

## **INFLUENCE OF TRAINING, COMPETENCE AND MOTIVATION ON EMPLOYEE PERFORMANCE, MODERATED BY INTERNAL COMMUNICATIONS**

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***Abstract:** In 2012, performance of PDAM in East Java was reported at the lowest rank of all provinces in the Java region (compared to five other provinces; West Java, Central Java, Banten, Yogyakarta and Jakarta). This condition raises the question of what factors influence the PDAM's in East Java in low-performance.*

*This study examines the factors affecting the performance of the employees of PDAMs in East Java. In this study, employee's training, employee's individual competence and employee's need for achievement motivation serve as the predictor variables on the performance of PDAM employees by entering PDAM's internal communication as a moderator variable. There are 9 hypotheses as follows: (1) training directly affects the performance; (2) competence directly affects the performance; (3) motivation directly affects the performance; (4) internal communication moderates the significance effect of training on performance; (5) internal communication moderates the significance effect of competence on performance; (6) internal communication moderates the significance effect of motivation on performance; (7) training affects the competence; (8) training affects the motivation; and (9) motivation affects the competence.*

*This applied explanatory research used the hypothetical-deductive method and structural equation model (SEM) supported by LISREL analysis. This study was conducted by taking the employee population with a sample of 197 employees that distributed in 12 PDAM in East Java. The sampling technique used is random sampling. Data was gathered using questionnaires completed by respondents for the variables of training, competence, achievement motivation, and internal communication, using semantic differential with range scale of 1 to 7; for the performance data collected from company officials in charge of the performance appraisal.*

*The results of this study indicate that all hypotheses confirmed except hypothesis 3 because motivation not significant directly influence performance. It also led to the hypothesis 6 "the significance of internal communication moderates the effect of motivation on performance" not tested.*

**Keywords:** *Employee's Performance, Training, Individual Competence, Need for Achievement Motivation, and Internal Communication.*

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## INTRODUCTION

Millennium Development Goals (MDGs) as stated on goal 7 point c is to reduce half of the proportion of the world's population who do not have access to drinking water in 2015. Regarding the goal Indonesia has set a target of achieving water services amounted to 68.87% in the year 2015. The approach taken by the government in order to meet the drinking water access is done through; sectoral programs, especially for rural communities and through other service providers i.e; the Local GOI Own Water Utility (PDAM) for urban communities and Sub-district Water Supply System (SPAM-IKK). Efforts to comply with drinking water services regulated by Government Regulation No. 16/2005 regarding Development of Drinking Water Supply Systems and Sanitation that contains the direction and guidance as well as the obligations and local governments in the development of WSS.

Report of the Indonesia Millennium Development Goals (MDGs) 2010 page 107 mentions the achievement of national water services at the end of the year 2009 has reached 47.71% of the total population of 206 264 595 (BPS, 2010). To achieve the target of 68.87% in 2015, a total of Indonesia must close the achievement gap by 21.07% or must achieve an increase of 4.23% on average per year. When compared to the base year 1993, the increase in the achievement of Indonesian water service each year on average only 0.26%. It is a big challenge for Indonesia which is practically also a challenge for PDAM.

PDAM performance evaluation report in 2011 showing of 335 PDAM in Indonesia as many as 145 taps are in a healthy condition, 103 less healthy and 87 PDAM declared sick. The low performance of this allegedly influenced by the low performance of the employee. The number of taps with sick status from 2010 to 2011 increased significantly by almost 5%. This means that the number of poorly performing taps increases. Of the whole province, the performance taps in the Java in general showed a fairly good condition except the province of East Java, where from 38 taps are 11 taps are unhealthy and 8 taps declared sick.

Based on Statistics 2011, East Java province with an area of wilayah 47.963 km<sup>2</sup> with a population of 37,687,622 inhabitants spread over in 38 districts / cities (30 districts and 8 cities) with a total urban population of 24,914,653 inhabitants became the target service taps. Until the year 2011 the number of taps customers in East Java has reached as much as 1.31572 million connections supported by 6,891 employees. The results of performance evaluation in 2011 taps above invite the attention of various parties.

The results of the annual performance appraisal Regional Water Company (PDAM), taps in East Java is the lowest rank compared to the other provinces in Java (BPSPAM, 2012). The decline in the performance of taps in East Java with regard to the quality or performance of the Human Resources taps (Djayadi, 2012). A review of the management problems taps nationally by PERPAMSI in 2010 put the problem of the low quality of human resources in the first rank in addition to other problems. Efforts

must be took to improve employee performance of PDAM, especially in East Java. This study aims to identify the factors that affect the performance of PDAM employees in East Java so that it can be used as a basis for improving employee performance.

## **LITERATURE REVIEW**

### **Employee Performance**

Performance is an accumulation of the individual's performance and the individual is a business asset (Harvard Business Essetial, 2006). Performance talking about how to do and what is done, who does not speak (Kotze-Stuart, 2009), is behavioral in work and as an feedback tool process of achieving goals (Latham et. Al., 2007). Performance includes three elements: (a) individu or who, (b) activities and (c) the place or where (Rothwell & Kazana, 2003). In essence, performance includes two perspectives namely individual perspective and organizational perspectives.

In the perspective of the organization, performance is defined as the value created by the organization using its productive assets to achieve what is expected (Verweire & Berghe, 2004). In the perspective of the individual, performance is defined as the ability/skills of the individual in doing work that is formally recognized as part of their job (Landy & Conte, 2010), the results of a series of activities to meet a target by some standards (Bailey, 1982 in Rothwell & Kazana, 2003) and is the organization's total expected value of the behavior of individual events separately over a period of time (Weiner *et al.*, 2012).

Factors that affect employee performance include capability, motivation, and organization (Vroom, 1964; Pringle, 1982); tradition, the characteristics of the organization, the definition of performance, technology and the type of task analysis (Landy & Conte, 2010); ability, motivation and resources (Lussier et al, 2010); motivation (intrinsic and extrinsic), quality control, social relations with the working group and the level of success or failure of the work (Armstrong, 2009); as well as the motivation, commitment and job satisfaction (Purcell, 2003). Boyatzis specifically argues that effective performance predicted by factors of labor demand (job demand), the competence of the individual, and environment of organization (Boyatzis in Hernandez, 2009). The managerial implications are to ensure the details of job descriptions, suitable individual competencies according to the type of work that dealt with and provide support for a conducive working environment that allows the individual can carry out their duties with ease. Common perception and understanding of the work is an important factor in the sense of commitment and responsibility. Managers and employees work together to identify, understand, and agree on what should have been done by employees, and how much needs to be done, why, when, and so on (Bacal, 2012). Some aspects to be considered in the implementation of employee performance are communication, performance agreement process, the performance review process, staff development plans, skills development, monitoring, and evaluation (Armstrong, 2009).

## Competency

Aspects of competency begin to get a strong position as a factor to be considered by firm for the achievement of effective performance. Limits depend on the type of competency of each organization in accordance with the needs and interests in the achievement of performance (Gupta, 2012). The concept includes elements of responsibility, competency, expertise, interdependency, education, training and learning; content of each of these elements had been developed in line with the changing demands (Green A, Wolf A & Lency T, 1999). Boyatzis (2008) argues that individual competence is one of the predictors of effective performance, further explained the competency of individuals is indicated by vision, values and philosophies held in the work, knowledge and skills possessed, as well as their interests and career life.

Competency is a specific characteristic or behavior of a person in terms of knowledge, skills, motives, values and self-concept that enable him/her to work more effectively, superior, and successful than others (Boyatzis, 1982, in Velayudhan, 2011; Dubois, 1983 and 1993 in Mills, 2006; Palan, 2007; Kesler, 2011, p. Xv). Competency can be observed, verified, logically, be used as a reference, reliable, and related to the job function (Woods, 2010; Mills, 2006; Gupta, 2012; Jackson *et al.*, 2011).

According to Boyatzis (2008) competencies can be developed through training. Competency as a condition for the fulfillment of tasks (job demand), either in whole or in part must be owned by an employee in performing job duties. If not enough then these competencies can be developed through training or other capacity building manner.

## Training

Training is a form of competency development to meet the demands in the fulfillment of both individual and company performance. Training is defined as a systematic approach to the impact on improving the knowledge, skills and attitudes in order to improve the effectiveness of individuals, teams, and organizations (Aguinis & Kraiger, 2009); as planned in a systematic effort to modify and develop the knowledge, skills, and attitudes through learning from experience to achieve effective performance in a variety of training activities intended to provide knowledge and skills and to inculcate attitudes needed for specific performance of the most frequently overlooked (Bukley & Caple, 2009).

Keywords of the training of the above definition is; systematic efforts, increase knowledge, skills and behaviors, as well as contribute to the improvement of performance. The concept of effective training to meet the needs of the company based on the results of the needs analysis, design and delivery, and evaluation of training (Saks & Haccoun, 2010). Individual differences in terms of duties and responsibilities in the work of consequence between the training needs of individuals differ from one another. To that end, the training was conducted based on the results of the analysis of organizational needs and requirements based on the potential that has been owned

by the individual, so that the training is strengthened or added to the knowledge or skills that already exist.

In the context of demand and behavioral job, training for employees at least include:

- a. Orientation of the job description of what tasks will be done, how to do, when, and in what way they will be evaluated.
- b. Thematic knowledge about the work in accordance with the latest issues and developments that must be followed or adopted by the company
- c. Specific skills to the work of more effective
- d. Matters concerning the internalization of values, motivation, and other positive behavior in the works.

### **Motivation**

In the concept of effective performance, motivation characterizes the individual competence (Boyatzis, 2008; Palan, 2007). The concept of motivation in general has fairly broad dimensions of daily life, from physical needs, security, social, reliability, and actualization (Maslow, 1943). Study of motivation in this research is the concept of motivation in working within the scope of their duties and responsibilities as a worker. Herzberg's two-factor theory concept (1968) explains that a person's performance is affected by motivatory and demotivatory factors. More specifically, the theory of motivation of McClelland (1968) popularized the concept of Need for Achievement Motivation which forms part of the theory of Need for Power and Need for Affiliation.

Motivation is a psychological event and motivations are also associated with intensity and persistence. Motivation as a process that stimulates a person to act for something they want, related to the willingness to work hard for the purposes of the organization, are stimulated by incentives, and is thought of as an incentive if it is perceived to help them to achieve their goals (Kumar et al., 2003:12). Likewise, Phares and Chaplin (1997) in James Y. Shah and Wendi L. Gardner (2008: 225), motivation is defined as the power within us that activates and directs behavior toward a goal more than others. Motivation as something that drives a person to act or behave in certain ways, and the motivation makes someone start, implement, and maintain a certain activity (Hanafi, 2003: 306). Terry Mitchell (1982) in Werner & DeSimone (2009:44) defines motivation as a psychological process that causes arousal, direction, and persistence of voluntary actions aimed at achieving a goal.

Achievement motivation is specifically defined as "the need to master the difficult challenges, to outperform others, and to meet the high standards of excellence" (Weiten, 2009:315); the individual's desire to excel significantly, mastering skills, control with high standards (McClelland, 1982, 1987); concerns issues of excellence, competition, challenging goals, persistence and Overcoming Difficulties. A person with a high need for achievement seeks excellence in performance, enjoys difficult and challenging goals,

and is Persevering and competitive in work activities. N-ach: a manifest (Easily perceived) need individuals that concerns issues of excellence, competition, challenging goals, persistence, and Overcoming difficulties (Nelson & Campbell, 2013:168).

Characteristics of individuals with high achievement motivation is as follows: work harder and more continuous for the task (Brown, 1974); follow up positively and effectively to negative feedback (Fodor & Carver, 2000); willing to delay gratification for the sake of long-term goals (Mischel, 1961; Aynor & Entin, 1982); competitive (McClelland, 1987; Stewart & Roth, 2007); feel the need to continue and remain outstanding, accept responsibility, set themselves to achieve realistic goals, positive in response to feedback, achievement is everything (Craig David Tom & Campbell, 2005:613); diligent, hard work, good relationships with superiors and subordinates (Crockett, 1962; McClelland & Boyatzis, 1982); strong desire, preoccupied with work (Atkinson, 1964; McClelland, 1965 in Jex & Brit, 2005:239).

### **Internal Communications**

Internal communications become part of the organizational environment that is outside the individual factors. Internal communications related to the climate and the performance of the communication process. Performance definition by Bacal (2012), which essentially confirms the performance management is communication between employees and employers on an ongoing basis in an atmosphere of partnership. In principle, this definition is related to the internal communication within the context of the performance communication.

Some definitions of internal communication are as follows: internal communication is across both formal and informal communication is done internally at all levels of the organization (Kalla, 2003 in Ragusa, 2010); exchange of information and ideas in an organization (Bovee & Thill, 2000 in Ragusa, 2010); efforts to make the entire internal stakeholders company as a customer, meaning that internal communication is internal marketing (Ahmed, 2003 in Ragusa, 2010); strategic process within an organization or company in which the internal communication can be a tool to motivate and empower employees (Argenti & Forman, 2002; Tourish & Hargie, 2012; Kalla, 2005 in Ragusa 2010:6).

Ruck (2011) portray that internal communication is a scenario in creating employee engagement where every employee understands the value and provide full support to organizational goals. Internal communications includes communication of line managers, internal communication of team, communication between sections (peer project), and internal corporate communications (Ruck, 2007:14). Internal Communications has a strategic position in creating employee engagement toward company (Ruck, 2011).

### **HYPOTHESES AND RESEARCH MODEL**

The thought that one of the factors that affect the performance of the employee is training delivered by Bukley & Caple (2009) and Saks & Haccoun (2010), this effect is

also corroborated by the results of: Farooq & Khan (2011); Hasniza (2009); Malik (2011); Wanyama & Mutsotso (2010). Based on the ideas and research results above, a first hypothesis can be formulated as follows:

Hypothesis 1: Training has a positive effect on performance

The concept of employee performance are influenced by individual competence stated among others by Vroom (1964); Lussier et al (2010); Boyatzis in Hernandez (2009); and Armstrong (2009). This concept is also supported by the results of the study, among others of Ligita, Brigita, and Diana (2005); Araujo & Taylor (2012); Tutu (2012); Ryann (2012); Anger H. et. al. (2006); Vichita V. & Thai-Ngam (2007); and Mitchelmore & Rowley (2010). Based on the concept and the results of the above research, a second hypothesis can be formulated as follows:

Hypothesis 2: Individuals Competence has a positive effect on performance

The theory believes that the employee's performance is influenced by motivation expressed by among others: Weiten (2009: 315); Clelland (1982; 1987); Nelson & Campbell (2013: 168); Vroom (1964); Lussier et al (2010); and Purcell (2003). These theories also supported by: Mc-Clelland (1964); Baruch, Fenton, Hind, and Gadot (2004:32); Lee, Sheldon, and Turban (2003); Shawn Carraher M, Buchanan Jason K., and George Puia (2010); and Loon Mark & Casimir Gian (2008). These support a third hypothesis as follows:

Hypothesis 3: Motivation has a positive effect on performance

Several studies have shown the influence of the organization's internal communication to employees performance generated by: Malik (2011); Akbar Ali et. al (2012; ) Zolin, R. Fruchter, and Hinds. P. (2003); Harish Jain (2012); Chiou H., Lee Y.H. and Sutrisno H.P. (2010); and Hayase Lynn (2009). The concept that internal communication is part of the environmental performance of the organization (Vroom 1964; Boyatzis in Hernandez, 2009; and Armstrong, 2009). Internal communication can support or otherwise can inhibit performance of employees. Internal communication is positioned as a facilitating factor that moderates the effect of training, competency, and motivation on employee performance. Based on the concepts and studies above, some hypotheses can be formulated as follows:

Hypothesis 4: Internal Communications moderates the effect of training on Performance

Hypothesis 5: Internal Communications moderates moderates the effect of individual competence on performance

Hypothesis 6: Internal Communications moderates the effect of motivation on performance

Aguinis & Kraiger (2009); (Bukley & Caple, 2009); and (Saks & Haccoun 2010) put training as a factor that affect the competency and attitude/motivation. Instead of employees who have a higher motivation to try harder to learn to master the competencies required for the job duties. Based on the above concepts and ideas can be developed the following hypotheses:

Hypothesis 7: Training has a positive effect on individual competence

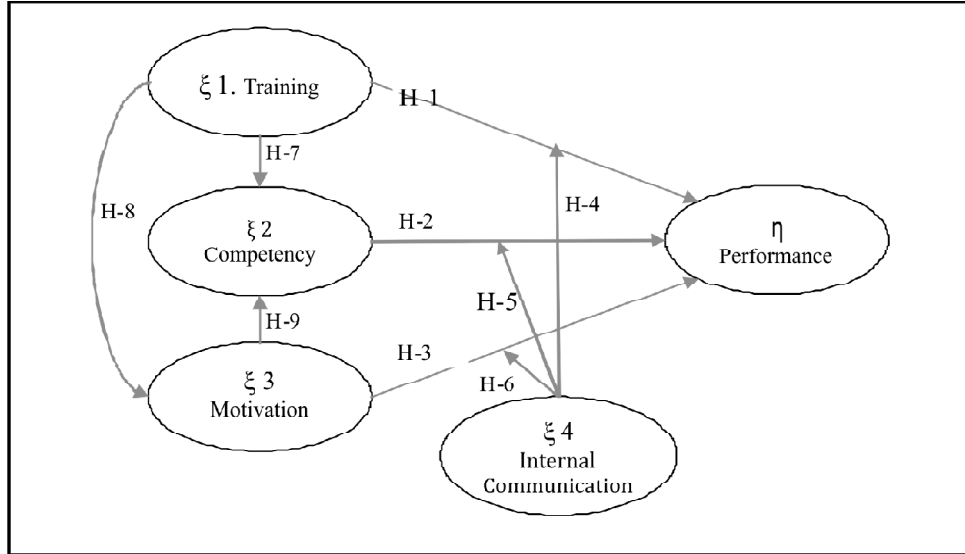
Hypothesis 8: Training has a positive effect on motivation

Hypothesis 9: Motivation has a positive effect on competency

Logical constructs were constructed in this study departs from the concept of the effective performance of Boyatzis (1982) by placing three factors as predictors of job performance i.e.; demand or job descriptions, individual competence and organizational environment. Rational in the elaboration of the concept of effective performance in this study as follows:

- Employee's performance will be effective if the employee job descriptions clearly understood, supported by the competency of knowledge, skills and behavioral.
- Competency will be fulfilled according to the demands when the company implemented capacity building through training as needed. Potential competency would be meaningful if supported employee motivation to excel.
- The significance of the effect of training, competency and motivation will depend on climatic conditions and the work that was built through internal communication.

By using path diagrams research model is described as follows:



## METHODOLOGY

This study examines the factors that affect the performance by putting training, individual competence, motivation as a predictor of employee performance and internal



communications as moderator. The analysis in this study include descriptive analysis and statistical analysis of structural equation models using statistical tools lisrel.

The experiment was conducted at PDAM in East Java with a population of employees in 12 taps with a total sample of 200 respondents and the total number 197 were complete and analyzed. Source of data derived from the employee to the variable training, competency, motivation and internal communication and performance data obtained from official company based performance assessment records. Data is collected using a questionnaire with measurement scale using semantic defferential (Osgood, Suci & Tanncenbaun, 1952) with the range scale of 1 to 7 which illustrates the perception of each indicator (observed variables).

The observation of the estimated value of damaged and test the construct validity using lisrel the results obtained from the 33 factors were 28 factors indicate invalid and discarded as much as 5 factors, then on 28 factors tested again with results as shown in Table 1 below.

**Table 1**  
**Construct Validity of Research Variables**

<i>Konstruk</i>	<i>Variabel Konstruk</i>	<i>Loading</i> ( $\lambda_i$ )	<i>Error</i> <i>Pengukuran</i> ( $\delta$ ) = (1- $\lambda_i^2$ )	<i>Keterangan</i>
<b>Performance</b>	Quantity of works result	0.780	0.310	Valid
	Quality of works result	0.860	0.160	Valid
	Timeless	0.720	0.410	Valid
	cost-effectiveness	0.630	0.550	Valid
<b>Training</b>	Orientation Training	0.690	0.510	Valid
	Training on Knowledge of Job	0.640	0.600	Valid
	Training on job skill	0.700	0.510	Valid
	Training on problrm solving	0.830	0.300	Valid
	The training meet with they desired	0.680	0.540	Valid
	Transfer of training in the job place	0.800	0.370	Valid
<b>Competency</b>	Understanding the target	0.700	0.500	Valid
	Understanding what's job to do	0.740	0.460	Valid
	Undertanding of job constrain	0.810	0.350	Valid
	Sufficient of skill	0.750	0.430	Valid
	Ability to solve their job problem	0.850	0.280	Valid
<b>Motivation</b>	Self confidence	0.790	0.370	Valid
	Reliable	0.640	0.580	Valid
	Sense of responsibility	0.740	0.470	Valid
	Initiatives	0.790	0.360	Valid
	Positive thinking	0.660	0.550	Valid
	Willingness to learn	0.690	0.500	Valid
<b>Internal Communication</b>	Care	0.730	0.460	Valid
	Access to information	0.730	0.470	Valid
	Engagement	0.790	0.410	Valid
	Communication targets results	0.830	0.310	Valid
	Interaction with supervisors	0.680	0.530	Valid
	Cooperation between departments	0.690	0.520	Valid

Table 1 indicates the whole factor of each variable is valid (loading factor > 0.50) and can be done subsequent analysis. Reliability tests performed by observing the value of the construct reliability (CR) and variance extracted (VE). Reliability test and extract variant constructs each latent variable calculated based on the loading factor and error variance of each of the factors that qualify validity. Construct reliability test results are presented in Table 2 below

**Table 2**  
**The Construct Reliability (CR) and Variance Extracted (VE) Value**

<i>Construct</i>	<i>CR</i>	<i>VE</i>	<i>Remarks</i>
Work performance	0,862	0,613	Reliable
Training	0,869	0,528	Reliable
Competency	0,880	0,596	Reliable
Need for Achievement	0,868	0,584	Reliable
Internal communication	0,880	0,551	Reliable

## RESULTS

### Fit of Model

The results of testing the suitability of the model by using the model fit parameters using lisrel shown in Table 3 below:

**Tabel 3**  
**Goodness of fit with and without Moderating Affect**

<i>GOFI Parameters</i>	<i>Tolerance</i>	<i>GOF</i>	<i>Remarks</i>
P-value of $\chi^2$	$\geq 0.05$	0.430	Good Fit
Root Mean Square Error of Approximation (RMSEA)	$\leq 0.08$	0.008	Absolute Fit
Normed Fit Index (NFI)	$\geq 0.90$	0.970	Fit bagus
Non-normed Fit Index (NNFI)	$\geq 0.90$	1.000	Fit mutlak
Relative Fit Index (RFI)	$\geq 0.90$	0.960	Good Fit
Comparatif Fit Index (CFI)	$\geq 0.90$	1.000	Absolute Fit
Incremental Fit Index (IFI)	$\geq 0.90$	1.000	Absolute Fit
Standardized Root Mean Square Residual (Std.RMR)	$\leq 0.05$	0.042	Good Fit
Goodness of Fit Index (GFI)	$\geq 0.90$	0.910	Good Fit
Adjusted Goodness of Fit Index (AGFI)	$\geq 0.90$	0.870	Marginal Fit

### Evaluation Model Structure Non Moderation

Results of testing structural models involving six manifest variables to construct the training, five manifest variables to construct competency, six manifest variables to construct achievement motivation are presented in Table 4 and Table 5 below:

**Table 4**  
Summary of model structural without moderation effect

Affect	Value			Remarks
	Coeficien	Std Error	t	
Training→work performance	0.31	0.12	2.70	t > 1.96
Competency→work performance	0.50	0.21	2.32	t > 1.96
Motivation→work performance	-0.43	0.24	-1.78	t < 1.96
Training→Competency	0.61	0.05	11.49	t > 1.96
Training→Motivation	0.68	0.05	14.08	t > 1.96
Motivation→Competency	0.87	0.03	26.60	t > 1.96

**Table 5**  
R Square of Model Structural without Moderation

Variable	R-square	R <sup>2</sup>
Performance	0.82	0.17

Source: Lisrel Output

Equation:

$$\text{Performance} = 0.30 \cdot \text{Training} + 0.50 \cdot \text{Competency} - 0.43 \cdot \text{Motivation}, \text{Errorvar.} = 0.82, R^2 = 0.17$$

(0.10)
(0.16)
(0.17)
(0.12)

2.70
2.32
-1.78
6.70

### Evaluation Model with Moderation Effects

Noting the results of the evaluation of structural equation non moderation, the effect of motivation on the performance figures shown not significant with an alpha of 5%, for the forward testing moderation only conducted to determine the moderating effect of internal communication toward effect of training on performance and effect of competency on performance.

The first step in testing the moderating effect are looking for value and variance value of interaction between internal communication and training, and between internal communication and competency. This step is testing the model by including variables of training, competency and internal communication to get the value of the loading and error variance of each factor to calculate the value of the interaction. Value loading factors and error of testing is as follows:

**Table 6**  
Loading Factors and Error Variance of Manifest

Factors	Internal Communication (IC)		Training (Tr)			Competency		
	$\lambda_z$	$\varepsilon_z$		$\lambda_x$	$\varepsilon_x$	$\lambda_x$	$\varepsilon_x$	
IC-1	0,72	0,48	Tr-1	0,69	0,52	Comp-1	0,70	0,50
IC-2	0,72	0,48	Tr-2	0,65	0,59	Comp-2	0,74	0,47
IC-3	0,76	0,41	Tr-3	0,70	0,50	Comp-3	0,81	0,34
IC-4	0,88	0,28	Tr-4	0,83	0,32	Comp-4	0,74	0,46
IC-5	0,78	0,38	Tr-5	0,70	0,52	Comp-5	0,87	0,25
IC-6	0,69	0,52	Tr-6	0,81	0,36			
	4,55	2,03		4,38	2,81		3,86	2,02

Interaction and variance value calculation using formula (Ping, 1995) as follows:  
 Interaction  $\lambda x: z = (\lambda x_1 + \lambda x_2 \dots \lambda x_i) (\lambda z_1 + \lambda z_2 \dots \lambda z_i)$ . Variance  $\theta \epsilon x: z = (\lambda x_1 + \lambda x_2 \dots \lambda x_i) \cdot 2 \text{VAR}(X) (\theta \epsilon z_1 + \theta \epsilon z_2 \dots \theta \epsilon z_i) + (\lambda z_1 + \lambda z_2 \dots \lambda z_i) \cdot 2 \text{VAR}(Z) (\theta \epsilon x_1 + \theta \epsilon x_2 \dots \theta \epsilon x_i) + (\theta \epsilon z_1 + \theta \epsilon z_2 \dots \theta \epsilon z_i) (\theta \epsilon x_1 + \theta \epsilon x_2 \dots \theta \epsilon x_i)$ . By using this formula obtained the following results:

### Interaction

- Interaction Training \* Communication =  $4.38 \times 4.55 = 19.93$
- Interaction Competency \* communications =  $3.86 \times 4.55 = 17.56$

### Variants

- Var Training \* Comm =  $(4.38)^2 \cdot 1 \cdot 2.03 + (4.55)^2 \cdot 1 \cdot 2.81 + (2.03 \cdot 2.81) = 38.94 + 58,17 + 5.70 = 102.82$
- Var Comp \* Comm =  $(3.86^2 \cdot 1 \cdot 2.03) + (4.55^2 \cdot 1 \cdot 2.02) + (2.03 \cdot 2.02) = 30.25 + 41.82 + 4.10 = 76,17$

The results of the statistical model testing moderation of LISREL output obtained coefficient value and significance of moderation as follows:

**Table 7**  
**Coefficient and Significancy of Moderation Effect Evaluation**

<i>Jalur Hubungan</i>	<i>Koefisien Jalur</i>	<i>Error</i>	<i>Signifikan</i>	<i>Keterangan</i>
Training→Performance	-0,14	0,14	-1,00	Not sig
Competency→Performance	-0,30	0,13	-2,36	sig
Tr*Comm→Performance	0,06	0,01	3,95	sig
Comp*Comm→ Performance	0,05	0,02	2,34	sig

**Table 8**  
**R Square Model Structuralwith Moderation Effect**

<i>Variabel</i>	<i>R-square</i>	<i>R<sup>2</sup></i>
Performance	0,86	0,14

The results of testing the structural model with the moderating effect as table 8 can be read that internal communication is confirmed to moderate the significant effect of training on the performance with coefficient value of 0.06 and a value of 0.06 is statistically significant with a t-value of 3.39 is above the critical value of 1.96 at the 5% alpha. Internal communication as moderators significant effect of competency on the performance with coefficient value of 0.05. It is shown; significance values influence of training on the performance decreased, while significant effect on the performance of competency increased or become stronger.

The evaluation results indicate that the structural model testing involving moderating factors influencing changes in the significance of the effect of training and

competency on performance between before and after testing the moderating effects. The results produced a complete change of moderation factor is as follows:

**Table 9**  
Significancy Before and After Entering Moderation Effect

Variabel	Without Moderation			With Moderation			Remarks
	Koef.	Errorr	Sig. (t) α 5 %	Koef.	Errorr	Sig. (t) α 5 %	
Training → Performance	0.31	0.10	2.70	-0,14	0,10	-1,n00	Weak
Competency → Performance	0.50	0.16	2.32	-0,30	0,16	-2,36	Strong
Motivation → Performance	-0.43	0.24	-1.78	-	-	-	
Comm*Comp → Performance	-	-	-	0,06	0,01	3,93	Significant
Comm*Training → Performance	-	-	-	0,05	0,02	2,34	Significant
Training → Competency	0.61	0.05	11.49				
Training → motivation	0.68	0.05	14.09				
Motivation → Competency	0.87	0.03	26.60				

Internal communication is confirmed as moderator that debilitating the effect of training and strengthen the effect of competency on performance. The results of model testing after entering the moderating effects internal communication as in model as follows:

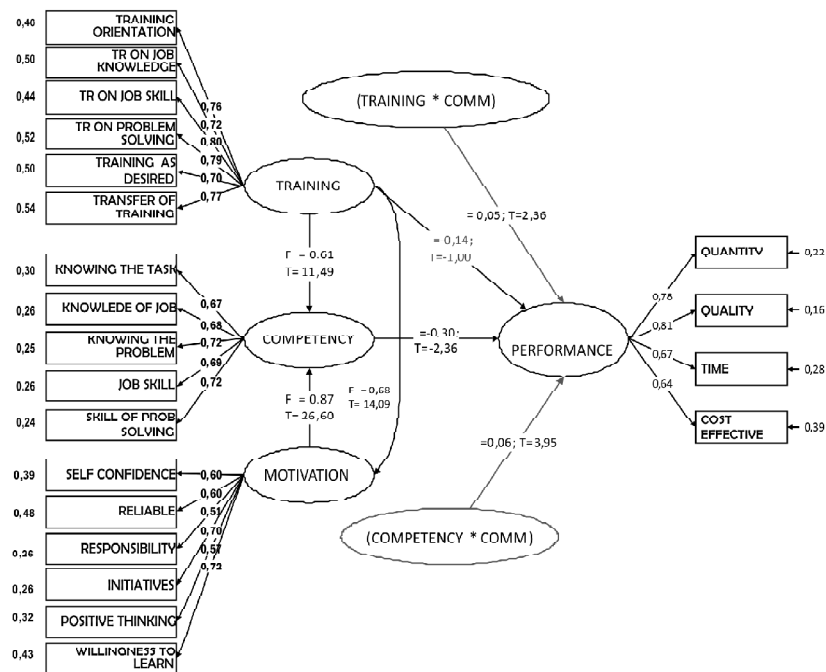


Figure 3: Hybrid Model Results

**Table 10**  
**Results of Statistical Hypotheses Testing**

<i>Hypothesis</i>	<i>Statistical Value</i>			<i>Conclusion</i>
	<i>Coefficient.</i>	<i>t-tabel</i>	<i>t-score</i>	
Hypothesis 1: Training has a positive effect on performance	0,31	1,96	2,70	Confirmed
Hypothesis 2: Individual Competence has a positive effect on performance	0,50	1,96	2,32	Confirmed
Hypothesis 3: Motivation has a positive effect on performance	-0,43	1,96	-1,78	Not Confirmed
Hypothesis 4: Internal communication moderates the effect of training on performance	0,06	1,96	3,95	Confirmed
Hypothesis 5: Internal communication moderates the effect of competency on performance	0,05	1,96	2,36	Confirmed
Hypothesis 6: Internal communication moderates the effect of motivation on performance	-	-	-	Not measured
Hypothesis 7: Training has a positive effect on competency	0.61	1,96	11,49	Confirmed
Hypothesis 8: Training has a positive effect on motivation	0,68	1,96	14,08	Confirmed
Hypothesis 9: Motivation has a positive effect on competency	0.87	1,96	26,60	Confirmed

\*Not measured due to the hypothesis 3 not confirmed

## DISCUSSION

Figure 3 illustrates the results of the overall effect of each independent variable (training, competency, and motivation) and moderator (internal communication) on the dependent variable (performance). Interpretation of test results without the moderating effect of structural models (Table 4) and the moderating effects (Table 7) and the results of test of statistical hypotheses (Table 10) are as follows:

### Effect of Training

As shown in Table 10, the direct effect of training on the performance of path coefficient value of 0.30 to 2.70 sig (above the critical value of 1.96 for alpha 5%). Thus the first hypothesis stated training has a positive effect on performance is confirmed.

Training effect on the competency of the value of the path coefficient of 0.61 with sig at 11.49 (also above the critical value of 1.96 for alpha by 5%). This confirms the hypothesis 7 which stated competency has a positive effect on training.

Hypothesis 8 which stated motivation has a positive effect on training is also confirmed, the value of the path coefficient of 0.68 and a significance value of 14.09 (above the critical value of 1.96).

The direct effect of training on performance can be said to be contrary to the theory because the concept of training is in order to increase knowledge and skills. By definition, the training is planned in a systematic effort to modify and develop the

knowledge, skills, and attitudes through learning from experience to achieve effective performance in a variety of activities (Bukley & Caple, 2009: 10).

The fact that the training effect on the competency and motivation of training evaluation in line with the theory of Kirkpatrick (1976) to determine the effectiveness of training by looking at the parameters of the reaction, learning, behavior, and results. The reaction in this case illustrates the participants' perceptions of the training program, learning designate the level of understanding and acceptance of the knowledge and skills are given the means to increase the competency and behavior change in this case the application of the results of training or transfer to the workplace which also means an increase in competency behavior and the results illustrate the overall effect on the achievement of performance with increased motivation and competency gained from the training. The results of this evidence supports the results of previous studies, among others, of Malik (2011), Nga T. P et al. (2012), Haznia (2009), and Wayama & Mutsotso (2010).

### **Effect of Competency**

Direct influence on the performance of individual competence has the path coefficient of 0.32 with a significance value of 2.32 (above the critical value of 1.96) supports the hypothesis number 2 which stated competencies has a positive effect on performance.

Competency affects the performance supports the existing theory that the performance is affected by abilities and capabilities within the scope of competency (Vroom, 1964; Boyatzis, 1982). Someone competent will achieve performance above average employees in general and higher quality work results (Palan, 2007; Gupta, 2012).

The results are consistent with the results of the analysis conducted by PERPAMSI problem that taps face the problem of lack of competency of human resources for the low performance of taps East Java. This shows the importance of giving attention to aspects of competency management for high performance.

### **Effect of Motivation**

Hypothesis 3 which stated motivation has a positive effect on performance is not confirmed indicated by the coefficient of -0.43, a significance of -1.78 (below the critical value of 1.96).

Instead hypothesis 9 which stated motivation has a positive effect on competency is confirmed as supported by coefficient lines 0.87 and a significance value of 26.60 (above the critical value of 1.96).

Motivation does not directly influence the performance of the PDAM employee in the study area is contradictory with the existing theories, especially the theory of achievement motivation is generally stated that a person with achievement motivation will perform better than others. Nevertheless, achievement motivation in PDAM East

Java employee still contribute to the individual employee performance through competency.

The test results show that motivation is correlated with the competency to support some opinions above, it means that the motivation of employees in PDAM East Java currently aligned or directly proportional to the condition of competency. It can be explained that high performance employees have high quality and competency and also high motivation. Motivation as an independent variable has no direct effect on the performance does not necessarily indicate the condition of the employees who are highly motivated performance is high. That is the motivation for the individual is not motivated to show their best performance as demanded by company, or specific performance demands are not understood so that the condition on the one hand they feel do much but the results obtained did not fulfil the demands of actual performance. This case that motivation does not affect directly the performance can be viewed from two perspectives, that of the individual and of the performance management.

### **Individual factors**

On individual side which needs to be studied, among others, as it PDAM employee's background and how their perceptions of work. As described in the background, PDAM was originally an institution as part of a government agency with bureaucratic climate and considered the nature of mind, employees in the work are not in the business mentality as employees in most companies in general. Change of status of PDAM company into a full and independent has not yet been followed by changes in the mentality of employees.

As an individual to satisfy his needs of live, he/she has motivation to achieve the expected goals but might be the motivation that there was not within the framework of achievement in the workplace but for purposes outside the office affairs. This explanation is rational for PDAM faces the problem of excess employees, limited financial capacity because there is no more government subsidies to cover operating costs, especially for taps with a limited number of customers. The impact of this problem, the work are less challenging and underload, earning is insufficient, so there is an attempt to increase their earning through additional work outside. In such situation, motivation to work split between the motivation to excel in the main job and motivation to succeed on the sideline.

### **Performance Management Factors**

Efforts of organization to achieve effective performance of employees bring consequences that it must perform a series of measures and strategies. Normative strategies undertaken by the company have to translated to a business plan, outlined in section and individual level. One of the problems of PDAM management as conducted and reported by PERPAMSI is in preparing business plan. The possibility of a business plan is not/less translated to individual level as a job description,



description of what to do and how much of the target goals to be achieved and how they will be evaluated not been effectively done. If so then the employees' perception of the job is as a routine activity. HR field performance issues weights only 15% compared to other parameters considered little attention to issues affecting human resources, especially activities geared to increase employee motivation to excel the company's performance. The small allocations of incentives have no impact for high-performing employees. Employees perceive "working hard or not results same".

### **Moderation effects**

Interaction of internal communication and training on the performance shows the value of coefficient of 0.05, t value of 2.34 (above the critical value of 1.96 for the alpha 5%). Comparison of the effects of training on the performance of significance between before and after testing the moderating effects showed a decrease in the t value of 2.70 on the right curve (positive) to -1.00 on the left curve (negative). Thus the hypothesis 6 that internal communication moderates the effect of training on the performance confirmed but likely to weaken. In other words, the effect of training on performance is weakened by internal communications.

Interaction of internal communications with competency and performance shows the value of coefficient of 0.06, significant t value of 3.39 (above the critical value of 1.96). Comparison of competency significant effect on the performance between before and after testing the moderating effects showed an increase in the value t of 2.32 on the right curve (positive) to -2.36 on the left curve (negative). Thus the hypothesis 7 which that internal communications as moderates effect of competency on the performance is confirmed, it strengthens the competency's influence on performance.

The position of internal communication in performance are factors beyond the individual who provided or created by the organization. Internal communications relating to the involvement of all employees in an effort to support the achievement of corporate goals. Conditions to be created through internal communication is the employee's belonging and commitment. Logically if internal communication is running good then it will trigger the growth of commitment and a sense of involvement. This study shows that internal communications take part in achieving employee performance. Internal communications condition that weaken the influence of training on the performance indicates that the quality of better internal communication can reduce dependence on training. While better internal communications can strengthen the influence of individual competence on performance, contrary to poor internal communication will hamper the role of competency to improve performance.

Training, competencies and motivation in silmutan affect the performance of the coefficient value of 0.82 and a significance value of 6.70 (above the critical value of 1.96 for the alpha of 5%). This shows the magnitude of the role of training factors, individual competence, and achievement motivation in creating employee performance in PDAM East Java. Improving employee performance can be done through more

effective management of training, individual competence, and achievement motivation. Internal communications need to be managed more effectively in order not to interfere with or diminish the role of competency.

### **CONCLUSION, MANAGERIAL IMPLICATIONS, AND LIMITATIONS**

The purpose of this study is to examine the factors that affect employee performance and khsusus to analyze the effect of training on performance, the effect on the performance of individual competence, motivation influence on the performance, and test internal communications as a moderator of the significance of independent variables on the dependent variable. Based on results of this study it can be concluded as follows:

1. PDAM Employee performance in the study area can be explained by a variant of training, competency and achievement motivation by 82%. This means that as much as 18% is determined by other factors that are not covered in this study.
2. Training and competency of individuals confirmed directly affects psotively the performance of employees
3. Motivation does not influence directly but indirectly through competency effect on performance
4. Training directly influence positively the competency and motivation of employees
5. Motivation directly affect postively the competency of employees
6. Internal Communications confirmed as the moderator of the relationship between training and performance as well as competency and performance

#### **Managerial implications**

The results of this study have implications for managers in ensuring employee contributes to the achievement of the company's performance through the performance of each individual, among others:

1. Ensure the company's business plan is understood by all levels of management in each section and translated as a reference in setting goals and performance targets as well as outlined in the job description for each employee.
2. Ensure that each employee understands enough about their work, the targets to be achieved, how to achieve it, when it will be achieved, and by the way how they will be evaluated.
3. Align the type of work, the need for competency and personal suitability charge.

4. Align the company's competency requirements with potential employee competencies reinforced through thematic training
5. Making the issue of human resources as an important issue to consider in terms of competency and motivation and involvement in the achievement of corporate performance.
6. Maintain and oversee employees in performing and motivational support to excel with valuable incentives and make internal communications as facilities to support high performance.

### **Limitations of the study**

This study has several limitations that are expected to be equipped with advanced research by subsequent researchers, among others:

1. Locus of research only in East Java and only as much as 12 of 38 PDAMs while the number of PDAM in Indonesia as many as 370 scattered throughout the province. To obtain an overall picture of taps required further research with larger sample size proportionally based on the archipelago which is assumed to have the cultural background of each work.
2. This study only focuses on aspects of performance are in part the individual competence, training, achievement motivation and internal communication. However, further research needs to be done to find other factors that influenced the performance of employees in the PDAM
3. Area of generalization of the results of this study are PDAM in East Java. Nevertheless, the results of this study could be the mirror of the taps in the area that have similar characteristics with PDAM East Java.

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