

THE VIEW OF INVESTOR'S ON POTENTIAL OF MARKETING TOOLS FOR IMPLEMENTATION OF MODERN METHODS OF CONSTRUCTION IN SLOVAKIA

Tomáš Mandičák; Annamária Behúnová; Jana Smetanková; Gabriela Hanečáková

*Received: 07 Feb. 2017**Accepted: 02 Mar. 2017***THE VIEW OF INVESTOR'S ON POTENTIAL OF MARKETING TOOLS FOR IMPLEMENTATION OF MODERN METHODS OF CONSTRUCTION IN SLOVAKIA****Tomáš Mandičák**

Technical University of Košice, Faculty of Civil Engineering, Department of Construction Technology and Management, Vysokoškolsk 4, 042 00 Košice, Slovakia, tomas.mandicak@tuke.sk

Annamária Behúnová

Technical University of Košice, Faculty of Manufacturing Technologies with a seat in Prešov, Bayerova 1, 080 01 Prešov, Slovakia, annamaria.behunova@tuke.sk

Jana Smetanková

Technical University of Košice, Faculty of Civil Engineering, Department of Construction Technology and Management, Vysokoškolsk 4, 042 00 Košice, Slovakia, jana.smetankova@tuke.sk

Gabriela Hanečáková

Technical University of Košice, Faculty of Civil Engineering, Department of Construction Technology and Management, Vysokoškolsk 4, 042 00 Košice, Slovakia, gabriela.hanecakova@tuke.sk

Keywords: marketing tools, modern methods of construction, investor's view**Abstract:** This paper focuses on the marketing tools of enterprise, operating in the field of modern methods of construction. One of the way to get enough information about its formation is marketing research. In this case, it was used and focused on one area of this vast complex of decisions, namely on the marketing communication of the company. It is necessary to explain the basic concepts, divisions and methods on the input part. These are then transferred to the general, where the above-mentioned marketing research is conducted using fixed procedure steps. The main aim of research is analysing of marketing tool and set model of marketing tool from a point of potential investors in this field. Modern methods of construction present new trends in civil engineering industry and its exploitation is denending on good marketing strategy and communication tools. Results obtained through its in-depth analysis are aimed at designing new recommendations for companies in the field and their communication with the public as well as selecting appropriate promotional advertising tools. Tha main aim of the research is set to model of effective marketing and communication tols for implemenatation of modern methods of construction in civivl engineering industry in Slovakia.**1 Introduction**

The success of enterprise is largely related with the status and perception of enterprise in society. At present, marketing is one of the most important tasks that serves to attract and retain customers. Keeping and getting customers is only possible if the needs and wishes of customers are known and the requirements are met better than the competition. Every enterprise has set goals that it wants to achieve. They must face negative impacts and threats to achieve the desired goals. The way to reach the set goals of the business and to be able to meet the needs of customers, that is to say, the reconciliation of all these areas, solves the marketing strategy. Building a suitable strategy is accompanied by a range of activities and decisions that deal with business environment issues, products, pricing, distribution channels, communications, and many other parameters. On the basis of these facts, it provides an insight into marketing communication that analyzes and suggests communications between the public and company.

2 Theoretical background and problem statement

The concept of marketing has a number of definitions. Individual authors define marketing as follows. The American Marketing Association (AMA) defines marketing as an activity, set of instructions and processes for creating, communicating, delivering and exchanging offers that have value for customers, clients, partners, and society in generally [1]. According to Philip Kotler and Kevin Lane Keller, marketing is a social process through which individuals and groups acquire what they need and want through the creation, supply and free exchange of products and services with others [2].

Other authors, for example Kaňovská defined marketing as a thought process that puts the winner in first place [3]. It is completed by the organization of the enterprises and the activities it performs, in such a way that the needs of customers are identified and satisfied effectively.

THE VIEW OF INVESTOR'S ON POTENTIAL OF MARKETING TOOLS FOR IMPLEMENTATION OF MODERN METHODS OF CONSTRUCTION IN SLOVAKIA

Tomáš Mandičák; Annamária Behúnová; Jana Smetanková; Gabriela Hanečáková

A marketing mix is a well-known set of marketing tools that serve to achieve the specified marketing goals of an enterprise on the selected market. Frequently used for the sake of brevity is also the term "4.P". E. Jerome McCarthy, designed the marketing mix tools as follows [4]:

- product,
- price,
- place and
- promotion.

It is possible to see in this context also the addition of other tools, which together with the above create "5.P" - 4.P and people, or even "7.P" - 5.P and physical evidence and processes. For the purposes of analysis in the article we are based on the basic division into 4P [4], [5].

The product needs to focus primarily on the quality of the product or service, its strengths or weaknesses. In the market research it is necessary to ascertain whether there is interest in products or services and whether there are potential customers. If there is a lot of competition on the market, it is necessary to distinguish it from it. Marketing is important to know the market perfectly, so a thorough analysis is needed [6].

The price is an important factor in the market. The goal is to analyze the potential of the customer and set the price as expected. An important factor influencing sales is also the point of sale itself and time. On a right-handed occasion, it is possible to increase sales several times [6].

The last part of the 4P basic division is promotion. Properly selected product or service presentation can target potential customers and rapidly increase product sales, services. According to the target group, it is necessary to choose the right communication, sales promotion, advertising, public opinion and personal sales. The main selling tools are television, newspapers, magazines, videos, exhibitions, fairs, flyers, city public transport, apps, blogs, promotional materials, promoters, billboards, posters, radio, internet, social networks and mailboxes [6].

Modern methods of construction are applied in the construction industry as a type of innovative constructional methods that are preferred over traditional constructional methods. They offer a number of advantages such as cost, time, error, better life cycle prognosis and lower environmental impacts [7].

Therefore, modern methods of construction can be divided into [8], [9]:

a) off-site techniques

- o volumetric (bulk) constructions,
- o panel construction systems,
- o hybrid constructions,
- o subassemblies and components

b) on-site techniques

- o wooden frames,
- o isolated lost formwork,
- o thin masonry bond,

- o lamellar frame constructions,
- o tunnel forms,

- o filigree structures.

All of these methods must be supported by effective marketing strategy and tools, for example social medias, printing materials and all others. Question of this field is follow: What marketing tools are effective for implementation of Modern Methods of Construction (MMC).

3 Methodology**3.1 Research methods and data collection**

The establishment of research in construction industry was carried out in a logical sequence. Based on a thorough analysis of theoretical approaches it has been set basic research problem of research in construction industry and fundamental research questions raised. Subsequently it was Formulated main aim of the research, which is supported by partial objectives. The methodology of the work and methods of research, we define the research methodology of processing. We have identified a sample clarify the methods of data collection and data processing method.

In research in construction industry were exploited empirical research methods research. In the empirical methods have been used on a larger scale observation, questionnaire surveys, interviews and representatives of enterprises. From theoretical methods it was most used method of abstraction, analysis, synthesis methods of induction to deduction. It was extensively along with application and even the method of comparison.

Data collection was conducted by the questionnaire. Questionnaire was designed and distributed in electronic and print form. Questionnaire was produced by online platform FORMEES in electronic form and print form. The research sample was approached by e-mail and personal with the request to participate in the research. Total were interviewed 413 of respondents.

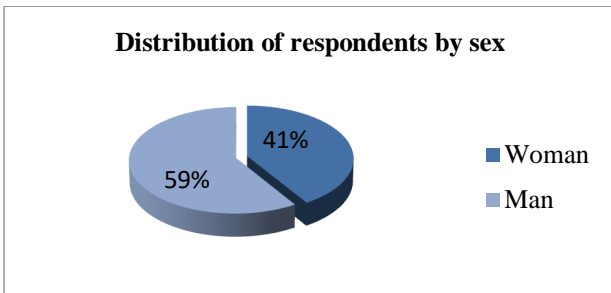
3.2 Research sample

Breakdown of research sample is very important in terms of correlation between the studied variables. Due to the content page of research was defined basic specification of the statistical of research sample.

The survey was attended by 413 respondents with a percentage of 41% of women and 59% of men (Graph 1).

THE VIEW OF INVESTOR'S ON POTENTIAL OF MARKETING TOOLS FOR IMPLEMENTATION OF MODERN METHODS OF CONSTRUCTION IN SLOVAKIA

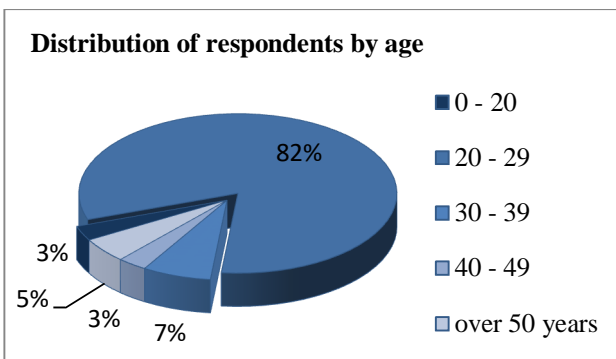
Tomáš Mandičák; Annamária Behúnová; Jana Smetanková; Gabriela Hanečáková



Graph 1 Distribution of respondents by sex

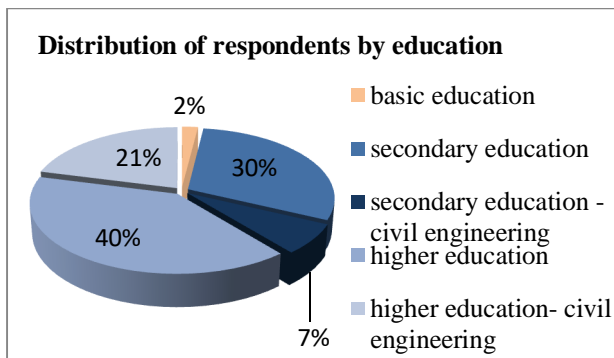
The aim of the research was to address respondents of different age groups. Of the interviewed respondents, the largest number of interviewed age groups was 20-29, namely 82% of the respondents. Other age categories were represented by the following percentages (Graph 2):

- in age 20-29 years – 3%,
- in age 30-39 years – 7%,
- in age 40-49 years – 3%,
- and in age over 50 years – 5%.



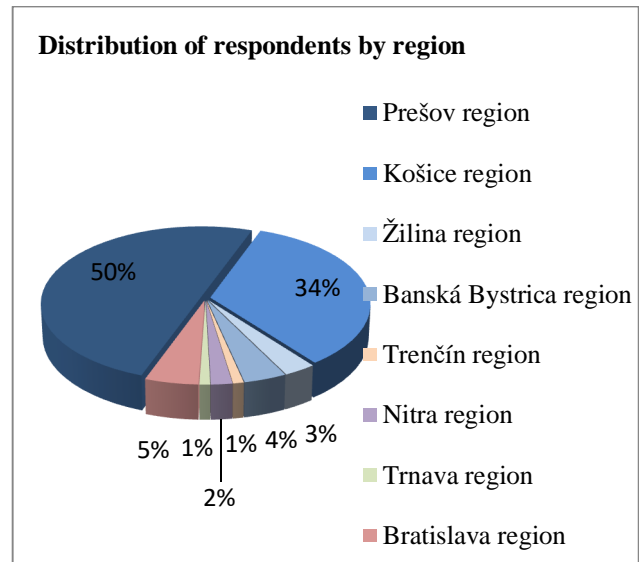
Graph 2 Distribution of respondents by age

Respondents addressed reached above all university education (up to 41%) and higher education in the field of construction 21% of respondents surveyed. Respondents with basic education (2%), secondary education (30%) and secondary education in construction (7%) participated in the survey, see Graph 3.



Graph 3 Distribution of respondents by education

From Graph 4 it can be seen that all the territorial categories of the Slovak Republic were represented on individual questions. Of the total number of respondents, the largest share (50%) of Prešov region was followed by Košice region (34%), Bratislava region (5%), Banská Bystrica region (4%), Žilina region (3%) And Trenčín and Trnava after (1%).



Graph 4 Distribution of respondents by region

4 Research results

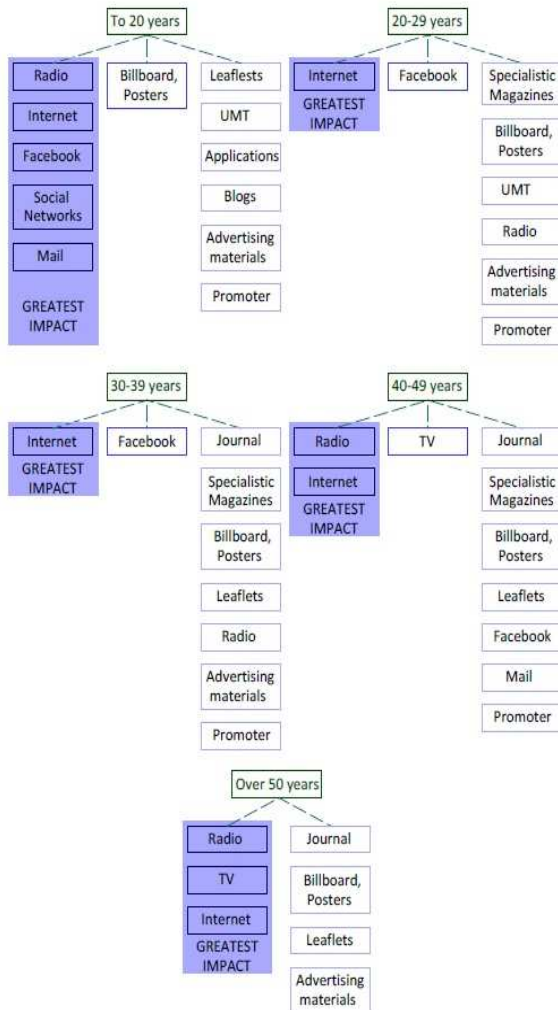
The marketing department of the enterprise determines the marketing strategy, that is the form and amount of advertising it wants to raise awareness of the target group and thus minimize its costs to maximize profits. The result of the survey has shown that media perceptions and their ability to engage with different groups vary considerably depending on the age group of respondents. Based on these facts, it is necessary for an enterprise to define a target group and then choose appropriate promotional media. Age is an important input as a group of people at a certain age range manifests itself in most of the same social features, interests, and specific requirements. When choosing an ad, you need to take these facts into consideration and choose the appropriate way to advertise. Individual age categories favor the following promotional tools. From Figure 1, the most effective ways of promoting in different age categories are:

- at the age of 20, *radio, internet, facebook, social networks* and *mail* are the most accessible media,
- at the age of 20-29 and 30-39, the *internet* is the most accessible medium,
- aged 40-49 are the most popular *radio* and *internet media*

THE VIEW OF INVESTOR'S ON POTENTIAL OF MARKETING TOOLS FOR IMPLEMENTATION OF MODERN METHODS OF CONSTRUCTION IN SLOVAKIA

Tomáš Mandičák; Annamária Behúnová; Jana Smetanková; Gabriela Hanečáková

- and over the age of 50 are the optimal tool for promoting radio, tv and the internet.



*UMT- Urban Mass Transportation

Figure 1 Scheme of effective marketing tools broken down by age group

Based on the research, the so-called “Model of marketing tools”. The model is broken down by individual target groups, specifically by age. The model details the tools that have a greater impact on the target audience. This view is according potential investors.

Due to the fact that interest groups are 20-29 and 30-39 years of age for the companies concerned, the following Tables 1 and 2 point to preferred marketing tools by these target groups. Selection of these group is not random. According previously researches, these groups of people are the most probably for buy or achieving of houses. There are really potancial groups.

Table 1 Ranking of marketing tools in selected research groups (age group 20 -29 years)

REPLY	MEDIA SORTED ACCORDING TO THE APPLICABLE USABILITY
1	Tabloid magazine, videos
2	Newspaper, specialistic magazines, leaflets, TV, social networks, applications, blogs, mailboxes, exhibitions/fairs
3	Specialistic magazines, billboards/posters, UMT, radio, advertising materials, promoter
4	Facebook
5	Internet

UMT- Urban Mass Transportation

Table 1 shows that respondents aged 20-29 have the largest influence tabloid magazine and videos. Based on results from this research is necessary use these tools for better implementation fo modern methods of construction.

Table 2 Ranking of marketing tools in selected research groups (age group 30 -39 years)

REPLY	MEDIA SORTED ACCORDING TO THE APPLICABLE USABILITY
1	Applications, videos
2	Tabloid Magazine, UMT, TV, social networks, blogs, mailboxes, exhibitions/fairs
3	Newspaper, specialistic magazines, billboards/posters, leaflets, radio, advertising materials, promoter
4	Facebook
5	Internet

UMT- Urban Mass Transportation

From Table 2 shows that respondents aged 30-39 have the greatest impact on applications and videos. It is interesting knowledge achieved by research. Research shown, this group of respondents are finding a lot of information and they want to see some documentary and relevant resources.

Conclusion

The basic philosophy of the company is customer satisfaction. Each enterprise has certain goals that it wants to achieve by doing business, linking and aligning the spectrum of successive decisions and activities that we call the marketing strategy in a comprehensive way.

THE VIEW OF INVESTOR'S ON POTENTIAL OF MARKETING TOOLS FOR IMPLEMENTATION OF MODERN METHODS OF CONSTRUCTION IN SLOVAKIA

Tomáš Mandičák; Annamária Behúnová; Jana Smetanková; Gabriela Hanečáková

The marketing strategy decides on issues related to market or internal market, products, pricing, distribution, or marketing communications, and others.

The conducted marketing research brought a picture of public opinion, modern findings and recommendations on modern methods of construction and on the tools of their promotion and advertising. The proposed model further defines the marketing tools that are key and relevant to the promotion of products in the given area from the point of view of customers, that is to say potential investors, and pointed to the low-efficient promotional tools.

Final model of effective marketing tools for better implementation of modern methods of construction is possible use in conditions of Slovak civil engineering industry. It must be said, it's a general model based on selected research sample. Construction market has a lot of specific conditions and factors. Probably, these are interesting marketing tools according this group of respondents. Construction companies should be thing about other factors, that impact on better implementation a offer of modern methods of construction.

Acknowledgement

"The paper presented a partial research result of project VEGA - 1/0677/14 "Research of construction efficiency improvement through MMC technologies".

"The paper presents a partial research results of project VEGA 1/0828/17 "Research and application of knowledge-based systems for modeling cost and economic parameters in Building Information Modeling".

References

- [1] American Marketing Association: Definition of Marketing [online]. [cit. 2017-06-09]. Available on: <<https://www.ama.org/AboutAMA/Pages/Definition-of-Marketing.aspx>>.
- [2] KOTLER, PHILIP - KELLER, KEVIN LANE. Marketing management. 14th. edition. New Jersey: Prentice Hall, 2012. ISBN 978-0-13-210292-6.
- [3] KAŇOVSKÁ, LUCIE. Základy Marketingu. 1. vydání. Brno: Akademické nakladatelství CERM, 2009. ISBN 978-80-214-3838-5.
- [4] Management mania: Marketingový mix 4P [online]. [cit. 2017-06-09]. Available on: <<https://managementmania.com/sk/marketingovy-mix-4p-marketing-mix-4p>>.
- [5] NESSIM, HANA - DODGE, H. ROBERT: Pricing: Zásady a postupy tvorby cen. Praha: Management Press, 1997. ISBN 80-85943-34-4.
- [6] Nástroje marketingu. [online]. [cit. 2017-06-09]. Available on: <<http://www.neri.cz/cs/marketingova-poradna-on-line-a-zdarma/nastroje-marketingu>>
- [7] ROHANI, MOHAMMAD; FAN, MIZI; YU, CHUCK: Advanced Visualization (Simulated) Techniques for Modern Construction Management. [Online] Indoor

and Built Environment. [cit. 2017-06-09]. Available on: <https://www.researchgate.net/profile/Mohammad_Rohani/publication/263274970_Advanced_visualization_and_simulation_techniques_for_modern_construction_management/links/0f31753a57a84639fa000000.pdf>

- [8] A guide to modern methods of construction. [Online] NHBC Foundation [cit. 2017-06-09] . Available on: <<http://www.trentglobal.com/docs/A%20Guide%20to%20Modern%20Methods%20of%20Construction.pdf>>
- [9] DOHERTY, T.: Modern Methods of Construction (MMC) & Eco-Building. [Online] Lenders' Housebuilding Conference. [cit. 2017-06-09] . Available on: <<http://www.buildstore.co.uk/lenderconference/site-files/pdfs/presentations/Tim-Doherty-MMC-&-Eco-Building.pdf>>

Review process

Single-blind peer reviewed process by two reviewers.