A CONTEMPORARY APPROACH FOR STRATEGIC MANAGEMENT: THE RESEARCH IN BOTTLED WATER INDUSTRY

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ABSTRACT

Drinking water is one of the most important part of healthy living. Accessing safe drinking-water is essential for health and it is a basic human right. One of the most consumed drinks in the world is bottled drinking water. Bottled water industry is also an important part of the soft drinks market in Turkey. In this study, the structure of bottled water industry and its properties are discussed. Pestle and Swot analysis are used to examine the sector. Main objectives of this research are; determining the outstanding trends, stating possible implications and the factors affected and providing better insight on opportunities for entrepreneurs about the bottled water industry in Turkey. According to the results, drinking water consumption habits are changing with the influence of factors as contamination of water resources, developing health-conscious and increasing income level. In terms of economic factors, packaging and transportation constitute the main cost elements. There is a great opportunity to pack and market for bottled water. Competition is high and consumer sensitivity is important in marketing stage. Strategies should be created according to competitor status, demand forecast and consumer habits. Valuable drinking water resources have to be protected for future generations.

Keywords: Bottled Water Industry, Pestle Analysis, Swot Analysis, Turkey Water Industry

INTRODUCTION

Water, which is an indispensable part of the living organisms in the ecosystem, is very valuable because it cannot be substituted. Water is considered to be the most important factor behind existence of life on earth. Human beings have a fundamental requirement for water, needing 1.8–2.0 litres/day to maintain good health under normal circumstances (Senior and Dege, 2005). World Water Development Report (2019) states that safe drinking water and sanitation are recognized as basic human rights, as they are indispensable to sustaining healthy livelihoods and fundamental in maintaining the dignity of all human beings. The demand for water is continuous and its importance is constantly increasing due to rapid population growth.

Access to water, which has an increasing strategic importance, is a natural and legal right for all living things. Besides, accessed drinking water resources should be reliable and clean and should have certain standards (Parag and Opfer 2011).

United Nations World Water Development Report (2015) has indicated that, water is the essential primary natural resource upon which nearly all social and economic activities and ecosystem functions depend. Sustainable development requires that we properly manage our freshwater resources and equitably share its benefits.

Despite the increasing world population, the water resources needed for the continuity of life are also decreasing rapidly. There are studies stating that there may be wars in order to possess water resources in the future. For example, an unclassified version of a U.S. National Intelligence Council report on Global Water Security was released which stated that, without more effective water resources management, between now and 2040, worldwide fresh water availability will not keep up with demand (National Intelligence Council, 2012). The report stated that “Water problems will hinder the ability of key countries to produce food and generate energy, posing a risk to global food markets and hobbling...
economic growth,” and concludes, “As a result of demographic and economic development pressures, North Africa, the Middle East, and South Asia will face major challenges coping with water problems.” (Kreamer, 2012).

Individuals prefer bottled/packaged water, tap water, artesian water and purified water for drinking purposes. There are differences between the two in view of the source of water. Tap water is often surface water (lakes, rivers, etc.) which may be subject to contamination. Most bottled water originates from protected underground sources. The distribution systems for tap and bottled water are second important difference. While tap water distribution often relies on many kilometres of antiquated piping, bottled water products are produced in food processing plants and packaged in clean, sealed containers (Anonymous, 2019a).

Starting from this point of view, the main objectives of this research are;

✓ To determine the outstanding trends of bottled water industry,
✓ To state possible implications and the factors effected on the bottled water industry,
✓ Provide better insight on opportunities for entrepreneurs about the bottled water industry in Turkey.

METHODOLOGY

In this research, it has been aimed to provide a better understanding of analysing and monitoring the macro-environmental factors that may have a profound impact on the bottled water industry performance. PESTEL Analysis is especially useful when starting a new business or entering a foreign market. It is often used in collaboration with other analytical business tools such as the SWOT analysis to give a clear understanding of a situation and related internal and external factors. SWOT analysis is one of many tools that can be used in an organization’s strategic planning process. Other tools that are commonly used for strategy analysis are Five Forces Analysis, and 3C(Company–Customer–Competitor) analysis (Akiyoshi & Komoda, 2005).

This research is a library research-based paper. As a secondary data source in the study, it has been benefited from the reports and statistics published by EFBW (European Federation of Bottled Water), International Council of Bottled Water Association Republic of Turkey Ministry of Agriculture and Forestry, Ministry of Health, Turkish Statistical Institute, The association in Turkey for Bottled Water (SUDER). Besides, it has also been made use of articles, projects and reports related with the subject published at home and abroad before.

As such, it is important that the view on the market and industry for Bottled Water in Turkey solely relies on the possible data obtained from secondary research method. Therefore, this research acts as a preliminary study into understanding further about the fast-growing industry.

OVERVIEW OF BOTTLED WATER SECTOR

Bottled Water Sector in the World

According to FAO, 1.4 billion people corresponding to approximately 20% of the world's population, lack adequate drinking water and 2.3 billion people cannot reach healthy water. Some estimates show that more than 3 billion people will face water shortages by the year 2025. The ratio of water scarcity and water stress population to the world population is estimated to increase by 34% and 15% respectively in 2025 (Anonymous 2008b).

Bottled water production in the world began as a medical product in the first stage. Due to the water bottled from sources, it is thought to be the healing power for treatment purposes. Bottled water was found in the spa centres until the middle of the 19th century and was consumed only by the elite. It is quite new for the public to consume it (Foote, 2011). The bottled water sector, pioneered by Europeans, is now in a rapid development process and its consumption tendency is increasing. Asia (China and Japan), Europe and North America are the largest water markets in the world. (Karakuş et al., 2016).

Amongst the early sellers of bottled water, there are names that are still known today: Evian, San Pellegrino, Perrier, and Vittel, among others (Parag and Opher 2011). Among the giant companies
operating in the field of water services management on a global scale, the two French companies holding the majority of the market are Suez and Vivendi (Dane, 2009). Also Thames Water, Ajegroup SA CG Roxane, LLC, Coca-Cola, Danone, Fonti Di Vinadio S.P.A., Hassia Waters International GmbH can be added (Anonymous, 2019c).

Bottled water consumption varies considerably among countries. Main reasons of increasing the consumption of bottled water worldwide are; population growth, the migration from rural to urban areas, precision to unpleasant tastes and smell from municipal water supplies regarded as safer and healthier than tap water, increased demand for spring water, the rise in income and education level, at a certain level of increment awareness of healthy living, changes in consumers’ drinking water consumption habits such as not preferring of carbonated beverages, as a result of increased social and economic activity, need to carry water nearby. According to Warburton et al. (1992) there is a common belief that natural (spring) waters have beneficial medicinal and therapeutic effects. Bottled water has been rapidly transformed from niche market into ubiquitous consumer object (Jaffee and Newman, 2013).

The figure shows per capita consumption of bottled water in European countries in 2017. It has come forward that the consumption of bottled water in Turkey (149 lt), compared to the average of European countries (117 lt) is higher.

Figure 1. Per Capita Consumption of Bottled Water in Europe in 2017 (litres)

Source: Anonymous, 2019d

Bottled Water Sector in Turkey Turkey is geographically located on the “Alpine–Himalayan orogenic belt” where continuing tectonic activities not only resulted in the formation of country's peculiar geologic framework but also resulted in the formation of numerous cold and hot water springs. Ground water and water from springs are the sources used for bottling water in the country. However, at present, only 20% of the existing springs are utilized by the Turkish bottled water industry (Güler, 2006).

Natural Spring Waters can be found in almost every region of Turkey. However, many of them are not operated because they are not economic due to their distance to consumption centres. Most of the water resources operated in the Marmara Region, the largest market, are collected around Bursa and Adapazarı (Anonymous, 2019e).

Turkey is a country with a rich source of drinking water and mineral waters. Commercially drinking water sector includes mineral waters, packaging recycled and irreversible waters (Anonymous, 2016f). Turkey is not included in the group of countries suffering water shortages when considering worldwide. However, the amount of drinking water resources is faced with a decrease as a result of urbanization, industrialization, population growth (Anonymous 2019e).

Turkey met packaged water in 1997 and today 264 water brands are available. 216 of the packaged water companies produce spring water, 36 of mineral water and 12 of filtered water (Birgül et al., 2018). Bottled water consumption showed a significant increase especially in the last decade. 19 litres polycarbonate carboy packaging is used in most of the offices or homes. Carboy, was first used in the late
1990s in Turkey. Today it has both moved to the pioneer in bottled water industry in terms of litres and has made the market grow too much by reason of the facts that it is easy to use with its additional devices and apparatus, it is economical and also provides address delivery service (Anonymous, 2019e). Bottled water industry in Turkey in 2007-2017 is shown in the Table 1

**Table 1. General Structure of Packaged Water Industry by Years in Turkey**

<table>
<thead>
<tr>
<th>Year</th>
<th>Production (Billion Litres)</th>
<th>Carboy (Billion Litres)</th>
<th>PET production (Billion Litres)</th>
<th>Market Volume (Billion Turkish Liras)</th>
<th>Annual Consumption Per Capita (Litres)</th>
<th>Growth (%)</th>
<th>Export Amount (Tons)</th>
<th>Export sale ( Thousand Dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>8.1</td>
<td>6.0</td>
<td>2.1</td>
<td>2.5</td>
<td>115</td>
<td>7.0</td>
<td>103.92</td>
<td>19.000</td>
</tr>
<tr>
<td>2008</td>
<td>8.7</td>
<td>6.3</td>
<td>2.4</td>
<td>3.0</td>
<td>122</td>
<td>3.0</td>
<td>123.36</td>
<td>19.663</td>
</tr>
<tr>
<td>2009</td>
<td>9.0</td>
<td>6.3</td>
<td>2.8</td>
<td>3.1</td>
<td>124</td>
<td>6.0</td>
<td>128.43</td>
<td>20.089</td>
</tr>
<tr>
<td>2010</td>
<td>9.5</td>
<td>6.4</td>
<td>3.1</td>
<td>3.3</td>
<td>128</td>
<td>6.4</td>
<td>147.22</td>
<td>24.817</td>
</tr>
<tr>
<td>2011</td>
<td>9.9</td>
<td>6.5</td>
<td>3.4</td>
<td>3.5</td>
<td>133</td>
<td>4.2</td>
<td>173.47</td>
<td>27.644</td>
</tr>
<tr>
<td>2012</td>
<td>10.3</td>
<td>6.5</td>
<td>3.8</td>
<td>3.7</td>
<td>135</td>
<td>4.2</td>
<td>199.14</td>
<td>31.704</td>
</tr>
<tr>
<td>2013</td>
<td>10.3</td>
<td>6.2</td>
<td>4.2</td>
<td>4.1</td>
<td>135</td>
<td>1.2</td>
<td>250.87</td>
<td>42.186</td>
</tr>
<tr>
<td>2014</td>
<td>10.7</td>
<td>6.3</td>
<td>4.39</td>
<td>4.2</td>
<td>138</td>
<td>1.2</td>
<td>264.81</td>
<td>41.851</td>
</tr>
<tr>
<td>2015</td>
<td>10.9</td>
<td>6.4</td>
<td>4.5</td>
<td>4.9</td>
<td>144</td>
<td>2.5</td>
<td>407.57</td>
<td>41.851</td>
</tr>
<tr>
<td>2016</td>
<td>11.3</td>
<td>6.4</td>
<td>4.9</td>
<td>5.4</td>
<td>148</td>
<td>4.0</td>
<td>448.33</td>
<td>64.184</td>
</tr>
<tr>
<td>2017</td>
<td>11.6</td>
<td>6.4</td>
<td>5.3</td>
<td>5.7</td>
<td>149</td>
<td>3.1</td>
<td>70.603</td>
<td></td>
</tr>
</tbody>
</table>

Source: (Anonymous, 2019e).

There is a steady increase in production quantity, market volume, annual consumption, export amount and export sale even in crisis years. Market volume is 5.7 billion Turkish Liras, average annual per capita bottled water consumption is 149 litres in 2017. According to Table 1, packaged water industry is sensitive to external dependency in packaging raw materials, international developments, price hikes for oil and exchange rate increases.

**ANALYSIS and RESULTS**

Macro Environment Analysis- PESTLE

The analysis of each variation of PESTLE has three main elements. These elements include:

- a. External factors,
- b. Implications of external factors,

PESTLE (Political, Economic, Social, Technological, Legal and Environmental factors) is a macro analysis technique to critically examine the business enterprise strategy, evaluate the product, or entering a foreign market.

Oktay (2006) gave some examples of the factors in PESTLE analysis. These are;

<table>
<thead>
<tr>
<th>Political</th>
<th>Government policies, state intervention, current state of government, international relations etc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economical</td>
<td>General economic situation in the world, commercial cycles, energy potential and cost, economic growth and domestic product changes, money and loan resources etc.</td>
</tr>
<tr>
<td>Social</td>
<td>Consumer trends, health, new needs and demands, income status, education, living standards etc.</td>
</tr>
<tr>
<td>Technological</td>
<td>Utilization of energy resources, alternative and new technologies, expert personel, government-industry and R&amp;D expenditures of universities, ecological factors, new products etc.</td>
</tr>
<tr>
<td>Legal</td>
<td>Relevant laws, tax system, subsidies / supports, foreign trade regulations etc.</td>
</tr>
</tbody>
</table>

8
Environmental pollution, energy consumption control etc.

Political Factors

According to FAO (2004), access to safe drinking water is essential for health, a basic human right and component of effective policy for health protection.

The modifications in the rules and regulations by the government in various functions effect the way business would operate. For example, change in taxation requirements like new tax laws, tax rates, or revised interpretations of the tax laws, modification of accounting standards, and new or modified environmental laws in global and local regulations (Grundy, 2006).

There is an association in Turkey for Bottled Water which is called SUDER (Packaged Water Manufacturers Association). The vision of the association is producing quality and safe packaged water in the amount required by the society, providing the consumers with the healthiest conditions, improving the sector and its stakeholders. This association is also a member of EFBW (European Federation of Bottled Water). The primary goal of the federation is to assure that the high safety, quality and environmental standards of bottled waters are recognised and maintained.

The processes carried out associated with bottled drinking water are licensing, import permits, monitoring quality standards, collecting and evaluating data on quality standards, facility inspections, market surveillance and management of inconvenience.

Economic Factors

Bottled water sector has a competitive environment and can be affected by the price changes, interest rates, and income distribution easily. Since the product is not very profitable, any little price or currency change would effect the sector. As the machines are imported, currency plays an important role. There is aggressive price competition in the bottled drinking water market. In the studies aimed at examining the factors effect the consumers’ preference of packaged water, it has been stated that there is a relationship among age, income, level of education and buying behaviour. Moreover, it has been specified that the quality, brand, price and package of the water also affects the consumers’ preference.

The main factors that constitute cost in the packaged water sector are; finding and drilling water, deletion, storing, transporting, re-storage, distribution, consumption, recycling of carboys and wastes, making them available again (cleaning for carboys, recycling for pet bottles) - storage, re-delivery to water filling facilities; also machinery, equipment, human labour, taxes, official bureaucracy which used in processes form cost items.

Social Factors

The production and consumption of bottled water entails various impacts on health, environment and society. The health risks are related not only to the quality of the water, but also to the quality of containers and to storage conditions. The environmental hazards are linked to the energy used and resources consumed in the processing, bottling and shipping of bottled water and to the huge amounts of bottle waste which is not recycled. These, in turn, raise social, equity and justice questions, such as who is being exposed to the risks and who should pay for the damages. It has grown dramatically in the last decade and today millions of people around the world, in developed and developing countries, consume bottled water regularly (Parag and Opher, 2011).

As one of the fastest growing sectors in the world, bottled water sector is shaped in parallel with the needs and habits of consumers. In developed countries, bottled water became one of the indispensables of daily life with the effect of healthy lifestyle trend. It is preferred by consumers rather than sugary-carbonated beverages that are perceived as harmful to health. According to Karakuş et al. (2016), changes in packaging (expansion of glass packaging, production of special lids for children, etc.) and differences in the structure of water (pH, degree of hardness) effect consumers' purchasing decisions. These new habits have led to the growth of packaged water categories in global markets in recent years.
Marketing researches have determined that new generation has higher level of interest willing to experience new brands and products. In addition, consumers who have higher levels of consciousness than their predecessors use the social media and communication channels more actively; they report more questions and complaints to producers about their products.

Technological Factors Packaging materials are essential for the bottled water industry to ensure that product reaches the consumer in the best possible condition. Packaging costs account typically for about one-third of a company’s turnover, so every effort is made to minimise them wherever possible.

For example, great savings can be made by transporting water in plastic containers as opposed to glass, and this is especially true in the case of the expanding home and office business, in which returnable polycarbonate bottles are used. As the industry continues to develop, much has been achieved in recent years to minimise the impact on the environment by improved manufacturing methods, rationalised distribution and reduction in packaging materials, for example by the light weighting of containers.

Drinking water from its source is taken into the special tubing system; it reaches the filling facilities after the natural flow inside the tubes. When it first reaches the factory, it is stored in a fully enclosed and hygienic environment by being taken to the appropriate designed storages according to the ministry of health regulation.

Few technological advances in the area of packaging like plastic bottles and cans have made it convenient for the consumers to buy these products. This makes it easier to carry and dispose of. The automation technology in the area of producing bottled water has increased the productivity of the bottling plant.

Legal Factors

Legal aspects related to food industry will continue with the changes in the government policy now and in the future. Bottled water products sold on the Turkish market have to be certified according to Turkish law published in the Official Gazette of Republic of Turkey which is the national and only official journal of the country publishing legislation. According to ministry of health, bottled water defined as stuffed without adding any substances other than safe and suitable antimicrobials, stored in bottles or other containers and suitable for human consumption (Tosun, 2005). The purpose of this regulation is to compose water for human consumption complying with technical and hygienic conditions, providing quality standards of water, producing and supply water for drinking water, packaging, labelling, sales and inspection. In accordance with this regulation, the sale of outdoor water is prohibited. As a result of the introduction of certain standards in the production, bottling and sales stages, the packaged drinking and mineral water sector entered a rapid development process. Thus, the bottled water sector has become a production line where large companies and some multinational companies invest (Anonymous, 2012h).

Table 2. Legislations Concerning with Bottled Drinking Water

<table>
<thead>
<tr>
<th>Legislations</th>
<th>Date</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Law of Public Sanitation, Laws no1593</td>
<td>May 6, 1930</td>
<td>1489</td>
</tr>
<tr>
<td>Veterinary Services, Plant Health, Food and Feed Law, Laws no 5996</td>
<td>June 13, 2010</td>
<td>27610</td>
</tr>
<tr>
<td>Presidential Decree No. 1</td>
<td>July 10, 2018</td>
<td>30474</td>
</tr>
<tr>
<td>Regulation on Waters for Human Consumption</td>
<td>February 17, 2005</td>
<td>25730</td>
</tr>
<tr>
<td>Regulation on Natural Mineral Water</td>
<td>December 01, 2004</td>
<td>25657</td>
</tr>
<tr>
<td>Communiqué on Procedures and Principles for Packaged Water Sales places and Packaged Water Transport Vehicles</td>
<td>August 20, 2014</td>
<td>29094</td>
</tr>
<tr>
<td>Implementing Regulation on Substances and Materials in Contact with Food</td>
<td>April 5, 2018</td>
<td>30382</td>
</tr>
<tr>
<td>Regulation on Control of Packaging Wastes</td>
<td>December 27, 2017</td>
<td>30283</td>
</tr>
</tbody>
</table>

Source: Anonymous (2019i). I

In accordance with these legislations shown in Table 2, product should carry a label containing the information specified in the regulation. The results of chemical analysis on bottled drinking water label
information should be evaluated with the World Health Organization, European Union and Turkish Standards limit values.

Packaging materials are divided into two groups in bottled water industry as one way (PET, glass) and carboy/ recyclable dispenser size in Turkey. Used packaging is produced in accordance with Turkish Food Codex Legislation. The necessary analyses are carried out by the Ministry of Agriculture and Forestry and are produced in packaging facilities subject to the permission and inspection of the Ministry (Anonymous, 2019e).

The purposes of these legislations are to create products suitable for technical and hygienic conditions for human consumption, to ensure quality standards of water, to produce and supply water for drinking water, packaging, labelling, sales and inspection.

**Environmental Factors**

Water resources should be protected for today, tomorrow and future generations. Protecting and preserving the environment has always been a core objective for the bottled water industry (Anonymous, 2019g). Bottled water sector stakeholders should protect valuable water resources, reduce packaging waste, provide more efficient recycling and maximize sustainable production. It should be developed to minimize packaging materials and optimize transport logistics.

Although Turkey has more water resources than many of its neighbours in the Middle East and North Africa, it is expected to face shortages in the near future. Climate change and rapidly rising demand are contributing to the overexploitation of groundwater resources. This is particularly problematic for agriculture, an important sector in the Turkish economy that is also a major water consumer and highly sensitive to water shortages. By 2023, the agricultural use of water – especially for irrigation – is expected to be the single most important source of domestic water use, accounting for 64 percent of total national water consumption (Suntos et al., 2016).

In order to prevent contamination of any contaminants from the outside into the source water, structures called "groundwater extraction" are installed at the exit points of the water. In this way, it is ensured that maximum hygiene is maintained by creating a protection area around it.

The choice of bottled water packaging material is increasingly done taking into account environmental considerations. PET (polyethylene terephthalate) is increasingly chosen instead of PVC (polyvinyl cloruro) because of its properties: it is light, easy to work on and very transparent. It can be re-manufactured into many different products, such as fibres for the clothing industry. When burnt, it doesn’t release chlorine into the atmosphere, contrary to PVC, whatever type of incinerator is used. Negative environmental impacts, in particular energy consumption, are reduced if PET, aluminium and glass packages are washed and re-filled rather than remanufactured. Emerging and developing countries may not have the necessary infrastructure to incinerate or recycle the bottles (Ferrier, 2001).

Trading and transporting bottled water all over the world also has an important environmental impact, in particular on atmospheric pollution and climate change because of fuel combustion. This impact varies a lot depending on many factors, i.e.: the type of transport used (train vs. old trucks), the type of fuel used (electricity vs. diesel), the distance to travel, etc (Ferrier, 2001).

**EVALUATION OF BOTTLED WATER SECTOR WITH SWOT ANALYSIS**

SWOT analysis is a commonly used method for analysing and positioning an organization’s resources and environment in four regions: Strengths, Weaknesses, Opportunities and Threats (Samejima et al., 2006). Strengths and weaknesses are internal (controllable) factors that support and obstruct organizations to achieve their mission respectively. Whereas Opportunities and Threats are the external (uncontrollable) factors that enable and disable organizations from accomplishing their mission (Dyson, 2004). By identifying the factors in these four fields, the organization can recognize its core competencies for decision-making, planning and building strategies (Phadermroda et al., 2019).
Strengths

✓ Increased consumer demand for bottled water
✓ Increasing awareness about healthy nutrition as its healthier alternative than other beverages
✓ Even in economic recession times, while other sectors are affected adversely, bottled water sector growth.

Weaknesses

✓ Illicit production; especially in carboy industry leads to unfair competition and unhealthy production. So public health is negatively affected.
✓ High prices in logistics and energy costs,
✓ Low profit margin,
✓ Marketing support is not enough in this sector and making an effective communication campaign is difficult.
✓ Unnoticed non-invoiced sales leads to tax-free trade,
✓ Ineffectiveness of sales/promotions,
✓ Environmental concerns of consumers over packaging/recycling. For example, the opinion that carboys are dirty because they are used for many times. According to the ministry of health, a carboy bottle can be filled just 5 years or 75 times; after it should not be used. Some companies cannot control how many times bottle that fills the carboy. Therefore, some consumers prefer disposable packaged products.

Threats

✓ Water scarcity,
✓ The main cost elements are packaging and shipping. External dependence on packaging material is sensitive to international developments in the sector, oil prices and exchange rate increases.
✓ Exports cannot reach the desired levels due to high freight expenses. This situation causes the sector to work with idle capacity.
✓ The product is shipped in the container during the export process. In hot weather conditions, the passage of acetaldehyde from bottle to water is accelerated for a long time in the container and slight sensory problems occur in water.
✓ Some consumers prefer to use purification systems in their homes instead of buying bottled water.

Opportunities

✓ Increasing consumption during summer season especially in touristic areas,
✓ Being close to the European Union and the Middle East market is an opportunity to export,
✓ Sufficient installed industrial capacity in case the demand for the sector increases,
✓ Sustainable economic growth in the sector through new investments.

CONCLUSION and RECOMMENDATIONS

Access to healthy drinking water, which is of strategic importance, is a natural and legal right for all living beings to survive. It is important that the drinking water is reliable and found suitable for use by the relevant institutions. Bottled drinking water provide assurance that the ministry of health is licensed according to the provisions of the regulation, is under constant supervision and does not pose a risk to public health.

In this study, the structure of bottled water industry and its properties are discussed. Pestle and Swot Analysis are used to examine the sector. This research attempts to provide entrepreneurs with overall information about bottled water industry and its consumers. It is an important study as it encourages the entrepreneurs to develop a robust and competitive organization on a long-term basis.

One of the most increased consumption of beverage is bottled water in all over the world. Based on economic data, it can be expressed that stable growth is sustainable with investments in bottled water.
sector. Bottled water sales have been growing dramatically in the world. Scientists and experts emphasize that consumption of bottled water increases rapidly every year and the sector will gain more importance in the future according to their researches. For these reasons, national and some multinational companies invest in the sector. Turkey, one of the world's most powerful countries in terms of its natural resources, has a promising potential in the bottled water sector.

Recommendations for bottled water companies and stakeholders to improve production quality and increase their competitiveness are:

- Drinking water resources are critical for life. Bottled water industry should protect valuable water resources, reduce packaging waste, provide more efficient recycling and maximize sustainable production. Minimizing packaging materials and optimizing logistics should be developed.
- Socially drinking water consumption habits are changing with the influence of factors such as developing health-conscious, contamination of water resources, increasing income level.
- Competition is high and consumer sensitivity is important in marketing stage. Strategies should be created according to competitor status, demand forecast and consumer habits.
- Sector may be affected negatively, from the production to distribution stage, as a result of unsuitable conditions applied by unconscious producers. Demand information of the product is the most effective data to be determined at the distribution stage as where and how much it will be sold can affect every process in the supply chain.
- Costs and time for transportation have a great impact on product price and service quality. Effective distribution network both reduces product prices and improves service quality.
- An effective inspection system should be implemented to maximize customer satisfaction, ensure the distribution channels providing a complete service quickly, efficiently and quality manner, and maintain product quality.
- Customer Service departments should provide evaluation of customers’ suggestions and complaints, providing data flow to the relevant departments and continuously improve the quality of products and services. Consumers should be informed about the benefits of natural spring water, and synergy should be created by taking on the role of a bridge between customers and distribution channels.
- In the target regions determined by the firms in the sector, demand estimation and the recognition of the water market are the primary targets and market analysis should be done.
- Good Warehouse Practices, as in other food products, bottled water is also applied. Especially pest management, ventilation, physical pollution (dust, etc.) and storage environment smell are important.
- As a candidate member of the European Union, in Turkey the results of the analysis of the bottled natural spring water on the label information should be evaluated with the World Health Organization, European Union and Turkish Standards limit values.

It can be concluded that the bottled water industry is driven by health concerns about drinking water. Drinking water consumption habits are changing with the influence of factors as changing lifestyles, ease of handling and portability of bottled water, contamination of water resources, developing health-conscious and increasing income level. The results of the researches and forecasts show the gradual increase in the consumption. Bottled water manufacturers can introduce new products with health benefits and new flavors. There is a great opportunity to pack and market for bottled water. Competition is high and consumer sensitivity is important in marketing stage. Strategies should be created according to competitor status, demand forecast and consumer habits. In this context, it is expected that the explosive growth of bottled water sector will continue to grow in the short, medium and long term. Investments to be made in the sector would be profitable.
REFERENCES


