

Looking for the profitably loyal clients by modeling CLV for the dining-out chain

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Introduction

Contemporary relationship marketing theory contemplates the concept of customer equity as the fundamental guide of marketing growth and success. Customer equity generally is measured as the total discounted lifetime value of company's customer base in the long-term perspective (Gupta et al., 2006; Srivastava et al., 1998). Recently extensive research has been undertaken on the customer lifetime value modeling. Rust et al. (2004) proposed the approach for service industry, when CLV is calculated as the projected future value on the individual (client) level. Following this approach, several studies apply the CLV measurement concept in specific context such as banking industry (Ekinci et al., 2014), consumer packaged goods (Sunder et al., 2016), luxury brands (Kim et al., 2012) and telecom services (Segarra – Moliner, Mliner – Tena, 2016). Hyun (2009) applied this approach for the restaurant industry, basing his calculations on the self-reported data and using a set of one-item questions to measure CLV. To our knowledge, none of the research previously applied the concept of CLV for the restaurant industry on the data-driven basis. Thus, the aim of our study is two-fold. To contribute to the current knowledge, we intent to develop the CLV measurement technique using forward-looking approach, which could unravel both general and industry specific customer loyalty drivers at individual level. Using the dataset of the one of the leading Russian restaurant industry players, we will propose the segmentation framework, which allows for the selection of the customers, profitable in future – this is the practical side of our study, which could be of a great help for the company to target customized communications.

Theoretical Background

Measuring marketing success is not an ordinary task, however it is necessary to carry out when company is concerned about its marketing outcomes and expenses. Many companies select loyalty as their primary business goal – it is generally (and sometimes wrongly) considered that loyal customers provide sustainable profitability at less costs (Reichheld, 2003; Reinartz and Kumar, 2002). Loyalty measurement techniques, which are elaborated to calculate various loyalty metrics based on the self-explicated data (like NPS) or backward-looking data (like RFM, SoW, repeat purchases etc.) are frequently used for segmentation and marketing budget allocation. As Kumar and Reinartz (2016) point out, “the traditional metrics that only takes into consideration past activity of a customer could lead to outdated results being used for customer selection and resource allocation” (p. 40). Evidently, that a customer need not to be loyal to be a highly profitable, and, on the contrary, many loyal customers could be highly unprofitable, responding the short-term marketing incentives offered by a company.

CLV is a forward-looking metric, which takes into account variable nature of customer behavior and enables a company to treat individual customers differentially depending on their contribution to the company’s profit (Kumar and Reinartz, 2016). The demand for marketing accountability and the development of data-driven marketing challenged academia to expand the CLV measurement approaches – a rich variety of them is currently presented in the literature (Benoit and Van den Poel, 2009; Donkers et al., 2007; Fader and Hardy, 2010; Pfeifer, 2011; Rust et al., 2011). We use one of them proposed by Kumar and Reinartz (2016). In their previous research (Reinartz and Kumar, 2002; Kumar and Shah, 2004) they have uncovered the relationship between customer profitability and loyalty to elicit the drivers of profitable loyalty – 8 constructs, universal for different companies, have been revealed. Based on this background, in our approach we combine the CLV calculation with the profitable loyalty drivers’ evaluation to provide the broader picture of customer loyalty for specific industry – dining – out services.

We apply our technique to the dataset of the one of the market leaders at Russian restaurant industry. This industry is strongly atomized – some companies operate chains with many brands in the same price segment, differentiating their marketing offerings by the cuisine. Others offer plenty of channels, combining quick – service, online delivery and dining facilities under the same brand. These and other strategies of managing the multiunit restaurant are aimed to retain the customers within the chains, preventing their switching over the competitors’ offerings (Muller and Roberts, 1994). Therefore, the selection of profitably loyal customers and their development becomes the crucial task to be implemented.

Methodology

The data come from the company CRM system, which contains all the information of loyalty cardholders transactions. The loyalty card could be used within the multibrand chain of restaurants in more than 10 Russian cities. The benefit obtained by the client is the 10% discount for the whole check. The data are stored in the individual cutaway, which permits to extract the variables, covering the every client behavior. We upload the following parameters: client id, starting date, number of visits for a given period, number of guests at every visit, content of every order, time of every visit, interpurchase time, location, way of payment.

Expected findings

First, we expect to bring into the light the structure of the customer base, using the taxonomy, proposed by Reinartz and Kumar (2002), which divides the clients into four groups depending both on their profitability and loyalty on the basis of individually calculated CLV. This will be executed with the help of the proposed approach.

Second, we expect to define the statistically significant profitable loyalty drivers for the restaurant industry. Two groups of drivers will be fetched out – general for the consumer behavior (for instance, average interpurchase time,

cross-buying behavior, share of wallet etc.) and restaurant specific factors (for instance, the time of visit, the type of cuisine, the cross-use of the brands in the chain etc.). Our findings will hopefully help to derive new insights on managing the customer behavior in the restaurant industry for the profitable growth.

References

1. Benoit, D.F., Van den Poel, D. (2009). *Benefits of quantile regression for the analysis of customer lifetime value in a contractual setting% an application in financial services*. Expert Systems with Application, 36 (7), 10475 – 10484.
2. Donkers, B., Verhoef, P., de Jong, M. (2007). *Modelling CLV: a test of competing models in the insurance industry*. Quantitative Marketing and Economics, 5 (2), 163 – 190.
3. Ekinci, Y., Uray, N., Ulengin, F. (2014). *A customer lifetime value model for the banking industry: a guide to marketing actions*. European Journal of Marketing, 48 (3/4), 761 – 784.
4. Fader, P., Hardy, B. (2010). *Customer-base valuation in a contractual setting: the perils of ignoring heterogeneity*. Marketing Science, 29 (1), 85 – 93.
5. Gupta, S., Hanssens, D., Hardie, B., Kahn, W., Kumar, V., Lin, N. (2006). *Modeling customer lifetime value*. Journal of Service Research, 9 (2), 139 – 155.
6. Hyun, S.S. (2009). *Creating a model of customer equity for a chain restaurant brand formation*. International Journal of Hospitality Management, 28, 529 – 539.
7. Kim, A.J., Ko, E. (2012). *Do social media marketing activities enhance customer equity? An empirical study of luxury fashion brand*. Journal of Business Research, 65 (10), 1480 – 1486.
8. Kumar, V., Shah, D. (2004). *Building and sustaining profitable customer loyalty for the 21st century*. Journal of Retailing, 80 (4), 317 – 329.
9. Kumar, V., Reinartz, W. (2016). *Creating enduring customer value*. Journal of Marketing, 80, 36 – 68.
10. Muller, C.C., Roberts, K.H. (1994). *An expanded restaurant typology*. The Cornell H.R.A. Quarterly, June, 27 – 37.
11. Pfeifer, P.E. (2011). *On estimating current customer equity using company summary data*. Journal of Interactive Marketing, 25 (1), 1 – 14.
12. Reinartz, W., Kumar, V. (2002). *The mismanagement of customer loyalty*. Harvard Business Review, July.
13. Reichheld, F. (2003). *The one number you need to grow*. Harvard Business Review, available at: <https://hbr.org/2003/12/the-one-number-you-need-to-grow>
14. Rust, R.T., Lemon, K.N., Zeithaml, V.A. (2004). *Return in marketing: using customer equity to focus marketing strategy*. Journal of Marketing, 68 (1), 109 – 127.
15. Rust R.T., Kumar, V., Venkatesan, R. (2011). *Will the frog change into a prince? Predicting future customer profitability*. International Journal of Research in Marketing, 28 (4), 281 – 294.
16. Segarra – Moliner, J.R., Mliner – Tena, M.A. (2016). *Customer equity and CLV in Spanish telecommunication services*. Journal of Business Research, 69 (10), 4694 – 4705.

17. Srivastava, R.K., Shervani, T.A., Fahey, L. (1998). *Market – based assets and shareholder value: a framework for analysis*. Journal of Marketing, 62 (1), 2 – 18.
18. Sunder, S., Kumar, V., Zhao, Y. (2016). *Measuring the lifetime value of a customer in a consumer packaged goods industry*. Journal of Marketing Research, 53 (6), 901 – 921.