

Industrial Engineering and Management of European Higher Education



# IE3\_4th Skype Meeting 27.04.2020



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Agenda	Participants
<ul> <li>WP1 and WP2: Discussion on the revised version of the questionnaires for HEI, Alumni and Students developed by PoliBa</li> <li>WP2: Update and discussion on the results of the qualitative interviews carried out by the university partners with companies</li> <li>WP1 and WP2: planning of the investigation with HEIs, students, alumni and companies (quantitative questionnaire)</li> <li>WP1: Updates on the syllabi received from the Associate Partners</li> <li>Any other issue that may arise</li> </ul>	<ul> <li>PoliBa, represented by Giovanni Mummolo, Francesco Facchini, Giorgio Mossa and Salvatore Digiesi</li> <li>PUT, represented by Agniezska Stachowiak and Joanna Oleskow-szlapka</li> <li>LIU, represented by Janerik Lundquist</li> <li>UPM, represented by Joaquin Ordieres</li> <li>TDIT, represented by Felice De Stena, Scarpetta Claudio and Ciannamea Vincenzo</li> <li>IMPLEMA, represented by Eskil Rehme</li> <li>ARRUTI, represented by Carlos Uruena</li> <li>VALUEDO, represented by Alessandro Guadagni</li> <li>INFOTECH, represented by Gianluigi De Pascale</li> </ul>

#### WP2: Update and discussion on the results of the qualitative interviews carried out by the university partners with companies

Mummolo (PoliBa) suggests starting with the update and discussion on the results of the qualitative interviews carried out by the university partners with companies (WP2). This will be a useful step for the discussion on the questionnaires also for the other target groups.

Digiesi (PoliBa) presents the first results of the semi-structured interviews for companies conducted by Universities (R 2.2a). The data analysed referred to 16 interviews (6 conducted by UPM, 5 by LIU, 5 by PoliBa). Oleskow-Szlapka (PUT) informs the partners that they have already conducted 4 interviews (one is planned for the same morning) and they will be able to provide PoliBa with the results very soon. The full powerpoint presentation is available <u>here</u>.

Mummolo (PoliBa) points out that one the main feedback for the finalization of the quantitative questionnaire is the introduction of an area fully dedicated to project management. All the partners agree on this point.

## WP1 and WP2: Discussion on the revised version of the questionnaires for HEI, Alumni and Students developed by PoliBa

Digiesi (PoliBa) shares his screen to show the participants two documents:

- the first one contains partners comments on R2.1 "Questionnaire for HEI professor's survey".;
- the second is the first draft of the quantitative questionnaires modified according to some of the comments received and already approved by PoliBa and PUT (as WP2 and WP1 Leaders)

The two documents are available here.

The following list summarizes the points on which the partners have found an agreement during the virtual meeting.

- The expression "learning issues" has been modified in "learning skills and competencies". In this way the questionnaire aligns with the terminology used throughout Europe after the Bologna process in the field of educational training.

Including terms of reference for Low, Medium and High level: Ordieres (UPM) suggests finding terms
of reference to balance the understanding of "high level, medium level, low level". Oleskow-Szlapka
(PUT) adds that perhaps we could use a numerical scale of values.

On this point, Mummolo (PoliBa) underlines the importance of conducting a separate analysis from the different stakeholders, thanks to which the partners will be aware of the reliability of the information gathered. The answers concerning needs must be interpreted as expectations and the information collected must be evaluated on the "quality" of different stakeholders.

- Adding "Project Management" (after "Operations Management") as an additional and specific box in the questionnaire.
- Replacing Human Resources Management with "Leadership issues". Introducing also "Industrial organisation", "Industrial marketing", "Investment and finance" and "Quality management".
- The section related to "Safety and Health Issues" is replaced with a section called "Safety of Work".
- Replacing Data Analytics competences with Big-Data Analysis.
- Replacing the alternative answers "never, sometimes, often" with a frequency scale ranging from 0 to 3 (never, low, medium, high).
- Replacing the definition of "on-site events" with "face-to-face events" and "on-line events" with "Webbased events". The subsection will be also improved including the reference to synchronous and asynchronous sessions, introducing examples for these two categories that will be the only ones showed in the questionnaire.
- Adding, in B.2 Knowledge Transfer, "seminars" to "exercises".
- Maintaining the "University-Company Labs", which PoliBa has experience with.
- Deleting "Research-based learning" expression because it could be misleading. Lundquist (LIU) points out that Master programme must always be "research-based learning", so it doesn't have sense to put it valuable.
- Deleting the section "B.3 Class Organization and Educational Tools" for companies, but keeping it for HEI, Students and Alumni.
- Substituting "recruited by contract" with "involved" in the question "in how many courses industry professors are recruited by contracts for teaching within IE&M programs?"
- Adding "if applicable" at the end of the previous question.
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The partners also agree on adding a preamble to the questionnaires including a short presentation of the project and the aim of the questionnaire. Stachowiak (PUT) suggests take inspiration from the text that they have already prepared for the collection of the syllabi. PoliBa will include this in the final version of the online surveys.

## WP1 and WP2: planning of the investigation with HEIs, students, alumni and companies (quantitative questionnaire)

PoliBa will adopt the decisions taken for the questionnaire for HEIs also for the questionnaires addressing the other target groups (students, Alumni and companies). They will also take into account the specific feedback received by the partners on these other questionnaires before preparing the ultimate versions.

The questionnaires for the target groups (HEIs, students, Alumni, companies) will be transformed into an online survey adopting Microsoft Forms. Facchini (PoliBa) presents the draft of the format for the questionnaire for Alumni (R1.2 and R2.1).

Facchini specifies that they will add a disclaimer referring to GDPR to explain the treatment of the personal data included in the questionnaire. All partners agree on that.

Referring to the work plan for the next activities, the partners agree to have a testing phase involving all the target groups adopting the following strategy:

- Company partners to test the online survey for companies
- University partners to test the online survey for HEIs
- University partners to test the online survey with at least one Alumnus
- University partners to test the online survey with at least 5 students

The partner agree to establish new deadlines (the link to the full list of deadlines is here):

PoliBa to send the partners the link to the online questionnaire for students, Alumni, Academics, and Companies	30/04/2020
Universities to test the online questionnaire with at least 5 students per University	04/05/2020 - 08/05/2020
Universities to test the online questionnaire with at least 1 Alumni	04/05/2020 - 00/05/2020
Universities to self-test the online questionnaire and provide feedback to PoliBa	
Companies to self-test the online questionnaire	
PoliBa and PUT to deliver the final version of the tool questionnaire	12/05/2020
Universities to collect feedback from students, Alumni, Academic and to conduct the research on companies good practices	13/05/2020 - 29/05/2020 (first deadline; final deadline: 12/06/2020)

As the targets to reach are high (800 students, 100 academic, while the 24 companies were already reached through the qualitative interviews), the partners agree on establishing two deadlines regarding the collection of feedback from students, alumni and academics and to conduct the research on good practices: the first one is set for 29.05.2020, while the second one (12.06.2020) will be considered just in case the targets were not reached before.

Guadagni (ValueDo) says that as soon as the partnership agree on the deadlines, the Lead partner will inform ESTIEM on the roadmap and they can also arrange a Skype meeting to discuss about its involvement in this phase of the project.

#### WP1: Updates on the syllabi received from the Associate Partners

At this point, Stachowiak presents the state of the art of WP1 (the full presentation available <u>here</u>). Almost all Europe was covered by the research, but we are missing data from Germany. Considering the relevance of this country for the field of IE&M and Industry 4.0, she asks to all the partners to make an effort for reaching at least one German professor.

PUT received already syllabi from AIM partners, while ESTIEM should provide data by 05.05.2020.

PUT will then develop an improved version of R1.3 "Report on education & training convergences and divergences and company good practices in IE&M" by 15.05.2020.

The meeting ends with some administrative and management clarifications:

- The meeting scheduled at the end of June in Poland will be replaced by a virtual meeting. ValueDo will send a doodle to decide the best timeslots and dates.
- Because of the current situation due by covid19 emergency, the original signatures on the timesheets are not necessary for the second quarter (February 2020 April 2020). The timesheets will be completed with the original signatures as soon as possible.

However, Guadagni (ValueDo) invites not to underestimate the administrative and financial tasks and asks all partners to send ValueDo the timesheets in excel format for a formal check.