

**DEVELOPMENT OF LABOUR MARKET OBSERVATORY PLATFORM AT  
NGUYEN TAT THANH UNIVERSITY**

**PILOT STUDY REPORT**

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## **Executive Summary**

The report provides information on the pilot study of the Labour Market Observatory Platform (LMO) at Nguyen Tat Thanh University (Vietnam). The platform was developed within the framework of the project Lab-Movie, co-funded by the Erasmus+ Programme of the European Union. The platform provides information on the labor market in the ICT sector in Ho Chi Minh City. The information, collected through surveying ICT enterprises, includes details on the job profiles (job description, required competencies and qualification), job prospective (employment trend and demands), industry profiles (types of employers, organisational structures) in the ICT sector. The main intended users of the platform are current and future job seekers (student, alumni). The pilot study, carried out from March to May of 2023, was intended to test the functionality and usability of the platform. It was also used to identify the weakness and strengths of the platform for further improvement of the platform before final release.

## **Introduction**

The ICT industry, with the key striking development in recent years has become vibrant, especially when the 4.0 revolution broke out. New technologies in the fields of software, artificial intelligence and ICT based technologies make the ICT human resources demanding and pressing. In order to continuously train and update the data and up-to-date requirements from the labor market, the LABMOVIE project aims to equip students with knowledge and skills to well prepare for work environment. Nguyen Tat Thanh University researchers have strongly connected with the ICT experts and HR department managers from small & medium scale and large companies and corporations in the field of information and communication technology to figure out the descriptions of job profiles, especially competencies, personalities, and skills in the sector. Research results are fed into a platform to provide overview and prospects in the labor market in the southern region. By referring to this portal, Nguyen Tat Thanh University students can search for professional requirements and find all relevant information about job titles, roles, and ICT related competences and how to combine these requirements with the lasted knowledge they are undertaking at Nguyen Tat Thanh University. In addition, the platform is also connected to the University's student recruitment website, increasing the experience and exploiting necessary information for students.

## **Platform**

The platform is installed on the university server and accessible at the address <https://labmovie.ntt.edu.vn>

### **Technical details**

- http server: Apache
- Connection: secure https
- CMS: WordPress 6.0.2
- Support: menu floats/fix on the right
- Compatible browsers: IE, Firefox, Safari, Opera, Chrome, Edge
- Cross-devices support: Smartphones, Tablets, Personal computers
- Monitoring by Google Analytics.

### **Information details**

The platform includes the six main sections:

- **Publications:** The section includes news and reports of the situation of the local market for information technology and telecommunication industry. The reports in this section provide overview of the sector, current situation of the sector over the recent years as well as the trend of development. The reports also present data and statistics of enterprises and employment situation in the industry. The section includes search function where users can search for publications by year or by sector.
- **Job Profiles:** This section lists different job roles, separating level from fresher to senior in ICT sectors. For each professional role, information on the job activities, qualifications required, specific technical skills, computer and linguistic knowledge, personal qualities and availability is included. The section includes search function to allow users to find relevant job roles. Users can search based on sector, specific position or seniority level.
- **Organizational Structure:** This section presents typical organisational structures where different job roles are fitted within the ICT sector.
- **Contacts:** Detailed information of the project, the researchers and technical expert is available for consultation purpose.
- **Jobs:** This section is linked to the job portal of Nguyen Tat Thanh University (<https://vieclam.ntt.edu.vn/>) that provide all jobs opportunities for students.
- **Survey:** this option provides access to questionnaires about the quality of this LMO portal.

The information on the platform can be searched by using the search toolbar on the platform.

## **Pilot Study Design**

**Time of study:** From 23rd of March to 13rd of May 2023

- Phase 1: 23rd to 30th of March 2023
- Phase 2: 19th of April to 13rd of May 2023

**Types of participants:** undergraduate and postgraduate students of Nguyen Tat Thanh University

### **Procedure:**

- Phase 1: target group. A group of students were invited to use this portal and give feedback on the website by answering the questionnaires. The group of students were selected to include undergraduate and postgraduate students who study ICT-related majors. The students were requested to try the platform and answer the questionnaire on the platform.
- Phase 2: Random sampling. At a class meeting of ICT students, a researcher introduced the platform to the students. The students could choose to try the platform later.
- The participants were explained on the purpose of the platform and the pilot study. The participants were given verbal instruction on how to use the platform and how to answer the questionnaire.

## The Sample

### Sample size

- Phase 1: 32 participants (target group)
- Phase 2: 89 participants (meeting class with a researcher)

### Gender of the sample

- Female: 18
- Male: 103.

The distribution shows that the ratio of male students is higher than that of female students. Among 121 students responded, approximately 15% (18) are female students. Male students account for a large proportion, around 85% (103 students) of participants in the survey. The percentage in terms of gender in the piloting phase is consistent with the gender distribution of students in ICT disciplines at Nguyen Tat Thanh University.

### Age of the sample

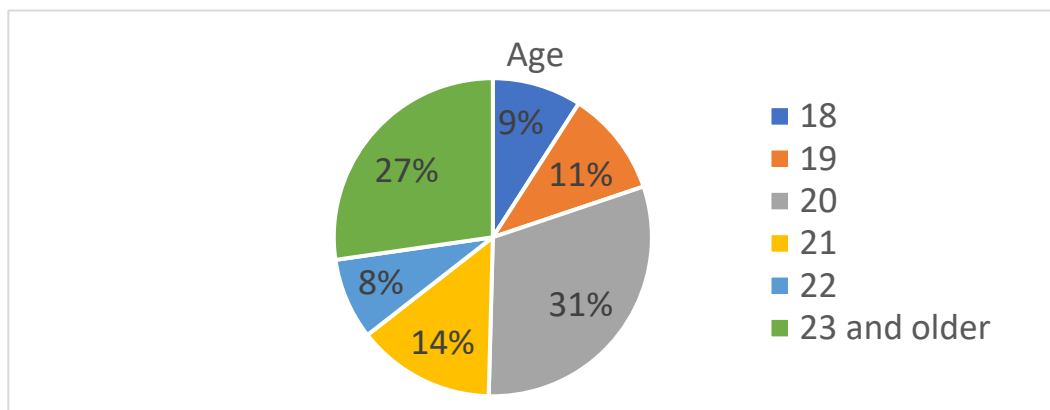


Figure 1 - Age distribution of the participants

The figure 1 shows that 51% of the surveyed participants age less than 20 years old. A significant portion of 27% are 23 years old or older. In detail, the average age is 23, the median of the age is 20, the youngest is 18 years old and the oldest is 46 years old. It may be said that the age distribution of the sample reflects the age of NTTU students, both undergraduate and postgraduate.

### Year of Study of the sample

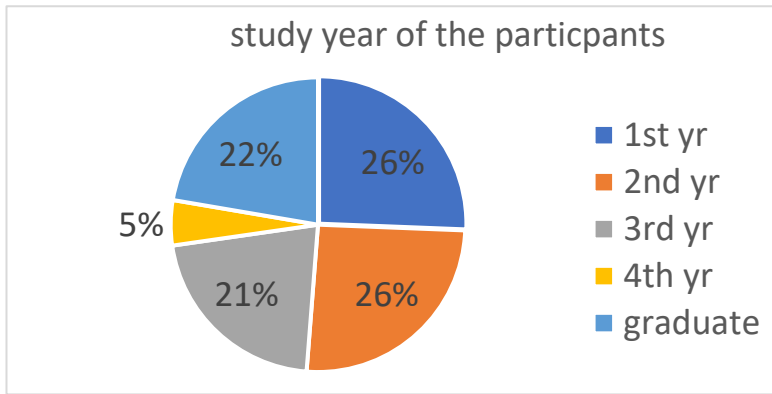


Figure 2 – The year of study of the participating

Figure 2 shows that distribution of the year of the study of the pilot study participants. A majority of the participants (78%) are undergraduate students, and 52% of the participants are Year 1 and Year 2 students. Only small portion of the participants are Year 4 students. It should be noted that at Nguyen Tat Thanh University, at the of the pilot study, Year 4 students often took industrial internship. A significant of the participants are graduates hence the study probably provides a balanced view of current and postgraduate students.

### Major of Study of the Participants

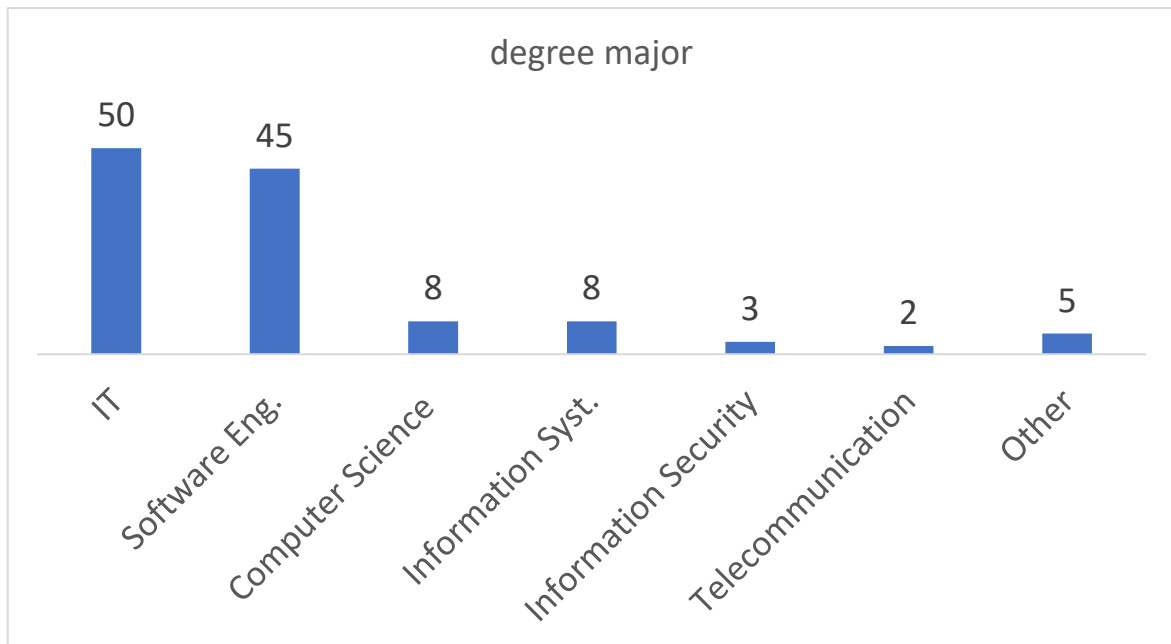


Figure 3 - Participants belong to different interested majors

Figure 3 illustrates that the proportion of the participants, who study the major of software engineering (45 students) and information technology (50 students), accounting for the largest majors of study (out of 121 participants). There are also other majors of study that relate to ICT (computer science, information systems, information security, telecommunication).

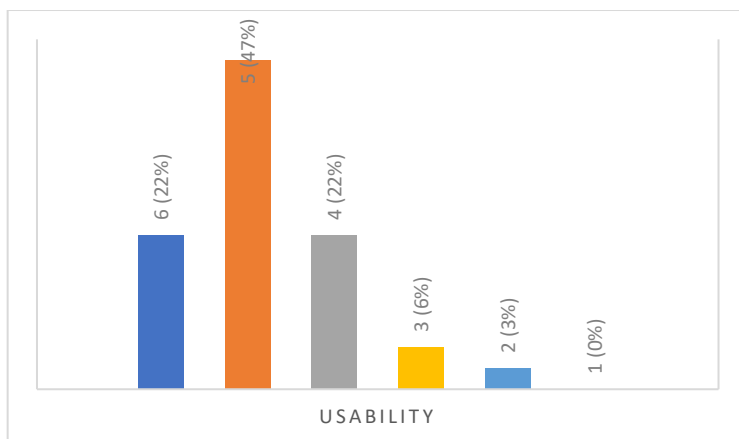
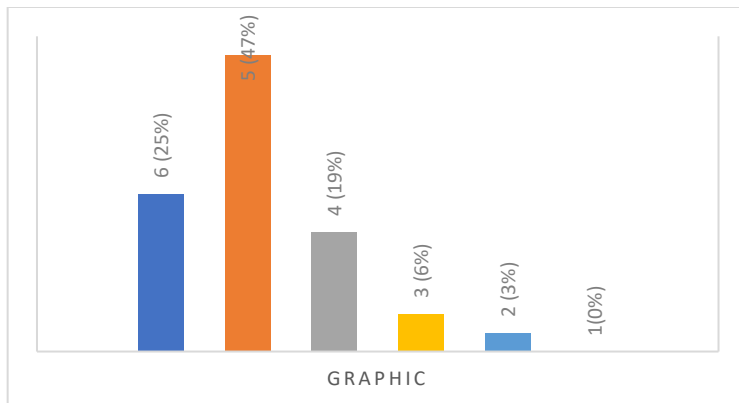


## Pilot Study Results

### Phase 1 Result

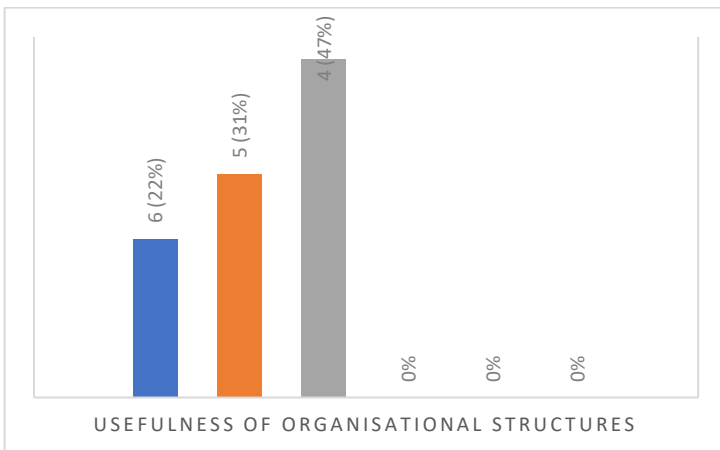
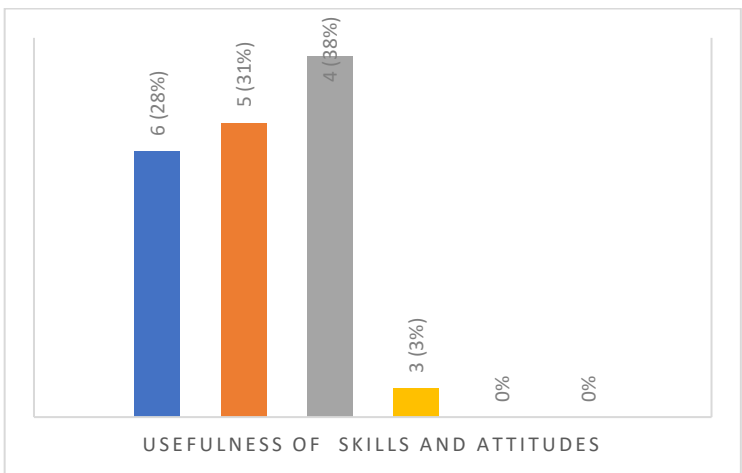
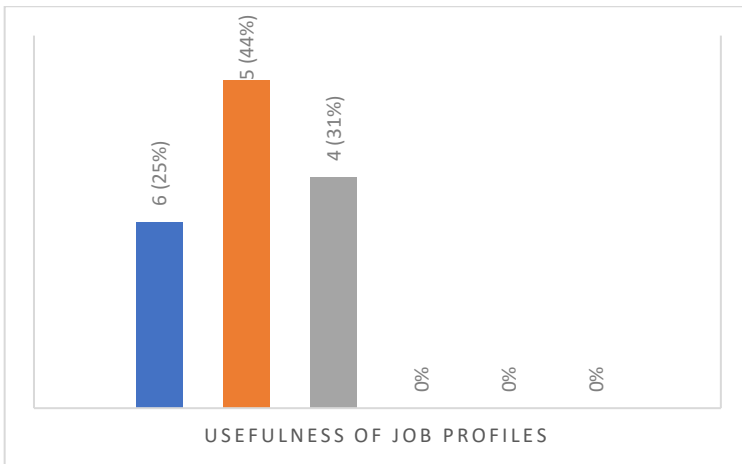
The users were requested to give opinions on the graphic quality, usability, usefulness of job profiles, usefulness of skills and attitudes, usefulness of organizational structure, usefulness of labor market operation, usefulness of a choice of second degree. The scale of rating is 1 – 6 (extremely negative to extremely positive).

#### *The Quality of the Portal Design*



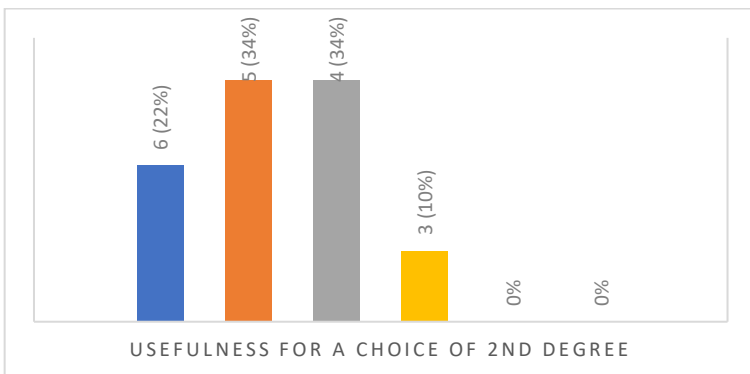
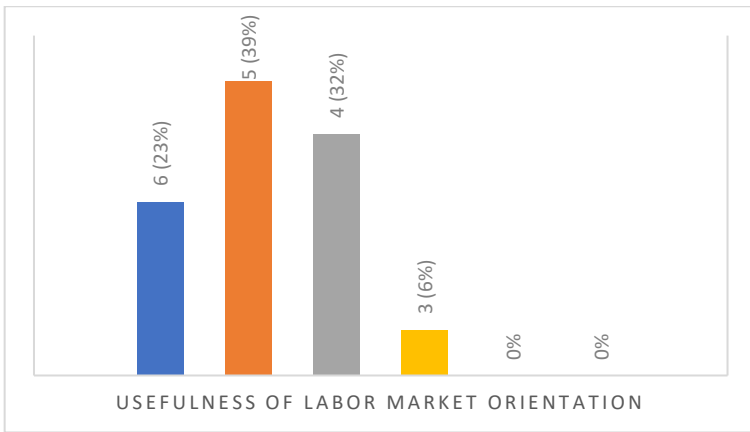
It can be seen that there is a relatively high portion of students satisfied with visual interface and usability of the platform. Up to 70% rated 5 and 6 for these two items in the questionnaire showing the high level of users' good experience in terms of graphic design and being easy to use.

#### *The Quality of Information*



These three figures show that almost all responders agreed on the quality of the information provided on the platform, including the profiles, personalities, skills and business structures. It can be seen that a wide range of percentages between 50% to 70% rated five (5) and six (6) for these three sets of information.

***The Usefulness of Information***



The last two figures show the feedback from students on the practicability of contents embedded in the portal for students' orientation to the labour market and their choice for a second degree. According to the data surveyed, no negative responses were collected, and a large portion of the responders highly appreciated the usefulness of the information provided.

The users were also asked to give comments on the advantage of the platform, the limitation of the platform. They were also asked to give comments on how to improve the quality of the platform. The comments were collected and classified in the following table.

The table below summarizes the results of the comments:

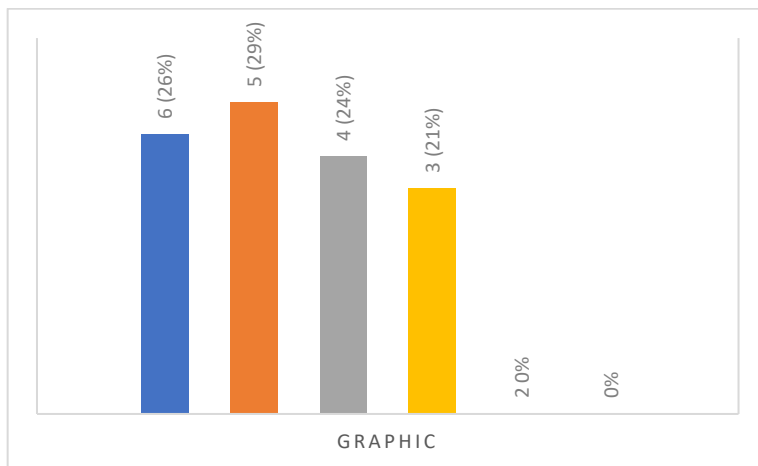
<b>Question</b>	<b>What are the advantages of the platform?</b>	<b>27</b>
Answer	It provides useful information on the labour market	23
Answer	Good interface	4
<b>Question</b>	<b>What are the limitations of the platform?</b>	<b>26</b>
Answer	The quality of the information	10
Answer	Low loading of the site	8
Answer	It requires people to have access to the internet	2
Answer	It should be linked to job-search website	1

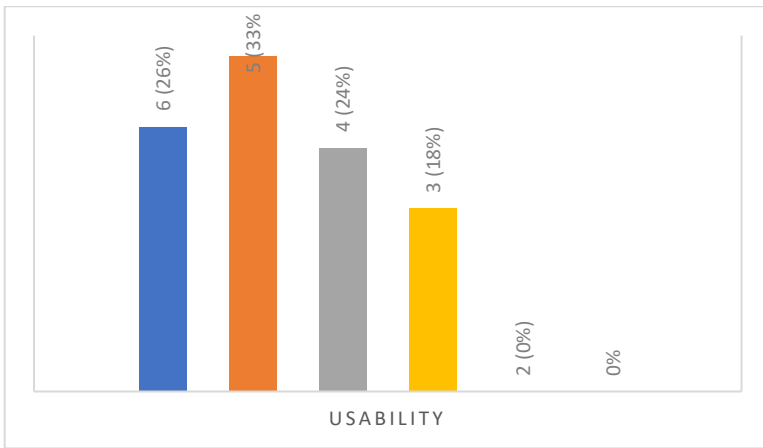
Answer	The design is not attractive	2
Answer	None	3
<b>Question</b>	<b>Any comment to improve the quality of the platform</b>	<b>15</b>
Answer	none, it is fine	12
Answer	To improve the graphic design	2
Answer	to update information timely	1

It can be seen that regarding the advantage of the platform, a majority of the comments agree that the platform has provided useful information on the ICT labour market. On the other hand, regarding the limitation of the platform, a significant number of the participant (10/26 comments) comment on the quality of the provided information. However, a closer analysis of the comments showed that the participants had difficulties in navigating and searching for information. Hence, it was decided to change the information layout of the platform. Furthermore, many participants also complained on the low loading of the platform. An arrangement with the server administrator was conducted to provide more internet bandwidth to the platform.

## Phase 2

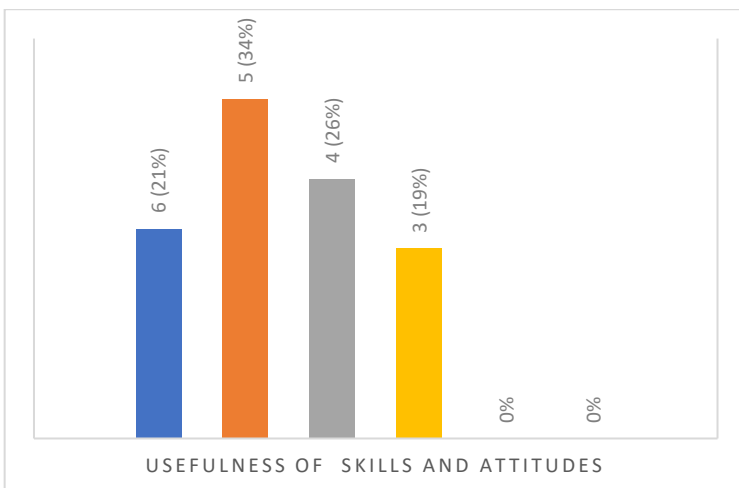
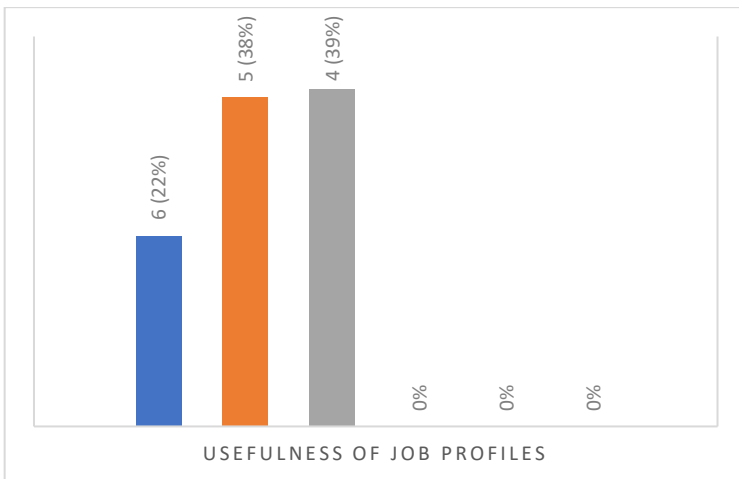
### *The Quality of Portal Design*

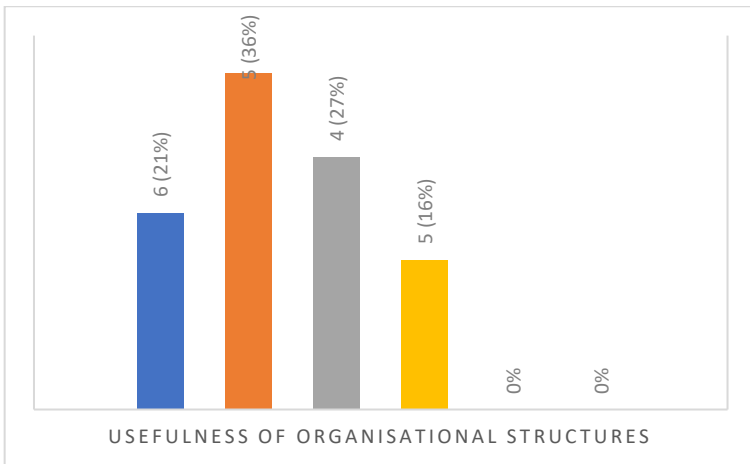




After improving the interface and layout, satisfaction levels increased significantly. No students rated two (2) for the quality of portal design from 3% from phase 1.

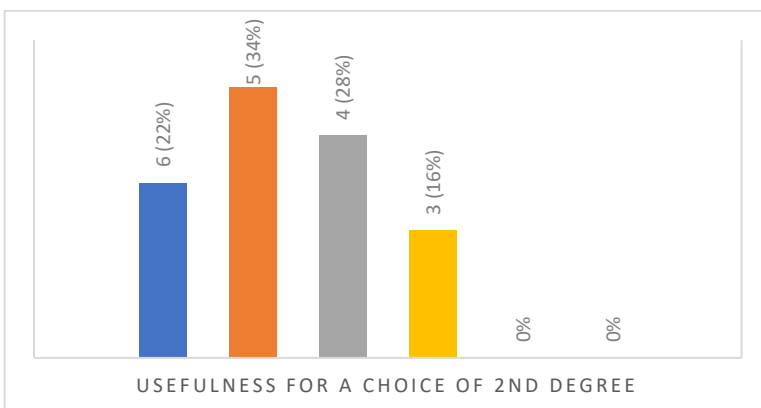
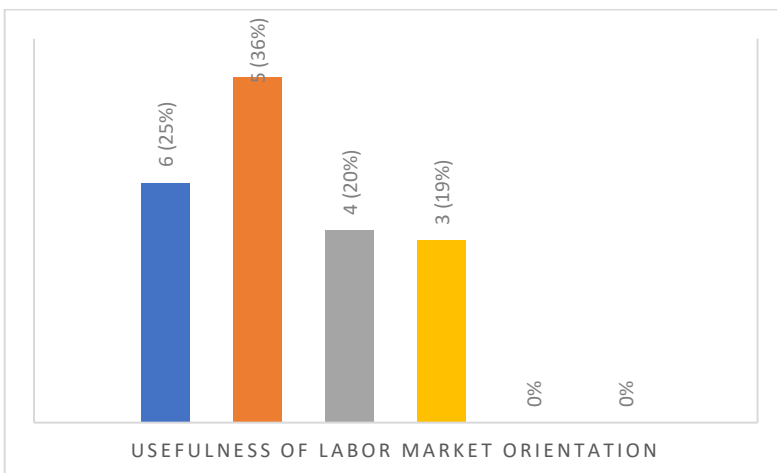
### *The Quality of Information*





After restructuring the information, layout, and adjusting the system, as well as upgrading the server, the level of satisfaction at level 5 has improved by more than 5% compared to phase 1.

### *The Usefulness of Information*



The charts show an increase in the percentage of students satisfied with the information. The rate of six (6) for market orientation increases up 3% in comparison to Phase 1. The scale of rating one (1) and two (2) for the information serving students' choice to pursue the second degree remained the same

of 0% which means zero percent of responses gave negative opinion on the information.

The table below summarizes the results of the comments in Phase 2:

<b>Question</b>	<b>What is the advantage of the platform?</b>	<b>62</b>
Answer	It provides useful information on the labour market	62
<b>Question</b>	<b>What is the limitation of the platform?</b>	<b>42</b>
Answer	It is difficult to use	8
Answer	Low loading of the site	7
Answer	Quality of information	3
Answer	No many students known platform	3
Answer	None	21
<b>Question</b>	<b>Any comment on how to improve the quality</b>	<b>42</b>
Answer	none, it is fine	38
Answer	To improve the graphic design	3
Answer	To improve the content	1

Through the evaluation table in phase 2, it was found that the rate of understanding information and positive reviews about the platform has increased. Feedback on the limitation of the quality of information and complaints on low loading of the site dramatically reduced to 7.15% and 16.6% from 38.5% and 31% respectively. These changes in the response show that the modified, well updated and friendly designed platform based on constructive comments from the responders met the satisfaction of these trial users in phase 2.

## Conclusion

- ✚ The target audience find the platform is useful in providing the information on the ICT labour market
- ✚ The usability and graphics of the platform are quite positively assessed
- ✚ Some improvements could be made related to
  - searching the information on the platform
  - organising the information
  - bandwidth for the platform
- ✚ Extending the platform to cover other industries is recommended