

FinEst Centre
for Smart Cities

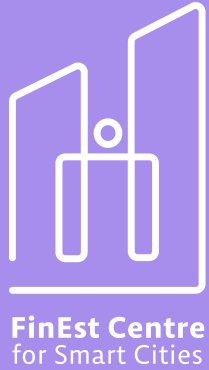
Experimenting & Piloting in Smart Cities

Matti Hämäläinen
Forum Virium Helsinki



Funded by
the European Union

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Introduction to PhD Modular Course

Experimenting & Piloting in Smart Cities

**6 lectures, 90 minutes each,
Tue, Wed, Thu at 3:30PM–5PM (Jun 14th–30th)**

1. Introduction
2. Prototypes, Pilots, Demo's & MVP's
3. Piloting Process, Plan & Evaluation
4. Living Labs & Innovation Platforms
5. Co-Creation, Co-Development & Agile Pilots
6. Piloting as Research Methodology
7. Exam

Pilot Project (Jun 27th–Aug 30th)

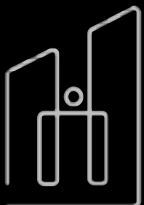
8. Pilot Project kick-off
9. Pilot Check-point Meetings
10. Pilot Presentations & Evaluation
11. Review & Feedback

Course Material:

- <https://fvh.io/pocketbook>
- <https://fvh.io/cohewepub>
- <http://fvh.io/brnce>
- <https://kehitakokeillen.fi/> (in Finnish)

Completion & Evaluation

- Final Exam

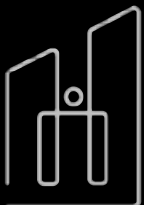


Experimenting & Piloting in Smart Cities

6 Lectures, 90 minutes each (Jun 7th–23rd) + Pilot Project (Jun 27th–Aug 30th)

1. Introduction	Tue	Jun 14 th	15:30–17:00	
2. Prototypes, Pilots, Demo's & MVP's	Wed	Jun 15 th	15:30–17:00	
3. Piloting Process, Plan & Evaluation	Thu	Jun 16 th	15:30–17:00	
4. Living Labs & Innovation Platforms	Wed	Jun 22 nd	15:30–17:00	(TBC)
5. Co-Creation & Agile Pilots	Tue	Jun 28 th	15:30–17:00	
6. Piloting as Research Methodology	Wed	Jun 29 th	15:30–17:00	
7. Exam	Thu	Jun 30 th	15:30–17:00	
8. Pilot Project kick-off	Mon	Jun 27 th	15:30–17:00	
9. Check-point Meetings (Jul 11 th –Aug 19 th)				
10. Pilot Presentations & Evaluation	Tue	Aug 30 th	15:30–17:00	
11. Review & Feedback	Tue	Aug 30 th	15:30–17:00	

COMPLETION & EVALUATION: Essay/Learning Diaries/Exam + Pilot Project Documentation

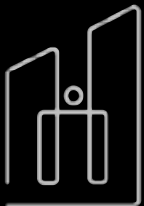


Experimenting & Piloting in Smart Cities

6 Lectures, 90 minutes each + Pilot Project
(Jun 14th–Jun 30th)

1. Introduction
2. Prototypes, Pilots, Demo's & MVP's
3. Piloting Process, Plan & Evaluation
4. Co-Creation & Agile Pilots
5. Living Labs & Innovation Platforms
6. Piloting as Research Methodology
7. Exam

COMPLETION & EVALUATION: Essay Exam + Pilot Project Documentation



Course Overview

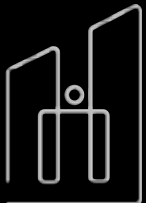
Combining **Research** & **Innovation** knowledge + skills

Research Agenda

- Know how to utilise agile pilots in research

Innovation Agenda

- Know how to plan, prepare, execute, document, and evaluate agile pilots & piloting programmes



Course Overview

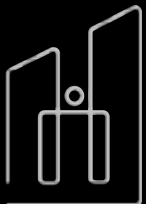
Two parallel modules: EPSC + PP

EPSC – Experimenting & Piloting in Smart Cities **1 ECTS**

- 90 minute lectures, on Tue, Wed, Thu at 3:30PM–5:00PM
- Piloting Theory
- COMPLETION & EVALUATION: Final Exam (Jun 30th)

PP – Piloting Project **4 ECTS** (Jun 27th–Aug 30th)

- Completed in teams of 2–5 students
- Piloting Practice
- Pilots and teams assigned on Jun 27th
- COMPLETION & EVALUATION: Deliverables & Presentations on Aug 30th



Pilot Project (4 ECTS)

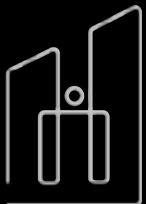
Students will work in teams of 2–5 people on given Piloting / Experimentation Project

DELIVERABLES:

Pilot Plan & Schedule (*at Check Point 1*)
Validation results
Final Presentation (Aug 30th)

COMPLETION & EVALUATION:

Piloting Plan (30%)
Delivered Material & Documentation (40%)
Research Performance
Innovation Performance
Final Presentation (30%)

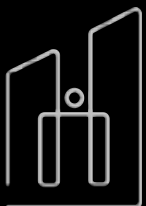


1. Introduction (90 min lecture)

- Course objectives
- Schedule
- Teaching, modules, exercises, completion & evaluation
- Course material
- Background — Brief history of Living Labs & Agile Piloting
 - Experimentation & Piloting
 - Terminology, objectives

Exercise

- Teaming up + pilot idea generation
- **Create a Pilot Plan**

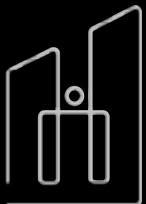


2. Prototypes, Pilots, Demo's & MVP's

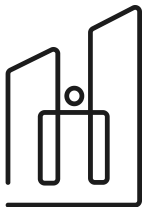
- Role of prototypes in general Innovation Process
 - Alpha's, Beta's, PoC's, DoD's, Demo's, MVP's, MLP's, Process Pilots, Product & Service Pilots
- Prototyping and Piloting as processes
- Objectives of Prototyping & Piloting
 - Critical Problems vs. Critical Functions

Exercise

- **Create a Pilot Road-map**



Testing or Piloting?



Research to Business

Experimentation

1) Research



2) Technology / method / solution

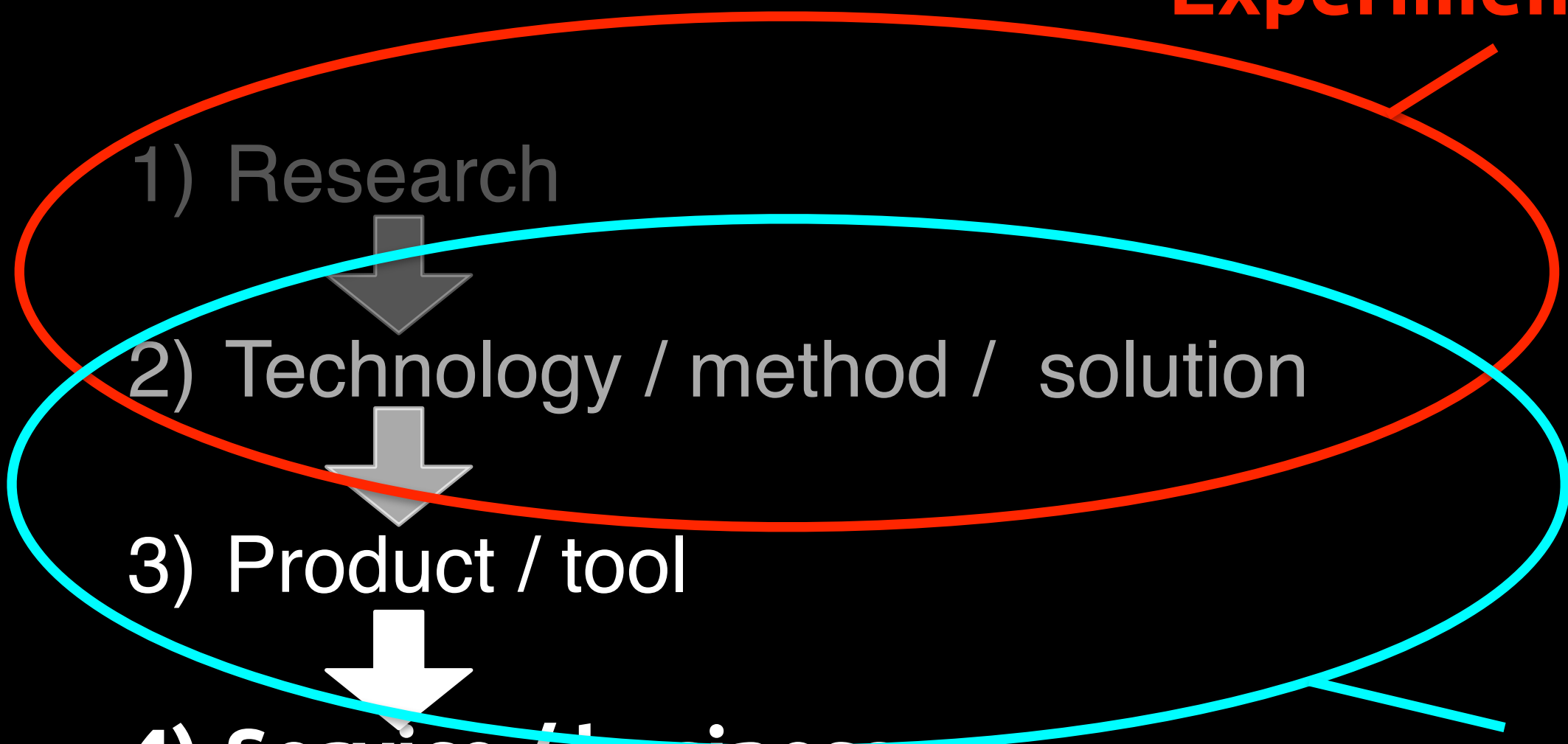


3) Product / tool



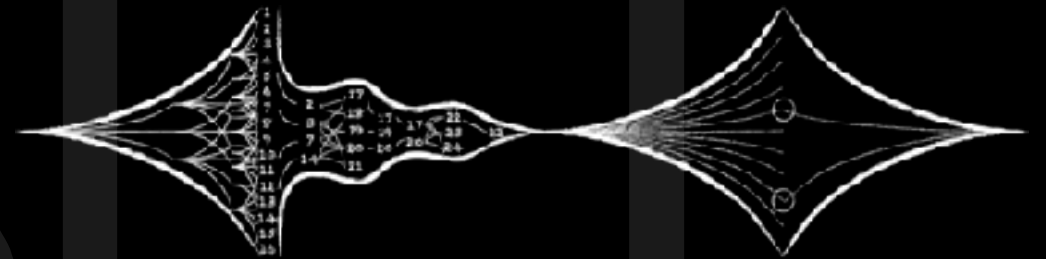
4) **Service / business**

Piloting



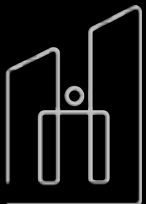
3. Piloting Process, Plan & Evaluation

- Stages and dimensions of General Piloting Process
 - Preparation
 - Execution
 - Wrap-up
- Planning of Pilot
- Piloting Contracts & Stakeholder involvement
- Evaluation of Pilots
 - Evaluation of Process vs. Evaluation of Outcomes
- *Research Perspective*
 - *What should be considered when using this in research contest?*

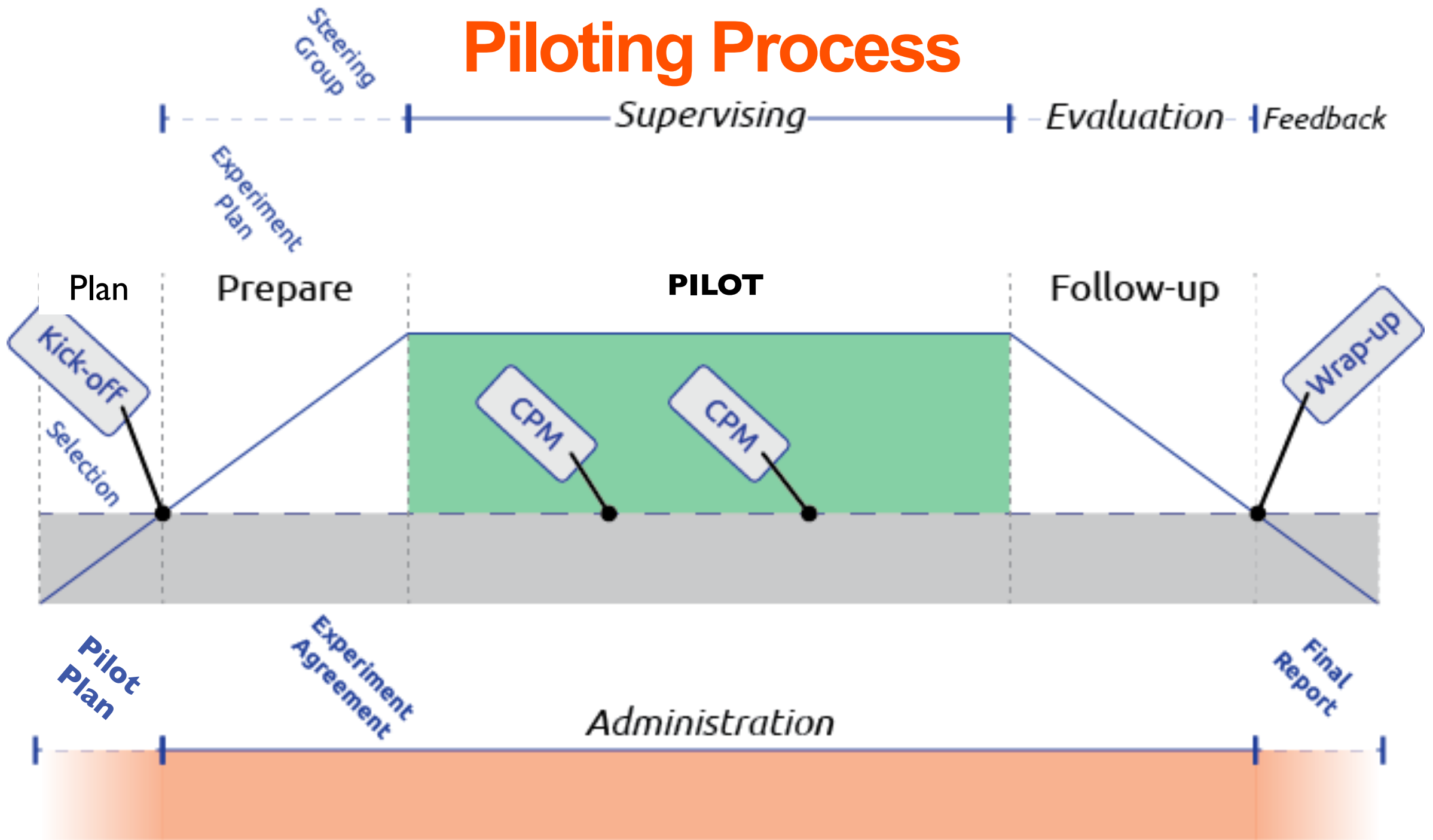


Exercise

- Create a detailed Pilot Plan; Service Blueprint, Customer Journey



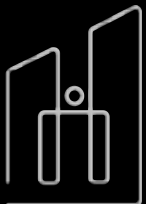
Piloting Process



4. Living Labs & Innovation Platforms

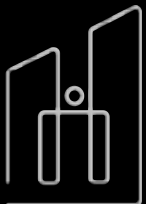
- Living Labs as Research, Development & Innovation Platforms
- Dr. Tuija Hirvikoski, Laurea

- *Research Perspective*
 - *What should be considered when using this in research context?*



5. Co-Creation, Co-Development & Agile Pilots

- Co-creation journey
- Common goal identification
 - Template exercise
- Participation
- Tools and methods introduced
- *Research Perspective*
 - *What should be considered when using this in research context?*

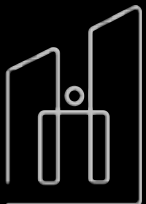


6. Piloting as Research Methodology

- Research Perspective into Piloting
- Seminar format

Exercise

- Create Pilot based Research Plan



**TAL
TECH**

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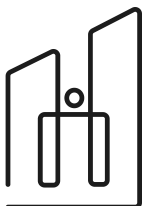


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