

MARKETING STRATEGIES – IT APPLICATION IN BUSINESS

MARKETING STRATEGIJA - IT APLIKACIJE U POSLOVANJU

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Abstract: *Beyond doubt companies today face increasing challenges to stay ahead and seize unique competitive and consumer advantages in order to boost their profits and business value. Information technology (IT) affects business in many ways. Some of these provide higher level of customer services, others enhance marketing operations in ways that can change their character. Still others create new perspectives for marketing strategy implementation. Important management questions today are whether the anticipated economic benefits of IT in the marketing field are being realized, how IT facilitates efficiency and is involved in marketing strategies formation.*

Key words: *marketing strategies, information technology, software applications, business value, competitive advantage*

Sažetak: *Tvrtke se danas suočavaju sa sve zahtjevnijim izazovima u poslovanju. Informatička tehnologija utječe na poboljšanje usluga korisnicima i na provedbu marketinške strategije. Potrebno je stoga stvoriti otkrivane ekonomske koristi od upotrebe tehnologije u marketingu.*

Ključne riječi: *marketinške strategije, informacijska tehnologija, softverske aplikacije, poslovna vrijednost, konkurentna prednost*



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1. Introduction

The evolution of contemporary marketing field demands good understanding of where it is and where it's perspectives are leading to, in order for marketing researchers to continue to contribute in the identification of opportunities for the business. For years, many firms have maintained functional boundaries (e.g. marketing, finance, HR, information technology, manufacturing, etc.). However, there is a substantial evidence that cross-functional integration improves goal achievement (Sashittal and Wilemon 1994) [1].

Management of business, small and medium enterprises and organizations is in tight connection with the advent of information technology (IT) and information systems, used for their management. There are various different definitions in the literature for the term „management“, but most authors incorporate the perception that this is a set of intentional human activities, related to the transformation of input resources into final result. In terms of marketing management, which dominates the discipline of the marketing field at present, the fundamental concern is the design of the marketing mix (Wind and Robertson 1983) [2]. However, the focus of the existing literature is not on how to gain competitive or consumer advantage, although such issues might be essential in the perspective of marketing managers. Most of the literature centers on improving decision-making within specific marketing mix components at the brand level or distribution decisions.

By contrast, marketing strategy focuses explicitly on the quest for long run competitive and consumer advantage. As such, it has a high degree of overlap with business strategy and can be viewed as an integrated part of and perspective for business strategy. Marketers develop strategy, based on analysis of consumers, competitors and other environmental forces, which than should be combined with other competitive advantages, based on R&D, human resources and information technology.

Many of the current frameworks have dealt with guiding the systems' development process, but few have successfully managed to cope with the underlying business issues that drive the need to develop proper marketing information system (Brien and Stafford 1988) [3]. The authors give the term „marketing information system“ definition as follows: *„A structured, interacting complex of person, machines and procedures designed to generate an orderly flow of pertinent information collected from both intra- and extra-firm sources, for use as the bases for decision-making in specified responsibility areas of marketing management.“*. Major challenges for marketing managers are retrieving the data, adapting the marketing information system to the complex information needs of the firm and guaranteeing that the process is timely and discontinuous. The instrument for the proper flow of those processes is precisely information technology advent and its applications.

2. Importance and objectives of the paper

There are three compelling reasons why IT matters in business:

- (1) IT continually transforms industry and society.

(2) Executive decisions about IT investments, governance, and strategy are critical to organizational success.

(3) Deriving value from increasingly available data trails define effective decision making.

The scope of the review, this paper provides, identifies several important streams of conceptual and empirical work in strategic marketing that has developed during the past twenty years. One is IT contribution to the organizational performance [4] and IT business value [5]. Researchers in those areas provide models for IT business value grounded on the resource-based views of the firm [6]. Others are on the marketing side of contribution to the implementation of business strategy [7].

In this context, the following objectives are laid for studying the role of IT applications in business for competitive marketing strategy implementation:

- Firstly, outline and review of the existing literature on the marketing strategy – IT application to identify the existing solutions to the researched area.
- Secondly, proper accordance to be given to IT applications. Since competitive marketing strategy is a systematic action, setting processes, as much as it is dynamic adjustment process, IT applications should be accordingly set in the systematic processes.
- Ultimately, the attempt of this paper is to understand the concept of the relationship between marketing strategy and IT applications in business.

The study is useful in business to marketing strategists who need to take information technology innovation into account and is also useful to IT specialists who need to relate to strategic marketing heads.

In this paper, first, theoretical base of marketing strategy is observed. Second, the nature of IT applications is examined. Third, the conceptual role of IT applications in competitive marketing strategy is studied by reviewing a framework for competitive force/marketing strategy model that can be used to recognize opportunities for strategic information systems approach within the firm's niche.

3. General characteristics of marketing strategy and IT applications

Marketing strategy is the set of integrated decisions and actions (Day, 1990) [8] by which a business expects to achieve its marketing objectives and meet the value requirements of its customers. Marketing strategy is concerned with decisions relating to market segmentation and targeting, and the development of a positioning strategy based on product, price, distribution, and promotion decisions (Kotler, 1994) [9].

One of the major objectives of marketing strategy is to promote the long-term performance of a firm. As such, competitive marketing strategy's purpose is to serve boosting the financial performance of the firm through sustainable competitive advantages. Competitive advantage is realized based on three factors (Sudarshan, D. 1995) [10]: (1) the firm's marketing strategy, (2) implementation of this strategy and (3) the industry context (Porter's model).

Any marketing strategy has to have a marketing objective. The marketing objective might be maximizing of the profits, sales, promote brand image, create customer value, retain price stability or increase marketing share, etc. Based on the objective there flows two types of analysis – strategic marketing analysis and internal analysis – resource limitations, strengths/weaknesses, etc. (Kanagal, N. 2009) [11]. Marketing strategy is developed in the framework of the two types of analysis, as well as past performance analysis and other forces.

Companies often use sophisticated CRM software applications to keep track of all types of customer contact, including sales calls, presentations, purchases, complaints and more. Marketers need to be able to access information that is in the system as well as input additional data as it becomes available. All forms of managing relationships with customers making use of information technology are CRM applications. CRM, or Customer Relationship Management, is a company-wide business strategy designed to reduce costs and increase profitability by solidifying customer satisfaction, loyalty, and advocacy [12]. The market growth, according to analysts, was driven by enterprise investments in technologies, focused on customer retention, analytics and on-demand solution [13].

In the context of the present study, the development of information technology has led to the development of web analysis applications. There are increasing number of available and refined for usage functionalities, enabling deeper analyses and better decision-making. Launching *Google Analytics* in 2005 was a good prerequisite for proliferation of web analysis among firms and consumers. Measurement of the results of online activities is crucial for improving the efficiency of marketing. However, at present, applications for web analysis give the answer to the question “What happens?” and not to the question “Why do things happen this way?”. In order to answer the latter, it is necessary to use additional research instruments (survey, observation, experiment). SEO (search engine optimization) is another tool that is used as Internet marketing strategy, affecting the visibility of a web page in search results, optimizing what people search for or considering which search engines are preferred by enterprise’s target audience. Semantic Web technologies take the solution further. The main purpose of the Semantic Web is to enable users to find, share and combine information on the web more easily, not only by humans, but readily interpreted by machines as well. Cloud applications are yet another software solution for helping companies build content-centered marketing and communications programs. Salesforce.com application for instance enables complete closed loop marketing including resource management and ROI reporting.

With the immense amount of personal and usage data currently available, targeting can be done automatically and extremely successfully. Technology applications, facilitating this process are Business Intelligence (BI) applications, ETL (extract, transform load) tools or transactional software applications, such as ERP (enterprise resource planning) that are used in the organization to manage the data. Business intelligence tools are a type of application software designed to retrieve, analyze and report data for the needs of the enterprise. The tools generally read data that have been previously stored, often in a data warehouse [14]. Data warehouses on the other hand store current and historical data. The main source of the data is cleaned,

transformed, cataloged and made available for use by managers and other business professionals for data mining, online analytical processing, market research and decision support. In order to leverage metrics strategically to create loyal and engaged clients, businesses need to look at creating metrics that can come together to help paint a picture of the end-to-end client relationship. Marketers need to get a complete view of client interaction and transactions and leverage this data to build strong relationships. In this sense, the impact of technology on marketing is very strong and new technologies can aid marketers in making better strategic decisions.

4. Theoretical base and perspectives

IT applications in marketing strategy have not been the direct focus of much research, neither within, nor outside of marketing field. However, there is a good amount of information systems researchers, struggling to develop a good framework to aid managers in the identification of opportunities for strategic use of information technology [15].

Interest in the strategic use of IT has led to numerous frameworks for the identification of opportunities for competitive advantage. These models have been used by researchers and practitioners to improve organizations' awareness of potential use of IT for competitive advantage, help them classify existing applications, and allow the evaluation of their strategic planning (Bergeron et al., 1991 [16]; Lee and Adams, 1990 [17]).

Very few frameworks exist that offer a truly niche-driven approach that identifies marketing strategies in a wide range of business areas, in which IT can be employed to gain competitive advantage. Porter utilizes the concept of the "value chain" to identify opportunities for competitive advantage by examining the entire process of product design, development, production, logistics, marketing and sales. Bergeron et al. (1991) generated more specific IT applications in various business functions for competitive advantage. However a later study (Segars and Grover, 1994 [18]) criticized the traditional models for suffering from significant shortcomings in providing general guidelines for identifying strategic opportunities within specific niches and industries.

Reithel, Hwang and Boswell (2001) [15] present an alternative model that focuses on the linkage between a firm's marketing practices and its formulation of strategies to deal with the competitive forces in its industry. The framework is structured to capture a wide range of strategic opportunities for the competitive use of IT that can be targeted on a specific marketing niche in a specific industry. The authors build upon two widely accepted concepts: Porter's five competitive forces (external environment) and McCarthy's four Ps (internal strategy formation). As a result, the new two-dimensional framework is tested by a case analysis. The results indicate a mapping of the strategic uses of IT into the framework as a means of mapping applications into the matrix. Furthermore, the results suggest a larger pattern of the current use of IT for competitive advantage across multiple industries and niches. The attempt of this paper is to broaden the model in order that IT applications used in

marketing strategy formation are properly fitted in the cells of the two-dimensional model. Consequently, evaluation is given to the impacts of IT applications on the cross of each competitive force – marketing mix Ps (*Table 1*). The row/column intersection provides a context in which the firm can identify opportunities for the use information technology as an integrated part of the firm’s competitive strategy within a particular market niche. The interaction between the external forces and internal environment can be interpreted as follows. For example, the intersection of “Threat of new entrants” and “Price” would indicate that an effective cost management and pricing system would be used as a barrier to potential entrants. Or, in the context of the intersection between “Rivalry among existing firms” and “Place”, a strategic application of IT would change the way a company’s products or services are delivered in order to differentiate its offering from the competitors’. With access to many sources of information and an interest in interactive media, consumers may collect more product information on their own. This outlines the interaction between “Bargaining power of buyers” and the marketing mix.

In order to apply the model to identify strategic applications for particular enterprise, an estimated scale is given to the impact of IT applications in strategy formulation. The scale goes from 0 to 1 at 0,25 points interval (*Table 2*). An additional 6th factor (F6*) is added, calculated as an arithmetic average of the above. Results are presented in radar charts, where each competitive force factor has its chart and finally has its cross section chart with the 6th factor chart. The intersection of each of them with F6* shows how the average impact area is covered by each factor’s impact area (*Figures 1-5*).

Perspectives for contemporary business are to determine where future iterations will lead to facilitate marketing strategy formation with information technology potential.

5. Tables

	Product	Price	Promotion	Place
Threat of new entrants	CRM		CRM	BI
Rivalry among existing firms	ETL SEO	ETL	SEO ETL Cloud Comp. App.	ETL Cloud Comp. App.
Threat of substitute products/services	SEO	SEO		Semantic Web
Bargaining power of suppliers	Data Warehousing	Semantic Web Data Warehousing	Data Warehousing	Data Warehousing
Bargaining power of buyers	CRM	Semantic Web	Semantic Web	

Table 1. Competitive Forces/Marketing Mix Framework

	Product	Price	Promotion	Place
F1 Threat of new entrants	0,5	0	0,5	0,75
F2 Rivalry among existing firms	1	0,25	1	1
F3 Threat of substitute products/services	0,25	0,25	0	0,5
F4 Bargaining power of suppliers	0,5	1	0,25	0,25
F5 Bargaining power of buyers	0,75	0,5	0,5	0
F6* /5	0,6	0,4	0,45	0,5

Table 2. Competitive Forces/Marketing Mix Framework

6. Figures

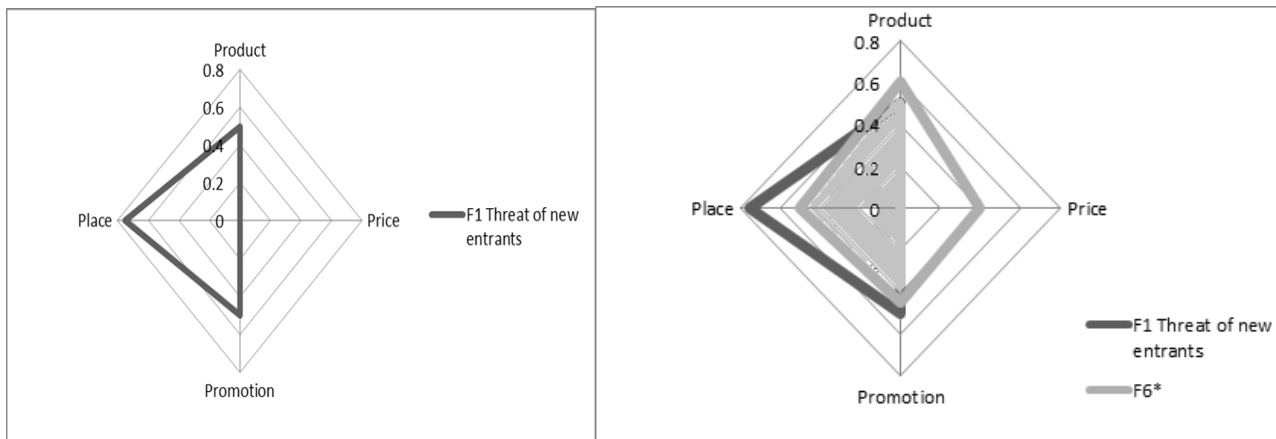


Figure 1. Factor 1: Threat of new entrants

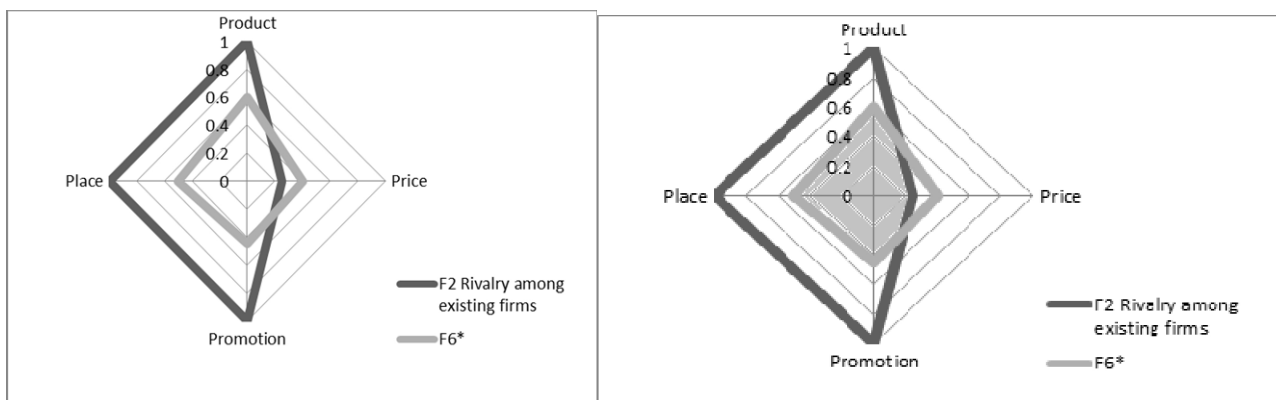


Figure 2. Factor 2: Rivalry among existing firms

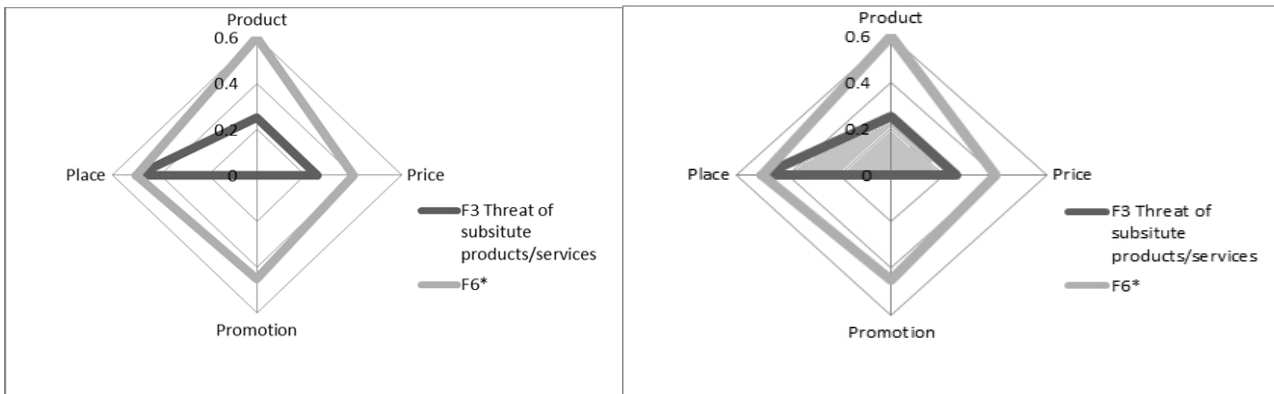


Figure 3. Factor 3: Threat of substitute products/services

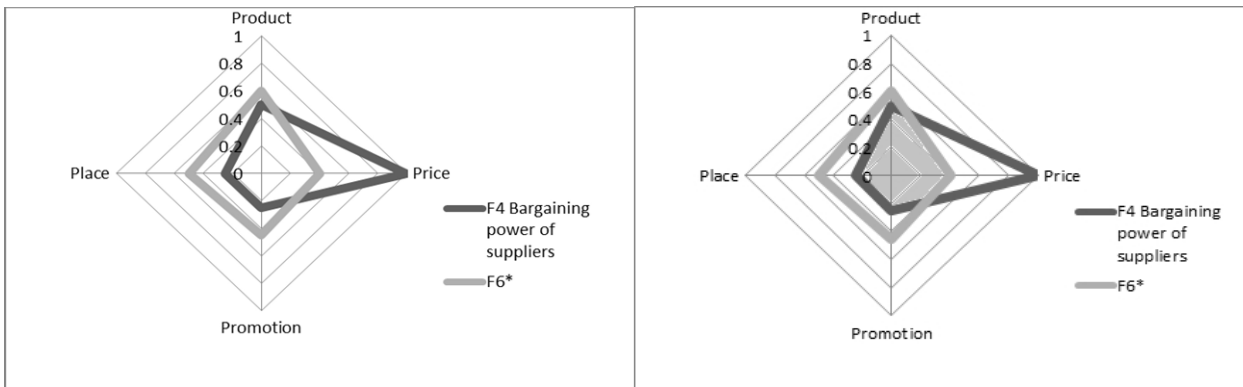


Figure 4. Factor 4: Bargaining power of suppliers

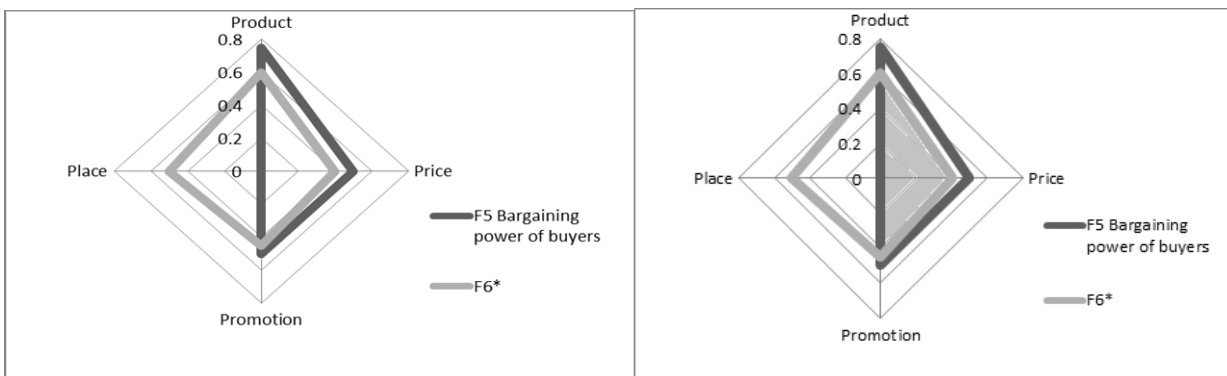


Figure 5. Factor 5: Bargaining power of buyers

7. Conclusion

Understanding the IT application impacts for successful strategy implementation is of interest to both academics and practitioners. It is of significant importance the role of marketing strategy in the business strategy dialogue and business value. Managers should not consider decisions regarding marketing strategy, neglecting the information technology contribution to business value with the information systems applications, decision support systems and expert systems application.

This analysis provides a blueprint to guide future research and facilitate knowledge accumulation and creation concerning information technology impacts over marketing function of the firm.

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Photo 037. Pressing the grapes / Prešanje grožđa