

Performance Evaluation of Supervisor Consultants in Construction Works (Case Study: Sp. Talang Pudak – Suak Kandis Road Works)

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ABSTRACT

This study aims to determine the assessment of the performance of the supervising consultant on the Simpang Talang Pudak – Suak Kandis Road work. The method used in determining the performance of the supervisory consultant in this work is the Customer Statistics Index with data collection using a questionnaire to determine the level of satisfaction of service users. Based on the results of the research that has been done is the performance of the Supervisory Consultant in the implementation of the Road Works Sp. Based on the results of analysis using the Customer Satisfaction Index (CSI) method, Jalan Simpang Talang Pudak – Suak Kandis obtained a value of 90.34%. This value is included in the range of $90\% < CSI \leq 100\%$ which means that the performance of the Supervisory Consultant is very satisfying to the PUPR Office of Jambi Province as a construction customer/construction service user.



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1. INTRODUCTION

The road is infrastructure most transportation _ used by Indonesian society _ do activity mobilization daily [1] . Roads are also Very good infrastructure important in support economy [2] . Before road can used as infrastructure Of course there is such a thing as a work process road, which is deep the process involve consultant supervisor For supervise work that. Study This aim For evaluate performance consultant supervisor in implementation Road Works Sp. Talang Pudak – Suak Kandis. Consultant performance supervisor No Far with function management project. Function management including planning , organizing , leading , controlling and staffing [3] . Management project is application knowledge, skills, tools, and techniques in activity project For reach objective divided project _ in the process, namely the process as following: Initiating, planning, implementing, managing and receiving. At stage beginning implementation, management project usually made as a planning and ongoing process developing, but also controlling and controlling implementation project. That is , project will handed over accept it to owner project at stage end of the settlement process project [4] .

2. METHODS

Method used that is method Analysis Descriptive with data retrieval with method spread questionnaire to user services on the Talang Pundak - Suak Kandis intersection road works . Distributed questionnaires _ containing draft satisfaction customer with connection factor performance qualities and aspects management project [5] which is presented in **Table 1** below :

Table 1. Relationship between Quality Performance Factors With Aspect Management Project

No	Performance Indicators	Variable Measurement	Aspect Management
A Products			
1	Performance	- Fulfillment to completeness administration project	- Management communication
B Service			
1	Time	- Supervise planning implementation realistic work (scheduling).	- Management time
2	Timeliness	- Supervise work to suit with curve plan	- Management time
3	Completeness	- Supervise implementation in accordance with an action plan	- Management time
4	Consistency	- Routine and orderly in administration	- Management communication
5	Accuracy	- Suitability report project with condition actual in the field - Accuracy in agree material use	- Management communication - Management procurement
6	Responsiveness	- Handling problems / disorders (cost , quality , time , conflict , etc.) on work - Give solution when happen problem in the field	- Management risk
7	Reliability	- System occupational safety and health (K3) during construction	- Management risk
8	Communications	- Team Leader/ Supervisor Engineer ability in communicate Good verbally and in writing - Inform possible risks _ can happen during construction - Integrated communication _ between member team	- Management source Power man - Management communication - Management integrity
9	Competence	- Structure organization manager complete project _ with source Power competent / qualified human beings	- Management source Power man

2.1 Design Instrument Research (Questionnaire)

Questionnaire as designer instrument purposeful research _ For measure in a way direct study to performance consultant . Instrument study planned has 3 parts that is related profile respondents ,

assessment to level satisfaction and assessment to level interest related with stated variables _ in instrument research.

As for the diagram flow research to be carried out by the author can seen in **Figure 1**.

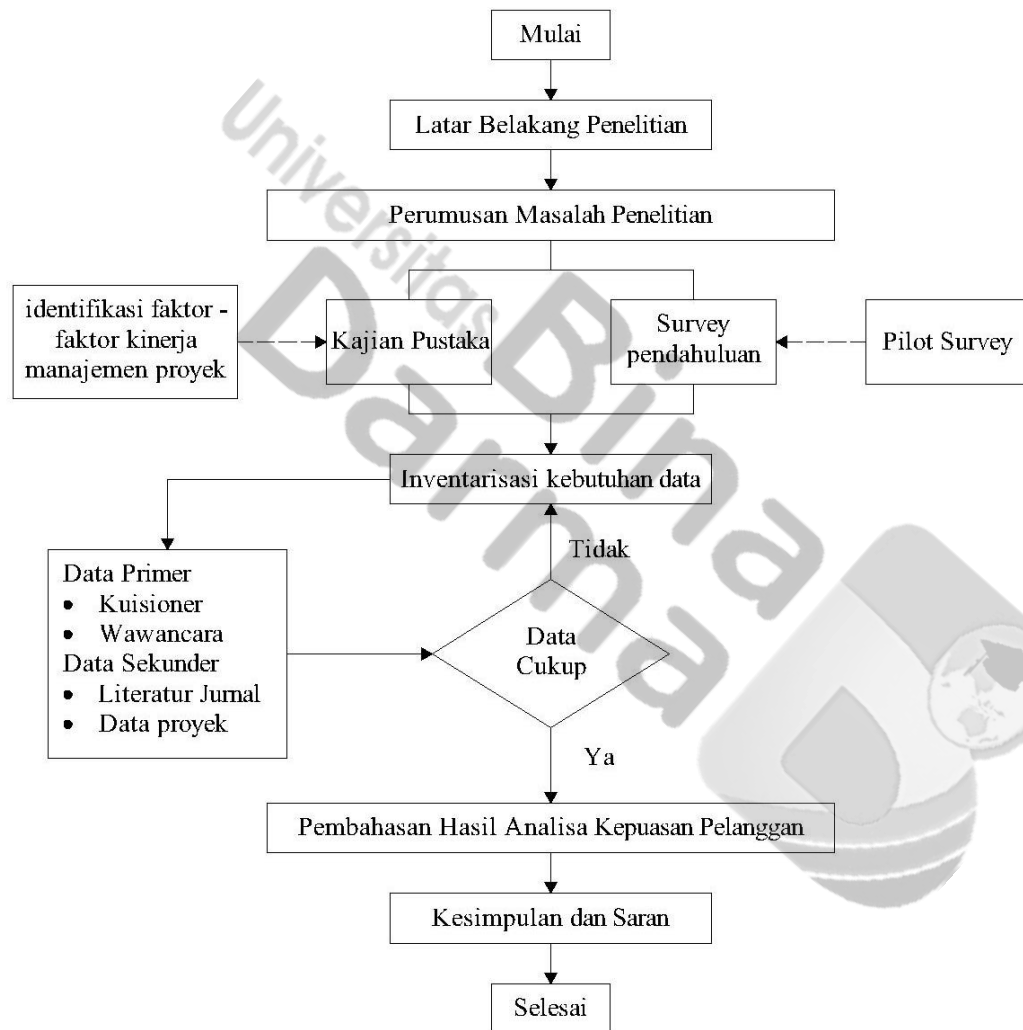


Figure 1. Flow diagram Study

3. RESULTS AND DISCUSSION

After doing spread questionnaire , in chap This will discuss about distribution questionnaire , profile respondents , processing and analysis of related data evaluation performance consultant supervisor .

3.1. Distribution Questionnaire

Distribution questionnaire done to party owner project namely the Jambi Province Public Works and Public Housing Service. Owner project own duties and rights For evaluate performance consultant supervisor. Amount personnel on the job supervision Road Works Sp. Talang Pudak – Suak Kandis with around 30 personnel and 15 personnel as sample.

3.2. Identity Respondent

As for the distribution of identity data respondents can seen in **Table 2** as following :

Table 2. Last level of education Respondent

Level of education	S2	S1	SMA
Lots of it	1	8	6

3.3. Conformity Level Management Performance Variables Project

As for the results evaluation respondents for each variable :

1. Fulfillment to completeness administration project

One _ task consultant supervisor is ensure full completeness administration project . From the pyramid twelve respondents _ obtained results evaluation level satisfaction and interest from variable fulfillment to completeness administration project , that is as following :

Table 3. Assessment Respondent on Fulfillment Performance to completeness administration project

Level of Performance Satisfaction Fulfillment of Project Administration Completeness					
Very Dissatisfied	Not satisfied	Quite satisfied	Satisfied	Very satisfied	Value
0	0	0	6	9	69
Level of Importance of Performance Fulfillment of Completeness of project administration					
Very Dissatisfied	Not satisfied	Quite satisfied	Satisfied	Very satisfied	Value
0	0	0	5	10	70

From the two data above will produce level suitability For supervision and control project amounting to 98.57%.

2. Supervise planning implementation realistic work (scheduling) .

Supervise contractor executor in compile scheduling project is one _ task consultant supervisor . From the pyramid twelve respondents _ obtained results evaluation level satisfaction and interest from variable supervise planning implementation realistic work (scheduling) , ie as following :

Table 4. Assessment Respondent on Supervising Performance Planning Implementation Realistic Work (Scheduling) .

Level of Performance Satisfaction Supervises Realistic Work Implementation Planning (Scheduling).					
Very Dissatisfied	Not satisfied	Quite satisfied	Satisfied	Very satisfied	Value
0	0	0	6	9	69
Level of Performance Importance Oversees Realistic Work Implementation Planning (Scheduling).					
Very Dissatisfied	Not satisfied	Quite satisfied	Satisfied	Very satisfied	Value
0	0	0	5	10	70

From both levels of data satisfaction and interest on will produce level suitability For supervision and control project amounting to 98.57%.

3. Supervise work to suit with curve plan

Supervise work to suit with curve plan is one of them task from consultant supervisor . From fifteen respondents obtained mark evaluation level satisfaction and interest from variable supervise work to suit with curve plan , that is as following:

Table 5. Assessment Respondent on Supervising Performance Work to suit with Plan Curve

Level of Performance Satisfaction Monitoring Work to conform to the Plan Curve					
Very Dissatisfied	Not satisfied	Quite satisfied	Satisfied	Very satisfied	Value
0	0	0	7	8	68
Level of Performance Importance Monitoring Work to conform to the Plan Curve					
Very Dissatisfied	Not satisfied	Quite satisfied	Satisfied	Very satisfied	Value

0	0	0	6	9	69
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From both levels of data satisfaction and interest the will produce level suitability For supervision and control project of 98.55%.

4. Supervise implementation in accordance with *action plan*

Action plan is plan work or implementation project yeah made by the contractor in a way detailed . Supervise implementation in accordance with an *action plan* is one task consultant supervisor . From fifteen respondents obtained results evaluation level satisfaction and interest from variable Supervise implementation in accordance with *action plan*, namely as following :

Table 6. Assessment Respondent on Supervising Performance implementation in accordance with *action plan*

Level of Performance Satisfaction Supervise implementation in accordance with <i>the action plan</i>					
Very Dissatisfied	Not satisfied	Quite satisfied	Satisfied	Very satisfied	Value
0	0	0	6	9	69
Level of Performance Importance Supervise implementation in accordance with <i>the action plan</i>					
Very Dissatisfied	Not satisfied	Quite satisfied	Satisfied	Very satisfied	Value
0	0	0	5	10	70

From both levels of data satisfaction and interest the will produce level suitability For supervision and control project amounting to 98.57%.

5. Routine and orderly in administration

Apart from being sued For fulfil completeness administration project , consultant supervisor must routine and orderly in administration . Routine and orderly admin is form commitment consultant supervisor in operate principle management . Of the fifteen respondents studied _ obtained results evaluation level satisfaction and interest from variable Routine and orderly in administration is as following :

Table 7. Assessment Respondent to Routine and orderly in administration

Level of Satisfaction with Routine and Orderly Performance in Administration					
Very Dissatisfied	Not satisfied	Quite satisfied	Satisfied	Very satisfied	Value
0	0	0	9	6	66
Level of Importance of Routine and Orderly Performance in Administration					
Very Dissatisfied	Not satisfied	Quite satisfied	Satisfied	Very satisfied	Value
0	0	0	9	6	66

From both levels of data satisfaction and interest the will produce level suitability For supervision and control project by 100%.

6. Conformity report project with actual conditions in the field

Consultant supervisor sued For supervise suitability report project with actual conditions in the field. Suitability This related Value work billed by the contractor is Already in accordance with implementation _ _ in the field. Of the fifteen respondents studied _ obtained results evaluation level satisfaction and interest from variable Suitability report project with actual conditions in the field is as following:

Table 8. Assessment Respondent on Conformity Performance report project with actual conditions in the field

Level of Performance Satisfaction Conformity of project reports with actual conditions in the field					
Very Dissatisfied	Not satisfied	Quite satisfied	Satisfied	Very satisfied	Value
0	0	0	10	5	65

Level of Performance Importance Conformity of the project report with actual conditions in the field					
Very Dissatisfied	Not satisfied	Quite satisfied	Satisfied	Very satisfied	Value
0	0	0	10	5	65

From both levels of data satisfaction and interest the will produce level suitability For supervision and control project by 100%

7. Precision in agree material use

Accuracy in agree Material use is one _ task from consultant supervisor . Accuracy This related with use of materials in the field with required material specifications . Of the fifteen respondents studied _ obtained results evaluation level satisfaction and interest from variable Accuracy in agree material use is as following :

Table 9. Assessment Respondent on Accuracy Performance in agree material use

Performance Satisfaction Level Accuracy in approving material use					
Very Dissatisfied	Not satisfied	Quite satisfied	Satisfied	Very satisfied	Value
0	0	0	9	6	66

Level of Importance Performance Accuracy in approving the use of materials					
Very Dissatisfied	Not satisfied	Quite satisfied	Satisfied	Very satisfied	Value
0	0	0	9	6	66

From both levels of data satisfaction and interest the will produce level suitability For supervision and control project by 100%.

8. Handling problems / disorders (cost , quality , time , conflict , etc.) on work

Implementation work supervision is one of them is apply principle momagemen . When it happens constraint or problem / disorder in work consultant supervisor expected capable For give handling to problem that . Of the fifteen respondents studied _ obtained results evaluation level satisfaction and interest from variable Handling problems / disorders (cost , quality , time , conflict , etc.) on work is as following :

Table 10. Assessment Respondent on Handling Performance problems / disorders (cost , quality , time , conflict , etc.) on work

Level of Performance Satisfaction Handling problems/disorders (cost, quality, time, conflict, etc.) on the job					
Very Dissatisfied	Not satisfied	Quite satisfied	Satisfied	Very satisfied	Value
0	0	0	6	9	69

Level of Performance Importance Handling problems/disorders (cost, quality, time, conflict, etc.) on the job					
Very Dissatisfied	Not satisfied	Quite satisfied	Satisfied	Very satisfied	Value
0	0	0	6	9	69

From both levels of data satisfaction and interest the will produce level suitability For supervision and control project by 100%.

9. Deliver solution when happen problem in the field

Handling problem in work construction very related with active consultant supervisor give solution when happen problems with the project . Of the fifteen respondents studied _ obtained results evaluation level satisfaction and interest from variable Give solution when happen problem in the field is as following :

Table 11. Assessment Respondent to Give solution when happen problem in the field

Performance Satisfaction Level Provide solutions if problems occur in the field					
Very Dissatisfied	Not satisfied	Quite satisfied	Satisfied	Very satisfied	Value
0	0	0	6	9	69

Level of Performance Importance Provide solutions if problems occur in the field					
Very Dissatisfied	Not satisfied	Quite satisfied	Satisfied	Very satisfied	Value
0	0	0	6	9	69

From both levels of data satisfaction and interest the will produce level suitability For supervision and control project by 100%.

10. System occupational safety and health during construction

System Occupational safety and health during Construction . Of the fifteen respondents studied _ obtained results evaluation level satisfaction and interest from variable Give solution when happen problem in the field is as following :

Table 12. Assessment Respondent on System Performance occupational safety and health during construction

Level of Satisfaction with Occupational Safety and Health System Performance during construction					
Very Dissatisfied	Not satisfied	Quite satisfied	Satisfied	Very satisfied	Value
0	0	0	10	5	65
Level of Importance of Occupational Safety and Health System Performance during construction					
Very Dissatisfied	Not satisfied	Quite satisfied	Satisfied	Very satisfied	Value
0	0	0	9	6	66

From both levels of data satisfaction and interest the will produce level suitability For supervision and control project amounting to 98.48%.

11. Team Leader/ Supervisor Engineer ability in communicate Good verbally and in writing

Team Leader/ Supervisor Engineer ability in communicate Good both verbally and in writing needed in implementation project . Of the fifteen respondents studied _ obtained results evaluation level satisfaction and interest from variable Give solution when happen problem in the field is as following:

Table 13. Assessment Respondent to Team Leader/Supervisor Engineer ability in communicate Good verbally and in writing

Level of Performance Satisfaction Team Leader/Supervisor Engineer's ability to communicate both verbally and in writing					
Very Dissatisfied	Not satisfied	Quite satisfied	Satisfied	Very satisfied	Value
0	0	0	7	8	68
Level of Performance Importance Team Leader/Supervisor Engineer's ability to communicate both verbally and in writing					
Very Dissatisfied	Not satisfied	Quite satisfied	Satisfied	Very satisfied	Value
0	0	0	7	8	68

From both levels of data satisfaction and interest the will produce level suitability For supervision and control project by 100%.

12. Inform possible risks _ can happen during construction

As consultant supervisor For can identify , assess , control and minimize possible risk _ happen during construction . Of the fifteen respondents studied _ obtained results evaluation level satisfaction and interest from variable Give solution when happen problem in the field is as following:

Table 14. Assessment Respondent on Informing Performance possible risks _ can happen during construction

Satisfaction Level Informs about risks that may occur during construction					
Very Dissatisfied	Not satisfied	Quite satisfied	Satisfied	Very satisfied	Value

0	0	0	7	8	68
Importance Level Informs about risks that may occur during construction					
Very Dissatisfied	Not satisfied	Quite satisfied	Satisfied	Very satisfied	Value
0	0	0	7	8	68

From both levels of data satisfaction and interest the will produce level suitability For supervision and control project by 100%.

13. Integrated communication _ between member team

Integrated communication _ between member team very important _ in implementation project . Of the fifteen respondents studied _ obtained results evaluation level satisfaction and interest from variable Give solution when happen problem in the field is as following :

Table 15. Assessment Respondent towards integrated Communication Performance _ between member team

Level of Performance Satisfaction Integrated communication between team members					
Very Dissatisfied	Not satisfied	Quite satisfied	Satisfied	Very satisfied	Value
0	0	0	5	10	70
Level of Performance Importance Integrated communication between team members					
Very Dissatisfied	Not satisfied	Quite satisfied	Satisfied	Very satisfied	Value
0	0	0	5	10	70

From both levels of data satisfaction and interest the will produce level suitability For supervision and control project by 100%.

14. Structure organization manager complete project _ with source Power competent / qualified human beings

Structure organization manager complete project _ with source Power competent / qualified human beings. Of the fifteen respondents studied _ obtained results evaluation level satisfaction and interest from variable Give solution when happen problem in the field is as following :

Table 16. Assessment Respondent on Structural Performance organization manager complete project _ with source Power competent / qualified human beings

Level of Performance Satisfaction Complete project management organizational structure with competent/qualified human resources					
Very Dissatisfied	Not satisfied	Quite satisfied	Satisfied	Very satisfied	Value
0	0	0	8	7	67
Level of Performance Importance Complete project management organizational structure with competent/qualified human resources					
Very Dissatisfied	Not satisfied	Quite satisfied	Satisfied	Very satisfied	Value
0	0	0	8	7	67

From both levels of data satisfaction and interest the will produce level suitability For supervision and control project by 100%.

Based on results distribution quizomer then the variables performance management project obtained percentage mark level suitability customer highest down to the lowest as following :

Table 17. Level of Conformity Application Management Project

No.	Var No.	Project Management Performance Variables	Conformity Rate (%)
1	5	Routine and orderly administration	100.00
2	6	Suitability of project reports to conditions actual in the field	100.00
3	7	Accuracy in approval material submission	100.00
4	8	Handling problems/ disruptions (cost, quality, time, conflict , etc.) on work	100.00
5	9	Give solutions if problems occur in the field	100.00
6	11	Team Leader/ Supervisor Engineer 's ability to communicate both verbally and in writing	100.00

7	12	Inform possible risks _ happen during construction	100.00
8	13	Integrated communication _ between member team	100.00
9	14	Structural organization complete project manager with resources Power competent / qualified human beings	100.00
10	1	Fulfillment to completeness project administration	98.57
11	2	Oversee realistic work implementation planning (scheduling).	98.57
12	4	Supervise work according to <i>the action plan</i>	98.55
13	3	Supervise work to ensure it conforms to the plan curve	98.57
14	10	System occupational safety and health (K3) during construction	98.48

3.4. Determination of Mean for Each Variable

Mean is something the average value obtained from total sum on values scale shared with amount size sample. Following is average value _ respondents questionnaire that can be seen in the table under this.

Table 18. Mean for each Variable

No. Var.	Mean Satisfaction	Mean Interest
1	4.60	4.67
2	4.60	4.67
3	4.53	4.60
4	4.60	4.67
5	4.40	4.40
6	4.33	4.33
7	4.40	4.40
8	4.60	4.60
9	4.60	4.60
10	4.33	4.60
11	4.53	4.53
12	4.53	4.53
13	4.67	4.67
14	4.67	4.47

3.5. Customer Statistics Index

Satisfaction is feeling somebody in appreciate feeling like nor disappointed to perceived performance on a _ product . One _ method For measure satisfaction somebody can done with use method *customer satisfaction index* . *Customer Satisfaction Index* is method For measure satisfaction customer based on attributes that will be measured like reliability , power responsiveness , assurance , and empathy . As for calculations *customer statistic index* obtained _ from comparison between level importance and level satisfaction performance management project consultant supervisor in work construct can seen in **Table 19**.

Table 19. Calculations Satisfaction Index

variable	Mean Importance Score	Valuing Factors	Mean Satisfaction Score	Valuing Factors
A	B	$c = (b / b_{Total}) * 100\%$	d	$e = c * d$
1	4.67	7.35%	4.60	0.34
2	4.67	7.35%	4.60	0.34
3	4.60	7.24%	4.53	0.33
4	4.67	7.35%	4.60	0.34
5	4.40	6.93%	4.40	0.30
6	4.33	6.82%	4.33	0.30
7	4.40	6.93%	4.40	0.30
8	4.60	7.24%	4.60	0.33
9	4.60	7.24%	4.60	0.33
10	4.40	6.93%	4.33	0.30
11	4.53	7.14%	4.53	0.32
12	4.53	7.14%	4.53	0.32
13	4.67	7.35%	4.67	0.34
14	4.47	7.03%	4.47	0.31
Total	63.53	100.00%		
$Value Total = \sum Value Score$				4.52
$Satisfaction Index = (Value Total / Scale(5)) * 100\%$				90.34%

Based on results calculations in table 20, obtained CSI results for performance variables management project consultant supervisor in work construction amounting to 90.34%. that value is in range CSI value ie between ($90\% < CSI \leq 100\%$) which is meaningful that customer or user service in matter This is the Jambi Province PUPR Service feels very satisfied on performance consultant supervisor in work construction

4. CONCLUSION (TIMES NEW ROMAN, 12 PT, BOLD)

Based on results and discussions that have been carried out carried out and explained in chapter previously, it can be withdrawn conclusion as following:

1. Supervisory Consultants in the implementation of Sp. Road Works. Talang Pudak – Suak Kandis based on analysis results using *the Customer Satisfaction Index (CSI)* method to obtain value 90.34%. This value falls within the range $90\% < CSI \leq 100\%$ which means the performance of the Supervisory Consultant very satisfying Jambi Province PUPR Department as customer construction / user service construction.
2. Indicator performance of supervisory consultants own value or level suitability among others; performance *performance* (fulfillment to completeness project administration 98.57%), *time* (overseeing realistic work implementation planning (scheduling) 98.57%), *timeliness* (overseeing work to conform to the plan curve 98.57%), *completeness* (overseeing implementation in accordance with the action plan 98, 55%), *consistency* (Routine and orderly in administration 100%), *accuracy* (Conformity of project reports with actual conditions in the field 100% and Accuracy in approving the use of materials 100%), *Responsiveness* (Handling

problems/disorders (cost, quality, time, conflict , etc.) on the job 100% and Providing solutions if problems occur in the field 100%), *Reliability* (Occupational Safety and Health (K3) system during construction 98.48%), *Communication* (Team Leader/Supervisor Engineer's ability to communicate both verbally and writing 100%, Informing about risks that may occur during construction 100% and Integrated communication between team members 100%) and *Competence* (Complete project management organizational structure with competent/qualified human resources 100%) . *The main performance of the Supervisory Consultant in the implementation of the Sp. Road Works. Talang Pudak – Suak Kandis according to the analysis results including performance _ consistency, accuracy, responsiveness, communication and competence*

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