

SYNERGY 4.0

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@ Aalto ARTS

A?



to act as society's
visionaries
and change agents

vision is the art of
seeing what is invisible
to others

Jonathan Swift (1667-1745)

discovery [creativity] is seeing what others see,
and thinking what others don't.

Dr. Albert Szent-Gyorgyi (Nobel Prize in Medicine 1937)

a world class university
in the fields of
technology, business
and design by 2020

Aalto University _ Founding Vision

innovation (n) is in essence about the
successful **implementation** and **adoption**
of **creative** and imaginative (i.e., new, novel, better)
insights and **ideas** that have **value**.

synergy

the whole being greater than the sum
of its individual constituent parts

the creation of a whole that is greater than the simple sum of its parts
 $2+2=5$ or more _ innovation **effectiveness** or $2+2=3$ or less _ innovation **efficiencies**

*The term **synergy** comes from the Attic Greek word συνεργία *synergia* from *synergos*, συνεργός, meaning "working together"*

significance

hi

success

hi



survival

synergy

2.0

3.0

4.0

SYNERGY 4.0 _ **CONTEXT**

What is the Fourth Industrial Revolution?



0:03 / 11:31



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DAVOS 2016: **TECHNOLOGY** TAKES CENTRE STAGE

meeting of minds

technology and the role of the digital economy
sets the agenda for leaders at Davos

The European Magazine, March-April 2016
World Economic Forum

“everyone agreed that **technology**
would continue to **shape everything**,
although exactly how
seemed to divide the room”

Alex Katsomitros, The European Magazine,
World Economic Forum 2016

“there is a **win–win**
for **business** and **society** if we look beyond
immediate commercial gain in favour of
long-term **value creation**”

Mark Spelman, co-head, Future of the Internet Initiative,
World Economic Forum

“what we need is more **empathy**
we need it wired into our **systems**,
programmed into our brains”

Anand Mahindra, Chairman and Managing Director,
Mahindra & Mahindra,
World Economic Forum 2016.



DAVOS 2017

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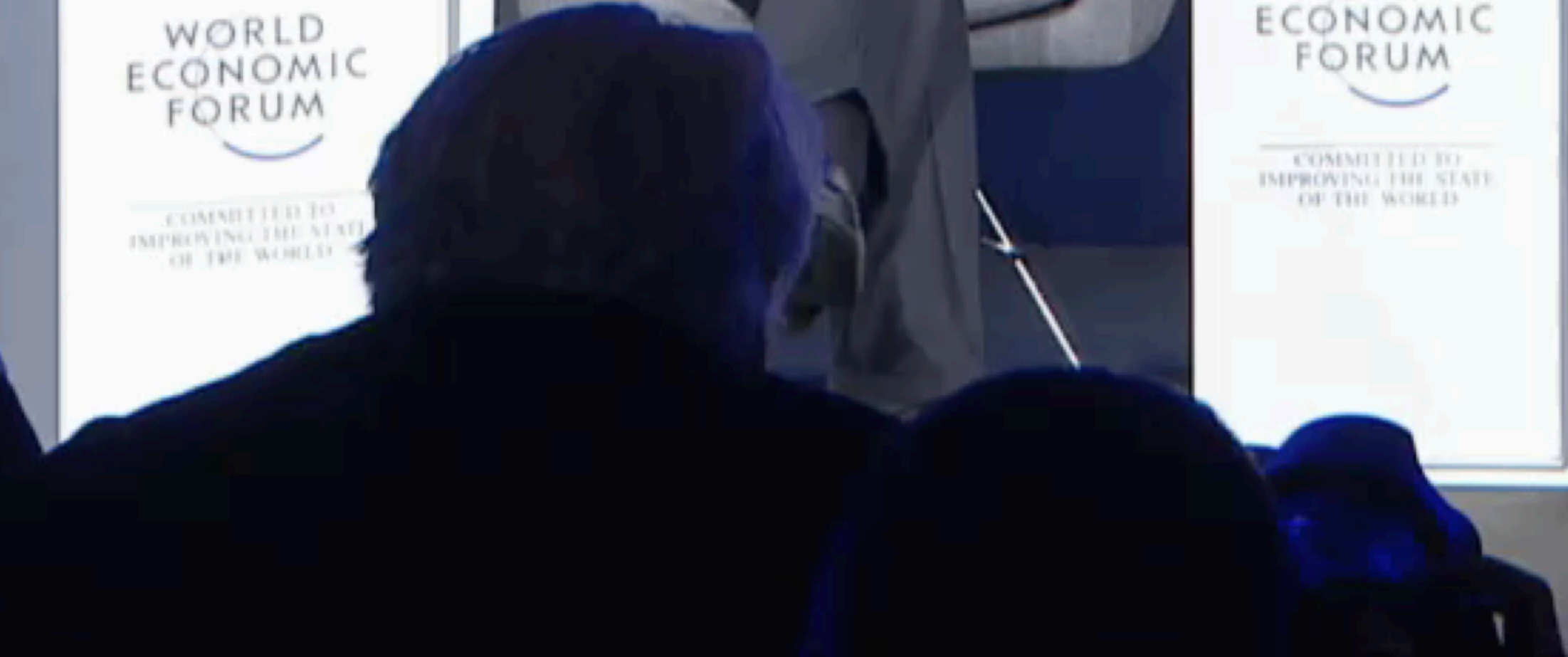
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DAVOS 2018

“we need to break the **cultural silos**.
too often people put **science** and the **humanities**,
or **science** and the **arts**, in **different silos**.
they are the **highest expression** of the **curiosity**
and **creativity of humanity**”

Fabiola Gianotti, Particle Physicist and the Director General of CERN
World Economic Forum 2018

“children
should be taught **soft skills** like
independent thinking, values
and teamwork.”

Jack Ma, Founder of the Alibaba Group (China's e-commerce giant).
World Economic Forum 2018

“we need to understand the importance of soft skills, creative skills, research skills, the ability to find information, synthesise it, and make something of it.”

Minouche Sharif, Director of the London School of Economics.
World Economic Forum 2018



DAVOS 2019



Davos 2019

Globalization 4.0

We're in a new economic era: Globalization 4.0. This is the theme of Davos 2019, which will bring together leaders from every sector and every part of the world to discuss how to cooperate on the challenges ahead. Find out more about the big ideas behind our Annual Meeting in this collection of articles by and about Davos participants.

“Our house is on fire.” 16 year-old Greta Thunberg wants action



Greta Thunberg has a message for world leaders

Image: Mattias Nutt

25 Jan 2019

James Workman

Official Writer at the World Economic Forum Annual Meeting 2019



This article is part of the [World Economic Forum Annual Meeting](#)

“I don’t want your hope. I want you to panic...and act.”

Greta Thunberg does not mince words when speaking truth to power, and her soft voice silenced a room full of global leaders from the financial, political and media sectors.



DAVOS 2020: **SYNERGY 4.0** TAKES CENTRE STAGE

SYNERGY 1.0

disciplinary and intra-disciplinary perspective

dominant emphasis: co-ordination / knowledge intensification

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SYNERGY 2.0

multi-disciplinary perspective

dominant emphasis: co-operation / knowledge amplification

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dominant emphasis: collaboration / knowledge integration

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dominant emphasis: collaboration / knowledge integration

SYNERGY 4.0

trans-disciplinary perspective

dominant emphasis: deep and transformative collaboration

and systemic integration of knowledge / collective imagination

to know

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SYNERGY 2.0

multi-disciplinary perspective
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SYNERGY 3.0

inter-disciplinary perspective
dominant emphasis: collaboration / knowledge integration

to imagine

SYNERGY 4.0

trans-disciplinary perspective
dominant emphasis: deep and transformative collaboration
and systemic integration of knowledge / collective imagination

‘trans-disciplinary
focuses on the organisation of knowledge around **complex**
heterogeneous domains
rather than the **disciplines** and **subjects**
into which knowledge is commonly
organised’

Lawrence, R.J. & Després, C., 2004. Futures of Trans-disciplinarity. *Futures*, 36 (4), pp.397–405.

synergy 4.0

is in essence **trans-disciplinary** and **transformative**
by nurture and intent.

transformational relating to a major change

generative learning

a style of learning that encourages
experimentation, risk-taking, openness,
and system-wide thinking.

people

synergy within and between **people** and **things**

things

people

synergies

things

people

within an

individual person _ T-shaped specialist (depth) + generalist (breadth / 'range')

synergies

things

people

within an

individual person _ T-shaped specialist (depth) + generalist (breadth / 'range')

within and between

people _ dyads e.g. CEO + CFO / CDO ... teams, companies, organisations

synergies

things

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within an

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synergies

within and between

people and things _ eco-systems, networks, platforms ... UI / UX / CX

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synergies

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things

within and between

things and systems of things _ the internet of things, big data, machine learning

Google

The image shows the word "Google" in its signature multi-colored font. The letter 'o' is replaced by a Nest smart thermostat. The thermostat is circular with a black bezel and a blue display screen. The screen shows the number "23" in white, indicating the current temperature. The word "nest" is visible at the top of the thermostat's bezel. The other letters of "Google" are in their standard colors: 'G' is blue, 'o' is yellow, 'g' is blue, 'l' is green, and 'e' is red.



Control, when you want it.



A thermostat in your pocket.
Change the temperature from the
subway or the sofa.



See your home on your phone.
Keep an eye on things when you're gone.



Hush alarms from the app.
No more ladders. Silence alarms from
your phone.

people

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IDBM

International Design Business Management Programme