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Original scientific paper

THE ABILITY OF THE BOTTLED WATER SECTOR TO MEET THE NEEDS OF CONSUMERS IN BOSNIA AND HERZEGOVINA

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ABSTRACT
Bottled water sector in B&H becomes more significant economically with media pressure and expectations. This paper aims to determine factors important for the consumers while choosing bottled water products and in that way try to, by comparing the results to the sectors abilities, determine sector's ability to meet the consumer's needs. Small research among (97) respondents was carried out, and the results indicate that the sector is unable to meet the needs of the customers, since the trade balance is negative and domestic market share low. Customer profile suggests almost only young consumers, which indicates that for the stronger results further research is needed.

Key words: bottled water sector, B&H, consumer needs.

INTRODUCTION
Food companies in Bosnia and Herzegovina (B&H) are under a great deal of pressure due to highly competitive market that came because of market liberalization. Market liberalization should create innovative environment and stimulate growth and development of the companies (Nikolić *et al*., 2011) and improve efficiency of resource utilization as well as strengthen existing, and create new, competing capabilities of the companies (Uzunović, 2010). Under such conditions, food companies in B&H have demonstrated and maintained certain competitive advantages (Uzunović, 2010; Nikolić *et al*., 2011; Uzunović, 2018) at the domestic and international markets. Same authors indicate that shown competitive advantages are mainly based on product price. In parallel, some researchers, (Nikolić *et al*., 2017; Uzunović, 2018) have shown that the B&H food companies are working on improving and strenghtening qualitative characteristics of the products by implementing modern business practices, such as total quality management and market orientation. Same authors conclude that the level of implementation of these modern practices is critically low and it is crucial for improvement of qualitative product characteristics.

Bottled water sector companies share the same faith as other food companies in B&H, but with much more pressure and expectations than the other food sector companies do. The reason for greater expectations and pressure put onto bottled water sector companies is the public opinion created under media influence, rather than fact based research. In media, sector of bottled water has been proclaimed as a potential sector for development, since B&H is a "country rich in drinking water". As country rich in water resources, together with the growth of water and bottled water products consumption as a trend, can make an important contribution to the food sector development, as well as to overall economic development of the country. Uzunović (2018) is trying to describe bottled water sector in B&H, as well as to compare it to global water bottled sector (Table 1). Following his findings, bottled water sector in B&H can be described as the follower of the global trends, where domestic companies are only a followers of the global trends, and where innovation is limited only to multinational companies (present at the domestic market) or to a bigger domestic companies (usually only imitating innovation of some global company).

Table 1. Global and B&H bottled water sector characteristics

Sector characteristic	Global sector	B&H sector
High production costs	Production in this sector is characterized with high production costs, capital investments in buildings, production lines, specific equipment and distributive infrastructure. In essence, this production is capitally intensive and according to Bailey (2015) the lowest production costs have companies that owe and control most of the value chain activities. Rani *et al*. (2012) also emphasize the energy consumption rates as an important share of the total production costs in the sector.	Not so different from the global bottled water sector. It is important to emphasize that companies usually do not owe nor control value chain activities, which are significantly underdeveloped in comparison to the global sector. B&H bottled water sector is also characterized as one with low degree of production utilization, the degree of production utilization is around 50% in average.
Intense competition	High number of companies offering differentiated products mostly comprised of big multinational companies, which, share the biggest market shares.	Small-scale companies with small market shares with a great number of companies. Small-scaled companies that use strategies of copying big, global companies. Around 63% of the domestic market share belongs to domestic companies. Competing focus of the companies is set to less demanding CEFTA markets.
High marketing costs and brand loyalty	Bailey (2015) states that the marketing activities are crucial for success in this sector. Marketing activities are sophisticated and focused on creating new markets and creation of added value for the customer. These marketing activities require use of social networks and use of IT in communicating with customers. Social responsibility, “healthy way of life”, resources protection (water) and creative packaging as well as energy efficiency, are the characteristics of these marketing activities.	Huge difference in marketing activities in B&H and global sector. Domestic companies fail to include social responsibility, PR and other “free” marketing activities. Most of the companies have functional web-presentation and 75% of the companies use social networks for marketing activities (Facebook, Twitter, and YouTube).
Smart consumer	Fry and Kim (2015) as well as Rani *et al.* (2012) indicate that the “smart consumer” is creating global trends by choosing more healthy options, which are flavored water options (“enhanced water products”), according to Rani *et al*. (2012). Changing trends and consumer preferences make this sector highly dynamic and challenging.	Trade deficit in bottled water indicate that the consumer preferences are changing, as well that companies are unable to follow dynamics of changing trends. B&H companies are very “slow” in creating adequate response to market trend changes.
Innovative pressure	High number of competitors and a huge number of substitute products force companies to innovate constantly. Competitive advantage is usually gained through innovations.	Ability to innovate is very low; innovations are mostly based on imitations.

Source: Compiled from Deichert *et al*. (2006), Rani *et al*. (2012), Bailey (2015), Fry and Kim (2015), Uzunović (2018)

Such findings may indicate that sector has no ability to follow the fast-changing demands of the domestic consumers. On the other hand, it can be explained as inability of the companies to innovate or to create added value for the customer – thus indicating company's inability to understand the customer needs. However, the sector deserver further research of its root problems.

Besides the potential and opportunities, the huge trade deficit in this sector implies the necessity for further research in this area and shows the weakness of companies in the food sector, especially in the subsector of water and bottled water. In addition, the water and bottled water sector, more than two decades have the highest and most stable growth of import in overall trade which also points out a weakness in this sector. Bearing in mind that this sector operates in a highly dynamic market that is characterized by rapid innovations based on consumer preferences, the analysis that focuses on this sector can serve as a basis for understanding the problem and giving recommendations for strengthening the capabilities of companies in this sector. In this regard, an important aspect is the analysis of customer behavior that is carried out with the aim of identifying the optimal ratio of quality and price that the buyer is willing to pay. Completing this is a complex task because the definition of food quality is also complex, and the customer's daily wishes have a complex and sometimes contradictory character. Numerous studies try to analyze factors affecting consumer purchasing habits, but also their interaction, shared conclusion is that consumer behavior is not influenced only by one decision, but by a series of interrelated decisions. Identification of those factors is not important for the improvement and re-designing of food products, but also in a process of new product development, strategic planning, marketing strategies, designing food and health policies, etc. In addition, presence of new type of consumers "Generation Z", often described as: with high interest in new technologies, an insistence on ease of use, a desire to feel safe, and a desire to temporarily escape the realities they face, with higher expectations, no brand loyalty and care more about the experience, highlight importance of analyzing their food motives. In view of the above, the aim of this pilot study is to point out future research of the water and bottled water sector, and it has a specific aim of pointing which factors should be investigated in the future, and which of the factors are correlated mostly with the buying of the bottled water in Bosnia and Herzegovina. Following the literature, availability, brand, marketing, price and packaging are used as factors tied to the buying of the bottled water in B&H. Since the "proclaimed" potential of the water and bottled water sector of B&H, these factors have been compared to imported bottled water products.

MATERIAL AND METHODS

Following the aim of the research, small and simple research methodology was devised, which uses questionnaire with simple questions on a small scale sample to determine future research questions and create a "silluette" of the bigger picture in the water and bottled water consumer preferences in B&H. Results of this pilot study could provide important input for future research, that can deal with questions such a methodological framework, theoretical concepts, sample size, geographical distribution etc., and could also provide valuable information for companies as well as to policymakers. Primary data for this study were collected via an online questionnaire (LimeSurey), specifically designed for purpose of this study and based on previous research that dealt with consumer behavior, attitude, motives etc. The questionnaire consists of questions (16 questions) regarding the socio-demographic characteristics, frequency of buying, importance of food product origin, and importance of availability, brand, marketing, price and packaging on buying habits. Questions can be seen in the Results section tables. All questions regarding attitudes towards factors use five-point Likert scale, in accordance to what the question is trying to answer, i.e. importance uses five-point Likert scale for importance etc. Questionnaire was distributed during the December 2017 and January 2018, with the sample size of 97, covering the territory of Bosnia and Herzegovina. SPSS v22 was used to determine simple frequency tables and non-parametric correlations between the factors and the profile questions as well as the question determining does the consumer buy and consume bottled water.

RESULTS AND DISCUSSION

Data shown in Table 2 show that almost 63.0% of the sample are female respondents (62.9%), and the most of the sample, 92.8% belongs to age groups from 18-25 years (66.0%) and 25-35 years (26.8%). Considering the social status, 67.0% are students and 16.5% employed, while minor percentages represent the pupils (6.2%), unemployed (9.3%) or retired (1.0%) people. Majority of the sample respondents represent first three income groups, form 0-150€ (34.0%), from 150-300€ (16.5%), and from 300-600€ (29.9%). Almost 17.0% of the respondents chose not to answer the question regarding the monthly income.

Table 2. Sample profile distribution

Profile characteristics	Groups	Percentage (%)
Gender	Male	35.1
	Female	64.9
Age group	Under 18	3.1
	18 to 25	66.0
	25 to 35	26.8
	35 to 45	3.1
	Over 45	1.0
Social status	Pupil	6.2
	Student	67.0
	Employed	16.5
	Unemployed	9.3
	Retired	1.0
Monthly income	0 to 150 €	34.0
	150 to 300 €	16.5
	300 to 600 €	29.9
	More than 600 €	0.0
	I choose not to answer this question	19.6

Source: Calculation based on survey data

Results of the research indicate that the average bottled water consumer can be described as a female (most likely) between 18 and 35 years, student with lower than the average monthly incomes, considering B&H average income of around 400 €. Consumer profile indicates younger consumers, and considering their income group and social status, most likely to be affected by price and packaging, as a marketing factors responsible for company's success.

Table 3 - Survey answers distribution

Question	Answers	Percentage (%)
Did you buy bottled water for drinking purposes in the last year?	Yes	90.7
	No	9.3
How often do you buy bottled drinking water?	Never	23.9
	Very rarely	46.6
	Rarely	20.5
	Often	9.1
	Very often	0.0
Is the origin (domestic versus imported) important to you?	Not important at all	83.0
	Mostly not important	17.0
	Neither	0.0
	Mostly important	0.0
	Very important	0.0
How important availability of preferred brand is to you?	Not important at all	3.4
	Mostly not important	1.1
	Neither	13.6
	Mostly important	20.5
	Very important	61.4
How important availability of domestic products is to you?	Not important at all	0.0
	Mostly not important	4.7
	Neither	27.9
	Mostly important	34.9
	Very important	32.6
How important packaging is to you?	Not important at all	6.8
	Mostly not important	8.0
	Neither	21.6
	Mostly important	35.2
	Very important	28.4
Grade the packaging of domestic products?	Bad	2.3
	Not bad	11.4
	It is OK	31.8
	Good	39.8
	Great	14.8
How important price is to you?	Not important at all	9.2
	Mostly not important	6.9
	Neither	27.6
	Mostly important	21.8
	Very important	34.5
Compare domestic products price versus imported products price?	Imported products have significantly favorable price	2.3
	Imported products have favorable price	5.7
	Same prices	31.8
	Domestic products have favorable price	30.7
	Domestic products have significantly favorable price	29.5
How marketing (commercials) is influencing product choice?	No influence at all	11.4
	Mostly no influence	14.8
	Nor it influences nor it does not	17.0
	Mostly influences	26.1
	It does influence greatly	30.7
How important brand is to buying bottled water?	Not important at all	9.1
	Mostly not important	10.2
	Neither	26.1
	Mostly important	30.7
	Very important	23.9

Source: Calculation based on survey data

Data shown in Table 3 show that more than 90.0% of the respondents says it is buying bottled water for drinking (90.7%) and that the origin (domestic or imported) of the bottled products is of no importance to them – 75.3% of the respondents said the origin is not important to them while following 15.0% of the respondents said that the origin is mostly not important to them. As the factors come in place, availability is graded important (18.6%) and very important (55.7%) on more than 74.0% answers; packaging also comes important (19.6%) and very important (32.0%) to the majority of the respondents (51.6%); price comes as nor important nor important (24.7%), important (19.6%) and important (30.9%) for the majority of the sample respondents (75.2%); marketing comes as nor important nor important (15.5%), important (23.7%) and important (27.8%) for the majority of the respondents (67.0%), and brand is nor important nor important (23.7), important (27.8%) and important (21.6%) for the majority of the sample respondents (73.1%).

Data presented in Table 3 indicates that the origin of bottled water products is not important for the consumers, and that the packaging, availability, price and brand are more important factors for the consumers' choice. These characteristics should be added to the consumer profile, making it a lot easier to understand for the companies and managers. These results indicate possible solution for the trade deficit of the bottled water sector. By improving domestic products in the availability, price, packaging and branding aspects, judging by the needs of the respondents in this research, market share of domestic companies should be improved. In other words, results are suggesting "a direction where to look" for the sector's improvement strategies and policies. Improvements in these factors, on a sector level, require systematic transformations, which require cooperation between private and public sector, thus strategies and policies. The correlation coefficients between factors, shown in Table 4, show that marketing is significantly and positively correlated with price and packaging, thus showing that the market communication is crucial to include characteristic such as packaging details and price for the products of bottled water. This also makes factors of price and packaging into a more specific definition of customer's needs – in other words, it defines two most important customer factors, which determine the choice of bottled water products.

Table 4. Non-parametric correlation coefficients

Factor 1	Correlation relationship	Factor 2
Social status	+	Age group
Which brand do you prefer?	-	How often do you buy bottled drinking water?
Compare domestic products price versus imported products price?	-	Is the origin (domestic versus imported) important to you?
	-	Which brand do you prefer?
	+	Grade the packaging of domestic products?
How marketing (commercials) is influencing product choice?	+	How important packaging is to you?
	+	How important price is to you?
How important brand is to buying bottled water?	+	Gender
	+	How important packaging is to you?
	+	How important price is to you?
	+	How marketing (commercials) is influencing product choice?

Source: Calculation based on survey data; Legend: + indicates statistically significant positive correlation; - indicates statistically significant negative correlation.

Combining all results shown, one may argue that B&H sector of bottled water products is able or unable to meet the needs of its customers?, but these results show that the sector has a few disadvantages or “inabilities” compared to the international market present at the domestic market of B&H. Judging by the interviewed consumers, international competitors are more successful in price and packaging design than the domestic companies. It is a reasonable assumption, since the global sector of bottled water products is characterized with “innovative pressure” and if flavored products are excluded, almost all innovations of the sector are in the packaging. This can indicate that the marketing strategies need to be adapted on a company level. Combined with the commercials importance for the customers, all being said, leads to improvement of the communication on a relation between consumer – company leads to the improvement of a sector, or in other words in sector’s inability to meet the needs of consumers.

CONCLUSIONS

These results are implication for further research, showing that commercials, hereby marketing, are the channel to get through consumers, since consumers are mostly young students, which as important take price, as a part of their social status, and a packaging, probably as a trend to follow. Since the price and packaging are important to the majority of the respondents, it is possible to conclude that this is the reason for not giving importance to the origin of the bottled water. Conclusion as such should be taken carefully, since the sample size is small and the methodology is simple and takes out most of the “unexplained” factors. However, these results are great as a starting point for the future research in the sector of the bottled water. Analyzing and identifying consumer behavior, motives, attitudes should become priority for the sector of the bottled water, which is also the main conclusion of this research. It should provide necessary information to the B&H companies in the sector necessary to improve competitive position on domestic and international market. Improvement in communication on a relation between companies and consumers should improve better consumer understanding, and that should lead to the creation of products that meet the needs of the consumers. Researches of this type clearly point out the problems that consumers face and besides strong marketing campaigns such as "buying domestic" business performances, further growth and development of companies in the bottled water sector are questionable.

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