

## **AGENDA**

- 1. QUICK RECAP ON COMPLEAP
- 2. UTILISING LEARNING ANALYTICS
- 3. FRAMEWORK ARCHITECTURE
- 4. FEEDBACK





Compleap is a 2year long (12/17-11/19) EUproject funded by DG Connect as part of creating the Digital single market

Creating services for learners with learners.





### WHAT ARE WE DOING?

- 1) A Learner Path personal services for users to map competences throughout their life
- **2) Learning Analytics** to provide the user with insights out of data
- **3) Depicting a wider service framework** of digital services for competence development

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# UTILISING LEARNING ANALYTICS IN COMPLEAP



## What is Learning Analytics?

Learning analytics is measurement, collection, analysis and reporting of data about learners and their contexts, for the purposes of understanding and optimizing learning and the environments in which it occurs



Siemens, 2013

# **How is Learning Analytics used?**

- Identifying students at risk
- Personalizing learning
- Providing feedback for students and teachers
- Providing administration with educational data



Similar methods are used in business - tracking, collection and analysis of user data (e.g., Netflix, Google and Facebook).



# How could it be used in Compleap? **Example**



Oulun yliopist



### What are we aiming at?

What we want:

Help identify prior experiences, skills and interests
Visualise competencies
Build confidence by providing map of skills, interest and competencies
Build on the personalized information
Suggest potential educational opportunities

What we don't want:

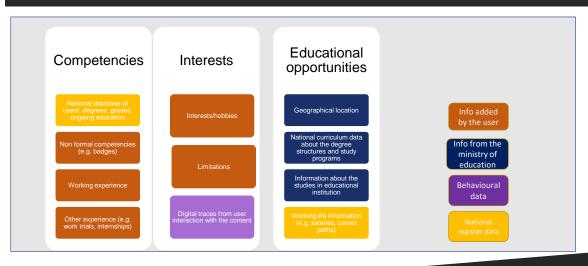
Categorizing people in a wrong way Recommendations only based on group choices Leading certain people only to certain education

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## **User groups**

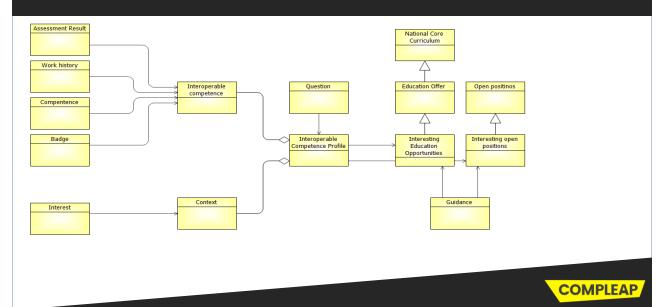
User group	Challenges	Special needs	Suppor t needs
mmigrants	Missing data, languages skills, cultural differences	Simple language, multilingual, visualised and ease-of-use	strong
NEETs	Low motivation, learning difficulties, former negative experiences with education	Ease-of-use, compelling interface/use, gamification, ease of access to information, clarity and simple language	strong
Basic education graduates	Uncertain of their educational/vocational direction	Visualised and ease-of-use	medium
Unemployed	Circumstantial change, updating vocational competence	Relevance and validity of the data	medium
Shifting career	Circumstantial changes, looking for a new direction	Relevance and validity of the data	minimal

# What data could be used in Compleap?



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# **Conceptual data model in Compleap?**



## **Basic level analytics**

Goal: better understanding of how the services are being used

**Data:** statistics from the service page

**Output:** automatically generated report including page views, what page content is being used by the users, for how long, etc.

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### **Visualisations**

Goal: Visualisation of competence profile in a way so it stimulates user's reflection on his/her current situation

### Data:

Field of study divided into competencies (based on metadata, categorization from degree offer)
Job title divided into competencies (based on metadata, categorization from various services)
Baseline competencies/soft skills (trainings, credits, own reports)
Badges divided into competencies

Language skills A.1.1-C 2.2 (exams, credits) Hobbies (e.g. music., animals, sports, cars...) (own reports)

**Output:** e.g. CV, bubbles or diagram (Web diagram or other type) showing people what competencies they have / area their competencies fall into mostly.



### **Education recommendations**

Goal: Provide the user with relevant educational offers based on his profile and interests

#### Data:

Field of study

Job title

Most interesting subjects from school (what field person likes)

Language skills A.1.1-C 2.2

Hobbies (e.g., music, animals, sports, cars...)

Other interest

Duration of education (e.g., short, degree)

Location of educational institution (area, close by)

Output: 10 relevant educational options

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### For other stakeholders

**Goal:** Info for insights to other stakeholders (institutions, government) about users' educational interests and educational choices

### Data:

- traces of people marking favourite educational options
- user profile information, e.g., prior studies, interests

### **Output:**

- what are the most favourite fields of studies among different types of users (grouped e.g., by age, gender, locations)
- · where different user groups apply



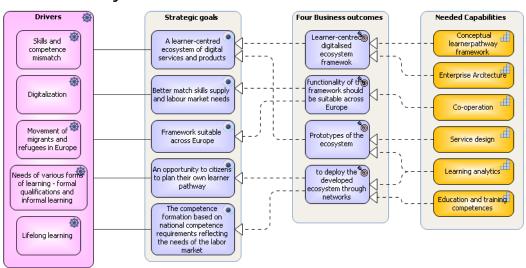
# FRAMEWORK ARCHITECTURE IN COMPLEAP (review)



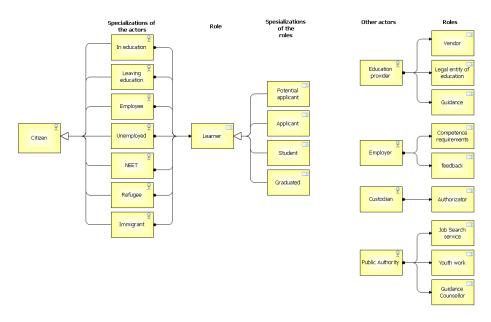
# MODELS FOR GENERIC FRAMEWORK ARCHITECTURE

- Strategy map
  - Purpose of the model: shows aims and outcomes of the project
- Actors and their roles
  - Purpose: Tells customers and service providers
- A list of Stakeholders
- Service Map
  - Purpose: shows most important services in the
- Learners pathway
  - Purpose: Shows learners main processes

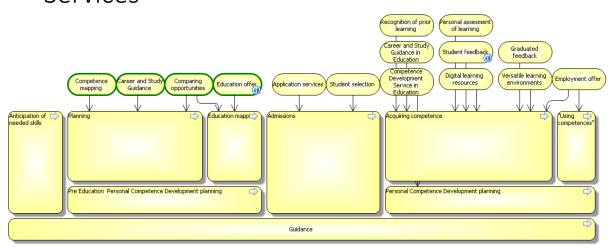
# Strategy Map: Four Main Aims and Outcomes of the Project



### Main CompLeap Actors and their Roles



# Learner Pathway Main Processes and Main Services

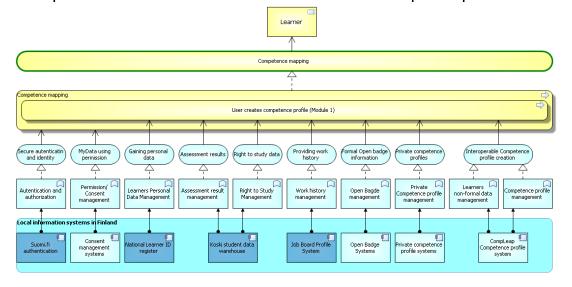


### Needed Models for Compleap Prototypes

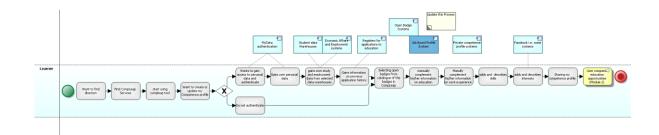
- User Processes
  - Purpose: Tells how learner will use CompLeap prototypes
- Compleap Layered Arhcitecture views
  - Purpose: Shows processes, application services and information systems we need for providing CompLeap services
  - Also shows high level structures of CompLeap Services

### Competence Mapping

Example How to actualize needed CompLeap services



## Example: User's Competence Profile Process





### WHAT HAPPENS NEXT

### **Next webinar:**

Wednesday November 28<sup>th</sup> at 9:30-10:30 - focus on Open Badges

### Midterm review seminar:

December 4th 2018 in Helsinki

- live stream available

## **STAY IN TOUCH**

### **JOINT WORKSPACE**

https://compleap.slack.com

### **LEARN MORE**

https://wiki.eduuni.fi/display/csccompleap/Reference+ Group+Webinars+and+Workshops

### **COMPLEAP.EU**

# **THANK YOU**

