

SUDTE

Supporting Universities in the
Digital Transformation in Erasmus+



Report On Desk Research

Erasmus Without Paper
My Academic ID
Students
EDSSI
Management of ERASMUS Mobility Activities
European Projects
Developments in Digitalisation in Erasmus
Erasmus+ App
Policy Context
University of Vigo
Target Groups
Students
EDSSI
IT Staff
ERASMUS+APP
Selçuk University

SUDTE –Supporting Universities in the Digital Transformation in Erasmus+
Project Number: 2020-1-TR01-KA203-09384

sudte.iyte.edu.tr

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REPORT ON DESK RESEARCH

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SUDTE –Supporting Universities in the Digital Transformation in Erasmus+
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Digital Transformation in Erasmus+

Report on Desk Research

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Executive Summary

Digital Technologies in Erasmus+ Programme have real potential to improve the quality of mobility management. Despite this, efforts providing direct support into HEIs digital transformation process are limited. To address this gap, the project titled Supporting the Universities in the Digital Transformation in Erasmus+ "SUDTE" is being carried out by a consortium of five institutions from Turkey, Spain, Italy, and Luxembourg.

The project seeks to facilitate the digital transformation of HEIs in line with the European Student Card initiative and to contribute to streamlining the gradual shift towards fully digital mobility management. The project will enable exchange of know-how between the participating institutions and ensure extensive support in achieving a smooth and well-coordinated digital transformation process in compliance with ESCI requirements.

The Project has 6 intellectual outputs (IOs). The first IO will provide the first systematic mapping of the status of digitization in the HEIs of the countries involved in the project. The primary purpose of the output is to develop a shared understanding of the existing situation in HEIs associated with digitalization, under the framework of Erasmus+ Programme. To develop the first systematic mapping within this context, a comprehensive survey will be conducted to all relevant stakeholders involved in the Erasmus Mobility Programme in HEIs. Through this survey, it will be possible to gather fresh data on the state of play, find out the strategic development areas and highlight the challenges in digital transformation. The current report concerns the first deliverable of this first intellectual output of the SUDTE project.

The first step in the project is this desk research which is prepared to set the framework and guide the consortium partners. It aims to assist the understanding of the current approaches in methods of handling the Erasmus Mobilities at the universities. This preliminary investigation will reveal a wider research and policy context and ensure that the mapping exercise is based on firm evidence. The main areas for this desk research were identified through the extensive discussions between the partner universities, the Turkish National Agency and the European University Foundation.

The third section of the Desk research presents the results of the interview that has been issued among the international relations offices of the Consortium Beneficiaries. The aim of this interview is to determine the means of Erasmus mobility management that the different HEIs may have. This would enable to highlight the possible challenges and issues that different software users have in the new digital era. The prepared questions form one of the vital sources on which it was prepared and an important point as the technical infrastructure of Erasmus Mobility management among the consortium Beneficiaries.

As a result of this comprehensive study, a number of hypotheses have been formed to be examined. These hypotheses will be investigated by a multidimensional survey which will be conducted in different HEIs in different countries. The results will be then turned into a visual map to easily compare the digital readiness of HEIs.

The image features a person in a blue suit, likely a professional, interacting with a digital interface. The background is a blurred blue gradient. Overlaid on the right side is a network diagram with white lines connecting various nodes, including circles and a smartphone icon. A dark blue banner with the word "Introduction" in white text is positioned across the center. The overall aesthetic is modern and tech-oriented.

Introduction

1. Introduction

This desk research report is aimed at collecting the existing data by exploring the relevant literature on the topic. This would lead to shape the survey questionnaires as relevant as possible. It will be used to develop a solid ground for preparation of the questionnaire to find out what the digitalisation situation is like with the HEIs.

The reports include a comprehensive review of the scientific literature, European projects documents relating to digitalisation policies and international research results. In particular, the report provides guidance on examining the importance of the Digitalisation in Erasmus + Mobilities, current studies and the needs of stakeholders.

This report consists of five sections including the policy context, literature reviews, software analysis, target groups and component of the survey. The reports based on official documents, comprehensive reviews of the academic literature, details of the past and future projects, results gathered from the interview with partner institutions regarding software analysis and stakeholder's analysis about digitalisation in Erasmus +. The final part of the desk research report analyzes the key components of the questionnaire in a detail. This will be followed by the aim and scope of the survey with the hypothesis to be examined.

1.1 Policy Context

A systematic approach has been adopted for this report produced within the scope of the SUDTE project. First, the policy context was considered and within this framework, existing standards, priorities of European institutions and legal publications were examined. In this way, it was thought that it would be possible to make a more consistent and systematic research. The policy context reveals an overview of EU policy and the EU Commission's digitalisation strategies at the institutional level.

Aware of the importance of digitalization, EU institutions can say that their policies on this issue are both broad and somewhat complex. The EU Digital Agenda 2020 is one of the five mainstays of the Europe 2020 Strategy aims at providing citizens with a more modern future through the goal of achieving a digital Europe. (European Commission, The EU Digital Agenda 2020, 2014).

What is meant by digital transformation is an EU approach in which every citizen, business is strengthened and included. It is also to have European core values that can meet global challenges. In this framework, the focus of digitalization has been directed on an open, democratic and sustainable digital society, a fair and competitive digital economy, Europe as a global digital player, and technology that works for people.

Supporting the connection of HEIs is one of the KA2 call priorities under the ESCI, further to the European Commission announcement in March 2019 that from 2021 ECHER holder universities will be asked to adjust their workflows to the EWP standards. Another mention of digitalisation is also placed in the new Erasmus Charter for HE for which the call has been published in February 2020. As a consequence, the next Erasmus Programme framework is foreseen to be digital in nature when taking into account a gradual shift towards fully digital mobility management.

1.2 Management of Erasmus Mobility Activities

An Erasmus mobility project usually has at least Student Mobility for Studies (SMS), Student Mobility for Placement (SMP), Staff Mobility for Teaching Assignment (STT), and Staff Mobility for Training Assignment (STA) as mobility activities. These activities can be further listed. These are according to the Erasmus + Programme guide organized by the four main institutions who have the following roles and responsibilities: Applicant Organization, Sending Institution, Receiving Institution, and Intermediary Institution.

According to Carmen Díaz — SIGMA Gestión Universitaria AIE, the paper burden and exchange of information for the mobility management is a challenging topic. She highlights that in the mobility practices implemented

until now, the paperwork load and beneficiary information shared over and over made the process cumbersome. In order to present in a possible audit, at least one student file should necessarily have more than ten documents like LA, TOR, application forms, grant agreement, letter of participation etc. They should also be prepared as three copies which should be kept by the student, sending and receiving institutions.

Bringing mobility between higher education institutions with different infrastructures and rules in line with the program rules is both difficult and requires a series of workloads. This process creates an extra workload for coordination offices and employees that provide mobility management. Instead of spending their time improving the quality of the program, they often deal with the paperwork load.

In respect to the Erasmus programme guide rules and regulations, different Erasmus Charter holder HEIs can basically manage the Erasmus mobilities in their organisation following one of the three ways below

- i. No tool
- ii. In-house built mobility management software
- iii. Use of 3rd party mobility management software.

According to John Chambers who is the executive chairman of the Cisco Systems the entities who do not follow the digital innovations and fail in adapting their institution may end up with collapses within the next decade. So, whatever the change the EU commission foresees, it must cover the institutions with the above different case scenarios. Otherwise, there is a risk that some of the participant organisations may be left behind. As a result, the transition period may not be achieved.

1.3 Developments in Digitalisation in Erasmus

The era of digital transformation is changing our world. Any HEIs that don't act now are at risk of being left behind. It is the HEIs to find out to learn how to make use of the opportunities provided by digital transformation and actively deal with the risks involved. Given that the next Erasmus+ programme framework is approaching (2021-2027) and it is foreseen to be digital in nature, the HEIs must act now.

Ensuring a secure and electronic network that enables the electronic exchange of student data between HEIs is an essential part of the European Student Card initiative. Thanks to Erasmus Without Paper Project, the EWP network was made available from late 2018. Since the usage of digital platforms for students and staff during the management of Erasmus+ mobility will be made mandatory by the EU Commission, the Erasmus charter holder institutions should align themselves with this change of paradigm to be able to participate in the 2021-2027 Erasmus Programme.

1.3.1 What is Digitalisation?

We can briefly define digitalization as the transformation of the structure in use by adapting it to the developing digital technologies. Sometimes the term "Digitization" is mixed up with the term "Digitalisation". To illustrate the difference, one can say that digital transformation is a result of digitalization and this starts with the digitization of data first. As a result of digitalization, outcomes such as more practical business solutions, using less paper and time-savings are expected.

Digitization is a very broad process that includes not only technical aspects such as software or technology requirements but also a cultural change that leads to institutional adaptation. In times when digital technologies were not so widespread, the need for digital transformation for different sectors had to be clearly stated and focused on this issue. It is inevitable for those who cannot keep up with these transformations today to fall behind the competition.

Speaking of Higher Education Sector, each year the number of HEIs that has the Erasmus Charter for Higher Education (ECHE) increases significantly. Depending on this situation, the number of students and staff benefiting

from the Erasmus+ programme is increasing day by day and it becomes difficult to coordinate mobility processes. Therefore, the digitalization processes experienced by all educational institutions have become an unavoidable fact of Erasmus+ mobilities. The digitalization-based studies that were started especially with the initiation of Erasmus+ Programme (2014-2020) have brought us some digital platforms, applications and digital education processes such as Mobility Tool, Euroam and OLS.

1.3.2 Timeline of Past Projects

In 2019, the EU Commission has announced that the digital transformation of Erasmus Mobility management procedures will become mandatory from 2021 and onwards through Erasmus Without Paper (EWP) standards. It may be important to have a look at the historical background behind this changing structure to find out a smooth transition period in the future. The digital transformation of Erasmus Mobility management procedures has been based on a series of past European Projects. In the table below, we summarised the past projects, initiatives and regulatory services related to the digitisation of Erasmus+ Mobility managements.

Name of the Project	Coordinating Institution	Funding	Years	Web Page
EGRACON	Ghent University	LLP Programme	2012-2015	http://egracons.eu/
Erasmus without paper I-II	European University Foundation-Campus Europae	EPPKA3	2015-2019	https://www.erasmuswithoutpaper.eu/
OLA I-II-III	European University Foundation-Campus Europae	KA203	2015-2022	https://learning-agreement.eu/
European Student Card Project	Centre National Des Oeuvres Universitaires Et Scolaires (CNOUS)	Erasmus+ Key Action 2	2016-2019	https://europeanstudentcard.eu/
Erasmus+ App	Eötvös Loránd University	Service contract with DG EAC	Launched in 2017 2019-2022	https://erasmusapp.eu/
My Academic ID	European University Foundation-Campus Europae	Connecting Europe Facility	2019-2021	https://myacademic-id.eu/
European Digital Student Service Infrastructure (EDSSI)	European University Foundation-Campus Europae	Connecting Europe Facility	2020-2022	
Supporting Universities in the Digital Transformation in Erasmus+ (SUDTE)	Selçuk University	KA203	2020-2022	sudte.iyte.edu.tr
eduGAIN			(since 2011)	https://edugain.org/
eIDAS			(since 2014)	https://www.eid.as/
European Student Card Initiative			(since 2017)	

1.4 Digitalisation in The Future Erasmus +

In accordance with the European Education Area by 2025, the procedures related to mobility applications, cultural and educational activities will be streamlined to better serve the needs of students. Erasmus Student Card Initiative (ESCI) is a forward-looking action which is promising to provide great efficiency gains for the coordinators, better overview of the mobility cycles, increased participant satisfaction and a great opportunity for fruitful interna-

tional cooperation. However, there are certain steps to be taken in order to comply with the requirements such as digitizing all the Erasmus procedures, integrating a student e-identifier and connect all the services into a single online entry point for staff and students. There will be a certain amount of investment of time, money and human resources to cope up with these requirements.

As the availability of digital platforms has spread throughout Europe, adoption across HEIs segments has been uneven. To overcome these challenges, the European Commission attaches importance to the digitalization of Erasmus+ mobility processes. For this purpose, various digital platforms and applications have been developed to facilitate the management and multi-directional participation of mobility processes. Integration into these developed digital platforms was declared among the priority areas by the European Commission and the commission made it compulsory to complete the digitalization process for all HEIs by 2025.

In addition, the use of a number of digital platforms such as EWP, OLA and ESC will be made obligatory to HEIs with the Erasmus Student Card Initiative (ESCI) as declared by the European Commission in the next Erasmus programme. However technological innovations related to digital Erasmus tools often unfold at a faster pace than some institutions are able to embrace. These facts underscores two point about how the new initiative works its way through HEIs:

First, different institutions and stakeholders have varying levels of preparedness for the digital technologies of the next Erasmus programme.

Second, this reality can result in varying levels of usage of new technologies as they diffuse across the EU Programme countries

These differences can, in turn, ultimately raise the possibility that uneven adoption and use of technology could have negative consequences on the successful implementation of the ESCI.

According to the EU commission's web site, the benefits of the overarching initiatives are as follows:

- To make the data flow of students between the HEIs more secure in compliance with the GDPR
- To make sure the easy management of mobilities without the paper burden
- To facilitate the comprehensive access to a number of services which the receiving institution offer
- To enable students to involve activities at a low price under the umbrella of the ESCI

Thanks to the overarching initiative, Erasmus mobility participants have now more time to enjoy exploring the new culture where the issues mentioned above were once a huge challenge for them. To be able to align all the aspects in favour of this initiative, a group of people works hard behind the scenes. For example, authentication and verification of student data is a challenging issue which will be addressed with a few choices of electronic identification rules like edugain eidas and myacademicID. Other challenges which are tackled by different networks, HEIs, the standard setters and project partners can be further listed. Some of the emerging onces may include the followings:

Challenge #1 Inclusive In its ability to support all HEIs.

Challenge #2 New use cases That fully leverage on ESI/My Academic ID

Challenge #3 Clarity To allow timely planning.

with a gradual implementation schedule starting in 2021 with the new Erasmus + program 2021-2027. To search for more information about the roadmap please consult with the following link: https://ec.europa.eu/education/education-in-the-eu/european-student-card-initiative_en. Going digital means putting student identity at the centre of mobility flows and processes (rather than as an afterthought).



```
operation = "MIRROR_Y";  
r_mod.use_x = false
```

```
operation = "MIRROR_Z";  
r_mod.use_x = false  
r_mod.use_y = false  
r_mod.use_z = true
```

```
ob.select= 1  
text = modifier_ob  
Selected = (modifier_ob) # modifier ob is the
```

modifier objec
active ob

AD-58

2. Literature Review

This literature review will focus specifically on current studies, field research and ongoing European project about digitalization in Erasmus + mobilities. In the literature review performed, it's tried to determine the need for digitalisation in different areas and the basic problems regarding the Erasmus mobility process of students.

2.1 Academic Publications

As we all know, the increase in the use of digital technology has required changes in the HEIs as in other areas. Digital technologies enable to transform people's life, business and society. Therefore, studies on digitalisation are gradually increasing due to the rapid development. A literature review demonstrated that digitalisation has inevitably existed and continues to exist in all areas of the world. HEIs are also affected by digital transformation which enables to digitise activities in the institutions. Considering the literature, extensive studies are carried out to emphasize the importance of digitalization and to explain its advantages especially in HEIs.

According to the report that is published by Pwc (PricewaterhouseCoopers), it is emphasized that because of the increasing new technologies, the role of universities in society has changed and universities have to renew their visions by adapting to these changes. But the report stated that higher education institutions couldn't keep up with the digital technologies. Basic reasons for these stated in the report are as follows: a lack of trust in digital services and cloud technologies or concerns about their reliability, security and resilience, inflexible policies, aging infrastructure and lack of experience working with digital agencies. In the report, it is emphasized that administrative and academic staff in higher education institutions may be afraid of using the tools even though they are the most intensely benefiting from the advantages of technology. Therefore, it is stated in the study that HEIs have a crucial responsibility for embracing digital to provide students getting the most from digital technology. In addition, IT is emphasized that staying relevant in the digital age necessitates a strategic vision for the whole institution, a vision that is led by executives with support from other departments, not only IT.

According to the article that is written by Cardoso and Seruca (2019) explains the project developed by the authors aiming to develop a web-based software platform to automate the process of submitting applications for students and Portuguese University (UPT) academic and administrative staff exchange of UPT within the Erasmus+ programme. The project aims to transfer a paper-based workflow, which is reliant on timely postal deliveries for signature purposes, into an online system that will enable students and staff to gain considerable time when preparing their studies or work abroad and cause a greater degree of flexibility and efficiency when requiring to change the LA. It's stated in the article that the Erasmus process formerly based on paper-based workflows and dependant on timely postal deliveries for signature purposes, it is error-prone and time consuming for students, department coordinators and Erasmus staff. The project that is included in the study enables to conduct Erasmus process with more efficiency and flexibility way and thus staff will free up time and work on other activities.

The report that is published by Harvard Business Review stated the barriers to digital transformation in institutions. According to a survey that is included in the report, the most substantial obstacles to institutions abilities make effective use of digital technologies are persistent ties to legacy systems, including the inability to experiment with technology, problems tied to a lack of flexibility.

Aşkar (2013) summarizes the digital advancements forcing HEIs to transform and adapt to the 21st century. Among the forces for a reform in HEI structures are social media effects, massive online open courses, open educational resources, collaboration between and among instructors and big data and learning analytics, digital platforms bearing new interaction and affective expression schemes.

However, it has been highlighted in the literature that the change pressures induced by the digital technologies haven't found repercussion from HEIs and that they are facing new barriers while adapting to the digital age.

According to the article that is written by Saykılı (2019), it is emphasized that higher education institutions cannot utilize full potential of digital technologies. It is stated in the article that digital tools and applications can provide solutions to the difficulties faced by higher education institutions.

The study that is written by Dinçer, Aslan and Bayraktar (2017) aims to analyse Erasmus coordinators' opinion about positive effects, experienced challenges and suggestions for solutions concerning the Erasmus programme. Spending a lot of time during the Erasmus process because of paper-based workflow, bureaucratic procedures, communication problems with department coordinators are listed as major challenges faced by the students.

According to the article, which is published by Limani, Hajrizi and others (2019), it is investigated current readiness of HEIs for the digital transformation of their processes. The findings show that there is a remarkable change in the certain interest in the use of digital technologies at HEIs. The study stated that there is a need for an institutional vision, a strong planning, the involvement of all stakeholders and an organizational approach for successful transformation during the digital transformation process. In addition, it is emphasized that HEIs need to prepare a comprehensive Strategic Plan in which digital transformation is included and the opinion of all stakeholders is taken during drafting the strategic plan. A key finding also indicates that all institutions emphasize a strategy regarding digitalisation, but not all have had the exact knowledge.

Throughout the literature review it becomes evident that digitalization in Erasmus + mobilities is a crucial necessity in HEIs as in other areas but benefits of technology usage in the institutions have not been realized yet. It is clearly said that administrative processes will be faster and efficient especially, both for students and universities after finalizing the transformation. But HEIs structures, resistance to change, lack of vision and so forth are the main challenges during this transformation. Therefore, it is critically important that the advantages of the digitalization process should be realized by stakeholders and institutional measures need to be taken on this issue.

2.2 European Projects

The whole ESCI has started as a bottom-up initiative with some of the projects being proposed and funded through Erasmus+ and the self-funding facility as well. Now EU commission has decided to move the initiative away from this project in piloting phase into a more long-term sustainable funding mechanism for all the projects that have been developed in the context of this initiative. The MyAcademicID, the Online Learning Agreement the Erasmus Without Paper infrastructure and the Erasmus+ App are the projects at the very core of the initiative as illustrated in the call for accreditation (Erasmus Charter for Higher Education) of the next Erasmus Programme.

Given this context, The European University Foundation (EUF) being one of the SUDTE partners is leading and/or taking part in several projects that have contributed to the ESCI of the new Erasmus+ programme, notably with:

- Online Learning Agreement
- MyAcademicID since 2019 (Connecting Europe Facility): Developing a European Student eID, which will allow students to identify and register themselves electronically when going abroad and therefore seamlessly access different student services.
- Erasmus+ App:

2.2.1 Online Learning Agreement

(OLA, OLA+ and OLA3.0) since 2014 (Erasmus+ Strategic Partnerships): Enable students to prepare their Learning Agreements within an online system, allowing them to liaise with the coordinators of sending and receiving Higher Education Institutions (HEIs) to finalise the document and approve/sign it online.

The OLA 3.0 will provide tested software solutions that are fully compliant with the values and regulations of the Erasmus+ programme. www.learning-agreement.eu

OLA 3.0				
Started:	Funding:	Project budget:	Length:	Partners:
2019	Erasmus+ Key Action 2	399,998 €	2.5 years	11

2.2.2 Erasmus Without Paper

Erasmus Without Paper (EWP and EWP 2.0) since 2017 (Erasmus+ forward-looking cooperation projects): Setting up a framework for data exchanges and building ICT-based connectors between the existing Student Information Systems to ensure the interoperability and once-only principle. The EWP project aimed to render the administrative workflow of Erasmus paperless. www.erasmuswithoutpaper.eu

EWP				
Started:	Funding:	Project budget:	Length:	Partners:
2015	Erasmus+ Key Action 3	499,982 €	3 years	10

2.2.3 Erasmus+ App

A direct connection to the OLA platform for students (using exact same login credentials for both student services) and allows students to receive updates about the LA preparation and finalisation. The Erasmus+ Mobile App is the students' single point of entry into the Erasmus+ programme. The App will provide a broad range of information, tools and services to help students plan and carry out their exchange.

The Erasmus+ Mobile App				
Started:	Funding:	Project budget:	Length:	Partners:
2019	Service contract with DG EAC	996,320 €	2,6 years	10

2.2.4 My Academic ID

MyAcademicID since 2019 (Connecting Europe Facility): Developing a European Student eID, which will allow students to identify and register themselves electronically when going abroad and therefore seamlessly access different student services. My Academic ID aims to establish a digital infrastructure that enables secure and seamless exchange of data to provide services related to student mobility in Europe. www.myacademic-id.eu

MyAcademicID				
Started:	Funding:	Project budget:	Length:	Partners:
2019	Connecting Europe Facility	1,386,185 €	2 years	13

2.2.5 EDSSI

EDSSI European Digital Student Service Infrastructure will be aimed at maintaining the My Academic ID infrastructure, implementing ESI in EWP, and on student services. The European Digital Student Service Infrastructure (EDSSI) project will develop a system which will allow HEIs to exchange and authenticate student data in a seamless and secure way.

EDSSI				
Started:	Funding:	Project budget:	Length:	Partners:
2020	Connecting Europe Facility	2,498,763.07 €	2 years	

2.2.6 SUDTE

The SUDTE project seeks to facilitate the digital transformation of HEIs in line with the European Student Card initiative.

SUDTE				
Started:	Funding:	Project budget:	Length:	Partners:
2020	Erasmus+ Key Action 2	222,384 €	2 years	5

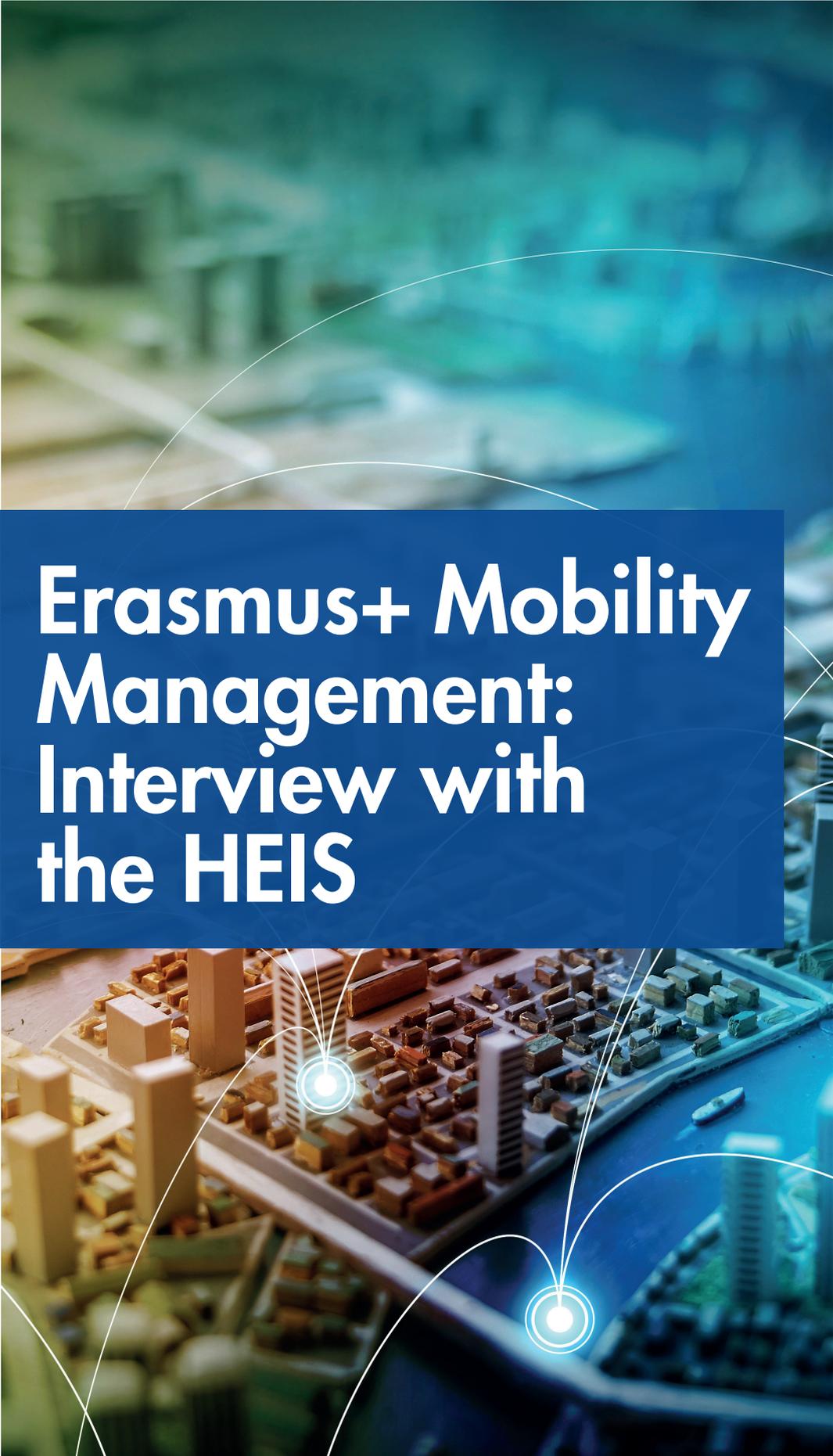
The SUDTE project is complementary in a number of ways to the above-mentioned projects which the overarching initiative is based on. Firstly, digital readiness will be mapped in participating countries to find out the needs of HEIs (O1). So the technical development can be made based on the current situation and a common perspective towards implementation of the ESCI can be constituted. This output is coming from the generally accepted idea that “you cannot manage what you do not measure”. Thus, taking into account the proposed target group(s) and the countries involved, the mapping methodology will contribute greatly for the future improvements of all the projects mentioned above as well as the implementation of the new initiative.

Secondly a functionality analysis will be followed by a recommendation report that will serve as a testing and feedback function which the EU commission is highly encouraging HEIs to do so. This will ensure a well-designed and well-guided digital transition in Erasmus+ programme. This output will feed the EWP and MyAcademicID initiatives.

Thirdly, All of the above-mentioned projects and the ESCI itself require individuals to have basic digital skills. A focus on skills requires a distinction between different types or profiles. The existing variety of definitions and distinctions is enormous and can only be taken up to a very limited extent here. Therefore the SUDTE is planning to provide orientation and guidance in the following context:

- Seminar for university leadership to strategically plan the digital transition
- Workshop for IT staff presenting the different technical solutions
- Training for Erasmus+ Coordinators and/or international relation officers on the use of the different tools and how the workflows should be adopted.

According to this the SUDTE project will provide training to the key persons mentioned above. So the trainings will ultimately expand to reflect on other participants resulting in trained people with skills and knowledge that will empower them through personal and professional development to succeed in their future life and to fully benefit from the 'digital dividends' of technology.

The image features a background of a cityscape, split into two horizontal sections. The top section shows a blurred aerial view of a city with a blue color cast. The bottom section shows a more detailed model of a city with buildings and a river, also with a blue color cast. A dark blue horizontal band is overlaid across the middle, containing the title text in white. White circular lines and dots are overlaid on the cityscape, suggesting a network or data flow.

Erasmus+ Mobility Management: Interview with the HEIS

3. Erasmus+ Mobility Management: Interview with the HEIS

In the third part of the research, the prepared interview questions were sent to the partner HEIs via email. The interview was conducted with the Erasmus Office staff of the partner HEIs during February-March 2021. The interview contained six questions. The questions aim to understand how partners currently manage Erasmus+ mobility and to reveal the differences and similarities between these systems. Features of the system used and whether this system meets the needs of IROs have been questioned. In addition, the effect of Covid-19 pandemic on digitalization, which started last year, has been tried to be determined. Answers of all HEIs (SU, IZTECH, UNINA, UVIGO) in the project and interview questions have been shared in the following sections.

Interview Questions

- How do you manage Erasmus+ mobilities? (in-house SIS, 3rd party provider, Excel etc.)
- Can you explain the Erasmus+ mobility process in your institution? (You can describe the process as before, during and after. If available, you can share the process-oriented scheme, diagram, etc.)
- Can you give more specific information about the system you use? Which features do you have in the system? (online application, nomination, IIA etc.)
- Do you think the system you use sufficient and manageable considering the number of mobility in your institution?
- What were the advantages and disadvantages of the system you used during the pandemic?
- Did any developments accelerate the digitalization process in your institution during the pandemic?

3.1 Selçuk University

Selçuk University uses commercial software in Erasmus+ mobility management. This software, known as KION, has the features needed for student and staff mobility management. The system used is sufficient and manageable considering the amount of mobility. However, there is a waste of time since nomination and inter institutional-agreements are made manually.

Basically, student and staff mobility are divided into two separate menus as outgoing and incoming in the KION software. The information of the student and staff is grouped in different tabs (personal information, student information, contact information, documents, grants and payments, etc.) and the documents are followed up by the office staff using these menus. The system calculates the student's Erasmus grade using language exam results and transcript information. It creates a list of principal and substitute candidates, taking into account the definitions (quota, language threshold, min transcript grade, etc.) made during the application period.

There are agreements being made between departments of universities in the bilateral agreements section. After the agreements are signed by both institutions, they are scanned and uploaded to the system. Agreement quotas both for students and staff are defined in the relevant sections.

Exam lists and contact lists are created with the filter feature in the reporting section. In the batch processing section, there are emailing, documents, application status update and period update features.

In the grant and account activity menu, budget details are displayed according to the grant budget year and exchange program (KA103, KA107, etc.) information.

In the general definitions menu, there are fields for content, document, exam and system definitions. While making these definitions, the updates in the program and the conditions determined for the application period are taken into consideration.

Before the pandemic, the student had to submit the transcript to the office in order to apply for Erasmus. Last year, a web service providing information from student affairs was integrated into the KION system and the student's transcript information was automatically transferred to the application page. In addition, the system made a filter by using the student's department information at the stage of agreement preferences. In this way, students only saw their own department agreements and chose from these agreements. Thanks to this change made before the pandemic, students were relieved of the obligation to deliver documents to the office. Also, online application time was shortened and paper was saved. This critical period, when the office could not provide face-to-face contact, proceeded in a healthy and programmed manner. Our university follows the processes and developments of Erasmus+ digitalization. SU recently signed a supply contract with the software company for the integration of EWP APIs.

The pandemic has had an accelerating effect on processes that are becoming increasingly digital. It could be said that this situation has a direct impact on SU technological infrastructure investments. The budget allocated for the Distance Education (UZEM) unit has increased so that the educational activities can continue without interruption, and the license capacity of the used program has become to meet the needs of the university. In addition to the Distance Education system, a Microsoft Office 365 campus agreement was signed, which includes features such as Office programs and online meeting. WebinarJam license was obtained for large-scale online events and the university email system was changed.

Mobility Process

Application conditions are determined according to the program rules. An announcement is posted on the web page for student and staff mobility. Application period, conditions and steps are stated in the announcement. After the Erasmus language exam, the Erasmus grade is calculated according to the application conditions. The results are announced on the website and an orientation program for the mobility is organized.

Before the Mobility:

Students who are eligible to benefit from the mobility are nominated to the receiving institution. After this stage is completed, the student is informed about the documents to fill. LA is signed by the department coordinators for the equivalence of the courses to be taken by the student. OLA is used at this stage if the other institution approves. A student who receives the LA document and letter of acceptance begins visa procedures. The processes such as passport, flight ticket and travel insurance required for the visa are completed by the student. The office prepares the official visa letter stating that the student will study abroad within the scope of Erasmus and the amount of grant. Students who complete these procedures upload their documents to the system and take the OLS testing. The outgoing student unit checks the documents and the finance unit prepares the grant contract. The grant is paid in two payments and the payment amounts are specified in the grant contract.

During the Mobility:

If students want to continue their mobility, they can extend the spring semester without a grant. The documents required to extend the semester are announced on our website.

After the Mobility:

The student who completes the mobility uploads the transcript and participation certificate to the system. Passport control is made to check the departure and return date. After completing the OLS testing and participant

report, the student's remaining payment is made. Whether there will be a deduction in the remaining payment depends on the fact that the mobility takes place between the specified dates and the student successfully completes the courses. If there is a remaining budget after all the mobilities are completed, this budget is given to students who extend the semester without grant.

3.2 İzmir Institute of Technology

IZTECH is still using Excel to manage Erasmus+ mobilities. However, our IT team is about to finish an in-house SIS. IZTECH doesn't think the system currently use is efficient enough. It can not be considered as unmanageable, but It is time consuming. The number of students is getting higher year by year and the system IZTECH has been using is not suitable for higher number of students.

IZTECH has been using online application forms both for Study Mobility and Traineeship Mobility. Erasmus Success Scores have been calculated over Excel both for Study Mobility and Traineeship Mobility. Student selections for spots have been done manually. Grant distribution between students has been managed manually. Our IT team has been developing a software programme for student selections. The nomination of the selected students has been done manually according to the directions of the host institutions. Learning Agreements, Recognition Sheets, Proof of Academic Recognition Document, Visa Document, Grant Contracts have been prepared manually. Inter-Institutional Agreements have been filled out manually. The Word template published by European Commission is used.

There are disadvantages of our system which can be summarized as heavy paperwork, time consuming, overwhelming bureaucracy, etc.

But they are not related to the pandemic. During the pandemic, there were a couple of developments such as the Turkish National Agency allowed us to proceed with certain forms online, i.e., without the official approval of signatures, in the first few months of the pandemic. Our IT Team has been working on a software programme about online joint application form for Study and Traineeship Mobilities.

Mobility Process

Before the Mobility:

Students fill out an on-line application form to apply Erasmus Study Mobility in the relevant year. To be able to access the form, students need to enter their email address as username and password into the system. This online form includes the following information;

-Personal ID Information of the Student: This information (Republic of Turkey ID number, name-surname, date of birth, etc.) is withdrawn and filled in automatically by Student Information System.

-Emergency Case Questions: This information (such as emergency contact person) needs to be entered manually by the student.

-Spot Preferences: The students may choose five spots at most. It is a manual process.

The students should upload their photographs and up-to-date transcripts into the form manually. All the applications have been checked about that whether the students are eligible to apply to the programme or not. The eligible students have been taken to the Erasmus English Proficiency Exam.

After the English Proficiency Exam Results are announced, Erasmus Success Score has been calculated for every applicant. This process is a manual process made by relevant Erasmus Advisor. IZTECH use Excel during this process.

According to their Total Erasmus Scores, the students have been placed to the spots or on the waiting list.

It is a manual process done by the relevant Erasmus advisor. Excel is used for this process. The results have been announced to the students and it has been given a specific time for objection to the results. After objections coming from the students have been evaluated, the finalized results have been pronounced.

After the orientation meeting arranged for the selected students, the nomination process starts. The selected students are nominated to the host institutions. Information needed for the nomination process might differ from university to university and it is a manual process done by the relevant Erasmus advisor.

The students start to determine the courses that they would like to take at the host institution and they fill out Course Recognition Sheet. This form is checked and revised (if necessary) by the Erasmus advisor and approved by the Departmental Erasmus Coordinator and Head of the Department. Approved Form is submitted for the approval of the relevant Faculty Board (for bachelor students) or Graduate Education Institute (for master and doctoral students). All these processes are done manually.

Learning Agreement is filled by the student and it is checked by Erasmus advisors. Required corrections are made on the document (if any) The finalized document is signed by the student, by Departmental Erasmus Coordinator, Erasmus Institutional Coordinator and by the authorized person at the Host Institution. This process is also a manual process. Microsoft word template of a Learning Agreement is used for this process.

For the students who submit her/his letter of acceptance to our International Office, an official visa document is prepared manually in Word format and then it is uploaded to Electronic Document Management System (EBYS) system to get the electronic signature of the Rector.

Then electronically signed document is submitted to the Rectorate for the original signature and stamp.

Online Linguistic Support (OLS) Exam is assigned to the students who receive their visas. For the students sending their OLS results, Erasmus Grant Contract is prepared manually. The contract is signed by the student and the Rector.

Payment Order Letter is prepared for each student manually in Word format to be able to pay their %80 of the total Erasmus grant. The letter is uploaded into the EBYS for the approval of Director of International Office and Rector. To be able to complete the grant payment procedure, Accounting Management System (MYS) -a system of Ministry of Finance- is filled out manually by the Erasmus advisor as the role of Data Entry Officer and electronically submitted for the approval of Execution Officer and Spending Authority. The necessary MYS documents are signed by Execution Officer and Spending Authority. The signed MYS documents and electronically signed Payment Order Letter are sent via email attachments to the Department of Strategy Development. Department of Strategy Development completes the necessary procedure to make the grant payment. The information of the student is entered into Mobility Tool.

During the Mobility:

If the students would like to change their courses submitted at the learning agreement and Course Recognition Sheet, they revise their Course Recognition Sheet. This form is checked and also revised (if necessary) by the Erasmus advisor and approved by the Departmental Erasmus Coordinator and Head of the Department. Approved form is submitted for the approval of the relevant Faculty Board (for bachelor students) or Graduate Education Institute (for master and doctoral students). All these processes are done manually.

The Add-Drop Pages of Learning Agreement is filled by the student and it is checked by Erasmus advisors. Required corrections are made on the document (if any) The finalized document is signed by the student, by Departmental Erasmus Coordinator, Erasmus Institutional Coordinator and by the authorized person at the Host Institution. This process is also a manual process. Microsoft Word template of a Learning Agreement (Add-Drop Pages) is used

for this process. If a student would like to extend her/his period of study, she/he needs to send an email to her/his Erasmus advisor stating her/his intent of extending Erasmus period. Erasmus advisor checks the budget and if the budget is sufficient, the Erasmus period extension request of the student is accepted. In this case, an attachment to the grant contract is prepared for the prolongation period. It is a manual process and Microsoft Word template is used for it. The attachment is signed by the student and the Rector. After the signature procedure, the amount of grant corresponding to the extension period is calculated and a Payment Order Letter is prepared for %80 of the extension period. It is a manual process and Microsoft Word template is used. The letter is uploaded into the EBYS for the approval of Director of International Office and Rector.

To be able to complete the grant payment procedure (MYS) - is filled out manually by the Erasmus advisor as the role of Data Entry Officer and electronically submitted for the approval of Execution Officer and Spending Authority. The necessary MYS documents are signed by Execution Officer and Spending Authority. The signed MYS documents and electronically signed Payment Order Letter are sent via email attachments to the Department of Strategy Development. Department of Strategy Development completes the necessary procedure to make the grant payment. The information of the student is updated in Mobility Tool.

After the Mobility:

After the mobility, the students submit their transcript of records and confirmation letter to their Erasmus advisor. Erasmus advisor compares the dates in the Erasmus Grant Contract and Confirmation Letter. If the Erasmus period in the confirmation letter is shorter than those in the Grant Contract, this means that the remaining %20 may not be paid or an amount is less than the remaining %20 may be paid to the student. In another case, the student may also have to repay some amount of the grant. This calculation is made manually by the Erasmus advisor. Erasmus advisor send an email to the student stating the remaining grant situation. After the calculation, if there needs to pay some of the remaining grant to the student, the Payment Order Letter is prepared for the remaining grant. It is a manual process and Microsoft Word template is used. The letter is uploaded into the EBYS for the approval of Director of International Office and Rector.

To be able to complete the grant payment procedure, (MYS) - is filled out manually by the Erasmus advisor as the role of Data Entry Officer and electronically submitted for the approval of Execution Officer and Spending Authority. The necessary MYS documents are signed by Execution Officer and Spending Authority. The signed MYS documents and electronically signed Payment Order Letter are sent via email attachments to the Department of Strategy Development. Department of Strategy Development completes the necessary procedure to make the grant payment. The information of the student is updated in Mobility Tool.

The transcript of the student is checked and compared to the updated (after add-drop process) Learning Agreement and if the courses are matching to the Learning Agreement, the Academic Proof of Recognition Document is prepared manually by the Erasmus advisor. It is signed by the Departmental Erasmus Coordinator. A cover letter addressed to the Office of Registrar is prepared manually in Word format. The cover letter and Academic Proof of Recognition as its attachment is uploaded to EBYS. Office of Registrar transfers the ECTS credits and grades of the courses taken at the Host Institution.

3.3 University of Naples Federico II

The University of Naples "Federico II" does not have a specific application for the management of mobility flows. At the same time, it does not resort to third parties for supplying this function. The University of Naples "Federico II" uses manually updated excel files for an internal use only. However, this kind of management tool is absolutely underperforming since it is exposed to errors. UNINA is currently looking at valuable alternatives that can make the process more efficient.

Each communication for students related to the Erasmus + Experience is available on the University of Naples “Federico II” and Departments’ websites. The application form for the Erasmus + Experience can be filled online on the University of Naples “Federico II” website. The University of Naples “Federico II” does not use any other tool and database in such a process. Regarding IIAs, negotiations with the corresponding parties are managed through email, until the agreements were signed and, once again, exchanged via email.

The main advantage of our system at the University of Naples “Federico II” is the complete dematerialization of documents, files of procedure connected to the Erasmus + Experience. Such characteristics granted the prosecution of the Erasmus + managing process despite the Covid-19 pandemic. However, the main disadvantage of our system is the lack of support from other ICT tools.

During the covid-19 pandemic the University of Naples “Federico II” implemented many ICT tools for supporting the online teaching activities (MICROSOFT TEAMS PLATFORM, MOODLE and FEDERICA WEB LEARNING) and remote working for administrative staff.

Mobility Process

The Erasmus + Call is published on the official page of the University of Naples “Federico II” (www.unina.it). The Erasmus + Call contains information regarding the selection process and the characteristics of the Erasmus + experience.

Students who want to apply must fill out the online application on the University website (www.unina.it). In the application students are asked to indicate three destinations, their banking information and an address that will be used in case of emergency.

Once the deadline for submission of applications has been reached, the selection process begins. Each Department is responsible for the selection process.

The Erasmus Committees of the Department first establish specific selection criteria for merit, language proficiency and motivation, then evaluate and formulate the rankings. The rankings are published on the websites of each Department.

The winning students must declare if they want to accept or not the scholarship. The date of departure and the duration of the period to be spent abroad (which cannot be less than 90 days) must be established at the time of acceptance. After the acceptance deadline, the Departments, according to the modalities established by them, will provide for any shortening of the ranking and / or allocation of remaining scholarships.

3.4 University of Vigo

UVIGO doesn’t have its own application for the management of mobility flows, so they resort to Access databases and different applications from the UVIGO, which are not linked to each other when it comes to the management of the different processes like application form, learning agreement, economic management applications, in addition to the different European platforms (OLS, Mobility Tool, etc.). There are no advantages of the system that UVIGO use. Managing possible incidents in Access does not facilitate the job of the International Office Staff. Hence, the need to look for alternatives.

What UVIGO has been using so far are Access databases, together with its own IT resources created ad hoc to manage (create, modify, sign) for example learning agreements for students. Those tools are absolutely independent, so the workload is not lightened, but increased, since processes are made more complicated. Nominations were received online and downloaded into our access database, documents were manually filled in the individual files created an ad hoc for each student. Regarding IIAs, negotiations were dealt with via email with the corresponding parties, until the agreements were signed and once again exchanged via email.

In 2020 UVIGO has started working with MOVEON, which is currently still being implemented. UVIGO is now about to start teaming up with MOVEON as one of the main tools to manage mobility flows, hoping to help it lighten the workload and simplify the processes for the staff at the international office. However, UVIGO is still searching if there would be a way of making MOVEON work together with the UVIGO its IT tools, so that processes won't have duplicated. The same scenario would also apply to the European platforms (eg. DASHBOARD/OLA).

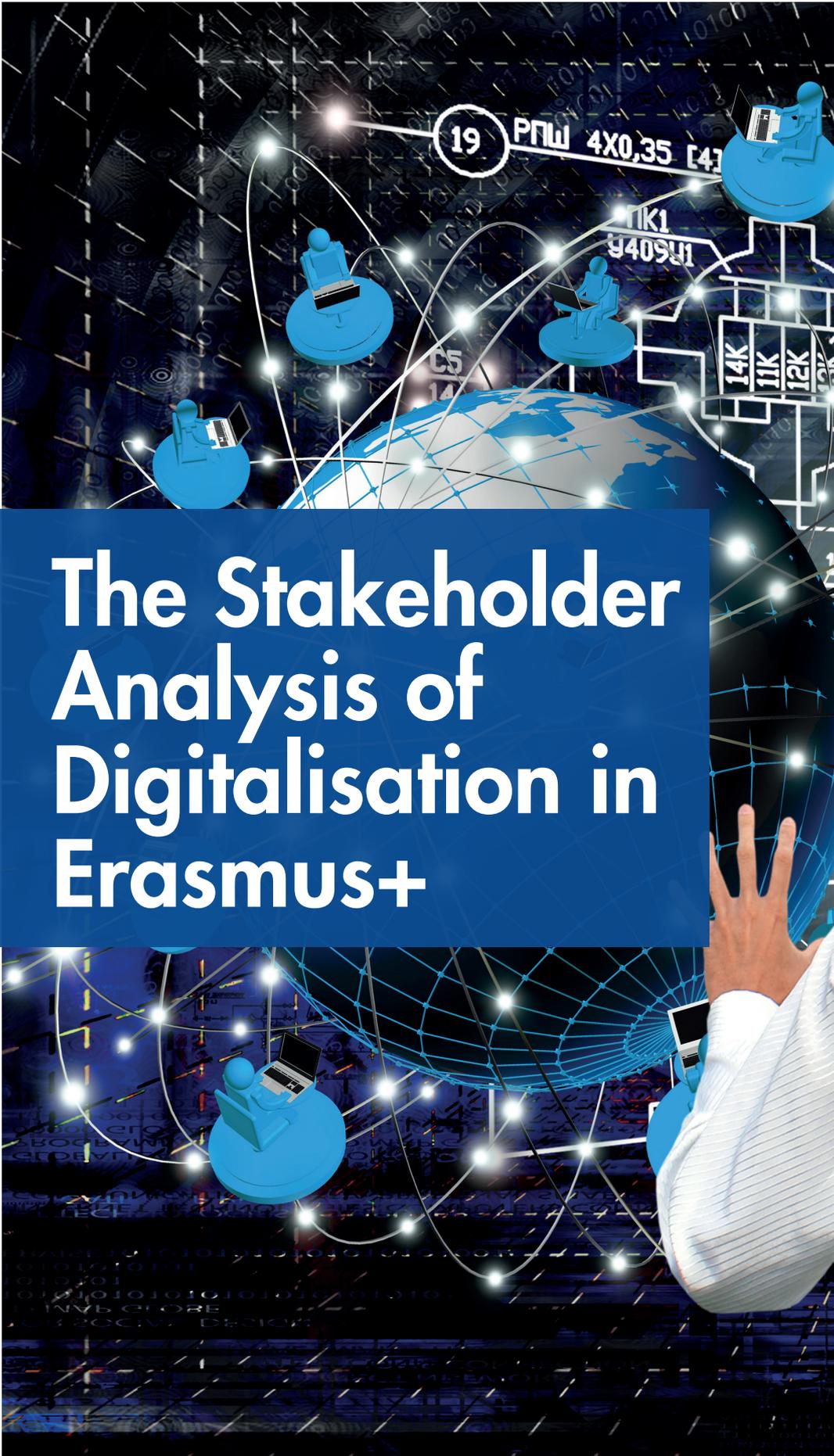
During the pandemic, UVIGO IT team developed our own remote campus for teachers, students and staff, so everyone could follow their activity (academic or technical/administrative) normally. What was called "CAMPUS INTEGRA" by the UVIGO, was born as a system to combine the "Digital twin of the UVIGO", our remote campus, with the face-to-face learning.

Mobility Process

Both inter-institutional agreements and mobility flows are managed using Access databases, which have not been professionally designed by IT staff. When preparing each mobility call, forms must be created through a UVIGO application. Once the applications are submitted, data are downloaded to proceed with the selection.

After the lists of the selected candidates are made public and all those interested submit their acceptance to take part in the programme, the nomination process begins, being one of the most laborious. Nomination processes vary depending on each host institution, forcing us to constantly monitor the deadlines and the very different procedures of nomination. The lack of uniformity in the process, at least between European institutions, greatly complicates both the nomination and its follow-up.

When mobility related documents are received, the corresponding data are registered in the database (arrivals & departures, payments, etc.) and individual files are created for each participant including all their mobility documents.



The Stakeholder Analysis of Digitalisation in Erasmus+

4. The Stakeholder Analysis of Digitalisation in Erasmus+

In order to be successful in digital transformation of Erasmus + Mobility, Communication between all stakeholders such as NAs, HEIs, Erasmus Office Staff, Academic and Administrative staff is quite essential. It is crucial to increasing the involvement of the key stakeholders during the transformation process. Ensuring transparency and establishing open communication channels for stakeholders are important task for HEIs, in order to expand awareness and increase productivity in the institution. Therefore, analysing the roles and responsibilities of the all stakeholders will provide insight into transformation process.

4.1 HEIs administrators

The HEIs administrators are one of the target groups of the project. HEIs administrators are primarily responsible for the effectiveness and quality of the education. Because students' needs and expectations change, HEIs take into account the needs and expectations of students, and all other stakeholders in the institution. They should consider age requirements for students, administrative and academic staff at the institutions. Priorities which is present in the Strategic Plan will guide the universities and need to be updated according to the requirements of the ages. One of the important requirements of these ages is to keep up with the pace of digital transformation. HEIs have witnessed a rapid transformation from traditional traditional manually based operation to digitalized operation. The HEIs administrators who keep pace with digital transformation in their institution will gain significant advantages when compared with the other institutions. Therefore, HEIs administrators must aware of the importance of digitalization in order to provide effective solutions that benefit students and staff. In addition, digitalization should be higher education's highest priority and take place in the university's strategic plan.

The digitalization processes experienced by all educational institutions have become an unavoidable fact of Erasmus+ mobility. The European Student Card Initiative is an important development which enables mobility process of Erasmus students in transition from paper-based to digital processes. During this process, on the one hand universities will face some challenges on the other hand they will encounter numerous opportunities it will enable administrative processes much faster and efficient. Digital transformation of Erasmus mobility workflow is not only about adopting new technology, it also requires change in operating model and organizational structure. Because EWP standards will be mandatory by the year 2021, HEIs need to take action in order to move towards a digital mobility management. Even If digitalisation process is more beneficial for students than HEIs, administrators have responsibility to take necessary precautions and also must aware of current development. HEIs will use and follow-up the digital platforms developed to carry out the Erasmus + mobilities processes in a healthier and more quality way.

4.2 National Agencies

National Agencies (NAs) have direct responsibility for supporting universities in the digital transformation in Erasmus+. Because EWP standards will gradually become mandatory from 2021, NAs must follow up closely on progress in the HEIs. NAs will help to develop a strategy supporting institutions with efficient digitization.

In order to make specific recommendations on the digital process at the national level and help facilitate each phase of the digitization process, The European Commission has asked national agencies to appoint digital officers. This appointment has showed that the commission has also expectations from NAs during the transformation process. Because digitisation process brings new challenges, NAs should determine a road map, for universities and inform them each stage of the digitisation process. NAs will be responsible for providing the coordination of the institutions and have a key role to determine the status of digital readiness of HEIs in the integration process. NAs are one of the regulatory bodies who would be able to address the risks and take certain measures to prevent from them. Therefore, NAs should follow current status of HEIs in relation to their digital transformation process.

4.3 Erasmus Office Staff

Erasmus office staff is one of the important target groups in the project. When conducting the Erasmus + mobility, Erasmus office staff allocates a certain amount of time to each student /staff. Traditional methods and practices are one of the challenges during managing the Erasmus + mobilities. In order to minimize bureaucracy for university and student, Erasmus Office staff need to have a system that digitizes the Erasmus management process. Therefore, Erasmus Office Staff is the most benefiting stakeholders from these changes. Digitalization in Erasmus + mobilities will facilitate the workflow.

During the transformation process, Erasmus office staff act as a bridge between students and staff. It's expected to inform students and department coordinators about current development of the digitalisation process. In consequence, increasing digital skills to use and develop digital technologies in Erasmus mobility Process are vitally important for Erasmus Office staff.

4.4 IT Staff

The digital transformation brought challenges to HEIs. Therefore, IT departments have a critical role in order to deal with these challenges. IT departments should lead the way in the institutions, increase their capabilities and follow the development of the new procedure closely in digital transformation. Collaboration and communication between IT and other stakeholders in the HEIs are quite substantial in order to manage effectively the transformation process.

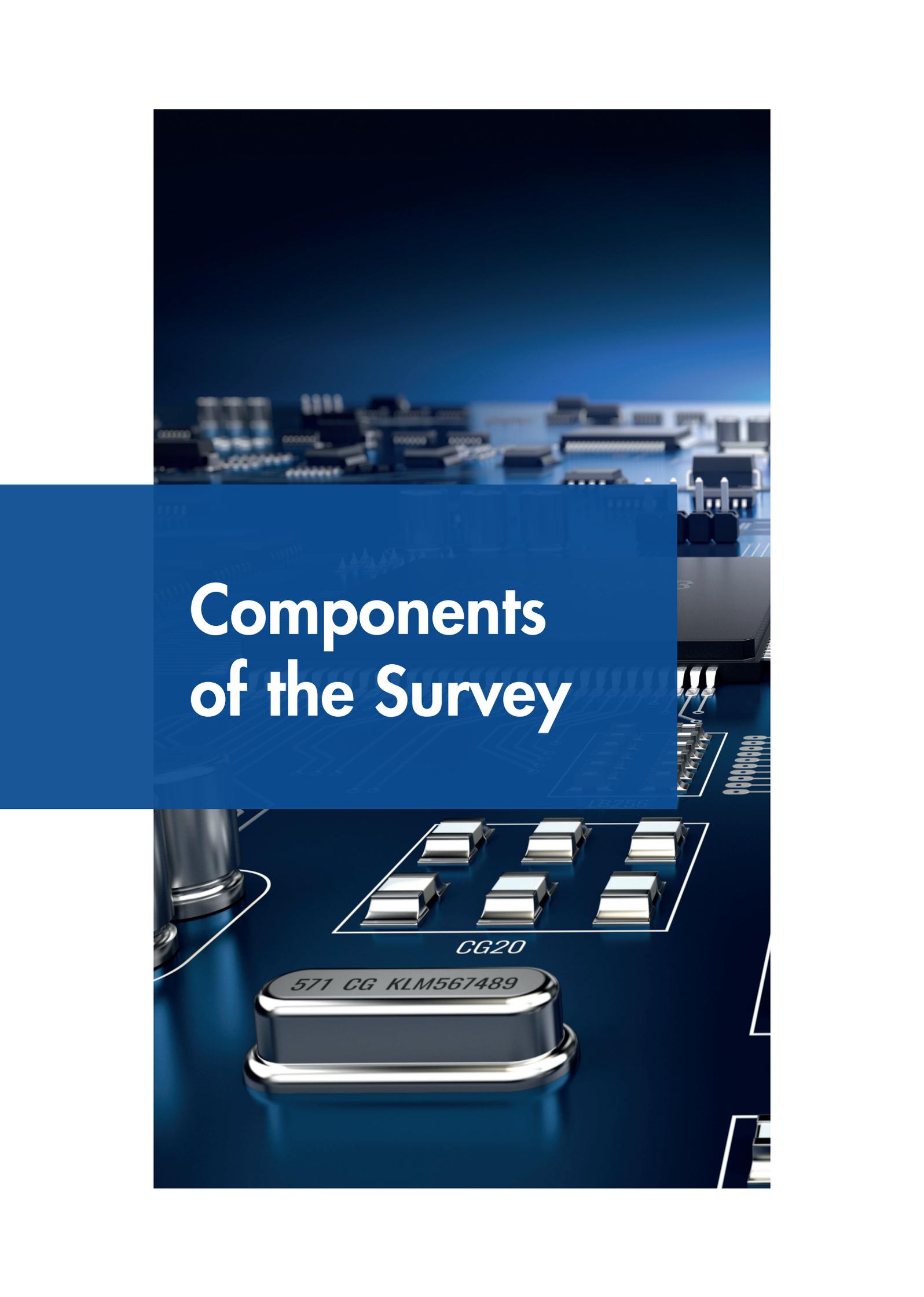
The implementation of digital tools in Erasmus mobility process will be carried out by IT staff at each university. Responsive IT is critical to complete the finalize Erasmus + mobility transformation process successfully. When the digital tools are ready to operate, the mobility flows will be tested by Erasmus office staff, students and department coordinator. Therefore, the technical infrastructures of IT and the capability of IT staff will play an active role in the digital transformation. The effort of the IT staff can make transformation process faster and more effective way.

4.5 Erasmus Department Coordinators

Except Erasmus Office staff, Erasmus Department Coordinators are also other important stakeholders while managing the Erasmus + mobilities. Department coordinator is assigned by faculty management in order to manage the mobility procedures on behalf of department. Department coordinator has a responsibility before, during and after the mobility process of students. Communication between department coordinator and students is not always easy because of workload of the coordinator. As a result of the digital transformation, both coordinator and students can save time and provide easier and more flexible online communication. Unless department coordinator meets up with the students, they can control all the documents online regarding Erasmus mobilities.

4.6 Students

Students are an other target group gaining the advantage of the transformation process. Students generally complain about administrative overload during their mobility processes. They have to face challenges regarding to Erasmus mobility admission procedures based on paperwork. In order to complete necessary document in their mobility process, students must come into contact with department coordinator, home and host university Erasmus offices. But it is not always easy to communicate with these stakeholders. Digital transformation makes it possible to complete the Erasmus + mobility process without communicating physically. Through preparation, participation and recognition arrangements of the student mobility will be significantly eased. In Addition, after the transformation process, students also have a chance to develop their digital skills, gain to manage the online process, and save time. Students will not have to meet with department coordinator and Erasmus + office staff physically.



Components of the Survey

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5. Components of the Survey

Within the scope of this survey, it is aimed to present the current situation in Higher Education Institutions (HEIs) where Erasmus + mobilities are carried out in terms of digitalization in a healthy and comprehensive way before the digital transformation processes. For this purpose, an international research design will be used to include data on digital transformation processes from all components of HEIs involved in Erasmus + program processes. In the development of the survey design, the opinions of all partners involved in the project were taken, and arrangements were made in the design, considering the changes specific to the countries of the partners. In this way, it will be possible to produce the strategies and road maps to be followed by HEIs in the digital transformation program under the Erasmus + program with an international perspective.

The survey will also enable HEIs to save time, resources and personnel by minimizing the high risks in digital transformation processes taking place within the scope of the Erasmus + program, with the data it will reveal and the visual mapping method. Within the scope of the study, besides the goals to be achieved above, the contribution of digitalization to internationalization and student-staff mobility will be revealed in detail through separate data collected in each partner country. Thereafter, the needs specific to HEIs in digital transformation process such as the importance of digitalization, institutional motivation, administrative requirements, structuring of information technologies and staff prototype will be determined. In addition to this, through the analysis obtained by the survey HEIs will be able to see what kinds of strategy they embrace for digital transformation in Erasmus+ mobilities bring the organizations closer to the completion of the ESCI and realization of their objectives in terms of duration, scope, resources, infrastructures, and activities.

While determining the target group in this survey, a wide perspective and a versatile sample selection should be made on the basis of the outcomes that the study aims to present. In this context, the objectives of the project have been decisive in determining the target group to create strategies and road maps regarding the digital transformation process taking place within the scope of the Erasmus + program. For this reason, all direct and indirect stakeholders of Erasmus + mobility processes in HEIs were determined as the target group and included in the study sample to constitute the sample of the survey. Since the main objectives of this survey include revealing the existing potential for the digital transformation of Erasmus+ mobility processes, it is necessary to include a very large group from the administrators of HEIs to their students. For this reason, using the purposeful sampling method, all stakeholders involved in the execution of Erasmus + mobility processes in HEIs were determined as the target group of the survey and included in the sample.

The survey method was preferred as the data collection tool for the survey designed according to the quantitative research design. Questionnaires will be conducted digitally due to the Covid19 Pandemic and data will be collected. Questionnaires will be implemented in project partners' countries of Italy, Spain, Turkey and Belgium by project partners in HEIs.

The sample determined in the research design includes the details of the target group of the survey. In this context, HEIs are included in the main target group of the survey, and within this main group there is a cluster consisting of 6 different subgroups.

These subgroups are;

- National Agency managers coordinating the implementation of Erasmus + Program in countries and HEIs.
- University administrators who decide to implement the Erasmus+ Program in HEIs.

- Erasmus+ Office managers and employees who are the implementers of the Erasmus+ Program.
- Department coordinators ensuring the coordination of Erasmus+ mobility within the scope of faculties, schools and colleges.
- Employees of the IT department, who manage the operation of digital platforms where Erasmus+ mobility takes place and who follow innovations.
- Students and staff benefiting from Erasmus+ mobility.

5.1 Policy, Legal Issues and Privacy Issues

Erasmus+ Program is carried out through a process that transfers the data of institutions and individuals who want to benefit from mobility to the other institutions. As a result of this process, various legal regulations have been made for data sharing. General Data Protection Regulation in force in the countries where this research was conducted (GDP), and Turkey Protection of Personal Data, which is used in private law (KVKK) will be the topics that survey will focus on. Today the legal regulations in force in HEIs in Europe and Turkey being updated for various reasons resulting from the digital conversion process or need to be updated. Due to issues such as validity of digital signatures, data sharing and recognition, various problems are experienced that cause disruption of digitalization processes. At this stage of the survey; legal arrangements made and to be made for Erasmus+ mobility specific to partner countries will be determined. This determination will be made comparatively within the framework of the internal structures of HEIs and the legal regulations applied throughout the country they are affiliated with.

In this context, regulations required for processes such as digital signatures, OLAs, IIAs and automatic recognition, permissions-approvals and determinations required for connecting to the EWP network will be made. In addition to these determinations, it will be determined whether the strategic plans of HEIs are suitable for digital transformation processes and recommendations regarding the legal regulations required for the digitalization processes in the Erasmus + program in the partner countries will also be made.

5.2 Differences in Terms of Technical Infrastructure

At this stage of the survey, an infrastructure-based analysis of the integration processes into digital platforms used for Erasmus + mobility will be made. In this context, due diligence of the technical infrastructure used by HEIs will be made categorically and it will be possible to classify them according to the technical infrastructure of the universities where the survey is applied. The main purpose of this classification is to provide infrastructure-based reporting of a low-cost structural transformation that is suitable for the digital transformation of the Erasmus + program. Because the high cost of technological infrastructure for HEIs makes it necessary to calculate the structural incompatibilities and high-cost risks that may occur in the digital transformation processes taking place in the Erasmus + program. Therefore, after determining the situation regarding the infrastructure differences in HEIs, it will be possible with the data obtained from the survey which of the three different integration scenarios developed for integration with the platforms used for Erasmus + programs will be more suitable for HEIs.

Today, as the management processes of Erasmus + mobilities are carried out on different platforms due to the infrastructure differences of HEIs, an evaluation of the functionality of the technical infrastructures can be made thanks to the data obtained from the survey. In addition, considering the scenarios of connecting to EWP, the classification of the technical infrastructures required for these scenarios will be made within the scope of the research over technical differences. In this framework, the necessary knowledge and experience will be provided to make a harmonious and healthy integration choice between the technical infrastructure of the universities and the EWP integration in terms of infrastructure. For this reason, it was aimed to collect data on these issues by including questions about these differences, risks arising from differences and alternatives in the survey.

5.3 Determination of Digital Skills Status

At this stage of the survey, it is aimed to determine the digital skills of the stakeholders involved in Erasmus + mobility and their management within HEIs. Through this determination, the skill levels of these stakeholders, who are the main actors of the digital transformation process, in using digital platforms will be revealed in detail. Data on digital skill levels of each stakeholder group will be collected through a questionnaire format with the question groups to be formed within the framework of this purpose. The survey identified students, academic and administrative staff, international relations office workers responsible for the management of student mobility, department coordinators, IT department employees and university administrators as the stakeholders of the Erasmus + program in HEIs as target group. Through the analysis of the data collected from these groups, the digital skills of the stakeholders of the Erasmus + program in HEIs will be determined. With this determination through the survey; whether HEIs are ready at the stakeholder level for the digital transformation process taking place in the Erasmus + programme or not, the due diligence and needs analyses regarding the utilization of their technical infrastructure will be revealed in detail.

5.4 Coordination and Motivation

At this stage of the survey, it is aimed to determine the level of awareness and a series of due diligence regarding coordination and institutional motivation, which are the basic elements of digitalization processes in HEIs. In this context, it will be determined whether a structural arrangement (like a coordination office) has been made regarding the coordination of digitalization processes in HEIs subject to the study and whether the developments are followed regularly. Afterwards, the fact that HEIs have a digitalization calendar and a strategy for the Erasmus + program will be another situation that the research wants to reveal. Whether HEIs include digitalization processes in the Erasmus + program in their strategic plans regarding this subject will be one of the topics to be answered among the research questions.

In addition, the digital skills of the stakeholders (Office Staff, Department Coordinators, IT Teams, Students and Staff, etc) should be monitored in a coordinated manner so that the digitalization processes and digital platforms developed for the Erasmus + program can be used in a healthy way. In this context, whether assignments are made as digital officers in the institutional structures of IROs, whether the digitalization calendar is shared with the stakeholders of Erasmus+ mobility within the HEIs will be among the topics that the survey will address within the scope of the coordination title. The level of awareness of the digitalization processes in the institutional sense among the stakeholders of the university administration and the Erasmus + program will also be revealed under this heading of the survey.

The second important requirement for the realization of the digitalization process, motivation, will also be examined in the survey. It is a common acknowledgment that corporate motivation is important for a healthy and stable execution of a digital transformation process. In this direction, the importance of the motivation factor in the realization of digital transformation processes taking place within the scope of the Erasmus + program will be investigated with a series of question groups. Motivation questions will be directed to each group in accordance with their roles in the questionnaire in order to measure the motivation of the stakeholders of the Erasmus+ program regarding the digitalization process, especially in HEIs.

It is also necessary to determine the factors that prevent motivation formation in motivation measurements. In this context, a group of questions will be included in the questionnaire form in order to determine the obstacles to the formation of motivation regarding digital transformation within the survey. Through these questions, the risks that will arise from lack of motivation in digital transformation processes will be identified within the scope of the survey. In addition, the motivation measurement in the survey will be measured in two groups as individual and corporate motivations, and the impact on the digital transformation process taking place in the Erasmus + program will be determined in detail within the scope of the research.

5.5 Scale Development

Within the scope of this research, data at various levels will be collected from the target groups determined in advance. To do this, one of the data collection techniques, the questionnaire technique will be used. In this context, various scales developed specifically for this subject were needed to be used within the scope of the research. However, the fact that the subject is quite current and specific and there is not enough literature on the subject made it necessary to develop scales specific to the project subject to collect data. In the process of developing scales, the contribution of academic and technical staff working directly with the target group of the project was considered in line with the opinions and suggestions of the statisticians. In this context, the question preparation process was initiated with the participation of experts from four project stakeholders, and a comprehensive question pool was created. The questions collected here were subjected to a screening process in line with their suitability to the target group and their relationship to the project output. Five main question categories were determined for the data to be collected from the target group in accordance with the project outputs. These are as follows:

- 1- Policy, Legal and Privacy Issues
- 2- Technical Infrastructure
- 3- Digital Skills
- 4- Coordination and Motivation
- 5- Demographic Questions

The questions in the question pool were separated according to these target groups and the questions were designed with logic from general to specific. Since the answers to be given should be based on the five-point Likert scale answer system, the questions were reviewed and designed in a suitable logic. A Likert scale assumes that the strength/intensity of an attitude is linear, i.e. on a continuum from strongly agree to strongly disagree, and makes the assumption that attitudes can be measured. To check the answers given by the participants to the questions, by asking similar questions within the same category, it was ensured that the data could be collected in a healthy way. Permission is required for the use of these scales developed within the scope of the project by different studies.

CONCLUSION

The current report on desk research of the SUDTE Project provides the existing data by exploring the relevant literature on the topic. Findings are based on articles, reports, past and ongoing projects, interviews of the partner institution. The report is a first guide for the SUDTE project and partners.

In the first section of the report, determination of the Erasmus+ mobility, conceptual definitions of digitalization, past projects, future development of the digitalisation Erasmus + were analyzed. In this section, it was also emphasized that digitalisation is a crucial tool for the EU policy agenda. As it can be seen from the section, there is a quite number of European Project aiming to digitalize the Erasmus Mobility management procedures.

As we understood from the second section, there are a significant number of published resources regarding digitalisation in all fields. Among these fields, digitalization of education has an essential place in the literature. The Rapid development of technology has forced universities to change its positions and take necessary measures to strengthen their positions in all units of the institutions. All we are agreed that digital technologies enable an opportunity to improve quality of education. It's the same for Erasmus mobilities as well. Digital Technologies in Erasmus+ Programme have real potential to improve the quality of mobility management. There is also a quite number of European Projects related digitalisation Erasmus + Mobilities. These projects enabled an important step towards the digitization of the Erasmus + program.

In the third section of the report, an interview was applied to Erasmus+ Office Staff of the partner HEIs regarding the functioning of the Erasmus + program a couple of questions were sent to the partner institution via email and the results were analysed. As it can be seen from the results, there isn't a common procedure in the universities while running the Erasmus + mobilities. Although program rules are the same, Erasmus+ mobility management differs among universities. Some of the partner universities use excel based method and others use different data base and software. For instance, while University of Naples "Federico II" uses Excel files managing the Erasmus+ mobilities, Selcuk University uses commercial software. Each method has its advantages and disadvantages. The results showed that Excel-based method causes heavy paperwork, time consuming, overwhelming bureaucracy etc, therefore digitalisation of Erasmus mobilities is quite essential for Erasmus + office. Especially COVID 19 crises have had an accelerating effect on processes that are becoming increasingly digital. During the pandemic, higher education institutions felt compelled to digitize more than ever.

In the fourth section of the report, the roles and responsibilities of the target group were analyzed. This section has demonstrated that successful digital transformation in Erasmus + mobilities base upon not only sudden and unexpected governance but also the ability of stakeholders such as NAs, HEIs, Erasmus Office Staff, Academic and Administrative staff to take measures, strategies, plans from the bottom up. Even If EWP standard will be mandatory by 2021, successful implementation of the process will require strong links between stakeholders. Direct and indirect stakeholders of Erasmus + mobility processes in HEIs were determined as the target group and included in the study sample to constitute the sample of the survey. This target group was determined as NAs, HEIs, Erasmus Office Staff, and Academic and Administrative staff in the project.

In the fifth section, components of the survey which determine as a Policy, Legal Issues and Privacy Issues, Differences in Terms of Technical Infrastructure, Determination of Digital Skills Status, Coordination and Motivation were analyzed. In this section, it was emphasized that legal regulations, privacy rules and policy practices are crucially important and differ from country to country. In order to examine the policy, legal and privacy issues in countries, a group of questions was included. By means of comparative analysis, it is aimed to reveal the current situation and make recommendations to the countries. The Technical infrastructure is an other component of the survey. Questions were included within the survey, in order to make an assessment of the functionality of the technical infrastructures. Knowledge, skills and trainings are the key qualities and have the potential to affect the success of digital transformation. In order to analyze the level of the target group, a group of questions was included within the survey. Coordination and motivation have been posed as an important factor for healthy and stable execution of a digital transformation process. Therefore, in order to determine the obstacles to the formation of motivation regarding digital transformation within the survey, questions were included.

In the light of this comprehensive desk research, it was decided to test the following hypotheses in the survey study to be carried out:

- H1:** The HEIs which give digitalisation a priority in their institutions successfully roll out to the EWP standards.
- H2:** The existing rules and regulations are flexible enough to allow digital transformation of the Erasmus Mobilities at your institution.
- H3:** The process of integration to the EWP network varies according to the ways that HEIs manage their Erasmus mobilities (Own SIS, 3rd part software, no tool).
- H4:** For universities with a strong IT infrastructure, it is easy to digitize the administrative processes of Erasmus mobilities.

H5: Universities with different identification and authorisation protocols lead to unreliable and inconsistent flow of mobility data.

H6: It is easy for institutions that attach importance to the development of digital skills (resource, time, personnel, planning, etc.) to adapt to digital transformation.

H7: The current digital skills of Erasmus stakeholders are sufficient for the digital transformation of Erasmus.

H8: Information and training on ESCI are systematically followed by a top-down approach (eg. From EU commission to the NAs, from NAs to the HEIs etc.)

H9: Hands-on training is efficient in acquiring digital skills. (How important is it? What kind of training model should be preferred?)

H10: Institutional initiatives in digitalisation eases the transformation processes.

H11: Mandatory digital transformation processes accelerate EWP integration.

H12: Digital transformation is easy in universities where Erasmus program is carried out centrally.

H13: The mandatory digital transformation in Erasmus causes fear and uncertainty for IRO staff.

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Annexes

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1. TARGET GROUPS: NATIONAL AGENCIES						
A. Policy, Legal and Privacy Issues		Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1.	In the EWP digital transformation process, universities need policies to be implemented at national level.	1	2	3	4	5
2.	My country can follow a sustainable policy in the digital transformation process in HEIs?	1	2	3	4	5
3.	The existing legal regulations in my country are compatible with digital transformation in HEIs.	1	2	3	4	5
4.	The privacy laws applied at national level in my country are sufficient for Erasmus+ mobilities.	1	2	3	4	5
5.	The current national policy for HEIs influences the university for EWP digital transformation.	1	2	3	4	5
6.	Universities that include digitalization in their strategic plans are more successful in the EWP integration process.	1	2	3	4	5
7.	Practical differences in the implementation of Erasmus + program in universities affect the EWP digital transformation process.	1	2	3	4	5
8.	Universities that have invested in digitalization are in an advantageous position in the EWP digital transformation process.	1	2	3	4	5
9.	My institution has a detailed education policy for higher education institutions in the use of EWP digital platforms.	1	2	3	4	5
10.	My institution sees itself with sufficient skill levels in the EWP digital transformation process that is being carried out?	1	2	3	4	5
11.	HEIs are aware of cost savings of digitization in Erasmus+ program.	1	2	3	4	5
12.	Covid 19 has proven the necessity of policies regarding digitalization for the Erasmus + program.	1	2	3	4	5
B. Technical Infrastructure		Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
13.	Universities have sufficient knowledge about the scenarios of connecting to EWP.	1	2	3	4	5
14.	In the process of connecting to EWP, universities can choose the correct method of connection according to their technical and personnel structures.	1	2	3	4	5
15.	Universities with strong IT staff and infrastructure are more successful in the EWP digital transformation process.	1	2	3	4	5
16.	I am aware of the technical infrastructure and skill levels of the universities in my country in the EWP digital transformation process.	1	2	3	4	5
17.	It is easy for universities with an in-house system to connect to the EWP network.	1	2	3	4	5
18.	Third party service providers have sufficient knowledge in the EWP digital transformation process.	1	2	3	4	5
19.	Dashboard is the easiest way to connect to EWP.	1	2	3	4	5

		Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
20.	Universities have sufficient knowledge of the technical details of the EWP digital transformation process.	1	2	3	4	5
21.	Universities in your country are fully prepared to join the EWP network in terms of technical infrastructure.	1	2	3	4	5
22.	Digital officers are needed for a successful EWP digital transformation process.	1	2	3	4	5
23.	Covid 19 can be an opportunity to overcome the digital infrastructure and level differences of higher education institutions for Erasmus + program.	1	2	3	4	5
24.	Technically, the EWP digital transformation process works in parallel with many legal regulations such as EduGain and eIDAS.	1	2	3	4	5
C. Digital Skills		Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
25.	Digital skills of national agency staff affect the EWP digital transformation process.	1	2	3	4	5
26.	The EWP digital transformation process of universities that attach importance to digital skills is realized more easily.	1	2	3	4	5
27.	The current digital skills of Higher Education Institutions and National Agency staff are sufficient to drive the EWP digital transformation process.	1	2	3	4	5
28.	Training is required for the EWP digital transformation process.	1	2	3	4	5
29.	In the EWP digital transformation process, national agencies provided sufficient training to their stakeholders.	1	2	3	4	5
30.	There is a need for trainings to increase practical skills in understanding the EWP digital transformation process.	1	2	3	4	5
31.	I questioned myself in terms of digital competence in managing the Covid 19 process for the Erasmus + program.	1	2	3	4	5
D. Coordination and Motivation		Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
32.	Lack of corporate motivation is an obstacle to the EWP digital transformation process	1	2	3	4	5
33.	Various events-meetings are needed to create corporate motivation in the EWP digital transformation process.	1	2	3	4	5
34.	Organizations that do not take corporate initiatives experience problems in the EWP digital transformation process.	1	2	3	4	5
35.	The EWP digital transformation process requires coordination at national level.	1	2	3	4	5
36.	The EWP digital transformation process requires coordination at institutional level.	1	2	3	4	5
37.	In the EWP digital transformation process, the motivation of all stakeholders is essential for a healthy transformation.	1	2	3	4	5

E. Demographic Questions

39.	Your County
40.	Your Department?
41.	Your Position?
42.	Number of Staff?
43.	How many ECHE holder universities or institutions do you have to coordinate?

2. TARGET GROUP: MANAGER OF THE UNIVERSITY									
In your opinion, how important are the following factors in the EWP digital transformation process?									
A. Policy, Legal and Privacy Issues					Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1.	My University develops policies and practices in line with the developments in the digital transformation.	1	2	3	4	5			
2.	There is a digital transformation strategy in my institution to meet needs and expectations of the students and staff.	1	2	3	4	5			
3.	The success of digital transformation starts with the determination of the digital strategy in which all stakeholders are included.	1	2	3	4	5			
4.	Universities that determine the digital strategies are more successful in the digitalisation Erasmus integration process.	1	2	3	4	5			
5.	My University has developed a sustainable policy that can maintain quality and accommodate both new needs and the growing use of IT services.	1	2	3	4	5			
6.	Universities that have invested in digitalization are in an advantageous position in the EWP digital transformation process..	1	2	3	4	5			
7.	Erasmus mobility transformation process is easy in universities where Erasmus programme runs central..	1	2	3	4	5			
8.	I think the Pandemic by Covid-19 could affect the digitalization policy positively in the institution	1	2	3	4	5			
B. Technical Infrastructure					Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
9.	My University has sufficient technical infrastructure to meet the needs and demands of today's students and staff profile.	1	2	3	4	5			
10.	My University provides the technical support required by the units with the facilities of the institution.	1	2	3	4	5			
11.	The technical infrastructure of my university is sufficient in order to improve new digital tool.	1	2	3	4	5			
12.	My University is dependent too much on third- party providers.	1	2	3	4	5			
13.	Technical infrastructure of my university positively impacts EWP digital transformation process.	1	2	3	4	5			
14.	My University is ready in general to realize the digitalisation of the Erasmus + mobility management.	1	2	3	4	5			
C. Digital Skills					Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
15.	There is sufficient knowledge of the technical details of the EWP digital transformation process in the University.	1	2	3	4	5			
16.	The current digital skills of Erasmus staff affect the success of the EWP digital transformation process.	1	2	3	4	5			
17.	The current digital skills of Erasmus office staff are sufficient to drive the EWP digital transformation process.	1	2	3	4	5			

		Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
18.	The current digital skills of Department Coordinators are sufficient to drive the EWP digital transformation process.	1	2	3	4	5
19.	Practical training is the best way to acquire digital skills.	1	2	3	4	5
20.	The training that is providing to increase digital skills is sufficient for students and staff.	1	2	3	4	5
21.	My university has a strategy to improve the digital skills of students.	1	2	3	4	5
D. Coordination and Motivation		Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
22.	Coordination between the HEIs and the national agencies is necessary for providing efficient Erasmus digital transformation	1	2	3	4	5
23.	Lack of knowledge about the benefits of the digitalisation. is one of the important barrier to the success of digital transformation.	1	2	3	4	5
24.	Taking the initiative is highly effective in the success of the Erasmus digital integration.	1	2	3	4	5
25.	The university follows closely developments occurring in the digitalization of Erasmus mobility programme	1	2	3	4	5
26.	Mandatory EWP digital transformation process increases the motivation between stakeholders.	1	2	3	4	5
E. Demographic Questions						
27.	Name of the University					
28.	Year of Establishment					
29.	Country					
30.	City					
31.	Gender a) Male b)Female					
32.	Position of the University					
33.	Number of Students					
34.	How much do you think the total Erasmus mobility management is digital in your institution as a percentage? (%1-100)					
35.	Is the management of Erasmus mobilities under the main responsibility of : a) International Relation Offices b) Faculties/Departments c) Both but predominantly IROs d) Both but predominantly F/D e) Other, please specify					
36.	The IT system you used for the managing of Erasmus Mobility at your institution: a) In-House b) commercial c) no tool d) Other					

3. TARGET GROUP: INFORMATION TECHNOLOGY (IT) STAFF						
A. Policy, Legal and Privacy Issues		Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1.	There are some personal data parts viewed by the public in our Erasmus+ software.	1	2	3	4	5
2.	My institution pays attention to sign a nondisclosure agreement with stakeholders.	1	2	3	4	5
3.	I feel protected on privacy and legal issues as much as i desire while using Erasmus+ Digital Tools.	1	2	3	4	5
4.	The EWP digital Erasmus tools are designed to be compliant with GDPR.	1	2	3	4	5
5.	The level of digital transformation in Erasmus+ varies from country to country in accordance with the rigidity in GDPR practices.	1	2	3	4	5
6.	There is a harmonization of digitalization with the legal infrastructure specific to my country.	1	2	3	4	5
7.	I think institutions that allocate more funds for development (staff, training, technologic etc.) are more advantageous in the adaptation process to EWP.	1	2	3	4	5
8.	I think the Pandemic by Covid-19 could affect the digitalization positively.	1	2	3	4	5
9.	My institution should include digitalization in our strategic plan to achieve sustainable results.	1	2	3	4	5
B. Technical Infrastructure		Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
10.	Data communication is done in our Erasmus+ software via HTTPS channel.	1	2	3	4	5
11.	There are enough computers for the staff in my institution.	1	2	3	4	5
12.	My institution has a strong and secure network infrastructure.	1	2	3	4	5
13.	There is a software developed/purchased according to the needs of the staff at the International Office.	1	2	3	4	5
14.	IRO actively uses all the features of the Erasmus+ software/system.	1	2	3	4	5
15.	We depend too much on third-party providers.	1	2	3	4	5
16.	Integration to the EWP network is costly through the 3rd party commercial service providers compared to the other scenarios.	1	2	3	4	5
17.	All tasks (updating, adding, deleting, viewing) in the Erasmus+ software should be recorded in the log files.	1	2	3	4	5
18.	Erasmus+ software allows me to get better communication with all the individuals with whom i relate.	1	2	3	4	5

C. Digital Skills		Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
19.	My institution has a continuous plan for staff training.	1	2	3	4	5
20.	Funding devoted to training is enough to keep up with new technologies.	1	2	3	4	5
21.	My institution facilitates and promotes mobilities for staff with this goal of improving their digital skills.	1	2	3	4	5
22.	My current skills are sufficient for digitalization.	1	2	3	4	5
23.	I think documents and specifications are descriptive enough for EWP integration.	1	2	3	4	5
24.	I can learn an application (such as Dashboard, OLA, Erasmus+ App) that I have not used before with basic instructions.	1	2	3	4	5
25.	I can learn an application (such as Dashboard, OLA, Erasmus+ App) that I have not used before with educational videos and help from my colleagues.	1	2	3	4	5
26.	I can not learn an application (such as Dashboard, OLA, Erasmus+ App) that I have not used before without training/workshop.	1	2	3	4	5
27.	Face-to-face training is effective in acquiring digital skills.	1	2	3	4	5
28.	Online training is effective in acquiring digital skills.	1	2	3	4	5
29.	I have technical knowledge and language skills to understand EWP documents.	1	2	3	4	5
30.	We have prepared training materials or modules that will give practical information about the use of Digital Tools.	1	2	3	4	5
31.	We have given trainings on Digital Tools to the users.	1	2	3	4	5
32.	I think the Pandemic by Covid-19 could affect ever-developing digital skills positively.	1	2	3	4	5
D. Coordination and Motivation		Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
33.	There are difficulties caused by traditional methods (paper, time, workload, consumable materials etc.) in the management of Erasmus+ mobilities.	1	2	3	4	5
34.	Digitalization has lots of contributions and modern conveniences in internationalization.	1	2	3	4	5
35.	My institution is ready to take initiative in digitalization of the Erasmus+ mobility.	1	2	3	4	5
36.	I am aware that the term digitization is just not about cost-saving, but a concept beyond that.	1	2	3	4	5
37.	My institution assigned an IT staff/Digital officer for digitalization of the Erasmus+ mobilities.	1	2	3	4	5
38.	I have been informed by the IRO on the Erasmus+ digitalization.	1	2	3	4	5

		Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
39.	We follow the developments in digitalization as an institution.	1	2	3	4	5
40.	Providing technical support would increase the use of digitalization tools.	1	2	3	4	5
41.	I think my institution may have problem in with digitalization.	1	2	3	4	5
42.	I think the Pandemic by Covid-19 could affect digitalization motivations positively.	1	2	3	4	5
43.	I think trainings are not only useful but also motivational in digitalization.	1	2	3	4	5
44.	We are ready to go digital and take the necessary steps in this regard.	1	2	3	4	5
E. Demographic Questions						
45.	Name of the University					
46.	Year of Establishment					
47.	Country					
48.	City					
49.	Number of Students					
50.	Number of IT Staff					
51.	How do you manage Erasmus+ mobilities in your institution? a) Third-party software b) In-house software c) We don't use a system.					
52.	Is there an authorization system in your Erasmus+ software? a) Yes b) No					
53.	Who must be in charge of digitalization in your institution? a) IRO b) IT Department c) IRO and IT department d) Specific staff e) All					

4. TARGET GROUP: INTERNATIONAL RELATIONS OFFICE (ERASMUS OFFICE) STAFF						
In your opinion, how important are the following factors in the EWP digital transformation process?						
A. Policy, Legal and Privacy Issues		Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1.	Digitalisation is part of the institution's overall modernisation and internationalisation strategy	1	2	3	4	5
2.	My university has already invested substantial efforts to digitalise the Erasmus workflows.	1	2	3	4	5
3.	Universities that allocate extra resources (staff, budget, hardware etc..) to their digital infrastructure are advantageous in the digital transformation in Erasmus+.	1	2	3	4	5
4.	Universities that set digitalization as a policy priority easily adapt to EWP standards.	1	2	3	4	5
5.	The EWP digital Erasmus tools are designed to be compliant with GDPR.	1	2	3	4	5
6.	HEIs that embrace digital solutions can recover faster in the post pandemic era.	1	2	3	4	5
7.	Our institution has no plan for digital transformation in Erasmus, so we are waiting for the integration procedures to become mandatory.	1	2	3	4	5
8.	The global pandemic has speeded up the development of digital strategies for the HEIs that have been reluctant to embrace digital transformation	1	2	3	4	5
B. Technical Infrastructure		Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
9.	Integration to the EWP network is costly through the 3rd party commercial service providers compared the other scenarios.	1	2	3	4	5
10.	Commercial softwares provide more comprehensive and user-friendly services to the IROs.	1	2	3	4	5
11.	Our institution is planning to switch to another mobility management tool because of the mandatory EWP procedures.	1	2	3	4	5
12.	My institution needs to assign a technical person / developer to be able to join the network.	1	2	3	4	5
13.	Our office has essential hardware and software products that an average IRO office needs to manage Erasmus mobilities without paper.	1	2	3	4	5
14.	The IT team at our institution is too busy to connect our In-House SIS to the network.	1	2	3	4	5
15.	Accessing the OLA platform with a Google login leads to uncertainty that the information is trustworthy.	1	2	3	4	5
C. Digital Skills		Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
16.	The NA in my country provides HEIs with timely, accurate information and the right strategic focus about the development in ESCI.	1	2	3	4	5
17.	Our university has a strategy to improve the digital skills of its students.	1	2	3	4	5

		Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
18.	I proactively look for online self-service solutions before asking a person	1	2	3	4	5
19.	I can easily figure out new technologies and applications	1	2	3	4	5
20.	I have an overall understanding of the components of a computer and how it is connected to other devices	1	2	3	4	5
21.	The digital transformation of Erasmus requires a different awareness, understanding and skill set to efficiently use emerging technologies.	1	2	3	4	5
22.	How do you feel about your preparedness to deal with ICT for mobility management purposes as a percentage?	1	2	3	4	5
23.	Training for the use of digital Erasmus tools in small groups would be more efficient	1	2	3	4	5
D. Coordination and Motivation		Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
24.	I feel that Erasmus mobility management at my institution is as digitalized as any other EU HEIs.	1	2	3	4	5
25.	Our institution has established a solid digital solutions to prepare for entirely digital management of Erasmus+ programme.	1	2	3	4	5
26.	There is a clear roadmap provided by the NAs in using EWP tools with deadlines.	1	2	3	4	5
27.	The current EWP procedures (signing OLA, IIA etc) is limiting the decentralised management of Erasmus Mobilities	1	2	3	4	5
28.	A sustainable digital transformation in Erasmus Programme can be achieved without mandatory deadlines	1	2	3	4	5
29.	The level of resistance to digital transformation can be reduced by straightforward steps such as early communication, clear expectations and training.	1	2	3	4	5
30.	Preparing for fully digital management that includes all units is a challenge due to the size of my university.	1	2	3	4	5
31.	The HEIs that takes institutional initiatives to digitize their workflow are successful in using EWP network.	1	2	3	4	5
E. Demographic Questions						
32.	Country					
33.	City					
34.	Name of the University					
35.	Year of Establishment					

36.	Size of your institution a) Small (<2.500 students) b) Medium (2.500 - 10.000 students) c) Large (>10.000 students)
37.	Gender a) Male b) Female c) I prefer not to say
38.	Number of IRO staff
39.	Management of Erasmus mobilities is under the main responsibility of a) International Relation Offices b) Faculties/Departments c) Both but predominantly IROs d) Both but predominantly F/D e) Other, please specify
40.	The IT system you used for the managing of Erasmus Mobility at your institution a) In-House b) commercial c) not tool d) other
41.	My university is a member of the eduGAIN/eID.as community for the authentication solution. a) Yes b) No c) Not sure

5. TARGET GROUPS: DEPARTMENT COORDINATORS						
A. Policy, Legal and Privacy Issues		Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1.	My university can follow a sustainable policy in the EWP digital transformation process.	1	2	3	4	5
2.	The existing legal regulations in my university are compatible with EWP digital transformation processes.	1	2	3	4	5
3.	The privacy laws applied at my university (locally) are sufficient for Erasmus+ mobilities.	1	2	3	4	5
4.	Universities that include digitalization in their strategic plans are more successful in the EWP integration process	1	2	3	4	5
5.	Practical differences in the implementation of Erasmus + program in universities affect the EWP digital transformation process. (Central/decentral)	1	2	3	4	5
6.	Universities that have invested in digitalization are in an advantageous position in the EWP digital transformation process.	1	2	3	4	5
7.	My department or university sees itself with sufficient skill levels in the EWP digital transformation process.	1	2	3	4	5
8.	Departments in my university are fully prepared to join the EWP.	1	2	3	4	5
9.	Department coordinators are aware of cost savings of digitization (short-term and long-term financial costs and savings)	1	2	3	4	5
10.	Covid 19 has proven the necessity of strategic planning regarding digitalization for the Erasmus + program inside the universities.	1	2	3	4	5
B. Technical Infrastructure		Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
13.	My university has sufficient technical infrastructure in the EWP digital transformation process.	1	2	3	4	5
14.	My university has sufficient knowledge of the technical details of the EWP digital transformation process.	1	2	3	4	5
15.	Department coordinators are aware of the technical infrastructure and skill levels of my university in the EWP digital transformation process	1	2	3	4	5
16.	Department coordinators have sufficient knowledge about the scenarios of connecting to EWP.	1	2	3	4	5
17.	I can competently use the automation system used for Erasmus + mobility at my university.	1	2	3	4	5
18.	I can prepare and complete an Online Learning Agreement (OLA) with using Dashboard one of the EWP digital platforms.	1	2	3	4	5
19.	EWP digital platforms are user friendly.	1	2	3	4	5
20.	Web-based access of EWP digital platforms reduces the workload for department coordinators.	1	2	3	4	5

C. Digital Skills		Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
25.	Digital skills of department coordinators affect the EWP digital transformation process.	1	2	3	4	5
26.	The EWP digital transformation process of universities that attach importance to digital skills is realized more easily.	1	2	3	4	5
27.	The current digital skills of department coordinators are sufficient to drive the EWP digital transformation process.	1	2	3	4	5
28.	Training is required for department coordinators during the EWP digital transformation process.	1	2	3	4	5
29.	In the EWP digital transformation process, universities provided sufficient training and training materials to department coordinators.	1	2	3	4	5
30.	There is a need for trainings to increase practical skills in understanding the EWP digital transformation process.	1	2	3	4	5
31.	I questioned myself in terms of digital competence in managing the Covid 19 process for the Erasmus + program.	1	2	3	4	5
32.	I can effectively use the digital platforms developed for the EWP digital transformation process.	1	2	3	4	5
33.	Covid-19 increased my technical knowledge regarding the EWP digital transformation process.	1	2	3	4	5
D. Coordination and Motivation		Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
34.	Lack of corporate motivation is an obstacle to the EWP digital transformation process	1	2	3	4	5
35.	Various events-meetings are needed to create corporate motivation in the EWP digital transformation process.	1	2	3	4	5
36.	Organizations that do not take corporate initiatives experience problems in the EWP digital transformation process.	1	2	3	4	5
37.	The EWP digital transformation process requires coordination at institutional level.	1	2	3	4	5
38.	The EWP digital transformation process requires coordination at faculty level.	1	2	3	4	5
39.	In the EWP digital transformation process, the motivation of department coordinators is essential for a healthy transformation.	1	2	3	4	5
40.	Department coordinators are aware of the positive impacts of digitization (short-term and long-term financial costs and savings)	1	2	3	4	5
41.	After covid 19, the necessity of coordination in EWP digitization processes emerged.	1	2	3	4	5

E. Demographic Questions

42.	Your County?
43.	Your City?
44.	Your University?
45.	Your Faculty?
46.	Your Department?
47.	Your Department's Number of Incoming Students (General)?
48.	Your Department's Number of Outgoing Students (General)?

6. TARGET GROUP: STUDENTS

In your opinion, how important are the following factors in the EWP digital transformation process?

A. Policy, Legal and Privacy Issues		Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1.	The existing legal regulations in my country are compatible with digital transformation in HEIs.	1	2	3	4	5
2.	I know how to utilize the laws and regulations to protect myself in digital environment.	1	2	3	4	5
3.	My institution is taking full advantage of the potential of digital technologies	1	2	3	4	5
4.	I trust in my institution to protect my personal information.	1	2	3	4	5
5.	I find it safe to share my personal information digitally during the Erasmus mobility process.	1	2	3	4	5
B. Technical Infrastructure		Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
6.	The technical infrastructure of my university is sufficient in order to improve digital technologies.	1	2	3	4	5
7.	My university is dependent too much on third- party providers.	1	2	3	4	5
8.	In case the university has developed its own tool: My university let students participate actively in the process of design and development.	1	2	3	4	5
9.	My university is ready in general to realize the digitalisation of the Erasmus + mobility management.	1	2	3	4	5
10.	Technical infrastructure of my university is positively impacts Erasmus digital transformation process.	1	2	3	4	5
11.	I know what is Erasmus App and how it works.	1	2	3	4	5
12.	I have found Erasmus App user friendly	1	2	3	4	5
13.	I have a problem with seeing courses on the Erasmus App	1	2	3	4	5
14.	I can access the OLA platform and complete it easily on the Erasmus App.	1	2	3	4	5
C. Digital Skills		Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
15.	The digital skills are relevant for the Erasmus digital transformation process	1	2	3	4	5
16.	My University provides support in order to improve the digital skills of the students	1	2	3	4	5
17.	My ability to use digital tools and applications is sufficient to drive the EWP digital transformation process.	1	2	3	4	5
18.	Senior management of my university has been helpful in the use of the new Technologies	1	2	3	4	5

		Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
19.	The current digital skills of students affect the success of the Erasmus digital transformation process	1	2	3	4	5
20.	The current digital skills of the department coordinator is sufficient to drive the Erasmus digital transformation process.	1	2	3	4	5
21.	The current digital skills of the Erasmus office staff sufficient to drive the Erasmus digital transformation process.	1	2	3	4	5
22.	I have an access to training materials, modules and web site that will give practical information about the best use of the digital tools.	1	2	3	4	5
23.	In the EWP digital transformation process, Erasmus office staff have provided sufficient training to the students	1	2	3	4	5
24.	Practical training is the best way to acquire digital skills	1	2	3	4	5
25.	I proactively look for online self-service solutions before asking a person	1	2	3	4	5
26.	I can easily figure out new technologies and applications	1	2	3	4	5
27.	I have an overall understanding of the components of a computer and how it is connected to other devices	1	2	3	4	5
28.	I think the Pandemic by Covid-19 could effect to increase the digitalization skills positively	1	2	3	4	5
D. Coordination and Motivation		Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
29.	Current level of coordination between the department coordinator and the IROs for the managing of Erasmus digital transformation process is sufficient	1	2	3	4	5
30.	The IRO encourages students to use the digital tools such as Erasmus + app	1	2	3	4	5
31.	I find it necessary to carry out Erasmus mobility processes through digital platforms	1	2	3	4	5
E. Demographic Questions						
32.	Country					
33.	City					
34.	Name of the University					
35.	Department					
36.	Gender a) Male b) Female					
37.	What kind of trainings are provided to students regarding Erasmus transformation process in your institution? Your Department's Number of Incoming Students (General)? a) Workshops b) Peer to peer network c) Online training d) There aren't any training activities					



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