# Optimization of Human Capital in Improving Competitive Advantage of Higher Education through Institution's Performance: A Case Study of Widyatama University

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Abstract---Human resources are a major factor in organizations or institutions, both profit-oriented and nonprofit. One organization that is not profit oriented is Higher Education. To become a university that is able to compete with other universities, the organization must pay attention to the Human Capital (HC) owned by the Higher Education. Regarding the importance of Human Capital which is part of Intellectual Capital (IC), it is necessary to conduct research that aims to find out how the conditions of human capital factors at Widyatama University are based on the criteria of BAN-PT. The research method used is descriptive and comparative method. The data used are secondary data, because this research is only limited to qualitative analysis. The Human Capital dimension measured is the number of full-time professors, number and type of training, number of permanent lecturers, number of non-permanent lecturers (guest lecturers, extraordinary lecturers, expert lecturers), lecturer achievements (awards, grants, program funding), qualifications (total Position) academic lecturer, academic lecturer competency (number of lecturers, S1, S2, S3) educations, number of non-academic staff (librarians, laboratory staff, technicians, etc.). The results of the analysis of the data obtained indicate that the overall condition of Human Capital owned by Widyatama University is good, because it is in accordance with the standards of Ban-PT.

Keywords---Human capital, IC, Competitive advantage

# I. INTRODUCTION

Human capital is one of the main components of intellectual capital (intangible assets) owned by an organization or company. Especially intellectual capital higher education organizations are the main assets (Leitner, 2002), because Universities are institutions that produce human resources for the benefit of organizations, communities and the state. For this reason, higher education institutions must be able to produce high quality and competitive resources. According to Ihyaul Ulum (2012), explaining that there are 8 dimensions for intellectual capital

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measurement held by higher education institutions, there are the number of full-time professors, number and types of training, number of permanent lecturers, number of non-permanent lecturers (guest lecturers, extraordinary lecturers, expert lecturers), lecturer achievements (awards, grants, program funding), qualifications (number of positions) academic lecturers, academic lecturer competencies (number of lecturers, S1, S2, S3) educations, number of non-academic staff (librarians, laboratory staff, technicians, etc.).

Widyatama University is one of the universities that has the aim of producing superior human resources so that they are able to compete with human resources or graduates from other universities. The advantages of these graduates are certainly more determined by the operations of higher education institutions, facilities, academic and non-academic staff. But not only that, which can directly determine the superiority of graduates or human resources, but also will be influenced by the performance of each of the factors mentioned above. This performance will usually be evaluated based on the acquisition of accreditation from study program institutions and institutions of the University (according to BAN-PT criteria Book VI). The acquisition of Widyatama University accreditation is as follows:

No	Strata	Study Program	Thn SK	Rating
1	D3	Accounting	2013	В
2	D4	Graphic Design	2014	В
3	S1	Industrial Engineering	2015	В
4	D3	Management	2015	В
5	D3	Multimedia Computers	2015	В
6	S2	Accounting (Accounting Magister)	2016	В
7	S1	Informatics Engineering	2016	В
8	S2	Magister Management	2016	В
9	S1	Japanese Language		С
10	<b>S</b> 1	Electrical Engineering		С
11	S1	Civil Engineering		С
12	D3	Mechanical Engineering		С
13	S1	Mechanical Engineering		С
14	Profesi	Accounting Professional Education	2015	А
15	S1	Accounting	2015	А
16	S1	English Language	2017	А
17	D3	Japanese Language	2017	А
18	S1	Management	2018	А

**Table 1:** Achievement of Widyatama University Accreditation Rating

**Source :**National accreditation institution – Higer Education (Ban-PT)

Based on the data above, it shows that the existence of study programs in Widyatama University is not optimal because it still gets the titles B and C, or in other words needs further improvement and hard work so that the predicate optimization reaches the expectations of all stakeholders or stakeholders. One effort that can be done is by encouraging the University's Human Capital to be able to have competitive advantages in national and global education in general, through better organizational performance and achievements in the future.

One indicator in measuring a higher education institution to be able to have a competitive advantage with other universities is the Human Capital (Human Capital) owned. For example, innovation, creativity, knowledge and ideas inherent in human resources and this is an important asset for a higher education institution, as a printer for the next generation. For this reason, optimal management and strong commitment from widayatama higher education institutions will be a strong and professional synergy.

On the basis of this description, human capital has a very strategic and decisive position in achieving competitive advantage through the performance of Universities. For this reason, it is deemed necessary to conduct an education institution research to find out how 1) the condition of Human Capital at Widyatama University, and 2) the current

condition of human capital performance at Widyatama University, with the research topic of Human Capital, Competitiveness in Improving Performance in Widyatama University.

# **II. LITERATURE REVIEW**

#### II.I. Intellectual Capital

Initially intellectual capital is only the difference between the value of the company (company business) and as the book value of the company's assets. Intellectual capital is a group of knowledge assets that are organizational attributes and contribute significantly to increasing competitive positions by adding value to interested parties (Marr and Schiuma, 2001 in Solikhah et al., 2010). Intellectual capital consists of three divisions, namely Human Capital, Structural Capital and Relational Capital.

Human capital, human capital is an intangible resource that employees give to their organizations. According to Davenport (2003) human capital or human capital is defined as the entire effort that workers bring to be invested in a company or organization. Whereas according to Leitner (2002), human capital can be grouped into 3 categories, namely Intellectual Capital, structural capital, and relational capital.

Structural Capital, structural capital is knowledge in organizations that are independent of people or in other words can be interpreted as knowledge that remains in the organization even though employees leave the organization (Rismawati and Sanjaya, 2013). Structural capital is the company's resources owned by the company includes information systems, technology, knowledge of market distribution, relationships with consumers, innovative capital, relational capital, organizational infrastructure, etc. (Diva and Mitha, 2014, Saudi, 2018).

Relational Capital, this element is a component of intellectual capital that can provide real value. To be able to provide value, there must be a harmonious relationship or association network that is owned by the company with its clients, both internally and externally (Haryanto and Henny, 2013).

## II.II. Competitive Advantage

Competitive Advantage has very basic keywords namely Power and Competitiveness. Therefore, proper understanding of these keywords is necessary. Tumar Sumihardjo (2008: 8), gives an explanation of the term competitiveness, namely: "The word power in competitiveness sentences means strength, and competitiveness means reaching more than others, or different from others in terms of quality, or having superiority certain. This means that competitiveness can mean the power to try to be superior in certain things that someone, group or institution does.

The same thing was expressed by Rangkuti (2003) in Kuncoro (2008: 73), that: "Competitive advantage is a specific activity developed by the company to be superior to its competitors".

While in the Minister of National Education Regulation No. 41 of 2007 concerning Process Standards, stated that: "competitiveness is the ability to show better, faster or more meaningful results". The ability referred to in the Minister of Education Regulation No. 41 of 2007, explained by Tumar Sumihardjo (2008: 11), including; 1) the ability to strengthen its market position, 2) the ability to connect with its environment, 3) the ability to improve performance without stopping, and 4) the ability to establish a favorable position.

Based on the opinion of Tumar Sumihardjo (2008), Agus Rahayu (2008), and the explanation of Regulation Of The Minister Of National Education No. 41 of 2007, then one conclusion can be drawn that what is meant by competitiveness is the ability of a person / organization / institution to show excellence in certain matters, by showing the most favorable situation and conditions, better, faster or more work. meaningful compared to someone / organization / other institutions, both to one organization, some organizations or entire organizations in an industry.

## II.III. Performance

Riani (2013: 61) performance is "The level of productivity of an employee, relative to his coworkers, on some results and behaviors related to the task". Wibowo (2014: 3) performance is "Implementation of plans that have been prepared, this implementation is carried out by human resources who have the ability, competence and motivation". This can be evaluated through several dimensions such as goals, standards, feedback, tools or facilities, competencies, motives, opportunities.

# **III. RESEARCH METHODS**

The type of research used in this study is a joint research that is both quantitative and descriptive analysis and associative causal research methods. The sources of this study are primary and secondary data studies and field studies with the technique of taking observation data, questionnaires and questionnaires.

The research is Widyatama University which has been concentrated in several parts or fields at Widyatama University.

## III.I. Variable Operationalization

The variable in this study is human capital which is derived into 8 dimensions of variables which are used as the forming factors of human capital. These factors are adopted from the Intellectual Capital Component developed by Leitner (2002) and have been adjusted for the content of universities in Indonesia by Ulum (2012) according to the results of their research. These eight dimensions will be compared with the performance of the institution according to BAN-PT Dikti standards.

Table 1:Operational Research Variables			
No	Variable	Variable Dimensions	Standard Variables BAN-PT
1	Human Capital	1. Total Full time Professor of Education	Educations + research min. 9 semester crediet system (sks), Additional Service (PkM)+ min 3 credits Total per semester 12-16 credits.
		2. Number and type training	<ol> <li>learning / training opportunities</li> <li>provision of facilities including funds</li> <li>clear career paths</li> <li>comparative study</li> <li>implemented well so that it can improve the qualifications and competencies of education staff.</li> </ol>
		3. Number of Permanent Lecturers	Ratio of Number of Students to the Number of Permanent Lecturers $\leq 30$ (exact) The ratio of the number of students to the number of permanent lecturers $\leq 45$ (Humanities)
		4. Number of Non-permanent Lecturers (guest lecturers, extraordinary lecturers, expert lecturers)	Percentage of non-permanent lecturers to the total number of lecturers $\leq 10\%$
		5. Lecturer achievements (awards, grants, program funding)	Na = Number of works that obtain a patent Nb = Number of works that obtained Intellectual Property Rights Nc = Number of works that have received awards from national or international institutions. NPS = Number of study programs NK = $(4 \times Na + Nb + 2 \times Nc) / NPS$
		6. qualifications (number of positions) academic lecturers	Percentage of permanent lecturers with professors' academic positions $\geq 30\%$ Percentage of permanent lecturers with academic positions of NK Chief Chancellor $\geq 8$
		7. Competency of academic lecturers (number of lecturers, S1, S2, S3 education levels)	Percentage of permanent lecturers with doctoral degrees $\geq 50\%$
		8. Number of non-academic staff (librarians, laboratory staff,	Librarians: A = $(4X1 + 3X2 + 2X3) / 4$

technicians, laboratory staff) $X1 =$ number of librarians educated S2 / S3 / Special Librarian X2 = number of librarians educated D4 / S1 X3 = number of librarians educated D1 / D2 / D3 Criteria: $A \ge 4$ Laboratory / technician / operator / administrative personnel: Criteria: Enough amount and very good activities Percentage of labors / technicians / operators / programmers who have competency certificates $\ge 70\%$		
$\dot{X2}$ = number of librarians educated D4 / S1 X3 = number of librarians educated D1 / D2 / D3 Criteria: A $\geq$ 4 Laboratory / technician / operator / administrative personnel: Criteria: Enough amount and very good activities Percentage of labors / technicians / operators / programmers who have competency	technicians, laboratory staff)	X1 = number of librarians educated S2 / S3 /
$\begin{array}{l} X3 = \text{number of librarians educated D1 / D2 / \\ D3 \\ Criteria: A \geq 4 \\ Laboratory / technician / operator / \\ administrative personnel: \\ Criteria: Enough amount and very good \\ activities \\ Percentage of labors / technicians / operators / \\ programmers who have competency \\ \end{array}$		Special Librarian
D3 Criteria: A ≥ 4 Laboratory / technician / operator / administrative personnel: Criteria: Enough amount and very good activities Percentage of labors / technicians / operators / programmers who have competency		X2 = number of librarians educated D4 / S1
Criteria: A ≥ 4 Laboratory / technician / operator / administrative personnel: Criteria: Enough amount and very good activities Percentage of labors / technicians / operators / programmers who have competency		X3 = number of librarians educated D1 / D2 /
Laboratory / technician / operator / administrative personnel: Criteria: Enough amount and very good activities Percentage of labors / technicians / operators / programmers who have competency		D3
administrative personnel: Criteria: Enough amount and very good activities Percentage of labors / technicians / operators / programmers who have competency		Criteria: $A \ge 4$
activities Percentage of labors / technicians / operators / programmers who have competency		•
programmers who have competency		8 9 8
		•

# IV. DATA ANALYSIS TECHNIQUE

Descriptive analysis is done by comparing secondary data with the factors forming human capital with the standards of the DIKTI BAN according to Book VI of the AIPT Form Assessment Matrix. This descriptive analysis was carried out to determine the position of Widyatama University's human capital whether it could reach the BAN-PT standard or vice versa, so that there were still components that had to be improved more optimally.

# V. RESULTS AND DISCUSSION

Based on the basic theoretical framework of this research that has been stated previously, that which is the object of this research is eight-dimensional human capital developed, namely 1). Number of ful time professors, 2). Number and types of training, 3). Number of permanent lecturers, 4). The number of temporary lecturers (guest lecturers, extraordinary lecturers, expert lecturers), 5). Lecturer achievements (awards, grants, program funding), 6). Qualifications (number of positions) academic lecturers, 7) Competencies of academic lecturers (number of lecturers' education levels S1, S2, S3). 8) Number of non-academic staff (librarians, laboratory staff, technicians, etc.). Furthermore, for the criteria used as a reference in the analysis are the provisions of the National Accreditation Board of Higher Education in Indonesia (BAN-PT) book VI with details of the criteria as in the previous discussion, the analysis results are obtained as follows;

	Table 2:Results of Human Capital Analysis			
No	Variable Dimensions	Criteria Analysis Of BAN-PT (VI)	Research Data	Analysis Results
1.	1. Total Full time         Professor       of         Education	Research min. 9 credits Additional Service + min 3 credits Total per semester 12-16 credits	<ul> <li>Number of lecturers is 274 people</li> <li>Great teacher 3 people</li> <li>Proposed 2-person Governorate</li> <li>Profesor not fixed 2 people</li> <li>The obligation of field 1</li> <li>9 credits</li> <li>Field II exists</li> <li>Field III exists</li> <li>Additional Obligations of the Professor.</li> </ul>	-Field 1 accordingly - The adequacy of each aspect of the Governor of North Sumatra is not yet appropriate -Research is appropriate -PkM is in accordance with the Governor's Obligations accordingly
2.	2. Number and type of training	<ol> <li>learning / training opportunities</li> <li>provision of facilities including funds</li> <li>clear career paths</li> <li>comparative study implemented well so that it can improve the</li> </ol>	Total certified lecturers 176 from 273 people or 64.47% (minimum 40%) -The percentage of 0% certification shortages. - Many learning / trainning opportunities - Adequate facilities,	- Learning / training opportunities are available -Giving facilities including funds. Available facilities are even more than enough. Funds for further studies

		qualifications and competencies of education staff.	funding is provided. -Caredible and measurable -The comparative study is conducted periodically / smster 1 time	exist, journal publications exist. clear career paths. Existing and measurable - comparative studies are conducted properly so that they can improve the qualifications and competencies of the education staff. -The comparative study is conducted periodically both with PT in the country and abroad. For example with Tel U, Polban, Mara Maly Univ, Hull Univ, etc.
3.	Number of Permanent Lecturers	Ratio of Number of Students to the Number of Permanent Lecturers $\leq 30$ (exact) The ratio of the number of students to the number of permanent lecturers $\leq 45$ (Humanities)	-The number of students is 12,465 people -The number of lecturers is 273 people -Ratio of 1: 45 -The number of students is 12,465 people -Number of permanent lecturers is 268 people -Ratio 1: 47	-The ratio of lecturers and students is slightly less good because it is above the normal ratio of 1:30. However, it is still within reasonable limits, considering the dominance of this university is a non-exact feature. -Ratio of students and permanent lecturers is as big as 1: 47, it should be 1:45. Thus this ratio is still above even a little.
4.	Number of Non- permanent Lecturers (guest lecturers, extraordinary lecturers, expert lecturers)	Percentage of non- permanent lecturers to the total number of lecturers ≤ 10% Percentage of non- permanent lecturers to the total number of lecturers ≤ 10%	<ul> <li>-Lecturer of coordinator of private universities 13 people</li> <li>-Lecturer is still full of 157 people</li> <li>-The lecturer is still not full of org</li> <li>- Lecturer contract / evaluation 97 org</li> <li>-Students remain home base non-5 people</li> <li>- Lecturer LB 5 people</li> <li>- Expert lecturer 12 people</li> </ul>	- The number of permanent lecturers is 273 and the number of lecturers is LB 5, so the ratio is 5: 268 = 1.08% This condition is very good.
5.	Lecturer achievements (awards, grants, program funding)	Na = Number of works that obtain a patent Nb = Number of works that obtained Intellectual Property Rights Nc = Number of works that have received awards from national or international	-Total patent 11 -Haki 30 -About / award etc 0 -Total study program 19 study program $-(4 \times 11 + 30 + 2 + 0)$ 19 = 9.05	9.05> 8, thus the achievement of Univ Widyatama lecturers is appropriate or good.

		institutions. NPS = Number of study programs NK = $(4 \times Na + Nb + 2 \times Nc) / NPS$ Criteria: NK $\geq 8$ Na = Number of works that obtained a patent Nb = Number of works that obtained Intellectual Property Rights Nc = Number of works that have received awards from national or international institutions. NPS = Number of study programs NK = $(4 \times Na + Nb + 2 \times Nc) / NPS$ Criteria: NK $\geq 8$	-	
6.	qualifications (number of positions) academic lecturers	-percentage of permanent	-Professor 3 people or 0.001% -Lectors of 21 people or 7.69%	3: 268 = 1.12% is not good, because it is still below 30% 21: 268 = 7.83% not good, because it's still below 50%
7.	Competency of academic lecturers (S1, S2, S3 lecturer education levels)	Percentage of permanent lecturers with doctoral degrees $\geq 50\%$	-S-2 number 214 or 78.61% -S-3 the number of 59 people or 21.39%	The number of DR ratio is 22%, still less than the government criteria of 50%

8.	8. Number of non- academic staff (librarians,	Librarians: A = (4X1 + 3X2 + 2X3) / 4	-Librarian 6 people	(4 x 0 + 3 x 3 + 2 x 3) = 15 15> 4 = appropriate /
	laboratory staff, technicians, laboratory staff)	X1 = number of librarians educated S2 / S3 / Special Librarian	-S-2 Librarians = 0 org	good
		X2 = number of librarians educated D4 / S1 X3 = number of librarians	-S-1 Librarian = 3 people	
		educated D1 / D2 / D3	-D-II librarians = 3 people -Laboran / Technician 35	
		Criteria: $A \ge 4$	people	
		Laboratory / technician / operator / administrative personnel:	-Total laboratory staff etc. 25 certificate owner	
		Criteria: Enough amount and very good activities		= 25/35 = 71.43% 71.43%> 70% =
		Percentage of labors / technicians / operators / programmers who have competency certificates ≥ 70%		Appropriate / Good

The eight results of the analysis above can further explain as follows;

# 1. Amount of Full time Professor

The fulltime amount of this Professor is to show the time owned by the Widyatama Permanent Professor to be permanently active in carrying out the Tri Dharma of his Higher Education. Thus the elements of the implementation of Education and teaching, research, implementation of community service, and special duties of professors are the core of the assessment of this point.

At Utama currently has a number of permanent and extraordinary lecturers of 273 people, professors of 3 people, and academics for professors of 2 people, and Governor of Permanent Persons of 2 people. Especially for professors in the field of education and teaching, they have the obligation of 9 credits up to 12 credits with research and community service carried out periodically which also ends with the obligation as a professor to carry out the publication of findings and research to the wider community. The conclusions for human capital are seen from this aspect according to the meaning of the fields I, II, III and the obligations of the Professor are well implemented. As a drawback, the adequacy of professors for each faculty needs to be added back so that it will be able to meet the expected ideal criteria.

# 2. Number and type of training

This training is the activity of adding skills carried out by the Main both for educative and educational staff. This activity can be done inside or outside the campus in accordance with the work program and the needs of each part. Value points are 1) learning / training opportunities, 2) provision of facilities including funds, 3) clear career paths, and 4) comparative studies are carried out properly so as to improve the qualifications and competencies of the education staff. The results showed that the number of certified lecturers was 176 from 273 people or 64.47% (minimum 40%), percentage lacking 0% certification, many learning / training opportunities or available, adequate facilities, funding provided, measured careers and periodic comparative study activities / semester 1 time.

Conclusions from this field are 1) Learning / training opportunities are quite available, 2) Provision of facilities including available funds. Available facilities are even more than enough. Funds for further studies are available, journal publications are well carried out by institutions and lecturers, 3) clear and measurable career paths, 4) comparative studies are carried out well so that they can improve the qualifications and competencies of education

staff. Comparative studies are conducted periodically both with PT in the country and abroad. For examples with Tel U, Bandung polytechnic, UGM, Mara Univ, Telecom University, Putra Malaysian Univ, Hull Univ, etc.

## 3. Number of Permanent Lecturers

This aspect measured is 1) The ratio of the number of students to the number of permanent lecturers  $\leq$  30 (exact), 2) The ratio of the number of students to the number of permanent lecturers  $\leq$  45 (Humanities). The results showed that the number of students owned by the Main 12,465 people, -The number of lecturers held for all faculties was 273 people. The ratio of the number of lecturers to students is 1: 45 and the ratio of the number of permanent lecturers to students is 1: 47. The conclusions from this aspect are the ratio of lecturers and students is considered sufficient because it is not too far from the normal ratio of 1:30 to exact. The ratio of students and permanent lecturers is 1: 47, should be 1:45. Thus these two ratios are still considered adequate, although slightly above the BAN-PT standard ratio.

## 4. Number of Non-permanent Lecturers (guest lecturers, extraordinary lecturers, expert lecturers)

Non-permanent lecturers in these criteria are guest lecturers, extraordinary lecturers and expert lecturers brought in from outside the Main. As a criterion of BAN-PT from this aspect is the percentage of non-permanent lecturers to the total number of lecturers  $\leq 10\%$ . The conditions of this aspect can be presented as follows: 1) Lecturer of coordinator of private universities 13 people, 2) Lecturers remain full of 157 people, 3) Lecturers are still not full of 1 person, 4) Lecturers still contract / evaluate 97 people, 5) Lecturers remain home base non 5 people , 6) LB lecturers 5 people, 7) expert lecturers 7 people. On the basis of these data the number of permanent lecturers is 273 and the number of lecturers is 5, thus the ratio is 10: 268 = 3.73% this condition is very good because it is under 10%. Even so, the presence of extraordinary lecturers is considered a counterweight to measure the development of real employment needs in terms of graduate competence.

## 5. Lecturer achievements (awards, grants, program funding).

This achievement is seen from the lecturers' output viewed from the aspects of Education, research and Community Service which obtain funding from both government and non-government, such as textbook writing grants, model findings and works of art, research and community service. The criteria in value are: Na = Amount of work that gets a patent, Nb = Number of works that obtain IPR, Nc = Number of works that get awards from national or international institutions, NPS = Number of study programs, with accumulated calculation of NK = (4 x Na + Nb + 2 x Nc) / NPS and NK criteria  $\geq 8$ .

The results of the study show that the number of patent is 11, Haki 30, award / award etc 0, then study program 19 study program is  $(4 \times 11 + 30 + 2 + 0) \times 19 = 9.05$ . Results 9.05> 8, thus the achievement of Univ Widyatama lecturers is appropriate or good.

## 6. Qualifications (number of positions) academic lecturers

The factors assessed are the completeness of educative staff from the functional position included in the count or this criterion is the percentage of permanent lecturers with professors jobs 30% academic position and Percentage of permanent lecturers with academic positions Head Chancellor  $\geq$  50%. The condition of Widyatama University lecturers viewed from this aspect is Professor 3 people or 1.12% and Chancellor Head 21 org or 7.83%. this condition is not good because it is still below the required standard of 30% and 50%.

## 7. Competence of academic lecturers (number of education levels for lecturers S1, S2, S3)

Lecturer competency seen from the last graduate academically, for this university has lecturers who are masters and doctoral educated. The criteria used by BAN-PT to measure this aspect are the percentage of permanent lecturers with doctoral degrees  $\geq 50\%$  Of the total 273 lecturers -S-2 numbering 214 org or 78.61% and the remaining -S-3 number 59 or 21.39%. Thus this ratio is still less than the standard expected. Based on the existing records of 214 lecturers who have not yet obtained doctoral degrees, 30 people are studying undergraduate programs both in and outside the country and are programmed to immediately take part in this program, especially for young lecturers and permanent lecturers in the evaluation.

## 8. Number of non-academic staff (librarians, laboratory staff, technicians, laboratory staff)

Non-academic staff or staff in the classification of librarians, laboratory staff, technicians, laboratory staff play a very important role. This non-educational body participates directly in the teaching and learning process on campus. The criteria used to measure this non-educational force are 1) A = (4X1 + 3X2 + 2X3) / 4, 2) X1 = number of

educated librarians S2 / S3 / Special Librarian, 3) X2 = number of librarians educated D4 / S1, and 4) X3 = the number of librarians who have D1 / D2 / D3 education, with overall criteria:  $A \ge 4$ . Laboratory / technician / operator / administrative personnel use the criteria for sufficient number and very good activities, Percentage of laboratory staff / technicians / operators / programmers who have a competency certificate  $\ge 70\%$ . The reliability of this power contributes significantly to the graduates of this university. Data from the research shows that the aspects of this university are 1) S-2 Librarians = 0 people, 2) S-1 Librarians = 3 people, 3) D-II Librarians = 3 people, 4) number of laboratory assistants etc. 25 org certificate owners . total number

	Table 3:Conclusion of Research Results				
No	Dimensions of Analysis	Results			
1.	Number of full-time professors	<ul><li>-corresponding/Agree</li><li>- Adequacy of professors need to be added.</li></ul>			
2.	Number and type of training	-According to, available, and costing			
3.	3. Number of Permanent Lecturers	-Adequate accordingly -Sufficient number of lecturers need to be added.			
4.	The number of non-permanent lecturers (guest lecturers, extraordinary lecturers, expert lecturers	-according to -This ratio is sufficient very good			
5.	Lecturer achievements (awards, grants, funding for )	-Good or scording to -The adequacy of this ratio is above the average			
6.	6. Qualifications (number of positions) academic lecturers	-Not appropriate -The adequacy of the professors and the Chief Chancellors needs to be optimized.			
7	Competencies of academic lecturers (the number of levels of educating S1, S2, S3 lecturers	<ul> <li>Not appropriate</li> <li>Sufficient competence need to be strengthened.</li> </ul>			
8.	Number of non-academic staff (librarians, laboratory staff, technicians, etc.	-Acording to - Sufficient number of staff is very good			

# VI. CONCLUSIONS AND RECOMMENDATIONS

Based on the results of the study it can be concluded as follows:

1. Overall the results of research on human capital at Widayatama University can be conveyed that the aspects of human capital are very good. This means that this aspect has been owned by the university Widyatama, managed and operational in a variety of academic and non-academic (supporting) activities that are able to provide a strong effect on the achievements of the University's achievements from various aspects.

The shortcomings arising from this aspect of analysis are part of the minor values that occur as a result of the dynamics of university management and managers, who always make changes and improvements as part of the response of the demands of the community and the world of Education. However, this reduction does not interfere with the operational daily activities of this university, because repairs are done quickly and according to needs.

2. In detail the eight aspects examined can be explained as follows: 1) The full amount of the Professor's time is appropriate, 2) The number and type of training is appropriate, 3) The number of permanent lecturers is quite appropriate, 4) The number of non-permanent lecturers (guest lecturers, lecturers extraordinary, expert lecturers) according to and the adequacy of this ratio is very good, 5) Lecturer achievements (awards, grants, program funding) are appropriate or good 6) Qualifications (number of positions) academic lecturers are not yet appropriate, 7) Competency of academic lecturers (number of educational levels S1, S2, S3 lecturers are not suitable, 8) The number of non-academic staff (librarians, laboratory staff, technicians, etc.) is appropriate or good.

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