

Analysis of the External Environment of a Vertical Dried Herbs Business and the Role of E-Commerce Tools

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Abstract. In recent years, citizens’ growing awareness about environmental issues in combination with their shift to a healthier lifestyle has created growth prospects for the medicinal and aromatic plants (MAPs) sector worldwide. Although the climatic conditions of Greece are a comparative advantage for MAPs, the sector has not grown significantly. The main objective of this paper is to give an insight into the external environment of a vertically organized dried herbs business as well as to examine e-commerce tools and applications which can contribute to its development. The results of this paper in combination with further research about the internal business environment and its viability consist a useful guide for newcomers in the MAPs sector in order to make the right decisions as regard the structure and the production process of their business.

Keywords: Information and Communication Technologies; Medicinal & Aromatic Plants; Consumers Trends; Sustainability.

1 Introduction

The increasing global demand for medicinal and aromatic plants (MAPs) generates significant opportunities for the development of rural and less-favoured areas. Although MAPs constitute one of the best cultivation options for these areas - as they use soils of low value with minimum inputs for high quality products - the sector has not been significantly developed (Kalfas, 2018). Further investigation and analysis of the external environment as well as the prospects, risks, strengths and weaknesses - both at regional and business level - is the basis for planning actions, that will bring the desired results in terms of smart entrepreneurship and sustainable rural development.

Based on the Strategic Plan for MAPs (SP-MAPs - Ministry of Rural Development and Food, 2017), the adoption and widespread use of Information and Communication Technologies (ICT) in the production and manufacturing of MAPs constitutes a significant opportunity for the sector. The rapid growth of ICT has provided new tools and opportunities for businesses at all links of the value chain, which play an important role in the development of the agri-food sector in general. In addition, ICT can provide solutions across the whole range of the activities of a farm, such as cultivation, field monitoring, management of resources etc. (Ragkos et al., 2017).

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E-commerce is one of the most important ICT applications with particular applicability to the primary sector. E-commerce is not just the online presence of a business but rather a form of entrepreneurship, which includes all the principles of management and finance. Indeed, it is a system that integrates some or all commercial transactions (distribution, service, sale, purchase, marketing of products and services) through Internet platforms or other networks (Andreopoulou et al., 2011). According to the E-Business Research Center (2017) an increasing number of consumers use the internet to make purchases, while an increasing number of businesses utilize e-commerce to promote their goods and services. In fact, in many cases such as the case of the Coronavirus pandemic (COVID-19), e-commerce is of utmost importance for the operation of businesses that engage in the food industry, as it is the only channel for the distribution of their products.

The purpose of this paper is to describe the external environment of a business which engages in the production and manufacturing of dried herbs and to analyze the role of e-commerce in its development. For this purpose, industry and consumer trends are presented aiming to provide an overview of the current situation in Greek MAPs sector and giving insights of potential for future development. In addition, the role of e-commerce tools and applications is described in formulating effective e-marketing strategy.

2 Methodology

The external environment of a business has a significant impact on its viability, so it must be considered thoroughly. In this paper, the external environment of a farm business which produces and processes dried herbs is analyzed with a qualitative approach. The analysis focuses on, (i) the Greek MAPs Sector, (ii) Consumer trends concerning dried herbs and seasonings and (iii) the applicability of e-commerce at the business level.

3 Results

3.1 The Greek Medicinal & Aromatic Plants Sector

The main MAPs cultivated in Greece are reported in Table 1. In terms of acreage oregano, lavender and anise are the most important crops while in terms of number of farms oregano, crocus and sideritis are the most widespread. Other MAPs are cultivated by few farmers in small areas (Kalfas, 2018). Apart from cultivation, most farmers are also engaged in processing. According to the Ministry of Rural Development and Food (2017), there are few small processing units, most of which exhibit backward vertical integration. However, there are some major processing plants, mainly in Northern Greece, whose main activity is the production of essential oils from lavender, oregano and rose (in smaller quantities). Some of them are HERBS & OILS, Vessel essential oils, Alpha lavender, PANAROMA LTD, Dioscourides,

Coop of Medicinal and Aromatic plants of Voio, Eth-oil. There is also an industry - Vergina Brewery- based in Komotini which produces ready-to-drink cold tea. Furthermore, two companies (KORRES S.A. NATURAL PRODUCTS and APIVITA SA) are engaged in the production of natural cosmetics and fragrances, offering a wide range of products. These companies export the largest part of their production, so they have a remarkable presence in foreign countries (Vasilikiotis et al., 2015).

Table 1. Number of MAPs farmers and average area per farmer in Greece

Crops	Number of Farmers	Land Area (Hectares)	Average cultivated area per Farmer (Hectares)
Oregano	1335	1366,99	1,02
Crocus	728	390,43	0,54
Sideritis	618	305,36	0,49
Lavender	580	628,38	1,08
Melissa	468	96,40	0,21
Anise	312	509,14	1,63
Salvia	285	63,72	0,22
Thyme	276	57,88	0,21
Mint	247	24,47	0,10
Rosemary	246	46,80	0,19
Other crops	1317	339,45	-
Total	6412	3829,02	-

Source: Kalfas 2018

The value chain of Greek MAPs is characterized by a relative lack of collective action both in primary production and in sales. Some examples of collective organizations are: (i) the Agricultural Cooperative of Aromatic, Pharmaceutical and Energy Plants of Aetolia-Acarmania, the members of which founded in 2009 the company «ANTHIR», which engages in the production, processing and marketing of dried MAPs, (ii) the Association of Aromatic and Medicinal Plants of Greece, (iii) the association of producers in Kilkis and (iv) the Cooperative of Aromatic and Pharmaceutical plants, Fruits and Vegetables of Voio, Kozani. This lack of collective action is linked to restrictions on the viability of farms, which due to their small size cannot take advantage of economies of scale and are faced with high production costs and reduced bargaining power. Under these restrictions, farms - as well as processing plants - have a low potential for investment, certification and access to innovation and restricted access to niche markets. In addition, the lack of cooperative relations and organizations - from the supply of propagating material to the sale of the final product - is a disincentive for new growers and entrepreneurs, who wish to engage in the MAPs sector (Ministry of Rural Development and Food, 2017).

3.2 Consumers Trends

There is a variety of reasons why consumers purchase MAPs. Indeed, these products have an extensive range of uses, for instance as raw materials in the food, beverage, pharmaceuticals and cosmetics industries (Kalfas 2018). Despite their diverse uses, there is limited scientific research about consumer behavior concerning culinary herbs and spices. However, according to a CBI research (2019), consumers are looking for convenience as regard the preparation of their meals. Indeed, due to busy schedules they want to spend less time on preparing meals and therefore dried herbs companies are increasingly shifting towards the production of ready-to-use spices and herbs mixtures. In addition, consumers prefer spices and herbs in smaller portions as they often need to try a recipe, so a small package covers better their needs. In recent years, small packaging options have increasingly appeared in retail chains across Europe. Also, certifications on the package are essential, as they prove the method of cultivation and facilitate the traceability of the products. In particular, the information that should be included on package are (i) the name of the product, (ii) details of the manufacturer, (iii) batch number, (iv) date of manufacture, (v) product grade, (vi) producing country, (vii) harvest date and (viii) net weight (CBI, 2019).

Furthermore, based on the SP-MAPs, more and more consumers are shifting towards a healthier lifestyle. In this process, consumers tend to prefer organic foods over conventional ones and MAP-based products are no exception to this trend. In France and Germany, there are organic retail chains (Bio C Bon in France, Naturkost & Bio company in Germany), which are growing rapidly and covering a wider consumer audience. Another motive for choosing organic food are environmental factors, as growing awareness for issues such as climate change and the sustainable use of natural resources has also affected consumption patterns and consumers are turning towards products that have undergone minimum processing with minimum environmental footprint (M. Korkmaz et al. 2011).

3.3 E – Commerce Tools for MAPs entrepreneurship

A dried herbs business can utilize a wide range of e-commerce tools and applications such as e-mail, enterprise content management, messaging systems and monitoring services to sell products online. The variety and security of these tools are important characteristics for businesses in the MAPs sector, as they allow to reach specialized audiences that use such technologies at a relatively low cost. Condition for the successful operation of an online store is the creation of a comprehensive marketing plan. In what follows, some of these tools and applications are briefly presented.

- Rational use of social media can have a significant impact on product promotion and sales. In particular, a dried herbs business using social media can (i) perform market research regarding consumer trends and competitors' products, (ii) manage complaints effectively due to direct interaction with consumers (iii) increase traffic to its website or online store and (iv) increase brand recognition.
- E – marketplaces, where consumers can purchase products from multiple producers at wholesale prices. The e-marketplaces are responsible for the promotion of the platform as well as the successful performance of transactions,

while the third-party vendors deal with production and positioning. Some examples of e – marketplaces which are used by agri-businesses are Amazon, eBay and e-bloko in Greece.

- Close to the philosophy and structure of e-marketplaces are price comparison sites (PCS), which are mostly oriented towards comparing products based on price or other criteria. PCS are popular among businesses in the agri-food sector, which register their products and store information on search engines, so they are more visible to potential consumers. One of the most popular PCS is “Google shopping” through which the user is led by the search results to the online store of the company.
- Affiliate marketing is a type of performance-based marketing where an affiliate (publisher) promotes a site of a vendor to its audience and is paid only if some of them perform a pre-agreed action (Duffy, 2005). Chefs are the main affiliates of the food industry due to their increasing popularity (Clarke, et al., 2016). The most common promotion strategy is cooking recipes based on the advertised product. The recipes are usually posted on their social media -mainly in video format - or even are presented on their TV cooking shows.
- Content marketing constitutes a particularly significant choice with high applicability potential for MAP-related businesses. Content marketing is a strategic marketing approach on creating and distributing content related to the company's products and services, with the aim of converting potential customers into repeat ones (Baltes, 2015). The purpose of content marketing is not the direct sale but the provision of content that has value for the receivers. This content can be distributed through the company's website and social media as well as relevant blogs. For a company that operates in the MAPs sector nutritional advice, online fitness and yoga lessons as well as recipes constitute significant forms of content marketing, especially if the business targets organic consumers.

To sum up, e-commerce is expected to provide great benefits for the companies in the MAPs sector including access to global markets, better approach and communication with consumers as well as efficient product promotion. The effective use of some of all the above methods can have a notable impact on a company’s profitability and sustainability.

4 Conclusion

The Greek MAPs sector is not significantly developed; however, it shows increasing trends as it pertains to the Greek soil and climate conditions. External environment analysis is crucial for the successful entry of a business in this sector. In particular, the analysis of the market-industry and consumer trends are important tools for the rational design of the business strategy and decision-making. Furthermore, ICT applications, particularly e-commerce, contribute to the implementation of the selected strategy, as they can lead to better market segmentation, targeting (selection of the target market) and product positioning. Social media, e -marketplaces, PCS, affiliate and content marketing are some of the tools that help agri-businesses to promote their

products. The discussion in this paper highlighted opportunities for a MAPs business, but further research is required to analyze the company's internal environment as well as its viability in order to render them applicable.

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