ERASMUS+ ELEGANT PROJECT

ENTERPRISE SURVEY QUESTIONNAIRE

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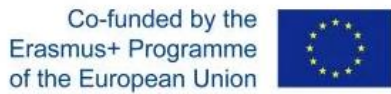
ELEGANT is an EU-funded project aimed at improving the University-Enterprise cooperation for the benefit of all stakeholders. The objectives of this cooperation are:
   a. To improve the curricula of the IT Faculties (Computer Science and Computer Engineering areas) of universities in order to reflect the needs of the ICT sector companies and improve the employability of ICT graduates; and
   b. To facilitate the transfer of knowledge from universities to the ICT sector.

It is generally agreed that University graduates do not always possess the knowledge and skills required by companies, i.e., there is a mismatch between graduates' knowledge and skills and what the companies need.

This Enterprise Survey is designed to identify the gaps in the knowledge and skills of graduates with a view to improving their study programmes and enable the graduates to be ready for the world of employment. The survey also aims at identifying and assessing different forms of cooperation between universities and enterprises.

Your participation in this survey is therefore crucial for identifying the IT graduates' knowledge and skill gaps. The survey is voluntary and you can stop the interview at any time if you so wish. The results of individual questionnaires will not be discussed or shared with anybody outside the research team. The overall results will be published in aggregate form for the benefit of universities and government departments dealing with higher education institutions.

The Lebanese participating institutions of the ELEGANT project (Modern University for Business and Sciences, Beirut Arab University and the Syndicate of Computer Sciences of Lebanon) are grateful for your time.

I. GENERAL QUESTIONS ABOUT THE COMPANY

1. Name of Company:

2. Location (Town/City)   Website Address:

3. Legal status:
   a. Individual proprietorship
   b. Partnership
   c. Corporation (joint stock company)
   d. Other (please specify)

4. Ownership:
   a. Domestic

b. Foreign
c. Joint venture

5. Sector of activity:
   Please indicate your main sector of activity: _____

6. What is your position in the company?
   a. Manager/Owner/CEO
   b. Manager or a member of staff of Human Resources Department
   c. None of the above

   If the answer is (c), please terminate the survey.

7. Year of establishment: _____

8. Number of employees in your enterprise at the end of 2019: _____

9. On average, what proportion (%) of your company's sales in the last 3 years (2017, 2018 and 2019) was from exports? ___%

II. SKILLS AND KNOWLEDGE GAPS OF IT GRADUATES AND TRAINING

10. Do you think there is a significant gap or deficiency (at least in some areas) between the skills and knowledge of recent computer science or computer engineering graduates that you have employed or considered for employment and the skills and knowledge your company needs?
    a. Yes   *b. No* (please go to Question 16)

11. If yes, please specify the general areas where you feel there are deficiencies *(please mark only those areas that are relevant to your company)*. You may select more than one answer.

    a. Programming
    b. Artificial Intelligence and Machine Learning
    c. Data Science and Big data
    d. Cybersecurity
    e. Internet of Things
    f. Telecommunication
    g. Hardware and Embedded Systems
    h. Web design and related areas
    i. Cloud Computing
    j. Others (please specify)_____

 12. How big is the gap between the skills and knowledge of your recently employed university graduates and the skills and knowledge your company needs in the following areas *(please mark only those areas that are relevant to your company)*?

	1	2	3	4	5	Not Applicable

1 = Minor gaps; 5= Very large gaps

    a. Programming
    b. Artificial Intelligence and Machine Learning
    c. Data Science and Big data
    d. Cybersecurity
    e. Internet of Things
    f. Telecommunication
    g. Hardware and Embedded Systems
    h. Web design and related areas
    i. Cloud Computing
    j. Others (please specify)_____

13. In addition to the technical and subject related knowledge, graduate employees are expected to have some or all of the following skills (sometimes referred to as soft skills). From your point of view, how important are these skills?

	1	2	3	4	5	Not Applicable

1 = Not important; 5= Very important

    a. Leadership skills
    b. Problem solving skills
    c. Communication skills
    d. Digital business skills
    e. Creative thinking
    f. Teamwork
    g. Cultural awareness
    h. Knowledge of a foreign language
    i. Others (please specify):_____

14. In your opinion, to what extent your recently employed university graduates meet your requirements in the following areas:

	1	2	3	4	5	Not Applicable

1 = To a large extent; 5= Only to a small extent

    a. Leadership skills
    b. Problem solving skills
    c. Communication skills
    d. Digital business skills
    e. Creative thinking
    f. Teamwork
    g. Cultural awareness
    h. Knowledge of a foreign language
    i. Others (please specify)

15. How do you close the gap and raise the level of knowledge and skills of new employees to the level your company needs? You may select more than one answer.

   a. *On the job training*
   b. *Training through universities (on line/ face to face)*
   c. *Training through private companies (on line/ face to face)*
   d. *Training through government supported schemes (on line / face to face)*
   e. *Self-study by new employees*
   f. *Others (please specify): _____*

III. HIRING PROCEDURES

16. In your hiring procedures, how relevant are the following factors?

	1	2	3	4	5	Not Applicable

1 = Not relevant; 5= Very relevant

   a. *Formal educational qualification (university diplomas)*
   b. *The reputation of institution they graduated from*
   c. *Recommendation from trusted persons*
   d. *Work experience.*
   e. Other (please specify):_____

III. GRADUATE EMPLOYMENT EXPERIENCE

17. Have you employed any university IT graduates in the past 3 years?

   a. *Yes*   b. *No*   c. *Tried but were unsuccessful*
                                                     (if c, go to question 19)

18. If yes, how extensively were the following methods used to reach your prospective graduate employees?

	1	2	3	4	5	Not Applicable

1 = Not used at all; 5= Used extensively

   a. *Public announcement*
   b. *Recommendations from friends, family or business partners*
   c. *Through the National Employment Office*
   d. *Through partner universities (if applicable)*
   e. *Through university career centres*
   f. *Graduates approach our company*
   g. *Internships and scholarships offered to university students*
   h. *Others (please specify):_____*

19. What was the main reason that you were not able to hire your prospective graduate employees?

a. *Lack of necessary technical skills*
b. *Lack of other skills (such as communication, teamwork, leadership, problem solving, cultural awareness and language skills).*
c. *Incompatibility of personal characteristics with your company's culture*
d. *Others (please specify): _____*

20. How would you rate the contribution of your graduate employees to the following activities of your company in the past three years?

	1	2	3	4	5	Not Applicable

1 = Not important; 5= Very important

a. *Developing ideas for new or improved products and services*
b. *Engaging with, and embracing, new technologies*
c. *Widening the company's network*
d. *Others (please specify):_____*

IV. UNIVERSITY-ENTEPRISE COOPERATION

21. Over the past three years have you cooperated with universities?

a. *In your country*   *Yes*   *No*
b. *Abroad*   *Yes*   *No*

If answer is yes, please continue with the next question. If the answer is no, please go to Question 25.

22. Which of the following describes best the nature of your cooperation with universities? You may select more than one answer.

a. *Participation in university events (teaching, conferences and seminars)*
b. *Participation in curriculum development*
c. *Internships offered to university students*
d. *Knowledge and technology transfer to support the company's product or process development*
e. *Training or further study for Company employees*
f. *Joint applications for nationally or internationally funded projects*
g. *Others (please specify)*

23. What motivated your cooperation with universities? You may select more than one answer.

a. *Government funded programmes*
b. *Public procurement of services or goods*
c. *Domestic funded project*
d. *Internationally funded project (e.g. EU-funded CBHE, etc.)*

e. University approached the company
f. Your company approached the University
g. Others (please specify): _____

24. How would you evaluate your cooperation with universities?

a. Excellent   b. Good   c. Fair   d. Poor   e. Very Poor

25. In your opinion, how important are the following forms of cooperation for improving the employability of graduates?

	1	2	3	4	5	Not Applicable

1 = Not important; 5= Very important

a. Business involvement in the development of new curricula
b. University staff participation in entrepreneurial activities
c. Network of alumni
d. Setting up university-enterprise cooperation centres
e. Internships and scholarships to recruit talented students
f. University-based training programmes for enterprise staff
g. Knowledge and technology transfer from universities to the business sector
h. Others (please specify):_____

26. Does your company offer internships to university students?
   a.   We offer internships to university students
   b.   We are willing to consider offering internships if the University approaches us
   c.   We do not offer internships

V. COVID-19 IMPACTS AND FUTURE SKILLS REQUIREMENTS

27. From the perspective of your enterprise how significant were the following effects of Covid-19 for your organization?

	1	2	3	4	5	Not Applicable

1 = Not significant; 5= Very significant

a. Loss of domestic sales
b. Loss of foreign sales
c. Abandonment of new product/service lines or ongoing innovations
d. Loss of established supply lines
e. Loss of skilled employees in the IT Department
f. Delays in production and other business activities
g. Others (Please specify):_____

28. How would you rank the contribution of IT graduate employees to the following activities of your enterprise during Covid-19 pandemic?

	1	2	3	4	5	Not Applicable

1 = Not important; 5= Very important

    a. Transition to digital communication with customers and suppliers
    b. Penetration of new market niches and new technologies
    c. Adjustment to work in virtual teams
    d. Use of social media to promote your business
    e. Application for public funds
    f. Change management
    g. Others (please specify): _____

29. In your opinion, how relevant will the following skills be for the performance of enterprises in your industry in the post-Covid-19 world?

	1	2	3	4	5	Not Applicable

1 = Not relevant; 5= Very relevant

    a. Virtual team working skills
    b. Social selling (through social media)
    c. Intercultural communication
    d. Change management
    e. Digital customer and supplier management
    f. Others (specify): _____

THANK YOU FOR YOUR TIME. YOU HAVE BEEN MOST GENEROUS AND HELPFUL.