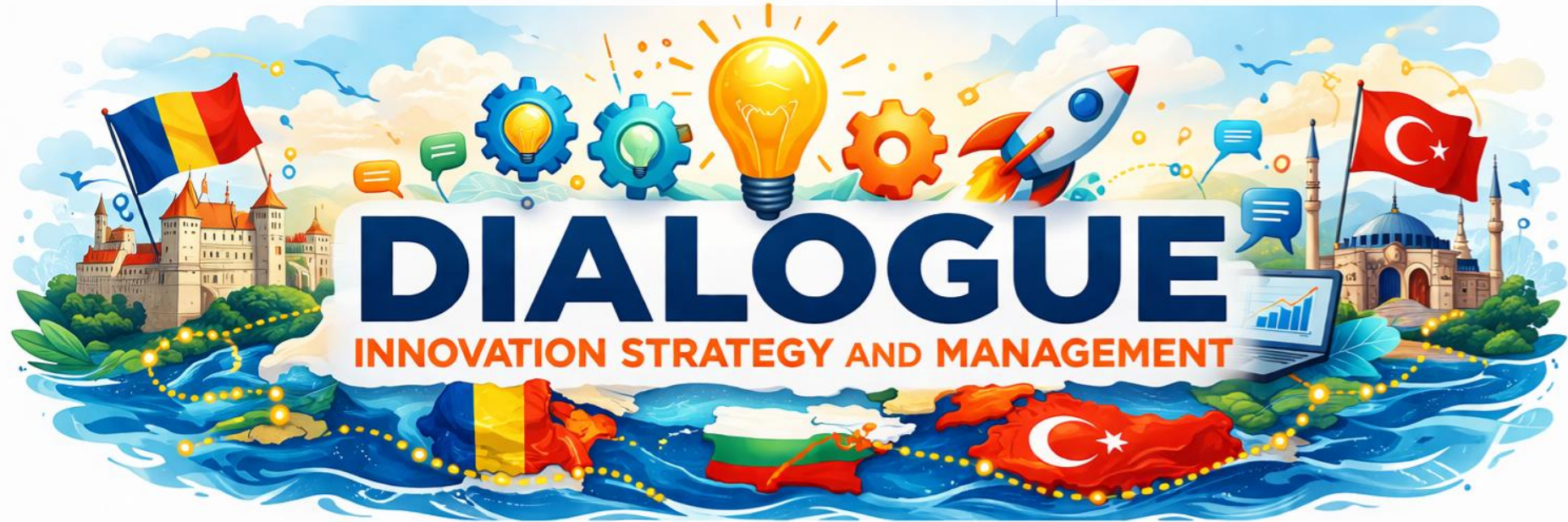




Innovation Strategy and Management

Day 3

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Day 3 - Agenda

1. Innovation Implementation

- Turning ideas into reality
- Organizational resistance

2. Scaling

- Prototype and funding
- Growth strategies

3. Ecosystems

- Collaboration networks
- Are ecosystems more important than individual companies?

4. Ethics & Sustainability

- Responsible innovation
- Should all innovations be pursued?
- Is failure necessary for innovation?

Workshop – team work

Round-table discussion



Why do companies resist innovation internally?

When is the right moment to scale an innovation?

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9.1 Responsible innovation

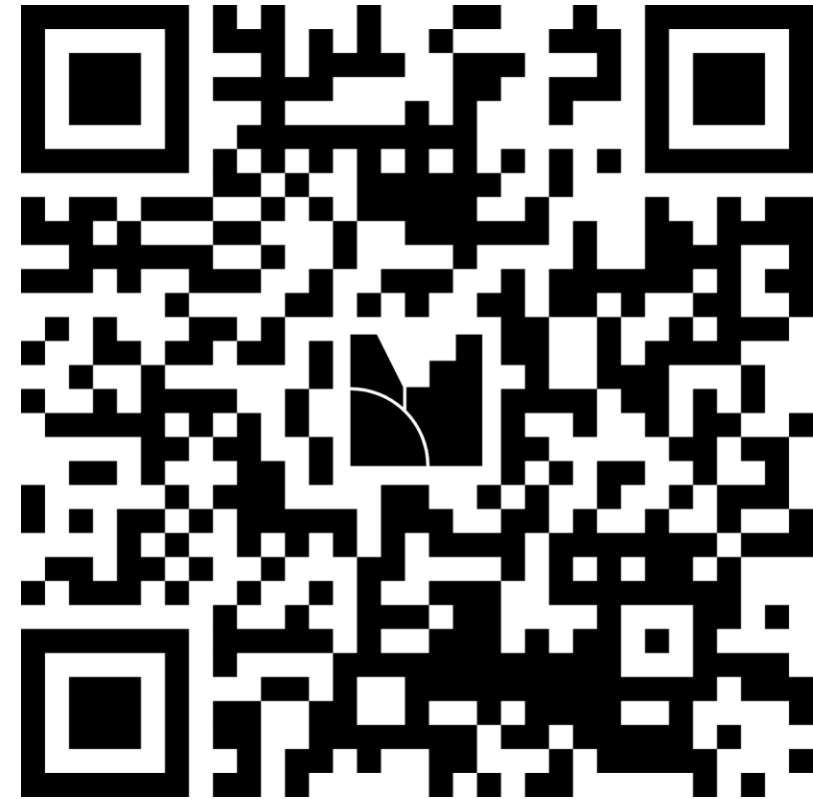
9.2 When to pursue an innovation

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Chapter 10. Conclusions

Innovation - recap

What do you remember from Day 2?
Add 3 things you remember most clearly.



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Innovation implementation

Success depends not only on idea quality, but also on:

- effective execution
- coordination across teams
- organizational alignment
- change management

Characteristics

- Implementation is a **socio-technical process**
- It involves:
 - ❖ technology or service deployment
 - ❖ workflow redesign
 - ❖ decision-making adjustments
 - ❖ stakeholder coordination

Turning ideas into reality

Innovation implementation stages:

1. **Concept validation** - the innovation is evaluated for technical feasibility and market relevance using prototypes, simulations, or pilot studies.
2. **Pilot implementation** - the solution is introduced in a controlled environment to identify operational issues before wider adoption.
3. **Full-scale deployment** - the innovation is integrated across the organization through coordination, user training, and workflow adaptation.
4. **Institutionalization** - the innovation becomes part of routine organizational practice and is supported by culture, governance, and incentives.

Organizational resistance

Levels of resistance:

- **Individual level** - resistance is driven by fear of failure, loss of competence or anxiety about new skills and technologies.
- **Group level** - resistance emerges from team norms, social dynamics, and concerns about autonomy or resource redistribution.
- **Structural level** - resistance is embedded in organizational hierarchy, rigid procedures and misaligned incentives that slow innovation adoption.

Lewin's change model

Lewin's change model (Lewin, 1947) stages:

1. **Unfreezing** - create awareness of the need for change by highlighting inefficiencies, risks, or external pressures.
2. **Changing** - introduce new systems, behaviors, and processes gradually through training and communication.
3. **Refreezing** - stabilize new practices by embedding them into policies, routines, and organizational culture.

Example: manufacturing companies implementing automation reduce resistance by training employees to use and improve new systems, shifting perception from replacement to augmentation.

Exercise: applying Lewin's change model

Task: Your organization plans to introduce a major innovation. Using Lewin's change model, describe how you would manage the implementation process. For each stage, identify concrete actions:

Unfreezing – “How would you prepare employees for change?”

Changing – “How would you introduce the innovation?”

Refreezing – “How would you ensure long-term adoption?”

Scenario: a manufacturing company is introducing an AI-based predictive maintenance system to monitor machines and reduce equipment failures. Employees are concerned that:

- ☐ AI will replace their jobs
- ☐ the system is too complex
- ☐ existing work routines will be disrupted

How would each stage look like?

1. Unfreezing

What actions should management take to reduce initial resistance?

- Communicate benefits?
- Explain business needs?
- Involve employees early?

2. Changing

How should the new system be introduced?

- Pilot project?
- Employee training?
- Gradual rollout?

3. Refreezing

How can the company ensure the innovation becomes part of daily operations?

- New procedures?
- Performance indicators?
- Continuous support?

Additional questions

- Which stage is most difficult in practice?
- What mistakes could cause implementation failure?

Scaling innovation

- Scaling innovation means expanding a validated idea, prototype, or pilot solution into a larger, repeatable, and sustainable system.
- Implementation focuses on making an innovation work in practice.
- Scaling focuses on making it work effectively at larger organizational or market levels and it requires:
 - ❖ Process redesign and standardization
 - ❖ Business model adaptation
 - ❖ Additional funding and resource allocation
 - ❖ Operational coordination and strategic planning

Prototype



Prototype = an early version of a product, service or system used to test an innovation idea before full implementation

Purpose

- ✓ validate technical feasibility
- ✓ test functionality and usability
- ✓ collect early feedback
- ✓ reduce uncertainty and development risk

Characteristics

- limited features
- low-cost development
- experimental and iterative

Funding



Funding - provides the financial resources required to develop, test, implement and scale innovations

Why funding matters

- ✓ supports R&D (Research and Development) activities
- ✓ covers technology, infrastructure, and staffing costs
- ✓ enables market testing and expansion

Sources of funding

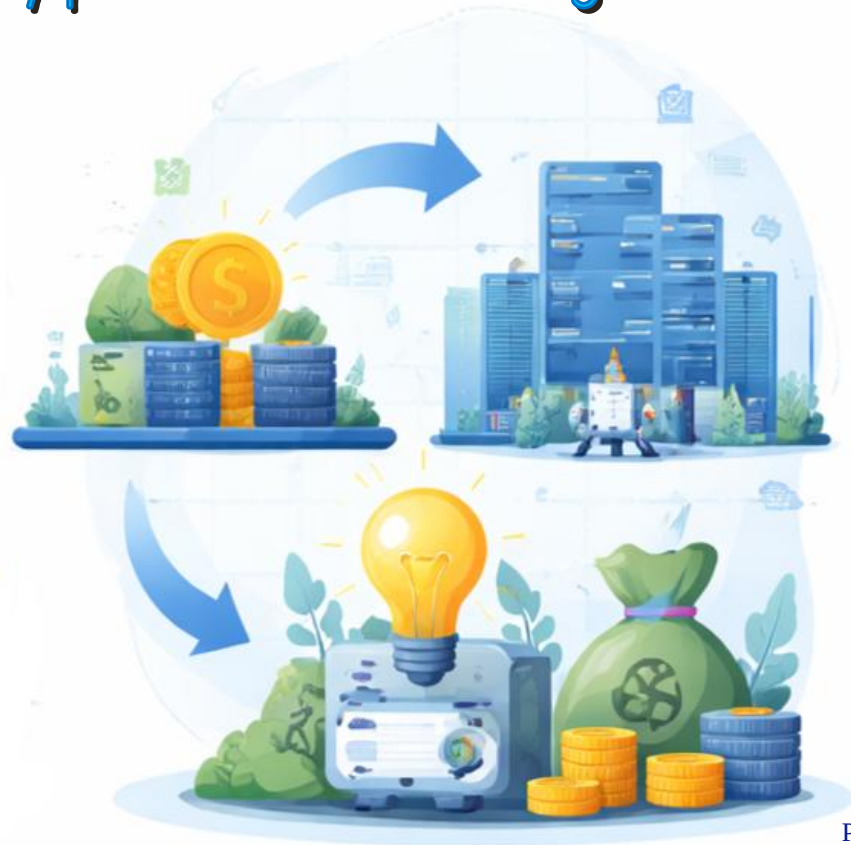
- internal organizational budgets
- investors / venture capital
- grants and public funding
- strategic partnerships

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From prototype to scaling

Prototype → Funding → Scaling



- ❖ **Prototype** validates whether an innovation works on a small scale
- ❖ Positive results increase confidence and attract **funding**
- ❖ Funding enables **scaling**, meaning broader deployment without loss of quality or efficiency

Example - University mobile app

Prototype: basic app with timetable and notifications

Validation: students actively use the app and request more features

Funding: university allocates budget for development team and infrastructure

Scaling: app expanded with exam registration, library booking, and campus navigation for all students

Growth strategies

Strategies:

- **Market penetration** - increasing adoption within existing users or markets by improving usability, reducing barriers, and enhancing features. Focus is on deeper engagement and higher usage.
- **Market expansion** - introducing the innovation into new geographic regions or user segments. Requires adaptation to different cultural, regulatory, and operational environments.
- **Product diversification** - developing additional products or services around the core innovation to build an ecosystem and increase user retention.
- **Platform scaling** - creating a network-based ecosystem where value grows as more users, developers, or partners participate, driven by network effects.

Example - University mobile app

Market penetration - increase adoption among all students and staff by improving usability, integrating the app into daily academic workflows, and promoting it as a central communication tool.

Market expansion - extend the application to partner universities or international campuses, adapting it to different languages, academic systems, and regulatory requirements.

Product diversification - expand the app into a broader ecosystem with additional services such as transport scheduling, student housing support, career services, and internship platforms.

Platform scaling – open the system to external developers or institutional partners to build complementary modules, increasing overall value through ecosystem effects.

Ecosystems

Main participants

- businesses and startups
- universities and research institutions
- governments and public agencies
- investors and funding organizations
- civil society and users

Characteristics

- innovation is based on collaboration and co-creation
- knowledge, resources and expertise are shared
- multiple actors contribute to development and adoption



Benefits:

- ✓ reduce uncertainty and innovation risk
- ✓ accelerate knowledge transfer
- ✓ improve access to funding and infrastructure
- ✓ increase flexibility and adaptability
- ✓ support SMEs that lack internal innovation capacity

Essential for:

- ✓ digital transformation
- ✓ sustainability transitions
- ✓ regional economic development
- ✓ large-scale technological innovation

Collaboration networks

- Collaboration can occur at multiple levels:
 - intra-organizational, between departments or business units;
 - inter-organizational, between companies, suppliers, or customers;
 - institutional, involving universities, public authorities, and research centers.



Dialogue Innovation Platform

Common framework: **the triple helix model**. In this model:

- universities contribute research and talent;
- industry contributes commercialization capacity and market access;
- government provides regulation, infrastructure, and funding mechanisms.

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Ecosystems vs. individual companies

Individual companies perspective:

- internal company resources
- firm capabilities and expertise
- competitive market positioning
- firm-centered competitive advantage



Ecosystem perspective

- access to knowledge and talent
- funding opportunities
- collaboration networks
- complementary technologies and infrastructure

Example – Tehnopol Galați

Tehnopol Galați supports regional innovation by:

- ✓ connecting universities, businesses, and public institutions
- ✓ facilitating partnerships and technology transfer
- ✓ supporting entrepreneurship and European projects
- ✓ integrating regional actors into international innovation networks

Round-table discussion

Why do companies resist innovation internally?

Focus on:

❖ organizational resistance

When is the right moment to scale an innovation?

Focus on:

❖ growth timing



Ethics and sustainability

Organizations must evaluate not only:

- **technical feasibility**
- **economic profitability**

but also:

- **social impact**
- **environmental responsibility**
- **long-term public value**

Ethics and sustainability challenges:

- AI and algorithmic bias
- automation and workforce displacement
- data privacy and digital governance
- environmental impact of technologies
- social inequalities and unequal access



Responsible innovation

A widely used framework for responsible innovation identifies four main dimensions:

- ❑ **Anticipation** - organizations should evaluate potential future risks, unintended consequences, and societal impacts before deploying innovations.
- ❑ **Inclusion** - responsible innovation requires involving stakeholders such as users, communities, regulators, and employees in decision-making processes.
- ❑ **Reflexivity** - organizations must critically examine their own assumptions, objectives, and possible biases embedded in innovation systems.
- ❑ **Responsiveness** - innovation processes should remain adaptable, allowing organizations to modify or discontinue solutions when ethical concerns or new risks emerge.

When to pursue an innovation

Innovation decisions should consider multiple dimensions:

- economic value;
- social consequences;
- environmental sustainability;
- legal and regulatory implications;
- effects on human autonomy, privacy, and well-being.

Ethical screening and sustainability assessment tools:

- life cycle assessment;
- stakeholder impact analysis;
- ethics review boards;
- sustainability reporting frameworks.

**Not only
“Can we do it?”
but also**

**“Should we do it?”
“Under what conditions should it be
deployed?”**

Inevitable failures

Failure is frequently described as an inevitable component of innovation. Because innovation involves uncertainty, experimentation, and exploration of unknown solutions, not all initiatives will succeed.

Failure can generate valuable learning when it occurs within controlled and reflective environments. In such contexts, failure provides information about:

- flawed assumptions;
- technical limitations;
- user needs;
- operational constraints.

Types of failure

- Productive failure - occurs within bounded, monitored, and reversible experimentation.

Examples: prototypes, simulations, sandbox environments, pilot studies.

- Destructive failure - results from negligence, poor governance, or unmanaged risk.

Examples, cybersecurity breaches caused by inadequate testing, infrastructure collapse due to ignored warning signals.

Innovation managers should design systems that are:

- ❑ safe-to-fail where appropriate;
- ❑ risk-aware where stakes are high.

Workshop No. 3

FINAL INNOVATION CHALLENGE

Team mission:

Transform your innovation project into a
clear, structured and convincing final pitch

- | | | |
|---|-----------------|---|
|  | Team 1 – purple |  |
|  | Team 2 – orange |  |
|  | Team 3 – yellow |  |
|  | Team 4 – grey |  |

Each team will:

- refine the solutions to the given problems (discussed in Days 1 and 2)
- prepare their PowerPoint presentation (decide what is the ONE key message of their project, that they want to support through the presentation)
- prepare for Q&A from other teams

PowerPoint Structure

PowerPoint structure:

- Problem: “What problem are you solving?”
- Users: “Who is affected?”
- Solution: “What is your innovation?”
- Value proposition: “Why does it matter?”
- Business model: “How does it sustain itself?”
- Adoption strategy: “How will users adopt it?”
- Risks and mitigation: “What could go wrong?”
- Vision: “What is the future impact?”

Team roles (each team member should have a role):

- Main presenter (the leader of the team)
- Co-presenter (supports explanations)
- Designers (in charge with the design aspect of the presentation)
- Experts (in charge with the information on the slides)
- Q&A responders

The first slide of the presentation will contain the names of the participants and their assigned roles. The rest of the slides should follow some rules:

- clear visuals (not text-heavy)
- consistent story
- aligned with the work done in Days 1 and 2

REMINDER

**This is not about the most complex idea, but
about the most convincing innovation story!**

Q&A rules

1. The leader of other team draws one question card from the three categories:

- Business and value 
- Adoption and market 
- Risk and feasibility 

2. Each team asks one question.

3. Presenting team answers immediately.

Quiz

Innovation strategy and
management



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Final conclusions

- ✓ Core capability
- ✓ Value creation
- ✓ Competitiveness & survival
- ✓ Organizational resilience



CONCLUSION

- ✓ Economic & societal impact
- ✓ Multiple innovation types
- ✓ Learning & experimentation
- ✓ Strategy & alignment
- ✓ Ethics & sustainability
- ✓ Collaboration & ecosystems
- ✓ Opportunity from uncertainty
- ✓ Sustainable development

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BSB Dialogue
Innovation
Platform



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