# STRUCTURAL EQUATION MODELING OF SALES PEOPLE PERFORMANCE IN THE COMPANY OF **BUSINESS TO BUSINESS**

Andri Wibowo Susilo<sup>1\*</sup>, Hengky Supit<sup>2</sup>, Sri Wahyuni Astuti<sup>2</sup>, Bambang Widjanarko Otok<sup>3</sup>

<sup>1</sup>PhD Students of Business Faculty, Widya Mandala Catholic University, Surabaya, INDONESIA

<sup>2</sup>Professor of Business Faculty, Widya Mandala Catholic University, Surabaya, INDONESIA

<sup>3</sup>Doctor of Department Statistic, Sepuluh Nopember Institute of Technology (ITS), Surabaya, INDONESIA

#### **ABSTRACT**

The purpose of this research examines the pattern of adaptive selling against performance of sales suite. By using Structural Equation Modeling (SEM), it reveals that sales people performance influenced by the ability to monitor and to modify motivation in practicing adaptive selling behavior. Therefore, there should be a training syllabus, which in the end can be used as an evaluation of the performance of employees.

**Keywords:** SEM, Adaptive Selling, sales people performance, Relationship Initiative, Moderating

## INTRODUCTION

The sales force is an extension of the company to convey the benefits of the product to the potential customer. Less responded sales people on the primary needs of the customer, attitudes too forced and lack of initiatives to build long term relationships after sales transaction, is the factor the main cause of poor performance sales people (Sharma, 2001). The existence of negative stigma in the community that the sales people usually impressed force, terrorizing, even deceive the customer. It is not all sales people do this but do not close the fact that action is done because solely pursue the purpose of the short term, not long-term relationship, for example reintegration of reintegration of gifts from the management, as holiday abroad, cars and so on (Park and Betsy, 2003, Park and George, 2006).

Turnover of human resources is high or low work retention becomes an indication of the emergence of stigma negative. Direct Selling Association Indonesia (APLI) stated that a sales people who often out from one type of company B2B to company type B2B, can confuse the people around him and was

<sup>\*</sup>Corresponding author: andri.wibowo@sewatoilet.com

impressed that the sales work there is no certainty of a promising career (apli.or.id, 2013). Therefore this research will observe the performance of sales people from company B2B, how to improve the performance of sales people, without having to force, terrorizing, or deceive the potential customer, so that the negative stigma in society will characters ditepis sales people can.

Sales force or sales people from company B2B are often early rejection of potential customers before the given time to explain the benefits of the product sold. Negative Stigma in the community who think that the company B2B no good, all only looking for the benefit solely, does not pay attention to the interests of the customer, can create more popular the sales people profession.

It should have been before sales people began to offer products or deserving, needs to be reviewed first, who the target market which should be targeted. If the product sold is expensive and sophisticated products, then the market segment is the companies that medium and large business scale. In fact, the sales people in the field, often does not pay attention to this and sell it to each company encountered, as a result, decission maker in the company feel disturbed by his presence, because the products offered are not in accordance with their needs.

On the contrary, although the exact targets even if it the sales people still also experienced rejection. Jaramillo, et. al., (2007) said that the main indication of this is the adaptability factor that has not been understood sales people that before selling a product, a sales people must build good rapport, then think from the point of view of how the potential customer think, and attempt to perform adaptive selling that does not impressed force.

The concept of adaptive selling is still debated until now the level of effectiveness regarding the time or the speed of a sales people reaches the specified sales target if companies must begin with build rapport first (Sharma, 2001). In addition, because His nature that are adaptive, product sold will be very customized and mixed with one another, and this course will be difficult because the company must provide a wide range of options on the customer is not of course the company have a system or the infrastructure enough to do it (Pettijohn, et al. 2000).

Assume the company is able to provide a broad selection of products according to the needs of each customer though, Giacobbe, et al. (2006) stated that sometimes the sales people itself is not able to see the opportunity and sell them to the potential customer. Sales people should have the ability that is called the ability to monitor, or the ability to detect the diversity of species and the subscriber character, that there must be a special approach for each customer type, and offer the right product for the type of the subscriber (Eveleth and Linda, 2002).

Another factor which is still the debate will be the concept of adaptive selling is the sales people were asked to cope with the situation faced (Chakrabarty et. al., 2010). This of course will disrupt the order of the system that sometimes has been dibakukan sales by the company (Roman and Dawn, 2010). The Adaptation of sometimes misunderstood it by sales people, where should profit margins large enough can be obtained by the company is not able to be accomplished, because sales people discounts is too large for an adaptation and closing (Chakrabarty et. al., 2004, 2008).

Sales people who are able to perform adaptive selling with good, does not give a guarantee to the company that will happen closing or it constitutes order continuously. Needed awareness and high initiative from sales people to continue to build relationships with customers to not impressed 'greatest hits and run'. Chakrabarty, et al. (2008) outlining that sales performance really be achieved with better when the condition of the adaptive selling maintained by continuous and consistent, that this can happen when there is supervision of the supervisor to maintain the relationship of the initiative from the sales people. The problem is often the training given to sales people is 'how to sell' not 'how to maintained customer', therefore there is a need to research related adaptive selling against sales suite of performance.

#### **METHODOLOGY**

Data in this research using primary data, namely with how to share a questioner to respondents who had been appointed as the sample. This research uses the individual sales people analysis unit and its customers (Levy and Stanley, 1999). The population of this research is the entire company sales people B2B in Surabaya. Samples of research is that the company sales people B2B Special Chemical Industry for Manufacturing in Surabaya and company (decision maker) who took the product. The variables used include are ability to monitor, ability to modify, motivation to practice adaptive selling, relationship initiative, adaptive selling behavior, and sales people performance.

The structural model is the relationship between latent variable exogenous with latent variable endogen. Mulaik (2009) structural equation model is as follows:

$$\eta = \mathbf{B}\eta + \Gamma \xi + \zeta \tag{2.1}$$

Where  $\eta$  is vector random variable endogenous,  $\xi$  is vector random variable exogenous,  $\mathbf{B}$  is matrix coefficient which shows the influence of the endogenous latent variables to other variables and  $\Gamma$  coefficient which shows the relationship  $\xi$  of against  $\eta$ , while  $\zeta$  is vectors random error. The assumption of common structural model latent variables:  $E(\eta)=0$ ,  $E(\xi)=0$ ,  $E(\zeta)=0$  and  $\zeta$  not correlates with  $\xi$  and  $(\mathbf{I}-\mathbf{B})^{-1}$  is based on the *nonsingular*. The measurement model confirmatory factor analysis (CFA) as follows (Joreskog, 1970 in Raykov and Marcoulides, 2006):

$$y = \Lambda_{y} \eta + \varepsilon \tag{2.2}$$

$$x = \Lambda_x \xi + \delta \tag{2.3}$$

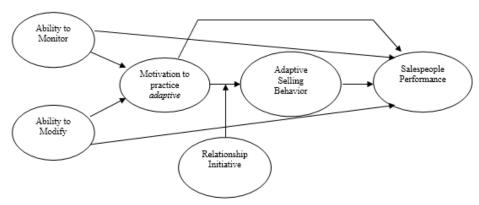
Based on the equation covariance (2.2) and (2.3),  $\Sigma(\theta)$  is as follows (Raykov and Marcoulides, 2006):

$$\Sigma(\mathbf{\theta}) = \begin{bmatrix} \Sigma_{yy} & \Sigma_{yx} \\ \Sigma_{xy} & \Sigma_{xx} \end{bmatrix}$$
 (2.4)

Structural Equation Modeling both direct relationship or not directly and allows the relationship between an independent variables against the dependent variables which were influenced by other latent variables (moderating) (Eddy, et. al., 2015). The method that can be used to assess the impact of the moderating, one is the interaction method (Porter et. al., 2003). The general Model Structural Equation moderating as follows (Usman, et.al. 2014).

$$\eta = \gamma_{11}\xi_1 + \gamma_{12}\xi_{21} + \omega_{12}\xi_1\xi_2 + \zeta \tag{2.5}$$

The conceptual research presented as follows.



**Figure 1.** The Conceptual Model Sales people Performance (Porter et. al., 2003)

#### **RESULTS AND DISCUSSION**

Validity test is intended to determine whether the questions in the questionnaire just representative. Validity test is done by using CFA on each of the latent variables are X1, X2, Z, Y1, Y2 and Y3 through AMOS program (Brown, 2006). Reliable is index that shows the extent to which reliable measure or can be trusted. Reliability is the size of the internal consistency of the indicators variable is proxies which shows the degree to which each indicator that indicates a common adjectives variable. In this research in calculating the reliability of using composite reliability with cut off value is a minimum 0.7. Validity and reliability tests in detail on each of the latent variable is presented in the following Table 1.

Table 1 above, latent variable X1, X2, Z, Y1, Y2 and Y3 provides loading factor and the value of the C-R on the value of the cut-off him so that can be said is valid and reliabel. So on each indicator all values p variance error smaller than 0.05 then said reliabel.

Latent variable p variance Indicator C-R Loading (λ) λ2  $1 - \lambda^2$ error Ability Perspective-Taking 0.988036 0.000 0.994 0.011964 to Monitor (X1) [X1.1]Empathic Concern 0.000 0.989 0.978121 0.021879 [X1.2]0.996 Verbal Cue Perception 0.990025 0.000 0.995 0.009975 [X1.3] Non-verbal Cue 0.000 0.991 0.982081 0.017919 Perception [X1.4] Ability to Modify Self Personality 0.000 0.989 0.978121 0.021879 0.988 modify (X2) (X2.1)Modify actions (X2.2) 0.000 0.987 0.974169 0.025831 Relationship Knowledge 0.988 0.976144 0.000 0.023856 Initiative (Z) initiative (Z1) 0.989 Appeal Initiative (Z2) 0.991 0.982081 0.017919 0.000 Motivation to Intrinsic Motivation 0.989 0.000 0.978121 0.021879 practice adaptive (Y1.1)0.982 selling (Y1) **Extrinsic Motivation** 0.000 0.976 0.952576 0.047424 (Y1.2)Adaptive selling Existing customer's 0.000 0.985 0.970225 0.029775 behavior (Y2) ratings (Y2.1) 0.990 Sales people self report 0.000 0.996 0.992016 0.007984 Intrinsic Sales Volume Sales people 0.997 0.000 0.994009 0.005991 Performance Y3) (Y3.1)Customer Account 0.928 0.000 0.991 0.982081 0.017919 (Y3.2)Sales Growth [Y3.3] 0.000 0.683 0.466489 0.533511

**Table 1.** The Value of Validity and Reliability of Indicator Latent Variables

After the validity test and reliability on each of the latent variable, some prerequisites that must be met in the structural modeling is the assumption of multivariate normal assumptions lack multikolinearitas or had been and outlier.

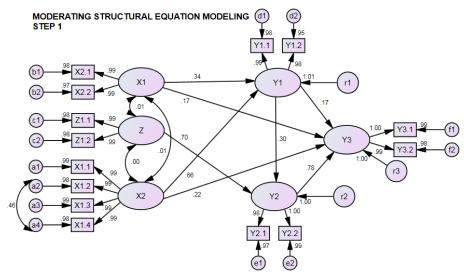
Normality from data is one of the conditions in the modeling of SEM. Testing normalitas stressed on multivariat data with see the value of kurtosis skewness, and statistically can be seen from the value of the Critical Ratio (CR). If used the level of the significance of 5 percent, then the value of CR in between -1,96 until 1.96 (-1,96  $\leq$  CR  $\leq$  1,96) said data distributed normal, both univariat or multivariat. The test result normality data on all research variable CR multivariat value of -0.510 and this value is located outside -1,96 until 1.96, so that it can be said that the normal multivariat berditribusi data.

Had been can be seen through determinan kovarians matrix. The value of a very small determinan or near zero indicates an indication there had been the problem that cannot be used for research. The research results provide the value of the Determinant of sample covariance matrix of 0.019. This value is almost pushed from zeros so that it can be said that there had been problems on the data analyzed.

Multicolinearity can be seen through the correlation between the exogenous latent variables. Multikolinearity occurs if there is a latent variable exogenous supply more than one and there is a correlation between. The value of the correlation between the latent variable Ability to Monitor (X1) with the ability to modify (X2) of 0.339 with p = 0.191 is greater than the level of the significance  $\alpha$ =0.05, it can be said not happen multikolinearity.

Outlier is the observation that appears with extreme values in both multivariate uniariate. Test results outlier in this research is presented on the Mahalanobis distance or the squared Mahalanobis d. Mahalanobis value greater than the Chi-square table or the value of p1 < 0.001 said the observation that outlier. In this research there are three data outlier, because it is still below the 5 per cent of observations, it can be said is not an outlier.

After the validity test and reliability on all latent variables which valid results and reliabel, data not multivariat normal, not happen multikolinearitas and outlier below 5 percent, then the latent variables can be continued in the analysis with the form of the path diagram as follows:



**Figure 2.** The Relationship Model X1, X2 Against Y3 through Y1 and Y2 with Z as moderator (Step 1)

The latent variable moderation in this research is Z moderate latent variable intervening Y1 to the latent variable intervening Y2. The relationship model step 1 used to lamda interaction and error variance as follows.

Z Moderation Y1 into Y2	7		Y1			
2 moderation 11 mto 12	Loading	Varians	Loading	Varians		
Indicator	0.988	.007	.989	.008		
	0.991	.006	.976	.015		
Variance	0.3	0.324 0.04				
Lamd_INT_Z_Y1		3.8887				
Var_err_Z_Y1	0.0314					

**Table 2.** Lamda interaction and Error Variance Z to Y1

The moderator latent variables can be continued in the analysis with the form of the path diagram as follows:

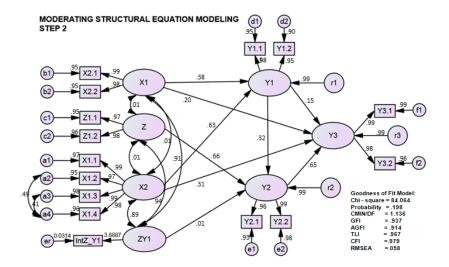


Figure 3. The Relationship Model Moderation X6 on X1 into Y1 Stage 2

The results of the measurement model testing with AMOS program in detail can be seen in the following table:

**Table 3.** The results of the Model Testing X1, X2 Against Y3 through Y1 and Y2 with Z As Moderator

Criterion	Value Cut - Off	results calculation	Description	
			$\chi^2$ with df = 74	
Chi - Square	expected small	84.064	is 95.082	
			Good	
Probability	≥ 0.05	0.198	Good	
RMSEA	≤ 0.08	0.058	Good	
GFI	≥ 0.90	0.937	Good	
AGFI	≥ 0.90	0.914	Good	
CMIN/df	≤ 2.00	1.136	Good	
TLI	≥ 0.90	0.967	Good	
CFI	≥ 0.90	0.979	Good	

From the appropriate model, so it can be in interprets each path coefficient through the following structural equation:

Y1 = 0.382 X1 + 0.628 X2

Y2 = 0.655 Z + Y1 + 0.007 0.323 ZY1

Y3 = 0.195 X1 + 0.308 X2 + 0.148 Y1 + 0.645 Y2

The path coefficient testing on picture 3 and equality above in detail is presented in the following table:

The variables	Coefficient	CR	Prob.	Description
Ability to Monitor (X1) → Motivation to practice adaptive selling (Y1)	.382	6.016	.000	Significant
Ability to modify (X2) → Motivation to practice adaptive selling (Y1)	.628	9.687	.000	Significant
Motivation to practice adaptive selling (Y1) → Adaptive selling behavior (Y2)	.323	5.302	.000	Significant
Relationship Initiative (Z) → Adaptive selling behavior (Y2)	.655	10.611	.000	Significant
Relationship Initiative* Motivation to practice adaptive selling (ZY1) → Adaptive selling behavior (Y2)	.007	5.141	.000	Significant
Ability to Monitor (X1) → Sales people Performance (Y3)	.195	3.248	.001	Significant
Adaptive selling behavior (Y2) → Sales people Performance (Y3)	.645	6.572	.000	Significant
Motivation to practice adaptive selling (Y1) → Sales people Performance (Y3)	.148	2.421	.015	Significant
Ability to modify (X2) → Sales people Performance (Y3)	.308	4.944	.000	Significant

**Table 4.** The results of the Test Model Line Coefficient X1, X2 Against Y3 through Y1 and Y2 with Z As Moderator

Table 4, interpretation of each path coefficient is as follows:

- X1 have positive and significant impact on the Y1. This can be seen from the path marked by the positive coefficient of 0.382 with the CR value of 6.016 and obtained the significance probability (p) of 0.000 smaller than equal significance ( $\alpha$ ) determined by 0.05. Thus the X1 directly impact on the Y1 of 0.382, which means that every increase in the X1 then will raise Y1 of 0.382.
- X2 have positive and significant impact on the Y1. This can be seen from the path marked by the positive coefficient of 0.628 with the CR value of 9.687 and obtained the significance probability (P) of 0.000 smaller than equal significance ( $\alpha$ ) determined by 0.05. Thus the X2 directly impact on the Y1 of 0.628, which means that every increase in the X2 then will raise Y1 of 0.628.
- Y1 have positive and significant impact on the Y2. This can be seen from the path marked by the positive coefficient of 0.323 with the CR value of 5.302 and obtained the significance probability (P) of 0.000 smaller than equal significance ( $\alpha$ ) determined by 0.05. Thus the Y1 directly impact on the Y2 of 0.323, which means that every increase in the Y1 then will raise Y2 0.323.
- Z have positive and significant impact on the Y2. This can be seen from the path marked by the positive coefficient of 0.655 with the CR value of 10.611 and obtained the significance probability (p) of 0.000 smaller than equal significance ( $\alpha$ ) determined by 0.05. Thus Z directly impact on the Y2 of 0.655, which means that every increase in the Z and will raise Y2 0.655.

- X1 have positive and significant impact on the Y3. This can be seen from the path marked by the positive coefficient of 0.195 with the CR value of 3.248 and obtained the significance probability (p) of 0.001 smaller than equal significance ( $\alpha$ ) determined by 0.05. Thus the X1 directly impact on the Y3 of 0.195, which means that every increase in the X1 then will raise Y3 of 0.195.
- Y2 have positive and significant impact on the Y3. This can be seen from the path marked by the positive coefficient of 0.645 with the CR value of 6.572 and obtained the significance probability (P) of 0.000 smaller than equal significance ( $\alpha$ ) determined by 0.05. Thus the Y2 directly impact on the Y3 of 0.645, which means that every increase in the Y2 then will raise Y3 of 0.645.
- Y1 have positive and significant impact on the Y3. This can be seen from the path marked by the positive coefficient of 0.148 with the CR value of 2.421 and obtained the significance probability (p) of 0.015 smaller than equal significance ( $\alpha$ ) determined by 0.05. Thus the Y1 directly impact on the Y3 of 0.148, which means that every increase in the Y1 then will raise Y3 of 0.148.
- X2 have positive and significant impact on the Y3. This can be seen from the path marked by the positive coefficient of 0.308 with the CR value of 4.944 and obtained the significance probability (p) of 0.000 smaller than equal significance ( $\alpha$ ) determined by 0.05. Thus the X2 directly impact on the Y3 of 0.308, which means that every increase in the X2 then will raise Y3 of 0.308.
- ZY1 have positive and significant impact on the Y2. This can be seen from the path marked by the positive coefficient of 0.007 with the CR value of 5.141 and obtained the significance probability (p) of 0.000 smaller than equal significance ( $\alpha$ ) determined by 0.05. Thus Z moderate Y1 against Y2 is strengthening of 0.007, which means that every increase in Z which followed Y1 then will strengthen the influence of Y2 0.007.

The above shows that the motivation to practice adaptive selling influenced by the ability to monitor and the ability to Modify. Relationship Initiative that moderate Motivation to practice adaptive selling that is strengthening in influencing adaptive selling behavior. Sales people performance influenced by the ability to monitor the ability to Modify Motivation to practice adaptive selling and adaptive selling behavior. This results in accordance advanced by Porter et. al. (2003) stated that the key to the success of a sales people in building the career is to have the ability to customize the behavior with the needs and the interaction that occurs with the customer at the time. Required competencies and capabilities are trained to a sales people can quickly do adjustment. If only sales focus on closing, then a sales people will be difficult to adapt themselves, build relationships with the potential customer is only transactional, not to 6 relational. Park and George (2006) stated that the quality of the relationship (rapport) which is already strong rapport between sales people and potential customers will give the possibility of far greater for closing.

### CONCLUSION

The results of the study showed with moderating approach SEM that sales people model performance is fit with the criteria of goodness of fit. Sales people performance with the indicator intrinsic sales volume and customer account is influenced by the ability to monitor, ability to modify motivation to practice adaptive selling and adaptive selling behavior. Relationship Initiative with the indicator appeal and knowledge initiative that moderate motivation to practice adaptive selling that is strengthening in influencing adaptive selling behavior that on the dominant influence of sales people performance.

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