Netzwerk
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CLOUD HED

Presenting the EU-project CLOUD HED: Disaster Resilience in Higher Education Systems via a Cloud University Model

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NATIONAL AGENCY for HIGHER EDUCATION QUALITY ASSURANCE (UKRAINE)

CLOUD HED in brief

- **An evidence-based, whole-university approach to the Cloud University Model as disaster-related response**
- „Cloud University“ = temporary shift of HEIs‘ operations to the cloud to maintain accessibility and continuity.
- Particular focus on teaching: It requires flexible learning pathways, modular course designs, certification through micro-credentials and appropriate forms of (online) assessment
- Individuals involved face physical threats, mental stress, have to flee or defend their region/country

CLOUD HED involves

- Needs analysis (systematic analysis of selected historical and current cases of HE-sectors during and post-conflict/war)
- Development of trainings for HE-teachers on how to implement the Cloud University Model in educational processes
- A focus on transversal skills and resilience skills
- Adoption of innovative teaching practices in line with latest technological advancements
- Use of micro-credentials
- Guidelines for HEIs to switch to (temporary) cloud-mode due to emergency

Cloud University Model

A technology-driven paradigm shift in HE

(1) Utilizes **cloud-based technologies** to create accessible, flexible, scalable, and cost-effective academic environments.

(2) Breaks down traditional geographical and infrastructural barriers.

(3) Supports **various HEI services/missions**: Teaching, learning, research, and administration.

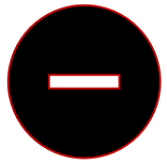
(4) Comprises **various functions**: Content Delivery, Learning Management, Resource Provision, Data Management, Collaborative Platforms, and Personalized Learning.

Traditional vs. Online vs. Cloud

Feature	Traditional University	Online University	Cloud University
Infrastructure	Physical infrastructure	Web platforms (e.g. LMS)	Cloud platforms (e.g., Microsoft 365, Google Cloud)
Learning Environment	In-person interaction, direct experience	Remote learning, digital reflection of traditional learning	Dynamic virtual, adaptable
Functions	Most HEI functions are in-person	Strong focus on T&L online	Whole HEI functions are through the cloud
Data Storage	Centralized, on-site servers	Centralized, on university's server	Decentralized, cloud-based
Accessibility	Limited by location and capacity	Remote access to programs	Global access, flexible, scalable
Focus	Direct educational experience	Remote access to education	Resilience through accessibility, flexibility and scalability, cost-effectiveness

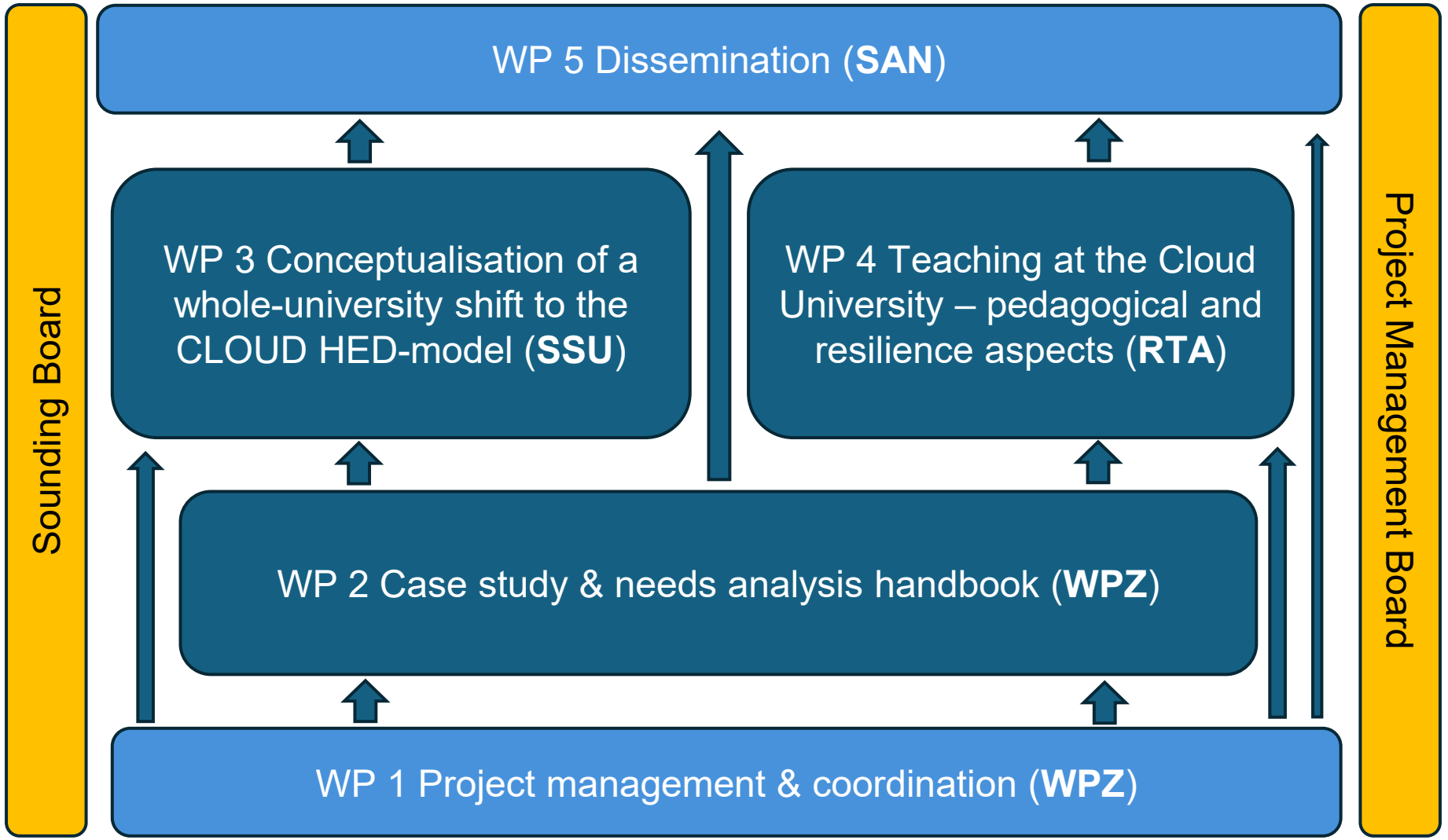
Advantages and disadvantages

- Courses and resources can be accessed from any location with internet connectivity
- Education accessible more flexibly and globally
- HEIs can scale their resources according to demand without major infrastructure investments ➔ reduced costs
- Seamless communication and collaboration between students, teachers and staff



- Digital divide and internet access – barrier for students in rural or low-income areas, or in case of black outs
- Data Privacy and security concerns (e.g. vulnerability to cyber-attacks)
- Loss of Campus experience and potential for lower engagement
- Dependence of Third-Party Providers
- Hidden Costs (data storage, scaling-up services, integration of different platforms)
- Standardisation challenges (how to meet the specific needs of every course or subject)

WP Overview


Sounding Board
WP 5 Dissemination (**SAN**)
WP 3 Conceptualisation of a whole-university shift to the CLOUD HED-model (**SSU**)
WP 4 Teaching at the Cloud University – pedagogical and resilience aspects (**RTA**)
WP 2 Case study & needs analysis handbook (**WPZ**)
WP 1 Project management & coordination (**WPZ**)
Project Management Board

WP2 Selected cases

- Selected cases and responsibilities:
  - Post WWII Polish and Austrian HE-system
  - Ex-Yugoslavian HE-system
  - Ukrainian and Israeli HE-systems during ongoing war/armed conflicts
  - Current Polish and Latvian HE-system at risk of crisis

WP2

- **Preparation of handbook**
  - More than 50 interviews taken in total
    - Cases of Ukraine and Israel: all interviews taken
    - Case of post-Yugoslavia: 14 interviews taken (delays because of political situation in Serbia)
    - Cases of post-WWII and countries in risk of crisis: first set of interviews taken
  - Structure for each chapter and for the entire handbook prepared
  - Introductory text in preparation

Details on WP3

- Topic: **Conceptualisation of the shift to the cloud**
- Methodology:
  - Desk research of “good practices”: **other cloud universities** worldwide *(see examples next slide)*
  - Fine-tuning the definition of cloud universities
  - Field study of **SSU, BGU, Tel-Hai, RTA and UKSW** to analyse:
    - Management structures and their needs for transition to the cloud
    - Teaching conditions and practices & their readiness for the cloud
    - Curricula (figure out how to implement flexible and modular course designs)
    - Technical and IT-conditions
  - **Pilot curricula adaptation to the clous at SSU, BGU, Tel-Hai, RTA and UKSW** with a view to structure of modules, use of micro-credentials and appropriate forms of (online) assessment
  - Development of **guidelines** for SSU, BGU, RTA, Tel-Hai and UKSW and, more generally, for further interested HEIs

WP3 Examples institutions facilitating a cloud university model (selection)

- **University of Tokyo –** has developed its own platform (UTokyo Azure), offers highly personalized and interactive models with individual feedback, gamification, and case-based approaches, and is one of the universities with well-developed scholarship programs.
- **Arizona State University –** Integrates mass content with personalized recommendations and access to mentors, provides an extensive program portfolio, and offers online counseling, forums, and digital mentorship using diversified cloud platforms.
- **Kiron Open Higher Education** – An initiative focusing on online learning for refugees and migrants; provides specialized education tracks with a focus on digital skills, integrates mass content through AWS; offers free education related to IT; and delivers education through partnerships with recognized universities.
- **The Open University (UK) –** Provides an extensive program portfolio ranging from undergraduate degrees to microcredentials across all disciplines through Microsoft 365, offers flexible payment systems, and has the most structured student support systems.

Thank you for your attention!!

Want to engage with us?

Follow CLOUD-HED on LinkedIn ➔
or at www.cloud-hed.eu

Don’t hesitate to reach out to us!
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