Being customer-centric through CRM metrics in the B2B market: the case of maritime shipping

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Abstract

Purpose

The aim of this paper is to present a comparison between the traditional methods for the calculation of customer relationship performance and the modern metrics suggested by the current literature in business-to-business markets using the Greek maritime shipping industry as an example.

Design/methodology/approach

The primary research was conducted in two phases; (a) quantitative analysis of actual measurements and (b) qualitative evaluation of the results. More specifically, in the first phase the measures used were a collection of traditional and modern CRM metrics applied to actual historical data along with statistical data for actual customers of a company supplying services for maritime transportation of containers in the Greek international trade market. For the qualitative evaluation of these results a semi-structure interview was carried out with seven 'specialists/experts' in this business sector, who provided an assessment of the relative worth of each set of CRM measures.

Findings

The use of modern customer-centred metrics (Share and Size of Wallet, RFM Value), in the shipping sector of Greek industrial activity is the most profitable and efficient means of decision making. The qualitative research showed that the customer-centred metrics were judged to be more effective and useful, as they provided a multi-dimensional and multi-layered picture of the current and future situation for the company and its customer base.

Research limitations/implications

In order to ensure confidentiality of personal information, the research did not use, examine or evaluate the individualized data in order to preserve the anonymity of the survey sponsor and their specific customers.

Originality/value

This is the first study that examines the effectiveness of different types of CRM metrics in the B2B market, which has, until now, suffered a dearth of empirical studies in the field, especially in the context of national economies that face intense international trading problems and significant reductions in activity in their maritime shipping industry due to the economic recession.

Type of Paper: Research Paper

Introduction

In global trade the maritime transportation industry of intercontinental commercial trade makes a significant contribution to the international economy as well as achieving various national goals despite globalization dramatically affecting its complexity nowadays (Marlow and Nair, 2008). However, the Global Financial Crisis (GFC) in 2008-2009 negatively affected international trade and B2B markets (Kanibir et al., 2011, Tsangarides, 2012) in general as well as the growth in international transportation, especially marine transportation, which had developed significantly during the previous five-year period. By the end of 2009, due to both the GFC and uncontrolled government spending, the Greek economy faced its most severe crisis since the reinstitution of democracy in 1974 (Kastanioti et al., 2013). As a result, the shipping companies now need to focus on customer relationship management procedures based either on traditional or modern methods for calculating the performance of enduring customer relationships. Customer relationship management (CRM), as both a definition and a concept and also as a business necessity, started to emerge in the mid-nineties(Wubben, 2008) due to the need to build long term, profitable relationships (Chang et al., 2014, Alem Mohammad et al., 2013, Jones et al., 2013, Sin et al., 2005, Mukerjee, 2013, Gummesson, 2004, Lambert, 2009). As King and Burgess (2008) stated in their research, today's CRM systems should display the appropriate knowledge on the appropriate timing. These systems rely on extensive data gathering and information distribution, which is why it is important to identify a clear data collection and analysis strategy before a CRM Project is implemented (Alshawi et al., 2011). The measurement and control of the CRM performance against relevant metrics constitute important elements of the total customer service strategy as they tend to clarify the vagueness of the interactive strategic objective goals; they communicate the wants of customer enterprises and the ways to achieve them, promote continual re-assessment, enable improvement and alignment of the joint strategic goals between firms and increase the possibility of and the rate of positive organizational developments as well as general business development (Smith, 2006). In B2B markets in particular customer retention is the most important factor since in this type of activity large amounts of money are spent and high returns are available (Rigby and Ledingham, 2004, Rauyruen and Miller, 2007).

According to Jang and Kim (2012) there is very little recently published research related to CRM and maritime logistical transportation, with only two studies from the same author, both of which describe the situation before the economic crisis (Lu, 2003, Lu and Shang, 2007). This research was initiated to help in filling this gap and begin a new platform for discussion. Its aim is to present and evaluate the traditional methods for calculation of customer relationship performance in comparison with the emerging modern metrics suggested by more recent CRM literature. The research specifies and evaluates the CRM metrics that determine the formation and development of successful customer relationship management and also the adoption of rational and customer-centered decisions by companies are engaged in the transportation services supply sector, especially those involving sea transportation of cargo. They reveal how the following good policy for customer service increases their retention and loyalty develops added value and contributes to better and high levels of service supply.

Literature Review

The success or failure of a business is largely based on its ability to realize its customers' individualized needs and to provide them with the products and services which will give them the highest possible value (Priporas et al., 2012, Vassiliadis et al., 2013, Priporas et al., 2008). Today the strategies followed by businesses are firmly customer-centered, with the marketing environment constantly adapting and changing to focus less on mass markets and more on individualized (one-to-one marketing) customers, thereby requiring personal and unique relationships with current and potential customers and being incorporated in sales strategy for a wide range of products and services for each of those customers (Yong Ahn et al., 2003).

Dyche (2002) defines CRM systems as the infrastructure which enables the company to outline the customer's characteristics, increase the offered value and give incentives to important customers, all of which contribute to the objective of keeping them as devoted and loyal business partners. Kotorov (2003) characterizes CRM as the third most important 'revolution' in nature of business organization following the adoption of the marketing concept in the seventies (Kotler, 1997) According to Kumar and Reinartz (2006), the main reason pushing companies to develop CRM programs is the change in strategic policies for the acquisition of competitive advantage. Some have defined CRM as a process, but others see it as a strategy, philosophy, skill or even a technological tool (Zablah et al., 2004). However it is labelled, CRM now constitutes a relationship management procedure of high strategic value that combines the best business practices, available resources and business knowledge with CRM software of the company, thereby improving the response to its customers' individualized needs and growing their devotion and loyalty (Smith, 2006, Sigala, 2011).

In the international literature there are a variety of methods for the measurement of CRM, which are categorized according to the perception of the CRM concept and its related calculation process (Oztaysi et al., 2011, Richards and Jones, 2008, Mendoza et al., 2007, Lindgreen et al., 2006, Kumar and Reinartz, 2006). The success of a CRM system can be confirmed, checked and monitored through the use of CRM metrics (Petersen et al., 2009). The most common metric, even today, is that of traditional 'market share'. It is usually used as an indicator of how well a firm is doing against its direct competitors and is very important for positioning in B2B markets because selecting a suitable supplier is often made based in perceived market strength (i.e market share) or even on the trend in increasing market share (Campbell et al., 2010). Declining market share may substantially affect even loyal customers because slow or negative growth can indicate underlying performance problems (Williams et al., 2011).

Sales and profit growth is also a very important metric because it can show how well a company is going now and allows some forecasting for its future performance. In most western nations sales growth and market share are commonly reported and publicized marketing performance indicators (Merrilees et al., 2011) which is why they are so well accepted as B2B decision-making metrics. Other researchers have examined CRM measures within the broader topic of marketing metrics (Gupta et al., 2004, Rust et al., 2004, Petersen et al., 2009, Kumar, 2008, Venkatesan et al., 2007, Anderson et al., 2009, Kumar et al., 2008, Ling-yee, 2011, Sampaio et al., 2011, Zahay and Griffin, 2010). Kumar and Reinartz (2006) separate metrics on a historical basis that includes (1) traditional (market share and sales growth), (2) basic customer centered, (3) popular customer centered and (4) strategic customer center metrics. Some of the more well-known consumer-centered metrics are Size of Wallet (Malthouse and Blattberg, 2005, Du et al., 2007), Share of Wallet (Keiningham et al., 2005, Du et al., 2007) and Recency, Frequency, Monetary Value (RFM) (Kumar, 2006, Kumar and Reinartz, 2006, Fader et al., 2005).

Size of Wallet indicates the availability of customer of money resources on a specific product category. It can be measured at the individual customer level or at an aggregate level applied to the market as a whole. Share of Wallet is a metric that calculates how important is a customer based on past transactions.

RFM is a well-known customer-centric metric (Khobzi et al., 2014) based on (1) Recency (R), which describes how recently the customer made a purchase; (2) frequency (F), which describes how frequently the customer buys; and (3) monetary value (M), which designates the revenue generated from the individual customer. Based on RFM the most recent, most frequent, and largest revenue earners are the best customers (Lumsden et al., 2008, Hu and Yeh, 2014, Khajvand et al., 2011).

The basic difference between the traditional and the customer-centred metrics lies in the actual source of the available data. Customer-centred metrics emerged and started being considered feasible and essential when more and more data at the customer level became available. In contrast to market-wide share measures this new approach provided a way that businesses could manage to calculate their performance in relation to the value that each individual buyer added to the sum of their customer base (Kumar and Reinartz, 2006). Even though the traditional metrics showed performance of marketing activities did provide sufficient general information, the customer-centered metrics use a lot of information about the customers themselves and enabled businesses to manage their customer base, targeting it in the most profitable ways in order to achieve long-term strong relationships that can result in long-term commercial survival and year-on-year growth (Iriana and Buttle, 2007).

Research methodology

Using an extensive series of available past statistical data provided by a specific company in the Greek maritime transport industry, the study initially used calculations involving the application of traditional metrics which were followed by examples of modern customer-centred metrics for a detailed comparison. The traditional metrics were the market share, the sales growth (income) and the profit, while the modern CRM ones were size of wallet, share of wallet and RFM measures. Moreover, we wanted to verify the results we got, so we developed two phases: (a) quantitative analysis and (b) qualitative expert opinion evaluation of the results. More specifically, in the quantitative analysis phase the metrics used were both the traditional market performance measures and modern CRM metrics on real historical data and information about actual customers of a real company supplying services for sea transportation of containers from Greece.

To complement our understanding of CRM metrics in a B2B context we conducted seven interviews with managers in an additional seven maritime industry companies. As the study was exploratory, the aim was to obtain a range of views on CRM metrics related to B2B from a wide variety of companies. All respondents chosen had a good knowledge of CRM activities within their company, substantial experience in a B2B environment and held senior positions with their respective organizations. The interviews were conducted face-to-face and lasted between 30 and 60 minutes. Each interview was recorded and subsequently transcribed. The interviewees were first provided with a short description of the eight (8) metrics, then they were asked to rate from 1 (strongly disagree) to 5 (strongly agree) the extent that each proposition is crucial in adopting managerial decisions. The metrics included were the RFM metrics, profit level, customer lifetime, market share, size of wallet, sales-revenue, share of wallet and customer lifetime value.

Specifically, in order to achieve a satisfactory level of diversity in the sample these experts included two Commercial Directors, one Branch Manager, two Sales Managers, a Forward Freight Agreement Manager FFA and a Sales Officer. At the time of interview they all had long-term experience in the field and are working for a number of dominant Greek shipping companies. Despite belonging to different professional ranks, they had strong future expectations and a faith in a future with more efficient customer relationships management and usage of the appropriate metrics for calculation of these relationships which aim at the suggestion and adoption of essential managerial decisions on their part.

It should be clarified that the data used for quantitative research are real and about real customers. Were engaged in import and export to and from the port of Thessaloniki, by a real shipping company that is a significant operator in Greece. For obvious reasons, mostly to the privacy of personal and professional data, neither the company nor the customers are named here, and the statistical data is historical rather than current. In particular, they cover the period of time between January 2006 and December 2008 (three years). The company in question has more than 4,000 customers in Greece, of which a sample of 400 customers from Northern Greece was studied. They were selected as they are at the center of the company's interest and display the following important characteristics; they were either: (a) importing and exporting companies (direct customers),(b) traders, who are involved in cargo transportation, and (c) FFW, who buy and resell to direct customers as intermediates. These key customers are the 'decision makers' in the selling process, as they are the ones who choose the shipping company that will transport their products. As those companies pay the cost for the transportation (paying party), they also decide which shipping company will serve them and transport their products (booking party). Apart from the fare, it is essential to arrange the shipment expenses in the case of export or the unloading expenses for the import of containers at Greek ports.

These include the brokers rights, which is the commission (or profit) earned by the shipping company for the supply of its services.

Results

Quantitative analysis

With the help of the available past data and statistical information from January $1^{st,}$ 2006 to December 31^{st} 2008 from this company (here after identified as Company X), which supplies services of sea transportation for containers, calculations were conducted using the traditional metrics of ‘market share’, ‘income’ and ‘profit’, and the modern CRM metrics of ‘size of wallet’, ‘share of wallet’ and ‘RFM’.

Insert Table 1 Here

As regards the traditional metrics and starting with the market share of Company X in 2006, 2007 and 2008 (Table 1), company X has a total market share of 31.71% in 2006 (32.02% in imports and 31.20% in exports), 30.65% in 2007 (imports 30.97%, exports 30.01%) and in 2008 it rises to 38.45% (imports 38.20% and exports 38.87%). Historically, between 2006 and 2007, company X lost 1.06% points of market share in a market which expanded 21.16% in total. In contrast, in 2008 company X retrieved those losses and raised its share further, reaching a high of 38.45% in an obviously low volume market, where total transfers of containers decreased more than 40% in comparison to the previous year.

Insert Table 2 Here

The second traditional metric employed was the growth of sales (or sales-income), the results for which are shown in Table 2. The total transfer of the company regarding cargo volume in terms of loaded containers is 82.143 TEUs for 2006, 96.206 TEUs for 2007 and 71.544 TEUs for 2008. Based on the internal factors, data and assessment by the company X itself, it is estimated that on average one import TEU brings €500 income to the company, while one export TEU generates €400. Therefore, the total sales/income of company X in monetary units for 2006, 2007, 2008 are €38.061.200, €45.037.100 and €33.060.500 respectively. Consequently, in 2007 there is an increase in profit of

17.12% in comparison to 2006, although in 2008 profit decreased by 25.63%, reaching a level lower than the one achieved in 2006 by more than €5.000.000 (Table 3).

This decline is quite distressing and would be one to raise an alarm amongst company executives. Metric of sales growth, despite its simplicity, is often used in the sector to confirm the level of improvement or decline of company performance from year to year and even from month to month. It reveals the present state and performance of the company and enables comparison to be made with the performance of other companies in the same sector. A problem with this metric is that it does not provide any information about which customers are contributing to the change and which are not, which is essential for a customer-centered approach to assessing performance.

It is worth providing some elaboration in order to clarify the calculation of the profit for company X. Firstly, the profits of the company arise when the customers pay at the cashier's office for the service they receive. This means that the company is interested in the customers who check and decide about the transfer of their cargo are the ones who pay the fare, broking rights and the road transfer charges from and to their facilities. Consequently, at this point only the FOB imports and the C&F exports are used, as both these two terms refer to local transport and storage whereas the maritime transportation is paid by the importer and the exporter respectively, as are the loading and unloading expenses for the port of Thessaloniki. According to internal research and statistical data from the company itself, it is estimated that 1/5 of import TEUs and 1/5 of export TEUs are undertaken by the company itself for the road transfer, while the remaining 4/5 are road transported to and from the facilities of the shippers with the use of their own (or a 'third party') transporter.

Insert Table 3 Here

On average the company X gains €15/TEU from the payment of fees at its office for both imports and exports, while the rest of the sum is attributed to the corporate headquarters abroad. Actually, this is its commission in the case where the company itself 'books' cargo on ferries. Moreover, when it undertakes the road transportation within the country, it gains €10/TEU. Finally, it gains, on average, €50/TEU from the import brokers and as well as (€25/TEU) from the actual loading expenses.

According to the available information, company X gained €1.949.732 in 2006, €2.411.365 in 2007 and €1.794.990 in 2008. The year 2007 was undoubtedly a very good year as the profits increased, up to 23,67% in comparison to 2006; however in 2008 there was a considerable reduction (-25,56%). For both revenue and profit, 2008 is obviously the 'worst' of the three years for the company, even though it managed to increase its market share against its rivals. The profit index is quite important and relatively easy to use, as long as many internal figures are reliable and timely information and data are available. It reveals the current performance of the company, but it does not indicate which customers or which segments of customers are more profitable.

To examine customer-centred metrics, the top 400 customers in the volume ranking of the customer base of company X were taken into account with respect to the volume of the transferred cargo associated with fees paid in Greece. The sample of those 400 customers includes 194 importers, 149 exporters and 57 customers who both import and export. Concerning the 'size of wallet' of the group of customers in question in 2006, 2007 and 2008, it is noted that 2006 the 400 customers were expected to transfer 70.112 TEUs in total, spending about €70.112.000, if we take into account that on average about €1000/TEU are spent either for FOB import or C&F export (Table 4). Similarly, in 2007 the size of wallet for these customers increased to €86.730.000 (86.730 per TEUs transferred) and in 2008 decreased to €64.456.000 (64.456 TEUs transfer).

Insert Table 4 Here

The above figures have been derived from a summative process as the available information concerns each customer individually. Depending on the size of wallet, company X can identify the customer's purchasing capacity, as well as his/her needs; the larger the size of wallet of a customer then the greater the potential for higher sales, revenues and profit. As a consequence, the company can easily classify these 400 customers according to the size of their individual wallets and focus on the ones who are higher in the ranking with respect to sensitivity to marketing, service, managerial decisions and relationship management.

In combination with the size of wallet, we can calculate the share of wallet for each customer individually or for the whole group of 400 customers of company X. This is the amount of money spent for the specific services of the company in relation to the total wallet size of each customer or group of customers. The following table (Table 5) provides the relevant results of these calculations for company X:

Insert Table 5 Here

According to Table 5, the top 400 customers in question tend to spend, or as one might better say - trust, some 34,70% of their total wallet and hence their purchasing capacity and needs, to the services provided by Company X in 2006, 37,71% in 2007 and 38,37% in 2008. Historically, it is obvious that company X gains ground and share from the 'wallets' of its 400 customers which is even more significant in the case of exports. Through the share of wallet index, it is feasible to calculate the level of loyalty and trust held by customers for the company. However, it is not possible to predict the future sales for the specific customers using this measure.

At this point one needs to note that the survey data regarding both the size and the share of wallet for each customer were used individually in the development of sales budget for company X for those three years, as the performance of the sales department (per seller, per month, per customer) and for the top 400, included cargo volume, customers (active, potential, lost) in the combined activities of company X were estimated from the year before. The third customer-centered metric, which concerned RFM measures, was used in the development of profitable strategies for approaching various groups of customers, all of whom share common or similar characteristics regarding the frequency of purchase, the quantity of service consumption and the level of expenditure. The RFM metrics include the key customer related variables of **regency** of the last order, the order **frequency** and **monetary values** of revenue or profit earned and were applied to the group of top 400 customers of company X in 2006, 2007, and 2008. Using the default method of five score categories for each of the three RFM components results in 125 possible RFM score categories. Results indicate that the same customers remain the most profitable for company X.

Qualitative assessment of the results

The interviewees were seven (7): four (4) were males and three (3) females. Only one (1) of them was between 19 and 29 years of age, three (3) between 30 and 39, one (1) between 40 and 49, and two (2) older than 50. As concerns their professional experience, they all had more than five years, as two (2) of them had been working in the sector for 6 to 10 years, three (3) for 11 to 20 years and the other two (2) for more than 21 years. The customer-centred metrics had the highest ratings. In the ranking they were the top five, while the other metrics were the last three. More specifically, during the interviews and throughout their in depth answers the respondents confirmed that the customer is the centre of their activities, and thus the information from, to and about him/her is vital for rendering the management of customer relationships more effective and profitable. Since the relevant information is available for each customer individually, the customer-centred metrics are expected to be more effective and complete, as they provide a multi-dimensional image not only of the current, but also of the future condition of the company and its customer base.

It was found that all the respondents consider the calculation and assessment to be key tools in rational and effective management of CRM and that all the metrics provide information, which, can be exploited in many ways and be useful for any company in the adoption of policies/ strategies , guidance for future activities and predictions of future situations. The RFM metrics and the share of wallet are the two measures which were ranked highest by the experts, while the growth of sales-revenue and profit were ranked lowest. It is definitely accepted that the aim and the basic goals for each company are profitability, growth of revenues and the reduction of expenses. However, all the expert respondents believe that in order to achieve growth of profit, the customer should first be satisfied through a strong, stable and long-term relationship, which will finally lead to his/her strong loyalty and even devotion.

Another important conclusion from the assessment of the possible uses of this groups of metrics by the experts for the adoption of managerial decisions is that the combined use of traditional and customer-centred metrics is considered as the most useful and reliable and is therefore generally preferred (94%). The use of customer-centred metrics alone is preferred by 80%. Business related measurements about the customer provide important and individualised information especially when combined with general information about the market and the business sector resulting in better and more reliable conclusions and lead to more appropriate business decisions.

Finally, the qualitative nature of the open-ended questions produced some very interesting thoughts and opinions from this expert panel, which are quoted directly here:

> *The Commercial Manager wrote: "The customer is at the centre and the company must keep him/her satisfied, aiming at his/her devotion and consequently the growth of sales and profitability. Therefore, the metrics about the customer are essential and crucial in adopting managerial decisions" and "Other important metrics are the percentage of acquiring new customers, and recovering 'lost' ones. In general, several metrics relevant to sales performance (e.g. number of visits, success percent, number of propositions etc.) should be used."*

The Branch Manager believes that: "The combination of traditional metrics with customer-centred ones gives the best possible results. Everything has a part to play. However, the customer is now at the centre and 'special occupation' with him/her is essential."

As we can see most managers consider metrics to be an important tool for their company since it can help them to know more about their customers; a critical factor for a B2B company operating in the maritime industry. These findings also support the conclusions described in the current literature that show that metrics can be a good measure of customer loyalty and sales volume (Kumar, 2008, Kumar and Reinartz, 2006, Priporas et al., 2012).

The Sales Managers wrote: "There is intense competition in the sector. What matters, is a bonded sales group with experienced sales officers who have built strong relationships with their customers. The retention of the customer in the company, when everything is about cost today, is the cornerstone of survival and, why not, of further development" and "All the metrics are important. The Administration should choose the ones that are more 'fit' for the company and its object, philosophy, culture, policy and strategic objectives in particular.

Loyalty is understood as key 'secret for success' by these sales managers; it is what CRM is all about -- the long-term relationship (Alem Mohammad et al., 2013, Jones et al., 2013, Mukerjee, 2013). It is also true if we are referring to a either a B2B relationship or C2B relationship; loyalty remains a key issue. However, it is interesting to note that all the respondents find traditional and modern metrics to be almost equally important for the future success of their company.

The FFA expresses his own view: "The transportation companies, as they are 'in the middle', need to give the added value to the customer, so that the customer will choose them. The customer-centred metrics in general, and not only the aforementioned ones, are the most appropriate for the continuous improvement of the customer relationships management. Of course, the combination with traditional ones is needed."

The interviews demonstrated that each individual organization placed a different level of emphasis on their respective CRM metrics. These different emphases appear to result in the development of different CRM strategies as well as variations in the amount of attention that is directed to the different aspects of CRM design. Clearly then, the metrics which are actually chosen affect the quality of decision making (Chang et al., 2014) as the following respondent confirmed:

> *Finally, the Sales Officer wrote: "The thorough analysis of all the aforementioned metrics can lead to the appropriate conclusions and stimuli, so that the decisions are almost ideal".*

Consequently, it is confirmed here that the use of new, modern CRM calculations and metrics is not only more effective in the adoption of managerial decisions, but it is also useful and sensible to use them simultaneously with some of the traditional metrics for the calculation of marketing activities which can become more effective and result in even more rational assessments of the systems for customer relationships management.

Conclusions

The results of the research show that, based on a study of actual examples with past data and real customer information from organizations that operate in the sector of shipping and transportation in Northern Greece, the most profitable and efficient decision making makes use of modern customer-centred metrics. The results verify the findings of the literature review, in particular the finding that metrics are an important asset for effective CRM development (Petersen et al., 2009, Kumar and Reinartz, 2006, Kumar et al., 2008, Kumar, 2008). The quantitative analysis, which was conducted first, lead to calculations and conclusions that revealed various important insights that suggest each index can provide, directly or indirectly, critical performance measures to interested parties and the management of each company with the industry. The qualitative research involving semi-structured interviews with sector experts, aimed at the confirmation of the previous acknowledgements and evidence to support the proposition that customer-centred metrics are more effective and useful since they provide a multi-dimensional and multi-layered image of the current and future situation of the company and its customer base. Additionally, the in-depth interviews revealed that the combined use of traditional metrics with customer-centred ones can eventually provide the best results for the company.

A number of conclusions arise about the various categories of metrics used for measuring CRM performance and their relationship with a company's performance and growth, their impact on developing value for customers and on increase of their satisfaction and loyalty with the further goal of increasing profitability. First, it is confirmed that the traditional metrics which involve calculating measures of marketing activities ('market share', 'sales growth', financial metrics) provide the company with information is interesting and useful but limited in terms of range and depth. On the other hand, the customer-centered metrics, such as ‘Size of wallet’, ‘Share of wallet’ and ‘RFM’, can contribute more effectively and multi-dimensionally to allow more profitable management of customer relationships and more rational managerial decisions.

Several researchers consider those metrics as good indicators of CRM productivity in most companies (Malthouse and Blattberg, 2005, Du et al., 2007, Fader et al., 2005, Keiningham et al., 2005). The combination of different groups of metrics, traditional and customer centered ones, is considered ideal, because it can provide better results and assist in multiple layers within a company. The customer-centered metrics require individualized customer data and are more specialized while the traditional ones require only general financial market figures and provide a more general view of the current condition of the sector as well as the place and performance of the company within the sector, but cannot estimate and predict future situations, react to chance events and reduce all business risks. It also seems that there is a positive correlation between the use of metrics in calculating CRM scores and enterprise performance, while the improvements from use of these metrics is closely associated with the survival and the development of the company regarding supply service, customer loyalty and bottom-line profitability. Those finding are in agreement with literature review which showed that CRM metrics can establish a long term, healthy relationship between different types of companies (Zamil, 2011, Campbell et al., 2010, Dyche, 2002, Jones et al., 2013, Rauyruen and Miller, 2007, Richards and Jones, 2008, Kotorov, 2003, Vassiliadis et al., 2013)

Research limitations

The research was mostly based on an extended literature review with the analysis of industry information being quite limited. This could have been deeper and more thorough, especially if the limitations encountered could have been minimized or eliminated.

The quantitative analysis and the qualitative assessment was conducted within the B2B sector of shipping transportation via containers. Other B2B industries may show different results particular if business concentration and market power are different. Moreover, in order to ensure confidentiality and anonymity of private information, the research study did not use, examine or evaluate the personal, individualized data even though this was made available to the researchers.

Suggestions for management

The present research shows that, in the modern environment of intense competition and continuous reductions in cost, enterprises need first and above all, to 'understand' their customers and organize their activities around them. This should be done in connection and alignment with the market by the use of comprehensive CRM systems.

Compartmentalization is still vital for marketing programming and design, but since the enterprises now have plenty of information about each customer, they need to consider proceeding with the development and employment of specialized modelling systems that can be used for the interpretation and applications to individualized customer interactions. This will enable the companies to improve their activities with groups of customers through the use of data derived from the CRM systems which, when collected and processed appropriately, can determine the most appropriate and profitable customers for specific products or services.

As a consequence, the future qualifications for the persons employed in the field of marketing will tend to be different because the ability to analyze will become more essential and important. As businesses shift their interest from the determination and the activation of marketing programs aimed at specific and separated groups of customers towards the development of individualized relationships with each customer, it is expected that of the knowledge of the more profitable activities will be a differentiating factor for employment. Within this scope, tighter relations need to be developed with agencies and companies conduct market research as well as with IT professionals in order to exploit the possibilities that a comprehensive knowledge of the customer can provide. The role of sales will change as well because the focus of the sales officers shifts from the simple purchase of a product or service to the comprehension and direct response to the individualized needs of the customers. What has been only an aspiration for many years, is now becoming a concrete reality (Bailey et al., 2009).

As concerns the various metrics measuring CRM performance, the experts need to examine thoroughly and deeply the various categories and uses and choose the ones that are more appropriate for each market, each company, each strategy, as well as each organizational philosophy, culture and set of objectives. The customer-centered metrics constitute an essential ingredient for the successful calculation and assessment of the performance of CRM systems. However this does not necessarily mean that the use of traditional metrics is excluded. On the contrary, the combined use is considered to bring about better results and be more efficient in adoption of business customer policies and strategies.

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Table 1: Application of ‘Market share’ index for Company X

Unloading laden mass of TPA area[1] (in TEUs[2])			**Unloading of company’s *X* laden mass (in TEUs)**			**Company’s *X* Market Share (unloading laden mass)**		
2006	**2007**	**2008**	**2006**	**2007**	**2008**	**2006**	**2007**	**2008**
162533	211671	116298	52040	65547	44429	32.02%	30.97%	38.20%

Loading laden mass of TPA area[1] (in TEUs[2])			**Loading of company’s *X* laden mass (in TEUs)**			**Company’s *X* Market Share (loading laden mass)**		
2006	**2007**	**2008**	**2006**	**2007**	**2008**	**2006**	**2007**	**2008**
96482	102159	69766	30103	30659	27115	31.20%	30.01%	38.87%

Total transport of TPA area (in TEUs)			**Total transport of company’s *X* laden mass (in TEUs)**			**Company’s *X* Market Share (total laden mass)**		
2006	**2007**	**2008**	**2006**	**2007**	**2008**	**2006**	**2007**	**2008**
259015	313830	186064	82143	96206	71544	31.71%	30.65%	38.45%

Note: where, [1] *TPA* = Thessaloniki Port Authority (in Greek: ΟΛΘ) and [2] *TEU* = Twenty foot Equivalent Unit

Table 2: Application of index ‘Sales-Income’ in company X

		Unloading of company’s *X* laden mass			Over Year Sales/Income trends	
Import		**2006**	**2007**	**2008**	**2007 vs 2006**	**2008 vs 2007**
	TEUs	52040	65547	44429	13507	-21118
€500/ TEU	EUR (€)	26020000	32773500	22214500	6753500	-10559000
					25.95%	-32.22%

		Loading of company’s *X* laden mass			Difference	
Export		**2006**	**2007**	**2008**	**2007 vs 2006**	**2008 vs 2007**
	TEUs	30103	30659	27115	556	-3544
€400/ TEU	EUR (€)	12041200	12263600	10846000	222400	-1417600
					1.85%	-11.56%

		Total trafficking of company’s *X* laden mass			Difference	
Total		**2006**	**2007**	**2008**	**2007 vs 2006**	**2008 vs 2007**
	TEUs	82143	96206	71544	14063	-24662

EUR (€)	38061200	45037100	33060500	6975900	-11976600
				17.12%	-25.63%

Table 3: Metric "profit" for company X

FOB Import Company X				
		2006	**2007**	**2008**
	TEUs	19238	24223	15486
Profit on the fare	€15/TEU	288570	363345	232290
Profit on landing agents	€50/TEU	961900	1211150	774300
Profit on the road 1/5 TEUs	€10/TEU	38476	48446	30972
Total Profits		1288946	1622941	1037562
Export C&F Company X				
		2006	**2007**	**2008**
	TEUs	15733	18772	18034
Profit on the fare	€15/TEU	235995	281580	270510
Profit on landing agents	€25/TEU	393325	469300	450850
Profit on the road	€10/TEU	31466	37544	36068
Total Profits		660786	788424	757428
Company X				
		2006	**2007**	**2008**
Import Total Profits	EUR (€)	1288946	1622941	1037562
Export Total Profits	EUR (€)	660786	788424	757428
Total Profits	EUR (€)	**1949732**	**2411365**	**1794990**

Table 4: Metric 'Size of Wallet'(Top 400 customer for Company X).

	Size of Wallet (TEUs)			**Size of wallet (€) [€1000/TEU]**		
	2006	**2007**	**2008**	**2006**	**2007**	**2008**
Import FOB	46610	58687	37517	46610000	58687000	37517000
Export C&F	23502	28043	26939	23502000	28043000	26939000
Total	70112	86730	64456	70112000	86730000	64456000

Table 5: Metric “Share of Wallet” (Sample - top 400 customer for Company X).

	Unloading (TEUs)			**Importers Share of Wallet (%)**		
	2006	**2007**	**2008**	**2006**	**2007**	**2008**
Import Total FOB	19238	24223	15486			
Import FOB	14072	20156	11717			
Import FOB (€) [€1000/TEU]	14072000	15200000	9717000	30,19%	34,34%	31,23%
	Loading (TEUs)			**Exporters Share of Wallet (%)**		
	2006	**2007**	**2008**	**2006**	**2007**	**2008**
Export Total C&F	15733	18772	18034			
Export C&F	10262	12549	13018			
Export C&F (€) [€1000/TEU]	10262000	12549000	13018000	43,66%	44,75%	48,32%
	Total Transport (TEUs)			**Total Share of Wallet (%)**		
	2006	**2007**	**2008**	**2006**	**2007**	**2008**
Total FOB & C&F	24334	32705	24735			
Total FOB & C&F (€) [€1000/TEU]	24334000	32705000	24735000	34,70%	37,71%	38,37%