



Ulisse

Soft Skills for Employability

IO3 - GAP ANALYSIS



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1. Introduction

The aim of this analysis is to evaluate the gap existing between what employers demand from the students in terms of soft skills and what the students offer in terms of soft skills.

2. Soft Skills Demand

The Soft Skills Demand is represented by the employers' opinion. In particular, the study of the "Soft Skills Survey Report" (IO2), gathered the employers' opinions through a survey. The starting point was to identify employers' assessment of recent graduates' soft skills, followed by the understanding of which soft skills are most valued by employers.

To represent the Soft Skills Demand we normalized the values of the charts from the "Soft Skills Survey Report" (IO2). Then, we built two indexes (DI-1 and DI-2) using the data coming from two specific questions from the questionnaire:

1. DI-1: Importance of skills

This index shows which are the most important skills a graduate (2 years) should have according to employers.

The index is calculated by normalizing the values of the Chart 10 of the IO2: the chart is the result of the questionnaire where it is asked to employers to describe with an open question which skills are considered most important in recent graduates (Question: "In your opinion, what are the most important skills that a recent graduate (course completed 2 years or less) should have")

2. DI-2: Most valued future skills

This index shows the level of importance of skills in the next 5 years.

This index is calculated by normalizing the values of the Chart 62 of the IO2: the chart is the result of the questionnaire where it is asked to employers to choose the skills (from a list of 17 items) that they believe will be the most important in the next 5 years (Question: "Please, select the 5 skills that, in your opinion, will be most valued in the job market in the next 5 years")

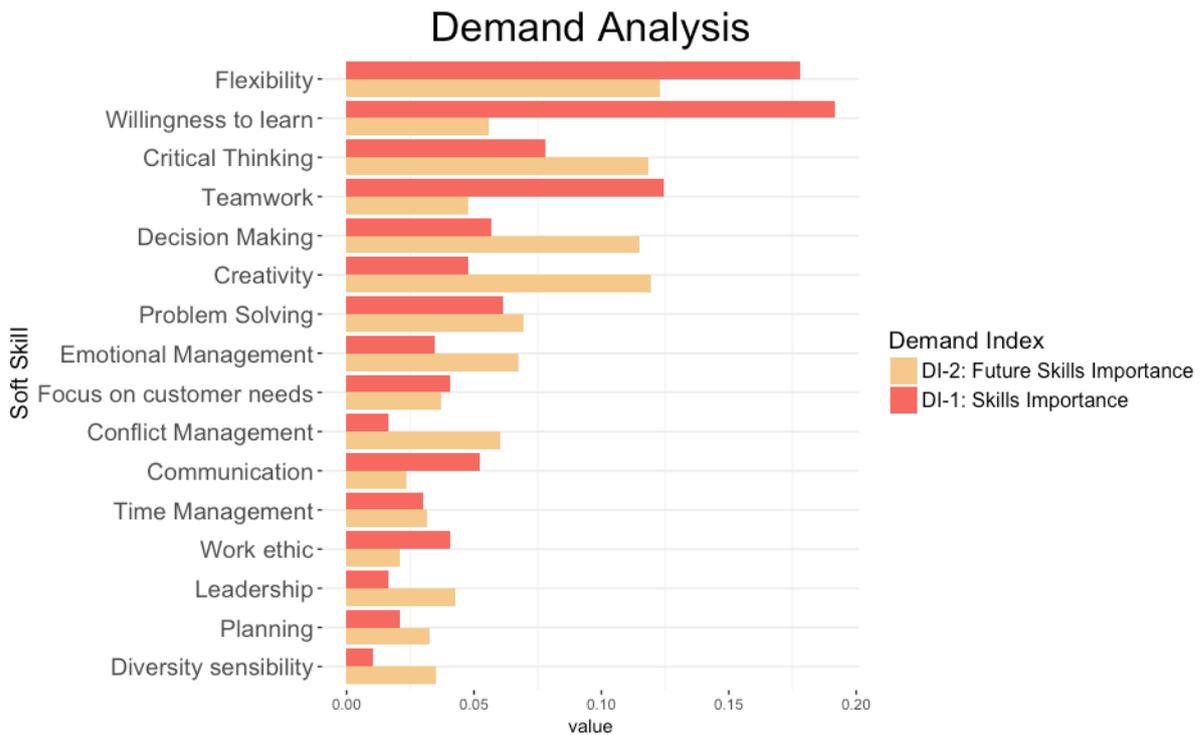


Figure 1 Demand analysis

Figure 1 shows the values of the two indexes for each soft skill. It is clear to see how skill's demand may change in the near future.

3. Soft Skills Offer

The Soft Skills Offer represents the level of soft skills the students possess according to employers' opinion and their self-assessment. For this purpose, we used the results of the "Soft Skills Survey Report" (IO2) question n.3 and the results of the "Student CV analysis" (IO3).

To represent the Soft Skills Offer we built two indexes (OI-1 and OI-2). In particular:

1. **OI-1: Skills level**

This index shows the current skill level of recent graduates according to the employers' opinion.

The index is calculated by normalizing the values of the [Chart 39](#) of the IO2: the chart is the result of the questionnaire where it is asked to employers to assess the graduates' level of knowledge of the list of skills (Question: "Below there is a list of several skills from the Workplace Skills Questionnaire (Vieira, 2019; adap. Vieira, 2014). Please, indicate the number that best describes the current skill level of the recent graduate/s").

2. **OI-2: CV-Skills frequency**

This index shows what skills the students explicitly state to possess in their CVs.

This index is calculated by normalizing the values of [Figure 4](#) of the “Student CV analysis” (included in IO3): the chart indicates the number of times the skills are mentioned in students’ CVs.



Figure 2 *Offer analysis*

Figure 2 shows the values of the two indexes for each soft skill. It is possible to see the gap between employer’s opinion (OI-1) and Student’s statements (OI-2)

4. Gap Analysis

We conducted the Gap Analysis by confronting the values of the Demand and Offer of Soft skills. In particular, we calculated for each skill the mean of the two indexes for the demand and offer respectively:

- the **Demand Index** is the mean of the **DI-1** and **DI-2**;
- the **Offer Index** is the mean of the **OI-1** and **OI-2**.

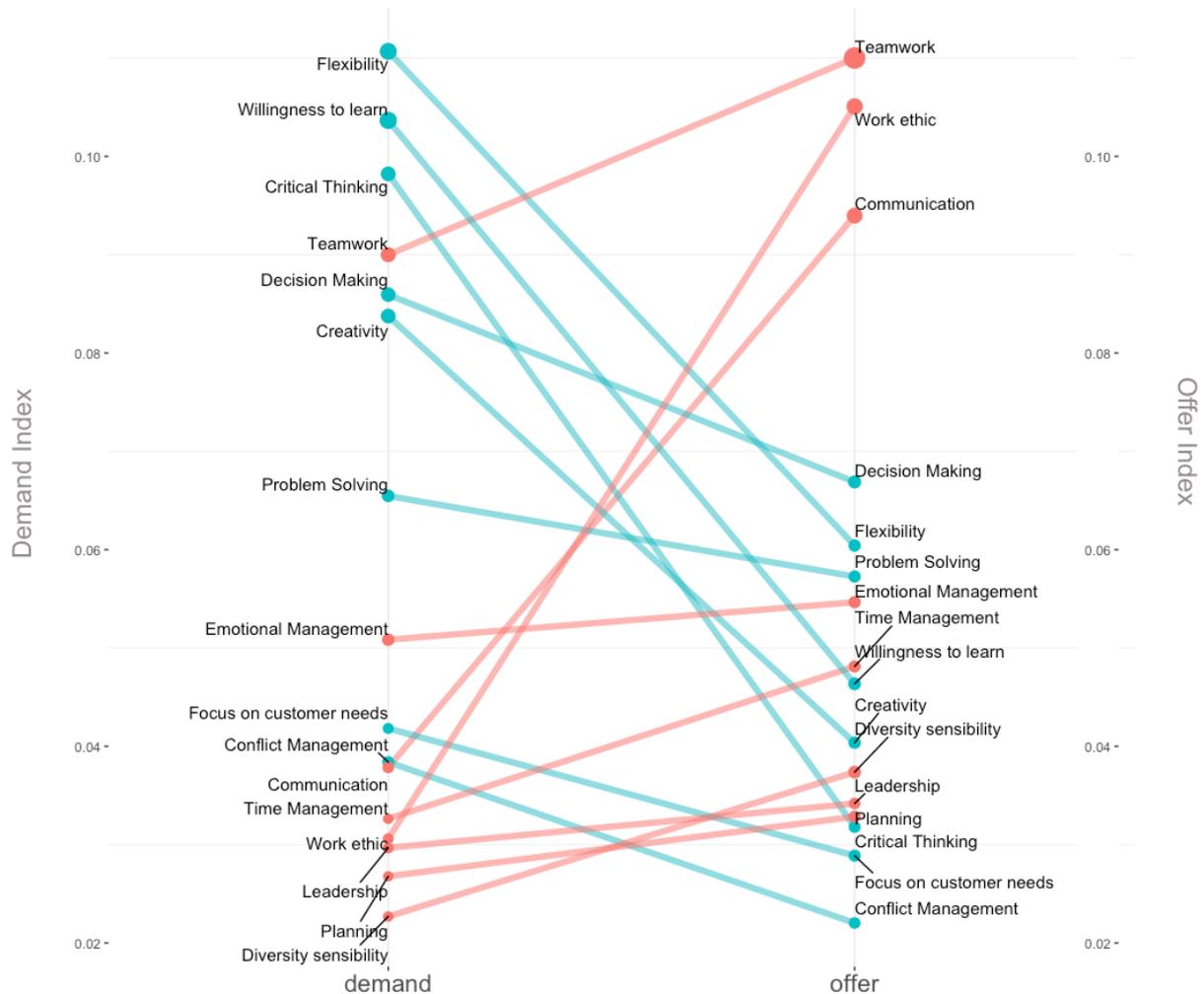


Figure 3 Gap Analysis of Soft Skills

Figure 3 is a good illustration of the gap existing between the Demand and Offer for each soft skill. On the left of the figure we have the soft skills ranked by their **Demand Index**. On the right of the figure we have the soft skills ranked by their **Offer Index**. The two parts of the graph are linked by lines. Each line connects each skill from the value of the Demand Index to the value of the Offer Index.

Blue line: the demand is higher than the offer.

Red line: the demand is lower than the offer.

Inclination/tilt: the more the line is inclined/tilted the more the difference between the demand and the offer is higher.

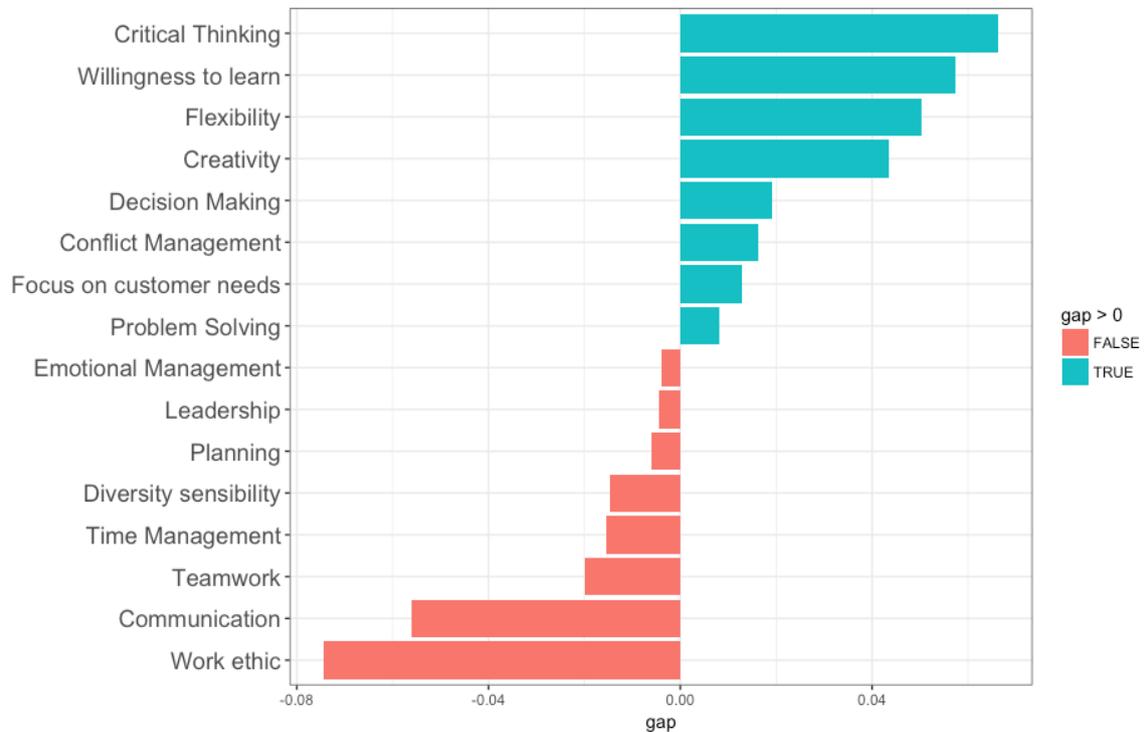


Figure 4 Gap values for each skills

Figure 4 represents the **Gap value** of each skill. The **Gap value** is calculated as the difference between the **Demand index** and **Offer Index**.

If the **Gap value** is *positive*, it means that the demand is higher than the offer and that it is important to fill the gap by teaching that skill.

If the **Gap value** is *negative*, it means that the offer is higher the demand and that the students do not need to learn that skill.

The higher is the distance from zero of this value, the higher is the gap.

For example, the gap value of the skill “Critical Thinking” is positive and high. This means that the students are lacking this skill, while employers demand for it.

Another example is given by the gap value of the skill “Work Ethic” that is negative and distant from zero. This means that the students are declaring a high level of this skill despite a low demand from employers.

Figure 5 is another way to represent the gap values.



Figure 5 *Gap values for each skill*

5. GAP Analysis - PRESENT demand for skills (offer: 50% employers - 50% CVs)

Here below an additional comparative analysis is proposed. The “Gap Analysis - PRESENT demand for skills” shows the **demand data only** from the employers’ side considering exclusively the information related to the index **DI-1: Importance of skills**. (Chart 10, Question: “In your opinion, what are the most important skills that a recent graduate (course completed 2 years or less) should have”).

The **offer** side considers the mean of the indexes OI-1: Skills level and OI-2: CV-Skills frequency (with the same weight).

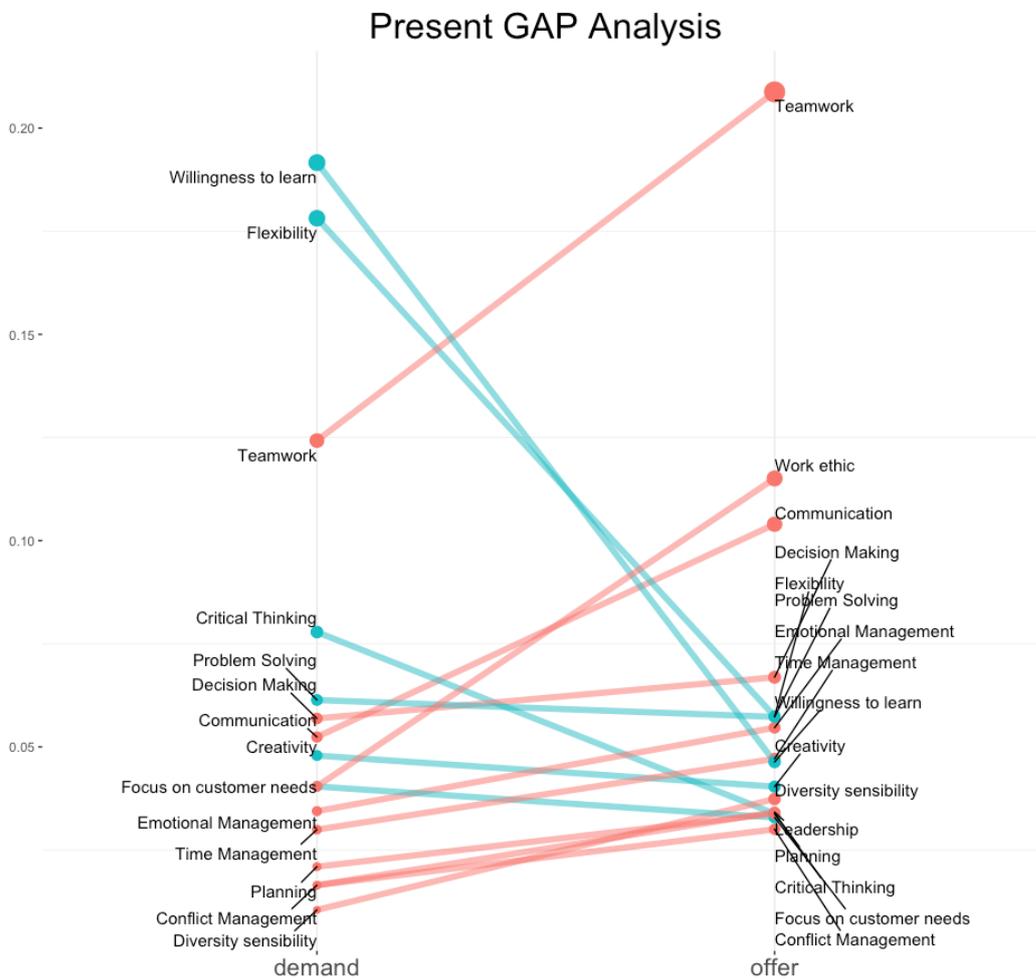


Figure 6 Gap Analysis of Soft Skills (demand: only Present)

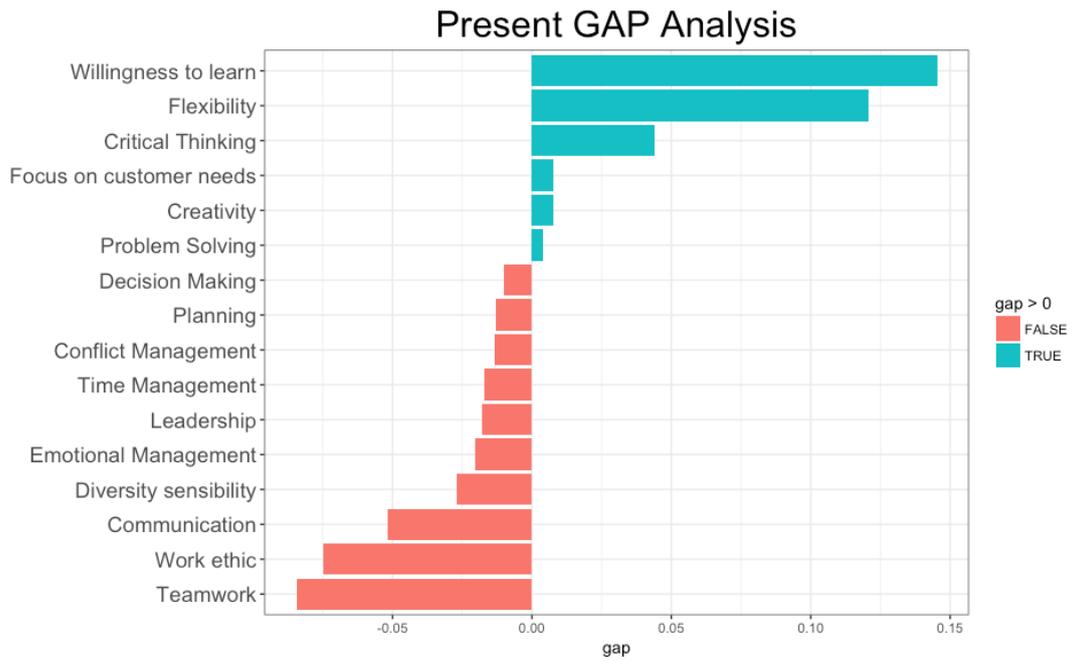


Figure 7 Present Gap values for each skills

6. GAP Analysis - FUTURE demand for skills (offer: 50% employers - 50% CVs)

Here below an additional comparative analysis is proposed. The “Gap Analysis - FUTURE demand for skills” shows the **demand data only** from the employers’ side considering exclusively the information related to the index **DI-2: Most valued future skills** (Chart 62, Question: “Please, select the 5 skills that, in your opinion, will be most valued in the job market in the next 5 years”).

The **offer** side considers the mean of the indexes OI-1: Skills level and OI-2: CV-Skills frequency (with the same weight).

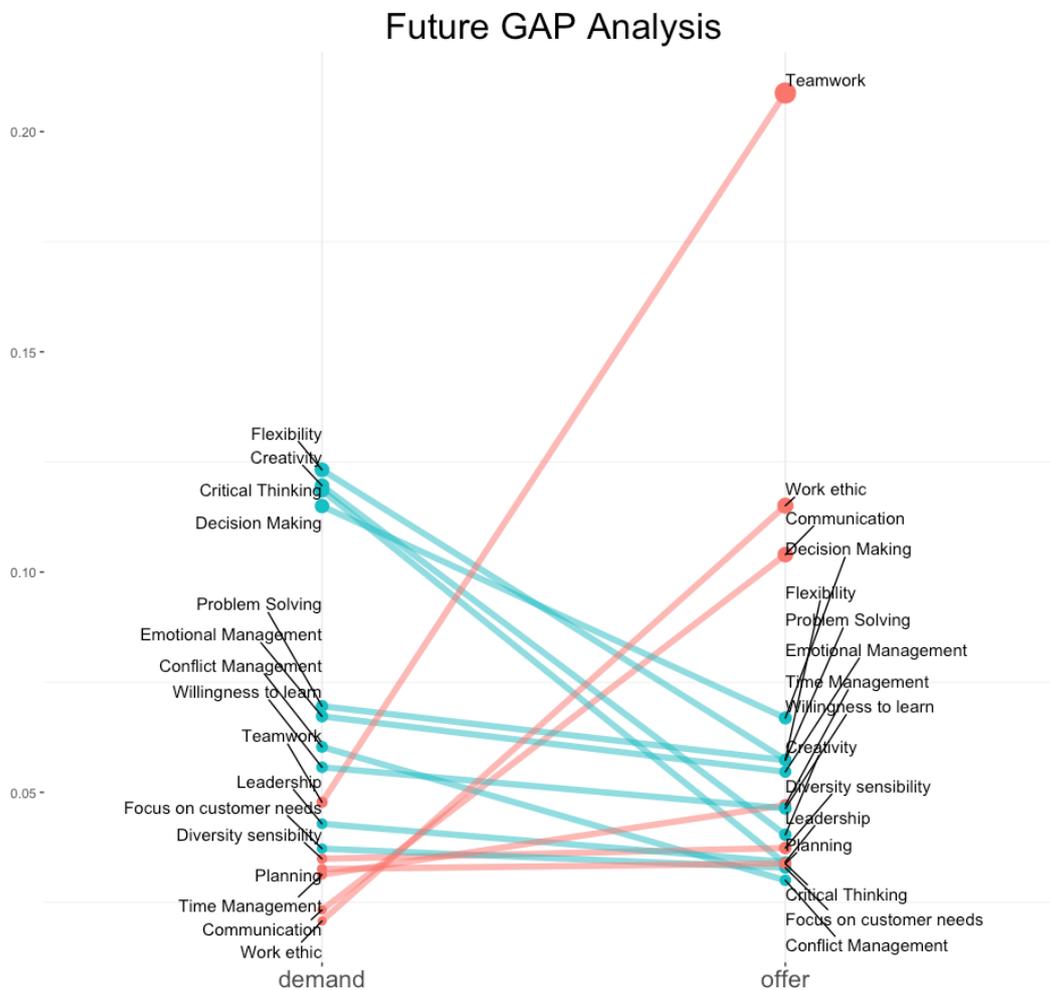


Figure 8 Future Gap Analysis of Soft Skills

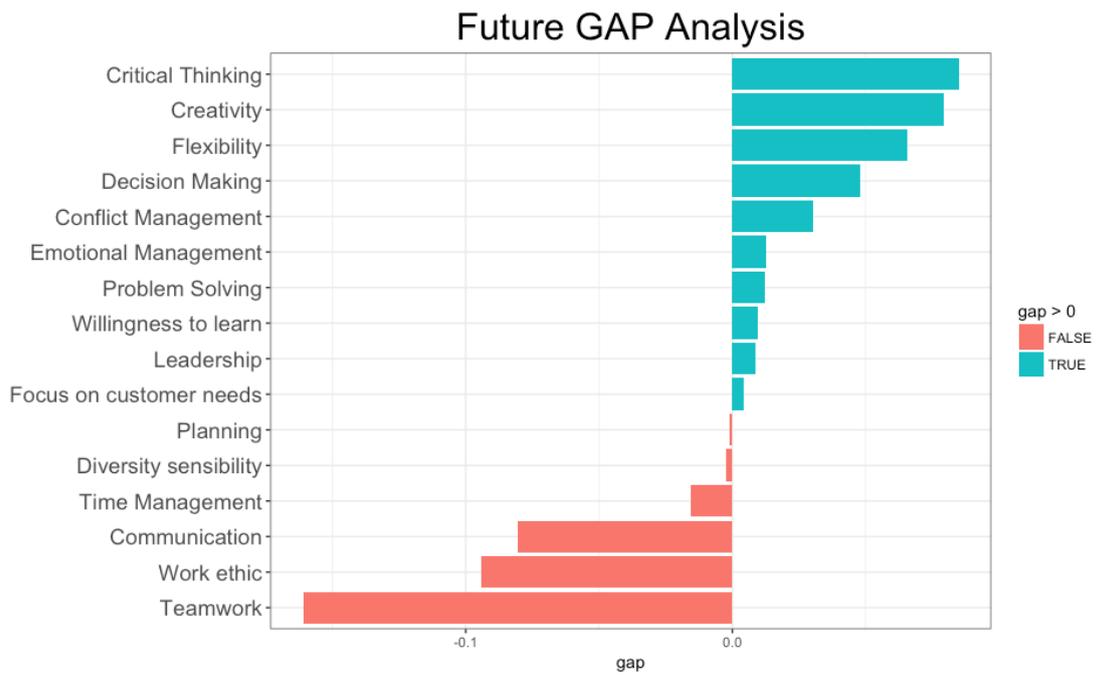


Figure 9 Future Gap values for each skills (

7. GAP Analysis - Difference between PRESENT and FUTURE demand for skills

skill	Teach in the Present	Teach in the Future	Change
Willingness to learn	yes	yes	
Flexibility	yes	yes	
Critical Thinking	yes	yes	
Focus on customer needs	yes	yes	
Creativity	yes	yes	
Problem Solving	yes	yes	
Decision Making	no	yes	■
Planning	no	no	
Conflict Management	no	yes	■
Time Management	no	no	
Leadership	no	yes	■
Emotional Management	no	yes	■
Diversity sensibility	no	no	
Communication	no	no	
Work ethic	no	no	
Teamwork	no	no	

The comparison between the present and the future situation shows a significant increase in soft skills need for employers.

8. Weighed Gap Analysis - 75% Offer employers - 25% Offer CVs (demand: 50% - 50%)

Here below an additional comparative offer analysis is proposed. The “Weighed Gap analysis” assigns a different weight to employers and CVs. The demand side considers the mean of the indexes DI-1: **Importance of skills** and DI-2: **Most valued future skills** with the same weight.

This choice was made taking into account what is called the Dunning Kruger effect (see 13. Bibliography), which explains why students might not be good when evaluating their own competencies.

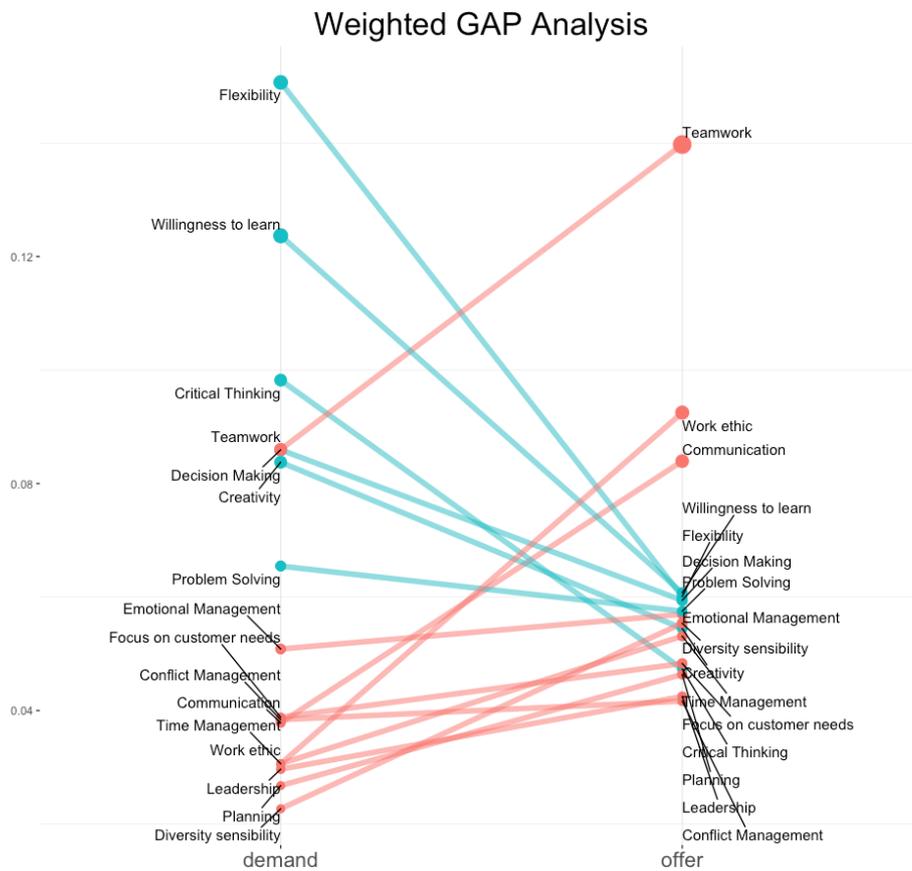


Figure 10 Gap Analysis of Soft Skills (offer: 75% employers, 25% CVs)

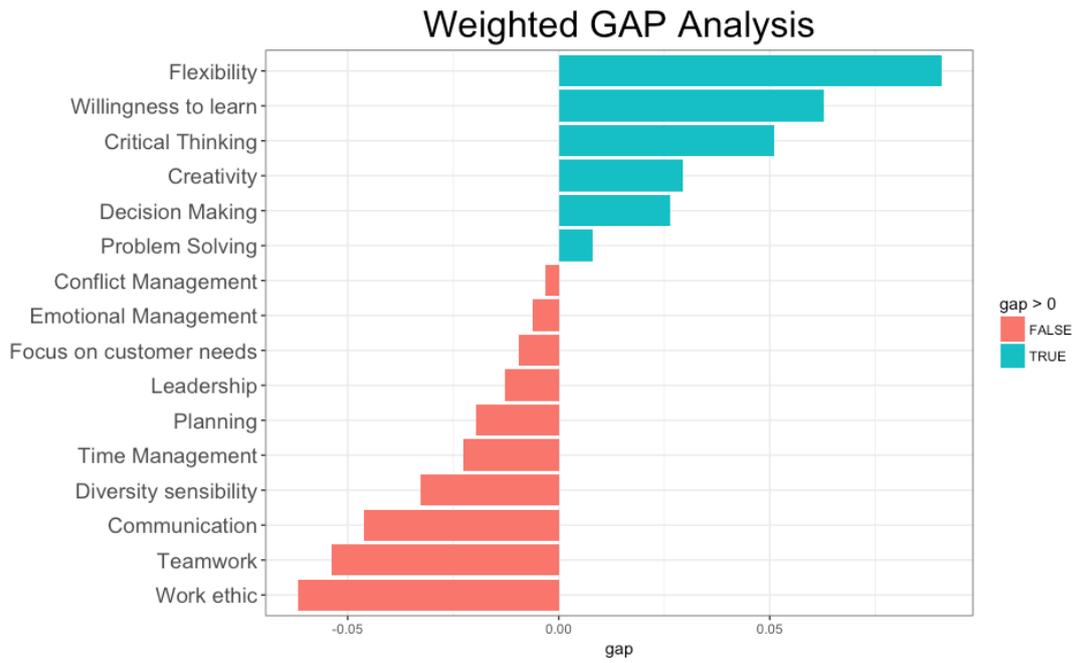
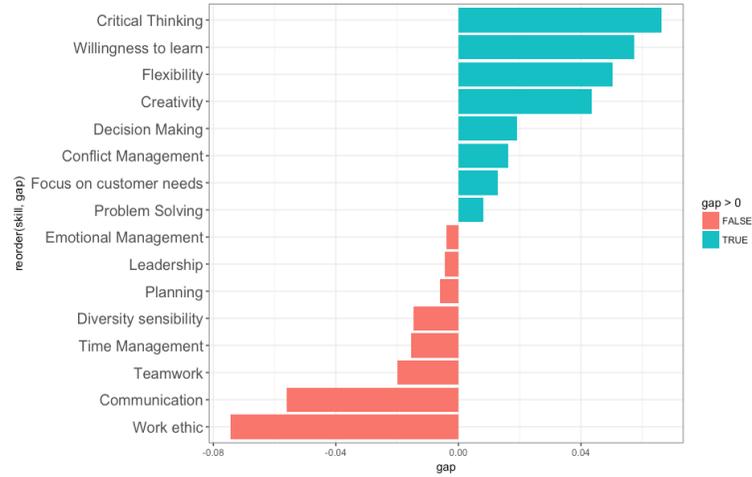


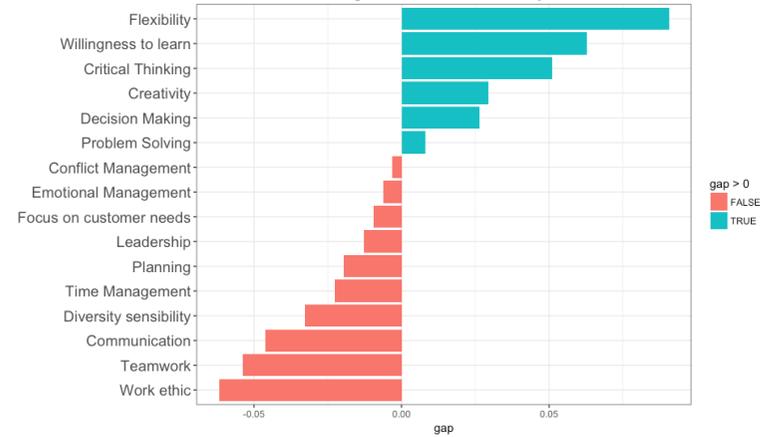
Figure 11 *Gap values for each skills (offer: 75% employers, 25% CVs)*

9. Comparative view

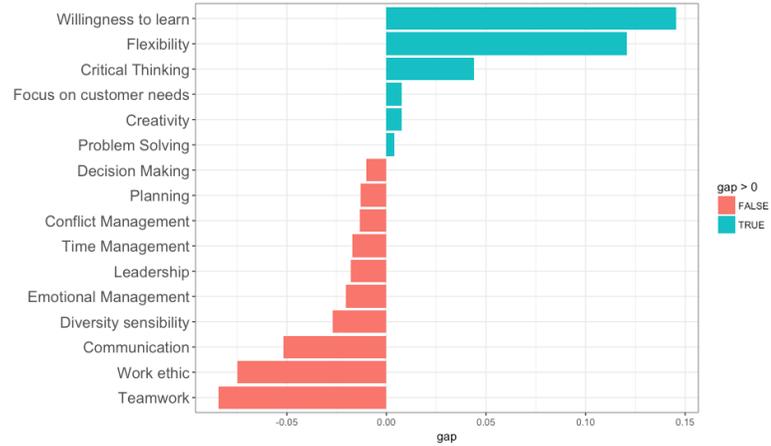
Initial Gap Analysis



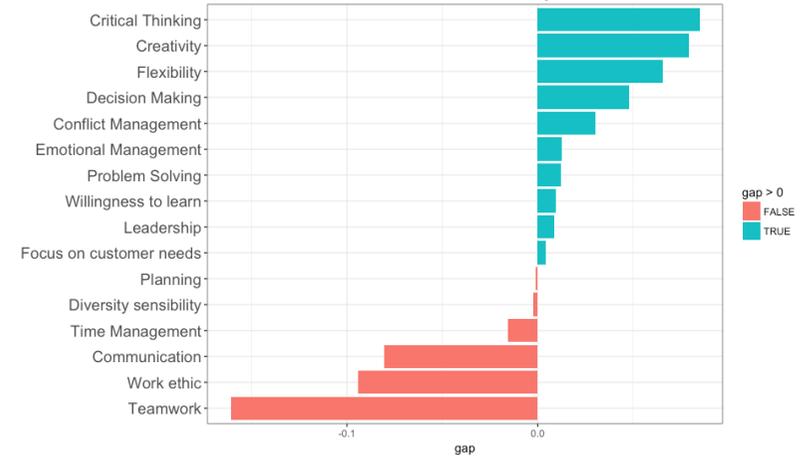
Weighted GAP Analysis



Present GAP Analysis



Future GAP Analysis



10. Partners' Training Offer Soft Skills Visualization

This graph takes into account the whole data collected by the partners through the "Training offer mapping".



Figure 12 Partners' Training offer soft skills visualization

11. Proposed List of Soft Skills to be included in the ULISSE training course

SOFT SKILL	DEFINITION	COMMENT
Conflict management	Identify sources of conflict and negotiate towards a resolution; take steps to overcome conflicts with others, or among others.	Quite important in the future. Already present in the training offer
Creativity	Come up with unusual and useful ideas about a given topic or situation; create new solutions or ideas; demonstrate originality; suggest innovative proposals; develop creative ways of doing things.	Important both in the present and in the future. Moderately present in the training offer
Critical thinking	Identify relevant and reliable information; make sense of complex and ambiguous information; ask relevant questions; question either own and others ideas with humbleness; combine information from different sources.	Very important both in the present and in the future
Decision-making	Make responsible decisions autonomously; make timely decisions taking into account the consequences (e.g., effects on others, political and/or ethical implications); take responsibility for the decisions made.	Quite important in the future. Already present in the training offer
Diversity sensitivity	Communicate and work effectively with individuals from diverse cultures, countries, races, ages, religions, lifestyles and points of view; respect and make the most out of people differences.	Not relevant
Emotional management	Manage stress; resilient; work well under pressure; self-motivated; manage own and others emotions; demonstrate a positive attitude.	More relevant in the future (see impact Covid19)
Flexibility	Adaptability; open-minded; easily adapt to changes; respond adequately to constructive criticism; deal well with unexpected situations; polyvalent.	Very important both in the present and in the future. Present in the training offer

Focus on costumers needs	Listen carefully to others; understand correctly the message of the other; act in accordance to other's needs.	Moderately important in the future, important in the present
Leadership	Coordinate and guide the work of others; delegate tasks efficiently; motivate others to give their best; identify and develop the strengths of others to achieve common goals; encourage positive group relations and influence others views or behaviours.	Moderately important in the future
Orientation to results	Goal-oriented; proactive; responsible; focus on achieving results; responsible attention to details without losing sight of the ultimate goal; carefully and efficiently complete tasks; show initiative.	
Planning	Determine the tasks to be carried out towards goals; allocate tasks; monitor the progress made according to the plans; update plans to adapt to unexpected events or new information.	
Problem-solving	Identify and prioritize problems; sort out the many facets of a problem; proactively contribute with ideas/answers regarding the problem while considering respective consequences; ability to solve novel and ill-defined problems in complex and real-world settings.	Important in the future. Present in the training offer.
Teamwork	Contribute actively in a group to achieve a common goal; share resources and responsibilities; encourage the participation of all group members.	Not relevant
Time management	Manage several tasks at once; be on time; be able to set priorities and allocate time efficiently in order to meet deadlines; manage own time and the time of others.	Not relevant
Willingness to learn	Ability to learn from daily experiences and mistakes; proactivity in the search for continuous improvement; humble attitude towards people with more experience and knowledge;	Very important in the present, moderately important in the future

	continuously update in the field of knowledge.	
Work ethics	Demonstrate integrity, ethical behaviour and loyalty; act responsibly to address individuals and social interests; show work-related behaviours that do not have a negative impact on others as well as on society.	

Legenda:

green - the skill must be trained up/developed

orange: the skill might be trained up/developed

light pink: the skill might be of moderate interest

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