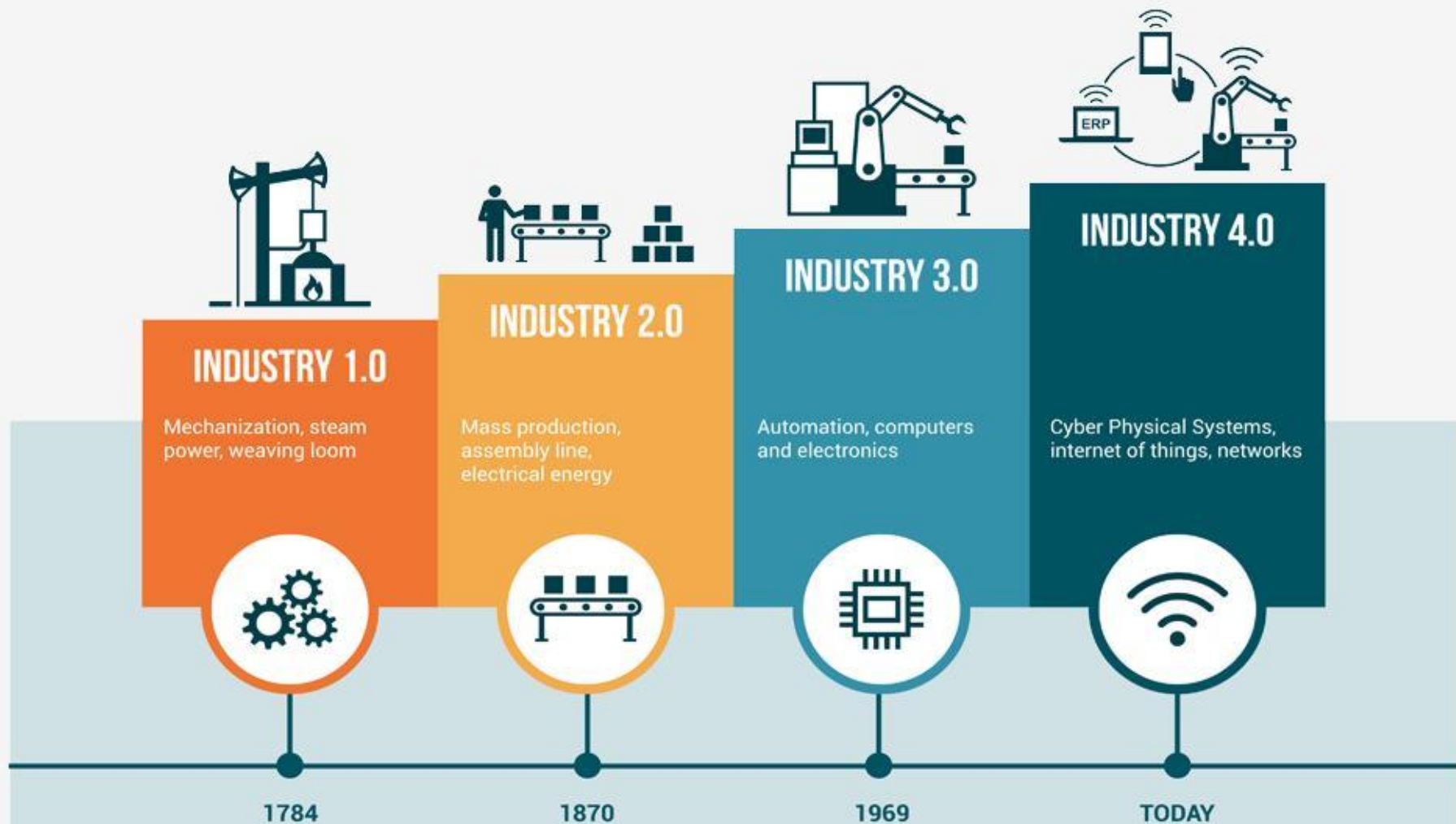
- 
- ◇ The Technological Revolution
 - ◇ Superior electrical technology
 - ◇ Oil Sector high raise.



Industrial Revolution 3.0

- ◇ First computer era
- ◇ electronics and IT
- ◇ automation in production
- ◇ Programmable Logic Controllers





What's the **Big Deal**?



INDUSTRY 4.0

Cyber Physical Systems,
internet of things, networks



TODAY





Every **Industrial Revolution** has made some skill in worker unnecessary.

Many of **unskilled** as well as **semi skilled** workers may lose their career due to it.

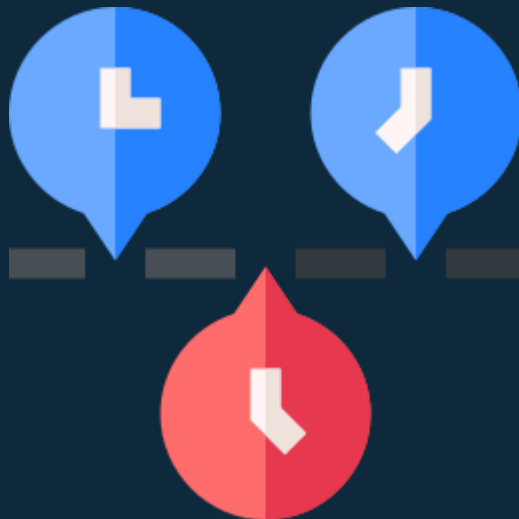
With some advanced Robot as a mechanical companion
, Tedious Jobs can be promptly replaced with highly
efficient **Machines**.



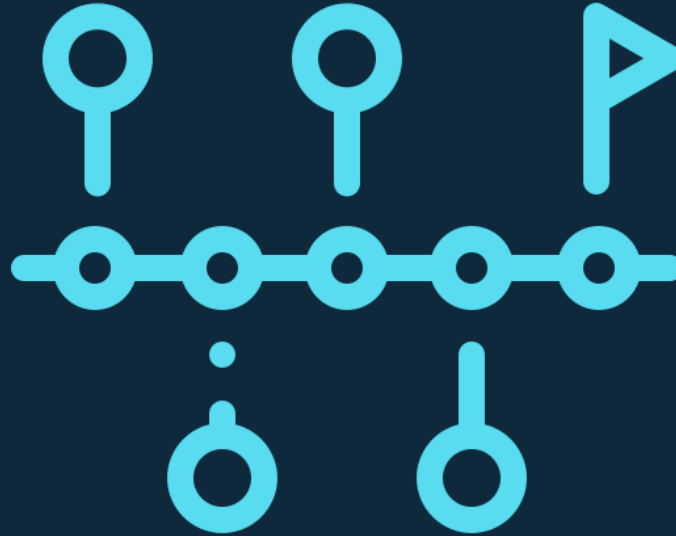


1

When?



2011



TODAY

2015



A cluster of various hexagonal icons in shades of blue and cyan. The icons include a lightbulb, a thumbs up, a network node, a smartphone, a magnifying glass, a gear, and a speech bubble.

2

How?





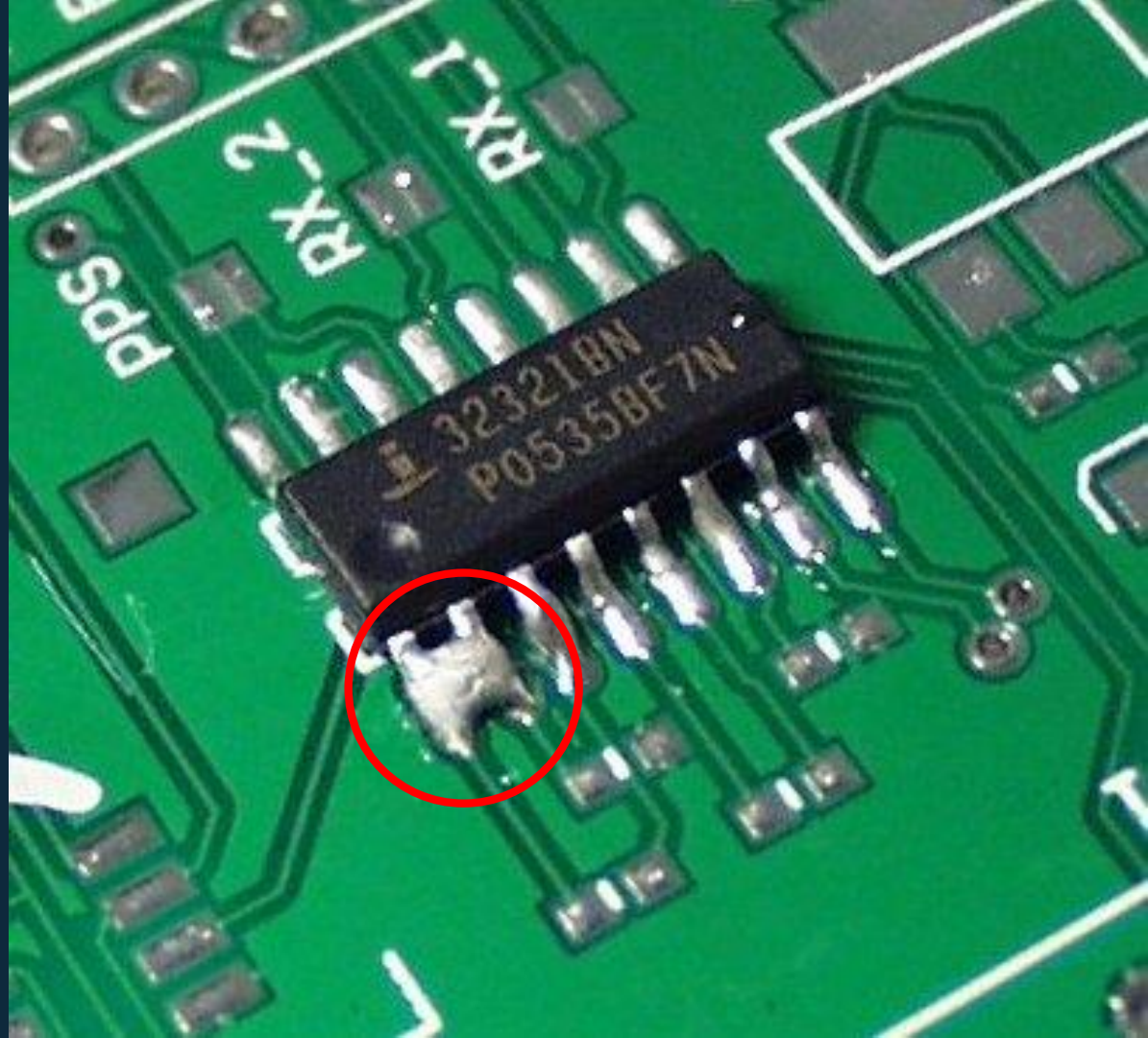
AI in Industrial Revolution v4.0



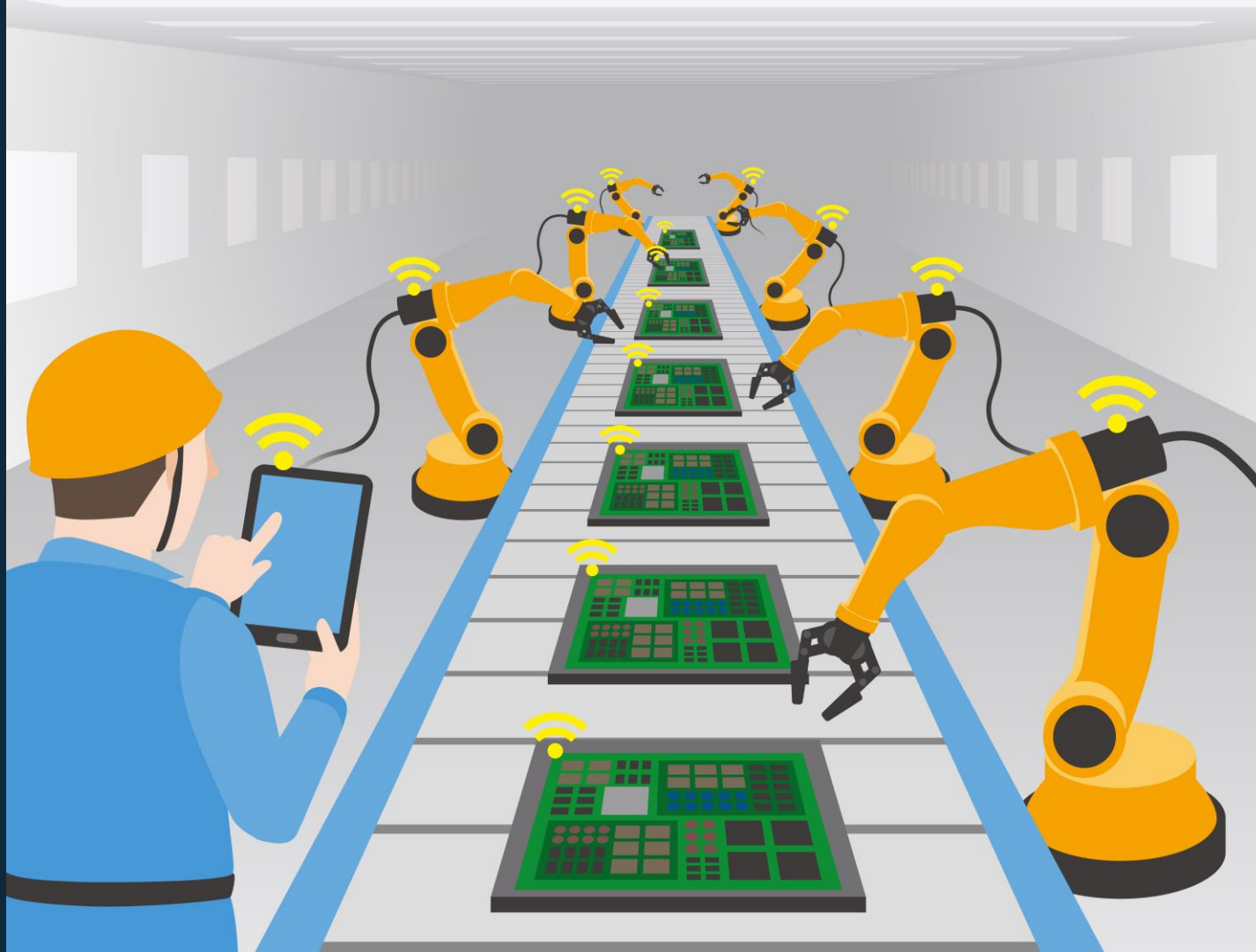
- ◇ All about Proficiency
- ◇ Error Detection
- ◇ Analyzing Performance
- ◇ Learning to Improve
- ◇ Enhance the Production



Error Detection in Soldering



Fast and
Reliable
Production



Quick Stats

99,474

Production Volume



77,662

Quantity Ordered



45

Active Machines

1.12M

Sales Revenue

Top 5 Products

	Product Name	Price	Sold Items	Revenue
1.	Flat 47"1080p	\$ 375	2,212	
2.	Laptop A10 460M	\$ 345	2,084	
3.	Sound Bar - 600 Watt	\$ 126	2,018	
4.	Flat 55" 1080p	\$ 437	1,921	
5.	DLSR D520 18MP1	\$ 460	1,917	

Production Volume by Top 5 Machines

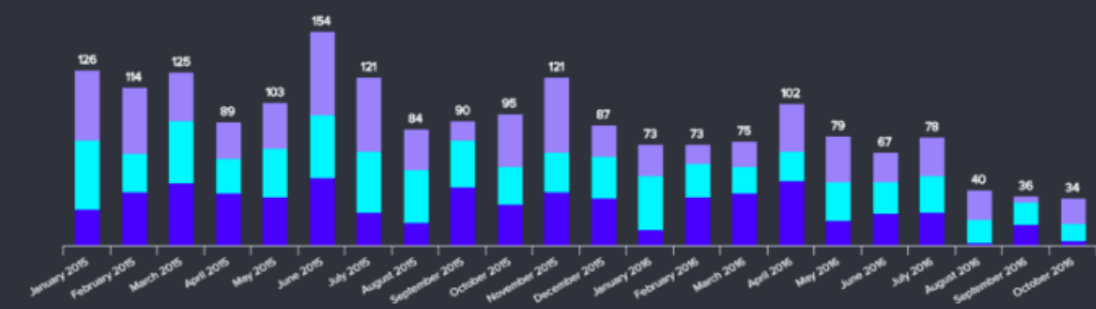


Downtime Causes



- Broken Machine 35%
- Missing Parts 35%
- Service 30%

Return Items by Reason



Clear and exact Analytics
In production





Benefits of AI in Industry.



- ◇ Undeviating Automation
- ◇ 24x7 Production
- ◇ Safer Operational Environment
- ◇ Condensed Operating Costs





- ◇ Create rapid, data determined decisions
- ◇ Minimize operational costs
- ◇ Facilitate superior scalability





3

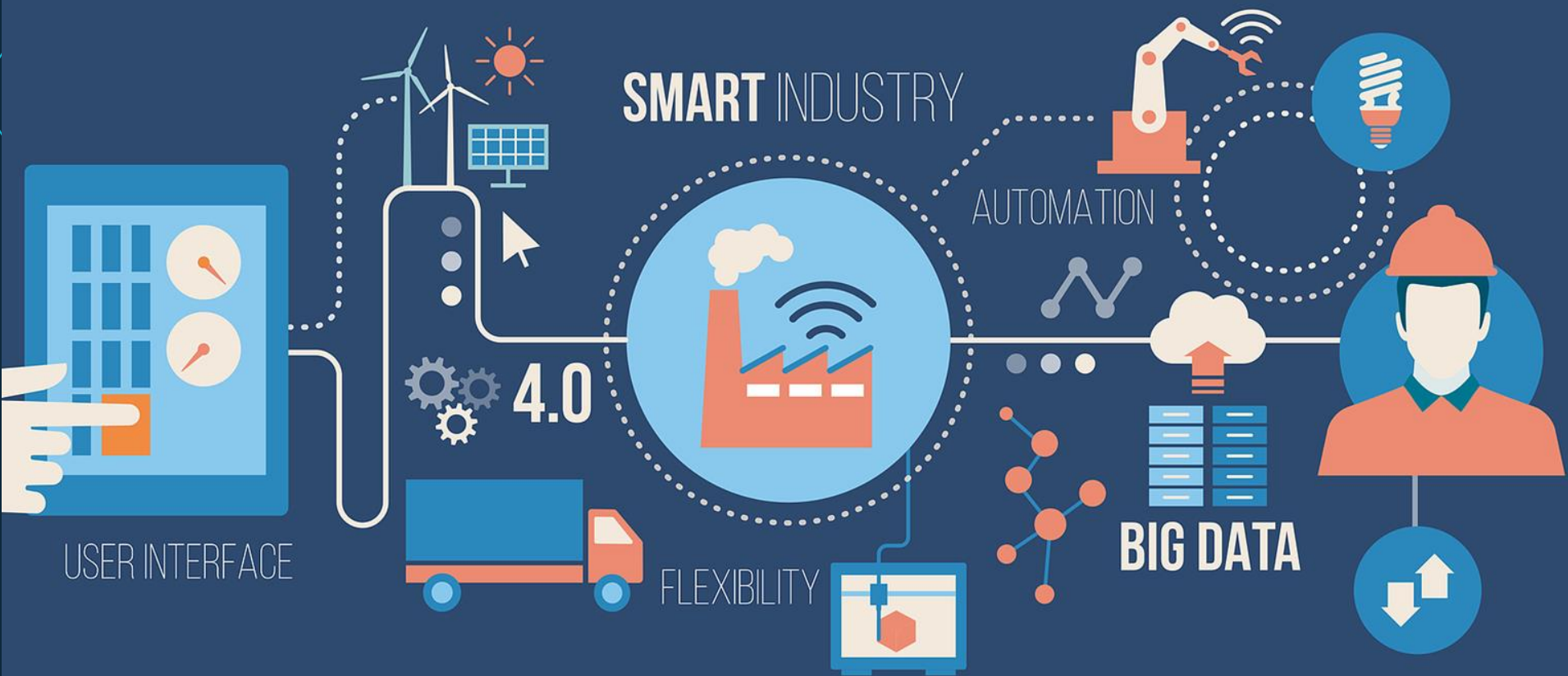
What in v4.0?





- ◇ Era of smart machines, storage systems and production facilities
- ◇ Industrial Internet of things (IIoT)
- ◇ Cyber-physical system
- ◇ The Internet of things (IoT)
- ◇ Cloud computing
- ◇ Cognitive computing

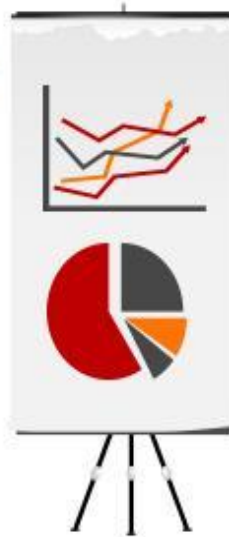




Traditional



What should be my Stock level
at Store # 007?



Cognitive



Your Stock Levels for Store #007
should be **375** Units



ML Automation



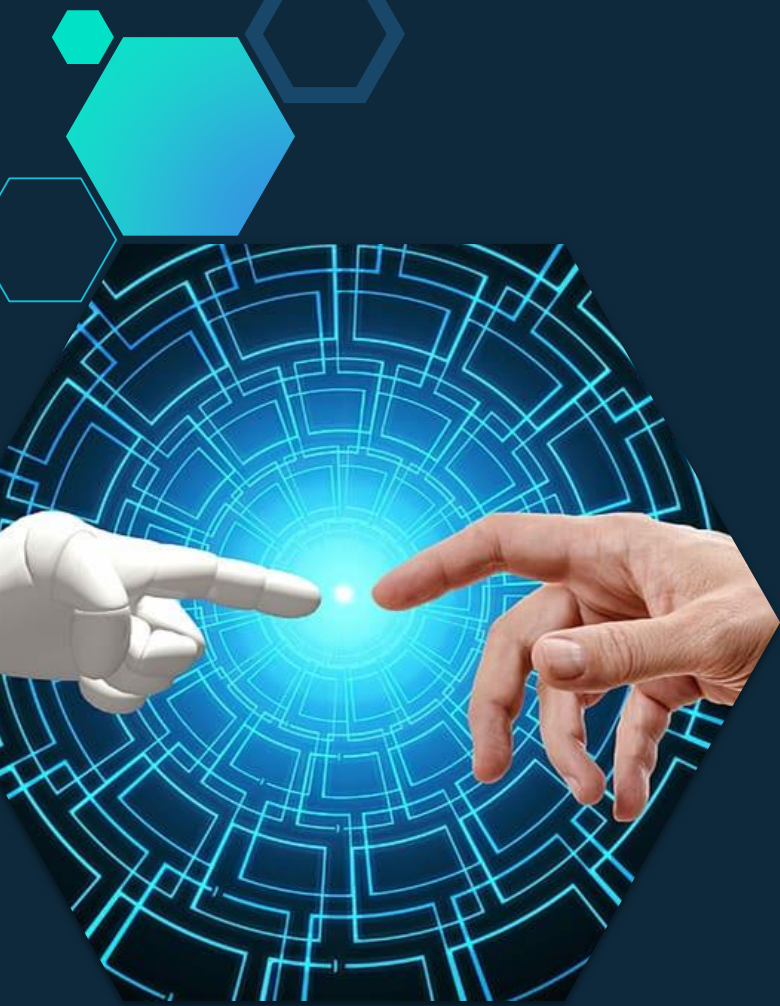
Commercial Way





ALEXA





Hands on 5.0 yet?

Era for changing the technology has already begun.

Man and Machine reconcile






5G Network

Neuralink



A worker in a white protective suit and mask is operating industrial machinery in a factory setting. The worker is focused on a large, cylindrical component of the machine. In the background, another worker is visible near a green door. The scene is brightly lit with overhead lights.

Want to improve
economy?
Improve Industry.





References:

- ◇ "Industry 4.0 in Artificial Intelligence - AI Objectives", *AI Objectives*, 2020. [Online]. Available: <https://www.aiobjectives.com/2019/11/14/industry-4-0-in-artificial-intelligence/>.
- ◇ "The Future of Artificial Intelligence in Manufacturing Industries", *Plantautomation-technology.com*, 2020. [Online]. Available: <https://www.plantautomation-technology.com/articles/the-future-of-artificial-intelligence-in-manufacturing-industries>.
- ◇ "The Industrial Revolution from Industry 1.0 to 5.0! - Supply Chain Game Changer™", *Supply Chain Game Changer™*, 2020. [Online]. Available: <https://supplychaingamechanger.com/the-industrial-revolution-from-industry-1-0-to-industry-5-0/>





Thanks!

Any questions?

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