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BRIDGING THE — GAP

An AI-enabled versatile skill matching
tool to assist the less privileged

BRIDGING THE GAP DELIVERABLE 2.4

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BRIDGING THE GAP Project Profile

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Partners

 INTERNATIONAL HELLENIC UNIVERSITY	DIETHNES PANEPISTIMIO ELLADOS (IHU)	Greece
 MYCOMPANY	MY COMPANY PROJECTS O.E.	Greece
	UNIVERSITATEA DIN CRAIOVA	Romania
	Regional center for vocational training and education to CCI-Blagoevgrad	Bulgaria

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Abbreviations and acronyms

Deliverable	D
Expected Outcomes	EO
International Hellenic University	IHU
Non-governmental organization	NGO
Labour Force Survey	LFS
Neither in employment nor in education or training	NEET
Human Resources	HR
URI	Uniform Resource Identifier
CV	Curriculum Vitae
JV	Job Vacancy
UoL	Unit of Learning

Executive Summary

BRIDGING THE GAP is a 24 month duration project funding from the European Union's Erasmus+: KA220-YOU under Grant Agreement 2021-1-EL02-KA220-YOU-000028780.

The overarching objective of the BRIDGING THE GAP project is to provide a holistic approach beyond a classical skill-matching system to a system that will bridge the gap as to who are the underprivileged and why are they underprivileged and how education and skill improvement will benefit them.

The main purpose of this document is to report the progress of the BRIDGING THE GAP project during the deliverable 2.4. More specifically, in the previous deliverables we covered the implementation of the solution frameworks (one for each stakeholder) and we described the benefits each stakeholder gets from its respective framework. This deliverable reports on Project Results 2 findings that study the collected data (CV, JV, UoL) for each framework, the methods used for their collection and a short statistical analysis on them when possible. These data are necessary for the frameworks' functionality and naturally, they represent the interconnections amongst labour market and educational tools (e.g. LinkedIn, Coursera etc.). In other words, this deliverable focuses on interconnections amongst labour market and educational tools (e.g. LinkedIn, Coursera etc.).

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1 Introduction

1.1 Purpose of the document

The purpose of this document is to present the progress of the project during the second implementation phase regarding the implemented research activities as they are reported in Project Results 2 (deliverable 2.4).

1.2 Intended audience

The intended audience of this document consists of the following target groups:

- BRIDGING THE GAP project partners and the Project Officer at the National Agency
- Young people, especially on the Balkan area, that are interested in skill building/matching
- Labour market actors
- Universities, course providers

1.3 Work Package Objective

The current deliverable 2.4, part of Project Results 2, analyses the collected data (CV, JV, UoL) for each framework, the methods used for their collection and a short statistical analysis on them when possible. More specifically, Project Results 2 are related to tools development and integrations with external systems & semantic intelligent bridging. For this purpose, all related deliverables including the current 2.4 focus on stakeholders, use cases serving them and building simple user interfaces through prototypes. These prototypes serve as proof of concept that CVs, job descriptions and courses can be annotated with semantics from standard specifications like ESCO. Moreover, we focused on technical issues and developed the back-end of our solution, an intelligent module that matches CVs and job, CVs and courses, Jobs and courses. The rules behind it are coded into this module. Towards this direction, we provide to the public a glass box interface explaining the way the match occurred. Moreover, we incorporate an intelligent software component in order to better guide and support at EU level the validation of non-formal and informal learning should be further pursued especially with regards to the validation of learning acquired through digital resources.

1.4 Structure of the document

In chapter 2, this report describes the collection and analysis of the data collected from the job candidates (CVs).

In chapter 3, this report the collection and analysis of the data collected from the job providers (JVs).

In chapter 4, this report describes the collection and analysis of the data collected from the institutes - course providers (UoLs).

In chapter 5, this report concludes the findings.

2 CV (Curricula Vitae)

The first type of data that we are interested in, is the CVs that come from the European citizens. A detailed description of what a CV is has already been given in a previous deliverable, however a short one will also be given below for ease of reference.

In short, a Curricula Vitae (CV) is, typically, a document that summarizes a person's academic and professional history, accomplishments, skills, and qualifications. It is mostly used to apply for academic positions, research opportunities, and jobs in many industries. The goal of a CV is to convince a potential employer or institution that the applicant is a good fit for the position and has the necessary qualifications and expertise for the role.

A CV usually consists of the following sections:

- **Personal information:** This includes your full name, contact information, and other personal details such as date of birth, nationality, and marital status.
- **Education:** This section lists academic qualifications, including degrees, diplomas, certificates, and any other relevant training or courses you have completed.
- **Work experience:** This section provides a detailed summary of work history, including the positions you have held, the companies you have worked for, and the dates of employment. You should also include a brief description of job responsibilities, achievements, and any notable accomplishments during each role.
- **Skills:** This section highlights technical, transferable, and soft skills, including language proficiency, computer literacy, communication skills, and problem-solving abilities.
- **Publications and presentations:** If the candidate has authored or co-authored any publications or presentations, this section provides a list of the titles, dates, and relevant details.

Sections that are less commonly found in a CV are the following:

- **Awards and honours:** This section lists any awards, scholarships, or honours the candidate has received in recognition of your achievements.
- **Professional memberships:** This section lists any professional organizations or associations you belong to, including the dates of membership and any leadership roles the candidate has held.
- **References:** This section provides the names and contact information of individuals who can vouch for work experience, skills, and qualifications.

4.1 Acquisition

A part of the CVs dataset, was collected from all four partners of the project. Each partner contributed with a number of CVs in its respective language, which were anonymously collected from people in its academic/work/etc environment. More details on these data can be found in the following table.

Table 1: CVs contributed by partners

Partner	Language	Number of CVs	Filtered Out	CVs Left

MyCompany Projects O.E.	English	69	15	54
Diethnes Panepistimio Ellados	Greek	43	9	34
Regional center for vocational training and education to CCI - Blagoevgrad	Bulgarian	37	6	31
Universitatea Din Craiova	Romanian	47	5	42
Total		196	35	161

Additionally, during the hybrid workshops and the multiplier event that were held during December 2023 at Craiova (Romania) and Blagoevgrad (Bulgaria), the application was presented in many potential candidates that used the tool providing their CV.

From all the CVs collected through the processes mentioned above, some of them were left out. Some of the reasons for that, were one or more of the following:

- The type of the data in the PDF file of the collected CV, were only images and no text, so all the information contained in it could not be extracted.
- The text in the collected CV was written in multiple languages so a specific language could not be assigned to it.
- The annotator module, as described in the previous deliverables, managed to extract a very small number of Skills from a collected CV. Specifically, the threshold for that decision was chosen to be 5, i.e. if the number of Skills extracted from a CV was less than 5, the CV was left out. The reason behind this filtering rule, was that, these CVs would probably not be a suitable input for the rest of the system's modules. For example, if a CV of this kind was given as input to the job proposing module, it would produce too many matches between this CV and JVs, without them differing a lot between each other in terms of the score value. So, the recommendation given to the user would be kind of random.

3 JV (Job Vacancies)

The second type of data that we are interested in, is the Job Vacancies or JVs that come from the European companies. A detailed description of what a JV is has already been given in a previous deliverable, however a short one will also be given here for ease of reference.

A job vacancy refers to an employment opportunity within an organization that is currently open and needs to be filled by a suitable candidate. When a company or employer identifies a need for additional personnel or a replacement for an existing employee, they create a job vacancy to attract qualified individuals who can fulfil the responsibilities and requirements of the position.

The process of announcing a job vacancy typically involves advertising the opening through various channels to reach a wide pool of potential candidates. This may include online job boards, company websites, social media platforms, recruitment agencies, industry-specific publications, and even word-of-mouth referrals.

A comprehensive job vacancy announcement usually includes the following details:

- **Job Title:** The specific position or role for which the company is seeking a candidate.
- **Job Description:** A detailed description of the responsibilities, tasks, and duties associated with the role. This section outlines the expectations and scope of the position, providing candidates with a clear understanding of what the job entails.
- **Requirements:** The skills, qualifications, experience, and knowledge necessary to perform the job successfully. This section may include educational requirements, certifications, technical skills, specific software proficiency, language proficiency, or any other essential qualifications.
- **Desired Qualifications:** Additional skills, experiences, or characteristics that would be advantageous for the role, but may not be strictly required.
- **Application Process:** Information on how interested candidates should apply, including instructions for submitting resumes, cover letters, portfolios, or any other required documents. It may also include details about interviews, tests, or assessments that will be part of the selection process.
- **Deadline:** The date by which applications must be submitted. This allows candidates to know the timeframe within which they need to apply.
- **Contact Information:** The name, email address, or phone number of the person or department to whom applicants should direct their inquiries or submit their applications.

4.1 Acquisition

All the Job Vacancies present in our database, were collected by scraping specific "job announcement" websites during a short period of time. For ease of reference, a short description of what web scraping is, is give in the next few paragraphs.

Web scraping refers to the automated process of extracting information from websites. It involves writing a script or using a specialized tool to gather data from web pages by sending HTTP requests and parsing the HTML or XML content of the web pages.

Web scraping allows us to retrieve data from multiple web pages, including text, images, tables, links, and other structured information. This data can then be stored, analyzed, or used for various purposes such as research, data analysis, content aggregation, price comparison, monitoring, and more.

There are different techniques for web scraping, including:

- **HTML Parsing:** The process of extracting specific data by parsing the HTML structure of a web page.
- **API Scraping:** Some websites provide APIs (Application Programming Interfaces) that allow developers to access and retrieve data in a structured format.
- **DOM Parsing:** This involves loading the web page in a browser-like environment and then manipulating the Document Object Model (DOM) to extract desired information.
- **Text Pattern Matching:** Searching for specific patterns or regular expressions within the raw HTML source code of a web page to locate and extract relevant data.

Web scraping can be done using programming languages like Python, along with libraries such as BeautifulSoup, Scrapy, or Selenium, which provide tools and functions to simplify the scraping process. However, it's important to note that web scraping should be done in compliance with the website's terms of service and legal considerations to ensure ethical and responsible use of the extracted data.

In order to get JVs in all four languages (English, Romanian, Greek, Bulgarian) required by the project, we needed to search for websites that contained JVs from these four countries specifically, or from multiple European countries, and then scrape their content. After examining a lot of websites suitable for our purpose, eventually we settled up with a number of them that covered our requirements. Some reasons for leaving some of the websites out were that, some of them posed problems with their terms of service and legal considerations and some others were difficult to scrape in terms of time and effort. The websites that were eventually scraped are given in the table below.

Table 2: JV websites scraped by the web crawler

URL	Language	Content	Comments
https://www.skywalker.gr/	Greek	Jobs	Also contains a few jobs in English
https://jobby.ro/	Romanian	Jobs	Contains a small number of listings
https://www.romjob.ro/	Romanian	Jobs	Great number of listings but many of them are without a description
https://ec.europa.eu/eures/portal/jv-se/search?page=1&resultsPerPage=10&orderBy=BEST_MATCH	ALL	Jobs	

https://eurojobs.com/	ALL	Jobs	
https://www.jobs.bg/	Bulgarian	Jobs	Plenty of listings, some in Bulgarian and some in English

In the paragraphs below, we will lay a few information about some of the scraped websites in order to give the reader an idea of their content.

Skywalker.gr: Skywalker.gr is the first site that was active in the job search in Greece, since 1999. Today, it remains the only Greek website in the area and the first choice in job search. It provides access to job advertisements, announcements, job announcements and career management tools, as well as the possibility for the candidate to add his CV to a pan-Hellenic database, from where companies everywhere in Greece can retrieve it.

EURES: EURES stands for "European Employment Services." It is a cooperation network between the European Commission and the Public Employment Services of the European Economic Area (EEA) member states, which includes the European Union (EU) countries, Iceland, Liechtenstein, Norway, and Switzerland. EURES aims to facilitate the free movement of workers within the EEA by providing information, guidance, and job matching services to both job seekers and employers. The network operates through various national and regional coordination offices, as well as online platforms. EURES aims to promote labor mobility, enhance job opportunities, and support the functioning of the European labor market by providing a range of services to facilitate job matching and cross-border employment within the EEA.

In the following table we present some information on the number of data collected through web scraping from the websites mentioned in the previous table.

Table 3: Number of Jobs scraped from each website

Website	Language Scraped	Number of Jobs	Filtered Out	Jobs Left
https://www.skywalker.gr/	Greek	500	124	376
https://jobby.ro/	Romanian	250	56	194
https://www.romjob.ro/	Romanian	250	43	207
https://ec.europa.eu/eures/portal/jv-se/search?page=1&resultsPerPage=10&orderBy=BEST_MATCH	English	250	13	237

https://eurojobs.com/	English	250	45	205
https://www.jobs.bg/	Bulgarian	500	187	313
Total		2000	468	1532

From all the JVs collected through the processes described in the previous paragraphs, some of them were left out. The reasons for doing so, were one or more of the following:

- Scraping of a single job posting failed so there was no content, which is necessary for the annotator module in order to extract Skills and Occupations from it.
- The annotator module, as described in the previous deliverables, managed to extract a very small number of Skills from a collected JV. Specifically, the threshold for that decision was chosen to be 5, i.e. if the number of Skills extracted from a JV was less than 5, the JV was left out. The reason behind this filtering rule, was that, these JVs would probably not be a suitable input for the rest of the system's modules. For example, if a JV of this kind was given as input to the job proposing module, it would produce too many matches between this JV and CVs, without them differing a lot between each other in terms of the score value. So, the recommendation given to the user would be kind of random.

A table of all the sites considered for scraping can be found in the following table, so that the reader can get an idea of the kind of websites used for our purpose.

Table 4: All JV content websites considered for scraping

Site	Region covered
https://www.linkedin.com/	ALL
https://www.glassdoor.com/	ALL
https://ec.europa.eu/eures	Europe
https://www.monster.com/	Limited countries
https://euraxess.ec.europa.eu/	ALL
https://eurojobs.com/	ALL
https://aquent.com/	
https://www.ejobs.ro	Europe
https://jobzz.ro	Romania
https://ro.jobble.org	ALL

https://www.hipo.ro	Romania
https://www.undelucram.ro	Romania
https://www.romjob.ro	Romania
https://devjob.ro	Romania
https://jobby.ro	Romania
https://www.careerbuilder.com	ALL
https://www.bestjobs.eu/en/	ALL
https://www.flexjobs.com/	ALL
https://www.theladders.com/apply4me	ALL
https://angel.co/	ALL
https://getwork.com/	ALL
https://www.myjob.ro/	Romania
https://www.jobber.ro/	Romania
http://posturi.gov.ro/	Romania
http://salesconsulting.ro/	Romania
https://www.skywalker.gr/	Greek
https://jobby.ro/	Romanian
https://www.romjob.ro/	Romanian
https://ec.europa.eu/eures/portal/jv-se/search?page=1&resultsPerPage=10&orderBy=BEST_MATCH	ALL
https://eurojobs.com/	ALL
https://www.jobs.bg/	Bulgarian

4 UoL (Units of Learning)

The third type of data that we are interested in, is the courses and seminars or UoLs (Unit of Learning) that come from the European course provide. A detailed description of what a UoL is has already been given in a previous deliverable, however a short one will also be given here for ease of reference.

Online courses refer to educational programs or classes that are delivered through the internet, allowing learners to access and engage with course materials remotely using a computer, tablet, or mobile device. These courses are designed to provide learning opportunities outside of traditional classroom settings, enabling individuals to acquire knowledge, develop skills, and earn certifications or qualifications from the comfort of their own location and at their own pace.

Online courses typically feature the following components:

- **Course Content:** Online courses present structured learning materials such as video lectures, reading materials, quizzes, assignments, and interactive multimedia content. These materials are usually organized into modules or lessons that cover specific topics or learning objectives.
- **Learning Management System (LMS):** Online courses are often hosted on a dedicated platform called a Learning Management System. The LMS serves as a central hub where learners can access course materials, participate in discussions, submit assignments, track their progress, and communicate with instructors and fellow students.
- **Flexibility and Self-Paced Learning:** One of the key advantages of online courses is the flexibility they offer. Learners can access the course materials and complete the assignments according to their own schedules, allowing them to balance their studies with work, personal commitments, or other responsibilities. Some online courses also provide self-paced learning options, enabling students to progress through the course at their preferred speed.
- **Instructor Support:** Although online courses are typically self-directed, they often include support from instructors or subject matter experts. Instructors may provide guidance through online forums, discussion boards, email, or virtual office hours to answer questions, provide feedback on assignments, and facilitate discussions among learners.
- **Assessment and Certification:** Online courses often include assessments or quizzes to evaluate learners' understanding of the material covered. Successful completion of these assessments may lead to the awarding of certificates or digital badges, which serve as evidence of the learner's achievement and can be shared on resumes or professional profiles.

4.1 Acquisition

As with the Job Vacancies, all Units of Learning present in our database were collected by scraping specific "job announcement" websites during a short period of time. For a short description of what web scraping is, have a look at the previous chapter.

As we did with the JVs, in order to get UoLs in all four languages (English, Romanian, Greek, Bulgarian) required by the project, we needed to search for websites that contained UoLs from these four countries specifically, or from multiple European countries, and then scrape their content. After examining a lot of websites suitable for our purpose, eventually we settled up with a number of them that covered our requirements. Some reasons for leaving some of the websites out were that, some of them posed problems with their terms of service and legal considerations and some others were difficult to scrape in terms of time and effort. The websites that were eventually scraped are given in the table below.

Table 5: UoL websites scraped by the web crawler

URL	Language	Content	Comments
https://www.coursera.org/	ALL	Courses	
https://www.semifind.gr/sem-inaria/home	Greek	Seminars	
https://opencourses.gr/index.xhtml	Greek	Courses	Free online courses without certification
https://www.telacad.ro/	Romanian	Courses	Online courses with certification
https://mooc.ro/	Romanian	Courses	Free online courses without certification
https://nbu.bg/bg	Bulgarian	Courses	Contains only Masters

In the paragraphs below, we will lay a few information about some of the scraped websites in order to give the reader an idea of their content.

Coursera.org: Coursera is an online learning platform that offers a wide range of courses and educational programs in various fields. It partners with top universities and organizations worldwide to provide online courses, specializations, and even degree programs. Users can access courses on Coursera and learn at their own pace from anywhere, often earning certificates or credentials upon completion.

Nbu.bg: New Bulgarian University is a higher education institution located in Sofia, Bulgaria. It was founded in 1991 as the first private university in the country. NBU offers undergraduate, graduate, and doctoral programs in various fields of study, including humanities, social sciences, natural sciences, arts, and more. It is known for its emphasis on interdisciplinary education, innovative teaching methods, and international collaboration. NBU aims to provide a quality education and contribute to the development of knowledge and culture in Bulgaria.

In the following table we present some information on the number of data collected through web scraping from the websites mentioned in the previous table.

Table 6: Number of Online Courses scraped from each website

Website	Language Scraped	Number of Jobs	Filtered Out	Jobs Left
https://www.coursera.org/	English	100	24	76

https://www.semifind.gr/seminaria/home	Greek	50	13	37
https://opencourses.gr/index.xhtml	Greek	50	16	34
https://www.telacad.ro/	Romanian	50	8	42
https://mooc.ro/	Romanian	50	17	33
https://nbu.bg/bg	Bulgarian	100	33	67
Total		400	111	289

From all the UoLs collected through the processes described in the previous paragraphs, some of them were left out. The reasons for doing so, were one or more of the following:

- Scraping of a single course failed so there was no content, which is necessary for the annotator module in order to extract Skills and Occupations from it.
- The annotator module, as described in the previous deliverables, managed to extract a very small number of Skills from a collected UoL. Specifically, the threshold for that decision was chosen to be 5, i.e. if the number of Skills extracted from a UoL was less than 5, the UoL was left out. The reason behind this filtering rule, was that, these UoLs would probably not be a suitable input for the rest of the system's modules. For example, if a UoL of this kind was given as input to the course proposing module, it would produce too many matches between this UoL and CVs, without them differing a lot between each other in terms of the score value. So, the recommendation given to the user would be kind of random.

A table of all the sites considered for scraping can be found in the following table, so that the reader can get an idea of the kind of websites used for our purpose.

Table 7: All UoL content websites considered for scraping

Site	Content	Certificate	Duration	Cost	Language
opencourses.gr	Study materials	No	Non-specific	free	En / Gr
https://www.eduguide.gr/	Diploma programmes	Yes	Specific	Based	GR
https://www.coursera.org/	Skill certificates / Diploma programmes	Yes	Specific	Based	En
https://www.udemy.com/	Lesson certificate	Yes	Non-specific	Based	En
http://www.gsaе.edu.gr/	Skill certificates / Adult education	Yes	Specific	(?)	GR

https://online.stanford.edu/	Diploma programmes	Yes	Specific	Based	En
https://ocw.mit.edu/	Study materials	No	Non-specific	Free	En
https://oyc.yale.edu/	Study materials	No	Non-specific	Free	En
https://www.edx.org/	Skill certificates / Diploma programmes	Yes	Specific	Based	En
https://docs.microsoft.com/zh-cn/learn/	Skill certificate	Yes	Non-specific	Based	En
https://www.linkedin.com/learning	Lesson certificate	Yes	Non-specific	Based	En
https://study.arden.ac.uk/online/study-online?source=AdW-Search&medium=cpc&campaign=Europe_Tier2_Generic-HighIntent_SO&term=online%20courses&qclid=CjwKCAjwwdWVBhA4EiwAjcYJEFs5hi8kG4O8mBajgYQLJvD4TK38wDzjKwgOFuFDanLDOh-wwY1yPB0Cp5kQAvD_BwE#programmes	Diploma programmes	Yes	Specific	Based	En
https://elearning.upt.ro/	Diploma programmes	Yes	Specific	Based	Ro
https://www.link-academy.com/	Skill certificates / Diploma programmes	Yes	Specific	Based	Ro
https://www.telacad.ro/	Skill certificates	Yes	Specific	Based	Ro
https://scoalainformala.ro/	Skill certificates	Yes	Specific	Based	Ro
https://scoalainformala.ro/	Lesson certificate	Yes	Specific	Based	RO
https://mooc.ro	Study materials	No	Non-specific	Free	RO
https://andrei.clubcisco.ro	Study materials	No	Non-specific	Free	RO
https://anis.ro	Skill certificates	Yes	Specific	Based	RO
https://www.itschool.ro	Lesson certificate	Yes	Specific	Based	RO
https://codecool.com/ro/	Skill certificates	Yes	Specific	Based	RO/EN/DE/PL/HU
https://unicampus.ro	Study materials	No	Non-specific	Free	RO
https://wellcode.ro	Skill certificates	Yes	Specific	Free/Based	RO
https://wellcode.com	Skill certificates	Yes	Specific	Free/Based	EN

https://www.udacity.com	Skill certificates	No	Specific	Based	EN
https://www.freecodecamp.org	Skill certificates	Yes	Non-specific	Free	EN
https://www.khanacademy.org	Study materials	No	Non-specific	Free	EN
https://www.codecademy.com	Lesson certificate	Yes	Non-specific	Free	EN
https://www.open.edu/openlearn/	Lesson certificate	Yes	Non-specific	Free	EN
https://www.sophia.org	Study materials	No	Specific	Free	EN
https://alison.com	Skill certificates / Diploma programmes	Yes	Specific	Free/Based	EN
https://www.w3schools.com	Skill certificates / Study materials	Yes	Specific	Free/Based	EN
https://www.invata-programare.ro/	Study materials	No	Non-specific	Free	RO
https://www.pythonist.ro/	Study materials	No	Non-specific	Free/Based	RO
https://codeberryschool.com/ro/	Courses	No	Non-specific	Based	RO
https://codecool.com/ro/	Courses	No	Specific	Based	RO
https://facemsoft.ro/en/	Video courses/code snippets	No	Non-specific	Free	RO
https://www.sgsgroup.ro/ro-ro/certification	Lesson certificate	No	Non-specific	Free	RO/EN/Many others
https://www.tuv-austria.ro/	Lesson certificate	No	Non-specific	Based	RO
https://academicearth.org/	Study materials	No	Non-specific	Free	EN
https://htmldog.com/	Beginner study materials	No	Non-specific	Free	EN
https://github.com/	Coding resources	No	Non-specific	Based	EN
https://unplugthetv.com/	Video resources	No	Non-specific	Free	EN
https://www.codecademy.com/	Study materials	No	Non-specific	Based	EN
https://learncodethehardway.org/	Study materials	No	Non-specific	Based	EN
https://rubymonk.com/	Study materials	No	Non-specific	Free	EN
https://learndigital.with	Courses	No	Non-specific	Free	EN

google.com/digitalgarage/				
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5 Conclusion

This deliverable provided a detailed description of the data collected for each solution framework built for the respective stakeholder. We described the methods used for their collection and we gave a short statistical analysis for them where possible. As mentioned, these data are necessary for the frameworks' functionality and naturally, they represent the interconnections amongst labour market and educational tools (e.g. LinkedIn, Coursera etc.).

References

- [1] BRIDGING THE TRANSITION BETWEEN EDUCATION AND THE LABOUR MARKET, Report of the conference of the European Network of Education Councils, Prague, 20-21 October 2014.