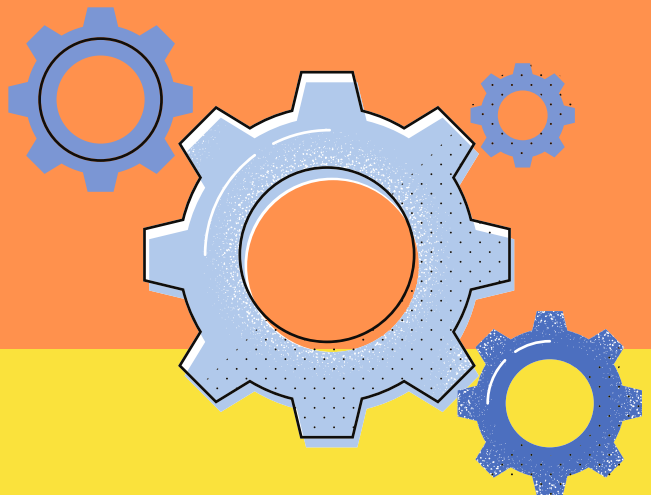




INDUSTRY 4.0 : SIMULATION



Introduction

IR 4.0

IR 4.0 promotes the connection of physical items such as sensors, devices and enterprise assets, both to each other and to the Internet.

Simulation

A simulation is the computer model which can mimic the operation of any real suggested system.

Why simulation ?

- can make improvements in the facility without having to unnecessarily move heavy machinery
- enhances overall production effectiveness
- risk-free environment
- can help you find out weaknesses in advance and reduce equipment downtime

How can simulation help facilitate the implementation of Industry 4.0?

Interoperability

The ability of devices and people to communicate and process information with each other via IoT.

Information Transparency

The creation of a virtual copy of the physical world using sensor data, like a manufacturing plant or contact center

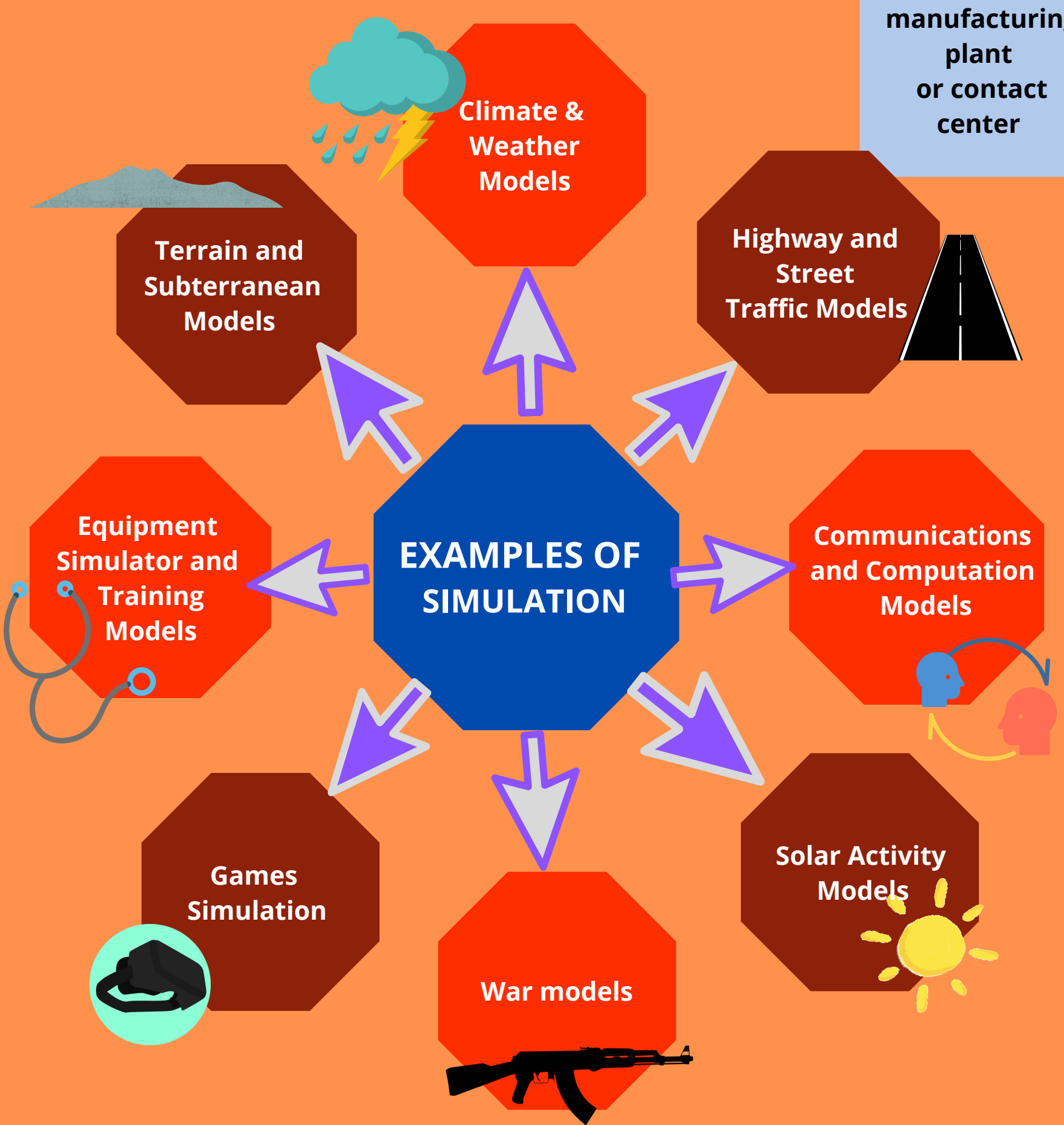
Technical Assistance

Information tools that support decision making through the rapid aggregation and visualisation of processed data as well as physical tools that help or replace human effort for demanding tasks.

Decentralized decisions

The ability for computer-based systems to make their own decisions for regular events in a system, only seeking human oversight when an exceptional or confusing event occurs.

EXAMPLES OF SIMULATION



REFLECTION

While creating this poster based on simulation, we understood the importance of simulation in training and education. Many trainings and education courses can be carried out by using simulation to reduce the risk of danger, cost as well as improve trainees' skills. A very good example is the flight simulator in the aviation sector. It is proved that simulation is very important for us to be aware that we should experiment or train in a safe environment without causing any injuries and damage. This technology definitely helps to improve human life and makes it easier.

REFERENCES

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