Does customer analysis affect firm performance? Quantitative evidence from the Polish insurance market

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ABSTRACT

Despite many conceptual and empirical studies, the relationship between marketing information systems and financial performance remains ambiguous. In this paper, we propose and test a model explaining how customer analysis can affect financial performance. The data for the study were collected from 590 insurance intermediaries in Poland. The results indicate that the strongest predictor of financial performance is the degree of formalized knowledge processing, followed by the scope of performed customer analysis. Other factors that positively correlated with financial outcomes include earning most revenues from corporate clients (versus consumers) and employing policies aimed at regaining former customers. The study also found that add-on selling is not significantly associated with better financial results.

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1. Introduction

Marketing performance measurement remains at the center of academics' and practitioners' attention (Clark, 2000; Gupta & Ziethaml, 2006; Lehmann, 2004). Despite a strong theoretical basis, many aspects of the relationship between marketing performance and general firm performance remain unclear, which could be partially attributed to inherent difficulties with quantifying marketing efforts. O'Sullivan and Abela (2007) demonstrate that the ability to measure marketing performance has a significant impact on general firm performance and the relative importance of the marketing function among other departments of a company. Homburg, Artz, and Wieseke (2012) find that the effect of comprehensive systems for measuring marketing performance on a company's performance is conditional on both internal and external influences. They summarize studies on general (not only marketing) performance systems to reveal mixed and inconclusive results concerning links between such systems and a firm's performance.

This paper contributes to the research in marketing performance measurement. Its purpose is to identify the impact of customer analysis on firm performance. The study was conducted in 2012 among Polish insurance intermediaries. At that time, the Polish insurance market was ranked 15th in size in Europe, with a steady growth (5% in 2012)

but a falling number of intermediaries (in 2012, the number of insurance agents decreased from 35.430 to 34.278) (Polish Insurance Association, 2012).

2. Overview of the major concepts in the study

Customer analysis (CA) represents the extent to which companies collect customer data, measure customer profitability, estimate their lifetime value and intangible benefits they generate, and analyze other customer metrics. CA is fundamental in several popular marketing concepts, such as customer relationship management (Payne & Frow, 2005; Winer, 2001), customer equity management (Bruhn, Georgi, & Hadwich, 2008), interaction orientation (Ramani & Kumar, 2008), and customer value management (Doligalski, 2015; Tomczyk, 2014). Despite the popularity of this concept, few studies have investigated how conducting CA influences financial performance (FP). Akroush, Dahiyat, Gharaibeh, and Abu-Lail (2011) find that there is a weak but statistically significant association between collecting information about key customers by banks and insurance firms and their financial performance. According to another study, customer equity analysis (including analyzing customer profitability, customer economic potential, and customer behavioral patterns) is a crucial factor in how the utility of CRM systems is viewed by managers (Bruhn et al., 2008). In contrast, Ramani and Kumar (2008) note negligible or no effects of various aspects of CA on earnings. This ambiguity of conclusions suggests that the question of how CA affects FP is not sufficiently researched. The current study conceptualizes CA as a second-order reflective

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construct with five first-order latent variables derived from the theory of marketing management and consumer behavior. Below are short characteristics of each of those variables.

As mentioned, metrics of customer profitability and customer lifetime value play a crucial role in CA. Gupta and Lehmann (2003) define customer lifetime value as the present value of all future profits generated from a customer. Customer profitability is the difference between the revenues earned from, and the costs associated with, a customer relationship during a specified period (Pfeifer, Haskins, & Conroy, 2005). Customer costs (COS) and revenues and earnings (REV) are therefore essential components of CA.

Apart from revenues, customers provide a company with Intangible Benefits (INT), such as recommendations, insights, value co-creation, image-associated benefits, or positive product reviews (Bauer & Hammerschmidt, 2005). Although expressing these benefits in monetary terms is rather difficult, they may be of great importance to a company's earnings.

Knowledge of cash flows related to customers, and intangible benefits they contribute, enables customer segmentation, i.e., the division of customers into homogenous groups according to their characteristics (e.g., profitability). Customer segmentation (SEG) enables the development of unique strategies for different customer groups, which may contribute to better satisfaction of their needs thereby increasing their value to the company (Reinartz & Kumar, 2002; Storbacka, 1997).

Monetary and non-monetary benefits, which current customers bring to the company, are often not sufficient to determine the long-term value of a customer portfolio. Hence, companies need to look at prospective clients in terms of their acquisition probability (Thomas, 2001) and future benefits from retention (Rosset, Neumann, Eick, & Vatnik, 2003). These aspects of CA are operationalized as the last element of the measurement model labeled prospective customers (PRO).

Customer analysis is part of customer relationship management. Below, we present four additional factors that can influence firm performance and serve in the model as mediating or moderating variables. Three of them are activities contributing to CRM strategy, while the fourth is the predominant type of customer served.

CA is closely related with formalized knowledge processing (FKP), which is a construct representing systematic acquisition, interpretation, and utilization of knowledge about customers. It can be argued that FKP supplements CA, while CA captures, above all, the scope of an analysis, and FKP implies the quality of information due to the systemic manner of its generation. There are many studies indicating positive influence of customer knowledge on different aspects of firm performance (Fidel, Schlesinger, & Cervera, 2015; Salojärvi & Sainio, 2010), but these positive effects are often contingent on how well -organized knowledge acquisition and processing are (Kumar & Reinartz, 2006).

CA resulting in customer profiling enables add-on selling (AOS). These practices, including cross- and upselling, are often presented as an effective tool to increase customer equity (Blattberg, Getz, & Thomas, 2001). Also, educating customers may increase their propensity to use more sophisticated products, thus leading to higher performance. Despite their popularity, research on both add-on selling (Jarrar & Neely, 2002) and customer education (Eisingerich & Bell, 2006) shows mixed and inconclusive results. Successful add-on selling may however lead to increased customer retention (Kumar & Reinartz, 2006), which in turn exerts significant influence on firm performance (Best, 2013).

An integral part of CRM strategy is maintaining a register of former customers in order to take actions oriented at regaining them (Kumar, Venkatesan, Bohling, & Beckmann, 2008). Former customers may have high bargaining power and demand adjusting a value proposition or expect a more attractive price level than what the current provider offers. Hence, Thomas (2001) argues that reinitiation efforts require solid analytical justification. However, successful winning back customers may positively influence a company's performance. Such actions were introduced to the model as regaining former customers (ROC).

The type of customers served may also be consequential for FP. Corporate customers (CC) usually display more relational behavior and require more sophisticated insurance products than consumers. Managing and maintaining loyal business customers can offer greater revenue for a service provider (Rauyruen, Miller, & Barret, 2007), making companies more willing to develop knowledge to increase their lifetime value (e.g., through add-on selling or regaining former clients). Corporate customers, however, can leverage greater bargaining power, requiring more favorable terms and conditions, thus leading to lower profitability.

3. Conceptual model and hypotheses

A graphical model in Fig. 1 summarizes the discussion so far, illustrating the variables relevant to the study and their interrelationships.

The figure incorporates 6 variables, all of which, except Type of Customers, are latent variables, not measured directly but through indicators (see Table 1 for the Likert scales used). The main interest here lies in the relationship between customer analysis and financial performance, with other constructs serving as mediators (FKP, AOS, and RFC) and one moderating variable (type of customers). As such, the expected relationship leads from CA to FP through a direct path and three indirect routes mediated by other variables (to account for possible, but arguably weak, reciprocal relationships the arrows in the graph are two-headed). The strength of each of the paths is assumed to be moderated by the main type of customers served by a company (business or private). The regression and correlation paths correspond to the following research hypotheses, which were developed from the guidelines found in the literature, reported earlier in the paper:

H1. CA is positively correlated with FP.

H2. FKP is positively correlated with FP.

H3. CA is positively correlated with AOS, RFC, and FKP.

H4. AOS is positively correlated with FP.

H5. RFC is positively correlated with FP.

H6. FKP is positively correlated with AOS and RFC.

H7. The incidence of CA, FKP, RFC, and AOS is higher among insurance intermediaries with a majority of business customers.

H8. FP is higher among insurance intermediaries with a majority of business customers.

(See Table 2.)

4. Research method

Data for the study were collected from owners of small insurance firms that operated as intermediaries in the Polish market. The respondents employed no more than 9 persons and offered coverage to both institutional and individual customers, providing a whole range of popular policies, such as casualty, automobile, life, and property, underwritten by large companies. In total, 590 completed questionnaires were obtained through the CAWI method between October and November 2012. The sample was drawn from an extensive database that included insurance agents from across the whole of the country, affording an adequate representation of this part of the insurance industry in Poland.

The questionnaire was comprised of 18 Likert scale items for identifying various aspects of customer analysis practices. The particular statements were adopted from previous studies on similar topics to account for all crucial aspects of CA that are relevant to insurance intermediaries. The other 9 Likert-type items were designed to represent essential indicators of the RFC, FKP, and AOS constructs.