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## **Customer Lifetime Value Management and Firm Performance. Empirical Evidence from Polish Insurance Market**

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### **Abstract**

The purpose of this article is to identify the relationship of customer lifetime value management and firm performance by empirical verification of a conceptual model. In the presence of the increasing level of competition in many industries, it is important to build long-term relationships with customers. Customer lifetime value management is the composition of marketing activities, that can be useful to build these kind of relationships through the prism of customer lifetime value. The thesis about the effectiveness of customer lifetime value management in the field of customer knowledge creation has been verified positively by the results of the study. The study was conducted from August till September 2012 and was attended by 1.245 micro-enterprises operating on financial advisers market in Poland (here: insurance agents).

**Keywords:** customer, performance, insurance

## **1. Introduction**

The company competes in many markets (financial, employees, customers, suppliers). In the modern economy it is becoming increasingly important to compete in the market of customers (Dobiegała-Korona, 2011). This is due to increasing competitive pressure and the development of information technologies, that allow the collection, processing and use of customer information (Szablewski, 2006). The focus on the management processes based on the product is replaced with the focus on the processes based on relationships with customers (Urbanek, 2006; Dobiegała-Korona, 2011). Relationships with customers are resource, which can be managed with appropriate activities. These activities are defined as the customer lifetime value management (CLVM). The essence of this concept is to shift from concentrating on the individual transactions with customers to building lasting and profitable relationships with them in order to maintain the relations in the long term (Dobiegała-Korona, 2011; Gupta & Lehmann, 2003, 2005; Kumar & Shah, 2009). It is not possible to create firm performance during customer lifetime value management without identification of firm performance determinants.

In the management science there are numerous works concerning the relationship between the customer lifetime value and the firm value. This problem is mostly presented in case study convention or theoretical analysis. The research carried out in the case study convention is based on measuring the individual customer or customer portfolio lifetime values and juxtaposing the changes in those values with the selected market indicators (mainly market capitalization). On this basis, it has been shown that there is the relationships between these variables for individual companies (Gupta, Lehmann, 2003, 2005; Kumar Shah, 2009). Theoretical works, in turn, focus on the analysis of customer lifetime value measurement formulas with respect to formulas describing the firm value (Bauer & Hammerschmidt, 2005; Tomczyk 2011, 2012). The next category are works concerning the customer lifetime value analysis in the context of strategic marketing decisions-making in a company (Dwyer 1989; Kumar, Venkatesan, Bohling and Beckmann, 2008). There is also a category of research, relating fragmentarily to the issue of relationship between the management of customer lifetime value and the firm performance (Bruhn, Georgi, Handwich, 2008). Thus, the overview of the subject literature reveals the absence of comprehensive studies regarding the CLVM as a composition of marketing activities in relationship to the firm performance. Creating the conceptual model that illustrates this relationship and its testing in empirical research, may therefore constitute an original contribution to the management science.

## **2. Research framework (conceptual model)**

On the basis of the analysis of existing CLVM theory, six elements of the customer lifetime value management were identified, and then divided into two groups: firstly, the customer analysis (customer knowledge creation (CKC) and customer lifetime value measurement (CLVMeas)) and secondly, the maximization of customer lifetime value (customer acquisition management (CAM), customer retention management (CRM), customer relationship development management (CRDM), customer attrition management (CAttM)). Moreover, the analysis of the theory of firm performance measurement allowed a choice of 4 metrics as the most appropriate to measure firm performance. These metrics are as follows: customer profitability, customer lifetime value, net sales and net profit/loss (Gupta & Ziethaml, 2006; Clark 2000; Kozielski 2008; Sierpińska & Jachna 2004).

In order to accomplish the purpose of the article, the main thesis has been established: "the higher the level of activities in the field of CLVM, the better the firm performance". In order to carry out the proof of the thesis, six hypotheses have been established (Table. 1).

**Table 1. Hypotheses**

<b>H1:</b> the higher the level of activities in the field of customer knowledge creation, the higher a firm performance
<b>H2:</b> the higher the level of activities in the field of customer lifetime value measurement, the higher a firm performance
<b>H3:</b> the higher the level of activities in the field of customer acquisition management, the higher a firm performance
<b>H4:</b> the higher the level of activities in the field of customer retention management, the higher a firm performance
<b>H5:</b> the higher the level of activities in the field of customer relationship development, the higher a firm performance
<b>H6:</b> the higher the level of activities in the field of customer attrition management, the higher a firm performance

### 3. Methodology

The object of this study was a population of micro-enterprises, operating on financial advisers market (insurance agents – captive and independent, insurance brokers, credit agents, banking agencies) and the sample was a group of insurance agents from Polish insurance intermediary market. The reason to choose this object was the ability to build long-term relationships between entrepreneurs and their customers. The specificity of insurance agents activity exhibits the characteristic of the financial advisers market as a whole. This characteristic includes: the higher importance of information in decision-making processes undertaken by customers than in other industries, the price and income elasticity of demand, high susceptibility to emotional factors related to the subject of exchange, service intangibility and its strong relationship with supplier regarded as an individual, and the relatively high importance of the personnel role as customer lifetime value generator (Płonka, 2004). Therefore, it can be assumed that the results may be reflected in the scope of the activity of the population selected for the study.

In order to accomplish the purpose of the article, a multi-method analysis has been used. The main advantage of such approach is the quantitative verification of statistical hypotheses combined with the qualitative interpretation of the results (Tomczyk, 2013). To verify the established hypotheses, a quantitative survey on the sample of 1,245 insurance agents operating in Poland has been performed (auto-selective sampling) and a sample of 451 respondents, who referred to their performance, has been used. The intensity level of the activities undertaken by agents in each of the six CLVM areas as well as the level of firm performance for each of the four proposed measures have been measured on a Likert scale. As a result, the characteristics of seven areas included in the model has been achieved. Using exploratory factor analysis performed by a principal axis method, 7 aggregated variables have been obtained and subjected to multiple regression analysis.

To interpret the results of the quantitative study, 10 in-depth interviews (IDI) have been performed and a sample of 10 insurance agents (purposive sampling) has been used. The sample has been selected on the basis of the features, that differentiated the quantitative results in the highest degree. These characteristics are: gender, age, length of service, the type of the agent (captive and independent) and co-workers support. The study was conducted to the point where, in the opinion of the researcher, all the necessary information has been obtained (point of redundancy - Kvale, 2007). Data analysis has been performed based on the method of analysis of meaning, made on full transcriptions of each of the 10 interviews (Gibbs, 2007) and described in detail in a separate report (Tomczyk, 2013).

Due to the type of the sample used for the quantitative study (auto-selective sampling) is not possible to obtain statistical generalization of the results to the whole micro-enterprises population, operating on financial advisers market, whereas the level of significance refers only to the results of the sample analysis. However, it is possible to identify a situation in which the results of research presented can be applied by analytical generalization (Kvale, 2007). This situation is based on the assumption mentioned above, that the insurance intermediary market has the same characteristic like the whole micro-enterprises population, operating on financial advisers market (Płonka, 2004). Because of the research method based on respondent's declarations (questionnaire interviews and IDIs), the results of the study should also be treated carefully when being evaluated.

#### 4. Major results

As a result of the quantitative research, hypotheses verification by multiple regression analysis has been done. Table 2 presents the summary of the model.

**Table 2. Model - summary**

Model	R	R-squared	Adjusted R-squared	The standard error of the estimate
1	,333	,111	,099	,94940303

The model is poorly adjusted. R-squared is 0,099, which means that using six predictors, only 9.9% of the variance of the dependent variable has been explained. The analysis of variance shows that model is statistically significant, so its predictability of the dependent variable is better than based on the mean. This means that at least one of the predictors indeed predicts the value of the dependent variable. In table 3 the values of the coefficients have been presented.

**Table 3. Coefficients<sup>a</sup>**

Model	Unstandardized coefficients		Standardized coefficients	<i>t</i>	Sig.
	<i>B</i>	Std. Error	Beta		
1	(Const.)	-,031	,045	-,673	,501
	CKC	,320	,073,310	4,373	,000
	CLVMeas	-,013	,069-,013	-,190	,850
	CAM	,051	,057,051	,889	,374
	CRM	-,008	,064-,008	-,121	,904
	CRD	,053	,058,056	,913	,361
	CAttM	-,029	,059-,029	-,486	,627

<sup>a</sup>

dependent variable: firm performance

The only significant predictor in providing the value of the dependent variable is the customer knowledge creation (CKC). This means that it is the only variable link to the firm performance (here: an insurance agent) in a statistically significant way. Mathematical formula, that allows to show the scope of mutual determination characteristics and predict potential changes as a result of their interaction, has the following form:

$$\text{firm performance} = -0,031 + 0,320 \text{ CKC}$$

The interpretation is impeded by the lack of natural units of measure. However, one can assume that in the absence of customer knowledge creation form, the level of economic performance is -0,031. With the increase of the unit of CKC, firm performance level increases by 0,320 with relatively high Beta (0,310). The verification of the hypotheses is presented in Table 4.

**Table 4. Hypotheses verification**

Hypotheses	Verification
<b>H1:</b> the higher the level of activities in the field of customer knowledge creation, the higher a firm performance	CONFIRMED
<b>H2:</b> the higher the level of activities in the field of customer lifetime value measurement, the higher a firm performance	rejected
<b>H3:</b> the higher the level of activities in the field of customer acquisition management, the higher a firm performance	rejected
<b>H4:</b> the higher the level of activities in the field of customer retention management, the higher a firm performance	rejected
<b>H5:</b> the higher the level of activities in the field of customer relationship development, the higher a firm performance	rejected
<b>H6:</b> the higher the level of activities in the field of customer attrition management, the higher a firm performance	rejected

As a result of qualitative research, **seven key factors affecting this verification have been identified**. These factors are: priority of customer portfolio building, the poor relationship between the level of formality and the firm performance, efficiency analysis for customer portfolio as a whole, the perceived unpredictability of customer behavior, treating marketing activities as the cost of competition and not competitive advantage, soft character of add-selling and the importance of customer good manner. The existence of the enumerated factors determines the appearance of the gap between the CLVM activities composition and firm performance (Tomczyk, 2013).

## 5. Discussion

The thesis "the higher the level of activities in the field of customer lifetime value management, the better the firm performance" has been proved in the field of customer knowledge creation. Thus, the purpose of the article was accomplished - the relationship between the CLVM and the firm performance was identified in the field of customer knowledge creation. And conversely - it means that the activities composition in the field of maximizing customer lifetime value do not play a significant role in shaping the firm performance in the field of micro-enterprises operating on financial advisers market (here: insurance agents).

In theory, the problem of relationship between CLVM, as the composition of marketing activities, and firm performance is relatively poorly recognized. Undoubtedly, the results of this study confirm the well-established importance of customer knowledge creation as a factor, that is conducive to firm performance (Sobolewska 2010, Mazur, Roszkiewicz and Strzyżewska, 2011). The customer knowledge creation in a natural way promotes CLVM, but it becomes evident, that elements of customer knowledge creation are not sufficiently utilized in the field of maximizing customer lifetime value (Tomczyk, 2013). Main factor is the reluctance of micro-entrepreneurs to reduce the level of service for customers, characterized by a low value, which follows from the principle of concentration on the construction of the customer portfolio as a whole, reinforced by the perceived unpredictability of customer behavior. Consequently, the fear of losing customers dominates, and micro-entrepreneurs activities are performed according to the principle of "serve each customer, because you never know" (Tomczyk, 2013). The scarcity of theory in the field of CLVM as the composition of activities may stem from the lack of relationships between the activities as such and the firm performance.

Accordingly, the financial and analytical approach to CLVM, adopted in the field of marketing, is the most reasonable, and the direction of further research is indicated by the need for building models of customer analysis and drawing conclusions rather from the customer behavior than from the firm activities.

## Key references

1. Bauer M. & Hammerschmidt M. (2005). Customer-Based Corporate Valuation. Integrating The Concepts Of Customer Equity And Shareholder Value, *Management Decision*, Vol. 43 No. 3, 331-348.
2. Bruhn M., Georgi D. & Handwich K. (2008). Customer Equity Management as Formative Second-Order Construct, *Journal of Business Research*. Available at: [file:///C:/Users/Przemek/Downloads/bruhn\\_georgi\\_hadwich\\_2008\\_customer\\_equity\\_mgt\\_formative\\_2nd\\_order.pdf](file:///C:/Users/Przemek/Downloads/bruhn_georgi_hadwich_2008_customer_equity_mgt_formative_2nd_order.pdf) [access: 25.03.2014]
3. Clark B. (2000). Managerial Perceptions of Marketing Performance: Efficiency, Adaptability, Effectiveness and Satisfaction, *Journal of Strategic Marketing*, No. 8, 3– 25.
4. Dobiegała-Korona B. (2011). Wycena klienta [Customer Valuation]. In Panfil M. & Szablewski A. (Eds.). *Wycena przedsiębiorstwa. Od teorii do praktyki* [Enterprise Valuation. From Theory To Practise]. (pp. 521-549). Poltext, Warszawa (in Polish).
5. Doligalski T. (2010). Wartość a rentowność klienta [Customer Lifetime Value and Customer Profitability]. In Dobiegała-Korona B. & Doligalski T. (Eds.). *Zarządzanie wartością klienta. Pomiar i strategie* [Customer Value Management. Measurement and Strategies]. (pp. 73-85) Poltext, Warszawa (in Polish).
6. Dwyer F. (1989). Customer Lifetime Valuation to Support Marketing Decision Making, *Journal of Direct Marketing*, 8(2), 73-81.
7. Gibbs G. (2007). *Analyzing Qualitative Data*, London, Great Britain, Sage Publications Ltd.
8. Gupta S. & Lehmann D. (Winter 2003). Customers as Assets, *Journal of Interactive Marketing*, Vol. 17, No. 1, 9-24.
9. Gupta S. & Ziethaml V. (November–December 2006). Customer Metrics and Their Impact on Financial Performance, *Marketing Science*, vol. 25, no. 6, 718–733.
10. Kozielski R. (2008). *Wskaźniki marketingowe* [Marketing Metrics], Oficyna Ekonomiczna, Kraków (in Polish).
11. Kumar V. & Shah D. (November 2009). Expanding the Role of Marketing: From Customer Equity to market Capitalization, *Journal of Marketing*, Vol. 73, 119-136.
12. Kumar V., Venkatesan R., Bohling T. & Beckmann D. (July-August 2008). The Power of CLV: Managing Customer Lifetime Value at IBM, *Marketing Science*, Vol. 27, no. 4, 585-599.
13. Kvale S. (2007). *Doing Interviews*, London, Great Britain, Sage Publications Ltd.
14. Mazur J. & Rószkiewicz M., Strzyżewska M. (2011). *Kompozycja działań związanych z wiedzą a wyniki ekonomiczne przedsiębiorstwa* [Knowledge-activities Composition and Firm Performance]. Oficyna Wydawnicza Szkoły Głównej Handlowej w Warszawie, Warszawa (in Polish).
15. Płonka M. (2004). *Marketing instytucji finansowych* [Financial Institutions Marketing], Wydawnictwo Akademii Ekonomicznej w Krakowie, Kraków (in Polish).
16. Sierpińska M. & Jachna T. (2004). *Ocena przedsiębiorstwa według standardów światowych* [Global Standards Enterprise Assesment]. Wydawnictwo Naukowe PWN, Warszawa (in Polish).
17. Sobolewska S. (2010). Model zarządzania wiedzą o kliencie [Customer Knowledge Management Model]. In Dobiegała-Korona B. & Doligalski T. (Eds.). *Zarządzanie*



- wartością klienta. *Pomiar i strategie* [Customer Value Management. Measurement and Strategies]. (pp. 141-156) Poltext (in Polish).
18. Szablewski A. (2006). Kapitał klienta [Customer Equity]. In Panfil M. & Szablewski A. (Eds.). *Metody wyceny spółki. Perspektywa klienta i inwestora* [Enterprise Valuation. From Theory To Practise]. (pp. 57-80), Difin, Warszawa (in Polish).
  19. Tomczyk P. (2013). Zarządzanie wartością klienta a wyniki ekonomiczne przedsiębiorstwa na przykładzie branży ubezpieczeniowej. Analiza jakościowa [Customer Lifetime Value Management and Firm Performance. Case of Insurance Industry in Poland. Qualitative Analysis]., Manuscript Title. Unpublished manuscript.
  20. Tomczyk P. (2014). Multi-Method Analysis. In Ghorbani A, & Takhar A, (Eds.). *Market Research Methodologies: Qualitative and Multi-Method Approaches*. Manuscript Title. Unpublished manuscript.
  21. Tomczyk P. (2012). Co to jest wartość klienta? [What is Customer Lifetime Value?]. Available at <http://www.valuecomesfirst.pl/wartosc-klienta/> [access: 25.03.2014] (in Polish).
  22. Tomczyk P.(2012). Co to jest zarządzanie wartością klienta? [What is Customer Lifetime Value Management?]  
Available at <http://www.valuecomesfirst.pl/zarzadzanie-wartoscia-klienta/> [access: 25.03.2014]
  23. Tomczyk P. (wrzesień-październik 2012). Modele wyceny klienta a podejścia do wyceny przedsiębiorstwa [Customer Valuation Models and Firm Valuation Approaches]. *Handel Wewnętrzny*, 182 – 190 (in Polish).
  24. Tomczyk. P. (2011).Analiza podejść do zarządzania wartością klienta. Próba systematyzacji [Analysis of Customer Valuation Approaches. Attempt to Systematize]. *Zeszyty Naukowe Uniwersytetu Szczecińskiego*, nr 660, seria Ekonomiczne Problemy Usług nr 72, 10/2011, 127-139 (in Polish).
  25. Urbanek G. (2005). Analiza determinantów kapitału klienta [Customer Equity Determinants Analysis]. *Marketing i Rynek*, nr 4, 2-7 (in Polish).