Competencies of Widyatama University Graduates Based on the results of the Tracer Study
(Case study: tracer study results 2019)

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Abstract: Alumni are the output of the quality of a college. But the quality of the alumni depends on the quality of the college. The task of higher education is not only to prepare qualified graduates but to maintain good relations between graduates is equally important. Widyatama University, which was founded in 1976, is certainly very aware of this considering the large number of graduates. With the increase in the number of graduates from year to year, it is necessary to develop new methods and media in developing alumni tracing. This study aims to find university graduates and evaluate the results of the 2017 graduate tracer study. The number of respondents who filled out the questionnaire was 384 out of 949 graduates in 2017. From the results of the overall analysis, the horizontal alignment was 79.5%, which means that the competencies obtained during their study at Widyatama is according to need. in the field of work, and the results of research show that there are 78% of graduates who work in accordance with their education level.

Key Words : Competencies, Tracer Study

1. Introduction

Alumni have more independent ties with the institution where they study, so alumni have a more objective perception and perspective in evaluating the learning program they have taken (Khalil, 1990). Therefore input or opinion from alumni is very valuable information for the development of an institution. Tracer study is a study of graduates from higher education providers (Schomburg, 2003; Erol & Velioglu, 2019). Other terms that are also often used are "Graduate Surveys", "Respondent Researches", and "Follow-up Study". Tracer studies can provide information for the benefit of evaluating higher education outcomes, one of which is about the competencies possessed by graduates. In addition, the tracer study activity is also useful for knowing: The

    a.   track record of alumni after graduating from college.

    b.   *outcomes* Educationalin terms of changing the atmosphere from the world of education to the world of work, current work situations and positions and the implementation of educational competencies in the world of work.

    c.   *The output of* education is self-evaluation of competency abilities.

    d.   The educational process in terms of evaluating the learning process and the contribution of higher education to the achievement of the acquisition of graduate competencies.

    e.   *input* Educationalby digging deeper into the sociobiographical information of graduates.

We can also know the competencies possessed by graduates from the results of the tracer study so that it becomes a measuring tool for universities whether the learning process provided during college students can provide the competencies needed in the world of work or not so that this tracer study activity is very important in determining the competencies needed in the world of work.

2. Literature Review

Alumni

According to Almanfaluthi (2009), alumni are people who have attended or graduated from a school or college. Alumni According to the Big Indonesian Dictionary, alumni are people who have attended or graduated from a school or college. Alumni for higher education bring benefits both academically and pragmatically, including providing input in curriculum changes based on relevance to the needs of the world of work and market needs, so that alumni tracing activities are very important with the aim of knowing how the quality of graduates is, getting input for development and improvement. curriculum, and evaluation for the learning process.

Tracer Study

graduates searches*(TracerStudy)*is an important part of the activity of an educational institution (Wuradji and Muhyadi, 2010). Theactivity *tracer study*allows an educational institution to track the condition of graduates who

have been produced.

Competency

According to McClelland defines competency as a fundamental characteristic that a person has that directly affects, or can describe, excellent performance. In other words, competence is what outstanding performers do more often in more situations with better results, than what average performers do. (Zainal, Veithzal Rivai, et al. 2015: 230)

Characteristics of Competence According to Spencer and Spencer in Wibowo (2016: 273) competence is formed from five characteristics, namely:

1. Motive Something that is consistently thought of or desired by people who cause action. Motive drives, directs, and chooses behavior towards a specific action or goal.
2. Traits Physical characteristics and consistent responses to situations or information.
3. Self-Concept A person's attitude, values, or self-image. Self-confidence is people's belief that they can be effective in almost any situation is part of people's self-concept.
4. Knowledge Information that people have in a specific area. Knowledge is a complex competency.
5. Skills The ability to do certain physical or mental tasks. Mental competencies or cognitive skills including analytical and conceptual thinking.

3. Research Methods Research

Design The research

design carried out was in the form of a survey. This survey is used to obtain an overview of the characteristics of the population of graduates in 2017 sensually, namely all graduates in 2017. Because this is a development process for tracking alumni, application software development will be carried out to make it easier for alumni to provide data.

Objects The

objects in this study were graduates in 2017 with a total of 954 respondents. The number of graduates taken was sensal, namely that all graduates in 2017 were not a sample, and the implementation of the tracer study was carried out 2 years after they graduated, namely in 2019 theTracing

TrackingTechnique for

graduates at Widyatama University used data collection methods in the form of face-to-face interviews, and by telephone.

Instrument

Theinstrument *tracer study* used the INDOTRACE standard questionnaire which was fully adapted and modified according to the needs of the university. The Indotrace questionnaire was adapted optimally in order to obtain optimal information in accordance with DIKTI guidelines.

4. Results and Discussion of

Profile of Respondents

The population targeted for graduates in 2017 was 949 respondents. But what we were able to track down were 384 respondents or 40.46% of the target. The number of respondents can be seen in table

1

Recapitulation of Respondents

NO	STUDY PROGRAM	1.Table	TARGET RESPONDENT	TRACKED	NOT TRACKED
1.	Accounting	S1	256	156	100
2.	Management	S1	432	154	278
3.	Accounting	D3	21	11	10
4.	Management	D3	43	12	31
5.	Industrial Engineering	S1	59	12	47

6.	Informatics Engineering	S1	29	21	8
7.	English Language	S1	29	7	22
8.	Japanese Language	D3	0	0	0
9.	Graphic Design	D4	11	4	7
10.	Multimedia	D3	10	3	7
11.	System Information	S1	59	4	55
	TOTAL		**949**	**384**	**565**

Source: Processed data

Graph 1
Horizontal Alignment (University)
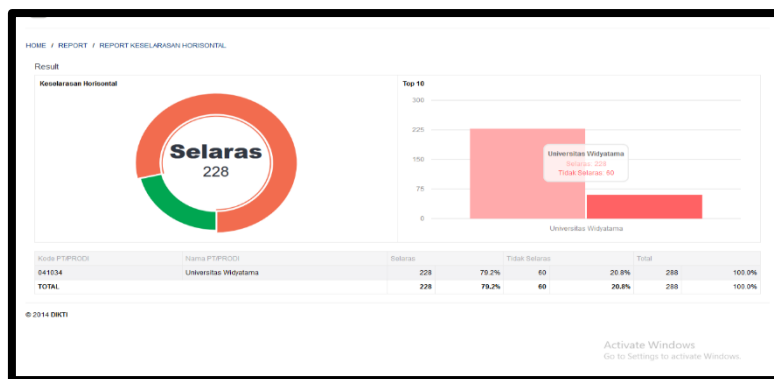
Source: Data processed

Horizontal alignment is the alignment between the education of the alumni and the field of work they take after graduation. Overall (university) this horizontal alignment is 79.2%.

Graph 2
Vertical Alignment (University)
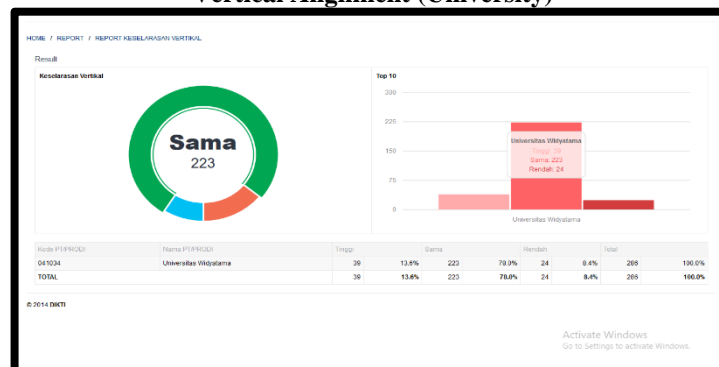
Source: Data processed.

Vertical alignment is the alignment of graduates from their education with the level of work being taken. Overall (university) for 13.6% are graduates who work in fields of work that should be done by those with higher education, 78% are appropriate and 8.4% of graduates who work in fields of work that should be done by those with less education.

Table 2
Competencies Regarding "General Knowledge" (According to Alumni)

Major	Level	Low	Moderate	High
Japanese Language	D3	0.0%	0.0%	100%
English	S1	0.0%	33.3%	66.7%
Accounting	D3	0.0%	36.4%	63.6%
Management	S1	0.0%	31.3%	68.7 %
Graphic Design	D4	0.0%	60.0%	40.0%
Accounting	S1	0.0%	31.6%	68.4%
Informatics Engineering	S1	0.0%	45.0%	55.0%
Industrial Engineering	S1	0.0%	33.3%	66.7%
Information Systems	S1	0.0%	40.0%	60.0%
Multimedia	D3	0.0%	66.7 %	33.3%
Management	D3	0.0%	33.3%	66.7%
	TOTAL	**0.0%**	**41.4%**	**58.9%**

Source: Processed data The

table above shows the ability of graduates (alumni) according to alumni opinions regarding general knowledge.

Table 3
Competence Regarding the "Skills Center" (According Alumni)

STUDY PROGRAM	LEVEL	LOW	MEDIUM	HIGH
Japanese	D3	0.0%	0.0%	0.0%
Multimedia	D3	0.0%	66.7%	33.3%
Graphic Design	D4	0.0%	33.3%	66.7%
Industrial Engineering	S1	0.0%	33.3 %	66.7%
English	S1	0.0%	33.3%	66.7%
Informatics Engineering	S1	0.0%	35.0%	65.0%
Management	D3	0.0%	75.0%	25.0%
Management	S1	1.4%	23.8%	74.8%
Accounting	D3	0.0%	45.5%	54.5%
Accounting	S1	0.0%	28.3 %	71.7%
Information System	S1	0.0%	40.0%	60.0%
	TOTAL	**0.1%**	**41.4%**	**58.4%**

Source: Processed data The

table above shows the ability of graduates (alumni) according to alumni opinions regarding internet skills.

Table 4
Competence Regarding "Computer Skills" (According Alumni)

STUDY PROGRAM	LEVEL	LOW	MEDIUM	HIGH
Japanese	D3	0.0%	0.0%	0.0%
Multimedia	D3	0.0%	33.3%	66.7%
Graphic Design	D4	0.0%	33.3%	66.7%
Accounting	D3	0.0%	27.3%	72.7%
Informatics Engineering	S1	0.0%	25.0%	75.0%
Management	D3	0.0%	41.7%	58.3%
Management	S1	0.0%	24.5%	75.5%
Industrial Engineering	S1	0.0%	33.3%	66.7%
Accounting	S1	0.0%	20.4%	79.6%
English	S1	0.0%	33.3 %	66.7%
Information System	S1	0.0%	20.0%	80.0%

TOTAL		**0.0%**	**29.2%**	**70.8%**

Source: Processed data The
table above shows the ability of graduates (alumni) according to alumni opinions regarding computer skills.

Table 5
Competence Regarding "Critical Thinking" (According Alumni)

STUDY PROGRAM	LEVEL	LOW	MEDIUM	HIGH
Japanese	D3	0.0%	0.0%	0.0%
Graphic Design	D4	0.0%	50.0%	50.0%
Management	D3	0.0%	50.0%	50.0%
Management	S1	1.4%	25.9%	72.8%
Multimedia	D3	0.0%	66.7%	33.3%
Informatics Engineering	S1	0.0%	45.0%	55.0%
Accounting	D3	0.0%	27.3%	72.7%
Accounting	S1	0.0%	23.0%	77.0%
Industrial Engineering	S1	0.0%	33.3%	66.7%
English	S1	0.0%	100 %	0.0%
Information System	S1	0.0%	40.0%	60.0%
TOTAL		**0.1%**	**46.1%**	**53.7%**

Source: Processed data The
table above shows the ability of graduates (alumni) according to alumni opinions regarding critical thinking.

Table 6
Competence Regarding the "Skills Research" (According Alumni)

STUDY PROGRAM	LEVEL	LOW	MEDIUM	HIGH
Graphic Design	D4	0.0%	33.3%	66.7%
Accounting	D3	9.1%	36.4%	54.5%
Management	S1	0.7%	36.7%	62.6%
Multimedia	D3	0.0%	66.7%	33.3 %
Informatics Engineering	S1	0.0%	60.0%	40.0%
Accounting	S1	0.0%	41.4%	58.6%
Industrial Engineering	S1	0.0%	33.3%	66.7%
English	S1	0.0%	66.7%	33.3%
Information Systems	S1	0.0%	40.0%	60.0%
Management	D3	0.0%	66.7 %	33.3%
Japanese	D3	0.0%	0.0%	0.0%
TOTAL		**1.0%**	**48.1%**	**50.9%**

Source: Processed data The
table above shows the ability of graduates (alumni) according to alumni opinions regarding research skills.

Table 7
Competence Regarding "Learning Ability" (According Alumni)

STUDY PROGRAM	LEVEL	LOW	MEDIUM	HIGH
Multimedia	D3	0.0%	0.0%	100%
English	S1	0.0%	0.0%	100%
Technical Information	S1	5.0%	35.0%	60.0%
Accounting	D3	0.0%	18.2%	81.8%
Graphic Design	D4	0.0%	50.0%	50.0%
Management	S1	0.0%	23.8%	76.2%

Accounting	S1	0.0%	21.1%	78.9%
Industrial Engineering	S1	0.0%	33.3%	66.7%
Management	D3	0.0%	50.0%	50.0%
Japanese	D3	0.0%	0.0 %	0.0%
Information System	S1	0.0%	40.0%	60.0%
	TOTAL	**0.5%**	**27.1%**	**72.4%**

Source: Processed data The
table above shows the ability of graduates (alumni) according to alumni opinions regarding learning abilities.

Table 8
Competence Regarding "Communication Skills" (According Alumni)

STUDY PROGRAM	LEVEL	LOW	MEDIUM	HIGH
Japanese	D3	0.0%	0.0%	100%
Management	S1	0.0%	19.0%	81.0%
English	S1	0.0%	66.7%	33.3%
Accounting	D3	0.0%	27.3%	72.7%
Management	D3	0.0%	50.0%	50.0%
Informatics Engineering	S1	5.0%	30.0%	65.0%
Information Systems	S1	0.0%	20.0%	80.0%
Graphic Design	D4	0.0%	16.7%	83.3%
Industrial Engineering	S1	0.0%	25.0%	75.0%
Accounting	S1	0.0%	15.1%	84.9%
Multimedia	D3	0.0%	33.3%	66.7%
	TOTAL	**0.5%**	**30.3%**	**69.2%**

Source: Processed data The
table above shows the ability of graduates (alumni) according to alumni opinions regarding communication skills.

Table 9
Competence Regarding the "Leadership" (According Alumni)

STUDY PROGRAM	LEVEL	LOW	MEDIUM	HIGH
Industrial Engineering	S1	0.0%	33.3%	66.7%
Graphic Design	D4	0.0%	50.0%	50.0%
Accounting	D3	0.0%	0.0%	100%
Management	S1	0.0%	21.8%	78.2 %
Informatics Engineering	S1	0.0%	35.0%	65.0%
Accounting	S1	0.0%	19.7%	80.3%
Management	D3	0.0%	25.0%	75.0%
Multimedia	D3	0.0%	66.7%	33.3%
Information Systems	S1	0.0%	0.0%	100%
English	S1	0.0%	33.3%	66.7%
Japanese Language	D3	0.0%	0.0%	0.0%
	TOTAL	**0.0%**	**28.5%**	**71.5%**

Source: Processed data The
table above shows the ability of graduates (alumni) according to alumni opinions about leadership.

Table 10
Competence Regarding the "Initiative" (According Alumni)

STUDY PROGRAM	LEVEL	LOW	MEDIUM	HIGH
Japanese	D3	0.0%	0.0%	0.0%
Industrial Engineering	S1	0.0%	16.7%	83.3%
Technical Information	S1	0.0%	50.0%	50.0%
Accounting	D3	0.0%	27.3%	72.7%
Graphic Design	D4	0.0%	50.0%	50.0%
Management	D3	0.0%	33.3%	66.7%
Management	S1	0.0%	23.8%	76.2%
Accounting	S1	0.0%	18.4%	81.6%
Multimedia	D3	0.0%	100%	0.0%
Information System	S1	0.0%	20.0%	80.0%
English	S1	0.0%	66.7%	33.3%
	TOTAL	**0.0%**	**40.6%**	**59.4%**

Source: Processed data The

table above shows the ability of graduates (alumni) according to alumni opinions about the initiative.

Table 11
Competence Regarding "Proficiency English" (According Alumni)

STUDY PROGRAM	LEVEL	LOW	MEDIUM	HIGH
Graphic Design	D4	0.0%	50.0%	50.0%
Accounting	S1	0.0%	37.1%	62.9%
Accounting	D3	0.0%	36.4%	63.6%
English	S1	0.0%	33.3 %	66.7%
Management	S1	0.7%	49.7%	49.7%
Informatics Engineering	S1	0.0%	45.0%	55.0%
Multimedia	D3	0.0%	66.7%	33.3%
Information Systems	S1	0.0%	60.0%	40.0%
Industrial Engineering	S1	0.0%	66.7%	33.3%
Management	D3	0.0%	66.7%	33.3%
Japanese	D3	0.0%	0.0%	0.0%
	TOTAL	**0.1%**	**51.1%**	**48.8%**

Source: Processed data The

table above shows the ability of graduates (alumni) according to the alumni's opinion regarding their English proficiency.

Table 12
Competence Regarding the "Integrity" (According Alumni)

STUDY PROGRAM	LEVEL	LOW	MEDIUM	HIGH
Japanese	D3	0.0%	0.0%	0.0%
Industrial Engineering	S1	0.0%	58.3%	41.7%
Technical Information	S1	0.0%	31.6%	68.4%
Graphic Design	D4	0.0%	33.3 %	66.7%
English	S1	0.0%	0.0%	100%
Accounting	D3	0.0%	36.4%	63.6%
Management	S1	0.0%	25.2%	74.8%
Accounting	S1	0.7%	13.8%	85.5%
Multimedia	D3	0.0%	33.3%	66.7%
Management	D3	0.0%	33.3%	66.7%

Information System	S1	0.0%	20.0%	80.0%
TOTAL		**0.1%**	**28.5%**	**71.4%**

Source: Data processed The
table above shows the ability of graduates (alumni) according to alumni opinions regarding integrity.

Table 13
Competence Regarding the "Loyalty" (According Alumni)

STUDY PROGRAM	LEVEL	LOW	MEDIUM	HIGH
Japanese	D3	0.0%	0.0%	0.0%
Industrial Engineering	S1	0.0%	33.3%	66.7%
Graphic Design	D4	0.0%	33.3%	66.7%
Multimedia	D3	0.0%	33.3%	66.7%
Management	S1	0.0%	25.3%	74.7%
Informatics Engineering	S1	0.0%	40.0%	60.0%
Accounting	S1	0.0%	20.4%	79.6%
English	S1	0.0%	0.0%	100%
Management	D3	0.0%	33.3%	66.7%
Accounting	D3	0.0%	18.2%	81.8%
Information System	S1	0.0%	40.0%	60.0%
TOTAL		**0.0%**	**27.7%**	**72.3%**

Source: Processed data The
table above shows the ability of graduates (alumni) according to alumni opinions regarding loyalty.

Table 14
Competence Regarding the "Adaptability" (According Alumni)

STUDY PROGRAM	LEVEL	LOW	MEDIUM	HIGH
Japanese	D3	0.0%	0.0%	0.0%
Multimedia	D3	0.0%	33.3%	66.7%
Accounting	D3	0.0%	0.0%	100%
Industrial Engineering	S1	8.3%	16.7%	75.0%
Informatics Engineering	S1	0.0%	40.0%	60.0%
English	S1	0.0%	33.3%	66.7%
Management	S1	0.0%	20.4%	79.6%
Graphic Design	D4	0.0%	33.3%	66.7%
Management	D3	0.0%	41.7%	58.3%
Accounting	S1	0.0%	16.4 %	83.6%
Information System	S1	0.0%	20.0%	80.0%
TOTAL		**0.8%**	**25.5%**	**73.6%**

Source: Processed data The
table above shows the ability of graduates (alumni) according to alumni opinions regarding adaptability.

Table 15
Competence Regarding "The ability to negotiate" (According Alumni)

STUDY PROGRAM	LEVEL	LOW	MEDIUM	HIGH
Japanese	D3	0.0%	0.0%	0.0%
Multimedia	D3	0.0%	66.7%	33.3%
Management	S1	0.0%	27.9%	72.1%
Accounting	D3	0.0%	18.2%	81.8 %

Informatics Engineering	S1	0.0%	55.0%	45.0%
Accounting	S1	0.0%	34.4%	65.6%
Industrial Engineering	S1	0.0%	33.3%	66.7%
English	S1	0.0%	33.3%	66.7%
Graphic Design	D4	0.0%	50.0%	50.0%
Information Systems	S1	20.0%	40.0%	40.0%
Management	D3	8.3%	58.3%	33.3%
	TOTAL	**2.8%**	**41.7%**	**55.4%**

Source: Processed data The

table above shows the ability of graduates (alumni) according to alumni opinion regarding negotiation skills.

Table 16
Competence Regarding the "Capability Analysis" (According Alumni)

STUDY PROGRAM	LEVEL	LOW	MEDIUM	HIGH
Multimedia	D3	0.0%	66.7%	33.3%
Technical Information	S1	0.0%	30.0%	70.0%
Accounting	D3	0.0%	36.4%	63.6%
Graphic Design	D4	0.0%	33.3%	66.7%
Management	S1	0.0%	28.6%	71.4%
Accounting	S1	0.8%	23.0%	77.0%
Industrial Engineering	S1	0.0%	33.3%	66.7%
English	S1	0.0%	0.0%	100%
Management	D3	0.0%	58.3%	41.7%
Information System	S1	0.0%	20.0 %	80.0%
Japanese Language	D3	0.0%	0.0%	0.0%
	TOTAL	**0.0%**	**33.0%**	**67.0%**

Source: Processed data The

table above shows the ability of graduates (alumni) according to alumni opinion regarding the ability to analyze.

5. Conclusions and Suggestions

From this study it can be concluded as follows:
1.   The results of the study show a horizontal alignment of 79.2%, which means that the alignment between education and the work field of the alumni is still appropriate.
2.   Vertical alignment is the alignment of graduates from the education they are taking with the level of work being undertaken. Overall (university) for 78% of graduates working in accordance with their field of work, 13.6% are graduates who work in fields of work that should be done by higher education, and 8.4% of graduates who work in fields of work that should be done by less educated .
3.   Alumni competencies that are considered good by alumni are: computer skills, learning abilities, communication skills, leadership, integrity, loyalty, adaptability, and analytical skills
4.   Competencies that must be improved from the research results are: general knowledge, internet skills, critical thinking, skills research, initiatives, English language skills, the ability to negotiate

Suggestion:
1.   the curriculum in each course is expected to be updated in order to improve the quality of teaching and learning and is expected to improve the competence of graduates in accordance with market needs
2.   Based on the results of the study are expected to competencies they It must be increased that students are given skills either in the form of workshops or public lectures that can improve the competencies needed

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