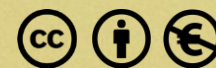


# DIGIVISIO



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# Integrating Together: Enterprise Architecture and Interoperability Enabling Collaboration

Sami Hautakangas  
Hanna Nordlund  
15 June 2023

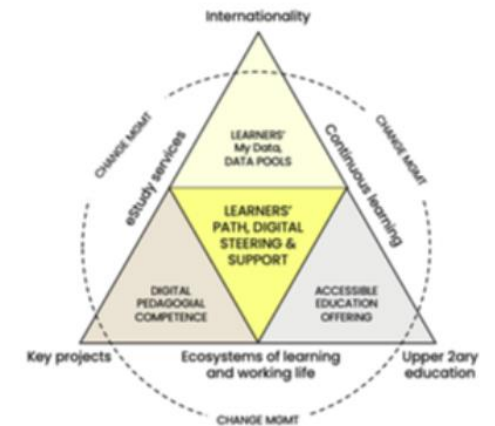


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## Digivisio 2030 programme in a nutshell

- Digivisio 2030 is a joint programme involving all Finnish higher education institutions
- The purpose of the program is to enable learner-centric, flexible learning path and make higher education accessible for different learners.
- Objective to create
  - A national digital service platform that
    - enables the compatibility of digital services between HEIs,
    - provides a “My Data” service for the learner and integrates the accumulation of the learner’s competence before and after the higher education in the learning and career path
  - Guidance based on digital pedagogics, the learner’s path and shared data
  - Support for change management for HEIs



- **Enterprise architecture and interoperability are the key tools**

# Continuous and Flexible Learning Tray (1/2)

- The aim of the new digital service is to combine the continuous learning offering of Finnish HEIs so that learners can access it easily and effortlessly in one place.
- The continuous and flexible learning tray combines several technical solutions that build the basis for the digital service platform.
  - The educational offering service
  - The identity management service enables authentication via the learner's user-centric identity
  - The My Data service gathers the learning-related data of the learner in one place
  - The guidance services form the tray's recommendation engine
  - The joint application and registration services
  - The data platform collects the required data from source systems and is available to be used through APIs
- The version 1.0 of the service has been released for testing and restricted pilot use (features for support of informal and non-formal categories). 2.0 under development

## Continuous and Flexible Learning Tray (2/2)

- The version 1.0 of the service has been released for testing and restricted pilot use
  - Features for support of informal offerings i.e., open resources for self-study such as learning materials, open events, podcasts etc.
  - First features for non-formal offerings, “simple courses”
- Version 2.0 is currently under development
  - Covers a part of formal non-degree education, focus on open university/open university of applied sciences
  - Scheduled release Q1/2024 for testing and pilot use
- Version 3.0 covers other forms of non-degree education in the HEIs
  - Target schedule Q3/2024

# Interoperability at the heart of Digivisio's enterprise architecture

- The common architecture principles of the Digivisio 2030 programme concerning integrations
  - The integrations are implemented consistently
  - The technology solutions are interoperable and compatible
- Interoperability standards and industry standards are followed unless there is a compelling reason to apply a deviating solution.
- The HEIs have a will to adhere to the standards

# How to Reach Common Specifications and Data Models (1/2)

- The Bologna Process and ECTS system constitutes a historical back-bone for common specifications
- In Finland there has been several phases (2004-2020), where different sets of data have been specified in cooperation
  - Curriculum data, study rights
  - Common data model of HEI's (XDW) with large amount of data, specification of students and credits -> national Virta register and integrations to source systems (SIS)
  - National Studyinfo service for applicants -> adoption of MLO-model
  - Cross-Institutional Study Service for HEI's, more detailed data of course units and course unit realisations/instances, enrolment, and study rights to support student mobility process more straight-forwardly.
- This work has developed the interoperability capabilities of HEI's
  - the common data models in production
  - Organisational capabilities to develop common models in cooperation



# How to Reach Common Specifications and Data Models (2/2)

- There has been several lessons to be learned from the past experiences
  - In the field of education, the international standards cannot be taken "as is", because of the specifics of national regulation
  - Extensibility is needed
  - There are several points of view that needs to be balanced, when changes are made to data models to meet new organisational/user needs
    - If it ain't broke, don't fix it
    - Take into account the time needed to implement changes technically and **in practices of organisations.**
    - Proof of viability in actual use may require POCs or pilot projects to justify the change and ensure motivation
      - Prepare for iterations before large-scale production
    - There is a need to discuss the planned changes with the relevant stakeholders *in their language*

# Possibilities for international cooperation

- If the national interoperability is reached by creating a data model, that can be mapped with chosen international standards, there are good possibilities to make national integrations to international services
- Background in ECTS helps the HEI's in Europe to find the "common denominator"
- The candidates that are examined in Digivisio 2030 are currently
  - European Learning Model v.3
  - European Digital Credentials Infrastructure (EDCI)
  - ELMO/EMREX
  - Relevant 1EdTech standards
- There is a risk of network-specific solutions in European Universities alliances.
  - **Can EUNIS be the player in this field to guide the IT architects of alliances to the use of standards and common solutions?**

Questions?

