

## ENABLING TECHNOLOGIES



### 3D PRINTING FOR MANUFACTURING

3D printing technology in manufacturing for end customer, allowing complex designs in tough materials such as steel, without tool investments and ready for rapid change.

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### 5G

5th generation wireless systems should offer approximately 10 times the performance of the 4g system of today.

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### ARTIFICIAL INTELLIGENCE

Will when properly in place rapidly increase the performance and output of any system that can be described. It achieves this with advanced algorithms and most likely large data and computing power.

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### AUGMENTED REALITY

Can be described as an improved or enhanced reality. Extra layers of information is added to the normal reality that we today experience without any addition to our senses.

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### AUTOMATED DISTRIBUTION

Self driving trucks in combination with smart warehouses and integrated delivering systems will take care of goods delivery from manufacturer to end customer. This without involvement of human intervention.

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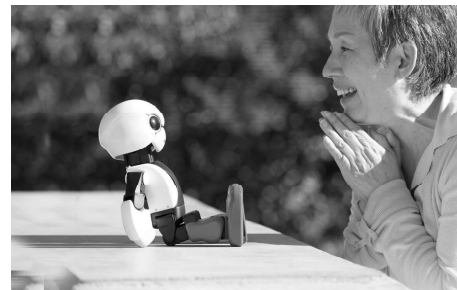


### BIG DATA

Big data is data sets that are so voluminous and complex that traditional data processing application software are inadequate to deal with them. Big data challenges include capturing data, data storage, data analysis, search etc.

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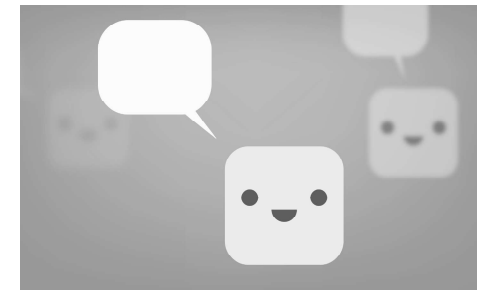


### COMPANION ROBOTS

Robots designed to interact with humans on a high social level giving comfort and company. So far mainly been introduced in medical environments.

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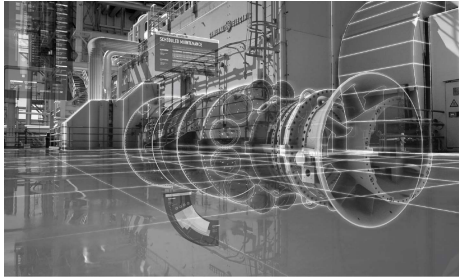


### CONVERSATIONAL PLATFORMS

Virtual assistants and chatbots are examples of systems that could use a certain degree of AI and are mainly used to increase a customer experience such as by buying a product or by offering support.

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### DIGITAL TWIN

A Digital twin refers to a digital replica of physical assets, processes and systems that can be used for various purposes. This could for example be a virtual turbine that is tested and optimized in a simulation.

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### DISTRIBUTED LEDGER

Is the technology behind bitcoin and smart contracts. Could render the 3rd party obsolete in for example loans and transactions, but also in any type of agreement or certificate.

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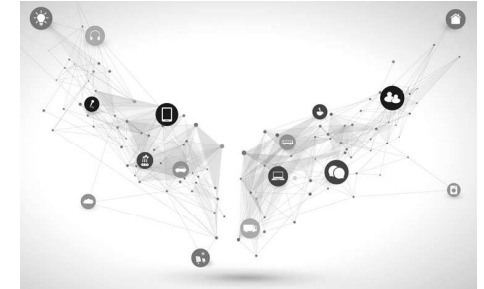


### DRONES

The most general definition of a drone is an unmanned vehicle. This vehicle can be flying, on the ground or in water. Is widely adopted in many fields such as surveillance, agriculture, military etc. Services provided is also growing.

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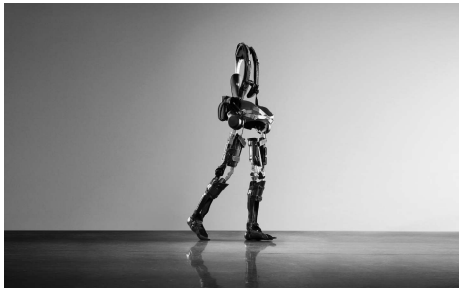


### EDGE COMPUTING

Edge computing is a method of optimizing cloud-computing systems by performing data processing at the edge of the network, near the source of the data. This decreases the demand of bandwidth within the system.

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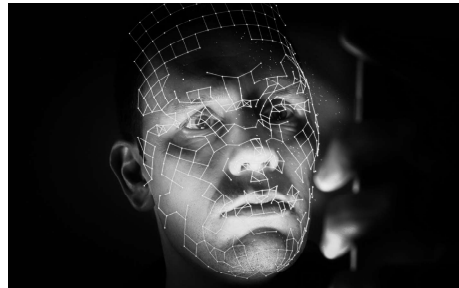


### EXO SKELETONS

External mechanic suit that will for example increase the power of the user or enable movement for an impaired person.

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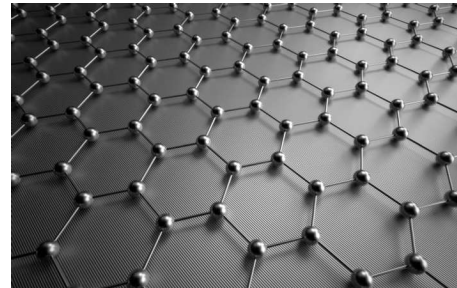


### FACIAL RECOGNITION

Is a part of a system that will recognize a person's face and by doing so for example giving access to a building, or let the police know that this is a person meant for prison.

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### GRAPHENE

A single layer of carbon atoms connected covalent bonds. Superior electrical and thermal properties, lightweight and stronger than diamond. Is revolutionizing battery technology and performance of plastics and implementation in just about any field of technology has just started.

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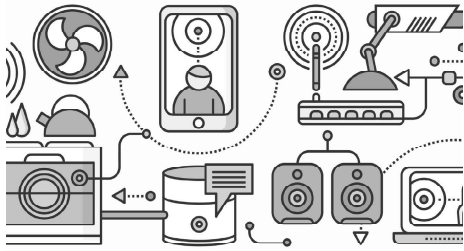


### IOT ANALYTICS

As the Internet of things is growing rapidly so is also the need to analyse the vast amount of data that is created in order to improve services and systems.

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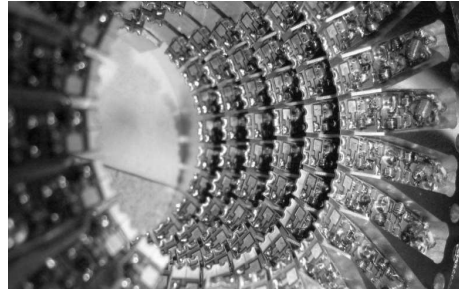


### IOT

Internet of things, is the popular term of an increasingly growing network of connected devices.

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### QUANTUM COMPUTING

Can solve certain problems at an unparalleled speed, compared with normal computers. As technology progress, it is feared that it will pose a great threat to the cyber security systems of today.

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### SERVITIZATION

This trend is turning the traditional product delivery model into more of a delivery of value business. You are no longer buying a car but are buying the service of "smooth transportation", and the service as such is not just a physical product.

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### SMART CARS

This term includes self-driving cars but also cars that will be able to actively avoid accidents when a human is behind the wheel. They are connected to the cloud and to each other, enabling a wide array of services.

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### SWARM INTELLIGENCE

This is how many individual devices can act upon sensor information individually, but by doing so, at a larger scale appear to act as one together with others.

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### TOUCHLESS INTERFACE

How a user interface is interacted with, without physically touching it.

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### VIRTUAL REALITY

VR is a computer-generated scenario that simulates a realistic experience. The immersive environment can be similar to the real world in order to create a lifelike experience grounded in reality or sci-fi.

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