

# INSIGHTS INTO MANAGING RESEARCH PROJECTS: FUNDING, COLLABORATION, AND EXECUTION

Group Assignment

TALLINN UNIVERSITY OF TECHNOLOGY

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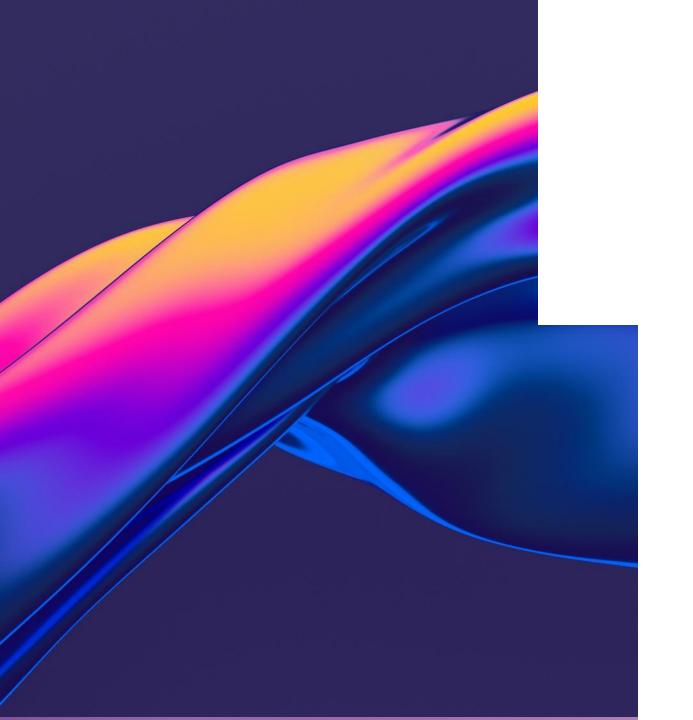
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| Department of Civil<br>Engineering and<br>Architecture | Department of<br>Energy Technology | Department of Civil<br>Engineering and<br>Architecture | Department of<br>Economics and<br>Finance | Department of<br>Software Science        |



## INTERVIEWED PRINCIPAL INVESTIGATORS (PIS):

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| Department of Civil<br>Engineering and<br>Architecture |                     | Department of<br>Energy Technology | Department of Civil<br>Engineering and<br>Architecture | Department of<br>Economics and<br>Finance | Department of<br>Software Science        |





# FINDING FUNDING

### **HOW RESEARCHERS IDENTIFY FUNDING**

| University Emails /<br>Info Sessions  | Networking / Internal<br>& External      | Online Searches /<br>Funding Portals | Direct from Ministries<br>/ Funders |
|---------------------------------------|------------------------------------------|--------------------------------------|-------------------------------------|
| ✓ Emails, timely reminders            | Informal expert network (most effective) | ✓ Occasional desk research           | ✓ Interreg, funder emails           |
| Letters from research office, funders | ✓ Seminars, senior staff                 | ✓ ETAg, Horizon Europe               |                                     |
| ✓ TalTech info sessions (very useful) | ✓ Past/ongoing project partners          | ✓ New European<br>Bauhaus            |                                     |



# INTERDISCIPLINARY COLLABORATION: A POWERFUL BUT DEMANDING STRATEGY



### **Why It Matters**

- Access to large-scale setups (e.g. Horizon)
- Combines diverse expertise
- Enhances networks & growth



### **Challenges & Risks**

- Conflicting goals (innovation vs. practicality)
- Misaligned work cultures (e.g. software teams)
- Delivery risks with external partners



### **Lessons for Success**

- Engage users early
- Assign expert sub-leads
- Match scope with realistic team capacity



### WHAT MAKES A PROPOSAL STAND OUT

### Clarity & Structure

- Clear problem definition, logical flow, measurable goals
- Defined roles, timeline, budget, and risk plan

#### Innovation & Relevance

- Propose something new, pilot it in real conditions
- Link to EU priorities like Green Deal or digital transition

### Collaboration & Proof of Capacity

- Strong consortium with real commitments
- Reference past successful projects without revealing too much

### Language that Connects

- Use the evaluator's language: buzzwords + policies
- Generic but credible "tick boxes & differentiate



### SMART PROPOSAL WRITING



### **Write Early, Write Clearly**

- Avoid rushed/sketchy proposals
- Start writing early (1 year ahead)
- Ensure clarity & call alignment



### **Plan Budget & Duration Realistically**

- Estimate staff/time by activity
- Don't undercut to win
- High-cost proposals can still succeed



### **Follow the Rules Exactly**

- Match every requirement in the call
- Adjust your idea to fit the format
- Review and tick all boxes



### **Recycle? Sometimes.**

- Use reviewer feedback to improve
- Reapply if call is similar
- Drop the idea if it's not worth it



### **DIFFERENCES IN ECONOMICS**

### Funding

- Funds often change focus
- Need to keep up with changes

### Interdisciplinary studies

- Quite common
- Need to pre-plan the deliverables

### Stand out features

- A novelty or a twist
- Strong team composition

### Tips on the application

- Fit the project to the call
- Plan ahead of time



### **TECH-SAVVY FUNDING STRATEGIES**



Targeted Tech Platforms: Leveraging specialized portals (ETAg, industry-specific channels, national databases).

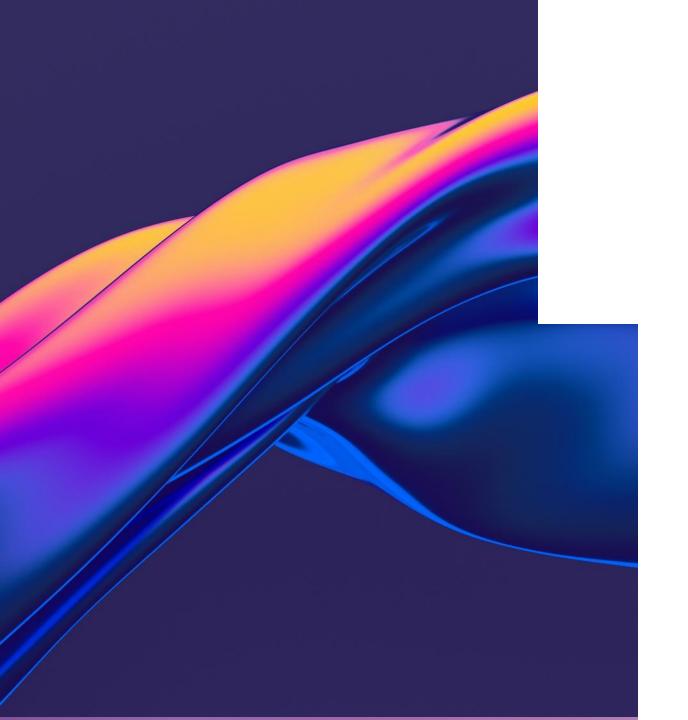


Industry-Academia Partnerships: Collaboration with SMEs to directly target applied research funding (practical, industry-driven opportunities).



Strategic Networking: Engaging proactively through internal workshops, tech forums, and informal tech communities to identify relevant funding.





# MANAGING PROJECTS

# TOOLS & PRACTICES FOR MANAGING RESEARCH PROJECTS: WHAT WORKS AND WHAT DOESN'T?



### **Tools That Work**

- MS Project, Excel for tracking
- Mendeley for references
- M-Files for document control
- Teams & Miro Board for collaboration
- Visio/draw.io for planning



### **Process Over Tools**

- Regular meetings keep momentum
- Clear roles & deadlines = smooth workflow
- Team alignment sometimes replaces formal tools



# Tool Challenges & Lessons

- Agile & Waterfall not always suitable
- Surprise outcomes & lastminute delivery
- Choose tools that match project complexity



## WHEN PROJECTS DERAIL: REAL CHALLENGES FROM THE INSIDE

| Challenge                   | Real Example                                    | Coping Strategy                               |
|-----------------------------|-------------------------------------------------|-----------------------------------------------|
| Deadline Disruptions        | Partner delays, equipment issues, illness       | Risk planning, buffer periods, flexibility    |
| Coordination Conflicts      | Partners act off-schedule, e.g., sudden demands | Reallocate roles, open team communication     |
| Budget & Procurement Gaps   | Unplanned procurements and stretched budget     | Pre-planning, close tracking, realistic scope |
| Team Motivation & Load      | Some members remain passive or inactive         | Delegate clearly, monitor contributions       |
| Cultural / Org. Differences | Diverse organizations and expectations          | Align early, clarify shared project goals     |



# MANAGING DIVERSE TEAMS: BEST PRACTICES FROM EXPERIENCED PIS



### **Clear Communication**

- Regular follow-ups and meetings
- Organize workshops to bridge gaps



### **Structured Leadership**

- Set project structure from the start
- Define meetings, timelines, and roles



### **Concise Messaging**

- Keep emails short and focused
- Prioritize important points only

## 👥 Dele

### **Delegating with Expertise**

- Appoint team leads for specific domains
- Delegate tasks to experts to ease management



### DOS AND DON'TS: FOR SUCCESSFUL PROJECT MANAGEMENT

### DOs (What Works)

- Set clear goals & timelines
- Hold regular check-ins & workshops
- Use calendars, meeting minutes, and tracking tools
- Keep a pragmatic vision of the end result

### DON'Ts (What to Avoid)

- X Don't assume deadlines are understood reinforce them
- X Don't expect perfect execution allow time for setbacks
- Don't rely too heavily on one person have a backup
- X Don't drift off-goal avoid distractions and scope creep



### **DIFFERENCES IN ECONOMICS**

### Tools

- Quantitative research methods
- Empirical and econometric analysis
- Simulation studies

### Challenges

- Same as other fields
- Lack of oversight

### Management advice

- Additional roles in the team are necessary
- Admins to keep track of progress and budget

#### DOs and DON'Ts

- Create support channels for administrative tasks
- Double check the progress reports



### **TECH-SAVVY MANAGEMENT STRATEGIES**



Dynamic Tools & Techniques: Utilizing agile-inspired methods (Scrum, Kanban) to manage complex IT-driven projects.



Communication as Core: Prioritizing frequent, structured communication across diverse teams to ensure alignment and clarity in goals.



Resource Optimization: Explicitly managing and allocating human resources to address typical academic project challenges—time conflicts and resource availability.





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