

A Five-Factor Market Approach For Long-Term Product Development

A Result Of Systems Thinking



Andy Mattulat Filipovic

NTNU - Norwegian University of
Science and Technology /
DTU – Technical University of Denmark
Email: filipovic.a.mattulat@ntnu.no



Mo Mansouri

USN – University of South-Eastern
Norway /
Stevens Institute of Technology
Email: Mo.Mansouri@usn.no



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Presenter

Resume

Andy is positioned as a dual degree PhD candidate between the Norwegian University of Science and Technology and the Technical University of Denmark.

Andy graduated with an MSc. in Design and Innovation from DTU in January 2021 on the topic of studying the elicitation of design requirements from strategic objectives.

Between graduation and the beginning of the PhD position, Andy was engaged in developing and implementing the mandatory innovation course for all future master's students at DTU. A combined multilevel and multidisciplinary massive course that runs three times yearly.

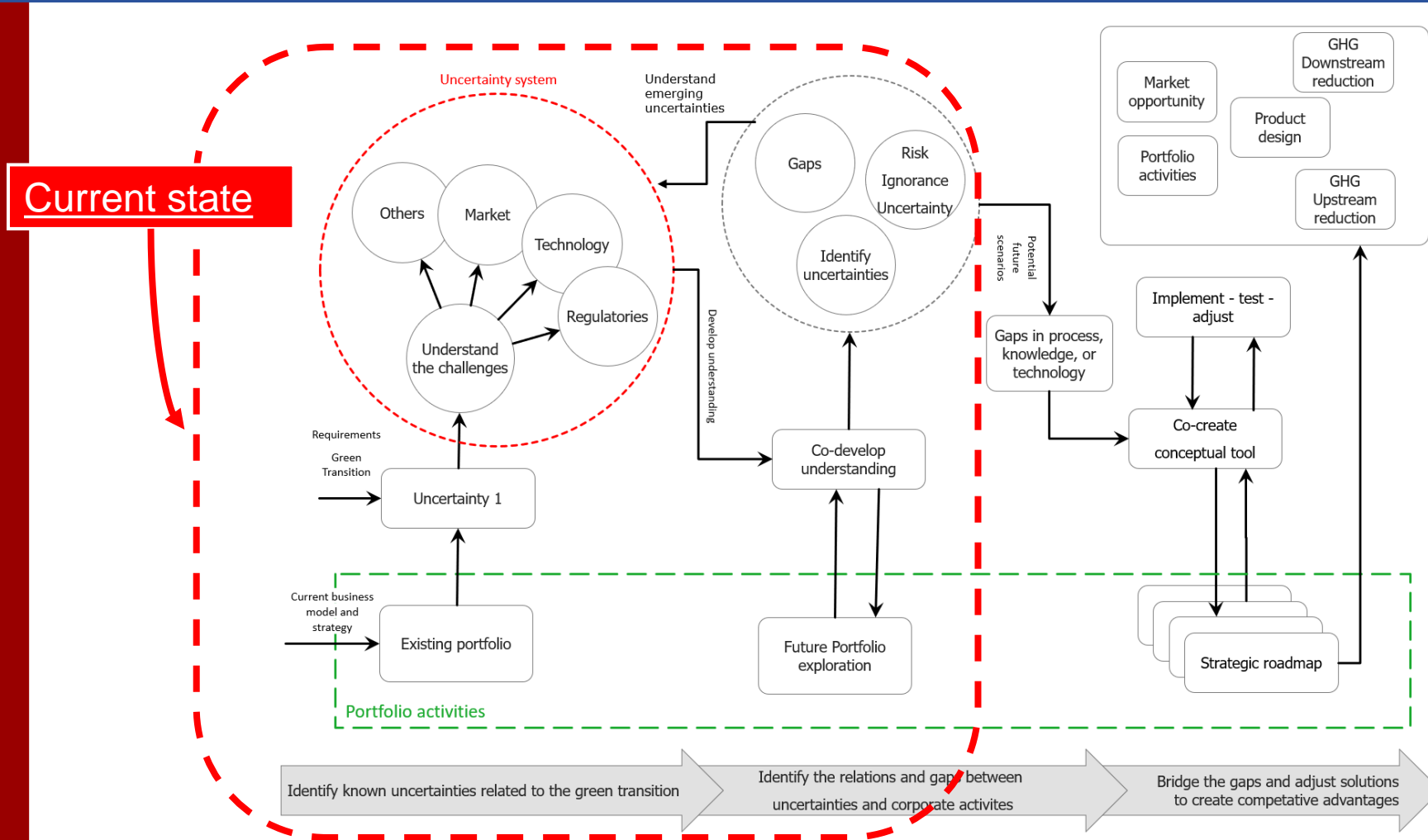
Andy's interests are in Systems thinking, Design and innovation, and product portfolio management.

Andy Mattulat Filipovic



Research area

De-risking the green transition in product development

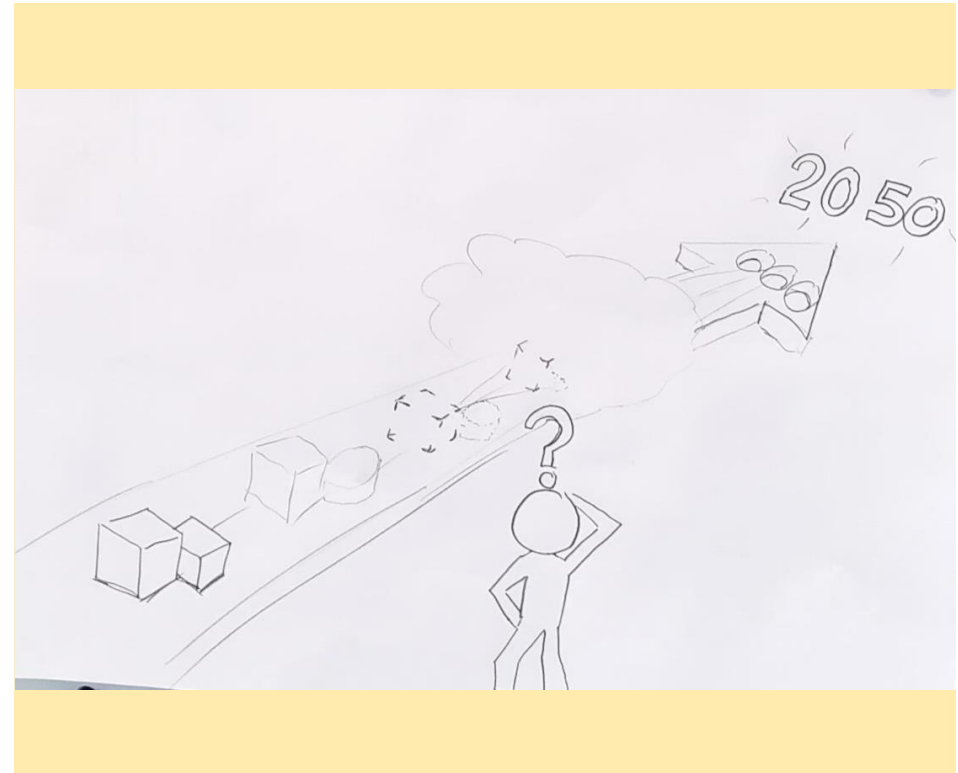


Product- and innovation portfolios

Portfolios

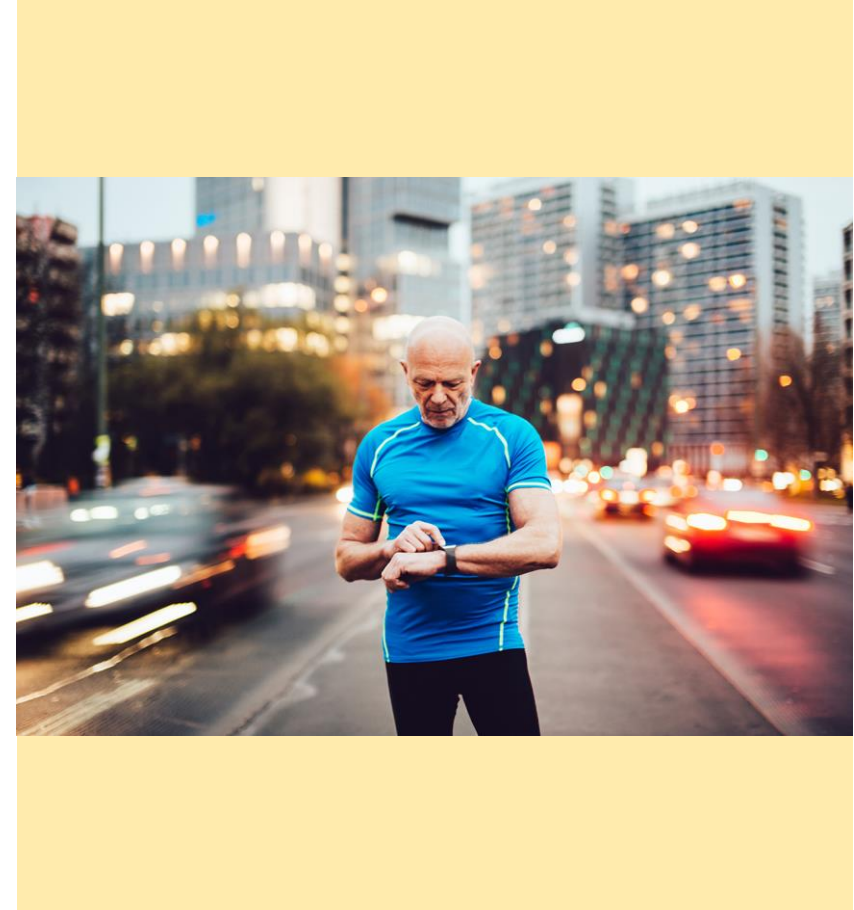
- Full product/service assortment
- Strategy
- Recourses
- Capabilities

Framing the future



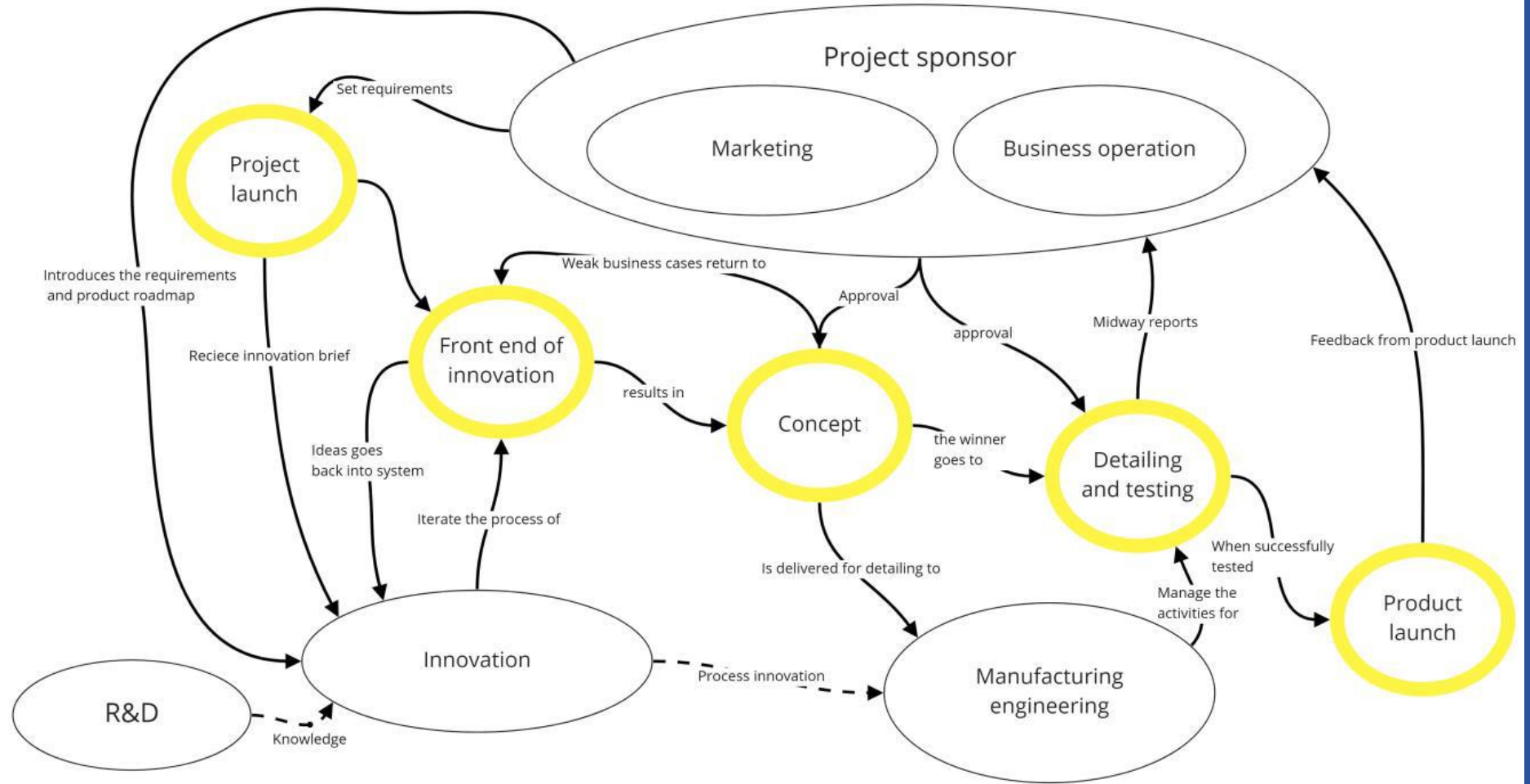
What determine the future market?

- Short-term/Long-term perspective.
- Changing requirements
- Changing conditions

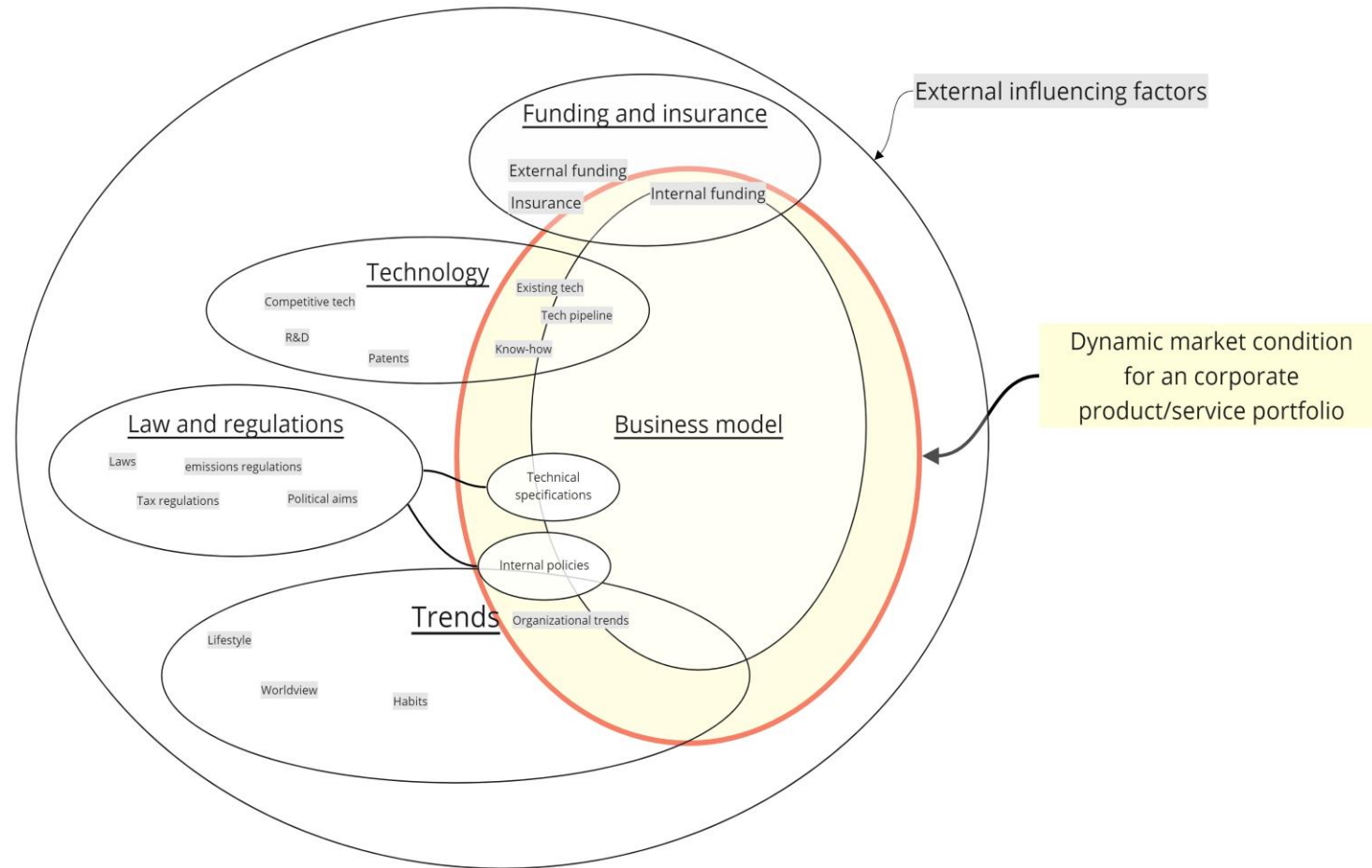


What determine the future market?

Framing the challenge



What determine the future market?



How the study is framed

Customer –

Actor –

Transformation –

Worldview –

Owner –

Environment –

What determine the future market?

Trends

- Tendencies and directions
- Lifestyles
- Behavior (public/private/professional)
- World views
- Movements



What determine the future market?

Technology

- Current (internal/external)
- Competitive
- Patents
- Pipeline
- Full value chain technologies



What determine the future market?

Funding and insurance

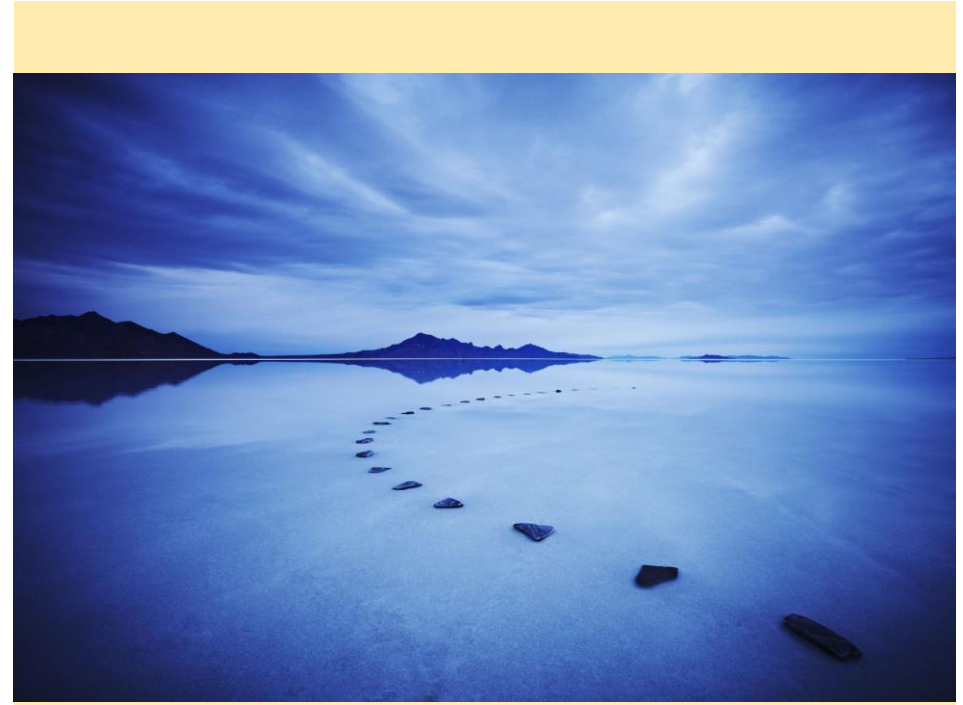
- Cashflow
 - Internal funding
 - Governmental funding
 - Seeds
 - Investments
-
- Security
 - Risk
 - Threats



What determine the future market?

Business model

Customer relation
Products and services
Organization
Strategy
Platforms
Value proposition
Value chain



What determine the future market?

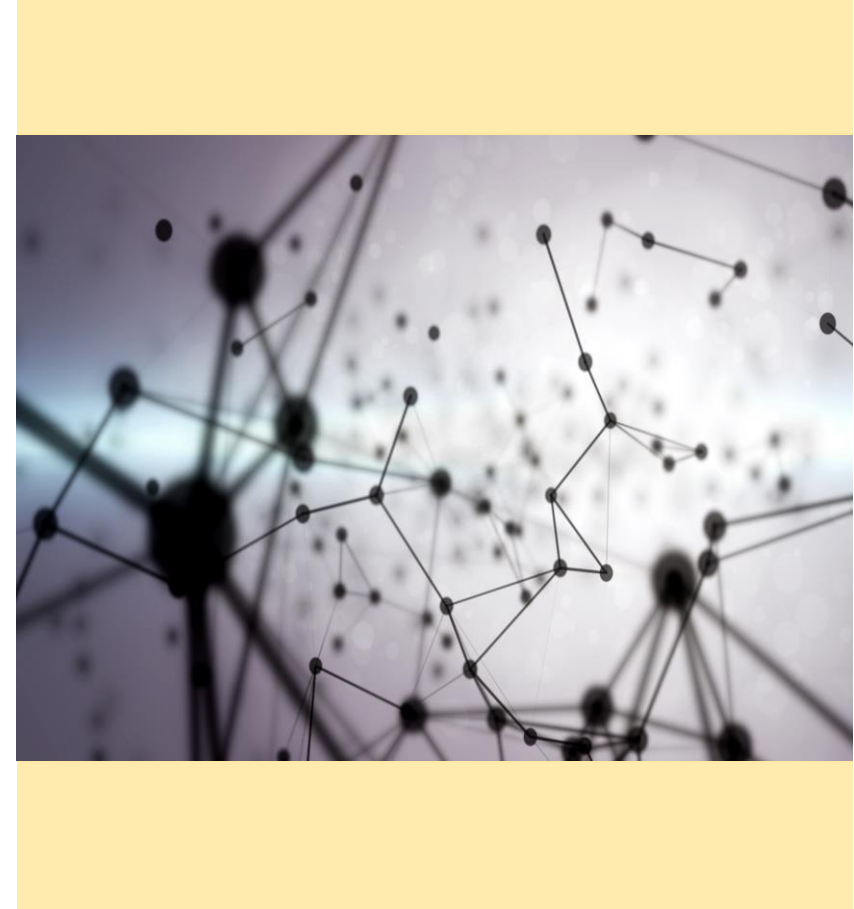
Law and regulations

- Legislation
- Laws
- Taxes
- Subsidies
- Regulations
- Fines



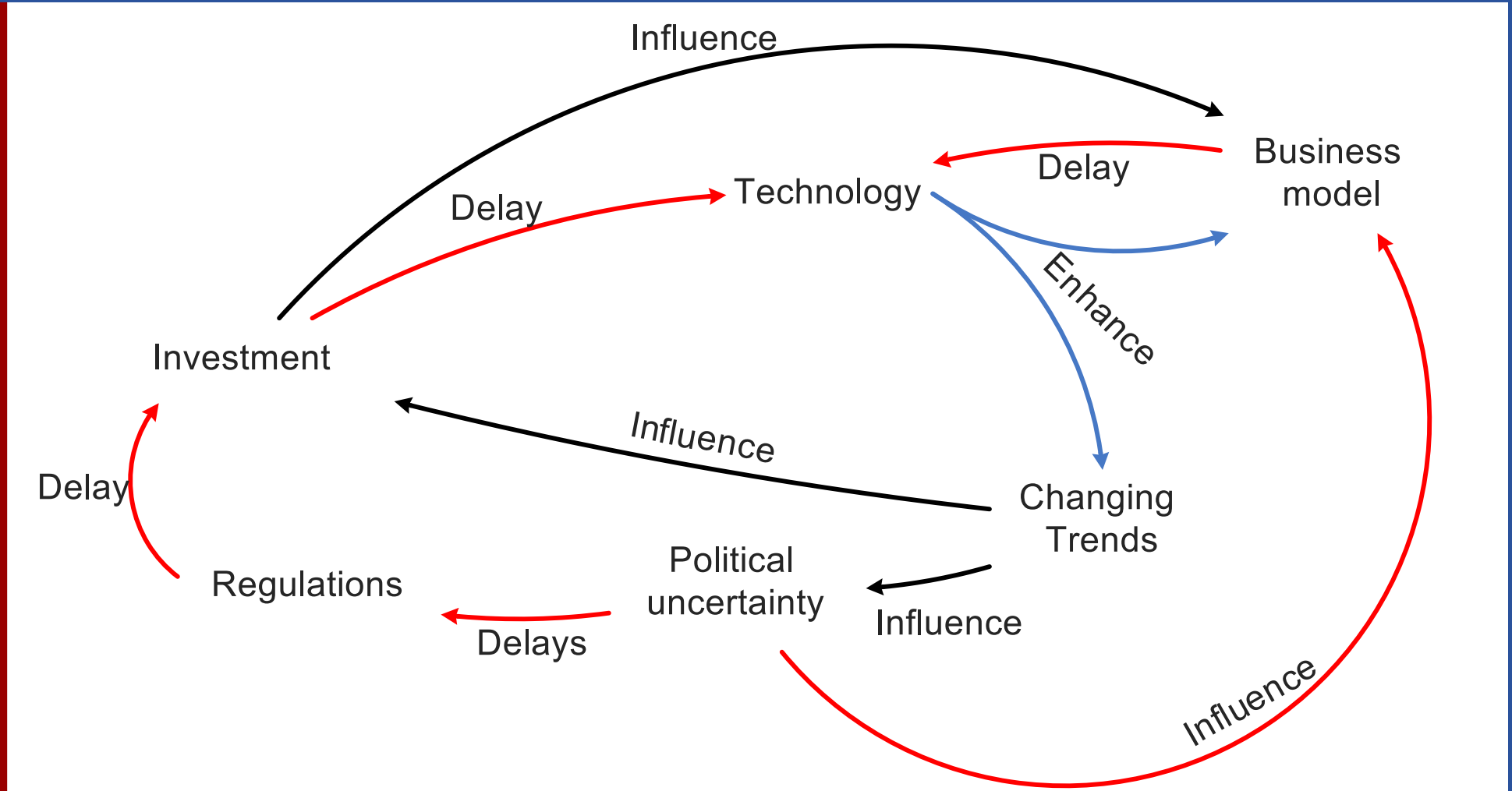
Interrelations between systems

- The systems elements influence each other to change the context.
- Feedback mechanisms
- Dynamics



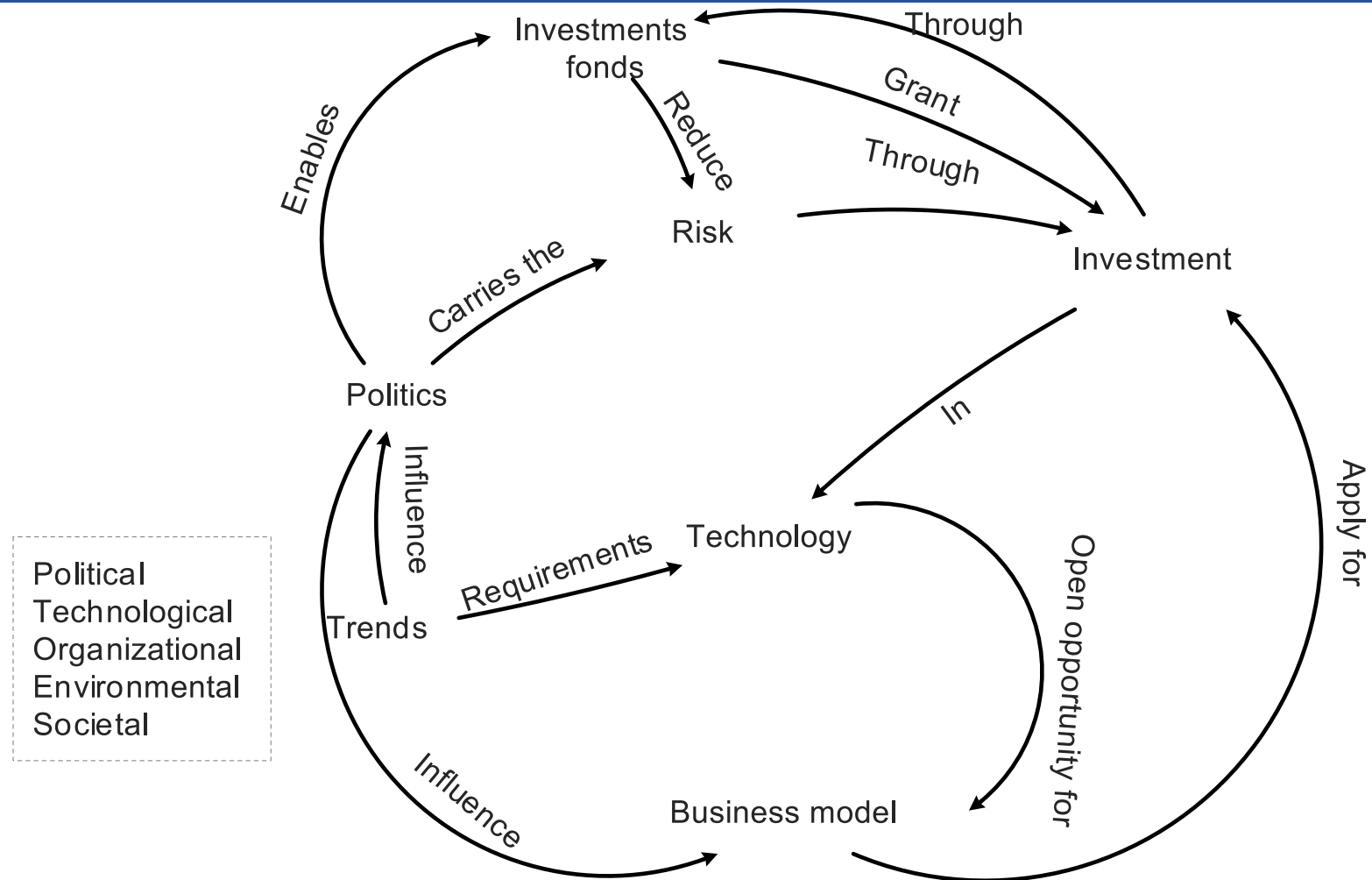
Illustrative example 1# Political delay

Long-term and dynamic



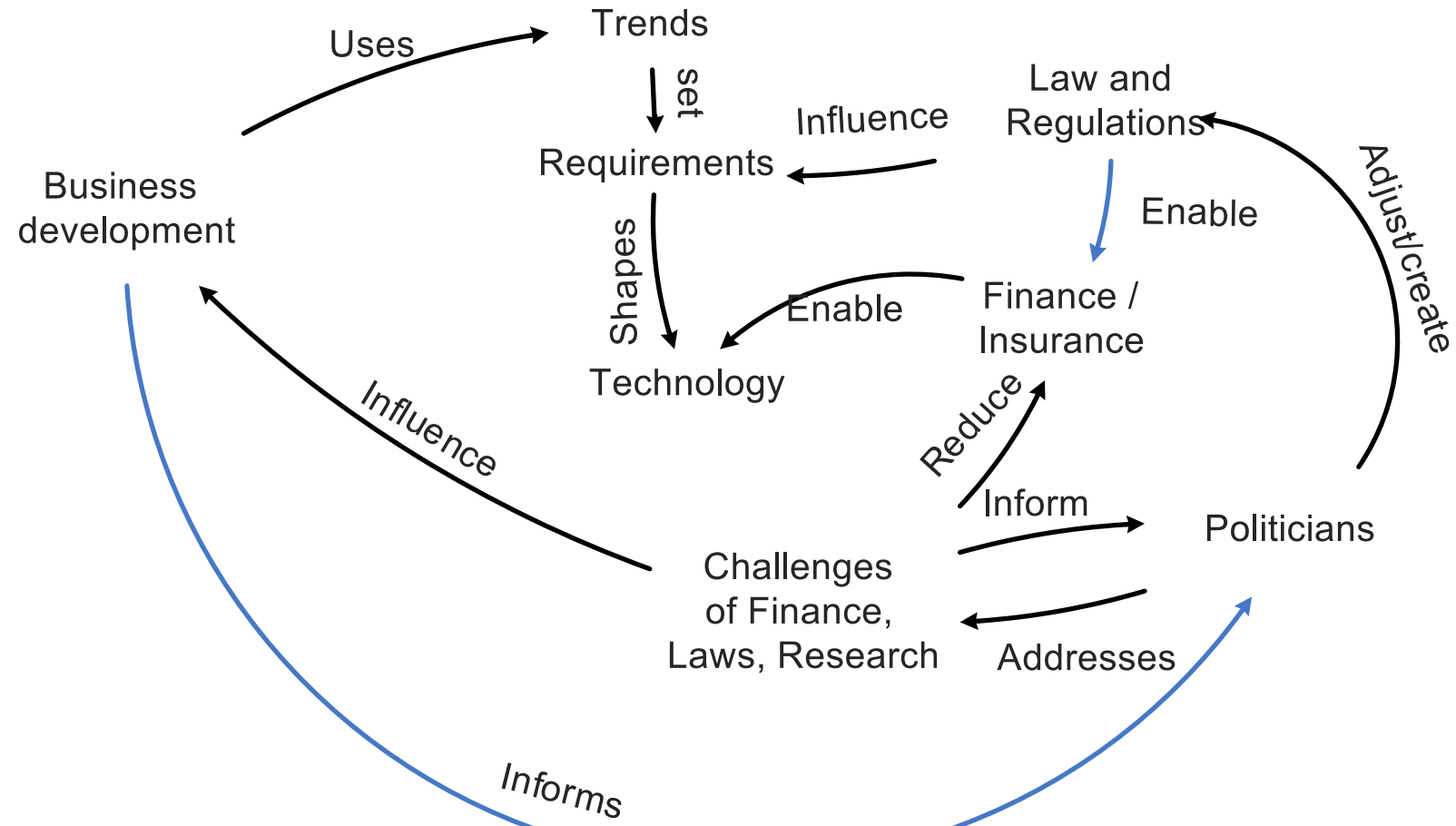
Illustrative example 2# Government Risk

Long-term and dynamic



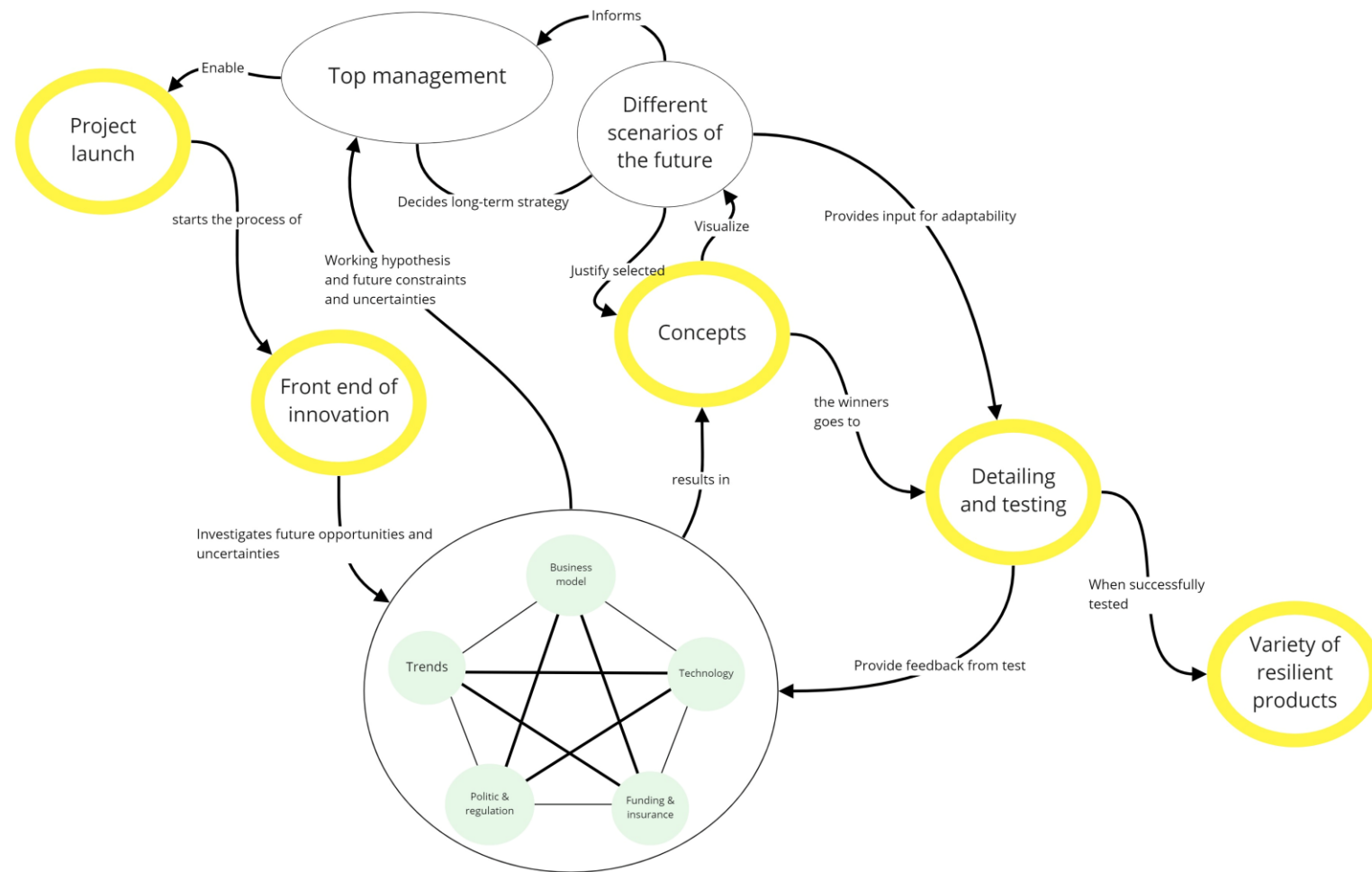
Illustrative example 3# Development

Long-term and dynamic



Fit in the process

Implications



Learnings from recent workshop

Implications

Workshop

- 8 hours
- 19 diverse participants
- Diverse background
- Industries

Learnings

- Complexity in organizations
- Difficult to start
- Tends to evaluate static instead of dynamics
- Unsure of responsibility

Future studies

Implications

What is the structure for the future study?

- Who and why?
- What to measure?
- Research approach?
- Expected results
 - Support innovation strategy



Thank you for your time

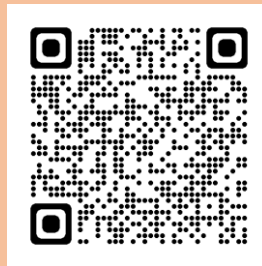
Contact

Email:

filipovic.a.mattulat@ntnu.no or
amafi@dtu.dk

LinkedIn:

<https://www.linkedin.com/in/andy-m-filipovic/>



Andy Mattulat Filipovic

