

 **MALAYSIAN TIMBER
CONFERENCE 2019**
The Future is Now



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Smart Factories and IR 4.0

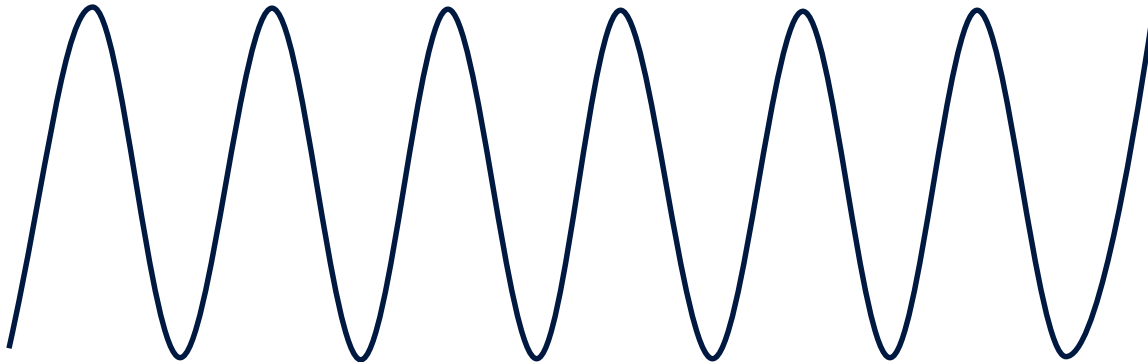
MALAYSIAN TIMBER CONFERENCE 2019

- The Future is Now -

Integrated Solutions of the Future Production Change

Heraclitus

Change is the only constant.
There is nothing permanent except change.

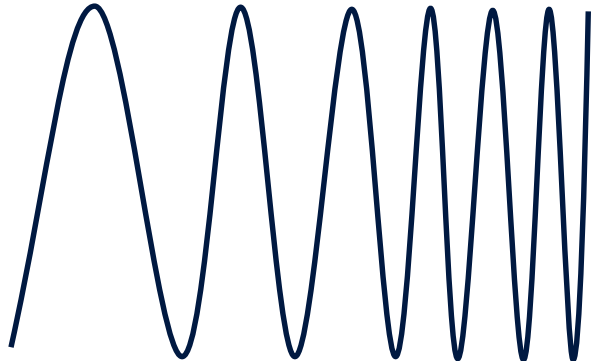


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Change changes

What we see

Change is **not** constant. Change itself changes!
It is getting faster

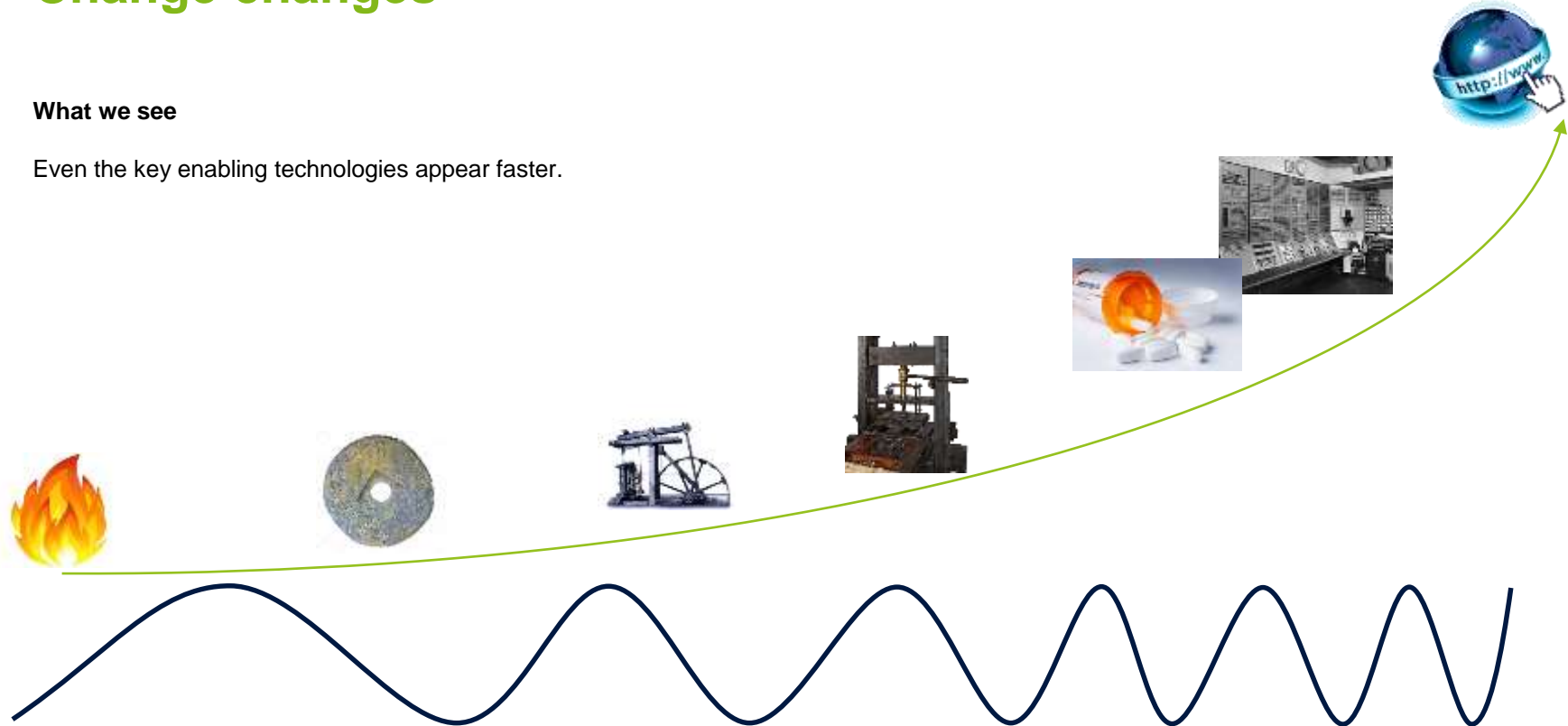


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Change changes

What we see

Even the key enabling technologies appear faster.



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Megatrends



**Knowledge
Culture**



Urbanization



Connectivity



Health



New Work



Gender Shift



Ecology



Globalization



Individualization



Silver Society



Mobility



Security

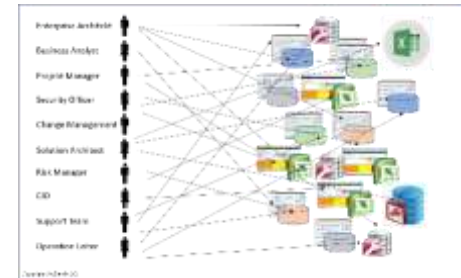
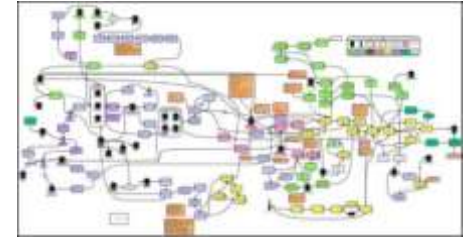
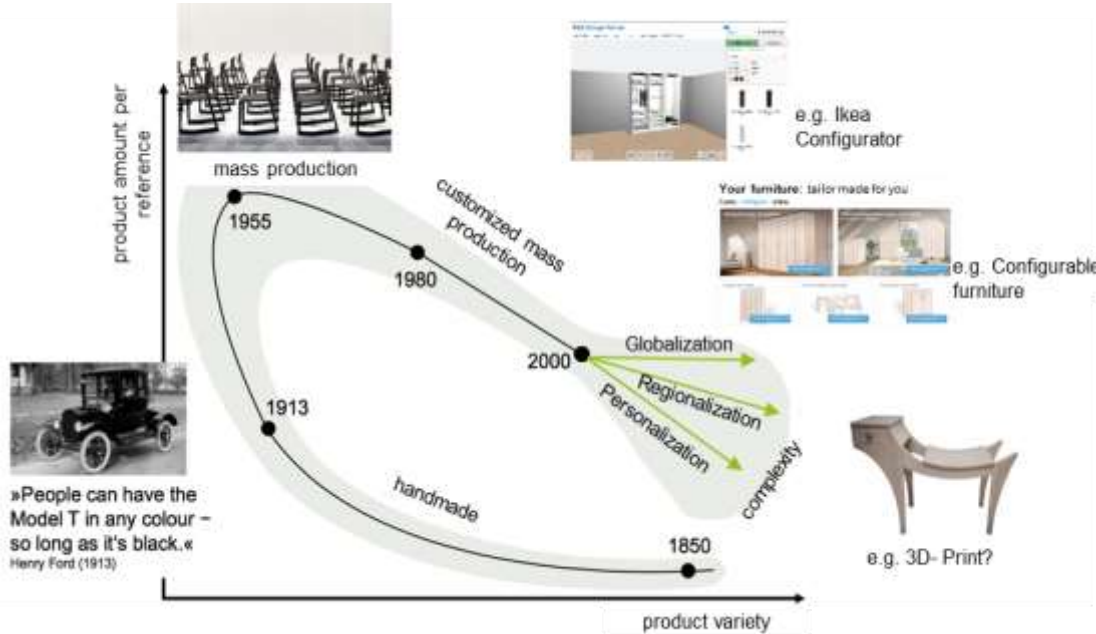
Megatrends do not have to be "predicted", because they are already there and **mark changes that have shaped us for a long time and will continue to shape us for a long time to come**. Megatrends are **deep currents of change**. As development constants of global society, **they span several decades**.

A megatrend affects every single person and encompasses all levels of society: business and politics, as well as science, technology and culture.

Megatrends are changing the world - slowly, but fundamentally and in the long term.

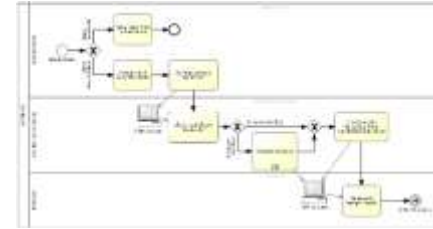
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Where we are coming from



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What we want to have

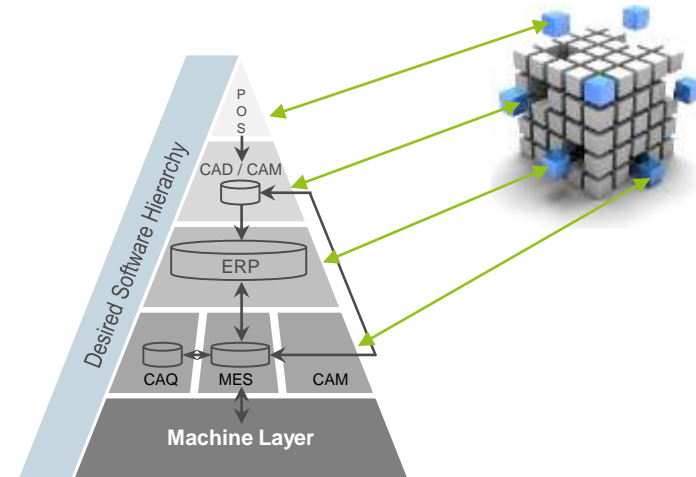


Fix labor costs -
automation

Variety -
low set up times

Material costs -
high yield rate

Depreciation costs -
high OEE



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Existing solutions for our demand



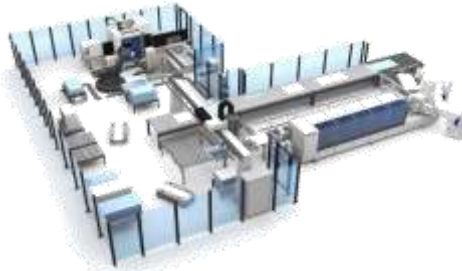
Agile control



Digital production order



Flexible logistics



Autonomous cells



Batch size 1 lines

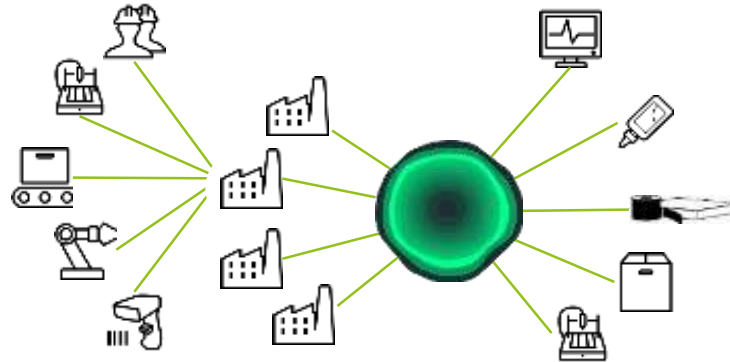
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What's next

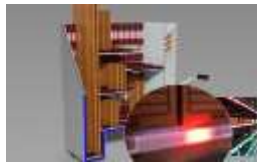
Supplier independent networking via ecosystems



digital HMI - planning board



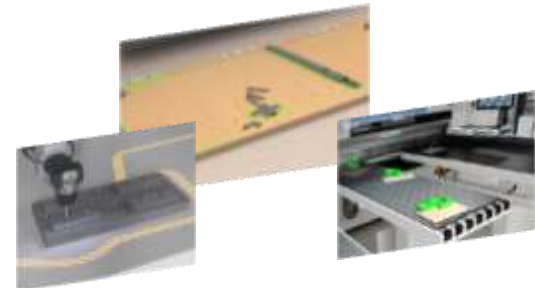
AI Assembly



SME - digital supported sorting & transporting



Flexibly applicable automation



Worker assistance systems

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- cyber physical systems -

A cyber-physical system (CPS) is a object that is controlled or monitored by a computer, integrated with the Internet and its users.



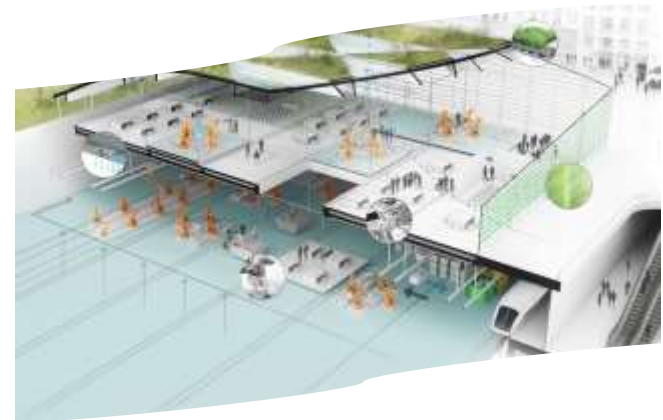
These are objects, devices, buildings, production facilities, logistics components etc. that contain embedded systems. These systems can communicate and use services via the Internet. Cyber-physical systems can directly record their environment with their corresponding sensors, evaluate and store it with the help of data and services available worldwide, and they can influence the physical world with the help of actuators.

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The Factory of the Future

- Rapid change through individualization and globalization
- Grown processes and IT structures slow down possible performance capabilities
- Powerful existing solutions and promising new technologies and services

The success of any project still depends on the people involved. We enjoy such tasks and are happy to support you. If you are interested, get in touch.



Support for your success.

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