Tracer Study of
MASTER PROGRAMME IN COMPUTER SCIENCE

POSTGRADUATE PROGRAMME

Universitas Pendidikan Ganesha
2021

SURVEY REPORT (TRACER STUDY)
MASTER PROGRAMME IN COMPUTER SCIENCE ALUMNI

MASTER PROGRAMME IN COMPUTER SCIENCE

POSTGRADUATE

UNIVERSITAS PENDIDIKAN GANESHA

Approval Sheet

Survey Report of Master Programme in Computer Science Alumni Undiksha

2021

Singaraja, November 1st, 2021

Approved by	Arranged by
Study Programme Coordinator of Master Programme in Computer Science	Study Programme Secretary of Master Programme in Computer Science
Dr. Gede Indrawan, ST., MT **NIP. 197601022003121001**	**Dr. I Gede Aris Gunadi, S.Si., M.Kom** **NIP. 197703182008121004**

Preface

Tracer Study is one of the methods used by several universities in Indonesia, especially to obtain feedback from alumni. The feedback obtained from alumni is needed by universities for evaluation in the context of developing the quality and education system. This feedback can also be useful for universities to map the world of business and industry so that the gap between the competencies obtained by alumni during college and the demands of the world of work can be minimized.

For the Master Programme in Computer Science Undiksha, tracer studies are very useful to know the real condition of alumni. There are several things that the study programme must know about the condition of its alumni, and responses from users. These include the ease with which alumni are absorbed in the field of work, the quality of the economy/income, the length of waiting time, the quality of work implementation in the workplace, and others. All of these things will be used as feedback for the Master Programme in Computer Science.

Finally, we would like to thank all parties for your help and participation so that the survey of alumni of the Master Programme in Computer Science can be carried out properly.

Master Programme in Computer Science -Postgraduate Undiksha

CHAPTER I

INTRODUCTION

I.1 Background

The success of university graduates is certainly a success measurement of the University in educating students to form characters and skills that can contribute to the nation. Thus, the University certainly has the responsibility to facilitate and bridge university graduates to enter the world of work. To measure the extent to which the University has succeeded in forming graduates who can be useful to the community, it is necessary to hold a Tracer Study aimed at stakeholders, namely graduates or alumni every year. Things that will be discussed in the Tracer Study include the learning process carried out by graduates during their study, whether the knowledge possessed is useful and in accordance with the needs of the community, and whether knowledge is needed outside the material from universities to support the performance of graduates in carrying out their work. In addition to these things, with the Tracer Study, the University can also find out the success of graduates in their careers, both in terms of waiting time, type of company, job status, position and income. The results of this Tracer Study will provide direct benefits for the Master Programme in Computer Science as evaluation & monitoring material. The Tracer Study also can serve as feedback for study programmes and also universities to evaluate and improve the curriculum, so that graduates can accommodate community needs/guidance. In addition, the results of the tracer study carried out is also very useful for the Master Programme in Computer Science Undiksha as a support for accreditation.

I.2 Purpose

The purpose in conducting the Tracer Study of Master Programme in Computer Science are as following:

1. Knowing the educational outcomes produced by the Master Programme in Computer Science.
2. Knowing the contribution of our universities to competencies exists in the world of work.
3. Monitoring the adaptability of college graduates when they enter the world of work.
4. As an evaluation material for universities to improve quality in the future

I.3 Survey Target

In this Tracer Study, the target population is all alumni of the Undiksha Master Programme in Computer Science from 2016, 2017, 2018, 2019. The data collection method used in this survey is a survey method with a questionnaire as a tool. The questions in the distributed questionnaire consisted of open and closed questions. This questionnaire has been prepared and distributed either through the online google form.

CHAPTER II
SURVEY RESULT

2.1 Survey Participants

The survey participants are in total of 47 respondens with a composition with the composition of the data filling presented as follows :
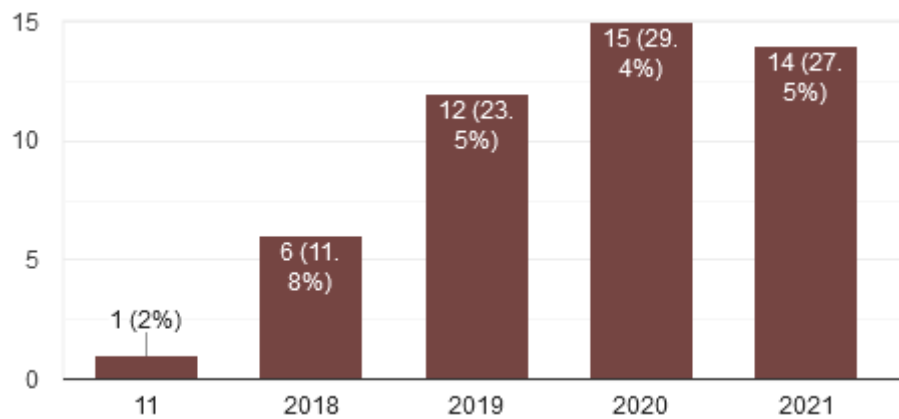

Figure 1. Survey Participants Data

So far, there have been 69 alumni of Master Programme in Computer Science starting in 2017 as many as 69 people.

2.2 Alumni Job Status Conditions

Regarding the status of students after completing their studies at the Undiksha Master Programme in Computer Science stated as follows:
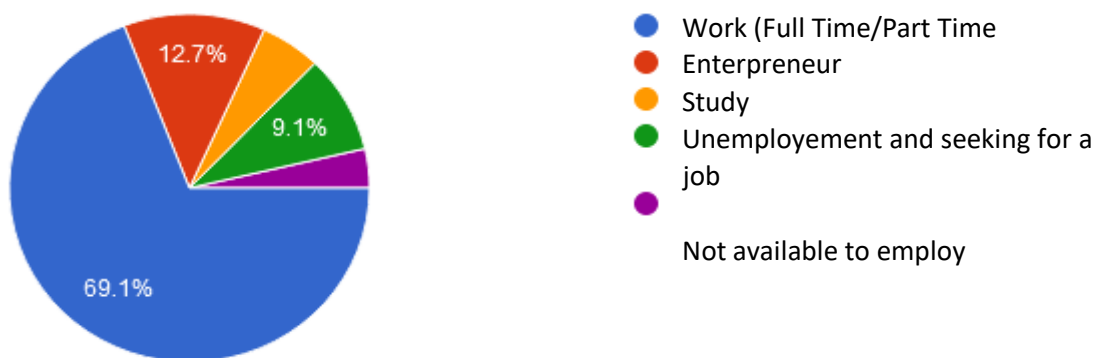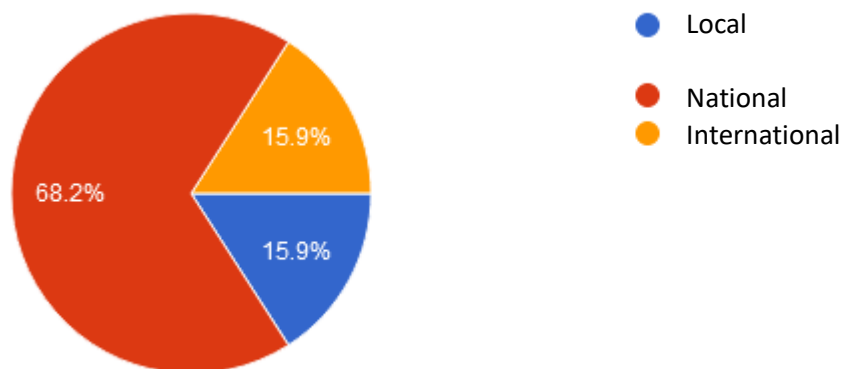

Figure 2 . Job Status of Master Programme of Computer Science Alumni

From these data, it can be seen that predominantly the students of Master Programme in Computer Science are working properly, the total who work in government, private and self-employed institutions are 91%. The remaining 9% are trying to find a job.
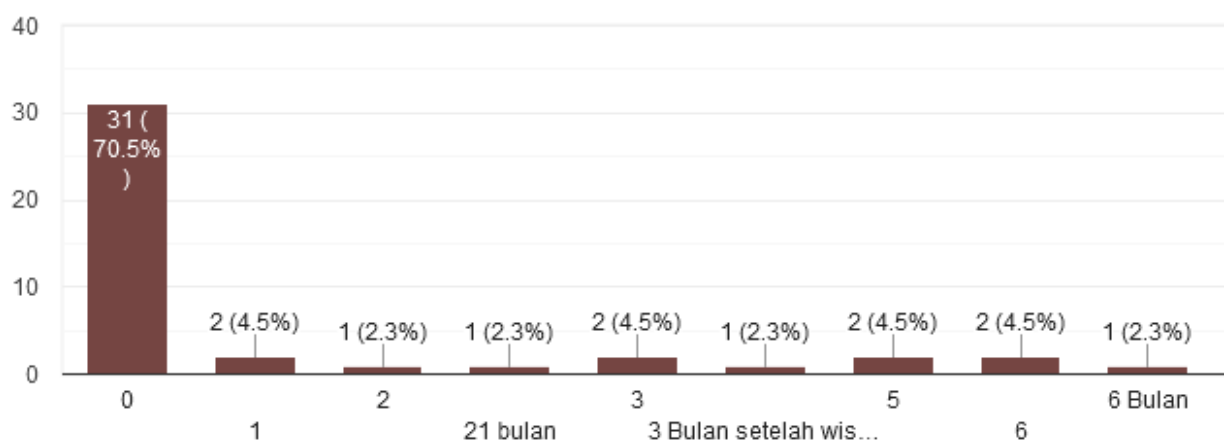
2.3 Workplace Status

The distribution of alumni's workplaces, this condition is stated as the status of workplaces for international, national, and local companies/agencies. Data related to the distribution of the level of the institution where the alumni work is stated as follows:

Figure 3 . Status of Alumni Workplaces of Master Programme in Computer Science

2.4 Waiting Period to Get a Job

The Alumni of Master Programme in Computer Science waiting period to get a job stated as follows:
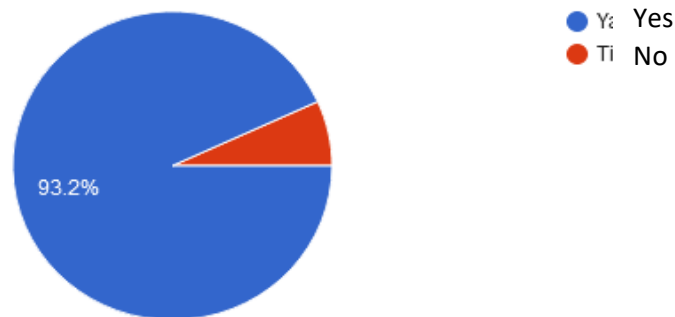

Figure 4 . Waiting Period for Alumni of Master Programme in Computer Science

Based on this data, 70.5% of students have worked before graduating. Another thing is that the longest waiting period is 21 months, as many as 2.3% of respondents stated that.

2.5 Suitability of the Field of Study with Work

The most important thing for the study programme is to see the suitability of the work that students are doing with the field of computer science. This will show the extent to which the usefulness of the knowledge gained in the study programme in the field of study that students are involved in. The survey data shows as following:

Figure 5. The Suitability of the Field of Work for the Alumni of Master Programme in Computer Science

According to this data, it can be inferred that predominantly more than 93% of alumni work in a field that is suitable with the computer science field.
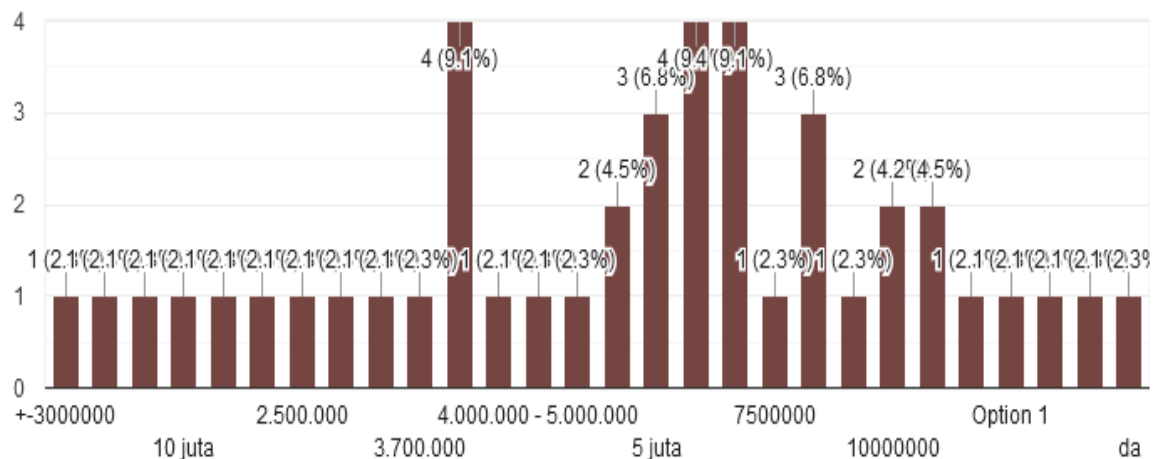
2.6 Alumni Income

Alumni income is one of the determined indicators of the success of a study programme, which can produce qualified alumni. The survey data showed as follows:

Berapa Rata Rata Pendapatan anda per Bulan

44 responses

Figure 5. Incomes of Master Programme in Computer Science Alumni

Based on this data, the income of Undiksha's Master Programme in Computer Science alumni is in the range of 4 -9 million rupiah per month, with an average of 5.55 million. The standard from the Ministry of Education and Culture of alumni salary eligibility is 1.2 regional UMR or *Upah Minimum Regional* (Regional Minimum Wage). This condition shows that it is far above the standard. If the highest UMR is taken in the province of 2.7 million, the average income of Master Programme in Computer Science alumni is 2.07 UMR. This shows that the level of alumni's economic life is very good.

2.7 Alumni Who Continue Their Studies

 Data survei menunjukan terdapat 9 % dari responden alumni yang melanjutkan studi ke S3 (doktoral) . Data survei menunjukan hasil sebagai berikut:
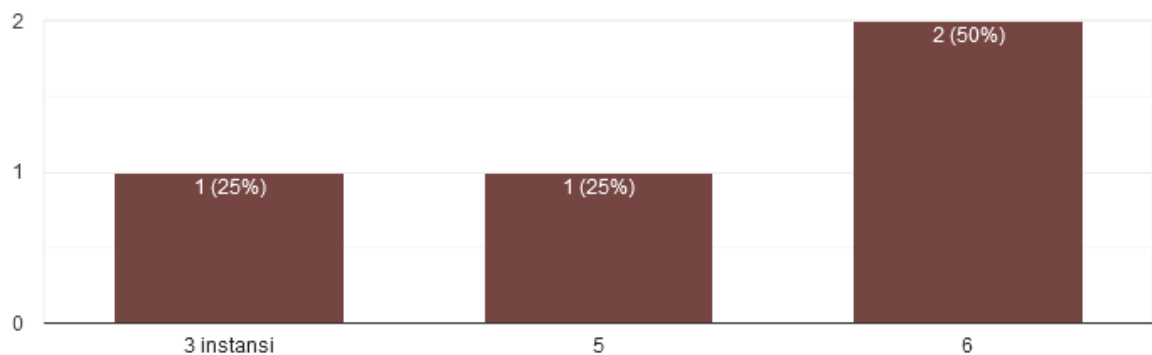
Tempat studi (100%) masih diinternal Undiksha , S3 Ilmu pendidikan . Alumni yang melanjutkan studi dengan biaya mandiri 66.7 % , dan beasiswa 33.3% .

2.8 Alumni Conditions that are Still Not Working/Looking for Work

There are 9% of alumni who are still looking for a job. The first thing to be surveyed is their efforts in applying for a work. The data show as follows:
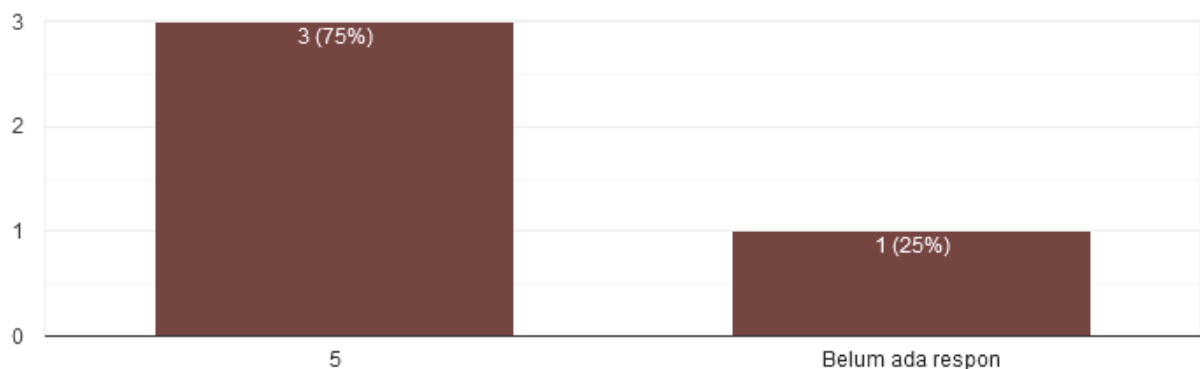
Sejauh ini sudah berapa instansi/ perusahaan yang anda lamar

4 responses

Figure 7. Number of Applications for Alumni Agencies

The number of agencies that respond to the application is intended for the following data:

Figure 8. Agency Responses to Alumni Applications

Furthermore, the reasons they have not got a job so far are 50% stating that there is no match regarding salary issues, and 25% stating that they are not suitable with the job, and 25% because of the Covid-19 condition.

2.9 Alumni Opinions about Learning Experience in Master Programme in Computer Science
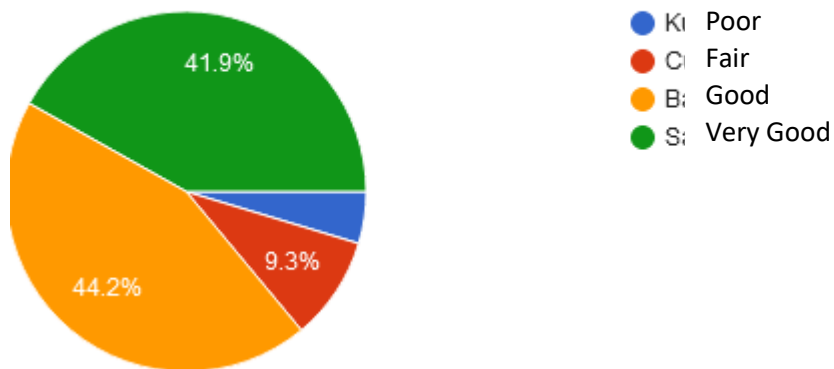

Figure 9. Alumni Responses about Learning Quality

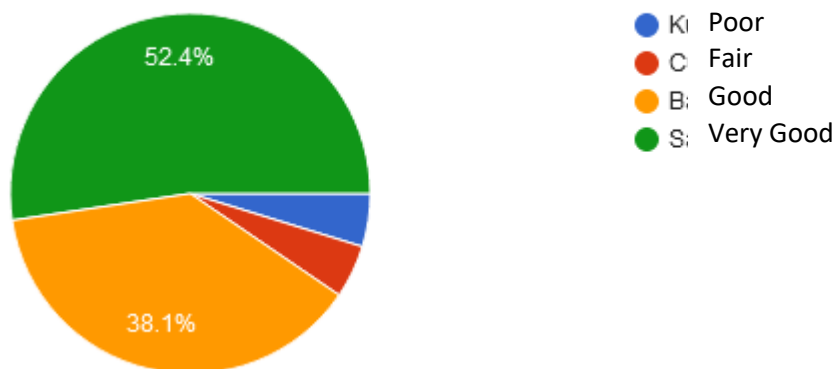## 2.10 Alumni Opinion of Thesis Research Guidance

Figure 10. Alumni Responses about Thesis Research Guidance

2.11 Alumni Suggestion regarding the Improvement of Study Programme

Some suggestions that are given for the study programme improvement are as following:

1. More directing students to focus on a specific field.
2. More emphasising on soft skill development
3. It is necessary to offer Thesis Topics provided by prospective supervisors so that the weight of the Thesis can be more in-depth.
4. Give more Foreign language knowledge.

5. There should be some courses similar to PKL or *Praktik Kerja Lapangan* (Field Work Practice) and enable students to go directly to the community or agency and see how the situation is with technological developments, so that they can provide ideas and innovations to improve them.
6. The knowledge that needs to be given to Master Programme in Computer Science graduates is about information system project management
7. It is necessary to provide a kind of integrated research facility that feels like it is a centric laboratory. So that students are able to produce ground breaking works.

CHAPTER III
RECOMMENDATION FOR STUDY PROGRAMME

In general, the condition of the alumni as well as the responses from users indicate that their condition is very good from all sides, as described in Chapter II. However, there are several inputs that need to be considered and followed up by the study programme. The recommendations are:

1. The mechanism of the field of interest between Information Systems and Computer Science should be more focused on research topics. So that students can more easily initiate research.

2. It is necessary to provide knowledge outside the field of science which is the development of soft skills.

3. It is necessary to offer Thesis Topics provided by prospective supervisors so that the weight of the Thesis can be more in-depth.

4. Providing foreign language knowledge.

5. There should be some courses similar to PKL or *Praktik Kerja Lapangan* (Field Work Practice) and enable students to go directly to the community or agency and see how the situation is with technological developments, so that they can provide ideas and innovations to improve them.

6. The knowledge that needs to be given to Master Programme in Computer Science graduates is about information system project management

7. It is necessary to provide a kind of integrated research facility with an integrated laboratory. So that students are able to produce quality work.