# Building value creation through the resources, new product development and competitive strategy to increase business performance

(a Study at Indonesia Telecommunication Industry)

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### **ABSTRACT**

In Indonesia with a population of 242 million, and the World, telecommunications is a huge industry that grows dynamically. In the world market, this sector contributes 3% of the total global economy. The telecommunications sector could contribute up to 1.8% of gross domestic product (GDP). For the last ten years though, Indonesia's telecommunication industry, after experiencing a high growth period and after reaching a penetration of above 100% thank's to the deregulation of opening the market for foreign investment, more affordable handset prices and changes in technology, now faces the tough and difficult period as a result of heavy competition in this beginning of saturated market. The performance became slower as indicated by slowing growth of revenues and ebitda amid the significant growth of penetration resulted from the entry of new and aggressive telecommunication companies, especially in the beginning period of their emergence which is the last 8 years.

This research aims to examine and analyze how the telecommunication company in order to remain competitive builds Value Creation through the utilization of Resources, New Product Development and Competitive Strategy to Increase Business Performance.

The research is conducted using strategic management science approach with the Stratified Proportional Random Sampling for all nine telecommunication companies in Indonesia. It is conducted with verificative method. The unit of analysis in this research is 55 business units of all 9 telecommunication companies. The unit of observation is the managers of each business unit. Data were obtained from the observations, the distribution of questionnaires and interviews. Analysis and hypothesis testing is run using the Partial Least Square (PLS) method.

The conclusion of the research shows that the resources, new product development and competitive strategy affects business performance through value creation. Value creation affects business performance. The research shows that value creation developed thru utilization of resources, development of new products and implementation of proper business strategy pose a significant and positive influence on business performance.

Key words: Business Performance, Competitive Strategy, New Product Development, Resources, Value Creation.

### 1. INTRODUCTION

Telecommunication business in Indonesia has grown significantly in the past 10 years, mainly driven by the deregulation of the industry which opened the industry and issued new licenses for new entry. As a result, the number of operators had once jumped from four to ten operators, operating in fixed line, cellular using both gsm and cdma technology. The market which has a large population base of around 240 millions people at the end of 2011 was very attractive and it encouraged investors to this telecommunication business. The entry of new players which tried to attract new subscribers and to grab market share has driven the tariff deep down, declined for more than 70% for cellular industry and the same pattern for fixed line, in the past 5 years, and started a trend of commoditization of the business. The number of subscribers has grown very significantly. Heavy investments in developing new infrastructures, wider coverage to reach the population, ever declining handset price and declining tariff have made the growth in subscribers and market penetration jumped high and reaching around more than 260 millions subscribers at the end of 2011, more than 100% of the number of population from around 35% five years earlier.

At the same time of those development, the external and internal environment of ICT industry also experienced a big change. It involves changes in technology, telecommunication and information technology become more mobile more digital and more internet based, changes in consumer behavior and then changes in the regulatory front. All of those changes, added by entry of new players, had made telecommunication business while growing rapidly also becoming very competitive and tough for operators. Company's efforts to anticipate those changes had become a paramount importance in order to reduce the capability gap required to improve the business performance. As stated by Pearce and Robinson (2012) that if a company able to anticipate change in its business environment then it can improve its business performance.

In reality, after experiencing the fast growth period, business performance of telecommunication companies in Indonesia tends to slow down as indicated by the slowing down growth of its revenues, ebitda and declining average revenue per user (arpu). Meanwhile, at the same time we see that the cost of operations keeps rising. This trend, makes the margin declines.

The telecommunication industry is now facing the new period and beginning to enter saturation. While the growth in the past 10 years was mainly based on the growth driven by the development of infrastructure (tangible assets), other resources have not been optimally utilised. These resources consist of both the telecommunication technology based and information technology based.

While coverage and capacity, driven by infrastructure development, are important, the competition in telecommunication business in Indonesia is not only based on the infrastructure, but also in the development of new products which serve customers needs. In the middle of this period, an execution of the right competitive strategy is also an important factor in facing the competition. The key success factor is how these factors wrapped together to create value for the customers. The growth of telecommunications and IT infrastructure just made the products offered differs in terms of capacity and coverage while other features and new products resulted from insfrastructure development have not really been developed. The convergence of telecommunications and IT industry and its synergy had opened a new converged products in information technology and media using both of the technology, and it had not really been exploited to develop new products in order to create value for the customers.

In this highly competitive environment, the telecommunication company should have several factors that can create value and have an impact to the business performance either directly or indirectly. The failure of the company in creating value will impact negatively on the customers preference towards the company which will negatively impact the company's performance. Therefore, the choice of a right competitive strategy along with product differentiation by developing new product and the utilization of its resources will make the company more competitive in the industry.

This study is conducted based on the fact that after a period with high growth in subscribers base and revenue until the end of 2007, then slowly but steady the telecommunication business is slowing down while penetration is high and now entering 100%. There are only 4 out of 9 companies showing a profit, positive bottom line while the remaining companies experienced negative bottom line and growth has been slowing down. However, despite this slow market growth and the negative trend of profitability, there still is a believe of the telecommunication operators on their continuous operations.

With the huge market opportunity with this large number of population, while already having more than 100% penetration, which is mainly served only using the telecommunication infrastructure, it is an interesting phenomenon to observe how the telecommunication companies can really optimize its resources, developing new products coming from the convergence of telecommunication and information technology, and implementing the right competitive strategy to create value in order to improve its business performance.

Based on the above explaination, I intend to observe how building value creation through the resources, new product development and competitive strategy increase the business performance of Indonesian telecommunication industry.

#### 2. PROBLEM FORMULATION AND HYPOTHESIS

Based on the identification of the problems as explained above the scope of variables in this research consists of resources, new product development, competitive strategy, value creation and business performance. The object under study is a telecommunication industry located in Indonesia. The time of the study was scheduled in 2011.

Based on the formulation of the problem and research paradigms that have been described, the hypothesis of this research are as follows :

- 1. Resources, new product development and competitive strategy has direct influence to value creation
- 2. Value creation influences business performance
- 3. Resources, new product development and competitive strategy influences business performance directly or indirectly through value creation.

### 3. REASEARCH METHODOLOGY

The research is conducted using strategic management science approach with the Stratified Proportional Random Sampling for all nine telecommunication companies in Indonesia. It is conducted using verification method. Verification method is used to test the hypothesis through field data collection. It is used to examine the relationship between variables, which is the influence of resources, new product development and competitive strategy on value creation and its implications on business performance of telecommunication industry in Indonesia. By using this research method, a significant relationship between the variables studied to produce conclusions that will clarify the picture of the object under study will be found.

The unit of analysis in this research is 55 business units of all 9 telecommunication companies in Indonesia. The unit of observation is the managers and directors of each business unit. Each unit of analysis is represented by 5 respondents to avoid unwanted bias. The total number of units of observation is 275 people, consists of directors and managers of the business units.

Data were obtained from surveys through distribution of questionnaires and interviews. The research instrument uses questionnaires to collect primary data from managers and directors of telecommunication company. Observation is carried out to obtain more accurate information and to obtain other information which can not be predicted in advance. Observations are made by examining, reviewing records or reports regarding resources, new product development, competitive strategy, value creation and business performance of the telecommunication companies under study. Analysis and hypothesis testing is run using the Partial Least Square (PLS) method.

### 4. RESEARCH FINDINGS

The Verification method is designed to examine the influence of telecommunication companies resources, new product development and competitive strategy on value creation and its implications to the business performance by using multiple relationship model among variables, so that the analysis techniques quantitatively uses Structural Equation Modeling (SEM). The structural equation modelling consists of two types namely covariance-based SEM which is often called SEM (Structural Equation Modeling) and variabt-based SEM or a component which is often called PLS (Partial Least Square). This PLS statistical technique is used to verify the relationship among the research variables.

# 4.1. The influence of resources, new product development and competitive strategy on value creation

The relationship between resources and value creation is 0.154, the t value obtained is 3.876 which is greater than 1.96 so that it is significant. The relationship between new product development and value creation is 0.282, the t value obtained is 4.687 which is greater than 1.96 so that is significant. The relationship between competitive strategy and value creation is 0.420, the t value obtained 7.703 which is greater than 1.96 so that is significant.

The influence of resources, new product development and competitive strategy to value creation is significant. The influence formed simultaneously by the resources, new product development and competitive strategy on value creation is 49.8%. The results of the above analysis prove that first hypothesis is accepted, that the resources, new product development and competitive strategy influence value creation either partially or simultaneously.

This is in line with the opinion of Palmberg and Martikainen (2006) which states that value creation can be implemented through utilization of the unique resources owned by the company, while Duysters and John Hagedoorn (1998) argues that company competitiveness is a result of value creation using the company resources.

Companies must do, among others, new product development in order to create value to customers as in the opinion of Broring & Cloutier (2008), while Palmberg and Martikainen states that new product development supported by the right usage of resources will create value for customers.

Companies must identify a suitable competitive strategy to create consumer value. Customer value consists of benefits and cost. In this case, Boyman and Ambrosini (2000) states that value creation can be achieved through the competitive strategy. Companies, telecommunication companies in Indonesia, must identify a suitable ingredients of resources, new product development and competitive strategy to create consumer value.

### 4.2. The influence of Value Creation to Business Performance

The relationship between value creation and business performance is 0.640, the t value obtained is 11.195 which is greater than 1.96, so that it is significant. The results of the above analysis proves that the second hypothesis is accepted that the value creation gives influence to the business performance.

In telecommunication industry, the value chain is quite complex, the development is very fast and a big infrastructure development which means a big capital investment is needed in order to serve customers in their location so that giving the better value for the customers compared to other companies. This value creation, would enhance the competitiveness of the company and making it to be the customers preference which would then provide a better business performance.

The result of the study supports the statement of Wendy (2004) that value creation can result a competitive advantage which can increase the business performance, Sucherly (2008) states that superior business performance can be improved through the positional advantage resulted from competitive advantage as a result of value creation. Robu and Ciora (2012) states that in the business world full of uncertainty, management understanding towards value creation and performance is a necessity in the context of increasing competitiveness in dealing with global market.

# 4.3. The influence of resources, new product development and competitive strategy on business performance through value creation.

The relationship between resources and business performance through value creation is 0.399, the t value obtained is 3.86 which is greater than 1.96, so that is significant. Relationship between new product development and business performance through value creation is 0.517, the t value obtained is 5.067 which greater than 1.96, so that is significant. Relationship between competitive strategy and business performance through value creation is 0.666, the t value obtained is 6.507 which is greater than 1.96, so that is significant. On the other hand, when measured on this study, the direct relationship between resources and business performance is 0.059, the t value obtained is 0.593 which is lower than 1.96, so that it is not significant. The direct relationship between new product development and business performance is 0.036, the t value

obtained is 0.275, which is lower than 1.96, so that it is not significant. The direct relationship between competitive strategy to business performance is 0.534, the t value obtained is 4.997 which is greater than 1.96, so that it is significant.

The influence of resources, new product development and competitive strategy to business performance through value creation is significant. The influence formed simultaneously by the resources, new product development and competitive strategy to business performance through value creation is 57.8%. The results of the above analysis prove that third hypothesis is accepted, that the resources, new product development and competitive strategy influence business performance through value creation.

The company that can formulate the value creation using the resources it has, develop new product which create value, all of that combined with a right strategy in competing in the market will improve the business performance. The study also reveals that, in the highly competitive environment and high penetration market as in the Indonesia's telecommunication industry, competitive strategy is the most significant variables influencing value creation and business performance. The application of the right competitive strategy would differentiate it as compared to the competitors.

The company that uses differentiated strategy attempted to gain a competitive advantage based on the uniqueness of the products offered. The company develops different goods and services from competitors utilizing its resources. Success of this strategy relies on the consumer's value creation for the quality and uniqueness of the company products. As a whole, the company that uses differentiation strategy to compete, develops new and different products and/or services from competitors using its unique resources is expected to create value for the customers and this value will improve the business performance.

### 5. CONCLUSIONS

Based on the objectives of the study, the results of this research can be summarized as follows:

Telecommunication industry in Indonesia has seen that value creation coming from its products and services are achieved through implementing the right competitive strategy by optimally utilizing its resources and consistently developing new products suitable to customers needs. These, are useful tools in order to create value for a better performance of the company. It also prove conformance to the theory, and can be explained because in a highly competitive market which is also entering a saturation period like in Indonesia, a company can have a better business performance if it created value better than its competitors.

Competitive strategy has the utmost influence for the business performance of telecommunication company in this market, marked by heavy competition and very high penetration of subscribers, whether directly or indirectly through the value it created for the customers. This influence is even higher than the influence coming from the resources the company owned and from the development of new products.

The company should continuously build value because value creation would improve business performance, and this can be done through the resources, new product development and implementation of the right competitive strategy.

Referring to result of this research, telecommunication company is suggested to do some of the followings:

- 1. In the current environment, telecommunication company should always monitor changes in the the market, technology and customers behavior and determine the appropriate competitive strategy to apply, which among others are cost leadership strategy, differentiation or focus strategy.
- 2. Keep and always develop new products that suits customers' needs, using the resources including the telecommunication and information technology infrastructure it had built.
- 3. Having built the network and resources it has, it should further perform efficiency of its resources throughout business processes chain to improve competitiveness.
- 4. Keep on improving service quality to increase customer loyalty, and continue performing customer value creation process as a basis for a better business performance.

## **TABLES and FIGURES**

Figure 1. The influence of resources, new product development and competitive strategy on value creation

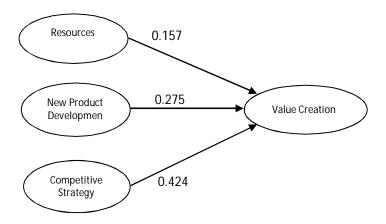


Figure 2. The influence of Value Creation to Business Performance

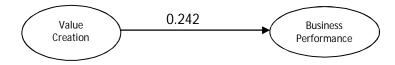


Figure 3. The influence of resources, new product development and competitive strategy on business performance through value creation.

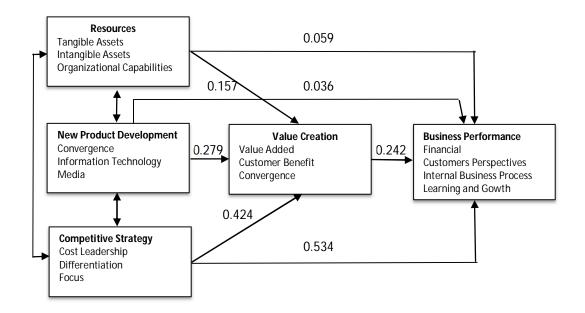


Table 1. Relationship among variables

Hypothesis	Coefficient	t-values	Description
Relationship between resources and value creation	0.157	1.965	Significant
Relationship between new product development and value creation	0.275	2.282	Significant
Relationship between competitive strategy and value creation	0.424	4.432	Significant
Relationship between value creation and business performance	0.242	2.086	Significant
Relationship between resources and business performance	0.059	0.593	Not significant
Relationship between new product development and business performance	0.036	0.275	Not significant
Relationship between competitive strategy and business performance	0.534	4.997	Significant
Relationship between resources and business performance through value creation	0.399	3.86	Significant
Relationship between new product development and business performance through value creation	0.517	5.067	Significant
Relationship between competitive strategy and business performance through value creation	0.666	6.507	Significant
Relationship between resources, new product development and competitive strategy to business performance through value creation	R2 = 0.578		Significant

#### REFERENCES

- Agus Rahayu, 2004. Pengaruh Lingkungan Pemasaran terhadap Strategi Pemasaran, serta Implikasinya pada Hasil Penjualan. Disertasi UNPAD. Bandung.
- Althonayan, Abraham, Joanna Keith, and Anna Misiura. 2011. Aligning Enterprise Risk Management With Business Strategy and Information Systems. Europan, Mediterranean & Middle Eastern Conference on Information System.
- Barney, Jay .B and Hesterly, William S., 2012., *Strategic Management and Competitive Advantage: Concepts*, 4th Edition, Pearson.
- Best, Roger J, 2000, Market-Based Management; Strategies for Growing Customer Value and Profitability, Prentice-Hall International, Inc.
- Bishop, Paul and Phil Megicks. 2002. Competitive strategy and firm size estate agency industry, *Journal Small Business and Enterprise Development* Volume 9 no. 2
- Bröring, Stefanie & L. Martin Cloutier, 2008, Value-creation in new product development (NPD) projects within the context of industry convergence, *British Food Journal*, Vol. 110 No. 1, 2008
- Cai, Tianyi., 2011, A Conceptual framework for value creation management in the lean product development process.
- Chatterjee, Sayan and Birger Wernerfelt. 2007. The Link between Resources and Type of Diversification: Theory and Evidence. *Strategic Management Journal*, Vol. 12, No. 1. (Jan., 1991), pp. 33-48.
- Chi, Ting, Peter P.D, and Vidyaranya B. Gargeya. 2009. Alignment between business environment characteristics, competitive priorities, supply chain structures, and firm business performance, *International Journal of Productivity and Performance Management* Vol. 58 No. 7, pp. 645-669
- Christopher Palmberg and Olli Martikainen, 2006, Diversification in response to ICT convergence indigenous capabilities versus R&D alliances of the Finnish telecom industry, A paper produced within PROACT research program funded by the Ministry of Trade and Industry Finland
- Crasco, Enrico and Ettore Bolisani. 2011. Knowledge- Based Strategies for Knowledge Intensive Business Services: a Multiple Case-study of Computer Service Companies. *Electronic Journal of Knowledge Management*. Vol. 8 issue 1.
- Curie, Wendy L, 2004, Value creation from the application service provider e-business model: the experience of four firms, Journal of Enterprise Information Management
- Dong-Hee Sin, 2006, Convergence of telecommunications, media and information technology, and implications for regulation, The Journal of Policy, Regulation and Strategy for Telecommunications, Information and Media.
- Duysters, Geert and John Hagedoorn, 1998, Technological Convergence in the IT Industry: The Role of Strategic Technology Alliances and Technological Competencies, International Journal of the Economics of Business, Nov. 1998
- Evans, Matt, H., 1999., *Creating Value through Financial Management*, Course Material. Excellence in Financial Management.
- Farbstein, Aviva, 1995., The Convergence of Telecommunication in Canada, Canadian Journal of Communication, 395-400
- Feltmate, Blair W., Brian A. Schofield and Ron W. Yachnin, 2002, Sustainable Development, Value Creation And The Capital Markets, Canadian Centre for Business in the Community
- Gerson Richard A., 2009., Telecommunications and Business Strategy, McGraw Hill Book Company.
- Gomez, Julieta Ojeda, Mike Simpson, S.C. Lenny Koh and Jo Padmore. 2007. Achieving competitive advantage in the Mexican footwear industry, Benchmarking: *An International Journal* Vol. 14 No. 3, pp. 289-305

- Hawkin, Del I, Roger J .Best, and Kenneth A.Coney, 2000, *Consumer Behavior, Building Marketing Strategy*, Eighth Edition, McGraw-Hill, United State.
- Heller, Ian. 2011. The Five Component of a Business Strategy. Articel. USA.
- Hesskett, L., James, W. Earl Sasser, JR., Leonard A. Schlesinger. 1997. The Service Profit Chain, How Leading Companies Link Profit And Growth To Loyalty, Satisfaction, and Value. New York: The Free Press.
- Hitt, M. A., Ireland, R. D. & Hoskisson, R.E. 2010. *Strategic management: Concepts, Competitiveness and Globalization*. 9th edition. Cincinnati, Ohio: Thomson/South Western.
- Isoherranen, Ville. 2011, Strategy Orientation Analysis in the Mobile Phone Case Business, *Modrn Economic*.
- Kahreh, Mohammad Safari, Heidar Ahmadi, Asgar Hashemi. 2011. Achieving Competitive Avantage through Empowering Employees: An empirical study. *Far East Journal of Psychology and Business*.
- Kotler, Philip dan Kevin Lane Keller, 2009, *Marketing Management*, Prentice Hall International, Inc. A Division of Simon & Scuster, Englewood Cliffs, Nj07632.
- Kushwaha, Gyneshwar Singh. 2011. Competitive Advantage Through Information and Communication Technology (ICT) Enable Supply Chain Management Practices. *International Journal of Enterprise Computing and Business Systems*.
- Lin, Chiun-Sin and Chih-Pin Huang. 2011. Measuring Competitive Advantage with an Asset-light Valuation Model. *African Journal of Business Management*. Vol. 5.
- Liu, Ligan, Vedastus Timothy, and Yang Gao. 2011. Resource-based determinants of performance in the Tanzanian commercial banking subsector. *African Journal of Business Management Vol.* 5(15), pp. 6640-6647, 4 August, 2011.
- Mackey, Tyson Brighton,. 2006, Essays on Corporate Diversification and Firm Value, 2006)
- Mas Bambang Baroto, Muhammad Madi Bin Abdulah. 2011. The Application of Cost, Differentation and Hybrid Strategy in Business Operations: Will Hybrid Strategy Become The New Competitive Strategy? *International Conference on Business and Economic Research*.
- Mudrajad Kuncoro, 2003. Metode Riset Untuk Bisnis & Ekonomi, Bagaimana Meneliti & Menulis Tesis. Penerbit Erlangga.
- Omerzel, Doris Gomezelj and Rune Ellemose Gulev. 2011. Knowledge Resources and Competitive Advantage. *Managing Global Transitions 9 (4): 335–354*.
- Palmberg and Marikainen, 2006., Diversification in response to ICT convergence indigenous capabilities versus R&D alliances of the Finnish telecom industry, Finlandia
- Pearce II, John A, and Richard B. Robinson Jr, 2007. Formulation, Implementation, and Control of Competitive Strategy. McGraw-Hill/Irwin.
- Rijamampianina, Russeli Abratt, and Yumiko February. 2008. A framework of concentric diversification throught sustainable competitive advantage, Management Decision, 2008. Emerald Publish limited.
- Robu, Vasile and Costin Ciora, 2010., Measuring Performance, Value Creation And Value-Based Management In The Context Of Competitiveness And Globalization, Bucharest Academy of Economic Studies
- Sekaran, Uma, 2003, Research Method for Business, A Skill Building Approach. Fourth Edition. International Edition, Prentice Hall, USA.
- Sharma, Pramodita and Carney, Michael, 2012., Value Creation and Performance in Private Family Firms: Measurement and Methodological Issues, Family Business Review 25 (3) 233–242
- Sucherly, 2004, Strategi Pemasaran, Model untuk Memelihara dan Meningkatkan Kinerja Perusahaan, Universitas Padjadjaran: Bandung.

- Sukati, Inda, Abu Bakar Abdul Hamid, Rohaizat Baharun, and Huam Hom Tat. 2011. An Investigation of The Relationship Between Supply Chain Management Practice and Competitive Advantage of The firm. Contempory Marketing Review. Vol. 1(4).
- Supranto J, 2004. Analisis Multivariat, Arti dan Interpretasi. Penerbit PT Rineka Cipta. Jakarta
- Thomas A. Carbono, 2011, Critical Success Factors in The Front-end of High Technology Industry New Product Development, Dissertation at University of Alabama, 2011
- Umi Kaltum, 2010, Pengaruh Strategi Bisnis dan Total Quality Service terhadap Keunggulan Bersaing dan Implikasinya pada Kinerja Unit Bisnis Industri Telekomunikasi di Indonesia, Disertasi, tidak diterbitkan, Program Pascasarjana Universitas Padjajdjaran Bandung, Indonesia
- Warren, Kim, 2002. Competitive Strategy Dynamics. John Wiley & Sons, Inc
- Wernerfelt, Birger, 1995. A Resource-based view of the Firm: Ten years after, Strategic Management Journal, 16, 3, 171-175.
- Wheelen, Thomas L., and Hunger, J, David., 2010, "Strategic Management and Business Policy": Entering 21st Century Global Society", 9th Edition., Prentice Hall Upper Saddle River, New Jersey 07458.
- Wheeler, Mark., 2001, Regulating communications: British public policy responses to convergence within the digital age, Canadian Journal of Communication Winter 2001: 119
- Zikmund, William G, 2003. Business Research Method. Seventh Edition. South-Western. United States of America
- Zott, Christoph, Raphael Amit, and Loranzo Massa, 2011, The Business Model: Recent Developments and Future Research, Journal of International Marketing, Volume 10.