

CHAPTER 9

Impact of Marketing and Financial Interface on Results Achieved by Company Shown in Dashboard

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Summary. The presented case study answer the previously asked research questions, and further in-depth case studies for selected companies allowed for a comprehensive and in-depth analysis of the complex phenomenon of the marketing and financial interface. In the light of the results presented in the dashboard, we can recall the term J.J. Lenskold (Lenskold, 2002) that marketing should be treated as one of the elements determining the financial success of the business. The integration of reports, as well as data and analysts allows us to conclude that there is a phenomenon of integrated strategic thinking, because there is a continuous game between finances and marketing and other operational and functional units that break down internal barriers and cooperate to achieve strategic goals of the company. In the dashboard, we can say that there are also processes of monitoring and control analysis. This allows effective implementation of the strategy. In this case, the key is the link between operational controlling and strategic controlling. This operational controlling provides information on the actions and effects carried out. It is important that this information is related to long-term tasks and objectives, and this is the task of strategic controlling. This is the only way to identify deviations from strategic goals in time. This can be an impulse for both analysing the effectiveness of implementation activities and for assessing the strategy itself. The controlling tools, namely KPI, KIR, KRI, and KIA, are the only way to integrate supervision over the implementation of the strategy into the current management of the enterprise, without which it is impossible to ensure the continuity of the implementation processes (Kaleta, 2013).

The impact on the functioning of society and the economy is visible when the results of scientific research are used in practice. This means that the research results used in practice: bring measurable benefits, including reduction of losses, are repeatedly used by different entities or used repeatedly by one entity at a given time. In addition this impact is assessed simultaneously in two dimensions: reach and significance.

When showing the impact, one should also show the cause and effect relationship between the research conducted by the evaluated entity and the declared impact. The basis was the need for business to use such tools, while science also presented the possibilities of such integrated analyses included in dashboards. In addition, there was an increase in the effectiveness of data analysis in the three companies surveyed (and their clients). Research carried out in two enterprises was continuous, and in one company it was an analysis of implemented solutions (compare more in the study by Golik-Górecka, 2018).

This brought for this analysed Polish company as well as many others an increase in revenues and new customers in the local and regional area. The research results were used to increase the efficiency of enterprises and, as a result, brought the implementation of new solutions (products). New IT solutions were used for new acquired customers, which in effect directly affects the increase in revenues of enterprises (indicates a minimum of 12–32% in 4 years, 2017–2020).

Keywords: marketing analytics, big data diagnostic scope, dashboards – managerial and analytical dashboards, marketing-financial-IT interface

1. Introduction

The latest solutions that cover a wide range of marketing analytics are dashboards that allow you to plan to monitor, analyse and control managerial and analytical decisions. The article will identify a marketing analytics using a wide scope of Big Data. The aim of the article is to present practical analyses that includes a dashboard trial experiment with analytical interfaces for an ABC industrial company. This experiment study will identify the company's strategic choices as well as analyses supporting marketing decisions. In addition, the article will present the basic concepts of interface, marketing analytics and manager dashboards. The marriage of science and business is also visible in the marketing-finance analyses included in the dashboards of practical cases of a running company. In addition, thanks to the aforementioned analysis, the goal is to show that the interface and relationship between marketing and finance can be seen in the modern concept of analytical marketing and the paradigm of analytical marketing. This cooperation provides an opportunity for business development – streamlining decision making analytics. These solutions should be recommended further towards effective knowledge sharing between business and science. Recommendations are especially important for modern large companies and SMEs. The chapter is theoretical and empirical in nature. The author uses experiment as a main research method. The dashboard tool – as an experiment carried out – is an element of cooperation with science and business. Dashboard designs have been implemented by among others Internet company and also presented in the BA thesis of the company owner. It is a dashboard as an implementation model. Case and experiment analysis shows that integrated reporting and analyzing improves the concentration of enterprise performance measurement.

2. Literature review

The problems of the marketing and financial interface are often discussed theoretically in English-language literature with the subject of analytical marketing. The chapter is part of a work that includes author's research, discovers a marketing and financial interface, because for the first time the issue was reviewed both in English and Polish literature. Reviewing the literature on marketing analytics, one could feel the impression of a certain stagnation, in the sense of the lack of significantly new proposals that appeared earlier in the publications of Davenport and Jeffery. Currently, several important publications have appeared, including

Grigsby (Grigsby, 2015), who states that marketing analysis allows business analysts and traders to answer the questions of who is the most willing to buy and what is the best way to control buyer behavior, using proven measurement methods to improve the effectiveness marketing programs. In turn, P.W. Farris and other authors (Farris et al., 2016) of *Marketing Metrics: The Manager's Guide to Measuring Marketing Performance*, present the measurement of marketing activities using a graphical presentation of the company's marketing indicators structure. It demonstrates the intrinsic nature of all indicators describing in detail both the marketing programs and the central role of the client. The publication of Stephen Sorger *Marketing Analytics: Strategic Models and Metrics* (Sorger, 2013) is very important for the scientific explorations conducted by the author in this work, in which he presented interesting strategy models and "soft" market indicators, and discussed a very important issue of using dashboards by many companies, both in relation to the entire company and its marketing activities. In turn, the article by Wedel and Kannan (2016) discusses the history of the development of marketing analyses and a description of the most modern techniques for modelling structured and unstructured data. In addition, they describe the research possibilities and challenges related to analyses undertaken to optimize market expenditures for the purposes of the marketing-mix composition, analyses in the field of personalization, as well as in terms of privacy and data security. They also discuss the implications for organizations that want to implement marketing analytics based on large, variable and diverse data sets, and identify trends that will shape marketing analytics as a scientific discipline and curricula for modern marketing.

The chapter contains such an evolutionary approach as well as directions along with the scope of research. In addition, an attempt was made to assess the impact of the MFTI interface in integrated strategic analyses on maintaining the position of enterprises in the market of their development and growth (especially indicators) and the latest analytical marketing methods in dashboards in which planning and monitoring of enterprise strategy can be integrated and integrated (Golik-Górecka, 2018). Modern analytics included in dashboards – as it were in integrated strategic management, allows to obtain and maintain a competitive advantage of enterprises on the market.

Modern enterprises strive for better strategic solutions, and managerial and analytical dashboards give the opportunity to implement strategy synergy. The interface consists of marketing, financial and IT and statistical areas of the organization's activity as well as a common space of possibilities created by these three areas of activity with the growth platform of each company located in it. This means that a new area of operation is created at the junction of two districts (Fig. 1). A space of plans, budgets, implementation, control and marketing analytics is created between marketing and finances. Another area that appears between marketing and statistics and econometrics/IT is all programs, the entire marketing information system, all marketing indicators. This third area between finances and statistics and information technology is the management accounting information system. The combination of these three districts is precisely this new area of activity including the interface of marketing, finance and statistics and econometrics. This area of the interface's activities is also connected with the analysis with these integrated strategic analyses and with this integrated in the broadest sense of the word strategic management – as they include both managerial and analytical dashboards. This interface is further marked in the MFTI study.

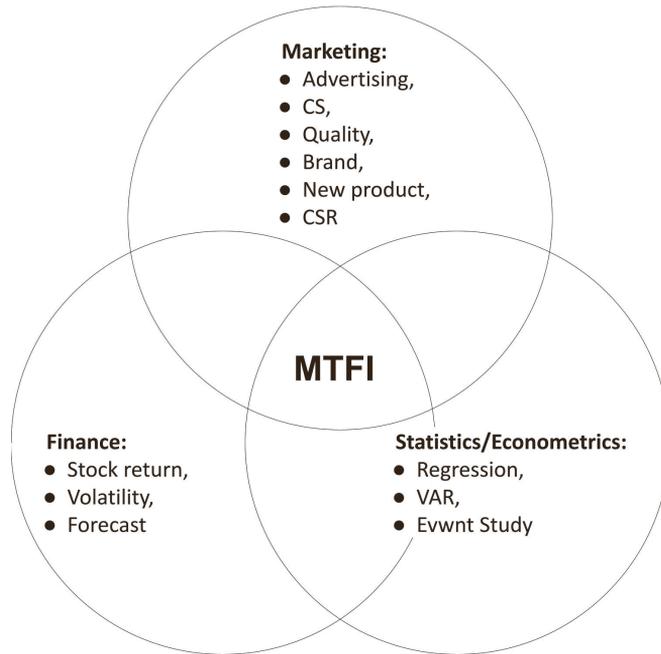


Fig. 1. Components of marketing and financial interface

Source: (Kim & Richarme, 2010)

It is worth considering whether there is integration of science and business, or is acceleration in science just an interdisciplinary approach? Does science determine business development or it is reversedly? Science dealing with the generalization of conclusions resulting from research practices is becoming a source of valuable knowledge. These practical business solutions and technologies also lead to the acquisition of new knowledge in the area of marketing and its rapid development and to the development of science, which is also confirmed by analytical marketing and the new marketing indicators. Actually, it is the winding up of these two spheres, science and business, even their overlapping. They coexist in parallel and technologies determine the development of marketing, various new types of relationships and interactions.

3. Research questions

The review of English and Polish literature presented in the author's monograph made it possible to compare the achievements of marketing analytics. There is a research gap in Polish literature, which should be supplemented with solutions indicating dashboards that integrate marketing, economic and financial analyses, giving the possibility of implementing strategy synergy. According to the author's knowledge, this publication is the first such comprehensive attempt in Polish literature to describe a new marketing paradigm resulting from the use of a marketing-financial interface in business practice.

In the author's research work, the following research questions were posed:

- Does the implementation of the marketing-financial-technological interface enable the company to achieve a distinctive market position and achieve economic success in both the long-term and the short-term?
- Can the marketing-financial-technological interface be treated in terms of a new holistic marketing paradigm in force in the first decades of the 21st century and based on interrelated key marketing and financial indicators?

Dashboards support business with its decisions in a marketing and financial interface and define and facilitate strategic decision making. It should be noted that this interface is included in the portfolio methods belonging to integrated strategic analyzes, until integrated strategic management is included in the executive dashboards – monitoring and analyzing/controlling the strategic choices of companies in real time. This mainstream, which is the MFTI concept, enables filling information, analytical, controlling and technological monitoring gaps. The approach defined as integrated strategic management in dashboards allows analyzing the main marketing and financial interfaces in both the strategic and tactical approach – taking into account the continuum of activities from one approach to another. Collaboration sides is the science offered by marketing and financial analytics – business and business – practitioners, who implement modern solutions. In these dashboards can also be included all KPI indicators as well as those regarding social media and e-commerce indicators especially those included in e.g. sales funnels. In addition, the research conducted in these companies relates to customer research.

The solution of a research problem in the form of designing a dashboard portfolio of products or clients is the reason for the development of matrix positioning methods and provides a new instrument for both simulation and economic reality research. The use of such a method seems almost necessary to achieve a relatively lasting competitive advantage and its maintenance. The term dashboard should be referred to here. It is an important element of results management. Correctly constructed, it demonstrates the adjustment of marketing expenditures to anticipated results. In addition, it allows the organization to determine whether it is on the right path, leading to increased demand for products, improved customer retention or increased market shares (Patterson, 2012).

Referring to the symposia that took place in 2008 and 2013 at Maastricht University, regarding the marketing and financial interface, we can say that the issue of this chapter is part of this research and reflection. As the professors from Maastricht stated and planned this, it is necessary to develop this so important problem. Therefore, the author's research and the latest dashboard experiments described include a marketing and financial analysis presented for an in-depth research study.

Particularly important publications and problems noticed on 2 symposia. Conducted by the School of Business and Economics and the Graduate School of Business and Economics at Maastricht University on October 3, 2008, the Second GSBE Marketing-Finance Symposium brought together researchers from marketing and finance disciplines as well as industry masters to discuss the latest developments and future challenges related to the marketing-finance interface.

Prof. Pennings said: *The 2008 Symposium inspired many researchers to further conduct work on the Marketing-Finance interface. For example more work has been done on relating*

marketing activities and strategies to the firm's stock price performance. Other research focuses on how the marketing-finance approach that was presented at the 2008 Symposium can be used for product development. Important economics, marketing and finance journals have called for papers on the intersection of marketing and finance. When we organised the conference in 2008 we witnessed the start of the global financial and economic crisis. The Marketing-Finance approach has been helpful to understand better the impact of the crisis on firms and at the same time provide tools for firms to respond to the crisis so that firms can turn it (at macro level) into an opportunity for the firm to create value (Pennings et al., 2013).

Interestingly, the interest in the Marketing-Finance approach is growing rapidly not only in the academic sphere, but also the industry is currently using our research. An important element of these considerations was also the cross-departmental marketing and financial integration, which new boundaries have been set up, consisting of interaction and cooperation in such a way that there are benefits that outweigh the individually produced benefits of the departments concerned. For cooperation to be effective, marketing and finance must be in line with their goals and objectives resulting from the company's strategy.

The second Symposium was devoted to the development of financial products and a marketing and financial approach, balanced taking into account the interests of customers in the product development process. In addition, the main challenge was Prof. Pennings, that the whole is greater than the sum of its parts. The aforementioned author's research is also a part of the subject of the mentioned Symposia in 2008 and 2013, i.e. in the subject of interdisciplinary approach to marketing and finance.

The impact on the functioning of society and the economy is visible when the results of scientific research are used in practice. The use of scientific research results in the economic or social sphere is associated with the fact that the original research results make a creative change in the functioning of the entity using these results. This means that the research results used in practice: bring measurable benefits, including reduction of losses, are repeatedly used by different entities or used repeatedly by one entity at a given time.

This impact is assessed simultaneously in two dimensions: reach and significance. In order to show the impact, it is necessary to show the causal relationship between the research conducted by the evaluated entity and the declared impact. Participation in proprietary research on the presentation of marketing analytics in the managerial cockpit application was of great value.

4. Research method: case study analysis in experiment dashboard – ABC company (Y), discussion and conclusions

The case study methods presents an attempt at a developed dashboard with a description of the possibility of adding further marketing analyzes. In order to answer the research question, the authors present a single, in-depth case study referred to ABC, an Polish company for which the trial dashboards were designed. The case study method was chosen to achieve the research objective because it allows for a holistic and in-depth analysis of a complex phenomenon in its real-life context (Yin, 1994), namely exploring and analyzing the design and the implementation of dashboard.

The company was established in 1987 as a private production plant operating within the Crafts Cooperative. Currently, as a limited company, it is one of the main producers of dust masks. Its offer includes products for the B2B and B2C market. During the many years of activity, the mission was updated and the strategy was reoriented – by introducing contemporary strategies, e.g. the strategy of virtual market diversification.

It can be said that this publication includes the development of the problems of marketing and finance in terms of such partial indicators as well as complex data and measures in the form of a marketing dashboard. It should be recalled here the statement that was made in the first chapter that marketing and financial indicators give deep insight. With regard to the issue of this work, this approach allows a better understanding of the diversity of existing indicators, as well as presenting company achievements that give chances for forecasting further trends and making decisions by top managers and marketers. Overall, managerial dashboards that are Business Intelligence tools that thanks to various forms of data visualization allow for effective monitoring of activities undertaken by the company. Dynamic cockpits provide the ability to drill, compare and filter data, as well as aggregate them. These are intelligent tools thanks to the forms of data presentation enabling making effective decisions in individual areas of organization management. The wider dashboard development concerns the first company, where they include:

- financial figures presented in the analyzes that illustrate changes in the long-term, the dynamics of these changes, which also indicates a change in circumstances over time in different economic conditions;
- cost-to-revenue relations, where the number of recipients reached by the company, best-selling products and customer satisfaction and satisfaction surveys are included.

The list below is a supplement and update of data analysis using the Data Solution method, data from 2012 to 2017 which are presented in Figure 2.

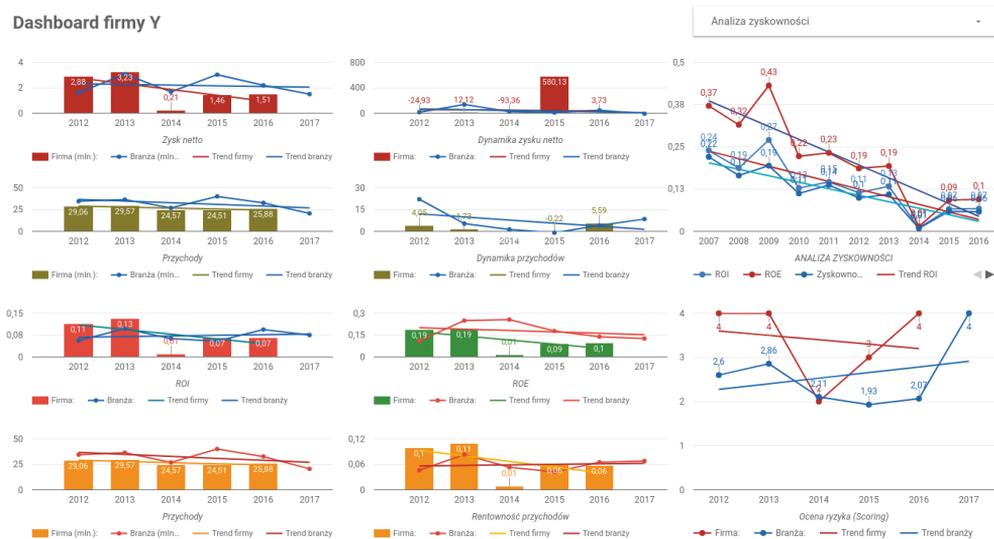


Fig. 2. Supplementing current data – charts from 2012 to 2017

Source: (Golik-Górecka, 2018)

In conclusion, the initial analysis can be said that the enterprise is analyzed in good condition and generate long-term positive results. ROI, ROE and profitability are at a good level, several times higher than the inflation rate. There was an increase in the effectiveness of data analysis in the three surveyed companies (and their clients). Research conducted in two enterprises were continuous, and in one company it was an analysis of implemented solutions, which were also described in the work of G. Golik-Górecka.

Subsequent analyzes and graphs include the results of customer perception surveys, including offer evaluation, transaction processing, number of recipients, or their loyalty. These values are cumulative satisfaction, total customer satisfaction and the amount of marketing spending remains the same. A correlation of sales revenues to particular categories of respondents within the scope of customer opinions and sales costs to particular categories of respondents within the scope of customer opinions was also made here. In addition, the presented map of the positions of regular customers and regular distributors can be developed in detailed terms concerning individual regions of Poland. Secondary data were used here. It also allows to define the scope and possibilities of future research, which may concern customer satisfaction, customer value, and company values, brand values.

Therefore, it is possible to verify the thesis that the power of marketing analytics influence on financial results depends on the advancement of analytical orientation and analytical paradigm, and even on the processes of data and information acquisition and advanced analytics presented in dashboards in the following way management as well as analytical. In the indicators presented above, we observe the marketing and financial interface, but it is only the application of the dashboard managerial cockpits method that allows us to present correlations and the formation of individual correlations in the past and to indicate the prognostic approach. As a result, thanks to dashboards we can see how the company develops and evolves. We need to track changes in the company through strategic and tactical dashboards that include monitoring and control indicators. This allows us to enrich and improve marketing strategies and increasingly strengthen its competitive position in the market. Dashboards can include several panels of key categories. The key categories are: customers, product, brand, advertising, PR, events and trade fairs, direct marketing, website research and online marketing, sales, sales channels, prices and discounts, collateral marketing, environment – micro- and macro environment.

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