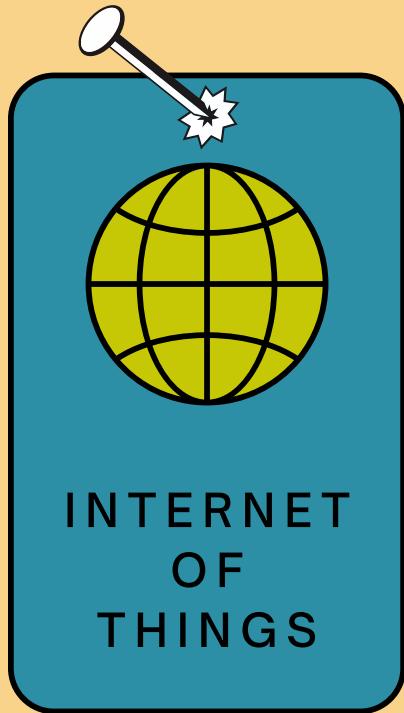


The Role of IoT in Supply Chain Management: Benefits, Challenges, and Solutions



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LET'S TALK ABOUT

- Improving Supply Chain Management (SCM).
- Identifying challenges.
- Proposing practical solutions.
- Suggestions for industries to stay competitive.
- Directions for future research to maximize IoT benefits.



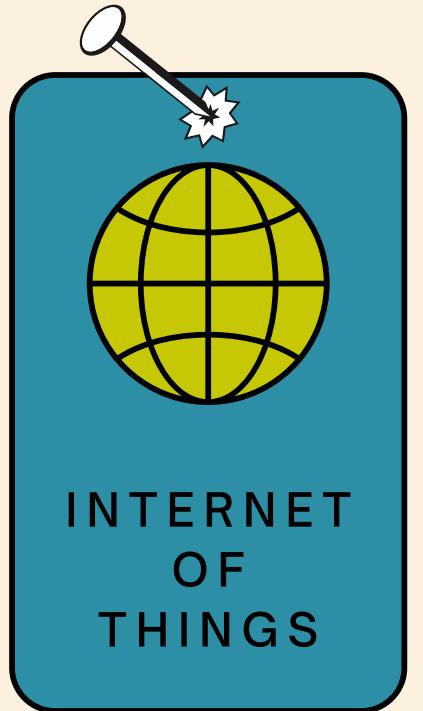
Introduction

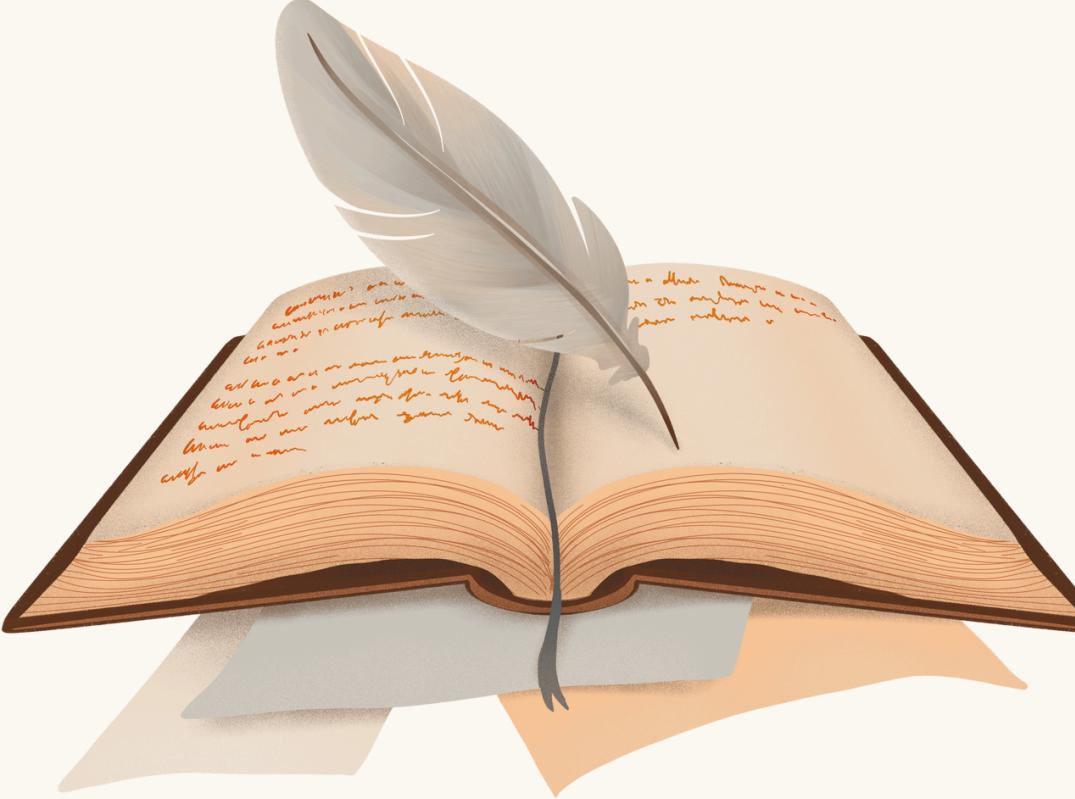
What is IoT:

- A network of connected devices that collect and share data.

History of IoT:

- Introduced by Kevin Ashton in 1999.
- First use: Coca-Cola vending machine in 1982 to monitor drink stock and temperature





Literature Review



IoT Benefits

- Enhances efficiency and visibility
- Improve data sharing and supply chain integration

Industry-Specific Impacts

Manufacturing firms focus on tracking products but service firms focus on agility

Challenges

- Protecting information
- Upgrading outdated system



ISSUES & CHALLENGES

Security

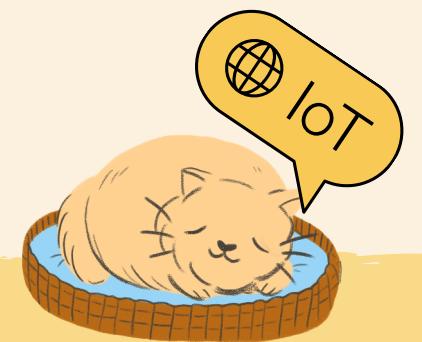
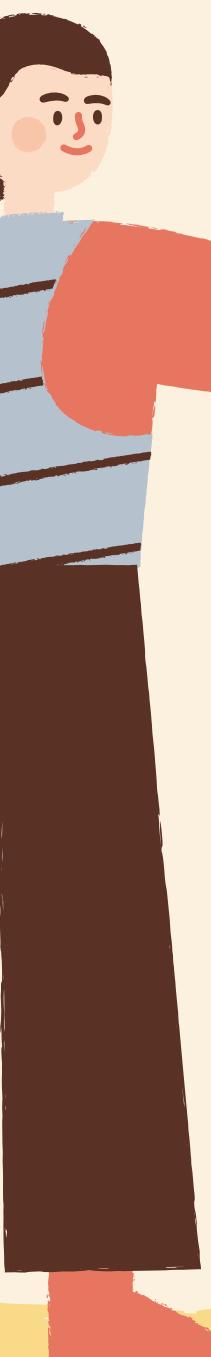
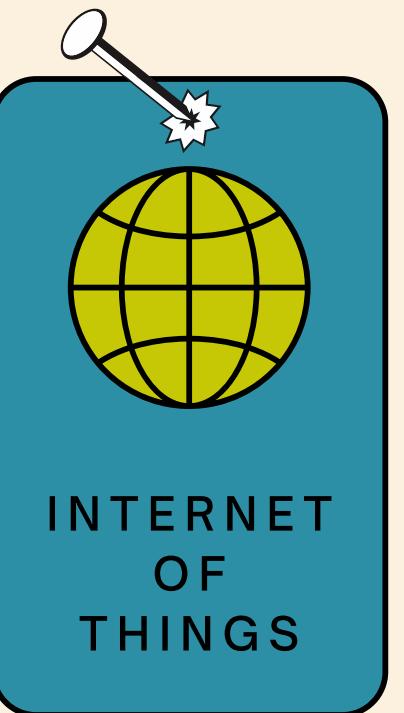
Technical Infrastructure

Integration

Compliance

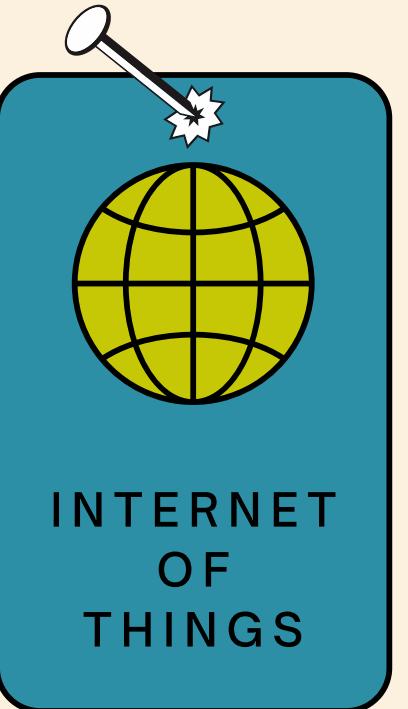
Management

Return of Investment



Challenges

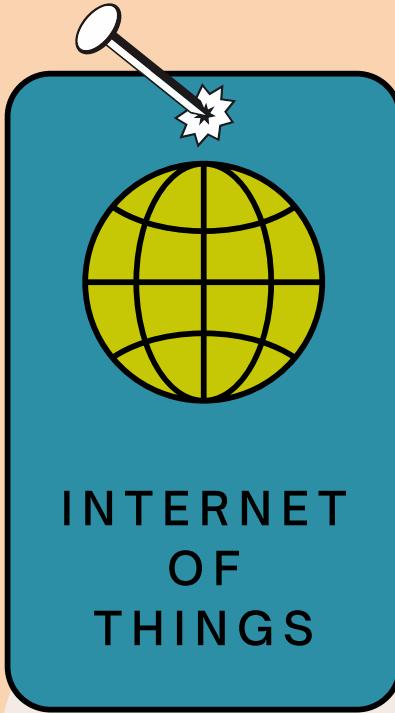
- Protecting important data from hackers
- IoT needs good technology to work well
- IoT collects a lot of data, which can be hard to manage
- Companies need good systems and skilled people to handle it
- Buying IoT devices, upgrading systems, and training workers cost a lot.



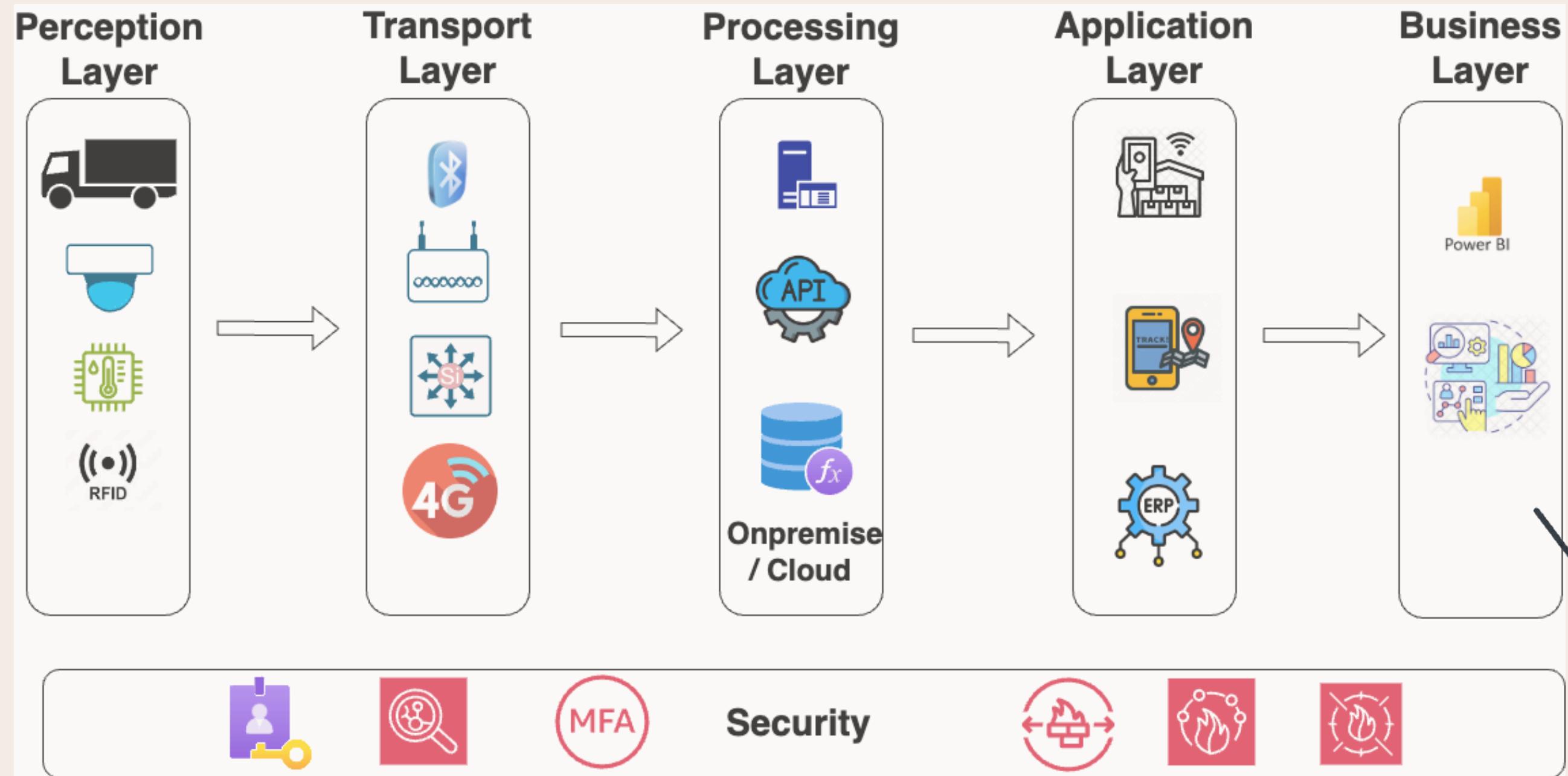
4 ESSENTIAL CRITERIA FOR EFFECTIVE IOT SOLUTIONS

- 01 Distributed
- 02 Interoperability
- 03 Scalability
- 04 Security





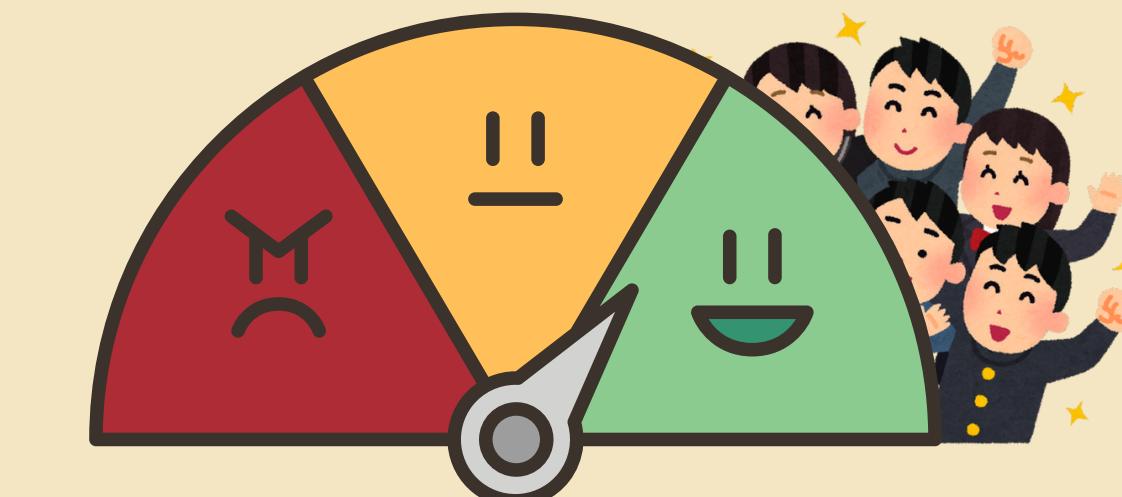
APPROACHING SOLUTION



OPTIMISING TRANSPORTATION



EXPANDING CUSTOMER SATISFACTION



MANAGING & PREDICTING INVENTORY



ENHANCE DECISION-MAKING

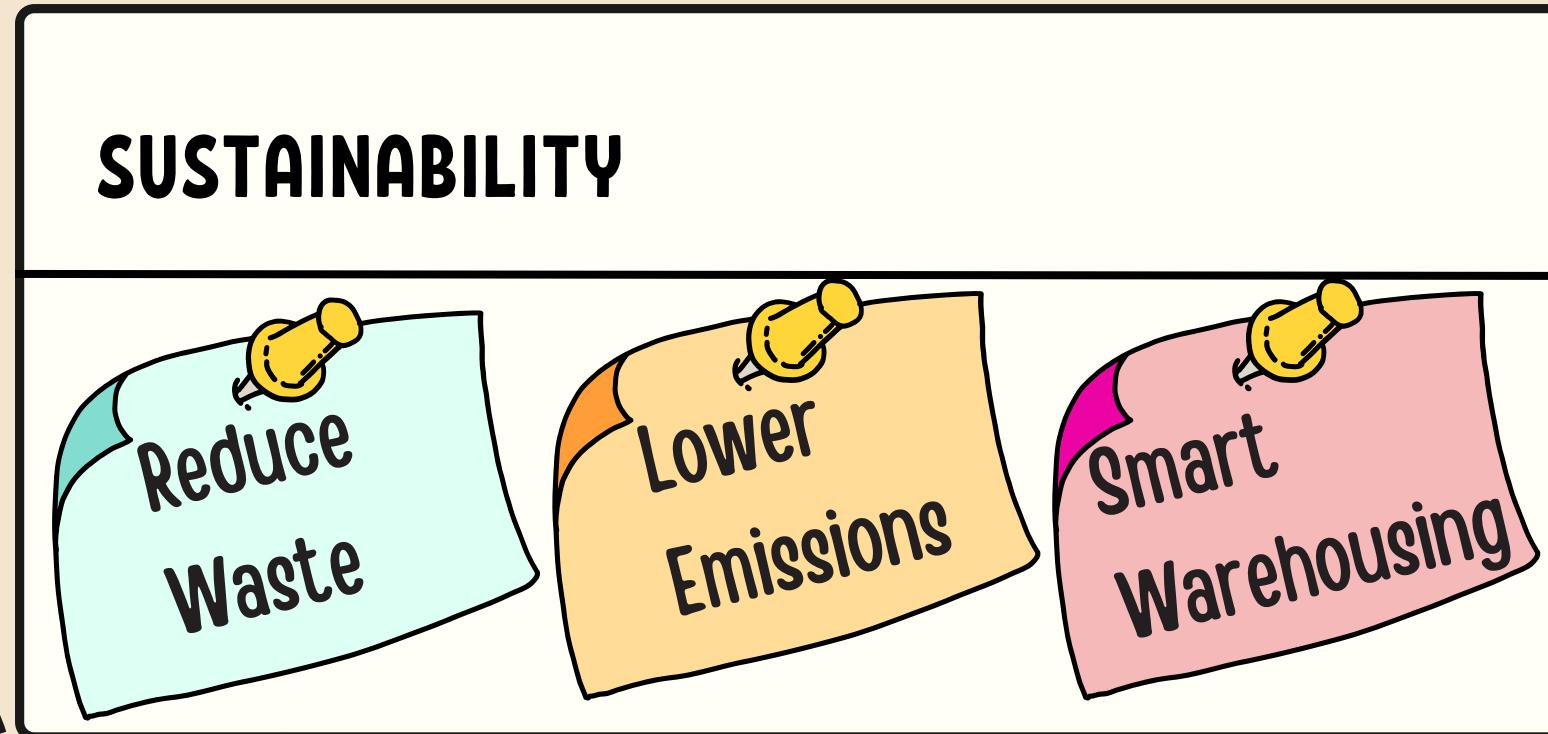
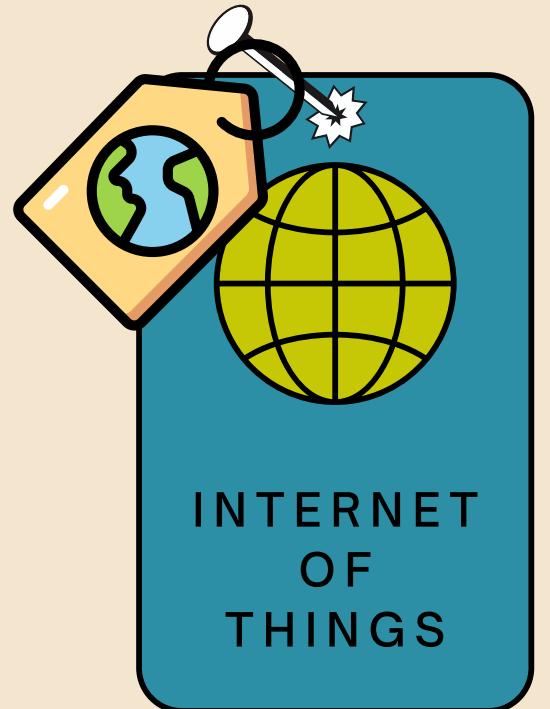
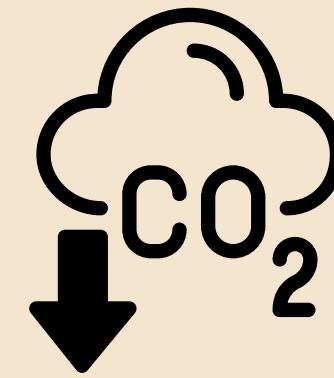


IOT + SUSTAINABILITY & PERFORMANCE

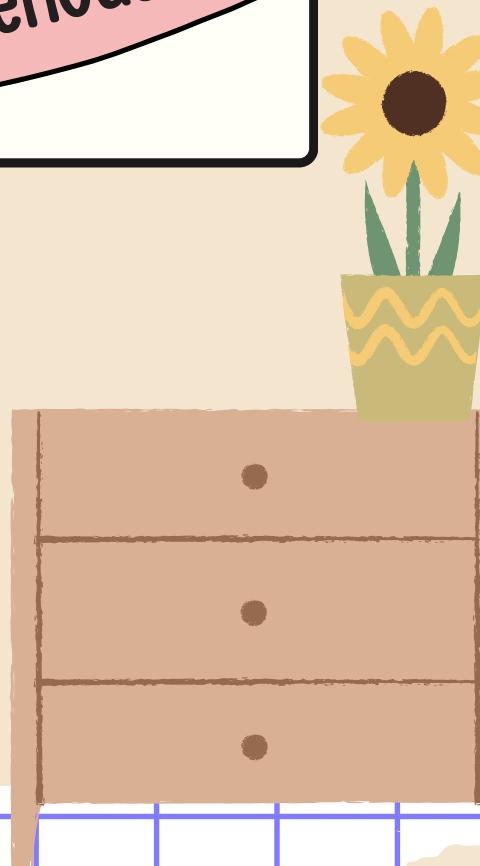
Protecting our planet through sustainable
practices for future generations



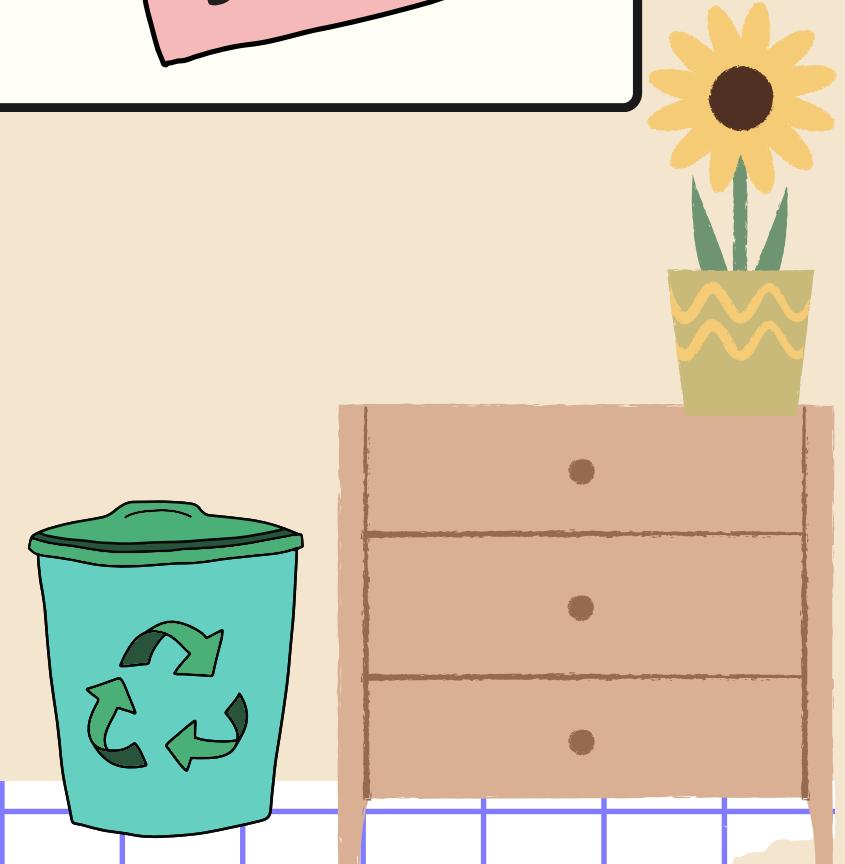
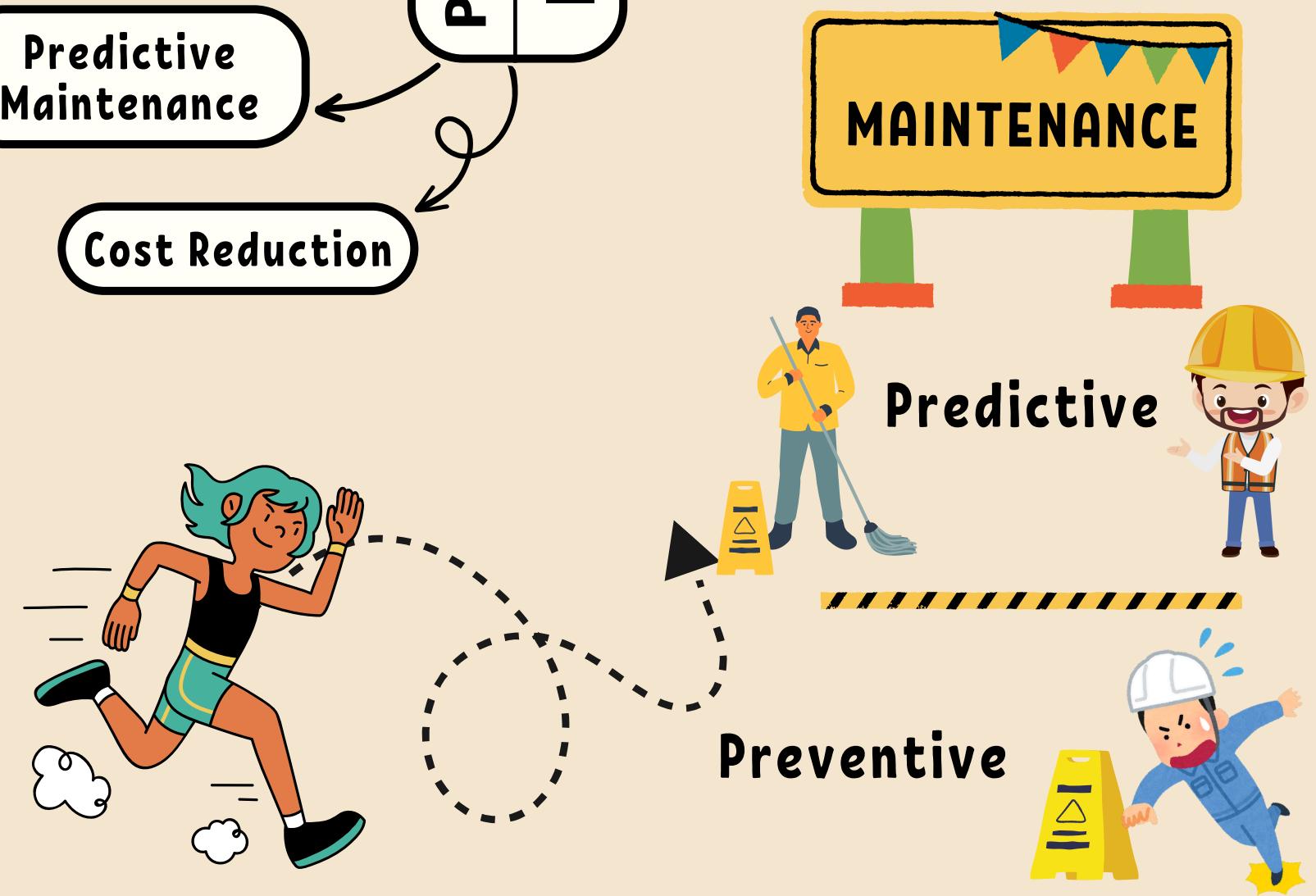
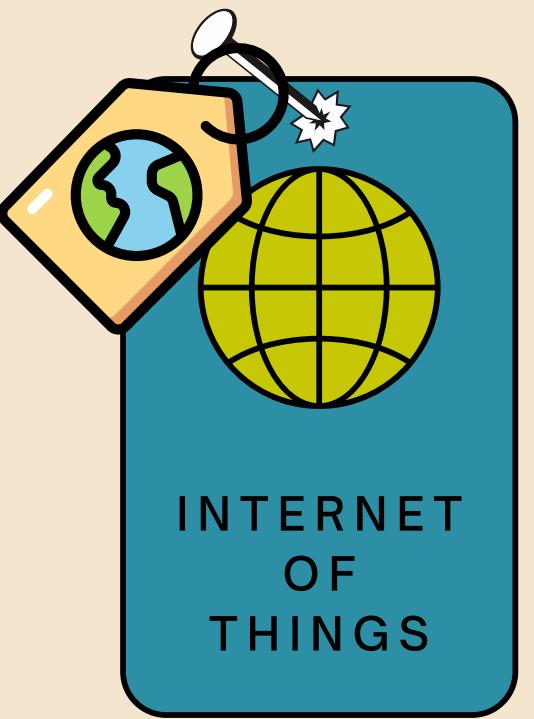
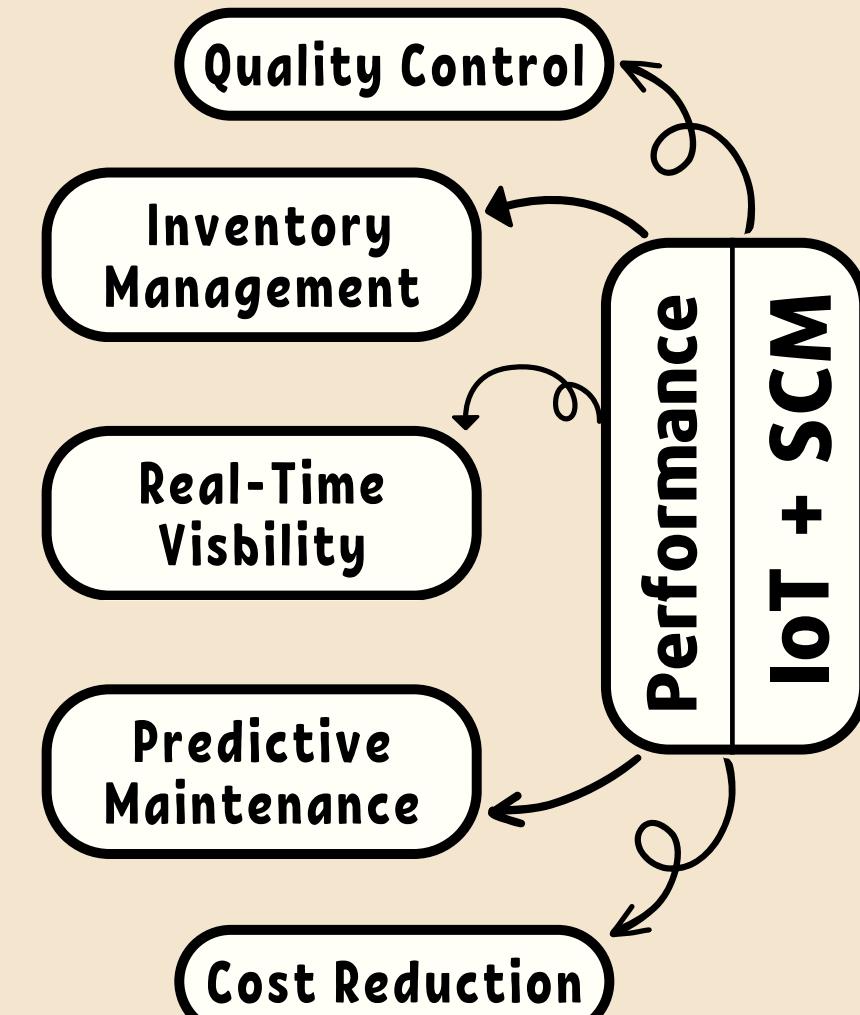
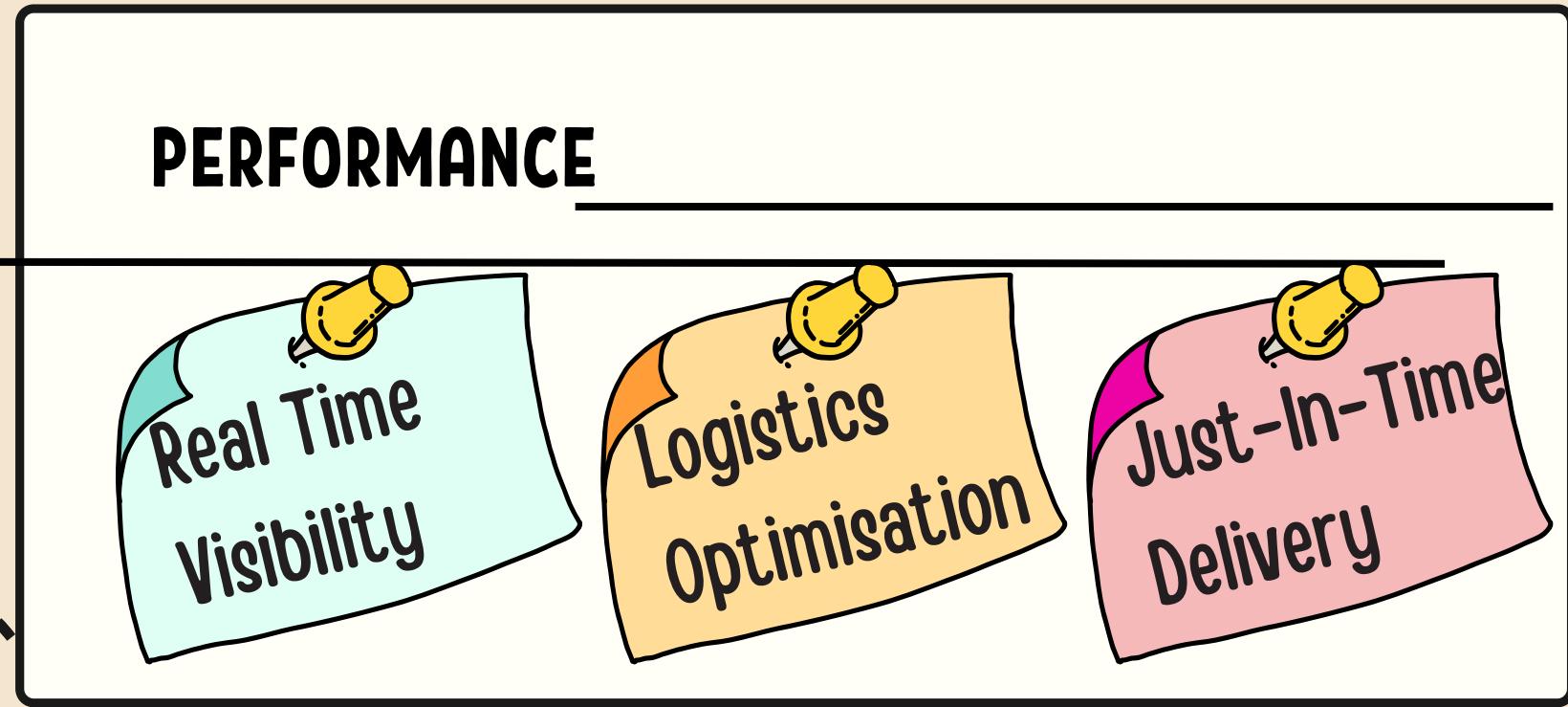
IOT + SUSTAINABILITY



- Sustainability**
- IoT + SCM**
- Reduced Waste
 - Smart Logistics
 - Real-Time Monitoring
 - Resource Optimization
 - Transparency



IOT + PERFORMANCE



IOT + ETHICS



“Technology is a useful servant but a dangerous master.” — Christian Lous Lange.



Collecting large amounts
of data creates
opportunities for
gathering personally
identifiable data without
user's consent

Who owns WHAT?

&

What CAN you do with it?



Poorly executed &
implemented systems can
create security
loopholes, are we safe
working around here??

Is the environment equal
to everyone?
Oh!
Sorry, you can't turn on
that light anymore!



Automated decisions may
encapsulate human
decision making process,
leading to TRUST issues..

or
is it?



We are creating teeny
tiny electronic devices in
large numbers!
OHHH!
That's a lot of electronic
waste! Someday..



RECOMMENDATIONS

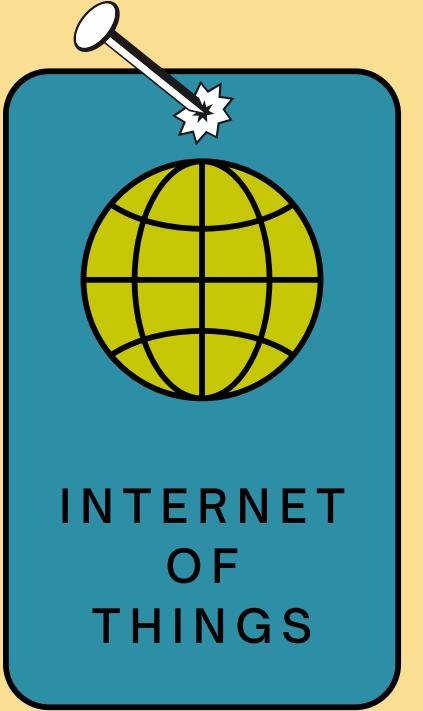
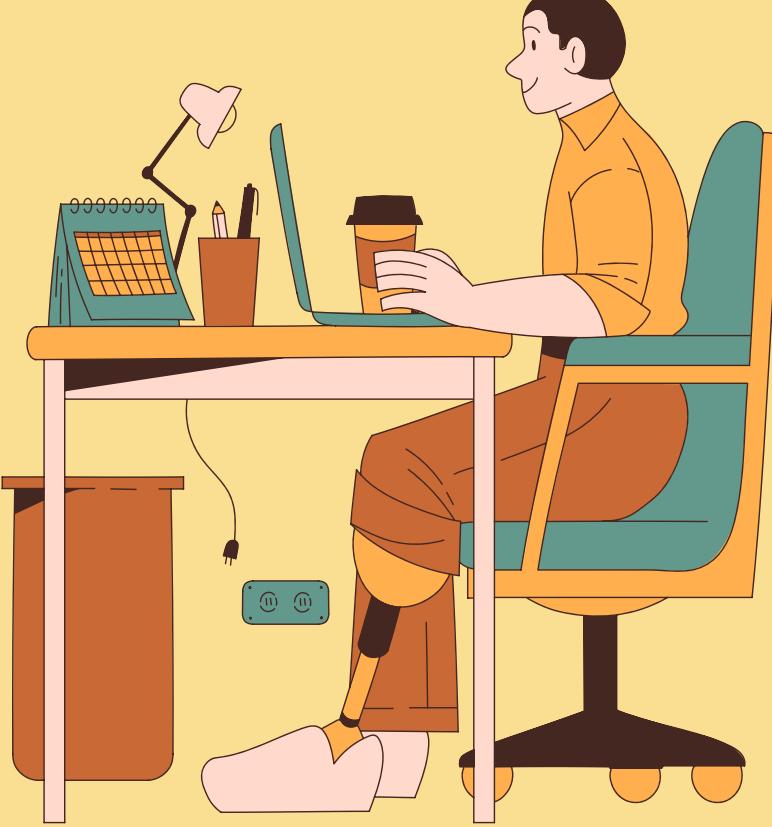
PLAN



TRAIN



CHOOSE



SO, INTERNET OF THINGS

- Improves customer satisfaction
- Boosts Supply Chain Performance
- obstacles like high costs, data management, and lack of understanding.
- Emphasize training and select the right technology

QUESTIONS???





THANK you!

