



Up2U

The European Project to Close the Gap between Secondary and Higher Education

What is GÉANT's strategy?

Peter Szegedi - GÉANT

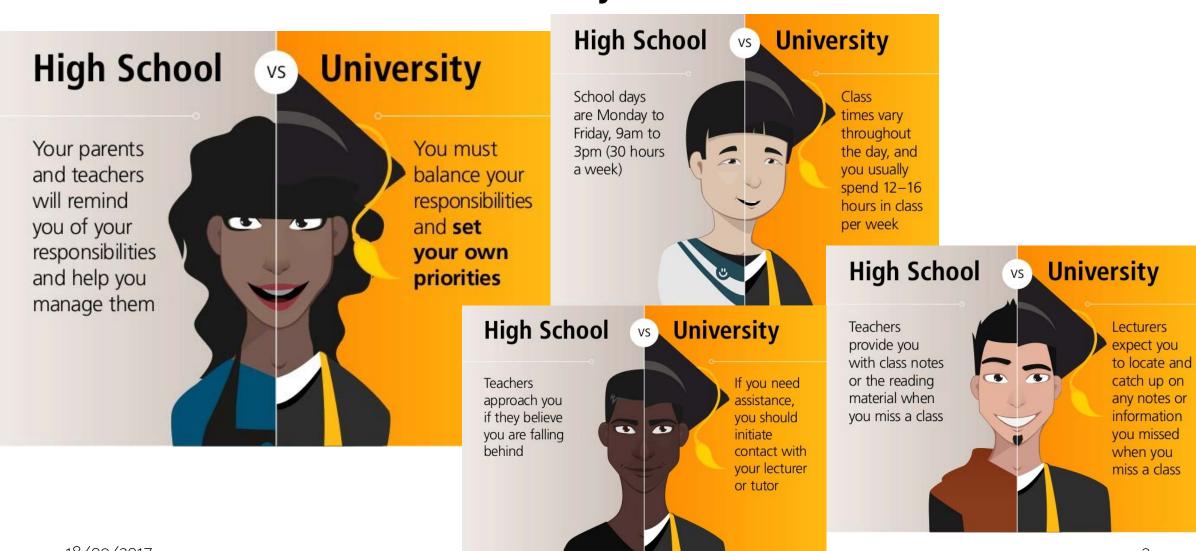
In a nutshell



- EC Call ICT-22-2016: Technologies for Learning and Skills
 - easy creation, mix and re-use of content, services, applications and contextual data for interactive learning processes
 - environments for new learning experiences and experimentation
 - educational support services
- The key objective of our project is to bridge the gap between secondary schools and higher education and research by better integrating formal and informal learning scenarios and adapting both the technology and the methodology that students will most likely be facing in universities.
- Innovation Action getting 5ME funding from the EC for 3 years

School vs. University





Up2U OKRs



Project Objective

Bring innovation to schools by piloting teaching & learning technology and methodology that empowers teachers and students to develop digital skills required by the 21st century internet society.

Key Results

- Both learning technology and state-of-the-art teaching methodology that are proven in higher educational context have been adapted to secondary schools.
- Teachers are empowered to develop new skills and be the ambassadors of digital learning at schools that closes the gap towards higher education.
- Policy changes are influenced at all possible levels by sharing the success stories of large-scale Up2U pilots across several European countries.

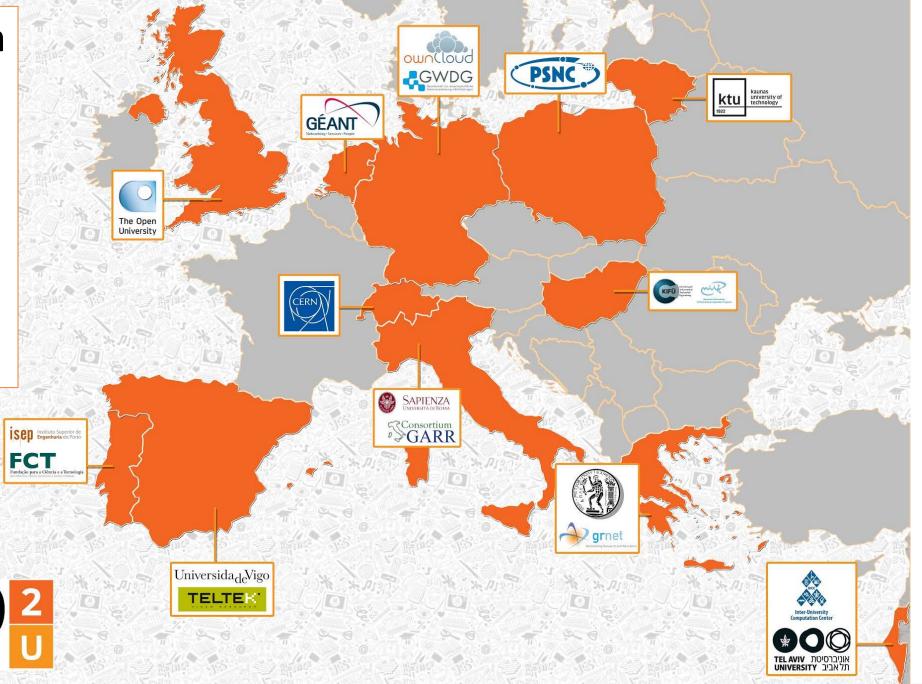
Up2U Consortium

18 partners

- Universities
- NRENs
- Infrastructure providers
- Commercials

12 countries

- EU
- Switzerland
- Israel



Next Generation Schooling



- Personalized
- 2. Strong teacher support
- 3. Close community links
- 4. Broad and diverse curriculum
- 5. Outside and inside school involvement
- Create the right conditions and children will learn!



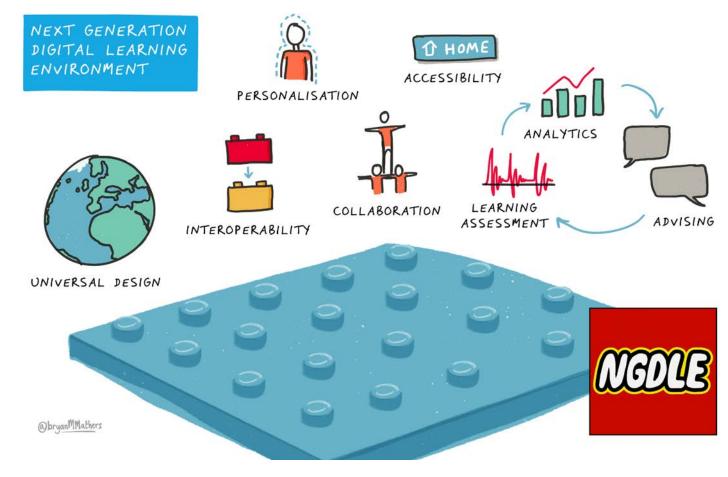
The original Lego approach



- April 2015 White paper on Next Generation Digital Learning Environment, NGDLE
 - Lego approach
 - Built from modules or components
 - Customized to the individual needs, no one LMS fits all
 - Systematic environment

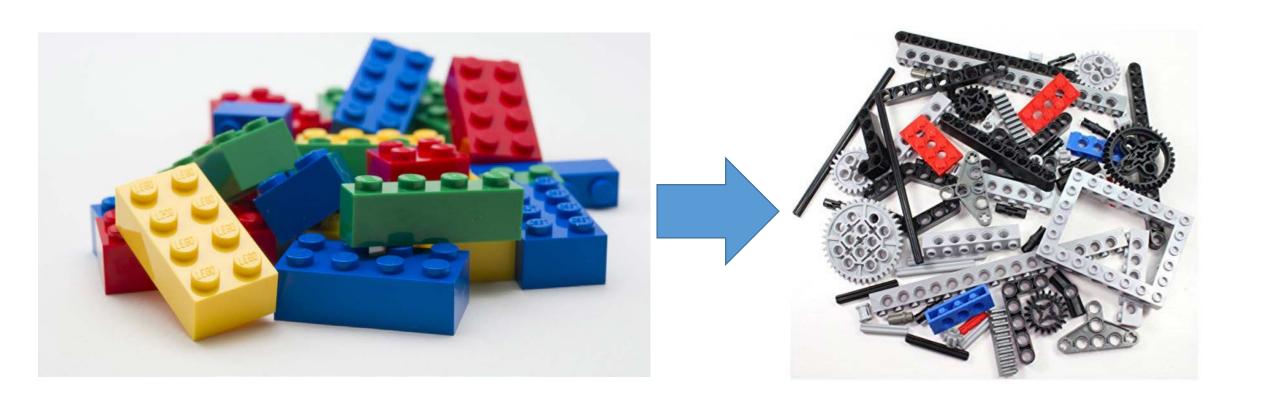
BUT

• Bricks not always fit together



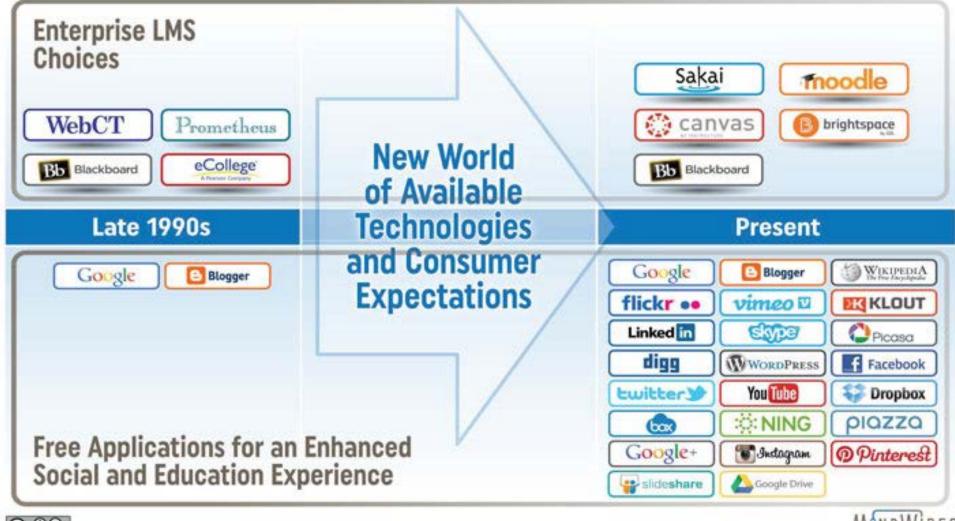


From Lego to Nervous System





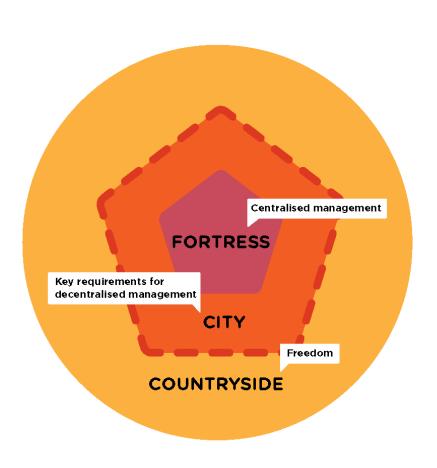
Growing Digital Ecosystem





SURFnet's approch...

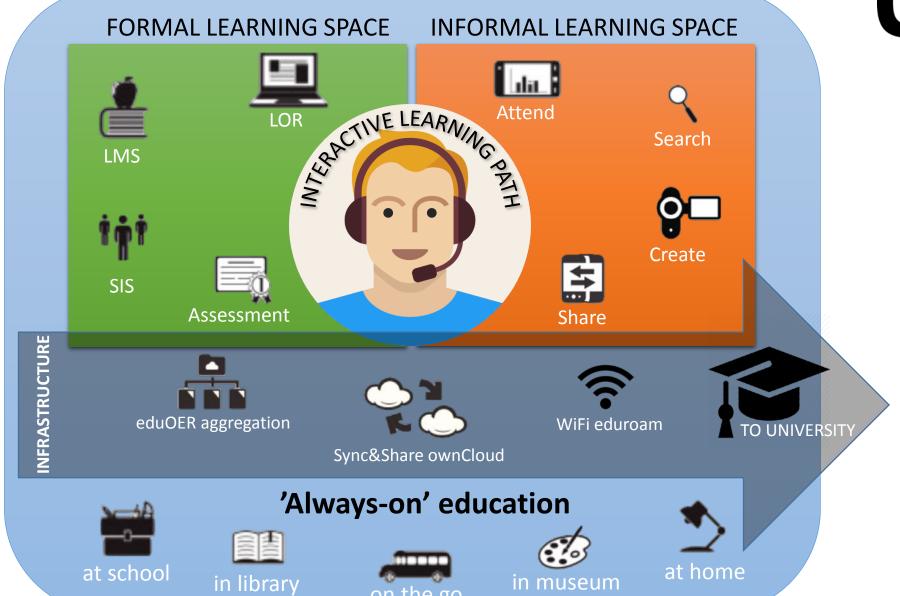




	Confidential	Integrity	Availability	Modulinge of date
	COL	Inte.	Aval.	We bras bies
FORTRESS Organisation of learning	Low	High	Medium	
Testing	High	High	High	Test material
Submission and assessment of assignments	Medium	High	Low	Test result
Management and use of student information	High	High	Medium	Participant
Timetabling	Low	Medium	High	Timetable
Learning analytics	High	Medium	Medium	Learning
				activity report ⁸
СІТҮ				
Developing, managing and sharing learning materials	Low	Medium	Medium	Learning materials
Education process support	Low	Medium	Medium	Progress
Internships and final projects	Low	Medium	Medium	Internship/final
				project activity ⁹
COUNTRYSIDE				
Communication	Low	Medium	Medium	-
Collaboration	Low	Medium	Medium	-
Multimedia	Low	Medium	Medium	-
Freely available application	Low	Medium	Medium	-

Up2U ECOSYSTEM





on the go





WORKFLOW

What's my objective?



- Try out new things
- Experiment with new methodology
- Know more about my students
- Improve certain skills
- Engage better
- Collaborate

How to get there?



- · With the minimum efforts
- · With the minimum disruption
- Self-motivated students
- Suitable tools
- Flexible frameworks

What's my impact?



- Do my class perform better
- Do i know what to change
- Where are my students compared
- Engagement levels
- Interaction level
- Succes

What's my objective?



- Try out new things
- Experiment with new methodology
- Know more about my students
- Improve certain skills
- Engage better
- Collaborate





WORKFLOW

What's my objective?



- Try out new things
- Experiment with new methodology
- Know more about my students
- Improve certain skills
- Engage better
- Collaborate

How to get there?



- · With the minimum efforts
- · With the minimum disruption
- Self-motivated students
- Suitable tools
- Flexible frameworks

What's my impact?



- · Do my class perform better
- Do i know what to change
- Where are my students compared
- Engagement levels
- Interaction level
- Succes

How to get there?



- With the minimum efforts
- With the minimum disruption
- Self-motivated students
- Suitable tools
- Flexible frameworks





WORKFLOW

What's my objective?



- Try out new things
- Experiment with new methodology
- Know more about my students
- Improve certain skills
- Engage better
- Collaborate

How to get there?



- · With the minimum efforts
- · With the minimum disruption
- Self-motivated students
- Suitable tools
- Flexible frameworks

What's my impact?



- · Do my class perform better
- Do i know what to change
- Where are my students compared
- Engagement levels
- Interaction level
- Succes

What's my impact?



- Do my class perform better
- Do i know what to change
- Where are my students compared
- Engagement levels
- Interaction level
- Succes

Key stakeholders

P_U

Teachers



Have you noticed that keeping up the attention span of teenagers is getting more difficult? In a world where digital technology rules the world, why not benefit from it? Incorporating digital tools and services in your teaching method can result in more engaged students and helps them developing "critical thinking" and be more independent learners. Introducing value-added learning analytics and community-based digital reward system changes the learning scenario thus it becomes more adaptive to students liking.

- Universities
- Commercials
- Service providers
- Publishers
- Education Ministries
- Policy makers
- ...

High schools

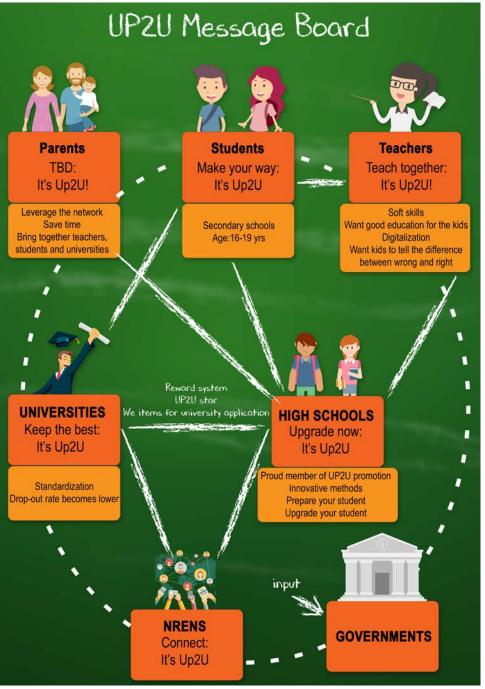


UP2U project is building a community that can support the new trends and methods of digital teaching and learning. We provide tools and services that will help you implement digital learning scenarios in the classroom. A heterogeneous training plan is being elaborated that would be able to accommodate training teachers with different technology backgrounds. Pilot schools from various European countries will experiment with our concept and will share their lessons learned. Skills that can be acquired via these digital learning methods can drive up your enrolments with students ready for higher education.

Students



Our project helps you to adapt to new learning scenarios that will be useful when attending a university. Experimenting with the informal learning spaces and develop new skills that will be inevitable in higher education. UP2U promotes technology in the classroom – no more boring classes! Engage with your fellow peers, explore the international UP2U universe ecosystem and experience with the digital reward system. Say goodbye to the old chalkboard and enjoy the era of digital classes.

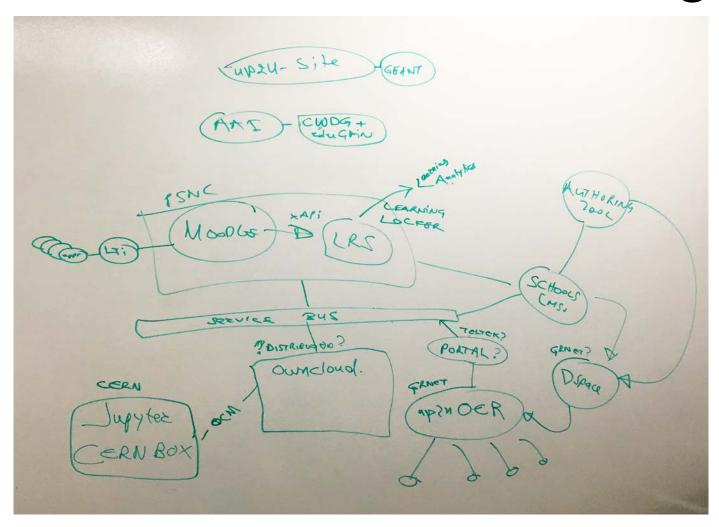




16

Next Generation Learning Platform





- Open Technology
- Standard APIs
- Value-add
- Scalable
- Modular
- Portable

INTEROPERABILITY



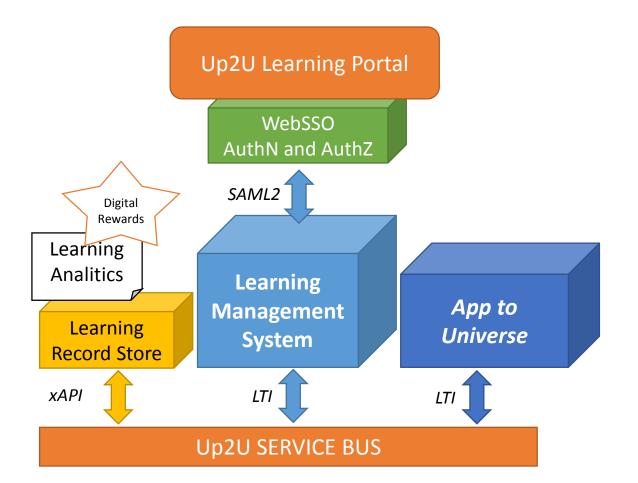


SAML2

Learning
Management
System

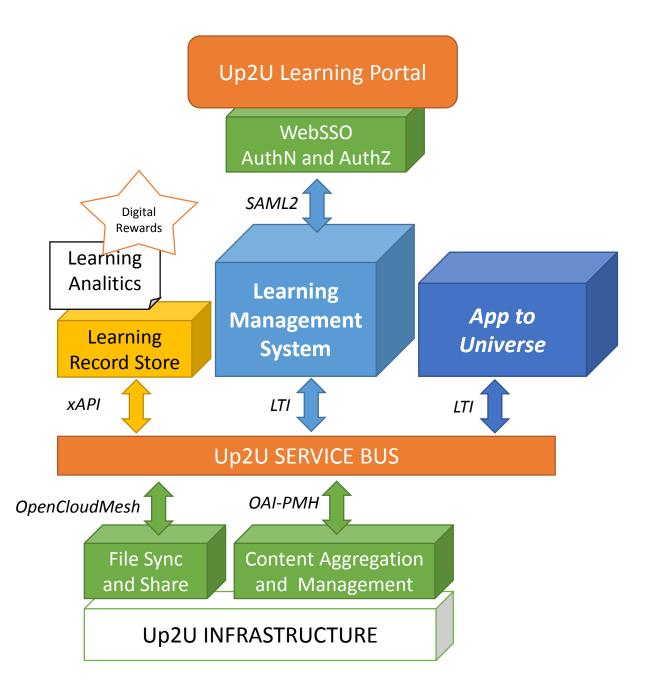


- Open Technology
- Standard APIs
- Value-add
- Scalable
- Modular
- Portable



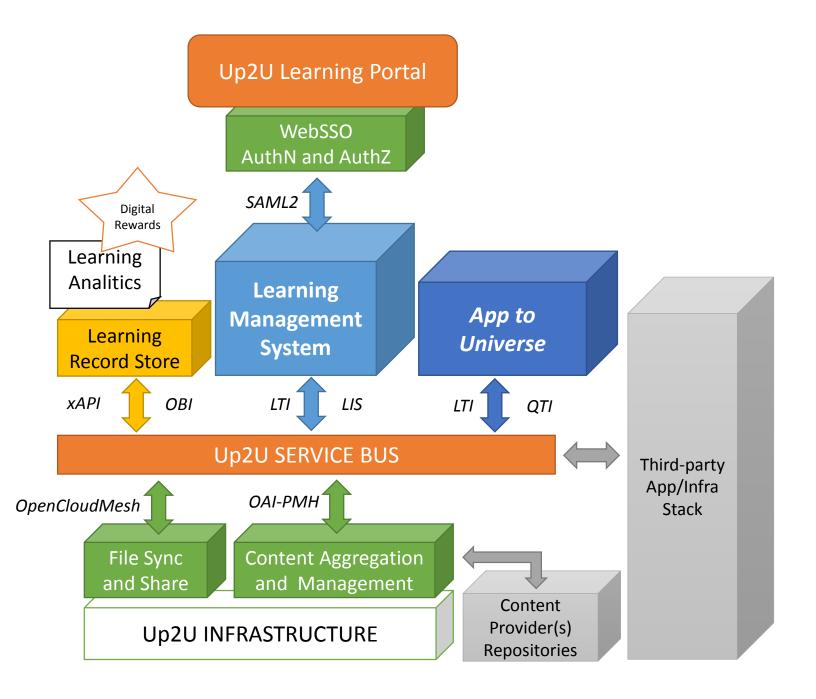


- Open Technology
- Standard APIs
- Value-add
- Scalable
- Modular
- Portable





- Open Technology
- Standard APIs
- Value-add
- Scalable
- Modular
- Portable





- Open Technology
- Standard APIs
- Value-add
- Scalable
- Modular
- Portable





































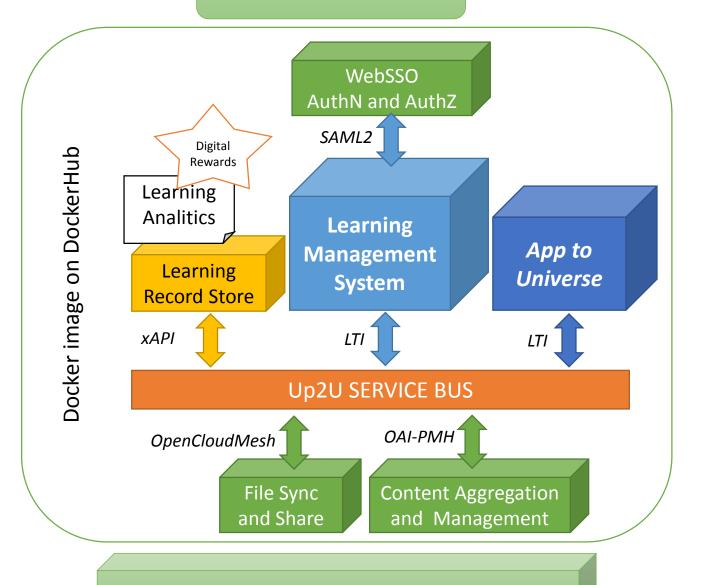






Your Preferred Portal





- Open Technology
- Standard APIs
- Value-add
- Scalable
- Modular
- Portable

Your Preferred Portal WebSSO Your Preferred Portal AuthN and AuthZ SAML2 Digital Docker image on DockerHub Rewards Learning **Your Preferred Portal** Analitics Learning AuthN and AuthZ App to Management Learning Universe **System** SAML2 **Record Store** Digital Rewards LTI TinCan AuthN and AuthZ Learning **Up2U SERVICE BUS** SAML2 App to **Management** Digital Docker image on DockerHub Learning Rewards Universe System OAI-PMH1 OpenCloudMesh -**Record Store** Learning **Analitics** Learning LTI LTI Content Aggregati App to Management and Share Learning Universe Up2U SERVICE BUS System **Record Store** OAI-PMH1 OpenCloudMesh TinCan LTI LTI YOUR PREFERRED INFRASTRUCT File Sync Content Aggregation Up2U SERVICE BUS and Share OAI-PMH OpenCloudMesh File Sync Content Aggregation YOUR PREFERRED INFRASTRUCTURE and Share and Management

• INTEROPERABILITY

Docker image on DockerHub

Learning

Analitics

TinCan

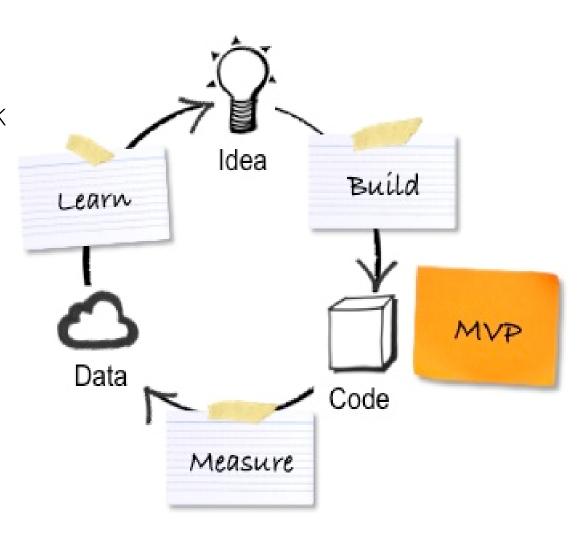
24

YOUR PREFERRED INFRASTRUCTURE

Buid as needed



- Rapid prototyping
 - Start with something existing quick
 - Consolidation functions
 - Develop what we need
- Build a platform (fit for purpose)
 - Mobile
 - HTML5
 - Cloud
 - Interoperability



Statement

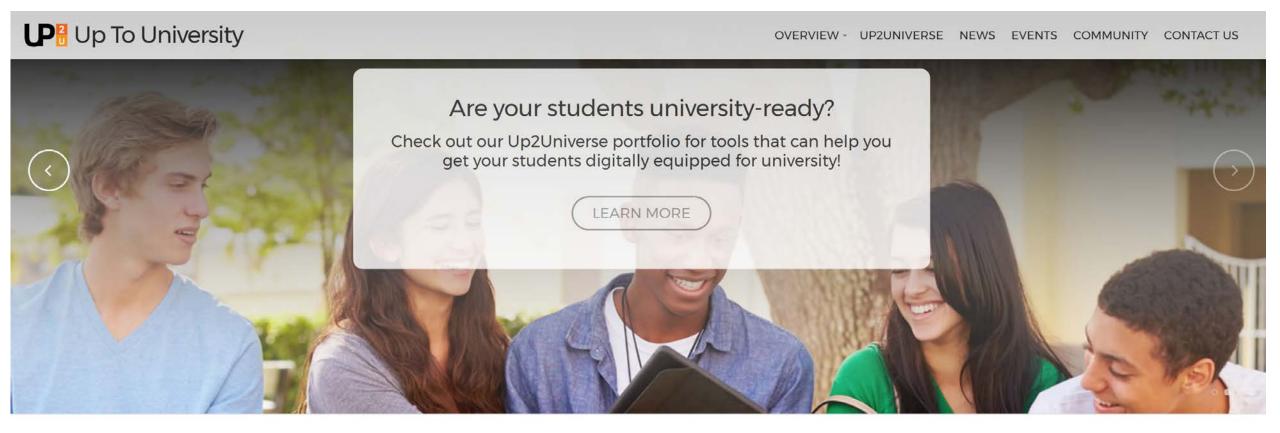


"We strongly believe that all the tools and services the project is going to use and/or make available (i.e. incorporate, design, develop and test) must be sustainable after the lifetime of the project."

- business plans and investigate appropriate business models using the expertise of the Small Medium Enterprise and National Research and Education Network partners and their contacts with third-party business actors
- make it easy for new schools to join the Up2U infrastructure and ecosystem that will form a federated market-place for the learning community

up2university.eu





Overview

The role of GÉANT and the NRENs



- Policy impact Digital education, Open education
- Modular, Scalable, Interoperable, Custom Solutions
- Standards, Workflows, Practices
- Prototypes and Cloud-based services

 What makes sense at the national and the European level...





We had a strategic statement (Nov 2014)

GÉANT Association NRENs and Open Education

NREN Community Statement on Open Education

Exec	cutive Summary	1
1.	Introduction	2
2.	ICT and Open Education – Opportunities and Challenges	3
3.	From Toys to Tools – Technology and Services	4
4.	Open vs. Accessible – Supporting the Key Principle	6
5.	Engaging with Education – NRENs in Action	7
Refe	erences	8
Арр	endix I – NREN Use Cases and Programmes	9
Арр	endix II – TERENA Compendium Data 2013	11

https://www.terena.org/activities/oer/GEANT Association NRENs And Open Education-final.pdf

Proposal



- Strategy Workshop
 - with all the NRENs interested
 - set the vision and objective
 - write the "GÉANT Open Digital Education Support Strategy"
- Architecture Review Workshop
 - with Up2U participants (NRENs, Universities, etc.)
 - with other interested NRENs (SURFnet, CARNet, UNINETT, ARNES...)
 - write the implementation notes for the strategy