

## SYNERGY 4.0

Peter McGrory  
Director of the  
IDBM Programme  
@ Aalto ARTS

A?



to act as society's  
visionaries  
and change agents

Aalto University \_ Founding Mission 2010

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

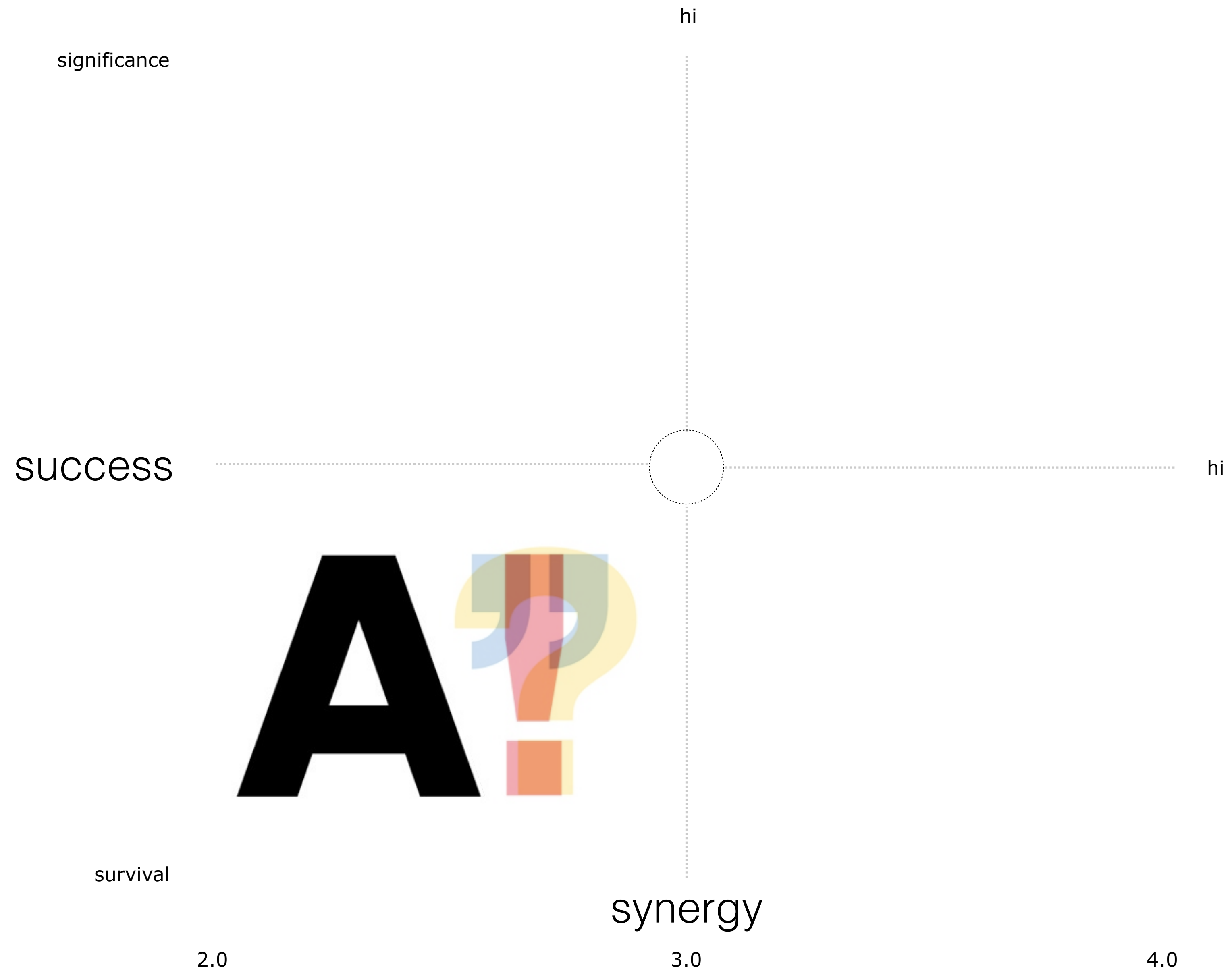
innovation (n) is in essence about the  
successful **implementation** and **adoption**  
of **creative** and imaginative (i.e., new, novel, better)  
**insights** and **ideas** that have **value**.

# 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"*



## SYNERGY 4.0 \_ **CONTEXT**

What is the Fourth Industrial Revolution?



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HD





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

WORLD  
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FORUM

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IMPROVING THE STATE  
OF THE WORLD

BRIN

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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



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# 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**

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dominant emphasis: co-operation / knowledge amplification

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## **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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**‘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

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within and between

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

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

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within and between

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





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.

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# **I<sup>2</sup>DBM**

International Design Business Management Programme