

## The influence of motivation and collaboration on organizational performance

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### Abstract

Organizational performance is an important factor for business sustainability. Various factors, both internal and external can influence the success of organizational performance. The purpose of this research is to examine the influence of collaboration and motivation on organizational performance. Statistical data processed using Smart PLS with 295 respondents showed that motivation and collaboration have a significant positive influence on organizational performance. Employees' motivations are significantly influenced by individual competence and goal importance. While collaboration is significantly influenced by coordination and resource allocation. The results of this study confirm previous research, as well as give a new theoretical approach, especially related to the positive influence of coordination and resource allocation on collaboration which is certainly useful to enrich science in the field of collaboration and organizational performance. The managerial implication of this study recommends leaders increase collaboration programs and always maintain employee motivation in order to provide the best for the organization.

**Keywords:** motivation, collaboration, performance, individual competence, goal importance, coordination, resource allocation

### 1. Introduction

In the midst of very tight business competition today, in the era of the Covid-19 pandemic, companies are forced to survive and save organizations from adversity. The organization makes every effort to maintain its performance, while looking for opportunities for continued growth in the future. In very general terms, Organization Performance has been defined as a set of financial and non-financial indicators that are able to assess the level of achievement of organizational goals and objectives (Kaplan & Norton, 2001). This organizational performance arises from the influence of operational performance such as human resources, strategy, etc. Where this is further emphasized by Iselin, Mia & Sands (2008)..

There are various studies that show that organizational performance can be achieved with the strong motivation of employees. The results of the research from Manik & Sidharta (2017), showed that performance is strongly supported by employee work motivation. In addition, the ability of employees will greatly impact on improving performance. Szumowska, Kossowska & Roests (2018) in their study added the importance of goal importance in determining the degree of motivation to deliver the best performance, however, not all motivations can directly affect the performance of the organization. Even in his research related to the System performance in a manufacturing industry, Purwanto, Asbari & Santoso confirmed there is no motivational influence on the performance (2019). Thus, there are many factors that influence to the degree of motivations such as individual competence and goal important (Szumowska et al., 2018).

In addition, organizational performance is also influenced by situations, such as collaboration between team members. Different motivational factors or plans would have different motivational influences on different employees to achieve their best performance. (Assbeihat, 2016; Ghaffari et al., 2017). The extent to which the team coordinates in the activity determines how strong the level of collaboration of the team is (Bond-Barnard et al., 2018). On the other hand, collaboration itself can have a positive impact on improving team performance (Lee & Raschke, 2016), but in other situations collaboration does not directly produce the best performance. Some research shows that collaboration will be better if supported by a strong organization commitment and sufficient culture (Nikpour, 2017) and distribution of workers (Glenn, 2009).

Previous research on the influence of motivation on performance was conducted in the manufacturing industry (Purwanto et al., 2019; Sumantri et al., 2017), education (Turabik & Baskan, 2015; Ghaffari et al., 2017; Chadwick & Raver, 2015) (Asmus et al., 2015), and government agencies (Manik & Sidharta, 2017). There's not many research on this in the mining industry. Researchers found one study in the mining sector in Ghana (Kuranchie-Mensah & Amponsah-Tawiah, 2016), but was more associated with job satisfaction. While the relationship between Individual competence and Goal importance with motivation does not exist yet. In collaboration context, previous research mostly explores collaboration in industries such as manufacturing (Assbeihat, 2016), & food industry (Rani et al., 2017). Previous research has also involved inter-company collaboration (Klijn et al., 2013), or on a project scale (Chiochio et al., 2012; Bond-Barnard et al., 2018). It has not been found the research on collaboration aspect in intra-company collaboration, how inter-functions within the organization conduct the collaboration process.

Considering the above explanation, it is reasonable to further examine the influence of motivation and collaboration to organizational performance within the organization in the mining sector. We do the research in the largest coal mining services company in Indonesia, namely PT XYZ. In this company, researcher notice that when the achievement of collaboration programs in the operational stream decreased by 36%, was correlated with decreasing in performance of 46.5%. Achievement of collaboration programs in 2020 in each stream ranges from 17%-100% (PT XYZ, 2020). Thus there are many factors that influence the success of the collaboration program in order to have a positive impact on the organization performance.

## **2. Literature Review**

### **2.1. ORGANIZATION PERFORMANCE**

In very general terms, *Organization Performance has been defined* as a set of financial and non-financial indicators capable of assessing the level of achievement of organizational goals and objectives (Kaplan & Norton, 2001). The organization performance arises from the influence of operating performance such as, *human resources and strategy*, where this is further emphasized by Iselin, Mia & Sands (2008) in their research that employees become important factors in the dimension of performance, especially related to satisfaction and capability. Other studies have found the importance of organizational factors including strategic orientation, organizational culture, and organizational commitment that can directly and indirectly contribute to improving organizational performance (Khuwaja et al., 2018).

### **2.2. MOTIVATION**

Motivation is an important part to understand why people behave differently in the workplace and how to manipulate their behavior so that they exert their best efforts to achieve organizational goals (Haque et al., 2014). Since in order to continue to perform well, employees need to continue their work smoothly and without interruption. It will be able to provided when employees have a willingness to do the job and always motivated to deliver the best result (Turabik & Baskan, 2015). Employee is more motivated if in charge with the more challenging task (Osabiya, 2015). In addition, managers should consider that diverse incentive plans can affect employees in different ways, at different positions, due to continuous changes in the work situation (Ghaffari et al., 2017).

### **2.3. COLLABORATION**

Collaboration is defined as interconnected processes of four team work's aspect : communication, synergy, explicit & implicit coordination. These four aspects was provide the evidence of the existence and complexity of collaboration as a multilevel construction (Chiochio et al., 2012). Collaborative teams are different from traditional teamwork because their members have different skills. Although members have different areas of expertise, they still have the same goals, resources, and leadership. With their diverse range of specific skills, they should be able to

solve problems as a group. Meanwhile, Glenn (2009) mentioned that there are five aspects of collaboration : coordination, workforce allocation, standard of inter operation, responsibility & authority, and feedback.

## **2.4. INDIVIDUAL COMPETENCE**

Capability and competence is a manifest of the abilities and expertise of humans. Competence describes a person's ability to do things. Competence is the ownership of skills, knowledge and capacity to meet current needs and the ability to develop themselves to meet future needs (Nagarajan & Prabhu, 2011). This is also relevant with the research from Epstein & Hundert (2002), the competence build on a foundation of basic skill, scientific knowledge, and moral development. For those individuals with high initial perceived competence, there was also some evidence to suggest that their willingness to engage in the task again in the future was enhanced as a function of enhanced intrinsic motivation (Patall et al., 2014). Which is emphasize by Sumantri, et al.(2017) in their research concluded the significant influence of the competency on work motivation that has a significant impact on performance.

## **2.5. GOAL IMPORTANCE**

Goal Setting is defined as a strategic process for the company to ensure the company's goals and target are developed and deployed well to the entire organization. The existence of goals in the organization is able to increase employee performance 12%-15% even without incentives (Asmus et al., 2015). Goal setting has an impact on employee effectiveness that leads to organization effectiveness (Teo & Low, 2016). Specific goals & challenging targets has motivating employees to perform at their best as their goals are more focused and improve employee capability. In thefield of education, it is also proved by Kuranchie-Mensah & Amponsah-Tawiah, (2016) where employees who are eager to achieve a high level of academic goals, in general are more motivated to pursue the best value. This is in line with research form Chen & Mathieu (2008) where the motivation to achieve excellent performance is strongly influenced by the approach, interpretation and response to situations and challenges.

## **2.6. COORDINATION**

Coordination is defined as "management of dependencies among independent activities", which emphasizes the interaction between these activities, and their autonomy (Boella & Torre, 2006). Coordination explicitly becomes a full mediator of the correlation process of team conflict & performance. The extent to which the team coordinates in the activity determines how strong the level of collaboration of the team is (Bond-Barnard et al., 2018). This coordination needs to be done in all stages of activities, from planning, implementation, as well as review and follow-up. Alaloul, Liew, & Zawawi (2016) in their research stated that one of the most important factors in coordination is if all parties are actively involved in planning. The coordination behavior has a positive impact on performance, both team and organization (Khan et al., 2010).

## **2.7. RESOURCE ALLOCATION**

Resource allocation is the process by which an organization determine how to grow its production factors among various productive activities for performance (Bower, 2016). In fact, this resource allocation process is a complex process that involves the strength of engineering, economics, finance, organization, culture and interpersonal that are fundamentally interconnected. In this context of our research, we emphasize on human resource allocation. In relation with the allocation of human resources (organizational, cultural and interpersonal), the leader is one of the essential resources for the formation of effective collaboration (Assbeihat, 2016). But, beside the existence of leaders, the number of resources, the form of organization, and procedures of communication and coordination become important in order to utilize these resources effectively to achieve good performance (Friebel & Raith, 2009).

## **3. Hypothesis Development**

### **3.1. MOTIVATION TO PERFORMANCE**

Considering the fact that in order to continue to perform well, employees need to continue their work smoothly and without interruption. It will be able to be provided when employees have a willingness to do the job and always motivated to deliver the best result (Turabik & Baskan, 2015). The results of the research from Manik & Sidharta (2017) showed that performance is strongly supported by employee's work motivation. In addition, managers should

consider that diverse incentive plans can affect employees in different ways, at different positions, due to continuous changes in the work situation (Ghaffari et al, 2017). In addition, Ochola (2018) stated that motivation can significantly affect the performance of an organization

Hypothesis-1 : Motivation has a positive influence on organizational performance

### 3.2. COLLABORATION TO PERFORMANCE

Klijn et al. (2013) in the research confirms the positive relationship between collaboration and performance within the international joint venture organization. Whereas previous research has done by Assbeihat (2016), also concluded there is a positive relationship between the collaboration of members and performance. Where also affirmed by Lee & Raschke (2016) related to the positive impact of collaboration on improving team performance. The Success of a program or project is very dependent on the degree of collaboration of the team that is also influenced by the level of trust between team members. (Bond-Barnard et al, 2018). Adler & Chen (2011) also concluded that large-scale collaborative creativity (LSCC) can drive performance improvement.

Hypothesis-2 : Collaboration has a positive influence on organizational performance

### 3.3. INDIVIDUAL COMPETENCE TO MOTIVATION

The results of previous research from Manik & Sidharta (2017), showed that performance is strongly supported by employee work motivation. These abilities are influenced by intellectual intelligence (cognitive, social, emotional, cultural) and physical abilities. Sumantri, Brahmajari & Munajah (2017) in his research also concluded the influence of significant from this competency on work motivation that has a significant impact on performance. Other studies have also concluded that there is a positive relationship between competence and individual performance and organizational performance (Zaim et al., 2013).

Hypothesis-3 : Individual competency has a positive effect on employee motivation

### 3.4. GOAL IMPORTANCE TO MOTIVATION

Specific goals & challenging targets was motivating employees to perform at their best as their goals are more focused, improve employee capabilities and quantitatively measured. This is also confirmed in the research of Szumowska et al. (2018) which states that the goal importance determines the degree of motivation of employees, although it requires more effort, but it makes employee more motivated to complete the task which will certainly lead to better performance. In the field of education, it is also proved by Kuranchie-Mensah & Amponsah-Tawiah (2016) where employees who are eager to achieve a high level of academic goals, in general are more motivated to pursue the best value because they will feel appreciated if they achieve excellent performance.

Hypothesis-4 : Goal importance has a positive influence on employee motivation

### 3.5. COORDINATION TO COLLABORATION

The Coordination explicitly becomes a full mediator of the of correlation process of team conflict and performance with strong information. The extent to which the team coordinates in the activity determines how strong the level of collaboration of the team is (Bond-Barnard et. al., 2018). Glenn (2009) mentioned that there are five aspects of collaboration: co-ordination, workforce allocation, standar of inter operation, responsibility & authority, and feedback. Researchers didn't find much research that specifically linked the influence of coordination to collaboration. Even Castañer & Oliveira (2020) in his research gave the recommendation for future research to further examine the relationship between coordination and collaboration in interorganizational relationships. But Researchers found one research in Bahasa Indonesia that firmly connects the coordination and collaboration, where is the coordination has a positive influence on the collaboration (Rani et al., 2017).

Hypothesis-5 : Coordination has a positive influence on collaboration

### 3.6. RESOURCE ALLOCATION TO COLLABORATION

Related to the allocation of human resources (organization, culture and interpersonal), the leader is one of the essential resources for the formation of effective collaboration (Assbeihat, 2016). Beside the existence of leaders, the adequacy of resources, organizational forms and procedures of communication and coordination become

important in order to utilize these resources effectively to achieve good performance (Freibel & Raith, 2009). Other research also mentioned that collaboration will be better when supported by the adequate allocation of workers (Glenn, 2009). Researchers have not found quantitative research that examines specifically the relationship between resource allocation and collaboration. However, based on various approaches of some previous research, researchers are confident to take the assumption there is a positive influence of resource allocation in collaboration.

Hypothesis-6 : The resources allocation has a positive influence on collaboration

Figure-1 is a proposed research framework that shows resource allocation, coordination, individual competence and goal importance as dependent variable. Collaboration and Motivation as mediating variable and organization performance as independent variable.

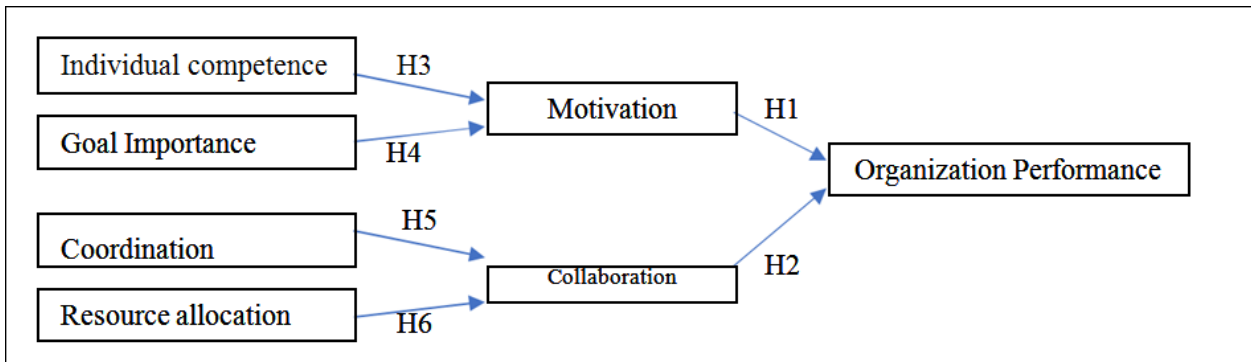


Figure-1 : Research Framework

## IV. Methodology

### 4.1. MEASUREMENT

Researchers use electronic questionnaire (google form) that is specially designed to meet the research objectives. This way are simple, fast and all respondents are familiar with this method. Each variable have indicator that represents those variable. There is minimum 3 items of questions in each variable. Question items is a result of the adaptation from previous research. 5 items for motivation variable (Deresa & Deru, 2019), 5 items for the variable of Goal Importance (Erickson Noonan, 2017), 3 items of Individual competence variable (Sitepu, 2014), 4 items for collaboration variable and 5 items for coordination variable (Mattessich et al., 2001), 5 items for Resource Allocation variable (Nadler, 2017; Qadeer & Butt, 2013), and for the Organizational Performance variable we have 6 items adapted from Maktabi & Khazaei (2014) and Rehman, Bhatti & Chaudhry (2019)

Respondents filled out questionnaires according to their experiences. The answer is set by numbers 1 to 5 of the Likert scale which indicates strongly disagree, disagree, neutral, agree and strongly agree with the existing question. We do the validity and reliability test before conducting the survey for total respondents.

### 4.2. DATA COLLECTION AND ANALYSIS

Although collaboration is basically done between divisions within the company, but researchers want to see individual responses to the influence of motivation and collaboration on performance. Respondents were taken from each division of PT XYZ, consisting of 10 Divisions, included: Operation, Engineering, Supply Management and Human Capital Division. by taking the staff / Officer level up to division head, excluding admin level employees. The 10 divisions consists of 619 employees, which consists of a leader level (Section Head Up = 162, including 10 division heads) and the rest are staff /officer levels.

In this study used probability sampling technique with stratified disproportional random sampling. This is in consideration of the representation of positions in each division, where there are Division Head, Department Head, Section head and Staff. However, the number of Department Head, Section Head and Staff in certain divisions is not balanced so it cannot be applied proportionally to the representation of the division population. In accordance with table 13.3 Sakaran & Bougie, the sample representing the purpose of the study was a total of 295 respondents (2016).

The analytical method used Structural Equation Modeling (SEM) Analysis conducted by using Smart PLS software. PLS-SEM analysis aims to find out whether the indicators are correlated with each other. PLS-SEM used

as an iterative algorithm consisting of several analyzes with the Ordinary Least Squares method. PLS-SEM is suitable for use as a method of analysis of a complex model, including if there is a mediating variable. This study used Bootstrapping technique as a nonparametric procedure to test the statistical significance between each variable

**V. Result And Finding**

Table-1 shows the demographic characteristics of the respondents. Out of 295 questionnaires, 259 respondents (87.8%) are men and 36 respondents (12,2%) are women. This is in line with the characteristic of the population as well as mining industries. Respondents with an age range of 31-35 an 36-40 years were the most dominant age group. Therefore, the majority of top leader involve in this research which is played an importance role in the organization.

Table-1 : Demographic characteristic of the respondents

Characteristics		Sample	
		Number	percent
Gender	Female	36	12.2%
	Male	259	87.8%
Age	21-25	12	4.1%
	26-30	31	10.5%
	31-35	93	31.5%
	36-40	65	22.0%
	41-45	41	13.9%
	> 45	53	18.0%
Position	Division Head	14	4.7%
	Department Head	53	18.0%
	Section Head	75	25.4%
	Staff/Officer	153	51.9%

**5.1. Validity and Reliability Test**

Prior to the deployment to 295 respondents, pilot tests were conducted to test the validity and reliability of the questionnaire items used. Pilot tests were conducted on 32 random respondents of different positions and ages. From validity and reliability analysis using SPSS version 26 tool, pilot test result of 37 items questionnaire representing all variables showed 1 item in invalid collaboration variable with loading factor < 0.5 (Hair at al., 2011). Researchers also decided to drop on 2 items in variable individual competence and 1 item in variable Organizational Performance because it has a marginal value compared to other items in the variable. Furthermore, 33 items of questionnaires that passed the validity and reliability test were used in further research on 295 respondents).

Based on data obtained from the 295 respondents, the validity test was conducted with Smart PLS by looking at the correlations between each measure items to each variable. Support is provided for convergent validity when each item has factor loadings above 0.70 (Hair Jr et al., 2014). Reliability test explains the level of confidence. The measure items that have high reliability can provide reliable results. The reliability test aims to measure whether someone answers consistently to the statement items in a questionnaire. The reliability test was also conducted using

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Smart-PLS, where the variable is said to be reliable if the composite reliability value  $> 0.70$ , with average extracted variances (AVE) levels  $> 0.50$  (Hair et al., 2011).

The validity and reliability test shows in Table 2 & 3 indicates that all the measure items were acceptable. The factor loading value varies from the smallest of 0.706 to the highest of 0.917. it means each instrument was acceptable. The composite reliability value from the lowest (0.867) to the highest (0.924) is above the minimum value, indicating that each variable follows the normal composite reliability and has a high-reliability rating. The results show that the minimum value of AVE is 0.566, which was quite acceptable. It can be indicated that every indicator that has been measured shows that the variable is valid. Therefore, it was concluded that all the scale fit measures were acceptable for testing the research model.

**Tabel 2 : Reliability and Validity Test**

Research Construct and research items	Factor Loading $> 0.7$	Composite Reliability $> 0.7$	AVE Var. Extracted $> 0.5$
Motivation		0.886	0.609
MT1	0.791		
MT2	0.821		
MT3	0.718		
MT4	0.716		
MT5	0.845		
Collaboration		0.889	0.667
CL1	0.813		
CL2	0.870		
CL3	0.803		
CL4	0.778		
Individual Competence		0.924	0.802
IC1	0.894		
IC2	0.917		
IC3	0.875		
Goal Importance		0.867	0.566
GI1	0.786		
GI2	0.754		
GI3	0.706		
GI4	0.795		
GI5	0.716		
Coordination		0.927	0.717
CD1	0.847		
CD2	0.883		
CD3	0.870		

CD4	0.871		
CD5	0.756		
Resource Allocation		0.905	0.656
RA1	0.831		
RA2	0.840		
RA3	0.825		
RA4	0.745		
RA5	0.805		
Organizational Performance		0.912	0.635
OP1	0.749		
OP2	0.760		
OP3	0.833		
OP4	0.805		
OP5	0.817		
OP6	0.813		

**Tabel 3 : Discriminant Validity**

	Collaboration Important	Coordination	Goal Important	Individual competence	Motivation	Organization Performance	Resource Allocation
Collaboration	<b>0.817</b>						
Coordination	0.783	<b>0.847</b>					
Goal Important	0.669	0.541	<b>0.752</b>				
Individual competence	0.462	0.403	0.507	<b>0.896</b>			
Motivation	0.656	0.533	0.749	0.506	<b>0.78</b>		
Organization Performance	0.599	0.638	0.536	0.408	0.575	<b>0.797</b>	
Resource Allocation	0.680	0.693	0.641	0.387	0.66	0.689	<b>0.810</b>

## 5.2. Hypothesis Test

To evaluate the relationship between variables in the proposed model, the study used Smart PLS 3 software. The hypothesis analysis is done by carrying out the bootstrapping method at a value of 5000 (re-samples). The hypothesis analysis is done by looking at the p-value that is related to each relationship between variables. Zero hypothesis rejected if p-value < 0.5. Figure-2 shows the results of the hypothesis analysis and the relationship between variables.

**Figure-2 : Result of Testing Model**



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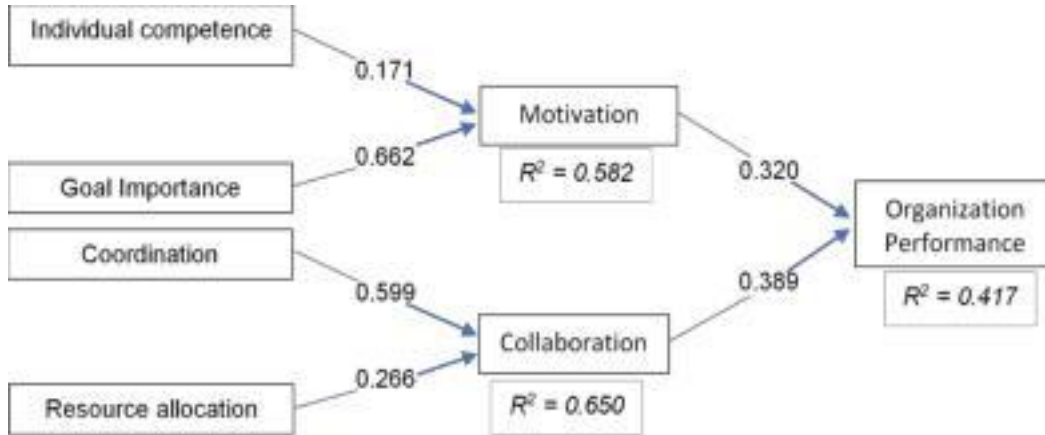


Table 4 : Summary of Statistical Hypothesis Test

Hypothesis	Variables	Original Sample Mean	Standard Deviation	T-Statistic	P-Value	Conclusion
H1	Motivation -> Organization Performance	0.32	0.070	4.596	0.000	Accepted
H2	Collaboration -> Organization Performance	0.38	0.069	5.657	0.000	Accepted
H3	Individual competence -> Motivation	0.17	0.070	2.424	0.015	Accepted
H4	Goal Important -> Motivation	0.66	0.058	11.475	0.000	Accepted
H5	Coordination -> Collaboration	0.59	0.057	10.556	0.000	Accepted
H6	Resource Allocation -> Collaboration	0.26	0.063	4.233	0.000	Accepted

## The influence of motivation and collaboration on organizational performance

The results of the hypothesis testing summarized in Table 4 shows that motivation have a positive influence on organization performance (p-value = 0.000), while collaboration also have a positive influence on organizational performance (p-value = 0,000). Individual competence and goal important have a positive influence on motivation (p-value = 0.015 and 0.000). Coordination and Resource allocation have a positive impact on collaboration (p-value = 0.000). Therefore, H1, H2, H3< H4, H5, and H6 all were accepted.

**Table 5 : Summary statistical test the effect fo mediating variable (motivation and collaboration)**

Variables	Original Sample	Sample Mean	Std. Deviation	T-Statistic	P-Value	Mediating Effect
Individual competence -> Motivation -> Organization Performance	0.055	0.056	0.026	2.1056	0,03	Significant
Goal Important -> Motivation -> Organization Performance	0.212	0.212	0.051	4.1390	0.00	Significant
Coordination -> Collaboration -> Organization Performance	0.233	0.234	0.044	5.2660	0.00	Significant
Resource Allocation -> Collaboration -> Organization Performance	0.103	0.106	0.035	2.9274	0.00	Significant

The role of motivation and collaboration as mediating variable is also tested using bootstrapping with re-sample 5000 as part of hypothesis test that has been described above, using Smart PLS. The result of statistical data evaluation of "special indirect effect" for the relationship of individual competence variable and goal importance variable with organization performance mediated by motivation variable, it was obtained P-value under 0.05 (0.036 and 0.000). So, it can be said that there is mediation effect of motivation on individual competence & goal important relationship with organizational performance. For the relationship between variable coordination and resource allocation with organizational performance mediated by variable collaboration also shows P-value under 0.05. Thus, there is also mediation effect of variable collaboration in coordination and resource allocation relationship with organizational performance.

## VI. Discussion

Based on the results of the analysis shows that motivation affects organizational performance significantly. R<sup>2</sup> value results of 0.582 showed that 58.2% organizational performance is determined by employee motivation, This finding was consistent with the results of previous research (Turabik & Baskan, 2015) which said that to be able to perform well, workers need to be motivated well. The results of the study are also in line with what was proved by Manik & Sidharta (2017), performance is strongly supported by employee work motivation. The research also showed different results from those examined by Purwanto, Asbari & Santoso in the manufacturing industry which stated that there is no motivational influence in system performance (2019).

The results also showed a positive influence of collaboration on organizational performance. An R<sup>2</sup> value of 0.650 indicates that 65% of organizational performance is determined by collaboration. This finding also support the previous research by Barnard, Fletcher, & Steyn (2018) which states that the success of a project is influenced by the degree of collaboration. The results of this study are also in accordance with data obtained from PT XYZ (2020), since the achievement of collaboration programs on operation streams decreased by 36% it correlated positively with organizational performance which decreased by 46.5%.

The finding of the research also showed a positive influence of individual competence on motivation. It's support previous research conducted by Sumantri, et.al (2017) which showed a strong relationship between employee competence with work motivation. This shows the importance of developing individual competencies to improve organization performance (Manik Sidharta, 2017; Zaim et al., 2013). This is also supported by the results of statistical analysis that shows a positive influence between individual competence variables in organizational performance (p-value = 0.045). There is a positive influence of goal importance on motivation. The results of this study support previous research conducted by Szumowska et al. (2018) which mentioned that the goal importance *determines the degree* of motivation of employees. These results also support the research of Kuranchie-Mensah & Amponsah-Tawiah (2016) in the field of education where the person who is eager to achieve a high level of academic *goals, in general* are more motivated to pursue the best value.

The results of the test showed a positive influence of coordination on collaboration. This finding also support the previous research in Indonesia conducted by Rani, et al. (2017) which also showed positive influence of coordination on collaboration. The results of this study also meet the recommendations of previous research conducted by Castañer & Oliveira (2020) where it is necessary to examine the relationship between coordination and collaboration. The results of this study also prove that coordination is not just one aspect of collaboration (Glenn, 2009), but has a significant positive influence on collaboration (p-value: 0.000). There is also a positive influence of resource allocation on collaboration. This is in line with the previous research conducted by Glenn (2009) mentioned that collaboration will be better when supported by the adequate allocation of workers. The results of this study also showed that the assumptions taken by the researchers are correct, where there is a significant positive influence of resource allocation in collaboration (p-value = 0.000).

Statistical analysis results also showed the significant mediation effect of motivation variables for individual competence and goal importance in organization performance. Similarly, the collaboration variable was showed a mediation effect for coordination and resource allocation on organization performance.

The researchers concluded that organizational performance is explained by collaboration variable and motivation variable as much as 41.70% ( $R^2 = 0.417$ ). The contribution of this influence is quite high for 2 independent variables (Vinzi et al., 2010). The rest can be explained by other variables not studied in this reserch. As for the fitness model, from the statistics analysis obtained RMSR (Root Mean Square Residual) figure of 0.065 (std: SMSR < 0.08), shows the proposed model has been fit (Henseler et al., 2016).

## 7. Conclusion

### 7.1. Theoretical Implications of the Study

This research contributes positively both theory and empirical in the field of organization performance, collaboration and motivation. In the context of organization performance, the resultsshow clearly the influence of collaboration and motivation on organizational performance. This research is important because most of the research related to collaboration involves inter-company relation (Klijn et.al., 2013; Castañer & Oliveira, 2020). , while the research carried out emphasizes to the intra-organization collaboration, where all hypotheses was well supported. Surely, this will enrich the science related to intra-company collaboration.

In the context of collaboration, the research results also provide new conceptual inputs on the relationship between coordination and collaboration, where coordination has a positive influence on collaboration. This is a positive contribution amidst the absence of extensive quantitative research that prove the direct influence of such coordination on collaboration. At the same time this embodies the recommendations of previous research to further examine of the relationship of coordination and collaboration (Castañer & Oliveira, 2020). In addition, the results of the study also provide new conceptual input on the relationship between (human) resource allocation and collaboration where resource allocation give a positive influence on collaboration. Researchers have not found any previous quantitative research related to this matter. So, it will be a valuable input to enrich the scientific field related to collaboration.

In the context of motivation, the results of the study support to the results of previous research (Sumantri et al., 2017) in relation with the positive influence of individual competence on motivation. Similarly, the goal importance relation with motivation, the results of the study also support the conclusions of previous research (Szumowska et al., 2018) in related to the positive influence of goal importance on motivation.

### 7.2. Managerial implications of the study

One of the managerial implications resulting from this research is the emergence of beliefs on the importance of collaboration and motivation as the determining factor of organizational performance. In this study the

leaders (Division head, Department head, section head) participated in filling out questionnaires. The results show that it is important for leaders to establish the collaboration program between functions within the organization to encourage the best performance achievement.

Leaders need to ensure the motivation of all employees are maintained to give their best performance. From the evaluation results of respondents, most respondents were aged 31-40 years (53.5%), which is included in the millennial generation who have a tendency to give more on competence and skill (Črešnar & Jevšenak, 2019). Individual competencies need to be maintained to fit the objectives of the organization, because not only to motivate employees, but also to have a good capability to realize the best performance. The role of the leader to ensure resource allocation in place is an important capital for the formation of effective collaboration and achieving the best performance.

### 7.3. Limitation and Future Research

This research is conducted to strengthen the existing theories and provide a new model regarding the influencer on organizational performance. The result of this study is expected to be used as reference material for further research. Although, the study was conducted only in Indonesia but specifically in the organization who in charge as market leader in mining services, hopefully represent the real situation. Therefore, there are limitations to the demographic's classification of research participants where there is a possibility to add others participant from other company in mining industries. Also, possible to add another industrial sector, such as agricultural sector, or civil infrastructure industries.

This study considers motivation and collaboration as the factor contributed to organizational performance. However, other factors can influence the organizational performance. It is recommended if future research will consider other factors such as culture, external support, and leadership style, of the respondents. Further research also can extend the proposed model of this study by considering adding several variables that might affect the collaboration and motivation.

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