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An Empirical Study to Evaluate the Measurement of Leadership Management in Superior Islamic Higher Education

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ABSTRACT

This study aims to analyze and evaluate the determinants of the success of leadership management in superior Islamic higher education. The research sample collection method is non-probability sampling using purposive sampling. There were 422 respondents from six Islamic higher education institutions in Indonesia. PLS-SEM analysis was used to test the structural model (8 variables and 41 constructs) and 17 hypotheses. The dimensions of the measurement model have met the evaluation of the measurement and structural model. The dominant factor measured leadership management. The job description was (IP5; λ = 89.00%), and the lowest factor was infrastructure facilities (PR4; λ = 77.30%). The ability of the structural model (R^2) to explain the usefulness variable based on seven measuring variables was 79.50%. In contrast, the leadership management dimension (Q^2) explains 59.40% of the phenomena predicted in the field. This research contributes to the success factor of measuring leadership management supported by the influence of worthiness, accuracy, and usefulness. The involvement of eight variables can facilitate the development and conceptualization of the leadership management model of Islamic higher education.

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INTRODUCTION

Good leadership management will be a success for an educational institution, and many elements are still needed to improve the quality of education.[1] Education is a process a person goes through, one of which is the formal education level.[2] Lectures are a process to improve a person's scientific, logical, and critical thinking. The government implements national higher education in Indonesia through universities to achieve national education goals.

When looking at Islamic higher education, leadership in this institution has not so much achieved success in delivering the goals of educational institutions in achieving their vision and mission. It is because it is not a matter of thinking ability or scientific knowledgeability and leadership management practices.[3] It is because Islamic higher education managers lack the internal carrying capacity to develop their organization. Internal carrying capacity in Islamic higher education consists of various kinds. In addition, leadership greatly influences a higher-education leader in realizing an only accredited university.[4] Leadership occurs not because of heredity but is influenced by effort factors such as developing management and leadership skills through social interaction.

Sudirman and Gemilang state that leadership can also use the spiritual side that exists with moral values built by a person in interacting in an organization.[5] A person's background greatly influences leadership management, such as staff, lecturers, and students in a higher education environment. In practice, leadership management affects the comfort of working to achieve the institution's goals and helping groups, organizations, or the college academic community achieve them.

Leadership management is needed to improve leadership's ability to carry out activities to achieve the organisation's goals. So, the development of personnel effectiveness in the organization will be achieved. Bellibas states that a leader can influence others in running the wheels of his organization. It means that the role of a leader can also be the key to success or setback for the organization to achieve common goals.

Educational institutions need a leader who illustrates that each element is closely related. Whereas in Islamic higher education, the quality of education is an existing problem, as Arbangi stated, namely low-quality of Islamic higher education. In addition, according to Brewer and Devnew, many practices in Islamic educational institutions are

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[1] Xiaohua Xu et al., "A Modified Delphi Study on Establishing a Curriculum Content Structure for the Leadership and Management Competency Cultivation for Future Nurse Managers in China," *Heliyon* 8, no. 12 (December 1, 2022): 1–12.

[2] Ayotunde Adetola Adelaja et al., "Students' Intention towards Self-Employment: An Application of ELT Theory on the Effectiveness of Entrepreneurial Education Types," *The International Journal of Management Education* 21, no. 2 (July 1, 2023): 1–13.

[3] Rahimah Haji Ahmad, Ali Jubran Salleh, and Simin Ghavifekr, "Leadership Dimensions and Creativity Traits of Islamic Schools Principals: A Quantitative Analysis," *MOJEM: Malaysian Online Journal of Educational Management* 5, no. 1 (September 5, 2017): 29–50.

[4] Pia Lappalainen, "Walking and Talking Sensors: Conceptualising Restorative Leadership to Enhance People Management Education in Engineering," *European Journal of Engineering Education* 45, no. 3 (May 3, 2020): 473–90.

[5] Anselmus Sudirman and Adria Vitalya Gemilang, "Promoting Work-Based Learning as a Praxis of Educational Leadership in Higher Education," *International Journal of Learning, Teaching and Educational Research* 19, no. 3 (April 17, 2020): 1–18.

still not adaptive, so raising and improving the quality of education becomes challenging due to a lack of openness between existing managers.[6]

Education is a process that has a curriculum for educating its students. Islamic higher education, as expressed by Ahmad, namely Islamic higher education, must have curriculum changes in Islamic higher education to adapt to the world of work, which is a fundamental need for every individual. So the public's view of Islamic higher education is so great because there are expectations that the community wants to achieve so that education is classified based on the concentration of specific scientific fields. But it all depends on the manager of the educational institution, whether it is adapted to the needs of workers in the existing society or only to meet the needs of Islamic higher education.

Realizing the expectations of Islamic higher education, a leadership management model of Islamic higher education is needed to influence and achieve the ideals of Islamic institutions.[7] Weaknesses in institutional management must begin to be addressed, so that implementation in the management of Islamic higher education can be professional, so that the goals and expectations of the community to access education in Islamic higher education can be fulfilled, taking part in educating the nation's life are increasingly being used as a reference for the community, this must be followed by improving the quality of lecturers, this is still one of the weaknesses in Islamic higher education, namely the poor quality and professionalism of lecturers in Islamic higher education.[8] It affects the learning process and the absorption of graduates amid the dynamics of global change.

The development of Islamic higher education as a religious educational institution has progressed, but this is not much compared to the accreditation that distinguishes success from one another. The accreditation component of them is facilities and infrastructure. As revealed by Supriyanto in his research, one of the weaknesses of Islamic higher education lies in infrastructure. Hence, those who excel in Islamic higher education are not up to 10 of the total Islamic higher education.[9] Leadership in higher education, mainly Islamic, is determined by analysing problems, solving problems or conflicts, and leading organizations to move forward. Leadership in Islamic higher education is expected to meet the community's needs in developing places of education that prioritize spiritual values.

RESEARCH METHOD

This study used a non-probability sampling method with purposive sampling.[10] This

[6] Katherine L. Brewer and Lynne E. Devnew, "Developing Responsible, Self-Aware Management: An Authentic Leadership Development Program Case Study," *The International Journal of Management Education* 20, no. 3 (November 1, 2022): 1–10.

[7] Nick Forster, "Why Are There so Few World-Class Universities in the Middle East and North Africa?," *Journal of Further and Higher Education* 42, no. 8 (November 17, 2018): 1-15.

[8] Zahrotush Sholikhah, Xuhui Wang, and Wenjing Li, "The Role of Spiritual Leadership in Fostering Discretionary Behaviors: The Mediating Effect of Organization Based Self-Esteem and Workplace Spirituality," *International Journal of Law and Management* 61, no. 1 (January 1, 2019): 232–249.

[9] Achmad Sani Supriyanto et al., "Empowerment Leadership as a Predictor of the Organizational Innovation in Higher Education," *International Journal of Professional Business Review* 8, no. 2 (February 28, 2023): 1–15.

[10] Muhammad Ghafar, Ahmad Zarkasyi, and Faisol Mahmud Adam, "Impacts of Openness to Experience on Learning Innovation Model The Moderating Effect of Teacher Knowledge-Sharing," *Cendekia:*

research was conducted in six Islamic institutions in Indonesia, including Universitas Islam Indonesia, UIN Sunan Kalijaga Yogyakarta, Universitas Muhammadiyah Yogyakarta, Universitas Ahmad Dahlan, UIN Maulana Malik Ibrahim Malang, and UIN Sayyid Ali Rahmatullah Tulungagung. There were 422 respondents (6-vice chancellors, 39 deans, 71 heads of study programs, 14 heads of departments, eight chairs of the senate, and 284 lecturers) from 6 Islamic higher education in Indonesia. Based on the analytical tool, PLS-SEM, the minimum recommended sample size is at least 100 respondents, or 5-10 times the number of arrows receiving endogenous variables.[11]

The data used in this study were primary data using a questionnaire directly to respondents online via Google form. The instrument used was a Likert scale based on the level of respondent agreement on each indicator with a Likert scale value range of 1 (disagree) to 5 (strongly agree). This study consisted of 8 variables measuring the success of leadership management in Islamic higher education: context, input, process, output, supervision, worthiness, accuracy, and usefulness.

To analyse the data, the researcher used the SEM approach. There are two SEM approaches – the CB-SEM and PLS-SEM techniques.[12] In general, PLS-SEM aims to test whether there are relationships and predictive effects between constructs. The consequence of using PLS-SEM is that tests can be carried out by ignoring some assumptions (non-parametric), and parameter estimation is carried out directly without the requirement of fit criteria. This study used the PLS-SEM technique to test the structural model. It was complex, with many constructs and indicators. There are eight variables, 41 constructs, and 17 hypotheses. The structural model in PLS-SEM is a path diagram of the relationship between construct and latent variables to analyze the measurement factors of leadership management at a superior Islamic university.

RESULT AND DISCUSSION

Testing of the Measurement Model (Outer Model)

Evaluation of the outer model aims to prove to construct validity and estimated reliability. These indicators need to be tested for validity and reliability. The following is a validity and reliability test for models using reflective indicators. In the evaluation of the outer model, convergent validity (factor loading and AVE), discriminant validity (Fornell-lacker and HTMT), and internal consistency reliability (CA, rho_A, and CR) were tested.[13] The evaluation of the outer model is based on the cut-off point value of the PLS-SEM

Jurnal Kependidikan dan Kemasyarakatan 20, no. 2 (December 1, 2022): 164–180.

[11] Sidiq Supriyanto et al., "The Influence of Internship Experience and Work Motivation on Work Readiness in Vocational Students: PLS-SEM Analysis," *Indonesian Journal on Learning and Advanced Education (IJOLAE)* 5, no. 1 (2023): 32–44. See also Ganesh Dash and Justin Paul, "CB-SEM vs PLS-SEM Methods for Research in Social Sciences and Technology Forecasting," *Technological Forecasting and Social Change* 173 (December 1, 2021): 1-12.

[12] Rihab Wit Daryono et al., "An Empirical Study to Evaluate the Student Competency of Vocational Education," *International Journal of Evaluation and Research in Education (IJERE)* 12, no. 2 (March 18, 2023): 1079–1086.

[13] Fatwa Dewi Apriliani et al., "The Influence of Fashion Knowledge, Fashion Selection Factor, and Dress Etiquette on Dress Look for Members of Dharma Wanita: PLS-SEM Analysis," *Jurnal Pendidikan Dan Pengajaran* 56, no. 1 (April 19, 2023): 194–207.

method.[14] Figure 1 is the result of testing the outer model on the output of the PLS Algorithm in the SmartPLS software.

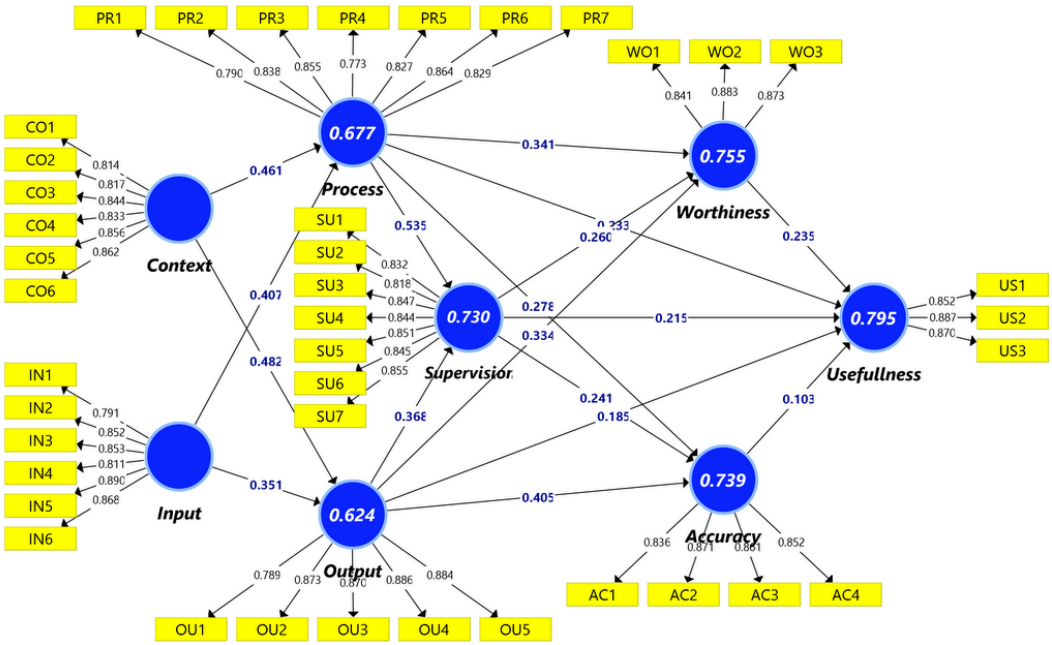

Figure 1. Testing of the Measurement Model

Convergent validity is determined based on the principle that the measures of a construct should be highly correlated. Convergent validity on constructs with reflective indicators is evaluated based on factor loading values (λ >0.70) and Average Variance Extracted (AVE>0.50).[15] Table 1 is the result of testing convergent validity, reliability, and AVE on the PLS Algorithm output.

Table 1. Convergent Validity and Consistency Reliability

No	Variable	Construct	Convergent Validity		Internal Consistency Reliability			VIF
			FL (>0.70)	AVE (>0.50)	CA (>0.70)	rho_A (>0.70)	CR (>0.70)	
1	Context	CO1	0.814	0.702	0.915	0.915	0.934	2.974
2		CO2	0.817					3.063
3		CO3	0.844					2.884
4		CO4	0.833					2.783
5		CO5	0.856					4.003
6		CO6	0.862					4.231

[14] Valentinus Lilik Hariyanto et al., "A Framework for Measuring the Level of Achievement of Vocational Students Competency of Architecture Education," *Journal of Technology and Science Education* 12, no. 1 (March 21, 2022): 157–171.

[15] Muhammad Saifurrahman, Putu Sudira, and Rihab Wit Daryono, "The Determinant Factor of the Principal Leadership Solutions in Facing the 21st-Century Learning," *Jurnal Pendidikan Dan Pengajaran* 54, no. 2 (2021): 230–243. See also Bojan Ćudić, Peter Alešnik, and David Hazemali, "Factors Impacting University–Industry Collaboration in European Countries," *Journal of Innovation and Entrepreneurship* 11, no. 1 (March 8, 2022): 1-33.

No	Variable	Construct	Convergent Validity		Internal Consistency Reliability			VIF
			FL (>0.70)	AVE (>0.50)	CA (>0.70)	rho_A (>0.70)	CR (>0.70)	
7	Input	IN1	0.791	0.714	0.919	0.921	0.937	2.565
8		IN2	0.852					2.962
9		IN3	0.853					3.155
10		IN4	0.811					2.493
11		IN5	0.890					4.286
12		IN6	0.868					3.470
13	Process	PR1	0.790	0.682	0.922	0.922	0.937	2.466
14		PR2	0.838					3.541
15		PR3	0.855					3.712
16		PR4	0.773					2.428
17		PR5	0.827					3.473
18		PR6	0.864					4.000
19		PR7	0.829					3.292
20	Output	OU1	0.789	0.741	0.912	0.913	0.935	1.976
21		OU2	0.873					4.595
22		OU3	0.870					4.252
23		OU4	0.886					4.898
24		OU5	0.884					4.127
25	Supervision	SU1	0.832	0.709	0.931	0.932	0.945	3.278
26		SU2	0.818					2.664
27		SU3	0.847					4.925
28		SU4	0.844					4.638
29		SU5	0.851					4.849
30		SU6	0.845					4.452
31		SU7	0.855					4.174
32	Worthiness	WO1	0.841	0.750	0.833	0.834	0.900	1.759
33		WO2	0.883					2.111
34		WO3	0.873					2.006
35	Accuracy	AC1	0.836	0.731	0.877	0.878	0.916	2.101
36		AC2	0.871					2.463
37		AC3	0.861					2.274
38		AC4	0.852					2.209
39	Usefulness	US1	0.852	0.756	0.839	0.839	0.903	1.834
40		US2	0.887					2.223
41		US3	0.870					1.978

Based on Table 1, each indicator's overall loading factor value is >0.70 (λ = 0.773-PR4 to 0.890-DT5). The Average Extracted Variance (AVE) value on each variable has a value> 0.50 (0.682-Process to 0.756-Usefulness). So it can be concluded that each indicator and variable on the instrument has supported the requirements of convergent validity. It means that the level of relationship between indicators and variables can be explained by 77.30% to 89.00%.

Based on the factor loading coefficient value, the most dominant statement indicator representing the success of leadership management at Islamic higher education is IN5, with

the statement there is a job description in each field in the university organizational structure on the input variable of 89.00%. In contrast, the weakest indicator in measuring the success of leadership management at Islamic higher education is PR4, with the statement adequate facilities and infrastructure at the university on the process variable of 77.30%. Furthermore, it evaluated the outer model by testing discriminant validity by looking at the Fornell-Larcker value and the Heterotrait-Monotrait ratio (HTMT) shown in Table 2.

Table 2. Discriminant Validity: Fornell-Larcker (*) & HTMT (°)

Variable	AC	CO	IN	SU	PR	OU	US	WO
Accuracy	0.855*							
	-							
Context	0.758*	0.838*						
	0.846°	-						
Input	0.754*	0.794*	0.845*					
	0.838°	0.863°	-					
Supervision	0.788*	0.806*	0.766*	0.842*				
	0.871°	0.873°	0.826°	-				
Process	0.792*	0.784*	0.773*	0.823*	0.826*			
	0.881°	0.853°	0.838°	0.888°	-			
Output	0.811*	0.761*	0.734*	0.786*	0.781*	0.861*		
	0.806°	0.832°	0.800°	0.853°	0.510°	-		
Usefulness	0.799*	0.751*	0.748*	0.821*	0.824*	0.808*	0.870*	
	0.830°	0.857°	0.851°	0.829°	0.840°	0.822°	-	
Worthiness	0.818*	0.795*	0.757*	0.803*	0.816*	0.804*	0.830*	0.866*
	0.857°	0.810°	0.864°	0.811°	0.831°	0.822°	0.892°	-

The Fornell-Larcker value is explained by looking at the correlation value of the latent variable with the correlation value of other latent variables. The HTMT value must be <0.90.[16] Based on Table 2 on the Fornell-Larcker test, the correlation value of the Accuracy → Accuracy variable has a value of 0.855 higher than the Accuracy correlation value with other variables (0.758; 0.754; 0.788; 0.792; 0.811; 0.799; 0.818). And so on for correlation assessment with other variables. Based on the analysis results, all HTMT matrix values are <0.90 (0.806 to 0.892). So it can be explained that Fornell-Larcker and HTMT, on the correlation of all variables in this research data instrument, have met the discriminant validity test requirements in measuring leadership management's success at Islamic higher education.

In addition to the construct validity test, the estimated reliability consistency test is also measured using three approaches: composite reliability, rho_A, and Cronbach's alpha, with a threshold value of <0.70.[17] From the SmartPLS output results in Table 1, it shows

[16] Khai Loon Lee et al., "The Effect of Digital Supply Chain on Organizational Performance: An Empirical Study in Malaysia Manufacturing Industry," *Uncertain Supply Chain Management* 10, no. 2 (2022): 495–510.

[17] Azhar Fauzan et al., "The Effect of Internship and Work Motivation on Students' Work Readiness in Vocational Education: PLS-SEM Approach," *Journal of Innovation in Educational and Cultural Research* 4, no. 1 (January 10, 2023): 26–34.

that all constructs have an overall value of CA (0.833-Worthiness to 0.931-Supervision), rho_A (0.834-Worthiness to 0.932-Supervision), and CR (0.900-Worthiness to 0.945-Supervision), which is >0.70. It can be concluded that all research variables have good reliability in measuring the success of leadership management at Islamic higher education.

Testing of the Structural Model (Inner Model)

The initial stage of structural model analysis is looking at the VIF, R2, effect size ($f2$), predictive relevance (Q^2) values, model fit, and path coefficient.[18] Variance Inflation Factor (VIF) was used to evaluate collinearity in two or more independent variables or exogenous constructs that are highly correlated, causing the predictive ability of the model to be poor. R^2 describes the amount of construct variance explained by the model—f^2 aims to assess the magnitude of the influence between variables. Q^2 predictive relevance measures how well the structural model generates the observed value. Model fit is used to measure overall model prediction and parameter estimation. Figure 2 is the result of testing the outer model in the SmartPLS Bootstrapping output.

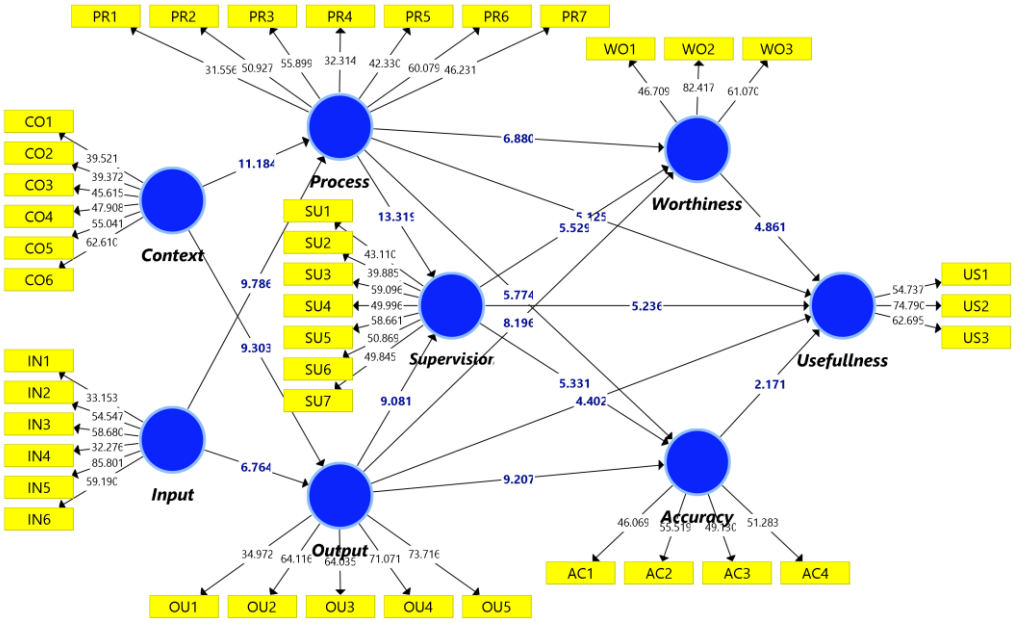

Figure 2. Testing of the Structural Model

First, collinearity symptoms are assessed by evoking the VIF inflation variance factor. A VIF value of ≥5.00 indicates a potential collinearity problem. Based on Table 1, the VIF values taken are all within the accepted threshold value of 11.759 to 4.925 (VIF < 5.00). Thus, collinearity is not a problem in the instrument's data measuring the success of leadership management at Islamic higher education. Based on Figure 1 and Table 3, the usefulness variable obtained an R^2 value of 0.795. The seven variables measuring usefulness (context, input, process, output, supervision, worthiness, and accuracy) influence the

[18] Felipe Hernández-Perlines, Antonio Ariza-Montes, and Luis Araya-Castillo, "Socioemotional Wealth, Entrepreneurial Orientation and International Performance of Family Firms," *Economic Research-Ekonomska Istraživanja* 33, no. 1 (January 1, 2020): 3125–3145.

Usefulness variable by 79.50%, and other variables outside the research model affect the remaining 20.50%. Effect size (f^2) obtained a value of 0.012 to 0.415, and the average research variable has an influence of 0.137 with a moderate category in measuring the success of leadership management at Islamic higher education.

Table 3. Coefficient of Determination (R^2) and Effect Size (f^2)

Variable	R^2	f^2					
	Value	EH	EV	CT	SP	OR	IM
Usefulness	0.795	-	-	-	-	-	-
Worthiness	0.755	0.060**	-	-	-	-	-
Accuracy	0.739	0.012*	-	-	-	-	-
Supervision	0.730	0.055**	0.074**	0.060**	-	-	-
Output	0.624	0.042**	0.148**	0.205***	0.196***	-	-
Process	0.677	0.062**	0.132**	0.082**	0.415***	-	-
Context	-	-	-	-	-	0.244***	0.229***
Input	-	-	-	-	-	0.190***	0.122**

R^2 (0,190 weak; 0,333 moderate; and 0,670 substantial); f^2 (0,02 small*; 0,15 medium**; and 0,35 large***)

The next test is by looking at the predictive relevance (Q^2) value, which aims to validate the model's predictive ability according to the reality in the field. Based on Table 4, all Q^2 values exceed the limit point (greater than zero).[19]

Table 4. Predictive Relevance (Q^2)

Variable	Construct Crossvalidated					Predictive
	S	Redundancy		Communality		
		SSE	Q^2 (>0.35)	SSE	Q^2 (>0.35)	
Context	2532	2532.000	-	1069.440	0.578	Strong
Input	2532	2532.000	-	1025.940	0.595	Strong
Accuracy	1688	786.902	0.534	776.990	0.540	Strong
Usefulness	1266	514.189	0.594	646.411	0.489	Strong
Worthiness	1266	555.487	0.561	659.054	0.479	Strong
Output	2110	1143.371	0.458	833.382	0.605	Strong
Process	2954	1605.123	0.457	1263.048	0.572	Strong
Supervision	2954	1438.924	0.513	1158.736	0.608	Strong

The results of the calculation of predictive relevance Q^2 (redundancy) in Table 4 obtained a value of 0.457 (organizing) to 0.594 (usefulness), which can explain the research model by 45.70% to 59.40% of the phenomenon studied (>0.35). The Q2 (communality) value shows eight variables with a strong predictive power of 0.479 (worthiness) to 0.608 (supervision). The results of both aspects of testing predictive relevance (Q^2) show that the model for measuring the success of leadership management in Islamic higher education has a large and robust predictive power.

[19] Majdi Mellouli, Fatma Bouaziz, and Omar Bentahar, "E-Government Success Assessment from a Public Value Perspective," *International Review of Public Administration* 25, no. 3 (July 2, 2020): 153–174,.

Path Analysis and Hypothesis Testing

The path analysis test in this study aims to analyze the influence of variables on leadership management at Islamic higher education. Path analysis is shown from the statistical significance value ($T_{statistics}$) compared to more significant than the T_{table} (1.96) and p_{value} (<0.005), which indicates the influence of variable significance.[20] The β_{values} indicate the direction of positive or negative impact. The values of the significant results can be seen in Table 5.

Table 5. Path Analysis and Hypothesis Testing

Hypothesis	Path Analysis	β_{values} (+/-)	$T_{Statistics}$ (>1.96)	p_{Values} (<0.05)	Decision
H-DR1	Accuracy → Usefulness	0.103	2.171	0.030	Accepted
H-DR2	Context → Output	0.482	9.303	0.000	Accepted
H-DR3	Context → Process	0.461	11.184	0.000	Accepted
H-DR4	Input → Output	0.351	6.764	0.000	Accepted
H-DR5	Input → Process	0.407	9.786	0.000	Accepted
H-DR6	Output → Accuracy	0.405	9.207	0.000	Accepted
H-DR7	Output → Supervision	0.368	9.081	0.000	Accepted
H-DR8	Output → Usefulness	0.185	4.402	0.000	Accepted
H-DR9	Output → Worthiness	0.334	8.196	0.000	Accepted
H-DR10	Process → Accuracy	0.278	5.774	0.000	Accepted
H-DR11	Process → Supervision	0.535	13.319	0.000	Accepted
H-DR12	Process → Usefulness	0.233	5.125	0.000	Accepted
H-DR13	Process → Worthiness	0.341	6.880	0.000	Accepted
H-DR14	Supervision → Accuracy	0.241	5.331	0.000	Accepted
H-DR15	Supervision → Usefulness	0.215	5.236	0.000	Accepted
H-DR16	Supervision → Worthiness	0.260	5.529	0.000	Accepted
H-DR17	Worthiness → Usefulness	0.235	4.861	0.000	Accepted

Based on Table 5, hypothesis H-DR1 (Accuracy → Usefulness) obtained β_{values} = 0.103 (positive decimal), $T_{statistics}$ = 2.171 (>1.96), and p_{values} = 0.030 (<0.05). The Accuracy variable significantly and positively affects Usefulness in Islamic higher education leadership management. Regarding β_{values}, the highest value is obtained in the Process → Supervision = 0.888, so the variable process to supervision provides the most outstanding contribution in influencing the success of leadership management at superior Islamic

[20] Mahfuzur Rahman et al., "The Role of Financial Behaviour, Financial Literacy, and Financial Stress in Explaining the Financial Well-Being of B40 Group in Malaysia," *Future Business Journal* 7, no. 1 (November 1, 2021): 1-18. See also Nicholas P. Danks, Pratyush N. Sharma, and Marko Sarstedt, "Model Selection Uncertainty and Multimodel Inference in Partial Least Squares Structural Equation Modeling (PLS-SEM)," *Journal of Business Research* 113 (May 1, 2020): 13–24. See also Omar Boubker, Maryem Arroud, and Abdelaziz Ouajdouni, "Entrepreneurship Education versus Management Students' Entrepreneurial Intentions. A PLS-SEM Approach," *The International Journal of Management Education* 19, no. 1 (March 2021): 1–14. See also Marko Sarstedt et al., "Latent Class Analysis in PLS-SEM: A Review and Recommendations for Future Applications," *Journal of Business Research* 138 (January 1, 2022): 398–407. Locky Law and Natalie Fong, "Applying Partial Least Squares Structural Equation Modeling (PLS-SEM) in an Investigation of Undergraduate Students' Learning Transfer of Academic English," *Journal of English for Academic Purposes* 46 (July 1, 2020): 1-27.

higher education. Furthermore, the seventeen hypotheses H-DR1 to H-DR17 are believed to positively and significantly affect their influence on leadership management.

Management of Leadership in Superior Islamic higher education in Indonesia

The results of the analysis that has been carried out on evaluating leadership management measurements at several rectors of superior Islamic higher education in Indonesia show that several leadership styles are often used, namely: paternalistic, democratic, charismatic, delegation, and visionary, while the leadership management model used is "a leader." Both the leadership style and the leadership management model that has been owned in managing the university are all based on Islamic values, namely "*rahmatan lil'alamin,*" which is tolerant and reflects the leadership of "*Rasulullah*" indicating that the spirit that inspires the leadership of every chancellor at the university is paternalist.

Furthermore, the interview data analysis results also show that the leadership style of the chancellors is not the same as the characteristics of their leadership style because it depends on the individual character of each, which is different from one another. It resulted in that during the period, the change of chancellor often hampered the process of realizing the vision and mission of the institution. The analysis identified that each chancellor's ability and individual character largely determine the leadership style and model of each chancellor.[21] Even so, every chancellor always tries to present a leadership model that reflects the "*Rasulullah*" leadership model with superior Islamic values. Finally, the adaptive ability of each leader is not the same, resulting in a slow process of realizing the expected vision and mission of the institution.

In the analysis of the interview data, there are already leadership styles, namely, paternalistic, charismatic, democratic, delegation, and visionary, but the individual characteristics of the leader very much determine all of them.[22] In addition, the leadership management model is more of a "leader" with a tendency towards paternalistic leadership based on Islamic values "*rahmatan lil'alamin*." It is more dominant so that the managerial elements needed by a leader in carrying out his leadership function are not yet visible.

Being a leader in higher education is indeed a "leader" and not a "manager." However, in implementing leadership, management, and leadership are related to each other, as stated by Supriyanto, which says that management is responsible for efficiently using organizational resources to achieve organizational goals. In contrast, leadership is concerned with formulating policies, organizational changes, and dealing with other people.[23] The opinion states that a leader must use management and leadership aspects in realizing the leadership function. A higher education leader needs these two aspects. According to Shulhan, leadership is part of management because management functions are planning, implementation, and supervision. Management is part of leadership because every leader must have four attributes and skills.[24]

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[21] Forster, "Why Are There so Few World-Class Universities in the Middle East and North Africa?"

[22] Sholikhah, Wang, and Li, "The Role of Spiritual Leadership in Fostering Discretionary Behaviors."

[23] Supriyanto et al., "Empowerment Leadership as a Predictor of the Organizational Innovation in Higher Education."

[24] Muwahid Shulhan, "Leadership Style in the Madrasah in Tulungagung: How Principals Enhance Teacher's Performance," *International Journal of Educational Management* 32, no. 4 (January 1, 2018): 641–651.

The leadership management style and model applied at the two Islamic higher education has placed the rector's position as a leader, which is correct. The rector is a leader who must seek to influence others to achieve goals and direct the organization to become more cohesive and coherent. However, he tends to emphasize leadership rather than management in his leadership function. It causes the institution's managerial process to be less effective. For this reason, it needs to be improved and improved with a superior Islamic university leadership management model.

Sudirman & Gemilang state that management and leadership must go hand in hand, even though they are theoretically two different concepts. Management and leadership are interconnected and complementary.[25] The management side plays a role in planning, organizing, and coordinating, while the leadership side provides motivation and inspiration. Good leadership must prioritize risk to encourage innovation and wise decision-making, allowing management and leadership to coexist.

The right mix of management and leadership skills can lead an organization to success.[26] The selection process of a leader is essential. It determines the achievement of organizational success because individuals with high potential can be the initial hope for the organization. Selecting the rector as a leader will impact achieving the vision and mission of Islamic higher education. However, it does not rule out the possibility that other factors can affect the management and leadership process, so development must be ongoing. Therefore, although management and leadership are two different concepts and still overlap, the integration of the two offers a conceptual foundation that promises theoretical progress.

CONCLUSION

The implications of the seven variables in measuring the leadership management of superior Islamic higher education have been ineffective due to several obstacles and things. The seven aspects, which include elements of vision and mission, human resources, infrastructure, operational costs, leadership management, communication, and leadership management models, have a reasonably practical impact according to the results of processed data that the seven aspects have an influence and contribution in the superior Islamic higher education leadership management model. The involvement of these seven aspects can make it easier for Islamic college leaders to develop their leadership styles excellently. The seven aspects can positively contribute to the leadership management model of Islamic higher education, the concept of developing a leadership management model in Islamic higher education.

[25] Sudirman and Gemilang, "Promoting Work-Based Learning as a Praxis of Educational Leadership in Higher Education."

[26] Ahmad, Salleh, and Ghavifekr, "Leadership Dimensions and Creativity Traits of Islamic Schools Principals."

REFERENCES

Adelaja, Ayotunde Adetola, Catherine Abiola Oluwatoyin Akinbami, Temitope Jiboye, and Gbemmisola Ogbolu. "Students' Intention towards Self-Employment: An Application of ELT Theory on the Effectiveness of Entrepreneurial Education Types." *The International Journal of Management Education* 21, no. 2 (July 1, 2023): 1–13.

Ahmad, Rahimah Haji, Ali Jubran Salleh, and Simin Ghavifekr. "Leadership Dimensions and Creativity Traits of Islamic Schools Principals: A Quantitative Analysis." *MOJEM: Malaysian Online Journal of Educational Management* 5, no. 1 (September 5, 2017): 29–50.

Apriliani, Fatwa Dewi, Widihastuti, Rihab Wit Daryono, Daniel Jesayanto Jaya, and Adilla Desy Rizbudiani. "The Influence of Fashion Knowledge, Fashion Selection Factor, and Dress Etiquette on Dress Look for Members of Dharma Wanita: PLS-SEM Analysis." *Jurnal Pendidikan Dan Pengajaran* 56, no. 1 (April 19, 2023): 194–207.

Boubker, Omar, Maryem Arroud, and Abdelaziz Ouajdouni. "Entrepreneurship Education versus Management Students' Entrepreneurial Intentions. A PLS-SEM Approach." *The International Journal of Management Education* 19, no. 1 (March 2021): 1–14.

Brewer, Katherine L., and Lynne E. Devnew. "Developing Responsible, Self-Aware Management: An Authentic Leadership Development Program Case Study." *The International Journal of Management Education* 20, no. 3 (November 1, 2022): 1–10.

Ćudić, Bojan, Peter Alešnik, and David Hazemali. "Factors Impacting University–Industry Collaboration in European Countries." *Journal of Innovation and Entrepreneurship* 11, no. 1 (March 8, 2022): 1-33.

Danks, Nicholas P., Pratyush N. Sharma, and Marko Sarstedt. "Model Selection Uncertainty and Multimodel Inference in Partial Least Squares Structural Equation Modeling (PLS-SEM)." *Journal of Business Research* 113 (May 1, 2020): 13–24.

Daryono, Rihab Wit, V. Lilik Hariyanto, Husaini Usman, and Sutarto Sutarto. "Factor Analysis: Competency Framework for Measuring Student Achievements of Architectural Engineering Education in Indonesia." *REID (Research and Evaluation in Education)* 6, no. 2 (December 31, 2020): 98–108.

Daryono, Rihab Wit, Muhammad Agphin Ramadhan, Nur Kholifah, Fajar Danur Isnantyo, and Muhammad Nurtanto. "An Empirical Study to Evaluate the Student Competency of Vocational Education." *International Journal of Evaluation and Research in Education (IJERE)* 12, no. 2 (March 18, 2023): 1079–1086.

Dash, Ganesh, and Justin Paul. "CB-SEM vs PLS-SEM Methods for Research in Social Sciences and Technology Forecasting." *Technological Forecasting and Social Change* 173 (December 1, 2021): 1-12.

Fauzan, Azhar, Mochamad Bruri Triyono, Rendra Ananta Prima Hardiyanta, Rihab Wit Daryono, and Shilmi Arifah. "The Effect of Internship and Work Motivation on Students' Work Readiness in Vocational Education: PLS-SEM Approach." *Journal of Innovation in Educational and Cultural Research* 4, no. 1 (January 10, 2023): 26–34.

Forster, Nick. "Why Are There so Few World-Class Universities in the Middle East and North Africa?" *Journal of Further and Higher Education* 42, no. 8 (November 17, 2018): 1-15.

Ghafar, Muhammad, Ahmad Zarkasyi, and Faisol Mahmud Adam. "Impacts of Openness to Experience on Learning Innovation Model The Moderating Effect of Teacher Knowledge-Sharing." *Cendekia: Jurnal Kependidikan dan Kemasyarakatan* 20, no. 2 (December 1, 2022): 164–180.

Hariyanto, Valentinus Lilik, Rihab Wit Daryono, Nur Hidayat, Sutarto Hadi Prayitno, and Muhammad Nurtanto. "A Framework for Measuring the Level of Achievement of Vocational Students Competency of Architecture Education." *Journal of Technology and Science Education* 12, no. 1 (March 21, 2022): 157–171.

Hernández-Perlines, Felipe, Antonio Ariza-Montes, and Luis Araya-Castillo. "Socioemotional Wealth, Entrepreneurial Orientation and International Performance of Family Firms." *Economic Research-Ekonomska Istraživanja* 33, no. 1 (January 1, 2020): 3125–3145.

Lappalainen, Pia. "Walking and Talking Sensors: Conceptualising Restorative Leadership to Enhance People Management Education in Engineering." *European Journal of Engineering Education* 45, no. 3 (May 3, 2020): 473–490.

Law, Locky, and Natalie Fong. "Applying Partial Least Squares Structural Equation Modeling (PLS-SEM) in an Investigation of Undergraduate Students' Learning Transfer of Academic English." *Journal of English for Academic Purposes* 46 (July 1, 2020): 1-27.

Lee, Khai Loon, Nurul Ain Najiha Azmi, Jalal Rajeh Hanaysha, Haitham M. Alzoubi, and Muhammad Turki Alshurideh. "The Effect of Digital Supply Chain on Organizational Performance: An Empirical Study in Malaysia Manufacturing Industry." *Uncertain Supply Chain Management* 10, no. 2 (2022): 495–510.

Mellouli, Majdi, Fatma Bouaziz, and Omar Bentahar. "E-Government Success Assessment from a Public Value Perspective." *International Review of Public Administration* 25, no. 3 (July 2, 2020): 153–174.

Rahman, Mahfuzur, Che Ruhana Isa, Muhammad Mehedi Masud, Moniruzzaman Sarker, and Nazreen T. Chowdhury. "The Role of Financial Behaviour, Financial Literacy, and Financial Stress in Explaining the Financial Well-Being of B40 Group in Malaysia." *Future Business Journal* 7, no. 1 (November 1, 2021): 1-18.

Saifurrahman, Muhammad, Putu Sudira, and Rihab Wit Daryono. "The Determinant Factor of the Principal Leadership Solutions in Facing the 21st-Century Learning." *Jurnal Pendidikan Dan Pengajaran* 54, no. 2 (2021): 230–243.

Sarstedt, Marko, Lăcrămioara Radomir, Ovidiu Ioan Moisescu, and Christian M. Ringle. "Latent Class Analysis in PLS-SEM: A Review and Recommendations for Future Applications." *Journal of Business Research* 138 (January 1, 2022): 398–407.

Sholikhah, Zahrotush, Xuhui Wang, and Wenjing Li. "The Role of Spiritual Leadership in Fostering Discretionary Behaviors: The Mediating Effect of Organization Based Self-Esteem and Workplace Spirituality." *International Journal of Law and Management* 61, no. 1 (January 1, 2019): 232–249.

Shulhan, Muwahid. "Leadership Style in the Madrasah in Tulungagung: How Principals Enhance Teacher's Performance." *International Journal of Educational Management* 32, no. 4 (January 1, 2018): 641-651.

Sudirman, Anselmus, and Adria Vitalya Gemilang. "Promoting Work-Based Learning as a

Praxis of Educational Leadership in Higher Education." *International Journal of Learning, Teaching and Educational Research* 19, no. 3 (April 17, 2020): 1–18.

Supriyanto, Achmad Sani, Vivin Maharani Ekowati, Wahibur Rokhman, Forbis Ahamed, Misbahul Munir, and Titis Miranti. "Empowerment Leadership as a Predictor of the Organizational Innovation in Higher Education." *International Journal of Professional Business Review* 8, no. 2 (February 28, 2023): 1–15.

Supriyanto, Sidiq, Sudji Munadi, Rihab Wit Daryono, Yayan Adrianova Eka Tuah, Muhammad Nurtanto, and Shilmi Arifah. "The Influence of Internship Experience and Work Motivation on Work Readiness in Vocational Students: PLS-SEM Analysis." *Indonesian Journal on Learning and Advanced Education (IJOLAE)* 5, no. 1 (2023): 32–44.

Xu, Xiaohua, Yuxia Zhang, Ping Zhou, Ying Lin, and Wenyan Pan. "A Modified Delphi Study on Establishing a Curriculum Content Structure for the Leadership and Management Competency Cultivation for Future Nurse Managers in China." *Heliyon* 8, no. 12 (December 1, 2022): 1–12.