

WEKIT Kickoff-Meeting OUNL – WP1

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WEKIT Framework and Industrial Learning Methodology

WORK PACKAGE 1

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WP1 – Partners and effort distribution

Work package number	WP1		Start Date or Starting Event										M01	
Work package title	WEKIT Framework and Industrial Learning Methodology													
Participant number	01	02	03	04	05	06	07	08	09	10	11	12	13	Total
Short name of participant	GFT	EP	OU	RAV	UiT	OUNL	RWTH	VTT	MP	CCA	LT	EA	AL	
Person/months per participant	4	3	2	5	1	11,5	2,5	4	1	3	1	1	1	40

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WP1 - Objectives

- To develop a **framework for wearable experience**. The framework identifies relevant processes, components, interfaces as a basis for all activities around specification, development, application, and evaluation.
- To specify a corresponding **methodology** for Knowledge-Intensive / Vocational Training.
- To create **example use cases and scenarios**, which show how to apply framework and methodology.
- To derive **requirements** for the technological platform

WP1 - Description of work

WP1 will be led by P09 OUNL.

The role of OUNL, a strong academic institution with extensive experience in technology-enhanced learning and especially AR-based learning, will include

- coordinating the overall processes for WP1,
- working on the theoretical grounding,
- supporting the framework development
- and the derivation of requirements.

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WP1 - Relationship with other work packages

WP1 sets the basis for subsequent work in other WPs by defining and specifying the framework and the methodology to be used throughout the project.

WP1 defines the framework and requirements to be used for all technical developments (WP2, WP3, WP4, WP5).

Furthermore, the framework sets the foundation for piloting phases and their evaluation (WP6).

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WP1 - Measures of success

- **the successful elicitation of data from the industry assessment interviews.** We expect to be able to perform interviews at all commercial partner organization and at least 10 external stakeholder organizations (T1.1 & T1.2).
- **the successful transfer of the framework** and the derived requirements to the technical WPs by producing corresponding technical outputs, which comply to the framework (WP2-WP5). In order to ensure applicability of WP1 results, the outcomes of WP1 will be thoroughly reviewed internally. (T1.3 & T1.4)
- **the successful application and evaluation of the framework** and its corresponding technical implementations in application cases and pilots (WP6).

WP1 - Impact

While augmented reality and wearable devices received a lot of attention in educational settings recently, little work is reported

- to assess the theoretical background and
- to systematize a framework, a methodology, and requirements
- for the development of wearable augmented reality solutions.

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WP1 - Major challenges

Defining requirements in innovative development tasks is at **risk of misunderstandings, conflicts, and over specifications.**

We aim to continuously update and maintain our requirements record by using the Requirements Bazaar (RB) methodology, a Web-based tool for Social Requirements Engineering (SRE).

Open Source Software (OSS) developer and end-user communities benefit from, and depend on, each other. End-user communities generate innovative ideas for software, but lack technical capabilities for their realization. OSS developers realize software, but need to access and prioritize an abundance of ideas to maximize impact. RB brings both groups together to negotiate requirements in mutual interest.

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WP 1

TASKS AND DELIVERABLES

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WP1 - Tasks & Deliverables

T1.1 Training Industry Assessment (Theoretical Grounding). Surveying AR-based training practice and interviewing stakeholders: perform business analysis, decision analysis, existing and potential applications, business drivers, affordance map and KPIs e.g., for reducing cognitive error, time to complete training task, increased recall, deviation analysis (lead participant: OUNL, contributors: GFT, LT, EA, AL).

D1.1 User Industry Needs. Reports the results of the Training Industry Assessment, T1.1. (M7)

T1.2 Technology Industry Assessment (Technological Grounding). Surveying AR industry practice and interviewing stakeholders: technology acceptance, including key factors determining success (lead participant VTT, contributors: GFT, OU, UiT, VTT, MP)

D1.2 Technology Industry Needs and Affordances. Reports the results of the Technology Industry Assessment, T1.2. (M7)

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WP1 - Tasks & Deliverables

T1.3 Research & Developing WEKIT Framework and Training Methodology.

Based on the survey results (T1.1 & T1.2), the framework identifies application scenarios and their respective educational objectives. These scenarios are still independent of concrete industrial application cases (WP6), but exemplify the concrete use of the framework. The framework also identifies applicable pedagogical methods, aspects of instructional design (addressing the project's self-regulated and authentic learning approach, e.g. by using 4C-ID: the four component instructional design model, a structured model for complex learning): building a repertoire of master level of performance (lead participant: OUNL, contributors: EP, RAV, CCA)

D1.3 WEKIT Framework and Training Methodology. The deliverable presents the project's industrial training methodology and the result of associated R&D activities of T1.3 (M5/M20/M35)

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WP1 - Tasks & Deliverables

T1.4 Requirements for Scenarios and Technological platform. Based on the Requirements Bazaar methodology and toolkit, requirements are continuously collected, updated, negotiated, and corrected among the stakeholders involved (lead participant RWTH, contributors: OU, RAV, OUNL, VTT, CCA)

D1.4 Requirements for scenarios and prototypes. The deliverable provides input scenarios (WP6) and prototypes (WP2), T1.4. (M6/M21/M36)

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WP 1

NEXT STEPS

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Next Steps in WP1

T1.1 & T1.2

- within M2: Interview and Survey questions, Schedule and list of organisations
- until M3: Perform surveys
- until M5: Perform interviews
- until M6: Analyse surveys and interviews
- until M7: Report (D1.1 & D1.2)

T1.3

- Critical: First Version of Framework & Methodology until M5
- Depends on T1.1 & T1.2

T1.4

- Critical: First version of requirements until M6
- Depends on T1.1, T1.2 & T1.3

Proposal: combine D1.3 & D1.4 first version also into M7

Communication & Collaboration

Weekly WP1 meeting

- Monday 14:00-15:00 CET
- One hour meeting
- Status, Tasks, Results
- Additional meetings as needed

Mailing list: wekit-wp1@dbis.rwth-aachen.de

→ **Make sure, your on that list!**

Shared drive folder as part of the overall WEKIT folder:

<https://drive.google.com/drive/u/1/folders/0B4hZ6WtSZ61bSW1Fd1NCb2luQkk>

→ **Make sure you have access!**

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Today – Survey & Interview Workshop

T1.1 & T1.2

- Split up in groups
- Work on:
 - Which target groups to address (includes: list of organisations)
 - Which level of experience
 - Which questions to ask
 - 1 group: work on technical challenges
- Side aspects:
 - How to motivate participants?
 - How to keep the survey interesting for participants and informative for us?
- Documentation in Drive-Folder or Paper

#	SG name
SG1	Formal education & research in AR/Wearables-based training
SG2	AR/wearables technology developers
SG3	AR/wearables training developers
SG4	Industrial training providers
SG5	Related industries and public services (personnel)
SG6	Public communities

T1.1: SG 3/4

T1.2: SG 2 + SG 1/5/6

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THANK YOU!

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