ONLINE RETAIL CHANNELS FOR ORGANIC BEE PRODUCTS

Assoc. Prof. Lyubomir Lyubenov, PhD¹

Abstract: The focus of the research is on online retail channels for organic bee products. They create short supply chains and ensure access to local and global markets and new market segments, which do not exist on offline markets. Creating one’s own online channel for organic bee products or using an intermediary one implies the development of one’s own retail platforms and social networks or the use of intermediary ones. Designing and maintaining one’s own online retail channel for organic bee products requires substantial investments, therefore such channels are mainly built by large agricultural and non-agricultural entities with high horizontal and vertical integration and ensured access to capital and markets. The high level of integration of different systems, technologies and innovations such as CRM and ERP in online platforms makes it possible to collect, systematize and analyse large volumes of data base – the so-called Big Data and analyse the online behaviour of customers in order to implement precise and targeted marketing.

Key words: retail platforms, social networks, CRM and ERP systems.

JEL: M31; Q 13.

Introduction

The SWOT analysis of Bulgarian beekeeping we conducted (Lyubenov, L., 2018b) helped us identify strengths which render the country a leader in the EU in terms of the number of biologically certified bee families, which is a third of the total number of bee families in the country. Due to the

¹ Assoc. Prof. Lyubomir Lyubenov, Department of Economics, ‘Angel Kanchev’ University, Rousse, e-mail: LLyubenov@uni-ruse.bg.
favourable environmental conditions, Bulgarian honey is of high quality and is used to improve the quality of honey produced abroad. The steady upward trend in global demand for conventional and, especially organic, bee products opens up a good opportunity. Identified weaknesses of Bulgarian beekeeping refer to the difficult access to markets and the fact that the conventional and organic honey mainly as a raw material, i.e. as a product with low value added. Identified threats relate to the lower competitiveness of Bulgarian bee farms and the monopoly established by merchants of conventional and organic bee products.

Another weakness of Bulgarian organic beekeeping is the validity of the certificate of organic origin. Most of the bee farms in Bulgaria are given letters of certification, and not certificates of organic production by certifying companies, as the latter are much more expensive. Wholesalers in Bulgaria accept such letters of certification as equivalent to the certificates of organic production, yet the situation is different with foreign wholesalers of bee products requiring certificates of organic production. Bulgarian wholesalers, therefore, buy organic bee products at prices that are similar to the prices of conventional bee products, since bee farms, which only have a letter of certification but not a certificate of organic production, cannot sell their produce abroad on their own. Beekeeping in Bulgaria, including the organic one, mainly produces honey. Since the dominant product on global markets for conventional and organic bee products is also honey, it is the object of this research.

Despite the growing global demand for organic honey, international offline retail markets\(^2\) are difficult to enter, including in EU member states like Germany, Austria, etc., where demand is high, yet, there are well-established big recognizable local brands, some of them owned by retail chains and organic food outlets. Bulgarian organic honey faces serious competition by established brands of honey on international offline retail markets. The majority of the bee farms in Bulgaria lack the knowledge and resources required to invest in honey processing or developing their own brand of

\(^2\) These are markets on which brick-and-mortar stores operate, in contrast to online markets on the Internet.
honey, which prevents them from charging higher prices on domestic offline retail markets as well. Hence, our interest in researching online retail markets for organic honey, too.

Creating online retail channels for organic honey will help benefit from the strengths identified in the SWOT analysis and take advantage of existing opportunities, while at the same time overcoming weaknesses and mitigating potential threats. Organic honey is suitable for branding since its quality is better than that of conventional honey. Branding organic honey will help consumers distinguish it from conventional honey and will encourage demand for high-quality products. Online retail channels are the subject of this research since they enable interactive communication with users and provide opportunities for creating positive attitudes, online communities and sustainable relations with brands. In contrast to offline retail channels, online ones enable economic agents to employ marketing tools which are more innovative, dynamic, diverse and faster, while at the same time being more cost-efficient, more personalized, strictly targeted and more precise, and hence, more efficient.

There is a major discrepancy between the rapid development of organic beekeeping in Bulgaria over the last decades and the weak development of retail distribution channels for accessing organic foods markets. Most of the organic bee farms in the country are in a disadvantageous position due to the monopoly of wholesalers who purchase their produce as a raw material at prices similar to that of conventional bee products and thus render their business unprofitable and highly dependent on subsidies. At the same time, the prices charged on organic honey on offline and online retail market are more than twice as high as the prices charged on conventional honey, which implies that the production of organic honey could be more profitable. The objective of this research, therefore, is to study online retail channels for organic honey and bee products. In order to accomplish that objective, the tasks of this research will be to study online markets for organic honey and identify the opportunities for creating online distribution channels.
ONLINE RETAIL CHANNELS FOR ORGANIC BEE PRODUCTS

1. The Synergy Between Online Retailing and the Market for Organic Honey as a Factor Contributing to Creating Distribution Channels

Global GDP in 2015 amounted to US $ 73,106 billion, the share of e-commerce in its total volume being 3.11%. In the same year, EU’s GDP was US $ 19,518 billion with e-commerce accounting for 2.59% of that figure. E-commerce (B2B) turnover in 2015 was US $ 2,273 billion, its average annual growth amounting to 19.9%, there being a decline in the growth rate in comparison to previous years. A.T. Kearney predicted that in 2018, the volume of online sales would reach US $ 1,506 billion and would continue to grow, though at a lower rate, with an annual growth rate of 13% in 2018. The volume of retail sales in the EU in 2014 was US $ 2,850 billion, the volume of online retailing sales reaching US $ 200 billion and continuing to grow in contrast to offline retailing where a slight decline was registered. In 2015, Great Britain was the European country with the largest share of consumers who did their shopping online, while the lowest share of consumers who made online purchases was registered in Romania – only 11%. While the EU average was 53%, Bulgaria ranked just before Romania with an 18% share of online retail sales in the total volume of retailing (Regal, 2017, pp. 38, 39), which indicates that there are prospects for sustainable growth due to the availability of fast Internet infrastructure.

Global industry for the supply of fresh agricultural produce and foods was expected to reach EUR 80 billion by the end of 2018. Nielsen and the American Food Marketing Institute (FMI) forecast that in 2025 the volume of online sales of fast-moving consumer goods in the USA will amount to nearly US $ 100 billion, which is a 20% market share of total sales. According to IGD, global sales volume in the segment would reach US $ 300 billion by 2020 (Goranova, K., 2017, p.14). E-commerce is acquiring a more global and mobile character and will continue to grow, since nowadays it covers only 20% of total retail sales (Regal, 2018, p. 6). The Internet renders it possible to switch to a more flexible and cost-efficient infrastructure that facilitates online sales and reduces costs, which results in lower prices on both online and offline markets.
The volume of online sales in Bulgaria in 2017 was BGN 580 million, with an annual average growth rate of nearly 23% over the last five years (Kapital, 2018, p.5). The relative share of foods, beverages and everyday goods in Bulgarian online market stood at about 10%, i.e. BGN 60 million per year over the last five years. This online market is still small but has been growing at an annual average rate of 15% (Lyubenov L., 2018а), while the growth rate of offline markets has been insignificant. Online markets for organic products have an even higher potential for growth since the certificates of organic origin, which accompany those products, build confidence in consumers and promote the growth of sales. Other factors that potentially contribute to the growth of online markets for organic foods are the fast pace of modern life, the adoption of IT technologies in households, the pursuit to reduce food expenses, the inconveniences of offline commerce and growing interest in healthy eating.

In 2015, there were 2.4 million organic producers in the world, 40% of them being in Asia, 26% - in Africa, 26%, 17% in South America, 15% in Europe, and 2% - elsewhere. The biggest consumers of organic products are the USA with 43% and Europe with 40%, while China and Canada each consume 4% of globally produced organic foods, followed by Switzerland with 3%, Japan with 2% of total global consumption of organic products, and 4% consumed elsewhere. In terms of countries, the consumption of organic products is as follows: the USA - 43%, Germany - 13%, France - 8%, China - 4%, Canada - 4%, Great Britain - 4%, Italy -4%, Switzerland - 3%, and 17% in the rest of the countries. The biggest consumer of organic products in Europe is Germany with 35.8%, followed by France with 5.5%, Great Britain with 2.6%, Italy with 2.3%, and Switzerland with 2.1%. The biggest exporters of organic produce in 2014 were the United Sates with EUR 2,409 billion, followed by Italy with EUR 1,420 billion, the Netherlands with EUR 928 billion, Spain - EUR 590 billion, Vietnam - EUR 551 billion, China - EUR 467 billion, France - EUR 435 billion, Canada - EUR 378 billion, etc. (Kapital. Regal 2, 2017, p.15). There was no available data about the organic produce exported by Germany and Great Britain.
According to data provided by Eurostat, in 2015, there were 6,173 registered organic producers in Bulgaria; 5,919 of them were organic farmers, while 161 were engaged in processing organic products (Kapital. Regal 2, 2017, p.8), i.e. more than 95% of them operated in the agricultural sector. This means that organic production is primarily developed in agriculture, and in 2014, Bulgaria was the EU leader in terms of growth of organically certified areas and producers. Unfortunately, there is no available data about the consumption, commerce, import or export of organic products, which renders it difficult to accurately estimate the size of domestic market for organic products. The high volume of exports of organic bee products and other products as raw material results in exporting value added from Bulgaria. This problem could be resolved by developing online retail channels for organic bee products and other organic products.

The turnover on the global market for organic foods was estimated at US $ 80 billion in 2014 and has been growing at an annual growth rate of 10% (Kapital. Regal 2, 2017, p.15), the forecasts being that it would exceed US $ 112 billion in 2019. The USA are the largest market for organic foods, followed by the EU. Bulgaria is no exception from the trends toward a healthy lifestyle and healthy eating, in addition to the growing number and volume of online markets. The annual turnover on the organic market in Bulgaria is estimated at BGN 16 million and is annually growing by 20%, the prices of organic products usually being higher than the prices of their conventional analogues by 20 to 30%. Such an assessment of the national market for organic products is rather conservative and inaccurate, though, due to the lack of representative data. When taking into account the potential and the growth rate of the domestic market for organic foods, turnover on that market was predicted to exceed BGN 32 million in 2019. Although there is significant potential for increasing the sales of organic foods on online markets in Bulgaria, that potential is still underexploited.

Most Bulgarian consumers are still skeptical when searching for high quality foods with a short shelf life on the Internet, while those whose attitude is more positive demand a fast delivery, that is, within half an hour or an hour. Unlike other foods, organic honey is a healthy product with numerous
medicinal effects and benefits; it has a wide range of applications and can be stored for prolonged periods of time, which means that no expensive or complex logistics is required. The certificate issued to organic honey builds confidence in customers, which implies a relatively small percentage of purchases returned by customers, in contrast to clothes, for example, where the wrong size can be bought and later returned to the seller. In addition, unlike offline groceries that have strong local characteristics, online markets, including those for honey, are global. There are favourable opportunities for developing online channels for organic honey.

The segment of potential customers of online channels for organic honey includes all consumers who have embraced a healthy lifestyle and healthy eating habits. Those are health conscious urban citizens with dynamic jobs and professions who have little free time and whose standard of living is above the average. The segment also includes pregnant women and mothers of young children who find it difficult to do their shopping in physical stores; elderly people who make online purchases themselves or have them made by their children living abroad and people with disabilities for whom online channels provide an opportunity to do their shopping independently. In other words, potential users of online channels for organic honey are all Internet users with healthy eating habits and limited mobility and free time.

Domestic consumer offline markets of honey are estimated at about BGN 44 million per year (Lyubenov, L., 2018b). Organic honey accounts for about 20% of those markets, i.e. nearly BGN 8.8 million per year and is primarily purchased and sold on organizational markets, with more than 90% of it being exported afterwards.

The domestic retail market is very small, with a predominant offline consumption culture and fierce price competition. Although online grocery sales in Bulgaria are on the rise, they still account for a very small share of total consumption (about 1%), in contrast to developed markets where their share is between 5 and 8% (Kapital, Regal 1, 2018, p.21). The items that are predominantly purchased online at this stage are clothes, electronic devices,
ONLINE RETAIL CHANNELS FOR ORGANIC BEE PRODUCTS

sports equipment, as well as pieces of furniture, toys, holidays and excursions and hotel accommodation.

The number of consumers who did their shopping online in 2016 in Bulgaria was only 1.1 million, which was less than 20% of the total population. In Europe, the share of online consumers is 43%, while in countries with developed e-commerce their share is 60% (Kapital, Regal 1, 2017, p.2). In 2015, the European online consumers spent about EUR 3,000 per year, while their Bulgarian counterparts spent EUR 262 per year (Kapital, Regal 1, 2017, p.8, 38). The identified potential customers of online channels for organic honey represent more than 5% of e-buyers in Bulgaria, that is, more than 55,000 potential consumers whose number is likely to increase. This means that an average consumption of 0.5 kg of organic honey per year at a price of BGN 12.00 per kg will generate an annual turnover of BGN 0.33 million per year. If we assume that the initial potential of offline markets is 1%, the annual turnover on the domestic online retail market for organic honey will equal about BGN 0.088 million. The real potential is much higher, though, due to the global nature of online markets.

In addition to access to local markets, online retail channels for organic bee products allow the performance of short supply chains where sales are made without the involvement of intermediaries. Development of local markets and short supply chains is promoted and subsidized by the Common Agricultural Policy 2014-2020 (CAP) of the EU. Local markets are defined as markets within 75 km from a bee products farm where both processing and sales to end consumers take place. A major feature of a short supply chain is the limited number of economic agents who have taken on the commitment to cooperate with one another and to promote local economic development and the establishment of close territorial and social relationships between the economic agents involved in the production and processing of honey and consumers.

Local markets and short supply chains have some advantages over national and international markets. In the first place, they reduce the time and costs for selling organic bee products. They also create their own consumer markets and promote the development of high-quality complex
bee products with high value added. Local markets and short supply chains are of social significance, as well, in terms of improving pollination, liquidity and profitability and enhancing the independence and the food security of local communities. In addition, they help reduce logistics costs and environmental pollution, create jobs and provide prerequisites for higher regional competitiveness.

Local markets and short supply chains are a model of horizontal and vertical cooperation among the players along the supply chain. Those could be associations of organic bee farms, small and medium-sized enterprises or retailers who operate within a specific local market or along a specific short supply chain. Organic bee farms could, in cooperation with enterprises in the Hotel and Catering Industry (or the HORECA sector) operating in a particular region, develop a short supply chain for bee products and open an online store. They could also become part of the structure of an online retail channel for organic bee products.

Local retail markets for organic bee products in Bulgaria are underdeveloped or even absent in some regions. In result, the development of short supply chains for organic bee products is negligible, as well. Establishing online channels for organic bee products will help create short supply chains and local markets and ensure access to them. This will put an end to the regional monopoly of the merchants of organic bee products and provide better opportunities for increasing the liquidity and profitability of bee farms. It will also encourage the consumption of local organic and unique bee products that are produced in the region of their consumption, as well as the development of regional road and Internet infrastructure, agrarian and Api tourism.

Low incomes of Bulgarian producers and consumers and the monopoly of wholesalers, in addition to the low prices charged on inferior honey by big retail chains, result in low prices on the domestic offline market for bee products. Quality has little effect on the prices of organic bee products on Bulgarian offline markets; therefore such markets discourage the production of organic bee products. In an increasingly competitive environment on international offline markets for bee products, Bulgarian
Organic bee farms could establish short supply chains and gain access to both local and global markets through online channels. Online channels help reduce the labour intensity of business processes, and hence, the production cost of bee products. The transition to a more flexible infrastructure will allow consumers to save both time and money. Online channels ensure access to new market segments with healthy products like organic honey that will compete with their unhealthy substitutes such as sugar and artificial sweeteners, thus expanding the market for organic bee products. Higher sales through online channels will encourage the development of bee farms in Bulgaria, facilitate pollination and help preserve biodiversity, promote the employment of sustainable agriculture and improve food security. Other major benefits include the development of organic bee farms and organic agriculture, the preservation of the flora and the fauna, and hence, the responsible exploitation of natural resources.

Online retail channels for organic bee products have a number of advantages over offline channels, the major ones being related to the opportunity to make local and global sales without having to overcome spatial barriers or being present at the point of sale; lower personnel and storage costs; uninterrupted flow of business processes from production to consumption; developing a personalized and individualized approach creating a customer data base; faster deliveries and customer self-service; accelerated market research and sales; an opportunity to reduce costs and offer greater variety of products.

The major problems, which accompany online retail channels for organic bee products relate to the security of transactions; the reliability of the Internet connection; difficulties arising upon the delivery of a large variety of small quantities of bee products and products which need to be stored in refrigerators; the impossibility to sample organic bee products and the lack of physical contact with their producers and sellers; misuse of accumulated consumer data; the delayed terms of delivery for some organic bee products, etc. Identified advantages and disadvantages of online channels (Lyubenov, L., 2016, p.39) support the thesis that combining traditional offline channels with online ones is the most favourable option for selling organic bee products.
products, since it will help attract a large number of the so-called Internet observers who are not active buyers but mainly monitor what is being offered.

Online channels make it possible to resolve objectively arising conflicts between production and consumption by accumulating, distributing, sorting and assorting of organic bee products. In addition, they are a Direct Marketing (DM) tool, as well as a means for making personal sales through own online channels. Online retail channels can be used as an interactive medium for public relations (PR), advertising and sales promotions. They also provide opportunities for managing more accurately the distribution process of organic bee products by employing specific quantitative, qualitative and price characteristics. Online channels provide market information and marketing knowledge, as well as access to new markets and better opportunities for exercising control and targeting and personalizing sales.

The producers of organic bee products are small farms that operate independently, which determines their characteristics as retailers: they supply a relatively narrow range of products and services to end consumers within a particular region; their activity is limited in scope, and the qualification of their consumer markets is low. Hence, their lower competitiveness in offline retailing. By entering online retail markets, those farms will gain access to markets and market information and will be able to establish long-term relationships with their customers. Since the development of consumer online channels for organic bee products requires investments and ICT competences, organic bee farms need to be integrated both horizontally and vertically.

2. Web Platforms as Online Channels for Organic Bee Products

Online markets are growing dynamically and are entering all spheres of human activity, the boundaries between them and offline markets becoming more and more blurred. A dramatic growth is expected on online
markets for agricultural produce and foods. According to unofficial statistics, there are already more than 20,000 virtual stores operating in Bulgaria (Kapital, Regal 1, 2017, p.32). Although the target markets of online channels for organic bee products are still small, they have an enormous potential for short-term and long-term growth. It is therefore necessary to carefully analyse valuable ideas that will best meet the demands of target consumers and estimate the required investments for online channels and the costs they will incur, as well as the necessary digital, marketing, etc. tools for their optimal management.

Online platforms for organic bee products make it possible to build online communities, based on the specific preferences they share for those products. Producers and their brands will thus be able to communicate personally with their audience and to develop sustainable relationships and communities. Furthermore, it will thus be possible to employ more targeted, more interactive and more cost-efficient marketing approaches in terms of specific market segments. Marketing will have better opportunities for creating a positive attitude in potential customers or changing negative attitudes into positive ones. Online platforms enable economic agents to employ marketing tools that are more innovative, more dynamic, more varied, faster, cost-efficient, more personalized and targeted, more precise and more efficient.

Online platforms have various options for receiving up-to-date information about bee products, the region where they are produced, the technologies used in the production process, etc. through their contents – photos, descriptions of the characteristics of bee products and their health benefits.

Honey and organic bee products may be offered with a certificate of quality (a certificate of organic origin) and customer satisfaction guarantees at a very good value for money ratio. Different available delivery options may be stated (delivery to customers’ homes, to a courier office, etc.), as well options for saving time and money. Platforms offer a wide range of opportunities for providing diverse information, direct feedback from customers and measuring customer satisfaction (see table 1).
Table 1.
The structure and contents of a web platform (web site) for an online (electronic) store

| Headings         | About us                                                                 | Products                                                                                                                                                                                                 | Promotions                                                                                       | Useful information                                                                 | Certificates                                                                                       | Posts                                                                                                                                 |
|------------------|---------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| Text             | Data about the producer and the online retailer. Business philosophy – caring for customers' health, supplying high-quality bee products and other services. | Focus on the quality of each bee products. Services – subscription, delivery to a specified address etc.                                                                                             | Promoting sales through promotional packages (baskets) of bee products. Discounts for subscriptions, market penetration, etc. | Description of the medicinal effects and other benefits of bee products. The global significance of pollination for preserving biodiversity and food security. | Conventional and organic bee products. Organic certificates, supervising bodies and quality management systems in the production of bee products. | The latest news. Reviews. Scientific publications and posts about pollination and national and global markets for bee products. |
| Photos           | Apiaries, honeybees, partnering beekeepers. Honey plants. Region, scenery, etc. | Logos and other graphics. Labels. Merchandise items – T-shirts, cups, souvenirs.                                                                                                                                                                                                                                          | Discounts for selected bee products. Promotional packages for bee products and services with discounts, etc. | Infographics about the role and importance of bee, the products they make and the part they play in the ecosystem. | Photos showing the process of organic production – the area where the apiaries are, the beekeepers, etc. Photos of the certificates of organic origin, etc. | Beekeepers and the organic practices they employ. The team of the online store. Bee products, the difference between nectar honey and honeydew honey, etc. |
| Video materials  | Video materials presenting the suppliers and their apiaries, packing premises, online distributions. | Quality-based market positioning through video materials about environmentally clean regions and the bee products produced there – honey, bee pollen, bee bread, etc. | Video clips with influencers, beekeepers, happy mothers, etc. Cartoons of business processes from honey production to honey consumption. | Video clips about apitherapy. Video clips with customer reviews. Video clips with beekeepers' stories. Video clips about api-tourism, etc. | Video clips about production in environmentally clean areas, employed organic technologies, the natural ingredients used to keep bees healthy, etc. | Research conducted by scientists and renowned authorities, famous beekeepers, satisfied customers, etc. |
ONLINE RETAIL CHANNELS FOR ORGANIC BEE PRODUCTS

Online platforms offer the option to leave reviews about viewed pages, bee products, services, time spent viewing, traffic, etc., which makes it possible to set traffic as close as possible to online purchases. They also provide numerous options for analysing signals by consumers, for conversion, for making online orders again or recommending the site to acquaintances. Web platforms allow elderly and disabled people as well as people with reduced mobility to gain fast and easy access to high-quality healthy products such as organic bee products. Web platforms will become even more accessible through mobile devices (telephones, tablets) and will offer increasingly better payment options.

Designing a web platform that will serve as an online retail channel, i.e. an online store, for organic bee products is a challenge even for enterprises with good knowledge about technology and established offline retailers. A number of difficult questions need to be answered even before the start, such as, who the target customers are, what system of payment will be used, what domain to choose, what the design of the site will be, etc. The choice of a specific type of platform will also depend on the target market of the channel and the specific features of the bee products. The web platform must have various functionalities according to planned quantities, quality and brand, the specialization of the channel, etc. The owners of bee farms can use several major options when designing their online store (Kapital, Regal 1, 2017, p.22) or different combinations of those options:

- Individual (custom) solutions require hiring specialists or software developers to design sites that will have all the functions for managing the supplied bee products, online promotions, campaigns, etc. The average cost of such platforms is about BGN 10,000 plus maintenance costs and different fees, for example, for web hosting, for additional administrative optimization features, for integration with storehouses, for Customer Relationship Management (CRM) and Enterprise Resource Planning (ERP) systems and other sales tools, which cost more than BGN 30,000. Although such solutions ensure control over the entire distribution channel, using this option implies larger volumes of turnover and branded bee products, as well as some experience in online retail. Since the site needs to be regularly upgraded, investments are bound to grow continuously;
- SaaS (software as a service) platforms are affordable to start-ups and small retailers since they do not require substantial initial investments. Customers pay a monthly subscription fee and choose among several designs, which they can later customize and personalize. The only requirement is that there should be photos, a description of the products and a logo. Such solutions are offered by a number of companies in Bulgaria - GombaShop, ShopMania Biz, CloudCart, etc. The monthly subscription varies between BGN 20 and BGN 100 and depends on the functionalities, the generated traffic and the goods, which are offered. A major advantage is the integration with the main payment systems, the connection with large courier companies, the hosting, etc. A lot of the SaaS platforms also have marketing instruments to monitor customer interests and behaviour. A major disadvantage of using such a solution is that the different sites look similar despite the possibility to change configuration settings and customize the software, and each upgrading is costly. In Bulgaria, tens of thousands online stores started operating by using SaaS solutions, some of them switching to custom solutions after expanding their business;

- Open-source solutions. Except for the hosting fee, such solutions are free and provided that they have the knowledge required, bee-farm owners can open their online stores themselves by using open-source solutions like OpenCart, Prestashop, etc. Most beekeepers cannot do this on their own, yet they can use the services of open-source developers to build their online store based on such solutions. The price charges for such services may vary from BGN 500 to BGN 3,000, depending on the functionalities, which the online store will have, and the level of integration with different services and systems. Beekeepers must take into account that it will be very difficult to use the services of the same computer programmer to upgrade and maintain the platform, and since platforms designed on the basis of open-source solutions are vulnerable, they need to be regularly upgraded. Nevertheless, Open-source platforms are constantly improved and are used by a growing number of online retailers;

- Marketplace platforms are widely used both by retailers who have acquired some knowledge about and experience in online retailing but need an additional channel and by start-up retailers. These platforms provide small online retailers the opportunity to compete with big online retailers by
ONLINE RETAIL CHANNELS FOR ORGANIC BEE PRODUCTS

reaching a larger number of customers. They make it possible to substantially increase the number of product categories in addition to the bee products that are offered, thus giving more choices to customers. By using such solutions, the owners of bee farms can build an intermediary online channel where they can post adverts with fixed final prices and get feedback about the performance of their products. Most platforms also deal with deliveries to the address of the buyer. In most cases, the owner of the Marketplace platform charges a commission of 10 to 20% on each sale. This is the model used by the biggest online retailer, Amazon, as well as eMAG, farmhopping.com, selskatrapeza.bg, etc.

Bee-farm owners may also build their own online channel for organic bee products by using the social networks. Such channels usually operate within a single city, town or village. Customers place their orders and the owners of bee farms deliver the products on a fixed day or send them via a courier. Such channels make it possible to apply the model of ‘community-supported agriculture’ in which consumers subscribe to the produce of a certain farm or group of farms by paying a certain sum at the beginning of the year or of the season. Joining such a community of consumers requires a recommendation by a member of the community in order to guarantee that the quantity stated in the order will be purchased. During the active season, consumers place specific orders with bee farms up to the limit of the sum, which has been paid in advance and the owners of bee farms deliver the orders to a place which has been negotiated in advance.

The owners of organic bee farms in Bulgaria need to start with simpler and cheaper online formats and then test different options and functionalities to establish which one will best suit their needs. They must enter online retail markets for organic bee products since those markets provide favourable conditions for making the most of their strengths, as well as good growth prospects. The owners of organic bee farms need not only to create online stores but also to promote their business in the vast online space. Bulgarian business practice indicates that after establishing a relatively small online retail store, it is necessary to allocate from BGN 500 to BGN 2,000 per month to marketing (Kapital, Regal 1, 2017, p. 23). Building competitive online channels for organic bee products requires substantial investments in online marketing.
In addition to an overall strategy, a communication policy and other marketing instruments, a key role to the quality and prices in online channels has the level of integration between the online platform (store) and the courier company that provided logistics services. That integration depends both on the software options which courier companies provide to online stores and on the open channels for communication between all users of the online channel, i.e. suppliers of bee products, couriers and consumers, since that helps save a lot of time and money and build competitiveness. Although the trend towards internationalization of online commerce in Europe will enhance those processes, the small volume of online stores for foods, organic honey and bee products in Bulgaria still prevents the wide-scale entry of some courier services on those markets.

Each online retail platform needs an integrated payment system through which customers could pay for their purchases. That system needs to be user friendly and should not burden online retailers with high costs. The choice of a payment system will depend on the purposes of the channel, the customers, the volume of turnover, etc. In general, an online store could offer four payment options to its customers (Kapital, Regal 1, 2017, p.33): cash on delivery, a bank transfer, a debit or credit card payment (via ePay or a module of the servicing bank) or through global systems such as PayPal.

The web platform must offer a combination of these options in order to meet the demands of as wide a range of online users as possible. The integration of the different payment systems is related to significant costs; therefore, Bulgarian online stores need to integrate up to 3 or 5 systems. The cost of such integration varies from several hundred to several thousand levs. The most cost-efficient option for online buyers is to pay through a bank transfer, since no commission is charged. All other payment platforms (ePay, BORICA, PayPal, etc.) charge a commission on online retailers for each payment which a customer makes.

Cash on delivery is an option, which incurs costs on online retailers, too. Due to the discounts which courier companies make to online stores (sometimes up to 20% of the sum of the payment), using their service might be a little cheaper for online retailers than the payment through a virtual POS terminal, yet this type of payment relates to some risks. When a customer places an order with an online store and the ordered goods are sent for
delivery, the courier company sends the customer an SMS that they can collect their order. Should the customer decide that they do not want the items they have ordered, the courier will have to store them for several days, which implies further costs for online retailers.

Although in Bulgaria the most popular method of payment for online purchases is cash on delivery, there is an upward trend in payments through virtual POS terminals as they help avoid the risks of cash payments. Virtual POS terminal service is currently provided by banks only to legal entities who have opened a bank account with them and have a web site that meets certain security criteria. This indicates that online stores have a bank partner they can rely on. Although in Bulgarian economy, cash payments are not likely to become obsolete, nearly 30% of all transactions are made by cards at present (Kapital, Regal 1, 2017, p.34), since online retailers encourage their customers to pay with cards by offering free delivery or a discount in exchange.

Online store solutions are becoming cheaper due to advances in SaaS technologies. Since such services are offered on Bulgarian market as well, it is easy to open an online store with its own system of payment through a monthly subscription. Such an option requires less investment and allows online retailers to allocate more funds to marketing, which is a key factor to the success of any online business. Even an online store offering the best bee products will fail unless its owners know how to make the store ‘visible’ on the Internet or how to conduct a successful online campaign.

Online channels for organic bee products must be designed in compliance with the regulations governing retail. The owners of online stores have to register and maintain a domain name. They need to sign contracts with their suppliers about all key elements of the cycle of deliveries (what will be delivered; where, i.e. the storehouse; how and within what time period) with the relevant quality assurance.

It is also necessary to sign a lease contract for a storehouse, for renting a separate storage area and/or using the services of a fulfilment center where bee products will be dispatched to their end users. In addition, a contract with a courier company with nationwide coverage must be signed regarding the processing of COD payments, the use of customer personal data and their responsibility for lost goods or delayed deliveries.
The web platform (the web site) must provide information about the major characteristics of all bee products and their selling price, including taxes, charges and transportation and delivery costs. Selling prices and unit prices must be unambiguous, easily identifiable and clearly legible, so that consumers will not be misled. Payment and delivery methods must be clearly stated, including available payment options, returns and refunds policy. In terms of data protection, online retailers are obliged to notify users about the manner in which their personal data are processed, i.e. why are such data collected (consumer profiling, marketing), who are they collected by (including third parties, e.g. a courier company), where and how those data will be stored. Online retailers also need to implement a cookies policy to ask for consent from the visitors of their web platform.

Unfair commercial practices like providing incorrect, unclear, incomprehensible, ambiguous and therefore misleading information, as well as concealing or omitting substantial information, is in breach of applicable regulations and is subject to hefty fines. Examples include unclearly stated prices, price reductions and discounts or false claims that a product is in stock when in fact is not. When running an advertising campaign, promotional materials must state all major elements of offers and promotions clearly and unambiguously, so that an advertisement cannot be considered misleading.

From a legal perspective, it is important how consumer data used for placing orders, servicing and marketing the online channel will be organised as a database. Access and processing rules need to be introduced to guarantee the legal protection of consumer data in case the database is hacked or misused by a present or former employee. It is necessary to ensure and maintain a level of cyber security that is in line with contemporary technological achievements. Another essential feature is the design of a concept, system and process for IT security to ensure continuous protection against hacking, identity theft and online fraud. The online platform must be able to respond upon the occurrence of incidents and inform both competent authorities and affected parties.

The performance of a web platform as an online retail channel for organic bee products requires that a number of requirements be met simultaneously within certain, sometimes very short, periods of time not only
in terms of logistics and payment, but also in terms of customer satisfaction, compliance with the legal regulations applicable to retail, etc. That would be impossible without the contemporary communication and information systems that allow a high degree of integration of the business processes in the online channel. Business practice indicates that two of the most appropriate IT systems in this respect are CRM and ERP. An online channel for organic bee products could not be competitive without those systems.

CRM systems make it possible to create a customer database that can be used to increase sales and to ensure customer retention. While the focus of CRM systems is on customers, the focus of an ERP system is on improving and optimizing the efficiency of internal business processes. The functionalities of ERP and CRM systems overlap in some respects and are completely different in other respects, yet both systems are essential for driving sales growth, improving the performance and increasing the overall profitability of a business. The successful introduction of both systems requires that the objectives of an online channel be clearly defined. CRM and ERP systems are expensive and are therefore impractical for small bee farms, yet they are the only viable solution for the efficient management of online channels.

Personal customer service would be difficult and even impossible without an integrated CRM system. It can be used as a standalone application or as a special module within an ERP system. A CRM system is useful for targeting and identifying potential customers, for monitoring and measuring multiple network campaigns, including through e-mails, surveys, social media, telephone, fax, chats, etc. It makes possible the interactive communication with homogenous consumer groups and measures clicks, updates, promotions and revenue. A CRM system is used in marketing to organize and create activities on the web space to promote customer relationships. Thus, a CRM system has two major functions: to ensure customer satisfaction and retention, on the one hand, and to streamline the performance of an online channel, on the other hand.

A CRM system is used to store and use accumulated knowledge about solving problems related to planning, budgeting, running advertising campaigns and analyzing their efficiency. The findings of conducted analyses may be used to make forecasts about consumer behaviour and to
identify different groups of consumers in terms of their age and social status, so that each category of consumers could be offered specific bee products. The volume of data on the Internet is growing and so is the need to analyse that data, therefore, the role of CRM systems is becoming even more important role and there are CRM applications available for mobile devices. Another useful feature of CRM systems is that they will allow online retailers to totally manage the revenue generated through online channels for bee products.

ERP is a multifaceted information system that uses a set of integrated applications, which manage the main business processes of a company, including online channels. An ERP system makes possible real-time monitoring of core business processes, such as production, supplies and inventory management. ERP systems track business resources (cash, raw materials and production capacity) and the status of business commitments such as orders, purchase orders and payroll. They also share data across various departments (Production, Purchasing, Sales, and Accounting). ERP facilitates the flow of information between different business functions and manages relationships with stakeholders. An ERP system is an essential management tool since it integrates various processes, information and systems, thus ensuring the smooth running of production and making of transactions.

Contemporary ERP systems are in most cases web-based software, which gives employees and their partners (suppliers, customers, etc.) real-time access to up-to-date information. They are highly integrated in terms of hardware, applications, networks, etc. and comprise an increasing number of functions and roles including relationships with investors, standardization, decision-making, etc. In most cases, an ERP system consists of modules for managing finance and accounting, human resources management, production management, supply chain management, project management, etc. ERP systems are vital for increasing business competitiveness since they help improve the quality of products, increase productivity and generate higher revenue.

The organic honey produced in Bulgaria is extremely suitable for branding, including online, due to its geographical origin, which is one of rich biodiversity and high value. The use of a web-based platform as an online
retail channel for Bulgarian organic bee products provides additional opportunities for branding. A domain name of a web platform and a certificate of organic origin are legally protected intellectual property guaranteeing the uniqueness and global character of products. The name under which a bee farm has been registered as a company may also be used as a domain name, especially if it has already become popular. The registration of an international brand may incorporate all these intellectual property items and provides potential opportunities for licensing and franchising, which further increases the marketing potential of an online channel.

Creating an online channel for organic bee products requires from bee farms both substantial investments and competencies about entering non-agricultural sectors, such as online marketing, IT and the food industry.

Table 2 presents the findings of the research we conducted. As these findings indicate, the online marketing of a channel for branded organic honey will require more than BGN 18,000. The development of an own platform with ERP and CRM systems will cost more than BGN 42,000, and the cost of packaging and labelling of organic honey with a semi-automatic honey dispenser will exceed BGN 48,000. The total amount of necessary investments will thus equal more than BGN 109,000, which means that it would be impossible for a bee farm to develop its own online channel for organic bee products on its own.

Building an intermediary (i.e. owned by someone else) retail channel for organic bee products also requires investing and acquiring new competencies in the spheres of ICT and the food industry. The owner of a bee farm will have to pay a monthly subscription fee of BGN 50 to BGN 100 to use an online platform even if a trademark is not registered, plus another BGN 500 per month for online marketing, the total annual sum required thus amounting to more than BGN 7,000. Such an option will spare bee farmers the costs for creating and maintaining online platforms, yet they will still have to pay for having their products photographed, for having a logo designed, etc. They will still need to cover the costs for filling and packaging honey and other bee products, and those are relatively high, too – more than BGN 48,000. The investments required for building an intermediary online retail channel for organic bee products thus exceed BGN 55,000, i.e. nearly a half of the investment required for creating one’s own online retail channel.
Table 2.
Basic investments required for building an online channel for organic bee products

<table>
<thead>
<tr>
<th>Investments</th>
<th>Cost in thousands of BGN</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Online marketing</td>
<td></td>
</tr>
<tr>
<td>- registering an international brand (Alicante)</td>
<td>3</td>
</tr>
<tr>
<td>- designing a logo and a standard brand book</td>
<td>5</td>
</tr>
<tr>
<td>- promoting the brand</td>
<td>10</td>
</tr>
<tr>
<td>2. Online platform</td>
<td></td>
</tr>
<tr>
<td>- domain, hosting, server, etc.</td>
<td>2.5</td>
</tr>
<tr>
<td>- designing a web platform</td>
<td>10</td>
</tr>
<tr>
<td>- implementing ERP and CRM systems</td>
<td>30</td>
</tr>
<tr>
<td>3. Packaging and labeling</td>
<td></td>
</tr>
<tr>
<td>- food safety system (HACCP, etc.)</td>
<td>1</td>
</tr>
<tr>
<td>- a computer, a label printer, a barcode scanner, etc.</td>
<td>3.5</td>
</tr>
<tr>
<td>- a packaging line for honey bee</td>
<td>44</td>
</tr>
<tr>
<td>Σ</td>
<td>109</td>
</tr>
</tbody>
</table>

In addition to the costs listed in table 2, building one’s own online retail channel for organic bee products or using an intermediary one will also incur current costs for the operation of the channel, including logistics, online transfers and payments, salaries, rents, fees, permits, etc. It will also be necessary to update and upgrade the online platform and its peripheral software and hardware each year, which implies further costs. In addition to the traditional costs for managing the online retail channel, it is necessary to plan a solid sum of expenses for online research, communication activities and online marketing, which may amount up to tens of thousands of levs per year for larger and more complex formats (see table 2).

The data in table 1 and table 2 indicate that the web platform synthesizes and integrates different systems (marketing, logistics, payment, etc.) into the online channel and ensures its numerous functionalities. Web platforms include an online shop (e-store) which has its own site, including a mobile version, as well as IT systems like CRM, ERP, etc.

In general, the development of digital technologies, social networks and e-commerce online platforms result in a boom in the development of online and offline markets and innovations in many different spheres, such
as software products and systems (CRM, ERP, etc.), logistics, online transfers and payments, online marketing, etc. The high level of integration of different technologies and innovations in online platforms enables them to collect, systematize and analyse large data bases, i.e. Big Data, thus making it possible to analyse consumer behaviour on the Internet in terms of their preferences and create a solid data base for precise and well targeted marketing.

Conclusion

The findings of the research we conducted of online retail channels for organic bee products lead to some conclusions in two major aspects:

**Firstly**, regarding the synergy between online and organic retail markets for bee products:

- The steady growth of online stores and the market for organic products creates a favourable environment for innovations and synergy. A certificate of organic origin guarantees quality and builds confidence in consumers, which contributes further to the growth on global online markets. There is substantial potential for increasing the sales of organic honey via online stores in Bulgaria which has not been developed yet;
- All Internet users with an interest in healthy eating and limited mobility or time constitute the target market of online channels for organic honey. The potential of that segment on a national scale is an annual turnover volume of BGN 0.088 to BGN 0.33 million. The real potential is much higher due to the global nature of online markets;
- Online channels ensure access to local and global markets for bee products and to new market segments, which do not exist on offline markets. They create short supply chains and markets for bee products and promote the development of beekeeping in Bulgaria. They also make it possible to use flexible and dynamic infrastructure for targeted and personalized marketing;
- Organic bee farms are less competitive on retail markets than other offline retailers and therefore need to integrate horizontally in
cooperatives, clusters, etc., as well as vertically, with sectors like IT and the food industry in order to build competitive online retail distribution channels.

Secondly, regarding web platforms as online channels for organic bee products:

- Creating one’s own or an intermediary online channel for organic bee products implies building one’s own platforms or using intermediary retail platforms and social networks. Online platforms need to be highly integrated with different systems – payment, logistics, etc., so that the channel could operate and be competitive;
- It would be impossible to meet numerous specific requirements within short deadlines in order to satisfy consumer demand and comply with the regulations which govern retail, etc. unless CRM and ERP systems are used to ensure competitiveness through the high integration of business processes between the different parties in the online channel;
- Certified organic bee products are very suitable for branding, including online. A domain name and a certificate of organic origin are legally protected intellectual property of unique and global character. The registration of a trademark implies both of them and opens up opportunities for licensing and franchising, which raises further the marketing potential of an online channel;
- Developing one’s own online retail channels for organic bee products requires substantial investments for designing a brand, packaging and online platforms. Such online channels may therefore be developed mainly by large highly integrated, both horizontally and vertically, agricultural and non-agricultural entities with access to capital and markets;
- Maintaining an online channel for organic bee products is related to substantial maintenance costs on logistics, online transfers and payments, salaries, rents, fees, permits, platform updates and upgrades, etc. As a rule, the highest costs are those for online marketing as they can exceed tens of thousands of levs per year;
- The high level of integration of different technologies and innovations in online platforms enables them to collect, systematise and analyse huge data bases – the so-called Big Data and analyse online customer behaviour in terms of all their preferences and thus provide a solid base for doing precise and well-targeted online marketing.
References:

Kapital. Nay-vazhno. br. 17 ot 27 april - 3 may 2018 g.
Lyubenov, L. (2018a). Digitalni marketing transformatsii, Sotsialno-

ikonomicheski analizi. V. Tarnovo. 2018. kn. 2. ISSN 1313-6909.

of Mountain Agriculture on the Balkans, 2018, 21 (4), 50-72, Research Institute of Mountain Stockbreeding and Agriculture,
Troyan, ISSN 1311-0489 (Print), ISSN 2367-8364 (Online)
Editorial board:

Krasimir Shishmanov – editor in chief, Tsenov Academy of Economics, Svishtov Bulgaria
Nikola Yankov – Co-editor in chief, Tsenov Academy of Economics, Svishtov Bulgaria
Ivan Marchevski, Tsenov Academy of Economics, Svishtov Bulgaria
Irena Emilova, Tsenov Academy of Economics, Svishtov Bulgaria
Lubcho Varamezov, Tsenov Academy of Economics, Svishtov Bulgaria
Rumen Erusalimov, Tsenov Academy of Economics, Svishtov Bulgaria
Silviya Kostova, Tsenov Academy of Economics, Svishtov Bulgaria

International editorial board

Alexandru Nedelea – Stefan cel Mare University of Suceava, Romania
Dmitry Vladimirovich Chistov - Financial University under the Government of the Russian Federation, Moskow, Russia
Ioana Panagoret - Valahia University of Targoviste, Alexandria, Romania
Jan Tadeusz Duda – AGH, Krakow, Poland
Mohsen Mahmoud El Batran – Cairo University, Cairo, Egypt
Nataliya Borisovna Golovanova - Technological University Moscow, Moscow Russia
Tadija Djukic – University of Nish, Nish, Serbia
Tatiana Viktorovna Orehova – Donetsk National University, Ukraine
Yoto Yotov - Drexel University, Philadelphia, USA
Viktor Chuzhykov - Kyiv National Economic University named after Vadym Hetman, Kyiv, Ukraine

Proofreader – Anka Taneva
English translation – senior lecturer Zvetana Shenkova, senior lecturer Daniela Stoilova, senior lecturer Ivanka Borisova
Russian translation - senior lecturer Irina Ivanova
Technical secretary – Assist. Prof. Zhivka Tananeeva

Submitted for publishing on 18.03.2020, published on 24.03.2020, format 70x100/16, total print 40
© D. A. Tsenov Academy of Economics, Svishtov, 2 Emanuil Chakarov Str, telephone number: +359 631 66298
CONTENTS

MANAGEMENT practice

DETERMINANTS OF SHORT-TERM LIABILITIES OF FINANCIALLY DISTRESSED SME-S
Galya Taseva, PhD ................................................................. 5

A QUALITATIVE APPROACH TO TRADE CREDIT IN BUSINESS ORGANISATIONS
Dariusz Nowak
Sławomir Górczyński ............................................................... 25

ONLINE RETAIL CHANNELS FOR ORGANIC BEE PRODUCTS
Assoc. Prof. Lyubomir Lyubenov, PhD ........................................ 42

INFORMATION and COMMUNICATIONS technologies

THE ESSENCE OF THE DIGITALIZATION PROCESS AS A NEW GLOBAL INFORMATIZATION STAGE
Orekhov Mykhailo ................................................................. 68

TRANSFORMATION OF THE DISTRIBUTION FIELD UNDER THE DIGITALIZATION PROCESS
Mykhailo Dubel ................................................................. 86