

MARKET RESPONSE TIME AS A NEW APPROACH FOR MORE EFFECTIVE MARKETING PLANNING IN BUSINESS-TO-BUSINESS SALES

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ABSTRACT

The ability to increase turnover in a short time is determined by industry characteristics. These characteristics need to be taken into account during forecasting and planning. The correlation, which can be described among others by the Market Response Time (MRT) has an impact upon the whole marketing planning. MRT is defined as the time between increased marketing efforts (stimuli) and the time when the market starts to react in terms of increased purchasing (response). It is expected that different industries have different MRTs which influence the analyzed planning in different ways. Thus sales planning must be adapted to MRT, which will most probably increase planning efficiency.

Keywords: Market Response Time, Marketing Planning, Market Environment, Stimuli-Response Models, Business-to-Business

1. INTRODUCTION

1.1 Intention of this study

It is the intention of this article to present some results of a pilot case study of a D. Tech. research project at the CUT, Faculty of Management Sciences, School for Entrepreneurship and Business Development in cooperation with Aalen University, Germany, Aalen under the supervision of Prof. Dr-Ing. J. Görne and Dr.J.J. v.d. Walt.

The research is about sales forecasting and planning in the field of business-to-business machinery & equipment as well as automotive supplier industry. It investigates the forecasting and planning activities in these industries. It will be shown that a discrepancy between forecasting and planning in reality and theoretical approaches in the literature could be found. This statement is based upon a broad literature review and its comparison to reality, which was researched by the case study methodology.

1.2 Importance of marketing forecasting and planning

One of the most important tasks of marketing management is to plan and forecast future sales in a reliable manner. Reliable means, that if the turnover drops unexpectedly, all efforts are taken by the sales management to bring turnover back to plan.

Good planning is the most effective way to increase revenue and margins (Calvin, 2001: 5). Corporate turnover is largely determined by environmental circumstances and industry characteristics (Hult et al., 2007: 59-60). This correlation between planning and industry characteristics has not been investigated yet, although the knowledge of the effectiveness of various planning processes is a very important area for practitioners as well as for academics (Stratis and Powers, 2001: 165).

1.3 A new approach in forecasting and planning in business-to-business Sales

The number and usability of techniques available to sales forecasters and planners have improved and the use of computers during the last decades has increased efficiency and effectiveness in forecasting (McCarthy et al., 2006: 322) and planning. Given all this, however, accuracy, technique and systems understanding and use, and satisfaction with techniques, systems, and management processes has not improved, even though the familiarity and usage of various sophisticated sales forecasting techniques have increased (McCarthy et al., 2006: 303-324).

The consideration of the time aspect in generating turnover is also not well researched, nevertheless important. Imagine the different aspects of time in business-to-consumer (B2C) and business-to-business (B2B) markets. In B2C more effort in marketing (campaigns or incentives) can bring back more sales after short time. This is not the case in B2B. Market reaction depends on many processes, that cannot be influenced directly, furthermore companies are facing the problem of independent, derived and dependent demand in the supply chain which makes forecasting more complicated (Mentzer, 2005: 3-9).

1.4 The market response time

The mentioned time lag is a major element in planning (Makridakis, Wheelwright, Hyndman, 1998: 2) and describes best the correlation between industry characteristics and marketing planning. It is known as the so called Market Response Time (MRT) (see Source 1). The investigated MRT can be influenced by marketing in B2C but neither in the investigated B2B machinery and equipment nor in automotive supplier industry. In these industries, products are underlying by the product life cycle of a product, or a system a delivered product is built in. For this reason, in some B2B industries planning needs to be much more forward thought.



Table 1: Market Response Time equals time lag

1.5 Research gap and intention of the research

It is the intention of the authors, to identify MRT's in two B2B industries as named afore and to validate, that sales planning is determined by these industry characteristics and that the knowledge of MRT can increase planning efficiency. Consequently, by knowing MRT's, companies will be able to organize their supply chain and services more effectively and save expenses, thus, increase profit.

2. REVIEW OF THE LITERATURE

The idea of market response is anything but new: The Russian scientist Pavlov recognized in the early 1910s, that a given stimulus would produce a given response, called stimulus-response view of selling. Based upon Pavlov's recognition under an economic point of view, it is important to know, after what time the response is given to the stimulus. It is assumed that a positive response (purchase) is the typical outcome of the exchange between buyer and seller after time (Cash and Crissy, 1958: 30-31).

Much more attention has been given to the challenges of planning, controlling, and forecasting sales efforts since the 1960s (Alderson and Green, 1964: 180-191, Shuchmann, 1966: 45-56). One possible answer to these challenges is the creation of market response models (Hansennes, Parsons and Schultz, 2003: 3). They are part of marketing planning, as this is the process of measuring and evaluating the results of marketing strategies and plans and taking corrective action to ensure that marketing objectives are attained (Kotler, Armstrong, Saunders and Wong, 1999: 118). E.g., the correlation studies of the impact of marketing decision variables on B2C sales were first modeled and completed by Seymour Banks in the 60s (Parsons and Schultz, 1994: 181-189).

Ten years later the first article was published that specifically addressed how market response could be used in forecasting and planning in B2B (Schultz, 1971: 153-164).

Since that time in 1970, econometric and time series analysis methods have been applied to a wide variety of situations.

Econometric and time series analysis is based on analyzing historical data over a longer time period (Noonan, 1998: 199, Mentzer, 2005: 74) The objective is to measure the fluctuations, typically by month or quarter of the year, in terms of their deviation from the average trend (Noonan, 1998: 200). Consequently, all time series techniques examine only four basic time series types of sales variations: level, trend, seasonality, and noise (Mentzer, 2005: 75). A mathematical model describing the past behaviour of the series is selected, assumed values for each type of sales variation are inserted, and the sales forecast is established (Still, 1998: 45).

This is leading to the fact that, today, market response models are an important tool of academic research and practical application (Ryans and Weinberg, 1987, Parsons and Schultz, 1994: 181).

3. METHODOLOGY

3.1 Case study methodology

It is the aim of this research work to describe special aspects of the planning behavior of corporations in the machinery & equipment industry and the automotive supplier industry to show the reasons for acting in the detected manner. Therefore the two contexts (manufacturing & equipment and automotive supplier industry) and eight cases, four in each industry, will be conducted. In order to display best the acting of the sales departments, qualitative case study by investigating the cases named afore with the case study research methodology was chosen.

Setting up case studies is a research approach, situated between concrete data taking techniques and methodological paradigms (Flyvberg, 2006: 220) and is an empirical inquiry that investigates a contemporary phenomenon in depth and within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident (Yin, 2009: 18).

The most appropriate type of design for this research topic is the embedded multiple-case study, which is used to investigate more than one industry with more than one company and more than one organization within the company (Two industries equals two contexts, more than one company equals more than one cases and more than one unit of analysis equals more than one department of a company).

3.2 Data Collection for validity and reliability

To gather case study evidence by reliability and validity, three principles of data collection are relevant: 1) use multiple sources of evidence, 2) create a case study database, and 3) maintain a chain of evidence (source 2) (Yin, 2009).

In addition, two characteristics distinguish case study questions from those in a survey instrument: The general orientation of questions and the levels of questions (Yin, 2009). All three principles are passed by 1) interviewing the sales director of the company, collection information about the strategic situation of the company and their environment to prove the statement of the interviewee, 2) establish a electronically cluster with all questions and answers as well as further information to the case study and 3) ensure the line of evidence due to the case study methodology Yin by (2009: 57) with the steps develop theory, select cases, conduct case studies, write case reports, draw cross-case conclusions, modify theory and develop implications and conclusions.

3.3 Research Statement

MRT is ignored during sales planning in different B2B industries.

4. EMPIRICAL SECTION: MULTIPLE-EMBEDDED CASE STUDIES

4.1 Introduction and intention

To gather empirical results, eight case studies were conducted to identify how well overall planning and sales forecasting and planning is working in reality, resp. in a deeper look how well sales managers are informed about the market environment they are working in. There are four cases of the automotive supplier industry and four cases of the machinery & equipment industry, therefore two different contexts were investigated.

The intention of the researchers are the following:

- To gather information about the overall planning behaviour and potential market knowledge by the planning department of the company, determined by the questions number I to IV.
- To gather in-depth information, by the questions numbered V-IX, about the sales planning department and their knowledge about time aspects in the underlying sales process.

4.2 Results

The case studies have given in-depth views into the sales planning processes of several companies acting in the above mentioned industries. It can be stated that until now, no big differences in the two contexts of the cases (machinery & equipment as well as automotive supplier industry) could be identified which can be verified by the similarity of the answers to some questions, esp. number I, II, V and VIII.

Sales Planning										
Kind of industry	Case Study No.	I Does the company have an overall company strategy?	II Does the company have a plan to achieve this strategy?	III Do you monitor the performance of the achievement?	IV Do you know the market potential for your products?	V Do you know the time from (first) contact to an inquiry?	VI Do you know the time from inquiry to a first offer (internal time)?	VII Do you know the time from your offer to an order (time of incoming order)?	VIII Do you know sth. about MRT?	IX Do you know the time between sales action and increase of your turnover?
machinery & equipment industry	1	Yes	Yes	Yearly	Yes	1 year	3-4 weeks	no	No	no
	2	Yes	Yes	Quarterly	yes	No	No	no	No	1 week-6 months
	3	Yes	Yes	Yearly	not well	No	No	No	No	no
	4	Yes	Yes	Monthly	yes	If the customer is known: 2 weeks/ new customer: 1 month	From 3 days to 2 weeks depending on the complexity of the project	Depending on the project and volume of the order, up to 2 months	a bit	Yes, 3 months, but it depends strongly on the kind of business
automotive supplier industry	5	No	No	No	No	cannot be specified	No	No	It is the time from first customer contact to our offer	no
	6	Yes	Yes	Monthly	not well	No	No	No	yes	no
	7	Yes	Yes	Monthly	well known	No	2 weeks	up to 5 months, longer than 5 months, no order will come	yes	no
	8	Yes	Yes	Quarterly	yes	No	1-2 weeks	1 minute to 1 week	Yes, and the figures for that are about 2 weeks and 6 months + delivery time for standard products and for complex products up to 2 years	no

Table 2: Empirical results

4.2.1 Overall planning results

It can be stated that 7 of 8 interviewed companies have an overall company strategy based on a plan to achieve this strategy and monitor the success of achievement more or less detailed (monthly, quarterly, yearly).

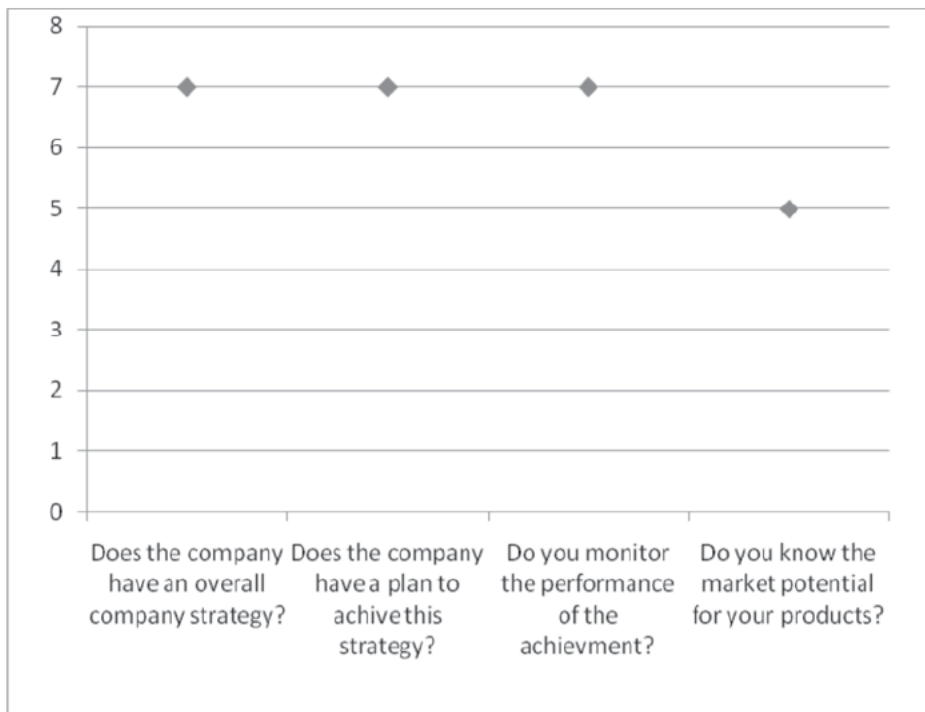


Table 3: Empirical results of the planning department of both industries

Due to this result and the obviously good overall planning behaviour it is interesting that only 5 of 8 companies claim to know the market potential for their business products although they have an overall strategy and rather should need to know the potential sales to plan turnover etc. adequately.

4.2.2 Sales planning results

A deeper view into the sales management departments in the field of sales planning fundamentals and knowledge of the market results that the factor time in the sales process is not well-known.

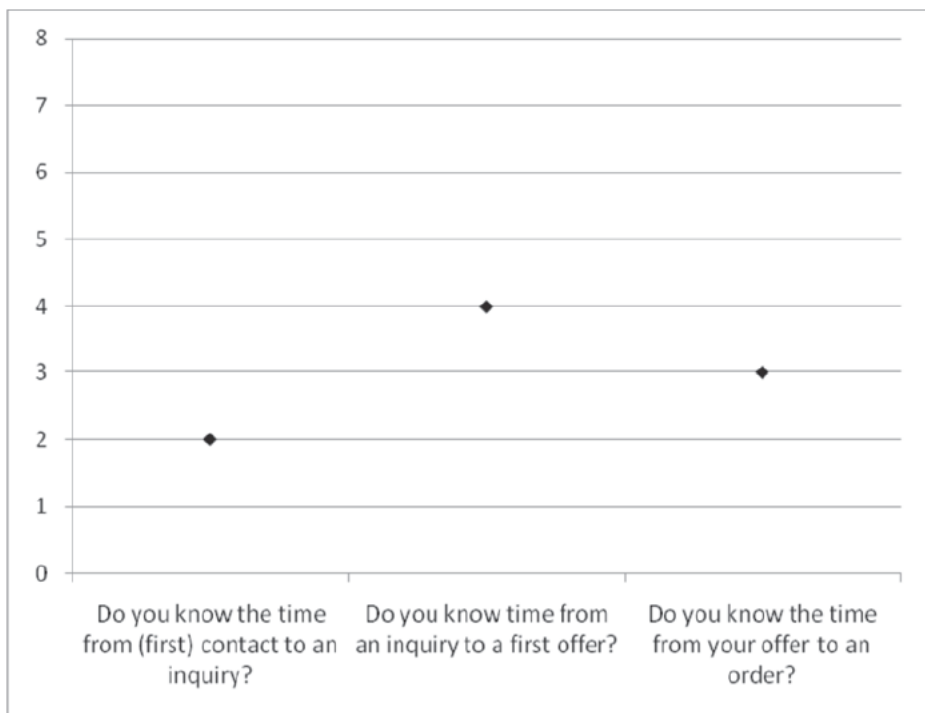


Table 4: Empirical results of the sales department

Obviously, the sales departments of the investigated companies are ill-informed about market reactions, although they are essential for their sales planning and finally establishing forecasts and plans for the overall planning.

It must be expected, that a pragmatic approach in sales planning is common in reality to achieve obviously good sales planning results. The question, if further knowledge of the sales process enhances sales planning, stays unanswered.

4.2.3 Market response time results

The knowledge of the market response time is only in one of eight cases available. Furthermore, the time between sales action of the company and increase of turnover is only known by 2 of 8 companies.

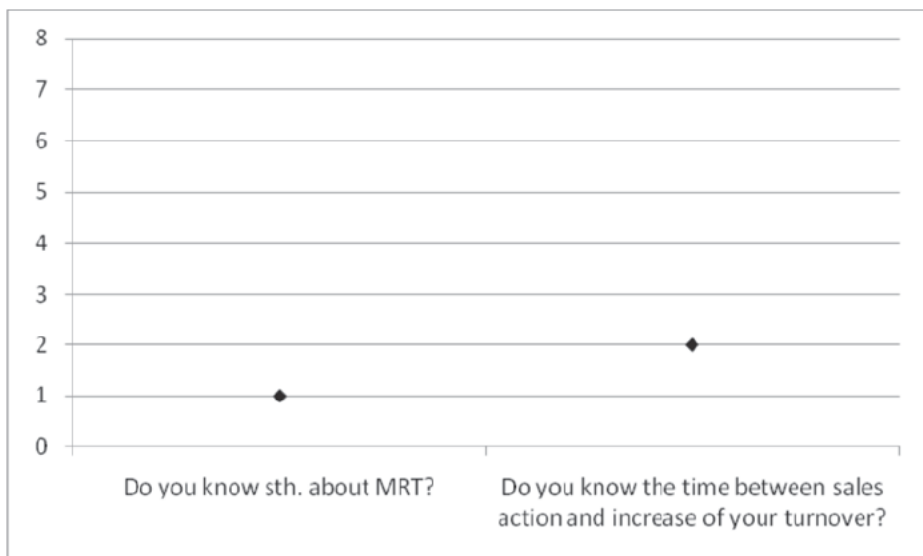


Table 5: Empirical results about the market response time

As a result, the research statement can be shown that MRT is mostly ignored during sales forecasting and planning in different B2B industries, at least in the investigated machinery & equipment and the automotive supplier industry.

5. CONCLUSIONS

The aim of this research was to investigate the forecasting and planning activities in the machinery & equipment as well as automotive supplier industry by in-depth case studies. Furthermore, it was the intention to investigate the research statement that MRT is ignored during sales planning in different B2B industries.

First of all, it can be stated, that there is a big discrepancy between forecasting and planning in reality and the theoretical approaches mentioned in the literature review.

In the literature, the overall planning as well as sales planning process is well researched and its importance could be proofed as well as that good planning is essential for a company's success. On the other side, the empirical results have shown that companies rather do a lot of overall and sales planning but often they have not a good basis for their decision making. This could be proofed by the knowledge of the market potential which was only by a few more than 50% of all interviewees (question V) and the knowledge of the time spans in the sales process (questions V-XII, X) which is evidently not well established.

Secondly, the research statement could be proofed, that MRT is ignored during sales planning in different B2B industries, esp. machinery & equipment as well as automotive supplier industry.

Obviously, the sales departments of the investigated companies are not well-informed about market reactions, although this seems according to literature essential for their sales planning and finally establishing forecasts and plans for the overall planning. It must be expected, that a pragmatic approach in sales planning is common in reality to achieve obviously good sales planning results. The question, if further knowledge of the sales process enhances sales planning, stays open.

Nevertheless, all case study companies are well established companies with a good financial background what raises up the questions, why are the companies doing well without an intensive knowledge of the market and could they do better, if they would know more about the market and the MRT. These are implications for further research.

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