



EPiC Series in Computing

Volume 105, 2025, Pages 293–302

Proceedings of EUNIS 2024 annual congress in Athens



Exploring the Implementation of Acceleration Services in Higher Education: A Case Study of Unite! Agora as a Transformative Platform

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Abstract

This paper is dedicated to the vital role of Acceleration Services in fostering the digital transformation of Higher Education Institutions (HEIs). Institutional transformation is pivotal for promoting innovation, elevating research and teaching quality, fostering interdisciplinary collaboration, and enhancing the societal impact of HEIs. Through a focused case study, we shed light on the implementation and impact of acceleration services within an HEI, specifically the A University Partnership for Acceleration of European Universities (aUPaEU) project. A comprehensive analysis of this case study, with a focus on university networks for innovation and technology (Unite!) Agora serves as a testament to the success and outcomes of Agora acceleration services in driving institutional transformation within the aUPaEU initiative. Agora is a shared platform for collaboration that offers a multitude of acceleration services to help HEIs connect, share knowledge, and create new solutions. Also, to create methodologies, sustainability plans, coaching services, and tangible digital technologies, using an acceleration agora to achieve integrated, shared, and long-term R&I transformations through collaborative efforts.

1 Introduction

Let's explain the acceleration services as customised solutions and resources designed to aid businesses in achieving rapid growth. These services accelerate business performance by addressing challenges, streamlining processes, and facilitating progress (Peca, 2022). The primary goal is to equip businesses with the necessary tools and resources to accelerate their growth and achieve sustainable success. Additionally, acceleration services enable companies to swiftly respond to market changes, seize new opportunities, and navigate potential obstacles. From previous studies, we can conclude that Acceleration services offer an invaluable pathway for businesses seeking rapid growth and

development. These services enable organisations to accelerate their progress, adapt to market dynamics, and unlock their full potential by providing specialised expertise, resources, and support. Considering the acknowledged significance of higher education institutions by the European Commission (Horizon Europe, 2022), the implementation of acceleration services in the scope of higher education is being proposed. Acceleration services encompass customised support mechanisms, resources, and expertise to expedite the process of institutional transformation within HEIs. The primary objective of these services is to empower HEIs to effectively implement strategic changes, enhance their capabilities, and successfully achieve their transformation objectives. To achieve the desired outcome in higher education institutions, systematic reforms in the pathways to higher education are offered. By implementing these strategies, learners can progressively gather evidence of their accomplishments within a unified qualifications system and advance in their careers (Hodgson & Spours, 2000). According to the previous studies the numerous advantages of acceleration services exist for the involved stakeholders and universities. Universities should develop acceleration services, either alone or with other universities. The benefits provide advancement in technology and education, economic sustainability to universities, and significant economic indicators for governments.

This paper delves into the accomplishments within Agora¹ spotlighting Unite! Agora² as a successful model for acceleration services in university alliances. Functioning as a virtual hub within the Unite! alliance, Unite! Agora brings together students, staff, and researchers from diverse universities to collaboratively address global challenges. With a focus on innovation and entrepreneurship, the Unite! Agora provides essential support through funding, mentorship, and state-of-the-art facilities. The aUPaEU³ project is a collaborative effort involving five academic institutions from the EPiCUR⁴ and Unite! alliance is a groundbreaking initiative aligned with the European Universities Initiative. Collectively, these institutions are dedicated to integrating acceleration services into a cohesive support system for higher education institutions, networks, alliances, and umbrella organisations. With a commitment to Research and Innovation (R&I) modernization, the project aims to set an example for European HEIs, networks, and partnerships. The overarching objective of aUPaEU is to devise methodologies, sustainability plans, coaching services, and digital technologies, culminating in the establishment of an "acceleration Agora." This Agora will serve as a dynamic space fostering integrated R&I transformations across six crucial areas, including capacity, infrastructure, and resource sharing; researcher career attractiveness; collaboration with R&I ecosystem actors; open science; societal outreach; and gender equality. Inspired by the Greek concept of the Agora, the project seeks to create an inclusive platform for stakeholders to contribute and benefit from accelerated services. User groups within the EPiCUR and Unite! alliances will assess the resulting Agora, providing a valuable blueprint for emulation by other HEIs, networks, or university alliances.

2 Overview of the HEI

European countries are increasingly investing in HEIs sector, recognizing its significant impact on society. HEIs serve as vital resources for generating innovation and driving societal progress. Institutional transformation is becoming a priority for higher education institutions and it is a necessary process for organisations to become competitive. One of the main challenges in HEI is sustainability leadership at universities (Leal Filho et al., 2020), this challenge becomes even more pronounced when universities form alliances or partnerships. Effective management and stakeholder engagement play a

¹ <https://aupaeu.widening.eu/>, last accessed 09 February 2024

² <https://agora.unite-university.eu/>, last accessed 09 February 2024

³ <https://cordis.europa.eu/project/id/101095314>, last accessed 09 February 2024

⁴ <https://epicur.edu.eu/>, last accessed 09 February 2024

crucial role in addressing this challenge. It is necessary to have strong leadership and foster collaborative problem-solving. By successfully tackling these challenges, universities can take the lead in creating a more sustainable future. Also, Stakeholder management is a challenge for many HEIs. Examples of this challenge include inadequate communication, lack of support staff empowerment, and limited collaboration (Pravitasmara Dewi et al., 2021). To address this challenge effectively, leaders within these institutions require assistance from experienced mentors who can provide guidance and support all over each phase of quality improvement.

2.1 Role of Acceleration Services in Supporting Institutional Transformation

Acceleration services play an important role in supporting higher education institutions (HEIs) in their journey of institutional transformation. These services offer a range of benefits and support mechanisms to facilitate and expedite the transformation process. The acceleration services led to investments in developing a new strategy or idea. The consultation process throughout the acceleration program enhanced the strategy by identifying weaknesses such as disorganisation, distrust, resistance to change, centralised control, and a lack of vision. (Giourka et al., 2021). Strategic planning facilitates the acceleration services to assist HEIs in developing a clear vision, mission, and strategic plan for their transformation, ensuring alignment with their objectives. These services conduct thorough assessments to identify the strengths, weaknesses, and areas that require improvement within the institution, providing valuable insights for targeted interventions (Vostal, 2016). Acceleration services provide guidance and resources for effective change management, equipping HEIs with strategies, tools, and techniques to navigate the transition process smoothly (Baskaran & Binu, 2019). HEIs receive training, workshops, and mentoring programs through acceleration services to enhance the skills and competencies of institutional leaders, faculty, and staff, empowering them to drive and sustain the transformation efforts (Kitchener, 2017). Acceleration services foster collaboration by creating platforms for HEIs to connect, share best practices, and build networks with peers, stakeholders, and industry partners, fostering a supportive ecosystem. These services establish mechanisms to monitor the progress of the transformation journey, assess the impact of interventions, and make necessary adjustments, ensuring continuous improvement. Acceleration services prioritise long-term sustainability by assisting HEIs in developing strategies and frameworks to maintain and expand the transformation initiatives even after the program concludes, ensuring scalability and lasting impact.

2.2 Acceleration services outcomes

Acceleration services increase sustainability and scalability to ensure that the transformation efforts of higher education institutions (HEIs) persist beyond the program's duration and make a lasting impact.

1. **Sustainability:** Acceleration services collaborate with institutions to establish a sustainable vision and strategic roadmap. They provide capacity-building programs, fostering internal capabilities, and integrate transformative initiatives within organisational structures. Sustainability planning includes financial strategies and resource allocation for long-term success (Townsend & Coroama, 2018).
2. **Scalability:** Acceleration services increase scalability by identifying successful practices for replication within institutions and sharing with other HEIs. They facilitate knowledge sharing, providing platforms for experiences, best practices, and lessons learned. By fostering innovation ecosystems and expanding networks, these services connect HEIs with external resources and expertise, promoting scalability (Vaidyanathan & Panda, 2007).

3. **Maintaining Transformation Momentum:** Acceleration services ensure continuous institutional support post-program, providing resources and expertise for sustained transformation. They foster communities of practice for ongoing collaboration and knowledge exchange among institutions. Regular assessments and a culture of institutional learning enable continuous improvement, fostering sustained growth and sustainability (Schudde & Keisler, 2019).

3 Overview of Agora

Agora represents the dedicated virtual space designated for each university alliance. It functions as a digital hub tailored for collaboration, connectivity, and serves as a repository for the uploading and sharing pertinent resources among alliance members. Each alliance has been established as a separate entity, and their respective Agoras have been configured employing a website module. Presently, two Agoras have been created, one for the Unite! alliance and another for the EPICUR alliance. Establishing the Agora demands a platform addressing complex business processes in the acceleration service catalogue. Optimal for this is the Enterprise Resource Planning (ERP) category⁵, with Openbravo⁶ and Odoo⁷ identified as open-source leaders, aligning with the aUPaEU project's dedication to open-source software for managing multifaceted organisational operations.

3.1 Email Communication

To improve communication and collaboration across different projects on the Agora platform, it has become essential to establish dedicated communication channels. Currently, two crucial functionalities effectively fulfil this purpose which are newsletter and mail groups.

The Email Marketing module enables the creation of Mailing Lists, with the flexibility to generate multiple lists. This includes a general list for each Agora and others tailored for specific purposes, such as the "Reading Club" mailing list, which disseminates the latest news about ongoing readings and outlines details for their monthly meetings. This channel is dedicated to unidirectional communication and proves highly efficient for broadcasting general communications to interested readers, who can conveniently subscribe via the website.

To facilitate collaborative and bidirectional message exchange among team members, Agora incorporates an add-on that streamlines the management of mailing lists through the creation of mailing groups. Team members can easily subscribe to these groups, email the specified group address using an email alliance, and engage in responsive communication within a group thread.

Furthermore, the emails exchanged within these groups can be accessed on the website, creating a forum-like space for communication.

4 Agora of Acceleration Services

The Agora of Acceleration Services encompasses a robust infrastructure consisting of four vital components. Firstly, the European Platform Integration seamlessly connects Agora to key European

⁵ [List of ERP software packages - Wikipedia](#), last accessed 09 February 2024

⁶ <https://www.openbravo.com/>, last accessed 09 February 2024

⁷ <https://www.odoo.com/>, last accessed 09 February 2024

platforms like EOSC⁸, OpenAIRE⁹, and EURAXESS⁹ through APIs, ensuring real-time access to pertinent information for HEIs. This integration empowers informed decision-making. Secondly, the Acceleration Service Layer adds value by offering data analysis, trend identification, and stakeholder matching capabilities, enhancing Agora's proposition with actionable insights for tailored acceleration services. The third component, Resource and Personnel Management, efficiently handles information about resources and personnel involved in acceleration services, improving utilisation and accessibility and fostering collaborative expertise. Lastly, Stakeholder Profiling and Identification facilitate the exchange, analysis, and profiling of stakeholder information, ensuring HEIs connect with relevant experts, thereby unlocking a network of knowledge and expertise crucial for expediting their transformation journey.

A variety of acceleration services are integral to Agora, each designed to cater to specific needs within university alliances. The Research Infrastructures Catalog serves as a pivotal service, assisting users in identifying research laboratories or facilities based on scientific fields or available equipment. This services implemented for both Unite! and EPICUR alliances, it stands as a fundamental Agora feature, marking the platform's initial service development in both instances. Another service, the Collaborative Research and Innovation Proposals feature, establishes a collaborative environment for users to explore, contribute to, and initiate research and innovation, particularly within the Unite! alliance, fostering collaborative initiatives across institutions. The Showcase component addresses the need for compact website displays in university alliances, allowing teams to create deliverables for new educational tools. These showcases, including examples like the "Well-being Community," "Space Tech Unite!," "Staff Hub Unite!," and the "Online Toolkit," provide independent user interfaces within the Agora platform, ensuring centralised storage of contact persons and shared internal Customer Relationship Management (CRM) within the alliance. The structure of multiple websites, including the Agora and individual showcases, offers selective access to editing features, allowing specific groups to focus on their showcase content without accessing all other Agora website features.

5 Methodology

The methodology of this paper involves a comprehensive exploration of the Agora platform, with a specific emphasis on the Unite! Agora as a primary case study. Unite!¹⁰ constitutes a collaborative alliance comprising nine universities from various European countries, involving students, staff members, and researchers. The research aims to clarify the services provided and the outcomes derived from the ongoing aUPaEU project within the Unite! Agora. We focus on two prominent services provided on this platform for Unite users, namely the Research Infrastructures Catalog service and the Collaborative Research and Innovation Proposals Service. Additionally, we explain other facilities present in this platform. Through this methodological approach, we delve into the distinctive features, challenges, and successes of the Unite! Agora, highlighting its transformative role within the landscape

⁸ [EOSC Portal](#), (European Open Science Cloud): A federated open science infrastructure that provides researchers with access to a wide range of scientific research data and resources; last accessed 09 February 2024 ⁹ [OpenAIRE](#), (Open Access Infrastructure for Research in Europe): A repository for research publications and datasets that facilitates the discovery, access, and usage of open research materials across Europe; last accessed 09 February 2024

⁹ [EURAXESS](#), (European Research Area and Mobility Programme): A network of information, advice, and support services for researchers in Europe, helping them to find funding, jobs, and collaboration opportunities across the continent; last accessed 09 February 2024

¹⁰ <https://www.unite-university.eu/>, last accessed 09 February 2024

of university alliances in Europe. Finally, we present the results of this platform through Google Analytics figures and the success criteria achieved by the platform.

6 Case Study Analysis: The Unite! Agora

Here, Unite! partners converge, and coordinate their efforts to actualize the envisioned outcomes of Unite! projects into tangible realities. Functioning as a dynamic hub, the Unite! Agora embodies the spirit of the ancient Greek Agora. This vibrant space facilitates collaboration, ensuring that Unite! initiatives materialise into impactful transformations. Anchored in a commitment to shared objectives, the Unite! Agora offers a diverse spectrum of acceleration services. These services are meticulously crafted to support Unite! partners in achieving integrated, collaborative, and enduring transformations within Higher Education Institutions (HEIs). From section 6.1 to 6.8 we will explain some of these services.

6.1 Research Infrastructures Catalog Service

The catalog of research infrastructures provide a concise description of their facilities and are interconnected to specific infrastructure pages containing comprehensive information on equipment, scientific domains, home partner institutions, and more. Each infrastructure entry includes a contact button that directs interested users to a contact form, allowing them to address any related questions. Upon submission, this form automatically generates a lead in the CRM, assigning it to the dedicated sales team responsible for managing the infrastructure. The integration with CRM is particularly significant, streamlining the process from initial contact to lead generation, ensuring no potential interest is overlooked.

6.2 Collaborative Research and Innovation Proposals Service

The platform offers users the ability to search for proposals through a customised website dedicated to displaying research proposal, ensuring a uniform presentation throughout the platform. Proposals are showcased with key details, including title, description, associated institution, contact options, and are linked to a dedicated page with comprehensive information. Additionally, the contact button initiates a lead in the CRM system whenever a user expresses interest in a specific proposal.

6.3 Events, Conferences, and Workshops

An integral component of the Unite! Agora's acceleration services involve the coordination of training sessions, incorporating conferences and workshops. These events are inherently dynamic, demanding a user-friendly platform for event creation and an accessible interface for upcoming event information. Prospective participants should be able to register for events and potentially receive pertinent instructions via email. The user interface offers a transparent list of events, providing comprehensive details such as the event title, date, description, and registration status. For organisers, the events module introduces a robust back-office tracking system. This system streamlines the management of attendee lists and logistical details essential for effective event planning. Organisers can effortlessly monitor the event lifecycle, from its initial announcement to its successful completion.

6.4 Enquiries about Digital Campus

This form is designed for individuals, to report various concerns related to metacampus¹¹. The user selects the appropriate subject category, specifies the concern, and agrees to the terms and conditions before submitting the form. The categories cover a range of issues, from seeking support and reporting problems to making requests for new features or spaces on metacampus.

6.5 Unite! Student Catalogue Submission Form

The Unite! Student catalogue submission form serves as a structured platform for individuals to contribute educational offerings to the Unite! network. Its purpose is to collect essential details about various types of educational offerings, from courses and joint programs to events and collaborative initiatives, for inclusion in the Unite! Catalogue on the Unite! university website. After submitting the form, the provided content undergoes a review process, and if no revisions are required, the offering is expected to be featured on the website. The form includes key information fields such as the submitter's name, email and type of educational offering, offering title, and a brief summary of expected outcomes for students.

6.6 Internships

Unite! Internships invite individuals to explore internship opportunities within the Unite! Community. Users are encouraged to use search and filtering options to tailor their internship exploration experience. The search function allows for specific queries, and users can refine their search by filtering according to the host university, subject area, and type of internship.

6.7 Reading Club

The "U! Reading Club" is a literary initiative led by students who share literature and its potential to broaden perspectives. With a mission to connect individuals through a shared passion for literature, the club aims to go beyond traditional book clubs by focusing on foreign literature and its role in understanding different cultures. The club envisions a series of nine monthly meetings, with each participating university recommending a book for discussion. The gatherings will blend virtual interactions with real-time engagement, offering flexibility for participants.

6.8 Enhancing Peer Relationships through socialising Activities

The Enhancing Peer Relationships through Socialising Activities seeks suggestions to foster social connections among Unite! Staff members. Individuals are encouraged to share ideas on starting clubs or hosting activities that promote a sense of community. Examples provided include yoga, meditation, dancing, singing, topical workshops, or any other engaging activities. The form, filled out by user, requests the participant's name, email, university, and the category of inquiry. The subject and inquiry fields allow for specific details about the nature of the suggestion or concern. This initiative aims to create a vibrant and collaborative social environment within the Unite! Community.

¹¹ <https://agora.unite-university.eu/digital-campus-enquiries>, last accessed 09 February 2024

7 Discussion and results

The assessment system on this platform gives significant importance to interaction metrics, employing a straightforward satisfaction rating system to evaluate the impact and effectiveness of services. Interaction metrics take precedence, happening at contact points or when users interact with the services offered. Currently, there are two feedback mechanisms in operation. The first involves a straightforward satisfaction rating accompanied by a comments box. Alternatively, a more comprehensive feedback approach to use the Surveys add-on, allowing the configuration of surveys with a set of questions and providing valuable metrics from corresponding responses. Additionally, it facilitates the configuration of surveys with a set of questions, enabling the collection of valuable metrics.

Upon analysing results derived from the analysis of active users and contacts within the Agora contact module, it becomes evident that these metrics have significant implications for both collaborating alliances and stakeholders involved in the aUPaEU project.

It's essential to distinguish between Portal and Internal users. Portal users, limited to website access, can interact through contact forms but lack access to the back-office management tool. On the other hand, internal users, serving as platform managers, have exclusive access to the back-office.

The Unite! alliance, engaged in the project since its inception, demonstrates robust participation, particularly from Portal users 165. This group mainly comprises researchers, teachers, and students within the Unite! Community. The Contacts database is about 1015 contacts and encompasses 36 institutions.

As a result of Google Analytics data over the past year, from January 2023 to January 2024, the Unite! Agora website had a total of 2.2 thousand visitors, with an average engagement time of 3 minutes and 7 seconds. These indicators mark a promising start, and the steady flow of visitors implies that the project's online visibility is steadily expanding. Sustaining this level of engagement as the project progresses is indicative of its ongoing success and influence.



Figure 1: Number of users & average engagement time from January 2023 to January 2024
(Source: Unite!Agora Google Analytics)

8 Conclusion

The Agoras, particularly the Unite! Agora proves to be an invaluable resource for Higher Education Institutions (HEIs) seeking transformation and improvement through acceleration services. These platforms provide targeted assistance and support, offering solutions to challenges and aiding in the achievement of goals within the Unite! alliance and beyond.

Acknowledgement

We gratefully acknowledge that this project has received funding from the European Union's Horizon Europe programme under grant agreement No :101095314 (aUPaEU). We sincerely appreciate the opportunities and resources available to enable us to conduct our research and achieve our objectives.

References

- [1] Giourka, P., Kilintzis, P., Samara, E., Avlogiaris, G., Farmaki, P., & Bakouros, Y. (2021). *A Business Acceleration Program Supporting Cross-Border Enterprises: A Comparative Study*. *Journal of Open Innovation: Technology, Market, and Complexity*, 7(2), 152. <https://doi.org/10.3390/joitmc7020152>
- [2] Hodgson, A., & Spours, K. (2000). *Expanding Higher Education in the UK: From 'System Slowdown' to 'System Acceleration.'* *Higher Education Quarterly*, 54(4), 295–322. <https://doi.org/10.1111/1468-2273.00163>
- [3] Horizon Europe. (2022). *Widening participation and strengthening the European Research Area. EN Horizon Europe Work Programme 2021-2022*. https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/wp-call/2021-2022/wp-11-widening-participation-and-strengthening-the-european-research-area_horizon-2021-2022_en.pdf
- [4] Leal Filho, W., Eustachio, J. H. P. P., Caldana, A. C. F., Will, M., Lange Salvia, A., Rampasso, I. S., Anholon, R., Platje, J., & Kovaleva, M. (2020). *Sustainability Leadership in Higher Education Institutions: An Overview of Challenges*. *Sustainability*, 12(9), Article 9. <https://doi.org/10.3390/su12093761>
- [5] Peca, V. (2022). *EIC-WP2022-NCPs-full-presentation_2.pdf*. https://access2eic.eu/wp-content/uploads/2022/02/EIC-WP2022-NCPs-full-presentation_2.pdf
- [6] Pravitasmara Dewi, Y., Sugiharto, D., Utami, I., Huruta, A., & Rahardjo, O. (2021). *Challenges of Top-Down Policy as Stakeholder Engagement Strategy in the Implementation of Internal Quality Assurance in Higher Education Institutions: An Empirical Research*. 24, 500–516. <https://doi.org/10.47577/tssj.v24i1.4817>

- [7] Schudde, L., & Keisler, K. (2019). *The Relationship Between Accelerated Dev-Ed Coursework and Early College Milestones: Examining College Momentum in a Reformed Mathematics Pathway*. *AERA Open*, 5(1), 233285841982943. <https://doi.org/10.1177/2332858419829435>
- [8] Townsend, J. H., & Coroama, V. C. (2018). *Digital Acceleration of Sustainability Transition: The Paradox of Push Impacts*. *Sustainability*, 10(8), Article 8. <https://doi.org/10.3390/su10082816>
- [9] Vaidyanathan, K., & Panda, D. K. (2007). *Benefits of I/O Acceleration Technology (I/OAT) in Clusters*. *2007 IEEE International Symposium on Performance Analysis of Systems & Software*, 220–229. <https://doi.org/10.1109/ISPASS.2007.363752>
- [10] Baskaran, C., & Binu, P. (2019). *Information acceleration into access on acquiring skill under consortium based resources in the selected Universities of Kerala, India*. <https://core.ac.uk/download/pdf/215160202.pdf>
- [11] Kitchener, I. (2017). *Are Accelerated Degrees the Future for Higher Education?* *Compass: Journal of Learning and Teaching*, 10. <https://doi.org/10.21100/compass.v10i3.569>
- [12] Vostal, F. (2016). *Acceleration in the Academic Life-World* (pp. 115–141). https://doi.org/10.1057/9781137473608_6