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# IMPROVING SERVICE QUALITY THROUGH STRENGTHENING TRANSFORMATIONAL LEADERSHIP, TECHNOLOGY LITERACY, CREATIVITY, INTERPERSONAL COMMUNICATION AND ENTREPRENEURSHIP

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**Abstract :** The purpose of this study is to produce strategies and ways to improve the quality of teacher services at the private Vocational High School (SMK) level by examining other variables that positively affect the quality of teacher services in educating and teaching their students. Furthermore, the strategies and ways to improve the quality of services found were used as recommendations to related parties, namely the Head of the Education Office, School Supervisors, Foundations, School Principals, and Private Vocational Teachers in South Tangerang City. Finding the best model to improve the quality of teacher services by conducting empirical research through the Modeling and Optimization of Resource Managemen method. This research method using mixed method. In this study, a gap between real and ideal conditions of teacher behavior as an indicator of service quality was identified. The next stage involves qualitative research in the form of interviews with informants to explore the factors that affect the quality of teacher services and the relationship between these factors. The results of this study show that Based on the survey results, factors were found to improve the quality of teacher services as follows: 1) Transformational Leadership, 2) Technology Literacy, 3) Creativity, 4) Interpersonal Communication, and 5) Entrepreneurship.

**Keywords:** *Improving Service Quality, Strengthening Transformational Leadership, Technological Literacy, Creativity, Interpersonal Communication And Entrepreneurship*

## INTRODUCTION

Teachers play a direct role in the success of learning in schools. Likewise in vocational middle schools (SMK), where the quality of teacher services is very important and has a significant impact on the educational process and student development towards increasing student achievement. Teachers who are qualified in service to students can teach more effectively, facilitate student understanding, and foster an interest in learning. This will have a direct impact on improving student academic achievement. Furthermore, the formation of students' character and foft skills is also greatly influenced by teachers who are willing to provide services in the form of communication, cooperation, and problem solving. This will have an impact on the development of students' potential and readiness to face future challenges.[1]

The quality of education services in Banten Province, especially in South Tangerang City, is still relatively low, not in accordance with the minimum service standards expected, this is reflected in the achievement of education quality scores published by the Banten Provincial Education Quality Assurance Agency (LPMP) for South Tangerang City in 2018, for elementary schools of 5.46, junior high schools of 5.42, high schools of 5.46 and vocational schools of 5.32. While the ideal quality score target according to national education standards is 7.00. From these data, it can be found that the achievement of quality scores for vocational schools is at the bottom of all levels of education [2]. From the same data source, the achievement of the quality score of each national standard of education for SMK is as follows; Graduate competency standards are 6.33, content standards 5.74, process standards 6.48, assessment standards 6.04, educator and education personnel standards 3.08, sarpras standards 3.14,

[1] Senol, H., & Dagli, G. (2017). Increasing service quality in education: Views of principals and teachers. *Eurasia Journal of Mathematics, Science and Technology Education*, *13*(8), 4857-4871.

[2.] Succi, C., & Canovi, M. (2020). Soft skills to enhance graduate employability: comparing students and employers' perceptions. *Studies in higher education*, *45*(9), 1834-1847.

management standards 5.82, and financing standards 5.93. From this data, it can be found that the achievement of educator and education staff standards and infrastructure standards is still far towards the ideal national standard of education [3].

The results of a preliminary survey through a questionnaire on service quality conducted on 30 teachers from 10 Private Vocational Schools in South Tangerang City in October 2021, obtained the following conclusions :

(a) 40% of teachers are not skilled in teaching, difficulty in delivering material, managing classes, and evaluating student learning outcomes.
(b) 30% of teachers are still inconsistent and objective in assessing student learning outcomes, and evaluating student learning outcomes correctly.
(c) 37% of teachers are less concerned about student development, lack of effective communication with students and parents in dealing with student problems.
(d) 27% of teachers lack confidence and ability to answer students' questions.
(e) 33% of teachers still lack attention and support to the needs of students.


Figure 1. The open unemployment rate by highest educational attainment (percentage), February 2021-February 2023.

[3] E Aoun Joseph, "Robot-Proof: Higher Education in the Age of Artificial Intelligence" (Cambridge, MA, and London: The mit Press, 2017).

The image above shows that the highest unemployment rate is actually from vocational high school (SMK) graduates, who are supposed to be ready to enter the workforce. This indicates a mismatch between the soft skills needed by the industry and the potential of SMK graduates. Based on the above explanation, although there has been a lot of research to improve the quality of services in schools, comprehensive and continuous research is still needed to determine the needs and shortcomings that exist. Therefore, research on the quality of services in schools, especially in vocational schools, is still very necessary to achieve the desired educational success.

## Regional Geology

### Quality of Service

According to [4] service quality is defined as the customer's perception of service performance that meets or exceeds their expectations about the services provided by the service organization[5]. Some indicators of service quality include tangible objects (*Tangibles*), such as physical facilities, equipment, and the appearance of personnel; *reliability*, namely the ability to provide services reliably and accurately; *responsiveness*, which is the willingness to help customers and provide services quickly; *Assurance*, which includes the competence, courtesy, credibility, and security of employees; and *empathy*, which includes customer access, communication, and understanding. Empathy is also the full, personalized attention a company gives to its customers.

According to [6] service quality, it is defined as an overall consumer assessment and perception of the level of service excellence received (*perceived service*) and the level of service expected (*expected service*) in an effort to provide

[4] Katia Saliba and Annmarie Gorenc Zoran, "Measuring Higher Education Services Using the SERVQUAL Model," *Journal of Universal Excellence* 4, no. 4 (2018): 160–79.

[5] Ching Sing Chai, Joyce Hwee Ling Koh, and Chin-Chung Tsai, "A Review of Technological Pedagogical Content Knowledge," *Journal of Educational Technology & Society* 16, no. 2 (2013): 31–51.

[6] Ahmad Ripai et al., "Application of the Split-Step Fourier Method in Investigating a Bright Soliton Solution in a Photorefractive Crystal," in *AIP Conference Proceedings*, vol. 2331 (AIP Publishing, 2021).

satisfaction to customers. Meanwhile, some indicators used to measure service quality include reliability, *responsiveness,* assurance, *empathy*, and *tangibles*).

**Transformational Leadership**

Transformational [7] leadership is defined as a leadership style that motivates members to commit to a shared vision and helps them develop their potential and tackle problems from new perspectives. The indicators that distinguish transformational leadership include: 1) *Idealized Influence*, namely the charisma of the leader, 2) Intellectual Stimulation, which is intellectual stimulation provided by the leader, 3) *Individualized Consideration*, which is the attention given by the leader to each individual, and 4) *Inspirational Motivation*, which is the motivation given by the leader to motivate his subordinates.

While [8] formulating transformational leadership is based more on leader behavior that transforms the values, beliefs, and needs of their followers into manifestations within the organization. The key for transformational leaders is that they strive to empower and increase followers. It is further explained that the characteristics of transformational leadership include: (a) Charisma (*Charisma*) refers to behaviors that provide vision and a sense of mission; instilling pride; gain respect and trust; (b) Inspiration refers to the behavior of communicating high expectations; using symbols to focus efforts; express important goals in simple ways; (c) Intellectual *stimulation* refers to behaviors that increase intelligence, rationality; and careful problem solving; and (d) *Individual consideration* which refers to behavior that provides personal attention; treat each employee individually [9].

## Technology Literacy

*The Education Development Center* (EDC) states that literacy is more than just literacy. But more than that, literacy is the ability of individuals to use all their potential and skills in life. There are several types of literacy, including:

[7] Bradley M Colquitt et al., "Cellular Transcriptomics Reveals Evolutionary Identities of Songbird Vocal Circuits," *Science* 371, no. 6530 (2021): eabd9704.

[8] Fred Luthans, Brett C Luthans, and Kyle W Luthans, *Organizational Behavior: An Evidence-Based Approach Fourteenth Edition* (IAP, 2021).

[9] Desianti, L. C., & Jayadih, "J. Enhancement of Organizational Commitment Through Strengthening Shared Leadership And Teacher Satisfaction In Fadilah Vocational High School South Tangerang.," n.d.

(a) Basic Literacy, is a basic ability in reading, writing, listening, and arithmetic. The goal of basic literacy is to optimize a person's ability to read, write, count, and communicate.
(b) Library Literacy, is the ability to understand and distinguish fiction and non-fiction writing, understand how to use catalogs and indexes, and the ability to understand information when making a paper and research.
(c) Media Literacy, is the ability to know and understand various forms of media (electronic media, print media, etc.) and understand how to use them.
(d) Technology Literacy, is the ability to know and understand things related to technology, such as *hardware* and *software*, understand how to use the internet and understand ethics in using technology.
(e) Visual Literacy, is a more understanding of the ability to interpret and give meaning to information in the form of images or visuals. Visual literacy comes from the thought that an image can be "read" and its meaning can be communicated from the reading process.

Advances in wireless information systems, such as the internet, are not the only technological developments taking place. Technological advancements are also seen in hardware and software related to digital media. This is reflected in the increasingly sophisticated and diverse software and applications that make it easier for users.

## Creativeness

Creativity is the use of new ideas in working, solving problems, and performing innovative actions [10] Some factors that can support creativity include (a) love to learn new things, (b) try to find opportunities or new ways to work, (c) confidence in work, and (d) openness to accept new and better ideas [11]. Meanwhile, [12] it suggests that creativity is the activity of turning original ideas

[10] S. Desianti, L. C., Hardhienata, S., & Setyaningsih, "The Modelling of ICT Literacy, Work Engagement, and Personal Knowledge Management to Enhance Teacher Creativity. Asian Journal of Management, Entrepreneurship and Social Science, 3(03), 164-192," 2023.

[11] Jason A Colquitt, Jeffery A Lepine, and Michael J Wesson, "Organizational Behavior: Improving Performance and Commitment," *Organizational Behaviour. McGraw-Hill Education. Www. Mhhe. Con*, 2015.

[12] Yubo Chen, Qi Wang, and Jinhong Xie, "Online Social Interactions: A Natural Experiment on Word of Mouth versus Observational Learning," *Journal of Marketing Research* 48, no. 2 (2011): 238–54.

into useful products, services, or processes. Some of the indicators of creativity expressed are (a) developing unique ideas that are different from existing ones, (b) creating benefits for the organizational environment, and (c) realizing them in verbal form (suggestions), processes (methods), or finished products.

Creativity is a person's behavior to express and realize the potential of thinking power to produce something new and unique or the ability to combine something that already exists into something else so that it is more interesting. Creativity Indicators are; (1) Curiosity; (2) Persistent development of ideas; (3) respect students' ideas; (4) Implementation of novelty in learning activities; and (5) Dare to take risks [13].

## Interpersonal Communication

Communication is a basic need and an integral part of human life. Therefore, individuals need to learn how to communicate with each other in order to live a harmonious and peaceful life in all walks of life consisting of tribes, nations and languages. In life, interpersonal communication is used as an important means of connecting people to others to promote friendship, brotherhood, conflict determination, comfort and comfort others in need, give advice and advice, and so on. Under the right conditions, interpersonal communication can be more polite, tolerant in communicating and strengthen the silahturahmi rope so that the main life goals can be achieved. In its implementation, interpersonal communication is an integral part of teaching because there is no teaching without communication, and both verbal and nonverbal messages are inherent in communication.

The role of communication occupies a very strategic position for the management of an organization. A manager must be able to communicate well to build *human skills* and maintain relationships with subordinates. This is done because effective communication can affect employee behavior in an

[13] Makhrus Makhrus, Oding Sunardi, and Rita Retnowati, "INCREASING TEACHERS'CREATIVITY THROUGH THE DEVELOPMENT OF ORGANIZATIONAL CULTURE, EMPOWERMENT AND VISIONARY LEADERSHIP OF SCHOOL PRINCIPLES," *International Journal of Social and Management Studies* 3, no. 2 (2022): 20–33.

organization, [14] stating, "*effective communication is important in organization because it affects practically every aspect of organizational behavior*."

The term interpersonal refers to the interaction between two or more people in an organization (*interpersonal relation, when two people interact*). Davis (2002). When interpersonal behavior occurs, there are 4 orientations, namely: (1) I am not okay, you are okay, (2) I am not okay, you are not okay, (3) I am ok, you are not okay, and (4) I am okay, you are ok. Of the 4 orientations, of course, the most positive is when interpersonal behavior is both okay or equally lucky. In order for the results of interpersonal behavior to be mutually beneficial or equally okay, the behavior must be based on knowing each other, having mutual *respect*, having a sense of belonging or *affection*, and a sense of pleasure and comfort (*enjoy interacting with one another*) [15].

## Entrepreneurship

Entrepreneurship or entrepreneurship is a mental attitude and nature of the soul that is always active in trying to advance work dedicated to increasing income in business activity. Entrepreneurship is also a creative and innovative ability that is used as a basis, tips, and resources to find opportunities for success. According to [16] the essence of entrepreneurship is the ability to create something new and different through creative thinking and innovative actions to create opportunities amidst life's challenges. Drucker also asserted that entrepreneurship does not only refer to the owner of a business or company, but can also be owned by employees within the company. According to [17]defining Entrepreneurship is a pattern of behavior based on the concept of strategic thinking and risk-taking, which is able to create new opportunities and is oriented towards progress or improvement for organizations and individuals. 1)

[14] George W Dollar, "A History of Fundamentalism in America," 1973.

[15] Jill Griffin, "Customer Loyalty: Menumbuhkan Dan Mempertahankan Kesetiaan," *Alih Bahasa, Jakarta: Erlangga*, 2015.

[16] Peter Drucker and Joseph Maciariello, *Innovation and Entrepreneurship* (Routledge, 2014).

[17] Sean McCully, Michael Schermerhorn, and John B Thatcher Jr, "NIRCam Filter Wheels," in *Cryogenic Optical Systems and Instruments XI*, vol. 5904 (SPIE, 2005), 90–94.

*Internal locus of control*: control of the goals to be achieved, self-directed and self-reliant, 2) *High energy level: persistent*, work hard and be able to expend great efforts to succeed, 3) *High Need for Achievement*: motivated to achieve challenging goals, and crave feedback, 4) *Tolerance for Ambiguity*: *risk-takers* are often challenged to deal with situations of 'uncertainty, 5) *Self-confidence*: feel competent, have confidence, and dare to make decisions, 6) *Passion & action orientation*: trying to overcome problems, and not wasting time, 7) *Self-reliance & desire for independence*: want to be independent, confident, want to be a boss (non-labor), 8) *Flexibility:* willing to face problems /errors and immediately change actions if the plan implemented does not bring results.

## RESEARCH METHODS

The sequential explotarory method that begins with research on the theme of service quality. From the initial research research on teacher service quality, it was found that there is a gap between real conditions (das sein) and ideal conditions expected (das sollen) from teacher behavior which is an indicator of service quality. Furthermore, qualitative research was conducted in the form of interviews with sources or informants whose purpose was to explore factors and investigate the relationship between factors that allegedly had a positive and dominant effect on the quality of teacher services. Furthermore, based on the factors found, data reduction, grouping, and tabulation of data are carried out so that they can be classified into a variable (codification). From these variables, a constellation of teacher service quality models is then built and analyzed so as to produce research hypotheses.

Data collection is carried out by interviewing sources or informants. Data and information from interviews in the form of: 1) Information related to teacher behavior in schools daily in terms of teaching, communicating with students, developing knowledge, solving problems, and adapting to change. 2) What factors support and hinder the development of teacher service quality. 3) What facilities and support have been carried out by the school in order to improve the quality of teacher services. 4) Opinions and ideas from informants related to the

development of service quality in the future. Form this interview we revealed 10 variables mentioned by the informants that can influence the quality of teachers' services at work, namely: (1) Transformational Leadership, (2) Work Discipline, (3) Organizational Culture, (4) Organizational Support, (5) Entrepreneurship, (6) Creativity, (7) Interpersonal Communication, (8) Technological Literacy, (9) Compensation, and (10) Work Motivation. Subsequently, the process of Focus Group Discussion (FGD) and triangulation through expert evaluation was conducted, resulting in 5 main variables that support service quality, namely: 1) Transformational Leadership, 2) Entrepreneurship, 3) Creativity, 4) Interpersonal Communication, and 5) Technological Literacy. These variables were then used as a model for improving the service quality of private vocational high school (SMK) teachers.

The next research stage goes to the quantitative stage to test the constellation of the built model and hypothesis testing. Model tests and hypothesis tests were carried out using the Partial Least Square Structural Equation Modeling (PLS-SEM) technique using the SmartPLS application version 4.0. SmartPLS will examination model and the research hypothesis is tested, to obtain strategies to improve Service Quality and ways to improve teacher Service Quality.

Table 1. Population of Private Teacher SMK in Tangerang City

| Kecamatan | Jumlah Sekolah | Jumlah Guru |
|---|---|---|
| Ciputat Timur | 7 | 74 |
| Setu | 2 | 42 |
| Pondok Aren | 7 | 97 |
| Serpong | 6 | 59 |
| **Grand Total** | **22** | **272** |

The population of this study consists of permanent foundation vocational high school (SMK) teachers in Tangerang City. The sample was determined using the multistage random sampling method and the Taro Yamane formula, resulting in a sample size of 162 individuals. Research data collection was carried out using questionnaire giving techniques to respondents. A questionnaire is a research instrument that asks respondents to fill in questions or statements given by researchers related to the thoughts, behaviors, feelings, attitudes, beliefs, values,

perceptions, personalities, and experiences of respondents or participants in accordance with the variables studied. The instruments used to measure the dependent variable, namely Service Quality (Y) and independent variables are Transformational Leadership (X1), Technology Literacy (X2), Creativity (X3), Interpersonal Communication (X4) and Entrepreneurship (X5).

The variables of Service Quality, Transformational Leadership and Interpersonal Communication, measured using the behavior rating scale, with 5 choices, namely: Always (Sl), Often (Sr), Sometimes (Kk), Never (P) and Never (TP). For the variables of Creativity and Entrepreneurship measured using instruments with 5 choices, namely; Strongly Agree (SS), Agree (S), Hesitate (R), Disagree (TS) and Strongly Disagree (STS). While Technology Literacy is measured using a form of multiple choice test with 5 choices.

## RESEARCH RESULT

### Analysis of Service Quality Model Test Results

The development of an optimization model for effective implementation is needed to obtain recommendations from research results, so that empirically built models must meet the criteria of validity and reliability in the *outer model* and *inner model*, the criteria *of goodness fit of*, and the criteria of model strength that show the quality of the model built. From testing using PLS-SEM, the following results were obtained :

**1. Measurement Model Analysis**

The results of the measurement model analysis (*outer model*) for each indicator on the independent variable and dependent variable of the Service Quality model are as follows :

(a) *Convergent validity analysis,* which is testing the level of validity of indicators in measuring variables built through *measuring Loading factor* for reflective type indicators and *significant Weight Factor* tests for formative type indicators. The *loading factor* test results for each reflective indicator have met the above criteria of 0.7 and *the significant weight factor* test has met the significant p-value < 0.05 criteria. Thus, the indicators of the

Service Quality Improvement Model are declared *valid* in measuring independent variables and dipendent variables.

(b) Composite Reliability analysis, which tests the consistency of reliability in reflective type indicators and multicoliniearity freedom in formative types. The test results showed that reflective indicators had a composite reliability coefficient of > 0.7 and an AVE value of > 0.5. Thus the indicators in the Creativity Enhancement Model are declared reliable in building independent variables and independent variables.

(c) Discriminant validity analysis, which is the assurance of a set of indicators combined in building varibale is not unidimensional and each has a unique or different concept. Based on measurements of the Fornell–Lerkel criterion , all indicators used to construct the dependent variable and the independent variable are declared to have adequate discriminants.

(d) Multicollinierity analysis, namely assurance that there is no correlation between two or more indicators in one predictor variable that correlates with each other. Based on the measurement of outer VIF (Variance Inflation Factor) on all indicators meet the criteria of VIF value < 5, it can be concluded that there is no multicollinearity problem in the Teacher Service Quality model.

Furthermore, based on the score of *path coefficient, loading factor,* and *R-square* values on each indicator, the magnitude of the influence and contribution of indicators in building independent variables and dependent variables can be analyzed as follows :

**1) Service Quality Variables**

The following table recaps the contribution of each indicator in building the Service Quality variable :

Table 1. Recapitulation of Contribution Value of Service Quality Variable Indicators.

| Indicator/ Factor | *Path* Coefficient | *Loading Factor* | Contribution Ranking |
|---|---|---|---|
| ***Assurance*** | 0,188 | 0,842 | 3 |

| | | | |
|---|---|---|---|
| ***Empathy*** | 0,182 | 0,860 | 4 |
| ***Reliability*** | 0,258 | 0,853 | 2 |
| ***Responsiveness*** | 0,139 | 0,858 | 5 |
| **Tangible** | 0,401 | 0,893 | 1 |

Table 1 shows that the biggest indicators that contribute to the service quality variable are: 1) *Tangible with* a path coefficient *value of* 0.401, followed by 2) *Reliability* 0.258, 3) *Assurance* 0.188, 4) *Empathy* 0.182 and 5) *Responsiveness* 0.139. Tangible is one of the important aspects in the quality of teacher services that can affect the quality and effectiveness of education. In the field of education, tangible means the ability of teachers to provide facilities, equipment, and physical appearance that support the teaching and learning process.

**2) Transformational Leadership Variables.**

The following is a recapitulation table of the contribution of each indicator in building the Transformational Leadership variable :

Table 2. Recapitulation of Contribution Value of Transformational Leadership Variable Indicators

| Indicator/ Factor | *Path* Coefficient | *Loading Factor* | Contribution Ranking |
|---|---|---|---|
| **Inspirative** | 0,160 | 0,856 | 4 |
| **Carismatics** | 0,397 | 0,884 | 1 |
| **Considerable** | 0,294 | 0,863 | 2 |
| **Renewers** | 0,285 | 0,845 | 3 |

Table 2 shows that the biggest indicators that contribute to the Transformational Leadership variable are: 1) Charismatic with a path coefficient *value of* 0.397, followed by 2) Considerrative 0.294, 3) Reformer 0.285, 4) Inspirational 0.160.

**3) Technology Literacy Variables.**

The following is a recapitulation table of the contribution of each indicator in building the Technology Literacy variable:

Table 3. Recapitulation of the Contribution Value of Technology Literacy Variable Indicators.

| Indicator/ Factor | *Path* Coefficient | *Loading Factor* | Contribution Ranking |
|---|---|---|---|
| **Communicate Digitally** | 0,417 | 0,831 | 1 |
| **Managing Digital Information** | 0,291 | 0,804 | 3 |
| **Developing Digital Learning Media** | 0,216 | 0,805 | 4 |
| **Using Hardware and Software** | 0,417 | 0,788 | 2 |

From table 3 shows that the biggest indicators that influence in contributing to the Technology Literacy variable are 1) Communicate Digitally with *a path coefficient value of* 0.417, followed by 2) Using Hardware and Software 0.417, 3) Managing Digital Information 0.291, 4) Developing Digital Learning Media 0.216.

**4) Creativity Variables.**

The following table recaps the contribution of each indicator in building the Creativity variable:

Table 4. Recapitulation of Contribution Value of Creativity Variable Indicator.

| Indicator/ Factor | *Path* Coefficient | *Loading Factor* | Contribution Ranking |
|---|---|---|---|
| ***Fluency*** | 0,390 | 0,883 | 1 |
| **Elaborasi** | 0,295 | 0,872 | 3 |
| **Flexibilitas** | 0,177 | 0,795 | 4 |
| **Originalitas** | 0,296 | 0,882 | 2 |

From table 4 shows that the biggest indicators that influence in contributing to the variable Creativity are 1) *Fluency with* a path coefficient *value of* 0.390, followed by 2) Originality 0.296, 3) Elaboration 0.295, 4) Flexibility 0.177.

**5) Interpersonal Communication Variables.**

The following table recaps the contribution of each indicator in building Interpersonal Communication variables:

Table 5. Recapitulation of the Contribution Value of Interpersonal Communication Variable Indicators.

| Indicator/ Factor | *Path* Coefficient | *Loading Factor* | Contribution Ranking |
|---|---|---|---|
| ***Empathy*** | 0,257 | 0,858 | 2 |
| ***Exploratif*** | 0,217 | 0,819 | 4 |
| ***Feedback*** | 0,136 | 0,816 | 5 |
| ***Openness*** | 0,397 | 0,867 | 1 |
| ***Similarity*** | 0,219 | 0,836 | 3 |

Table 5 shows that the biggest indicators that contribute to Interpersonal Communication variables are 1) *Openness with* path coefficient *value* 0.397, followed by 2) *Empathy* 0.257, 3) *Similarity* 0.2919, 4) *Explorative* 0.217, 5) *Feedback* 0.136.

**6) Variable Entrepreneurship**

The following is a recapitulation table of the contribution of each indicator in building the Entrepreneurship variable:

Table 6. Recapitulation of the Contribution Value of the Entrepreneurship Variable Indicator.

| Indicator/ Factor | *Path* Coefficient | *Loading Factor* | Contribution Ranking |
|---|---|---|---|
| ***Inovatif*** | 0,351 | 0,858 | 1 |
| ***Keberanian mengambil resiko*** | 0,249 | 0,814 | 4 |
| ***Keterampian Manajerial*** | 0,321 | 0,852 | 2 |
| ***Optimis*** | 0,308 | 0,828 | 3 |

From table 6 shows that the biggest indicators that influence in contributing to the Entrepreneurship variable are 1) Innovative with a path coefficient *value of* 0.351, followed by 2) Managerial Ability 0.321, 3) Optimistic 0.308, 4) Courage to take risks 0.249:

**a. Structural Model Analysis**

Based on the results of the PLS-SEM test, the structural model of Service Quality obtained results;

(1) Multicollinearity analysis proves that there is no *multicollinearity problem* in the structural model of service quality, because all inner VIF values of independent and dependent variables are below the value of 5.

(2) Analysis of the coefficient of determination (*R-square*) of the dependent variable of service quality shows a high (*strong)* value, which is 0.985. This means that this model is able to analyze and explain the magnitude of *variability* of the dependent variable of service quality based on the influence of changes in independent variables Transformational leadership, technological literacy, creativity, interpersonal communication and entrepreneurship is 98.5 percent, and the rest is influenced by other variables outside the model.

(3) Analysis of *the path coefficients* of almost all paths in this model shows positive values and is greater than 0 except for the path of technological literacy to service quality of –0.058. This means that 4 independent variables have a unidirectional (positive) influence on service quality variables or the magnitude of performance changes from service quality variables in the same direction as the magnitude of changes from independent variables and 1 variable has the opposite direction (negative) to service quality variables. Simultaneously, based on the evaluation of structural models, it shows that the Transformational Leadership variable (X1) has the greatest *direct effect* on changes in service quality variables with a path coefficient value of 0.704. This shows the urgency for principals to leverage transformational leadership to foster the quality of teacher services. Furthermore, the variables that play a role in influencing the performance of teacher service quality are the Creativity variable with a pathcoefficient value of 0.170, the interpersonal communication variable of 0.128, the entrepreneruship variable of 0.046 and the Technology Literacy variable of (-0.058).

(4) The Goodness *of Fit* evaluation showed satisfactory results because all Model Fit criteria values were met, namely SRMR value 0.009 (less than 0.80 criteria),

NFI value 0.971 (less than 1.0 criteria and the closer to 1 the better), and Q-square value 0.932 (more than 0).

(5) A *Q-square* or *predictive relevance* value greater than 0 identifies the model as having a good observational value. Thus, the overall structural model of service quality built is valid and appropriate (fit) to predict the improvement of teacher service quality through strengthening transformational leadership, technological literacy, creativity, interpersonal communication and entrepreneurship.

(6) Evaluation of model strength through *PLS-predict criteria* shows the results of the PLS algorithm's ability to predict the model quite well (being at the medium level) compared to the linear regression method of the model.

**b. Analysis of the Strength of Influence Between Variables**

As determined at the beginning of the study, the focus of this research is on strategies and ways to improve the quality of teacher services which is an important element related to achieving educational goals. From the qualitative research conducted, variables were found that had a positive and dominant influence on the quality of teacher services. These variables are transformational leadership, technological literacy, creativity, interpersonal communication and entrepreneurship with the best constellation of models as presented in Figure 2.

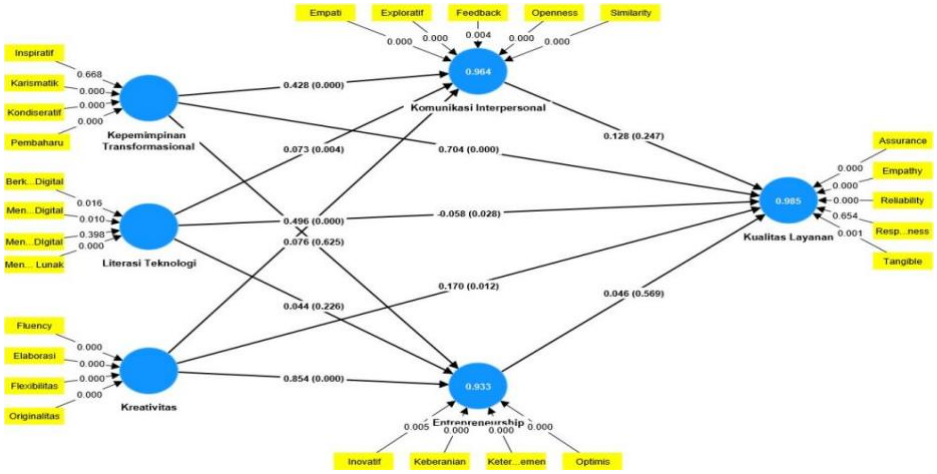

Figure 2. Constellation of Teacher Service Quality Models.

**4. Discussion**

Based on the magnitude of the value of the path coefficient from each exogenous variable to the endogenous variable of service quality. The highest value of the exogenous variable path coefficient is a top priority to be addressed or corrected if there are weak indicators. The priority order of handling variables based on the value of the path coefficient is: (1) Transformational Leadership, (2) Entrepreneurship, (3) Interpersonal Communication, (4) Creativity and (4) Technology Literacy.

## CONCLUSION

Based on the survey results, factors were found to improve the quality of teacher services as follows: 1) Transformational Leadership, 2) Technology Literacy, 3) Creativity, 4) Interpersonal Communication, and 5) Entrepreneurship. Based on the results of PLS-SEM analysis found constellation of teacher service quality models that have met the Goodness of fit criteria as follows. Based on the magnitude of the path coefficient in the constellation of models built, it shows that Transformational Leadership is the variable that has the greatest influence on improving teacher service quality, followed by Entrepreneurship, Interpersonal Communication, Creativity and Technology Literacy. The strategies and ways found in this study to improve the quality of teacher services are as follows: a. Based on variable analysis using PLS – SEM, a strategy to improve Service Quality was obtained by strengthening Transformational Leadership, Entrepreneurship, Interpersonal Communication, Creativity and Technology Literacy.

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