

# The Influence of Decision Makers' Global Mindset to the Company's Internationalization Behavior

(a Case Study of Telkom's Global Talent Program)

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**Abstract**— The Global Talent (Development) Program or in short GTP is one of the important Telkom's human capital programs. During the GTP, every participant has to do a three months overseas job assignment, in order to provide them with sufficient yet real international business experiences. The overseas job assignments are mainly aimed to support the Telkom's international expansion programs. Despite of its important for the company's future sustainability, the GTP involves hefty investment. Thus, it is interesting to know the influence of Decision Makers' Global Mindset to the Company's Internationalization Behavior. A survey method was employed to gather data from respondents who were the Telkom's employees who had finished GTP. The 209 valid collected data was analyzed using a descriptive and quantitative investigation approach. The partial least squares (PLS) method was used to quantitatively evaluate the impact of the key constructs of Decision Maker Characteristics, Work Experience, Company Characteristics toward Global Mindset, and the impact of Global Mindset toward Company Internationalization Behavior. The Company Internationalization Behaviors were significantly influenced the Global Mindset (0.69). Global Mindset was significantly influenced by Company Characteristics (0.59), Decision Maker Characteristics (0.21) and Work Experience (0.07). The model of this study achieved  $R^2$  of 0.53 and  $R^2$  of 0.47, these results indicated that the model substantially explained the variance in Global Mindset and Company Internationalization Behavior.

**Keywords**— *Global Mindset; Internationalization; Behavior, Global Talent Program, Decision Maker Characteristics*

## I. INTRODUCTION

Most of business organization today are facing highly competitive yet extremely volatile environment, which are global, complex and dynamic. This definitely changes the way they conduct their business and manage their human resources in the global context. PT Telekomunikasi Indonesia, Tbk. (Telkom) as the most dominant telecommunication players in Indonesia is recently aggressively starting its international expansion program with the target to have 12 (twelve) footprint countries in the region from 2013 to 2014. Hope for gaining and sustain the competitive advantages in years ahead, Telkom believes that they should be able to win the competition against the global player, not only in the regional market but also in the Indonesian market. Telkom also believes that to win the competition and achieve challenging business goals, they have to own a systematic yet comprehensive human capital development

program by creating great leaders and great people with international experience and certification. In short, Telkom commits to invest in people.

There are two main programs of Telkom that are related to Telkom International Expansion, Global Talent (Development) Program or GTP and International Leadership Program (ILP). GTP provides the Telkom's talents with sufficient international work experiences and exposures, while ILP provides Telkom's top talents with classroom leadership trainings in world class Management Schools. For example, Melbourne Business Schools, Thunderbird, Orange and National University of Singapore, as well as live Action Learning Program (ALP) from all Telkom's Business Units.

One of the important Telkom's human capital programs is the GTP. In 2012 to 2014 Telkom planned to send more than 1000 of the selected talents to be involve in this program. This program has several objectives. Firstly, GTP aims to develop the credible, capable and certified global talents, who have competence on technical skills, entrepreneur, functional and leadership by undertaking and completing a three month international job assignment.

Secondly, it intentions to create the global talents, which are capable to develop their networks and partners with companies related to Telkom business in host country to get Telkom's strategic initiatives. By completing this program the talents are also expected to be able to implement the latest world best practices and innovative thinking in accordance with Telkom core value collaborative innovation and in a win-win partnership environment.

In addition, during their undertaking the GTP, the talents should perform and represent Indonesia and Telkom's business interests professionally in the host country. Eventually, the talents are expected to become a role model for their colleagues.

Despite of its important for the company's sustainability in the extremely competitive environment, the GTP learning program involves hefty investment. Telkom Board of Directors (BOD) at that periode had committed to rise up the people competence spending from 2.9% to 20% of the total Telkom Human Capital Development budget. "HR, however, often focused principally on its own performance. It's time for HR to shift its focus from what it does to the quality of the talent decisions that support it" [1]. Indeed, academics and consultants in the human resources field have been wrestling with this problem and trying to reorient HR departments toward measurements that are more meaningful to the business [2]. A variety of analytical approaches can help HR executives to link investments in human capital to a company's returns on financial capital. More importantly, they can help HR leaders to actively shape their organization's future managing talent and directing programs toward the long-term needs of the business" [3]. Therefore, it is

interesting to know the influence of decision makers' global mindset to the company's internationalization behavior; a case study of a global talent program in supporting Telkom's international expansion.

## II. RESEARCH QUESTIONS AND OBJECTIVES

In line with the introduction above, this paper seeks to answer the following research questions:

1. What is the perception of the participants on their Decision Maker Characteristics, Work Experience, Company Characteristics, Global Mindset as a result of GTP and Internationalization Behaviour?
2. Does the existence of Decision Maker Characteristics, Work Experience, Company Characteristics as a result of GTP positively influence the Global Mindset?
3. Does the Global Mindset positively influence the Internationalization Behavior of Telkom Indonesia?
4. What should the company do to encourage or impede company's Internationalization Behavior?

Bring up the research questions, the objectives of this research are: 1) to know the perception of the participants on their Decision Maker Characteristics, Work Experience, Company Characteristics, Global Mindset as a result of GTP and Internationalization Behavior ?; 2) to know if the existence of Decision Maker Characteristics, Work Experience, Company Characteristics as a result of GTP positively influence the Global Mindset; 3) to test if the Global Mindset positively influence the Internationalization Behavior of Telkom Indonesia, and 4) to find out the activity that should be done relating to the result of this study to encourage or impede company internationalization behavior. Therefore, this study is prospective to give the contribution on measuring the influence of global mindset as a result of GTP to the internationalization behavior of Telkom Indonesia. Furthermore it can be used to plan, do, and act the next GTP that will increase the global performance of Telkom.

## III. LITERATURE REVIEW

Measuring the effectiveness of training program is especially done by a company and involving significant amount of investment is very important. Many scholars have done research regarding the effectiveness of the programs of training, among them are: Donald Kirkpatrick who had developed a very popular evaluation model that have been used since the late 1950s [4], [5]. Kirkpatrick (1959) wrote that there are four levels in evaluating training program, namely reaction, learning, behavior, and results. Level 1, reaction measures the immediate reactions of participants towards training program, such as if they like the program, the instructor, the presentation, the perceived usefulness, and the perceived difficulty [4], [5]. Level 2, learning measures the extent to which learning has occurred. In this level, the researcher should measure clear learning outcomes, such as knowledge, skill, and/or attitude that is acquired by participants. Level 3, behavior measures to what extent the participants on the job behavior as a result of their attendance and participation in the training program which has changed. This level three specially involves the proses of measuring the transfer of knowledge, skills, and attitudes from the training context to the workplace. Level 4, result is to find out if the training program leads to final result, especially business results such as business profits. Thus, in level 4, it is measured if the training has changed the financial outcome such as the positive return on investment or increased profit [4], [5].

The four levels evaluation model of Kirkpatrick is acknowledged by many scholars as the standard in the field. Modifications of the model have been suggested such as Holton III [6], Kyvik [7], Cifalino and Baraldi [5]. Holton III in 1996 argued that the four levels of Kirkpatrick was not sufficient to be addressed as a model, since a model based on Dubin's statements in 1976 should have at least six components, namely: 1) elements or unit which are represented as constructs are the subject matter; 2) there should be relationships between the constructs; 3) there should be boundaries or limits of generalization; 4) there should be system states and changes, 5) there should exist deductions about the theory in operation which are expressed as hypotheses; and 6) there should be prediction made about the unit. Based on this argument Holton III in 1996 proposed a model to measure the effectiveness of training. Holton stated that learning outcome is influenced by trainee reactions, motivation to learn, and ability. Performance outcome is primarily influenced by motivation to transfer, transfer condition (environment), and transfer design (ability). Organizational Results outcome is influenced by the intervention must link to the organizational goals, expected utility or payoff, and external factors. The model of Holton III is very complex and not parsimony.

In order to measure the effectiveness of GTP which has an objective to create global mindset, a model of Kyvik in 2006, as shown in Figure 1, should be fit to be used. Kyvik [7] stated that global mindset are influenced by childhood grounding, education, decision maker characteristics, work experience, firm's characteristics, domestic firm performance. Global mindset positively influence firm internationalization behavior which has three dimensions, namely: inward-outward connection, international firm performance, and international networking.

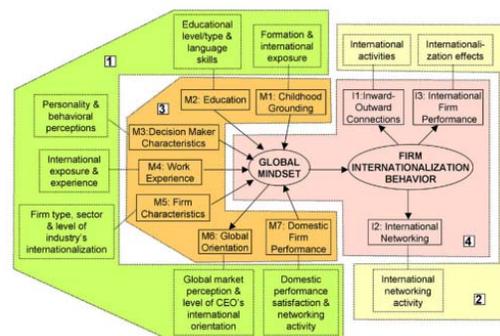


Figure 1. The Influence of Global Mindset toward Firm Internationalization Behavior (Source: [7])

The result of Kyvik study revealed that Firm Characteristics, Decision Maker Characteristics, Work Experience, and Childhood Grounding have positive influenced on Global Mindset. Global Mindset has positively influenced the Firm Internationalization Behavior [7].

## IV. CONCEPTUAL MODEL

Referring to the models for measuring Global Mindset and Firm's Internationalization Behavior from Kyvik in 2006, this study modified the model in order to be more parsimony and fit with the object of this study, as shown in Figure 2. The present study does not involve the construct of Childhood Grounding, though in Kyvik's study it is proven to be significantly influenced Global Mindset, since it is not relevant to be involved. Telkom could not start to select its employee based on their Childhood Grounding.

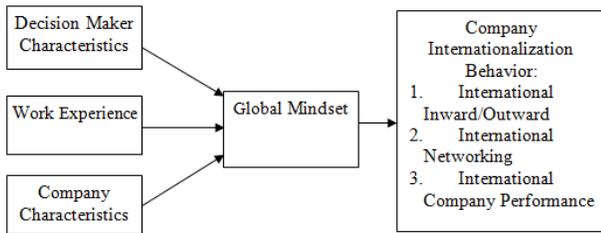


Figure 2. The Proposed Conceptual Model

Decision maker characteristics construct is claimed to have link to Global Mindset through cross-disciplinary collaboration by Gupta & Govindajaran in their paper in 2002 [7]. Decision Maker Characteristics which consist of cognitive flexibility, cross-disciplinary collaboration is proven to have positive influenced to Global Mindset [7].

Work experience construct has indicators which are grounded in work experience and international exposure, these indicators are claimed to have link to the Global Mindset (Bundersen, 1995; Leonidou et al, 1998 as cited by Kyvic [7]. It became an exposure to Internationalization. Kyvic proved that Work Experience construct has a positive influence on Global Mindset.

Company's characteristics construct has several indicator technological levels (Andersson et al, 2004; Wiedersheim-Paul et al, 1978 as cited by Kyvic [7], research and development orientation [7] access to resources (Maignan& Lukas, 1997; Welch &Luostarinen, 1993; Fletcher, 2001 as cited by Kyvic[7], market dynamism and a degree of internationalization [7]. The study of Kyvic [7] proved that company's characteristics construct consist of technologically advanced operation, research and development, resource access and operations in a dynamic international market, has a positive influence on global mindset. Decision maker's global mindset or having managerial global mindset is measured by vision of the world as one marketplace, sensitivity to foreign ideas and cultures and prioritizing internationalization [7]). The study of Kyvic [7] proved that decision maker's global mindset has positively influenced the company's internationalization behavior.

The study of Kyvic [7] stated that company's internationalization behavior construct has three dimensions, as follow: 1) Inward/outward connections, the indicators which reflect the company's international inward-outward connections are the tangible and intangible products and services; 2) International networking, the indicators reflecting the company's international networking behavior includes explanatory motives behind the behavior; 3) International firm performance construct, the indicators of this dimension are based on the company's international performance: Indicators include financial effects, knowledge effects and company-image effects of internationalization.

Hypotheses of this research are:

Based on the proposed model, there are 5 hypotheses to be tested:

- H1: the existence of decision maker characteristics as a result of GTP positively influence the global mindset
- H2: the existence of work experience as a result of GTP positively influence global mindset
- H3: company characteristics positively influence global mindset
- H4: the global mindset positively influence the internationalization behavior of Telkom Indonesia

H5: The overall proposed model can predict the global mindset and internationalization behavior.

## V. RESEARCH METHODOLOGY

In order to test the hypotheses and achieve the objective, this study employed a survey method using a set of questionnaire to gather data from respondents, the Telkom employees who had finished GTP. The set of questionnaire was composed in Google drive and the link was distributed on line. In developing the questionnaire, the first step that should was done was operationalizing the variable, the process of identification of variables of the model tested, defining of the variables, reducing the abstract concept of the variables to render it measurable in a tangible way. This method was called "operationalizing the concepts" or "definition," which could be done by looking at the behavioral dimensions, facets, or properties denoted by the concept [8],[9], [10]. These parts were then interpreted into observable and measurable elements to develop an index of the concept's measurement. The measurement of variables in the theoretical framework was an essential part of research and an important aspect of research design; the hypotheses could be tested and the answers to research questions could be determined if variables were not measured by any means. With these concerns, the present study first defined each construct for the proposed conceptual which consist of decision maker characteristics, work experience, company characteristics, global mindset, and company internationalization behavior.

Reviewing the related items from the existing references to measure the variables of the proposed model was the second step of developing questionnaire. The third step was modifying the existing items in the references in order to fit with the object of this study. The 39 modified items were arranged into a set of questionnaire which was given to two prospective respondents to test the readability as the last step.

This study applied a purposive sampling technique in selecting respondents. Applying this technique, this study selected the respondents who are confined to specific types of people who can provide the desired information, either because they are the only ones who have it or because they conform to some criteria set by the researcher [8], [9]. In this study, the criteria are Telkom's employees, who had finished GTP. The total of valid questionnaires for data analysis was 209.

The collected data were analyzed using method of descriptive and verificative investigation. According to [9], a descriptive study was undertaken in order to ascertain and be able to describe the characteristics of the variables of interest in a situation. Descriptive analysis was performed to obtain the respondents opinion regarding the variables involved in this study. In this study, the descriptive method was employed to answer the first research question and verificative data analysis was employed to answer the second and third questions, as stated by Indrawati [10], [11] that the verificative investigation method can be used for its appropriateness to model testing. The fourth research question can be answered by using the results of both descriptive and verificative investigation method.

The verificative analysis method used in the study was the partial least square (PLS) method, which is a variance-based technique of structural equation modeling (SEM). The PLS method can analyze structural models with multiple-item constructs, as well as to measure direct and indirect paths. PLS can also produce standardized regression coefficients between constructs and loadings between items and constructs (similar to principal components analysis). Values for dependent constructs are similarly produced. The reasons

for the selection of PLS are: First, PLS has less demand on the underlying data distribution. Since, PLS is able to analyze data and model latent construct under non-normal data condition, so by using PLS, there is no distributional necessities of data. In PLS, the test of significance is assessed from bootstrap procedure, for this reason, the normality is not an assumption ([12]). This capability makes PLS becomes popular, since the majority of data that was collected in behavioral research did not follow normal distributions [13]; [14]. Second, PLS has less demand on the measurement scale [14]. The measurement scale may be any level: nominal, ordinal, interval, or ratio. This study used software of SmartPLS 2.0 M3, which can be downloaded free from <http://www.smartpls.de>.

## VI. RESEARCH RESULT AND DISCUSSION

As it had been explained in previous part that this study applied two kinds of method, namely: descriptive and verivcative method.

### A. Descriptive Result

In analyzing data with descriptive method, data were computed to get the mean value or the score of respondents' that answered each of variable. The mean value than translated into several quality, the mean value which had score ranging from 20% to 36% is considered to be very low, above 36% to 52% considered to be low, above 52% to 68% considered to be medium, above 68% to 84% considered to be high, and above 84% to 100 considered to be very high. The result of scoring showed on Table 1. The table shows that the variables of Decision Maker Characteristics, Company Characteristics, Global Mindset, and Company's Internationalization Behaviour were coterogized as very high, these indicated that participants had a very good perception for those variables. Variable work experience was categorized as high, this indicated that participants had a good perception on work experience.

TABLE I. DESCRIPTIVE ANALYSIS RESULT

Variable	Total Index	Category
Decision Maker Characteristics	91%	Very High
Work Experience	82%	High
Company Characteristics	91%	Very High
Global Mindset	93%	Very High
Company's Internationalization Behaviour	85%	Very High

### B. Verificative Result

In analyzing data with verificative method, this study applied PLS. There are two steps that should be followed in PLS method, namely: (1) assessment of the measurement model to test the reliability and the validity of the instrument; and (2) the assessment of the structural model to test the research hypotheses [12], [15] [16]. In assessment of measurement model, there are three standards that should be fulfilled: indicator reliability, internal consistency reliability, and convergent validity. Assessment of the measurement model is generally performed to ensure that the measurement is reliable and valid before making any conclusions about the relationships between the constructs of the model. The measurement model can be tested by evaluating indicator reliability, internal consistency reliability, convergent validity, and discriminant validity [12] and [16]. Indicator reliability explains the extent to which a variable or a set of variables is consistent to that it is intended to measure [16]. In PLS, the indicator reliability is assessed by factor loading (FL), this study accepted items with a loading of 0.5 or higher and the items with FL less than 0.50 were deleted.

### C. Assessment of the Measurement Model

SmartPLS can directly create the FL of each item with the user clicking on "Calculation for PLS Algorithm". The FL results of PLS in this study fulfilled the requirements except for item Decision Maker 2, Work Experience 1 and 2, Company's Internationalization Behaviour 1 and 2 which had FL value less than 0.5, thus those items was not involved in the next process (assessment of the structural model to test the research hypotheses).

Internal consistency reliability measures the degree to which the indicator variable or manifest variable simultaneously loaded when the latent variable increases. The most well-known criterion for assessing internal consistency reliability is Cronbach Alfa (CA) and as an alternative measure to CA is Composite Reliability (CR) [12], [16]. The values of CR and CA range from 0 (completely unreliable) to 1 (perfectly reliable). Values above 0.700 are desirable for exploratory research, and those above 0.800 or higher are desirable for advanced research. Values below 0.600 indicate a lack of reliability [17].

Convergent validity measures the degree to which individual items reflecting a construct converge in compare to items measuring different constructs. A commonly applied criterion of convergent validity is the AVE proposed by Fornell and Larcker in 1981 [16]. An AVE value of at least 0.5 indicates that a latent variable can, on average, explain more than half of the variance of its indicators, and is therefore considered to demonstrate sufficient convergent validity. This study had CA and CR values above 0.7, which indicated that each construct met the internal consistency reliability requirement, except for work experience which had CA for 0.63. But, the CR and AVE of work experience were above the requirements. The AVE values of all construct was above 0.5, except for decision maker characteristics, but the CA and CR values of decision maker characteristics wee above 0.7, thus this study decided that each construct met the convergent validity.

### D. Assessment of the Structural Model

In PLS, the accuracy of the proposed model can be measured by using Path coefficient (PC) and R-squared (R<sup>2</sup>) criterion. The path coefficients should have t-values of at least 1.96 to be considered significant at the 95% confidence level [15], [16]. The t-values are then obtained using re-sampling techniques, such as bootstrapping [16]. Table 2 shows the path coefficients and t-values of the model as a result of bootstrapping. All paths were significant, three paths were significance at the 99% one tail confidence level, and one path significance at 90% one entail confidence level.

TABLE II. THE PATH COEFFICIENTS (PC) AND T-VALUES OF THE PROPOSED MODEL

Paths	PC	t-Values
Decision Maker Characteristics to Global Mindset	0.21*	3.17
Work Experience to Global Mindset	0.07**	1.39
Company Characteristics to Global Mindset	0.59*	8.62
Global Mindset to Company Internationalization	0.69*	17.78

Note: \* represents significance at the 99% confidence level one tail.  
\*\* represents significance at the 90% confidence level one tail.

The  $R^2$  criterion measures a construct's percentage variation that is explained by the model or the proportion of the entire variation in the dependent variable explained by the independent variables jointly [16]. The  $R^2$  value should be adequately high for the model to have a minimum level of explanatory power. Values above the cutoff of 0.670, approximately 0.333, and 0.190 or lower are considered substantial, average and weak, respectively [16]. Based on the SmartPLS, which can directly create FLs and path coefficients as well as  $R^2$  by clicking on "Calculation for PLS Algorithm," the model of this study attained an  $R^2$  of 0.534 and  $R^2$  of 0.470. This result indicated that the model substantially explained the variance in the global mindset and company internationalization behavior.

## VII. CONCLUSIONS AND IMPLICATION FOR PRACTICE

Based on the empirical result, this study concluded that the Company Internationalization behaviors were significantly influenced by Global Mindset (0.69). Global mindset was significantly influenced by Company Characteristics (0.59), Decision Maker Characteristics (0.21) and Work Experience (0.07). The model of this study achieved  $R^2$  of 0.53 and  $R^2$  of 0.47, these results indicated that the model substantially explained the variance in Global Mindset and Company Internationalization Behavior.

Referring to the findings, this study suggests that in order to achieve company internationalization behavior, Telkom should pay attention to global mindset which are respectively influenced by company characteristics, decision maker characteristics and work experience. Thus, Creating Company Characteristics and Decision Maker Characteristics through for example GTP are two most important things. Not only should Telkom develop Decision Makers Characteristics through GTP, but also it should develop Company Characteristics, and the Company Characteristics construct is dominant than Decision Maker Characteristics and Work Experience constructs. But, based on the descriptive analysis result on items to measure Company Characteristics it was founded that the participants did not feel too happy with research and development, this research suggest that the research should be done by their selves. Another thing should be considered to improve Company Characteristics is the market which were operated should be more global in nature.

In term of Decision Maker Characteristics, the thing should be improved is the self confident of participants to influence or make their work and business environment better with calculated risk. The participants also should be motivated to be more active as networking team player in global business.

In term of Work Experience, the participants should be more active to have daily contact with international clients, suppliers, and collaborators. This part is considered to be very low by participants. This can be improved by motivating them to create more real international or global business in their daily work.

## VIII. STUDY LIMITATIONS

While our study provides useful information for measuring company internationalization behavior and global mindset as a result of GTP in term of finding the variable that influence the global mindset, this study assumes that the time for measuring the constructs is too short, the participants who participants in this study have only completed the GTP several months before the data taken. It is suggested that further study may survey their job satisfaction in a one or a two years period after their program completion so that the measurement may exhibit the influence of the GTP to global mindset and further more to the company internationalization behavior. The further study may involve many more participants who have the

opportunity to do global expansion in order to get a higher result's accuracy.

## References

- [1] J.W. Boudreau, and P.M. Ramstad, "Talentship and HR Measurement and Analysis: From ROI to Strategic Organizational Change", *Human Resource Planning*, Vol. 29 (1), 2005, pp. 25-33.
- [2] J.W. Boudreau, and P.M. Ramstad, *Beyond HR: The New Science of Human Capital*. Boston: Harvard Business Review Press. 2007, ISBN 978-1422104156.
- [3] J.G. Harris, E. Craig, and D.A. Light, "Talent and Analytics: New Approaches, Higher ROI", *Journal of Business Strategy*, Vol. 32 (6), 2011, pp. 4-13, Emerald Group Publishing Limited, ISSN 0275-6668.
- [4] D.L. Kirkpatrick, *Kirkpatrick Then and Now: A Strong Foundation For the Future*, CreateSpace Independent Publishing Platform, 1959, ISBN 78-1448670598 Available on line at <http://www.kirkpatrickpartners.com/Portals/0/Storage/Kirkpatrick%20Then%20and%20Now%20peek%20inside%2010%2009.pdf> download October 2013.
- [5] A. Cifalino, and S. Baraldi, "Training Programs and Performance Measurement Evidence from Healthcare Organizations", *Journal of Human Resource Costing & Accounting*, Vol. 13(4), 2009, pp. 294-315.
- [6] E.F. Holton III, "The Flawed Four Level Evaluation Model", *Human Resource Development Quarterly*, Vol 7. No. 1, 1996, pp. 5-21
- [7] Ø. Kyvik, *The internationalization of small firms: a Cognitive Perspective An Empirical Assessment of the Relationship between Decision Makers' Global Mindset and Norwegian Small Firms' Internationalization Behavior*. (Doctoral thesis) ESADE, 2006
- [8] U. Sekaran, *Research methods for Business, A Skill Building Approach*. Fourth Edition, Singapore: John Wiley & Sons Inc., 2003, ISBN 978-0471203667.
- [9] U. Sekaran, and R. Bougie, *Research Method for Business, A Skill Building Approach*. Fifth Edition, Singapore: John Wiley & Sons Inc., 2010, ISBN 978-0470744796.
- [10] Indrawati, *Metode Penelitian Manajemen Dan Bisnis: Konvergensi Teknologi Komunikasi Dan Informasi*. Bandung: Refika Aditama, 2015, ISBN 9786027948549.
- [11] Indrawati, "Behavioral Intention to Use 3G Mobile Multimedia Services in Indonesia", *Doctoral Dissertation*, Multimedia University, Malaysia, 2012
- [12] W.W. Chin, *How to Write Up and Report PLS Analyses*. In V.E. Vinzi, W.W. Chin, J. Henseler, H. Wang (Eds.), *Handbook of Partial Least Squares Concepts, Methods, and Application*, Berlin: Springer, 2010, pp. 655-690, ISBN 978-3540328254.
- [13] P.J. Curran, J.F. Finch, and S.G. West, "The Robustness of Test Statistics to Non normality and Specification Error in Confirmatory Factor Analysis", *Psychological Methods*, Vol. 1, No. 1, 1996, pp.16-29.
- [14] W. Reinartz, M. Haenlein, and J. Henseler, "An Empirical Comparison of the Efficacy of Covariance-Based and Variance-Based SEM", *International Journal of Research Marketing*, Vol. 26, No. 4, 2009, pp.332-344.
- [15] W.W. Chin, and J. Dibbern, "An Introduction to a Permutation Based Procedure for Multi-Group PLS Analysis: Results of Test of Differences on Simulated Data and a Cross Cultural Analysis of the Sourcing of Information System Services Between Germany and USA", In V.E. Vinzi, W.W. Chin, J. Henseler, H. Wang (Eds.), *Handbook of Partial Least Squares Concepts, Methods, and Application*, Berlin: Springer, 2010, pp. 171 - 193, ISBN 978-3540328254.
- [16] N. Urbach, and F. Ahlemann, "Structural Equation Modeling in Information Systems Research Using Partial Least Squares", *Journal of Information Technology Theory and Application*, Vol. 11(2), 2010, pp. 5-40.
- [17] J.C. Nunnally, and I.H. Bernstein, *Psychometric Theory* (3rd ed), New York: McGraw-Hill, 1994, ISBN 978-0-070-47849-7.