# **THESIS**

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# The possibility of business development with business planning

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### 1 INTRODUCTION

# 1.1. BACKGROUND AND SIGNIFICANCE

Modern Hungary is a relatively small state located in the center of Europe. In the national economy of Hungary, agriculture and the food industry play an important role. The climate is very favorable for the development of agriculture. Crop production dominates in the value of agro-industrial complex products. The livestock sector is not inferior to agriculture, contributing 60% of the income to the state budget from the agro-industrial complex.

In recent years, the share of agricultural and food products in the gross national product, as well as in labor force employment, has somewhat decreased compared to similar indicators in other sectors of material production, but they continue to be an important factor in the country's economic development. Therefore, not only the current situation of Hungary, but also its further economic and social progress largely depends on the pace, conditions and direction of development of the agro-industrial complex. Over the past period, the importance of agriculture in the country's economy has decreased, but still continues to play a significant role. It can be concluded that despite significant changes in agriculture, it was not possible to achieve a European level of development and even repeat the successes of the Soviet era.

Small business is an important component of a market economy. The experience of industrialized countries shows that up to 60% of the gross domestic product is provided by small businesses. Small businesses in developed countries employ about 50% of the total number of employees. It is important to note that in Hungary, small farms play a significant role in providing jobs, as well as a key social role (MIRZOV, 2021).

The creation of a powerful sector of small and medium business is one of the keys to the economic and social prosperity of the country. The effective development of small and medium-sized businesses contributes to the formation of a balanced market environment as a result of the flexibility and high adaptability of this segment to economic changes. The small business sector is the backbone of the modern market infrastructure, which provides a competitive environment for the economy. Entrepreneurship as one of the specific forms of manifestation of social relations helps to increase the material and spiritual potential of

society, creates a fertile ground for the practical implementation of the abilities and talents of each individual.

The master's thesis is devoted to the creation and development of a business plan for a snail farm, which will be located in Hungary, but the products are mainly intended for export. This industry is practically not developed in the country due to the lack of local demand. On the other hand, in some European countries there is a need that is not covered by current supplies. Snail farming is a new and profitable business that requires little investment and brings profit in a short time. The cost of such an unusual ingredient is comparable to premium varieties of cattle meat, but it can be obtained at a much lower cost. So you can consider snail farming as a business with excellent margins. In addition, the situation in this niche of the national market is still very favorable for newcomers. Competition is relatively low, demand is becoming more confident every year, the prospects for expansion and development of the snail market are assessed positively.

Thus, the topic of this work is relevant.

# 1.2. OBJECTIVES

The subject of the work is the business planning tools in the context of business development.

The work is aimed at the development and justification of the economic feasibility of implementing a business project of a snail farm for growing snails, producing four tons per year and their further sale on the external and internal markets.

In order to accomplish this goal, the team identified seven main objectives:

- 1. To conduct the literature review studying the aspect of business planning, its elements and limitations as well as the differences between a startup business plan and traditional business plan.
  - 2. To discover the key aspects of snail farming.
- 3. To describe the materials and methods to be used in order to reach the aim of the work.
- 4. To study the way of establishing business in Hungary and legal framework of operating an animal farm.
  - 5. To undergo the analysis of the world's snail market.

- 6. To form the business model of a snail farm in Hungary.
- 7. To implement the financial analysis of the proposed business.

# 1.3. RESEARCH METHODOLOGY

To achieve the objectives of the work, the following *methods* are used:

- Business Model Canvas.
- Startup Business Plan.
- Porter's Five Forces analysis.
- The risk analysis.
- PESTEL analysis of the project.
- SWOT analysis of the project.
- Project implementation schedule.
- Breakeven point.

**Key words:** Snail Farm, Business Planning, Business Model Canvas, Small Business, Agriculture

# 2 LITERATURE REVIEW

# 2.1. Business planning as a business development tool

Fiore F. (2015) states that "A business plan is an organizational tool that explains business goals and strategies. This tool allows the owner to plan the business idea and explain the company's resources in a detailed document. A business plan focuses on setting goals, identifying risks, organizing thinking, setting priorities, allocating resources, highlighting priorities, planning challenges, and developing opportunities."

SCARBOROUGH M. and ZIMMERER T. (2008) declare "A business plan is any simple plan, not only limited to the business startup plan that helps the management to understand the current situation of the enterprises (strengths, weakness, opportunities and threats) and look forward into the future. A startup plan is business plan which consists of the mission, vision, objectives and action plans for the future of the new enterprises while the business plan drawn during the operation of the firm is vital for running the firm effectively, acquire new customers, partners, loans and so on. According to business plan is two things; an organizing tool to simplify and clarify your business goals and strategy, the second one is a selling document that sells a business idea and demonstrates that a product or service can make a profit and attract funding and company resources. A business plan is a written summary of an entrepreneur's planned business scheme, it financial and effective details, its promotion opportunities, and strategy, and its leaders skills and skills. Generating a business plan is important because an entrepreneur needs to a well-conceived exactly created business plan in order to increase the possibility of achievement."

Business plans are well known by investors, entrepreneurs, and students. "A business plan describes the business's vision and objectives as well as the strategy and tactics that will be employed to achieve them. A plan may also provide the basis for operational budgets, targets, procedures, and management controls" (FRIEN G. and ZEHLE S., 2004). The underlying logic behind a business plan is to try to predict the future of a company by using specific marketing, strategy, and financial research and planning tools. In fact, while engaging time and money, entrepreneurs desiring to increase their chance of success should plan their business and test it against multiple scenarios.

ETTINGER and WITMEUR (2003) observed four uses for the business plan, "First, it is a decision-making tool that helps entrepreneurs to review the most important success factors of a venture. Second, the business plan is an analytical tool. It integrates multiple techniques (e.g. SWOT analysis or Porter"s five forces model), that help to analyze the pros and cons of different options. Third, the business plan is a communication tool that is required when entrepreneurs want to attract new business partners, including investors. Finally, the business plan is a controlling tool that can be applied to monitor the short and long-term evolutions of the project. A business plan's typical structure includes four main chapters: the context (including team, opportunity, market, and industry), the strategy (including vision, core business, and position), the action plan (including production, sales & marketing, and R&D plans), and the financials. The financial section should contain the projections and the investment requirements."

When developing a business plan, the goals are to understand:

- 1. The industry involved.
- 2. The competitive market.
- 3. The customer base (Butler, 2007).

# 2.1.1 Elements of the business plan

As there are no businesses that are absolutely the same, the plans differ one from the other. There is information that each of them includes, still the detailed characteristics are different. According to authors such as DUL J. and HAK T. (2008), a basic template generally has the following components:

- 1. Executive summary: vision, mission and objectives of the company; products and services; strategy and financial forecast; timing.
- 2. Basic business information: title; contents; contact info; definitions and legal structure.
- 3. Current business situation: current state of the business and of the market; core competencies; business organization and infrastructure.
- 4. Strategic analysis: political, technological, social and economic and their impacts; uniqueness; value chain; operation resources, human resources, financial resources; organizational resources; industry structure; competitor analysis; SWOT analysis.

- 5. Strategic plan: sources of sustainable competitive advantage; market positioning; brand strategy.
- 6. Marketing plan: market segments, size and growth; description of potential customers and their needs; description of products and services; pricing and discounting offers and packages; advertising and promotional; channel and distribution strategy; comparison with competition; performance and marketing forecasts.
- 7. Operations and production: physical location of the firm; make or buy considerations; production process; facilities, equipment and machinery needed for production processes; staffing requirements; sources of supply of needed materials for operations and production.
  - 8. Research and development: objectives; organization; plans; resources.
- 9. Management and organization: staffing; recruitment; training; working facilities; employment and related costs.
- 10. Forecast and financial data: performance ratios; sales forecast; profit and loss account (income statement); balance sheet; cash flow statement; benchmarks.
  - 11. Financing: funds required and timing.
- 12. Risk analysis: risk overview; limiting factors; critical success factors; alternative scenarios and strategic responses, specific risks and risk-reduction strategies.

# 2.1.2 Limitations of Business Planning

Today a huge amount of literature on business planning is available and most business schools offer a business planning course. However, the relationship between the practice of formal planning and superior company performance is far from obvious. Six typical arguments against business planning are briefly summarized in this next section.

First, writing business plans is based on a top-down approach, which is not suitable in every situation. The Segmentation-Targeting-Positioning (STP) formula explained by authors such as KOTLER (1994) is widely used by entrepreneurs who have to launch their venture and define who their customers are. However, SARASVATHY (2008) proposes that the entrepreneurial decision-makers do not always start with a predetermined goal or target. She suggests that they rather start with a predetermined set of means and later select a

market, i.e. they do not follow the STP sequence. In fact, the "reversed" sequence is more relevant when the market does not yet exist at the inception of the venture.

Secondly, writing business plans is very time consuming. Indeed, it may take a lot of time (about 3 months) to collect data and properly formalize the plan in writing (i.e. most business plan guides advise to write a 30-40 page document). Many specialists suggest this time could be better spent in doing actual business (e.g. MINTZBERG 1994).

Thirdly, writing plans is useless in an unpredictable market. ARMSTRONG (1982) suggested that the relevance of formal planning is limited under high uncertainty. Despite this theoretical view, he made the hypothesis that high uncertainty would require more planning. However, his study could not confirm it.

Fourthly, the importance of BP business planning depends on cultural aspects. RAUCH, FRESE, and SONNENTAG (2000) found that the relationship between planning strategies and success in small-scale enterprises was positively correlated in West Germany and East Germany, but negatively in Ireland. They proposed that business planning only has a positive impact in cultures that value uncertainty avoidance. They also proposed that the professional background of stakeholders has to be taken into consideration. For example, if the entrepreneur only deals with business angels, the importance of planning would be lower than if he deals with commercial bankers.

Fifthly, formal planning is not dynamic and could prevent entrepreneurs from exploiting contingencies. As explained by e.g. ARDICHVILI, CARDOZO, and RAY (2003), opportunities are made, not found. Flexibility in the development of opportunities should then be the entrepreneur"s number one priority. Consequently, rigid business plans could prevent them from properly developing their project when opportunity arises. In other words, BAKER, MINER, and EESLEY (2003) explained that formal planning obscures the potential value of improvisational skills. They highlighted the necessity of training in improvisational skills so that entrepreneurs can use and combine both rigid and flexible methods when appropriate.

Sixthly, traditional business plans typically look the same and do not always convince stakeholders anymore (e.g. KIRSH, GOLDFARB, GERA, 2019). In fact, business plans often appear as being part of business tradition, but do not include enough valuable insights on the business itself since the plans often pay more attention to the form than to the substance.

Nevertheless, this traditional view of business plans by investors highlights the consensus about the need to write a business plan when entrepreneurs are looking for financial support.

# 2.1.3 Relationship between business planning and company performance

Results on the impact of planning on company performance are contradictory. On one hand, BREWS and HUNT (1999) found a positive relationship between formal planning and the company performance. They also suggest that the environment has no influence on these results. As a conclusion, they felt entrepreneurs should always plan. The authors only suggest that plans should be flexible in uncertain markets. Based on a study of 223 new companies, DELMAR and SHANE (2003) argue that business planning has a positive impact since it reduces the likelihood of the venture disbanding, accelerates product development, and reinforces organizing activities. On the other hand, LUMPKIN, SHRAEDER, and HILLS (1998) analyzed 94 companies and observed that writing a formal business plan had no influence on company performance, neither for established firms, nor for new ventures.

BRINCKMANN, GRICHNIK, AND KAPSA (2020) applied a meta-analysis to reanalyze the empirical findings of 46 studies on 11,046 new and established firms to test the influence of planning on venture performance. They also paid attention to the influence of the context (i.e. newness of the firm, nature of business planning practice, and cultural variables) to mitigate the relevance of business planning. Their findings confirm the positive influence of planning on firm performance, but they also highlight that there are some factors that can strain the relationship.

First of all, firm newness reduces the return of planning, i.e. planning should start to be used after the gathering of all information by the entrepreneurs and once the influence of contingencies is being reduced. Secondly, they found that written business plans have the same impact as informal business planning activities. In other words, there is no best way to plan. Finally, they observed that business planning is less effective under high uncertainty. An interpretation of this could be that entrepreneurs that have high uncertainty avoidance may more closely stick to their plan, reducing their scope of decisions.

# 2.1.4 Differences between a startup business plan and traditional business plan

The dissimilarities between startup and traditional businesses are numerous. While traditional businesses boast established customer bases, optimized business models, and historical profits, startups tend to prioritize the development of a vision, the creation of strategies to attain their goals, and the identification of benchmarks for financial sustainability. The differences between a startup business plan and traditional business plan are presented in the Table 1.

Table 1: Differences between a startup business plan and traditional business plan

Name	Description
Purpose	A startup business plan is usually created to help entrepreneurs raise
	capital, secure investors or partners, and guide the development of a new
	business. A traditional business plan, on the other hand, is typically
	created by existing businesses to outline strategies, operations, and
	financial goals.
Scope	A startup business plan tends to focus more on the feasibility of the
	business idea, the market potential, and the overall business model,
	whereas a traditional business plan often includes more detail on current
	operations, customer base, and financial performance.
Assumptions	Because a startup is a new venture, there are often more assumptions that
	need to be made about the market and the potential for success. A startup
	business plan will usually include more assumptions and projections than
	a traditional business plan, which has a track record of operations.
Flexibility	A startup business plan may need to be revised frequently as the company
	learns more about the market and its customers. A traditional business
	plan is usually updated less frequently and may be more rigid in its
	approach.
Funding	Startups often rely heavily on outside funding to get off the ground, so a
	startup business plan may be more focused on convincing investors or
	lenders of the potential for growth and profitability. Traditional
	businesses may have more established relationships with lenders and
	investors, and may not need to focus as much on funding in their business
	plan.

(Source:own development)

Despite these differences, the business structure of startups and traditional businesses shares some similarities. Notably, the startup business plan distinguishes itself from the traditional business plan in several ways.

Creating a startup business plan can be more challenging than creating a traditional business plan for several reasons. Firstly, startups are usually based on a new or innovative idea, and it may be difficult to determine how the market will respond to this idea. As a result, the assumptions made in a startup business plan may be riskier and require more careful consideration.

Secondly, startups often lack the track record of success and established customer base that traditional businesses possess, making it harder to make accurate projections and financial forecasts. The lack of historical financial data may also make it more challenging to secure funding from investors or lenders.

Thirdly, startups are more likely to pivot or change direction as they learn more about the market and their customers. This means that the startup business plan may need to be revised and updated more frequently than a traditional business plan, which can be a time-consuming process.

Lastly, startups often require more detailed plans for growth and scalability, as they aim to rapidly expand and capture market share. This can make it more challenging to create a comprehensive and realistic startup business plan that covers all necessary aspects of the business.

In summary, the unique nature of startups and the uncertainty and risk associated with new ventures can make it more difficult to create a startup business plan compared to a traditional business plan. However, a well-crafted startup business plan is crucial for securing funding, guiding business operations, and achieving success in the long term.

# 2.2. Business Model Canvas

The Business Model Canvas (BMC) is the first business technique to be discussed. According to JOYCE and PAQUIN (2016), the BMC sheds light on how high level strategies and fundamental business operations are calibrated. There are three aspects to consider when using the BMC as a business planning tool:

1. How key components and parts are integrated to convey the value of a business to the customers.

- 2. How these parts are interconnected throughout the entire business.
- 3. How the business generates profit and values through this network of parts.

Why do we use it?

- To quickly illustrate what the idea entails.
- To comprehend a company and walk through the process of connecting an idea
   with the best way to implement it as a business.
- To examine what kind of customer choices have an impact on how the systems are used.
  - To enable everyone to clearly understand what the business will most likely be.

It is designed as a chart with 9 blocks, describing the firm's value preposition, infrastructure, customers and finances. Answering the questions in the template table is a simple way to plan the business using the Canvas Model (Figure 1).

The right side of the BMC focuses on the customer (external), while, the left side of the canvas focuses on the business (internal) and represents part that is under the control of the business holder.

Both external and internal factors meet around the value proposition, which is the exchange of value between your business and your customer/clients.

# I. Value Proposition

Value Proposition is the cornerstone of any venture or product. It is the basic idea behind the value exchange between the company and the clientele.

When a customer's problem is resolved or their suffering is lessened by the business, value is typically exchanged from them for money.

# II. Customer Segments

The practice of segmenting a customer base into groups of people who are similar in particular ways, such as age, gender, interests, and spending patterns, is known as customer segmentation.

The market's size and the size of the Customer Segment are other important factors to assess and comprehend. This will aid in the understanding of the market both on a micro and macro level.

Establishing customer personas for each of the customer segments is a great way to begin understanding the target market.

# **Business Model Canvas**

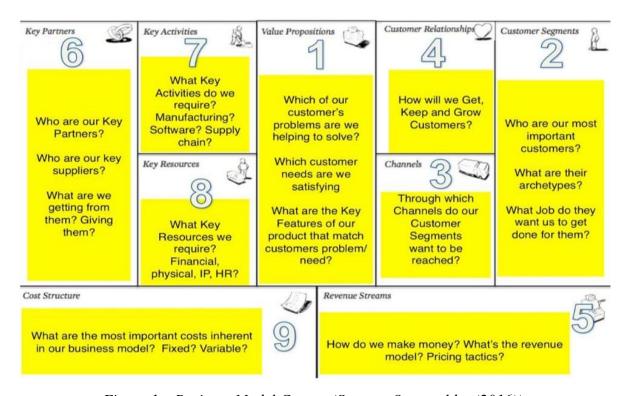


Figure 1: Business Model Canvas (Source: Osterwalder (2016))

# III. Customer Relationships

How a company interacts with its customers is referred to as customer relationships.

One must decide whether to communicate with the customers in person, on the phone, or online if the business is primarily conducted there.

#### IV. Channels

The pathways by which a customer interacts with a company and enters the sales cycle are referred to as channels. In most cases, this is covered by the company's marketing strategy.

# V. Key Activities

The Key Activities of a business/product are the actions that the business undertakes to achieve the value proposition for the customers.

# VI. Key Resources

This block defines the resources that are necessary to create value for the customer. They are considered very important for the company, as being needed to sustain and support the business. These resources are human, financial, material, and intellectual.

# VII. Key Partners

Key Partners are a list of other external companies/suppliers/parties you may need to achieve your key activities and deliver value to the customer.

#### VIII. Cost Structures

The business cost structure is defined as the monetary cost of operating as a business.

Characteristics of Cost Structures:

- Fixed Costs: costs are unchanged across different applications (salary, rent).
- Variable Costs: costs vary depending on the amount of production of goods or services.
- Economies of Scale: costs for products go down as the amount are ordered or produced.
- Economies of Scope: costs decrease due to incorporating other businesses that have a direct impact to the original product.

#### IX. Revenue Streams

Revenue Streams are defined as the way by which a business converts the Value Proposition or solution to the customer's problem into financial gain. It is also important to understand pricing the business accordingly to pain of purchase in exchange for the pain of solving the problem for the customer.

# 2.3. Key aspects of snail farming

This business can be started with the cultivation of mollusks in the garden. In the future, the business can be expanded to the organization of a full-fledged farm. Due to the popularity of these molluses, starting a snail farm can be quite a lucrative venture.

#### 2.3.1 Benefits of snails

Although the full extent of snails' benefits is not completely understood, some advantageous characteristics are known. Snails have a variety of potential benefits, including:

- Rich in vitamins: Snails contain vitamins A, B, PP, E, and K, which can support various bodily functions.
- Improved calcium metabolism: The consumption of snail meat can help restore calcium metabolism, which can be especially beneficial for pregnant women.
- Skincare: Snail secretion has been found to have beneficial effects on the skin,
   making it a popular ingredient in cosmetics and skincare products.
  - Pets: Snails can make interesting and low-maintenance pets.
- Medicinal uses: Snail mucus has been used to treat inflammation, burns, and warts.
- Improved complexion: Snail secretion has been shown to improve complexion,
   making it a popular ingredient in skincare products.
- Weight loss: Snail meat is low in cholesterol and high in amino acids, making it a potentially effective food for weight loss.
  - Aphrodisiac: Some cultures believe that snail meat has aphrodisiac properties.

Table 2 shows a nutritional comparison between snails and the traditional meat choices.

Table 2: Comparison of protein alternatives per 100 grams of meat

Element	Alternative					
	Snails	Chicken	Beef	Fish		
Calories	90	110	288	240		
Protein	16.5	29.55	26.33	19		
Iron	3.5	1.33	44.55	0.3		
Fat	1.4	7.72	19.54	14.53		

(Source: own development)

Snails are often considered as a unique type of meat that offer a number of advantages as well as disadvantages compared to other types of meat.

On the one hand, snails are relatively low in fat and calories, and are a good source of protein and minerals such as iron.

At the same time, snails may not be as widely available or familiar to consumers as other types of meat, which could limit their appeal. In addition, preparing snails is more time-consuming and labor-intensive than preparing other kinds of meat since they require cleaning and cooking in a specific way to ensure they are safe to eat.

All things considered, whether or not snails are a preferable choice compared to other meats depends on individual preferences, dietary needs, and cultural considerations.

# 2.3.2 Types of snails

There are several types of snails that are commonly farmed for their meat and other beneficial uses. Here are a few examples:

- 1 Helix aspersa (common garden snail): This species is one of the most commonly farmed for its meat. It is easy to care for and can be raised in small spaces. The meat is low in fat and high in protein, making it a healthy food choice.
- 2 Achatina fulica (giant African snail): This species is also commonly farmed for its meat. It is larger than the common garden snail and has a higher yield of meat. However, it requires more space and specific environmental conditions to thrive.
- 3 Cornu aspersum (European brown snail): This species is popular in European cuisine and is also farmed for its meat. It is similar in size to the common garden snail but has a slightly different taste.
- 4 Helix pomatia (Roman snail): This species is known for its large size and is considered a delicacy in many parts of Europe. It is slow-growing and requires a cooler environment, making it more difficult to farm.

There are several species of snails that can be raised for food. The optimal type that is well-suited to the local climate and farming conditions is Helix aspersa.

# 2.3.3 Conditions and diet

The process of cultivating snails on a farm involves the construction of specialized enclosures on a land plot. To create a suitable environment for snail cultivation on a personal plot, a shaded location must be enclosed with a fence that has a foundation that is 20

centimeters deep. This is essential to protect the snails from rodents and other ground pests that pose a threat to their wellbeing.

The wall around the enclosure should be approximately half a meter to one meter in height, with a concave shape that allows the snails to enter the enclosure while preventing their escape. A metal mesh with small cells is placed over the top of the enclosure to protect the snails from predators such as birds and reptiles. Shallow trenches are also formed within the paddock to collect water, and hills are created to provide shelter for the snails.



Figure 2 shows a possible enclosure for snails.

Figure 2: Snails encloser (Source: WikiHow (2023))

Inside the enclosure, vegetation is planted that will serve as a food source for the snails. Examples of suitable plants include burdock, nettle, and wild grapes. Grape snails hibernate during the cold season for approximately three months.

To cultivate approximately one ton of grape snails during the growing season, a plot with a natural diet of thirty to forty individuals per square meter of vegetation, with a height of at least 10 centimeters, is required. Alternatively, artificial feeding allows up to

200 snails per square meter. Approximately one kilogram of feed or grass is required for every 20 snails, and additional supplements such as chalk and powdered milk are also used.

# 2.3.4 Breeding and harvesting processes

The breeding process of Helix aspersa in Hungary can vary depending on the farm and the specific methods used.

Snails that are to be used for breeding are carefully selected based on their size, health, and reproductive potential. They should be mature and free of diseases. The breeding environment should be spacious enough to allow snails to move freely. It should also be dark, cool, and moist, with soil or other substrates that are suitable for snail reproduction. Snails are hermaphrodites, meaning they have both male and female reproductive organs.

To breed, snails mate and exchange sperm. They then lay eggs, usually in moist soil or substrate. The eggs take several weeks to hatch. Once the eggs are laid, they are incubated under appropriate conditions until they hatch into small snails. Newly hatched snails require a diet of fresh vegetables and other plant-based foods. They also require appropriate care, such as protection from predators and monitoring of environmental conditions. Snails grow and mature over time, typically taking several months to reach adulthood. They should be provided with a balanced diet and appropriate housing conditions to support healthy growth.

Snails are typically harvested by hand, sorted by size and health, and then either sold for consumption or used for their mucus in cosmetics and skincare products.

Snails should be transported in plastic, wood or metal boxes, provided with ventilation spaces to avoid suffocation, so they cannot get out. Selection of dead snails and broken.

# 3 MATERIAL AND METHOD

# 3.1. Case Study Research

Case study research is a controversial data collection method. At the same time, it is acknowledged widely in different social disciplines. This is due to its ability to provide detailed insights into different areas of business.

Most sciences recognize case study research design and methods and their roles have become more prominent. This approach is used to research and write about topics in education, sociology, and community-based issues.

# 3.1.1 What is Case Study Research?

In social studies, the case study is a research method in which a phenomenon is investigated in its real-life context. It's an empirical inquiry and research strategy that is based on an in-depth investigation of a group, event, or individual to explore the underlying principles causes.

Essentially, this study can be defined as an exploratory and descriptive analysis of a case. But, what is a case study in research? Well, a case can be anything that a researcher wants to investigate. This can include a person, a group, an event, a decision, a policy, period, institution, or any other system that can be studied historically.

Case studies are a popular research method in business area. Case studies aim to analyze specific issues within the boundaries of a specific environment, situation or organization.

According to its design, case studies in business research can be divided into three categories: explanatory, descriptive and exploratory.

Explanatory case studies aim to answer 'how' or 'why' questions with little control on behalf of researcher over occurrence of events. This type of case studies focus on phenomena within the contexts of real-life situations.

Descriptive case studies aim to analyze the sequence of interpersonal events after a certain amount of time has passed. Studies in business research belonging to this category usually describe culture or sub-culture, and they attempt to discover the key phenomena.

Exploratory case studies aim to find answers to the questions of 'what' or 'who'. Exploratory case study data collection method is often accompanied by additional data collection method(s) such as interviews, questionnaires, experiments etc.

# 3.1.2 Strengths and weaknesses of the case study

A case study can have both strengths and weaknesses. Researchers must consider these pros and cons before deciding if this type of study is appropriate for their needs.

Case study method has the strengths and weaknesses of both forms of inquiry.

Weaknesses

Case studies involve analysis of small data sets, such as one or two companies, that may lead the researcher to gain some insights about trends in relevant industries. For example, a case study about the Mitsubishi car company might be used to generalise about similar companies in the automobile industry. The data is "real life" in the sense that a company or companies have been chosen as the source of the data. However, the studies involve "small-n" data and therefore conventional empirical techniques cannot be used, or where they are used, they may have limited application as there may not be enough data to meet requirements for statistical significance.

#### Strengths

The case study method involves detailed, holistic investigation (for example, all aspects of a company) and can utilise a range of different measurement techniques (the case study researcher is not limited to any one methodological tool). Data can be collected over a period of time, and it is contextual (relative to a certain industry). The histories and stories that can be told about the company are also something that can be assessed and documented—not just empirical data, for example, stories and anecdotes about how the company interacts with the marketplace can be used. Researchers may choose to perform a case study if they are interested in exploring a unique or recently discovered phenomenon. The insights gained from such research can help the researchers develop additional ideas and study questions that might be explored in future studies.

However, it is important to remember that the insights gained from case studies cannot be used to determine cause and effect relationships between variables. However, case studies may be used to develop hypotheses that can then be addressed in experimental research.

# 3.1.3 Objectives of case study research

Case study research has been advocated as a valid research strategy in marketing (BONOMA, 1985), operations management (MCCUTCHEON and MEREDITH, 1993), management information systems (BENBASAT, 1987), and strategy (MINTZBERG, 1979; EISENHARDT, 1989; LARSSON 1993). Most of these authors consider case study research as a useful research strategy (a) when the topic is broad and highly complex, (b) when there is not a lot of theory available, and (c) when "context" is very important. It is claimed that all these three conditions hold for many topics in business research. Based on such arguments, most authors advocate the use of case study research for studies with exploratory aims. Several authors provide a list of topics or questions for which they deem case study research particularly useful. Suggested topics in marketing include, marketing strategy development and implementation, business reengineering and customer service, and the formation of organizational ethical orientations as they pertain to marketing (VALENTIN, 1996; PERRY, 1998; JOHNSTON, 1999). In Operations, the management of environmental policies in operations, the dynamics of technology implementation, and differences between manufacturing and service operations management provide, according to these authors, interesting opportunities for case study research (MCCUTCHEON AND MEREDITH, 1993; ELLRAM, 1996; MEREDITH, 2002; STUART, 2002).

Some authors elaborate on the use of case study research for testing purposes. BONOMA (1985), for instance, proposes a four-step process for conducting case study research that is oriented to theory-testing. JOHNSTON (1999), WILSON and WOODSIDE (1999), and HILLEBRAND (2001) also advocate case study research as a strategy that is useful for theory-testing.

# 3.1.4 Case Study Format

Given below is the case study outline that it is required to follow a logical flow.

- Title

An engaging title that describes the overall purpose of the study.

- Abstract

A brief resume of the study is indicated in one of two paragraphs. Annotation should answer what, when, where, who and why on your topic. In addition, this is an introduction into a general study, problem, hypothesis and results.

### - Introduction

In the introductory paragraph, one is to highlight the reasons for interest in a specific topic and provide reference information about the research problem and its significance. For example, what he or she knew on this topic before the study, and what did he or she learn from this?

# - Problem

Next, state your problem, how you decided on it, what led to its development, etc.

Make sure that the hypothesis is testable and that you can prove it using evidence.

# Methodology

Here, present the research methodology used to carry out the research and find relevant data.

#### - Results

Organize the gathered data and present it logically so the reader can conclude.

#### Analysis

Give an explanation of the results and results, as well as how they support your hypothesis.

## - Conclusion

Send with a brief description, which states what the thematic study can achieve, the hypothesis has been proven, and what did you learn from this?

Also, provide some recommendations for further work and improvement.

# - References

Cite all the sources used to gather information.

# - Acknowledgments

Thank those who helped carry out the study.

### - Appendix

Add any extra information related to the case study, such as graphs.

# 3.2. Entrepreneurship in Hungary

In 2023, starting a business in Hungary will be profitable. Since the state is a member of the EU, businesses can access the market there. The nation has a sophisticated infrastructure and is situated in the middle of Europe. Production, logistics, and the service industry are all strongly established in this area. Yet these are not the only benefits Hungary offers to businesses.

#### 3.2.1 Benefits

Hungary's geographic location benefits from easy access to the markets of the EU and the nations of Eastern and Southern Europe. A strong industrial and manufacturing sector that specializes in electronics and automotive, advanced logistics, is also produced by favorable business environment.

The nation also excels in other sectors, such as: trade, agriculture, IT, pharmaceuticals, textiles, food production, and building materials are some examples.

These industries have a ton of potential for growth on a global scale. As a result, businesses that operate in these areas won't collapse.

One can transport goods without paying any duties if you register a corporation in Hungary, which grants you unrestricted access to the entire EU market. The development of logistics facilitates profitable import and export. The nation has excellent roads, railroads, waterways, and air links for travel.

By signing agreements for distribution, agency, and franchising, investors can engage in direct tradingExport, import, and customs provisions also apply to these contracts.

Opening a company in Hungary 2023 takes only a few days. The enterprise can be managed remotely. The state has struck agreements with numerous countries throughout the world in order to prevent double taxation. Last but not least, Hungary offers the lowest corporate income tax rate that in 2023 amounts to only 9%, which is one of the lowest among EU jurisdictions.

Cash grants that are non-refundable or just partially reimbursable may be given to the company and help the project succeed. Despite being a member of the EU, the country has lower prices. By contacting a representative of our organization in 2023, you can open a bank account online in Hungary (not in every bank).

To run your firm, you do not need to hire local employees. But it is crucial to remember that:

- The country boasts a skilled workforce as the number of people with higher education increases every year.
  - The majority are multilingual, which makes hiring locals even more appealing.
- As for the cost of labor, the Hungarian labor cost is still much lower compared to the western countries, for example, the average gross earnings of full-time Hungarians was HUF 508,100 for men and HUF 427,200 for women. Taking into account inflation for 2021 of 7.9% compared to the same period last year, real wages in Hungary increased by 5.4%.

Consequently, using qualified local workers enables Hungary to provide high-quality services and goods at competitive costs, which supports business growth.

# 3.2.2 Business Association

As a foreigner, one can establish five types of business associations in Hungary. Have in mind that all business associations need a HUF bank account.

- 1 Unlimited partnership (Kkt). Needs a minimum of two members, but there's no required starting capital. However, involved partners share unlimited liability. The registration fee is 50,000 HUF. The administration is done by partners.
- 2 Limited Partnership (Bt). It needs a minimum of two members a general and a limited partner. The general partner has unlimited liability while the limited partner is liable only for their stake in the company. No minimum capital is required and the general partner manages the company.
- 3 Limited liability companies (Kft). The minimum number of members of an LLC is one and all members have limited liability. Minimum investment capital is 3.000,000 HUF and each company must have at least one managing director. It also needs a supervisory board if the law requires so or the company has more than 200 employees.
- 4 Private limited company (Zrt). Needs at least one member and at least 5,000,000 HUF of starting capital. The liability of the shareholders is limited to their shares. In terms of administrative provisions, it must have a board of directors. There needs to be a

supervisory board if the company has more than 200 employees or if the shareholders that have at least 5% voting rights demand so.

5 Public limited company (Nyrt). Needs at least one member and the starting capital must be at least 20,000,000 HUF. A board of directors is required, while the existence of the advisory and supervisory boards depends on the same criteria as for private limited companies.

One of the main advantages of business association is that you can register a company via "one-stop shop" where the Court of Registration obtains your VAT number from the tax authority for you. Generally, setting up a company takes up to 15 days.

Company registration fees range from 50,000 HUF for unlimited and limited partnerships to 100,000 HUF for LLCs and private limited companies. It costs 600,000 HUF to register a public limited company.

# 3.2.3 Steps to register a new company in Hungary

The whole procedure can be done personally or remotely and by our law firm's legal representation.

- 1. To begin with, one needs to decide on the specifics of the company, such as the name, registered office, management, amount and type of share capital, person of delivery agent. There are certain requirements and restrictions that one needs to meet in order to register a business name in Hungary. When setting up a Limited-Liability Company in Hungary, it is needed to choose a name that is not similar to other names.
- 2. The Hungarian lawyer prepares the corporate documents, including the articles of association, statutory declarations from the management.
- 3. If the shareholder is a foreign company, its legalized company registry extract or similar certificate needs to be obtained and then translated into Hungarian. The certificate should confirm that the shareholder is duly established and existing in its jurisdiction, furthermore, the certificate should verify the registered seat and the person signing on behalf of the shareholder.
- 4. The corporate documents are signed either in front the Hungarian lawyer or abroad, in which latter case notarization and legalization may be necessary (Hungarian consular or embassy certification or Apostille).

- 5. A Hungarian bank account needs to be opened where the share capital shall be deposited.
- 6. The Hungarian lawyer files the executed and countersigned corporate documents and the electronic application for the registration of the company.
- 7. The Court of Registration registers the company. As the registration process is a one-stop-shop action, it also provides the company with the VAT number and statistical number.

The letter of confirmation will have the TAX number printed on it. One will also need documentation proving that he or she is a genuine representative of your company, along with the business identification card.

With some restrictions, the company can start business activities as from the filing. On average, it may take up to 15 days to start a company in Hungary. This covers the time required for all legal processes, such as consulting with a lawyer and going to the registration court.

It is possible to apply for an expedited registration (usually within a week), however in such case, the articles of association has to be prepared on the basis of a template without any additions or deletions.

The registration of a general partnership, a limited partnership and a limited liability company is free of statutory fees. The duty fee of registering a private company limited by shares is HUF 100,000 and it is HUF 50,000 of registering a branch office. Statutory publication fees (HUF 5,000), translation, legalization and courier fees would also apply.

# 3.2.4 Legal aspects to conduct an animal farm in Hungary

There are many laws and regulations that one needs to know about, and consequently abide by, when opening a farm. Which rules will apply to a business will often depend on the type of farm one operates.

Generally, one is expected to comply with health and safety regulations, as well as laws that govern how the animals and produce you farm is reared and supplied. Several documents and permits are required to start a snail farm in Hungary. Here are some of the most important:

- 1 Land Use Permit: If one plans to use land for your snail farm, he or she may need to obtain a land use permit from your local authority.
- 2 Animal welfare permit: One must have an animal welfare permit issued by the Hungarian Food Safety Office (NÉBIH). This license ensures compliance with animal welfare and care standards.
- 3 Environmental Permit: If the snail farm may have an impact on the environment, one may need to obtain an environmental permit from the local authority.
- 4 Health and safety permit: One may need to obtain a health and safety permit from the local authority to ensure that the snail farm is safe for staff and visitors.

It is important to note that these are general requirements and the specific permits and documents required may vary depending on the location of the snail farm and the size and type of the operation. It is recommended that one consults a lawyer or snail farming expert in Hungary to ensure compliance with all legal requirements and obtain all necessary permits and licenses for the particular snail farming project.

# 4 RESULTS AND THEIR EVALUATION

# 4.1. Market analysis

The total consumption of snails in 2021 was estimated around 75.000 tons. This amount of snails was received as follows:

- a. The 19% (14,250 tons) of this amount are snails that have been collected from snail breeding units.
- b. The remaining 60,750 tons (of all traded goods) are snails that have been collected from nature in poor countries, where this activity found a great resonance.

The increasing demand for snails, especially in Europe has generated market conditions that will guarantee the sale of the quantity produced. With more than 80% of the market share, the commonly consumed snail type is Helix Aspersa. It is well known for being an excellent and highly appreciated gastronomic product thanks to the quality of its meat and slime. Mediterranean countries benefit from climate conditions, which completely satisfy all breeding conditions for this type of snails.

In 2022 the total worldwide market of the consumption of snails has reached 156 million dollars. In France, in 2021 there was a significant lack of 7,000 tons of snails due to their high consumption. Based on the above information, it is expected that need for snails will not be covered even in the next 10 years.

# 4.1.1 Global Market Size. Consumption Volume

It is difficult to measure the total world consumption of snails due to the large percentage that represents the hand-picked snails for personal consumption, while global commercialized production is now estimated at about 75,000 tonnes in 2021.

Consumption of snails (except sea snails) has fluctuated over the past 6 years (see Figure 3).

In 2019, global consumption reached a market high of 81,000 tonnes following a two-year rising trend from 2017.

However, the market witnessed its biggest decline ever in 2020 as consumption fell by 9.9% to 73,000 tonnes.

The HoReCa channel consumes a huge amount of fresh snails, therefore the impact was enormous. In addition, this channel was one of the hardest hit by counteractive measures and travel restrictions.

As the post-pandemic recovery begins and tourism resumes, the market is set to grow slowly, but is not forecast to reach the 2019 market high in the long term. Instead, consumption is forecast with an anticipated CAGR of +0.7 % from 2021 to 2030, projecting a market volume to 80,000 tonnes by the end of 2030.

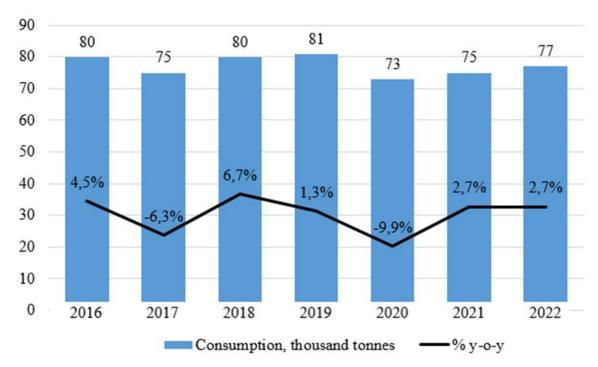


Figure 3: Market Volume, in consumption terms, 2016-2022 (Source: UN statistics (2023))

# 4.1.2 Global Market Size. Consumption value

The market value prices here are captured at importer/exporter prices as opposed to the final consumer price. Figure 4 provides an indication of approximate value size in what is a challenging industry to quantify.

Market value reached its top in the last six years at \$158 million, however this is still much behind the worldwide market peak level of \$193 million in 2008.

The market has done well to preserve its worth, having only had a very slight loss (-0.01%) in value compared to the previous year, despite the -9.9% decline in consumption volume between 2019 and 2020.

It is forecasted that market value will grow as well and by 2030 overcome its recent peak value reached in 2018.

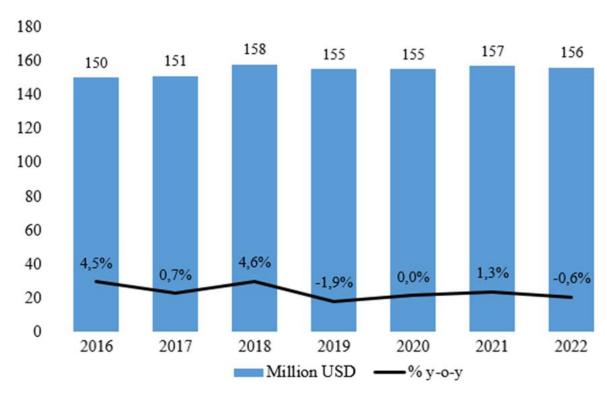


Figure 4: Market Value, in consumption terms, 2016-2022 (Source: UN statistics (2023))

# 4.1.3 Top 10 Exporting Countries 2022

Market Trends in Selling Countries from 2021 to 2022 are presented in the Table 3.

The value of exports in 2021 added up to USD 77,976,646 while in 2022 this indicator amounted to USD 72,945,901 showing a significant decrease of 6,45%.

The market shares of the listed countries are illustrated in Figure 5.

The top 10 selling countries represent 69.41% of global production.

Morocco remains the largest exporter of snails globally, compromising 12.67% of global exports which equated to a value of \$9.24 million (decrease of 19.45% vs. 2021).

Romania holds the next greatest share at 8.46% having demonstrated the slight increase (+0.10%) in market share vs. 2021 while at the same time the export value has decreased by 5.36% evidenced a huge fall in price paid per kg vs. 2021. Romania occupies third position with an 12.19% share of global production, however of the top country, production has remained the most consistent.

Table 3: World Market Trends for HS 030760, 2021-2022

Country		Market	Market	Change	Export	Export	Own
		Share,	Share,	in	value,	value,	Growth,
		%	%	Market	USD	USD	%
		Year	Year	Share,	Year 2021	Year 2022	
		2021	2022	%			
1	Morocco	14.71	12.67	-2.04	11,470,526	9,239,138	-19.45
2	Romania	8.36	8.46	0.10	6,518,918	6,169,772	-5.36
3	Lithuania	7.25	8.10	0.85	5,653,040	5,911,825	4.58
4	France	4.98	7.48	2.50	3,885,465	5,454,892	40.39
5	Seychelles	5.88	6.74	0.86	4,586,616	4,914,512	7.15
6	Indonesia	7.01	6.57	-0.44	5,466,453	4,790,107	-12.37
7	Bosnia and	0.75	5.75	5.00	581,792	4,192,584	620.63
	Herzegovina						
8	Serbia	4.07	4.93	0.86	3,171,447	3,593,107	13.30
9	Turkey	5.44	4.77	-0.66	4,240,693	3,483,055	-17.87
10	Czech	5.55	3.94	-1.61	4,329,443	2,874,585	-33.60
	Republic						

(Source: UN statistics (2023))

Lithuania, France and Seychelles both showed slight increases in market share compared to 2021 (0.85%, 2.50% and 0.86% respectively). However, it is worth to notice that the shares of the countries in export value have grown up considerably in comparison to 2021 (4.58%, 40.39% and 7.15% respectively) likely driven by price paid per kg.

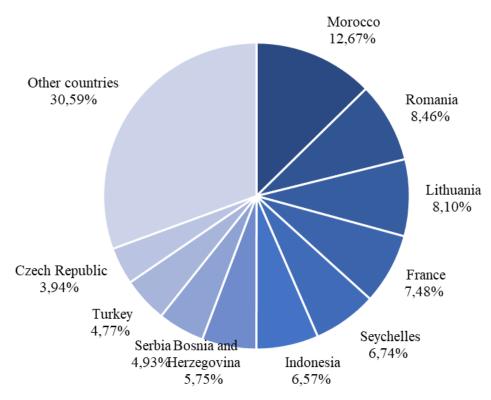


Figure 5: The market share of top 10 producing countries in 2022 (Source: UN statistics (2023))

The list of countries that have achieved the considerable grow in the market share during 2021-2022 presented below (see Table 4).

Table 4: Emerging Markets in 2022

	Country	Market Share in 2022, %	Gain in Market Share, %	
1	Bosnia and Herzegovina	5.75	5.00	
2	France	7.48	2.50	
3	Canada	3.40	1.68	
4	Senegal	1.48	1.31	
5	United Kingdom	1.43	1.20	
6	Hungary	1.44	1.00	
7	Serbia	4.93	0.86	
8	Seychelles	6.74	0.86	
9	Lithuania	8.10	0.85	
10	Viet Nam	2.48	0.48	

(Source: UN statistics (2023))

As we can see in the Table, Bosnia and Herzegovina topped the list of emerging markets in 2022 having greatly grown their share by 5.00% (from 0.75% in 2021 to 5.75% in 2022). In addition, France and Canada enhanced their positions in the global market gaining the shares of 7.48% and 3.40% respectively. It is necessary to notice that Hungary has also boosted its share in the market and during 2021 its share was up by 1.00% reaching in total 1.44% in 2022.

# **4.1.4** Top 10 Importing Countries 2022

Market Trends in Buying Countries from 2021 to 2022 are presented in the Table 5. *Table 5: World Market Trends for HS 030760, 2021-2022* 

Country		Market	Market	Change	Import	Import	Own
		Share,	Share,	in	value,	value,	Growth,
		%	%	Market	USD	USD	%
		Year	Year	Share,	Year 2021	Year 2022	
		2021	2022	%			
1	France	25.03	28.04	3.00	17,448,561	17,225,08	-1.28
						8	
2	Spain	18.92	18.07	-0.85	13,187,892	11,103,88	-15.80
						0	
3	Italy	9.93	8.12	-1.81	6,922,290	4,986,542	-27.96
4	Romania	6.38	8.04	1.67	4,444,704	4,942,386	11.20
5	Bosnia and	4.28	5.95	1.67	2,985,476	3,657,468	22.51
	Herzegovina						
6	Portugal	4.72	5.33	0.61	3,288,159	3,275,941	-0.37
7	Lithuania	4.78	5.01	0.23	3,332,814	3,080,338	-7.58
8	Czech	5.05	3.89	-1.16	3,523,179	2,391,740	-32.11
	Republic						
9	United States	4.28	3.81	-0.47	2,983,630	2,338,829	-21.61
	of America						
10	China	1.27	1.56	0.29	887,930	958,746	7.98

(Source: UN statistics (2023))

In 2021, total global imports were estimated to be valued at USD 61,441,192 showing quite a noticeable decrease of 11.85% from USD 69,706,606 in 2021. The market shares of the listed countries are illustrated in Figure 6.

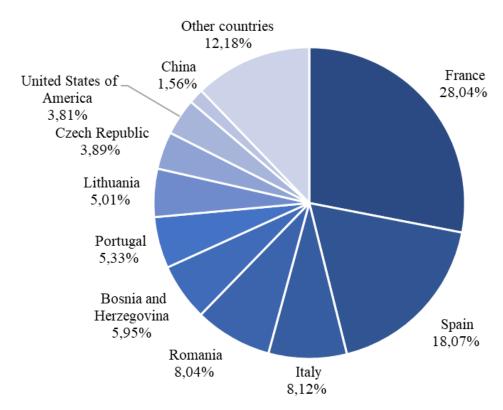


Figure 6: The market share of top 10 inporting countries in 2022 (Source: UN statistics (2023))

The top 10 buying countries of prepared snails account for 87.82% of global import value.

In 2021, the top importers of Snails were France and Spain, accounting for 28.04% and 18.07% of global import value respectively and occupying together almost the half of the world's import (46.11%). At the same time, the market share and import value decreased for both countries. The import share of Spain has fallen by 15.80% (from USD 13,187,892 in 2021 to USD 11,103,880 in 2022) due to a huge increase in price per kg versus 2021.

The shares of Italy and Romania are almost equal in 2022 though in 2021 the market share of Italy exceeded the other one by approximately 50%.

Italy and Romania are followed by Bosnia and Herzegovina, Portugal and Lithuania which shares in 2022 amounted to 5.95%, 5.33% and 5.01% respectively. However, it is important to note that their market shares remained quite stable during the chosen period of time.

The list of countries that have achieved the considerable grow in the market share during 2021-2022 presented below (see Table 6).

Table 6: Emerging Markets in 2022

	Country	Market Share in 2022, %	Gain in Market Share, %
1	France	28.04	3.00
2	Bosnia and Herzegovina	5.95	1.67
3	Romania	8.04	1.67
4	Hungary	0.63	0.63
5	Portugal	5.33	0.61
6	China	1.56	0.29
7	Malaysia	0.78	0.28
8	Georgia	0.48	0.24
9	Lithuania	5.01	0.23
10	Thailand	0.24	0.11

(Source: UN statistics (2023))

As we can see in the Table, France, representing the biggest share in the global market, gained even bigger part in 2022 proving that the demand for snails still keeps growing in the country.

Bosnia and Herzegovina and Romania grew their buying tendencies equally (by 1.67% both).

Last but not least, for the first time in a while Hungary has shown internal demand for snails and the change in the culture of consumption. Its market share reached 0.63% in total in 2022.

## 4.1.5 Snail market in Hungary

However, the breeding of ethical snails does not exist in Hungary, although there were great flare-ups in the late 1980s and early 1990s, which ended in ugly decline. There is still in-kind collection as well as processing, although the situation in the sector is becoming increasingly bleak. The snail business seemed to flourish in the late 1980s, and many people in Hungary began breeding snails. Experts said that due to the great flare-up, due to inadequate technology and lack of expertise, many producers have put all their money and savings into snail farming, and in 1990-91 a lot of them fell for it.

The processing sector in Hungary simply needs to make a living from the collected snails. But how significant is the manufacturing sector in general? A few years ago, it was possible to assert that the largest snail processor in Hungary, operated by the French company IMOFI SRWS Kft, is situated in Zalaszentgrót. Subsequently, in Kisvárda in 2019, IMOFI debuted its second processing facility. However, the processing at the Zalaszentgrót facility has already been finished, and the firm has shifted all of its operations to the east of the country. This was managed by the company's subsidiary, Bourgogne Gastronomie Kft. (BG). The Kisvárda facility, however, declared bankruptcy after just two years, and BG Ltd. is still in liquidation.

Mantar Kft., which is perhaps the last snail processor in Hungary, operates in Vajan, Szabolcs-Szatmár-Bereg County. The managing director of the company, Sándor Tóth on the issue of the Agricultural Sector, said that snails arrive through them through an extensive collection network. The expert explained that anyone is entitled to collect the snails, but the acceptance is subject to a permit issued by the authority at the request of the integrator company. Purchasers can obtain a permit from the company and only take possession of the snails from the collectors. Collecting is similar to collecting herbs, there is a set amount that should not be exceeded. During the last few years, they were not able to cover their operational needs.

# 4.2. Business model for a snail farm project

#### 4.2.1 Key consumer segments

For the segmentation of consumers, the following main features were identified:

- a) geographic location;
- b) specialization.

Consumers of live unprocessed snails are:

- enterprises producing medical or cosmetic preparations, which include components of the grape snail;
  - food industry enterprises specializing in the processing of seafood;
  - enterprises snail processors.

Given these features, we can distinguish nine consumer segments (see Table 7).

Table 7: Consumer segments depending on their geographical location and specialization

	Geographical location			
S	Hungary	Other EU	CIS	
	<u> </u>			countries
	Manufacturers of medicinal or	1	2	3
Charielization	cosmetic products	1	2	3
Specialization	Food industry enterprises	4	5	6
	Enterprises – snail processors	7	8	9

(Source:own development)

In the process of conducting a qualitative analysis, the following variables are used:

- 1) segment size (capacity);
- 2) projected share of the organization in the segment;
- 3) dynamics of the development of the segment and the forecast of its development trends in future periods;
- 4) key requirements of consumers of products in the segment in terms of the components of the marketing mix;
  - 5) advantages of the enterprise over competitors in the domestic market.

A qualitative analysis of the attractiveness of the organization's sales market segments was carried out using expert assessments.

A quantitative assessment of the attractiveness of these segments is shown in Table 8.

Based on the assessment of the attractiveness of the snail consumer segment, the following segments can be distinguished:

- European manufacturers of medical or cosmetic preparations, which include components of the grape snail (further segment 1);
  - European food industry (further segment 2);
  - local enterprises snail processors (further segment 3).

Table 8: Quantitative analysis of the attractiveness of market segments

Sales	segment	Att	ractiv	eness	criter	ion				aking in		
Specialization	Geolocation	1	2	3	4	5	1	2	3	4	5	Integral value of segment attractiveness
dicinal /	Hungary	1	3	1	4	1	0,3	1,5	0,3	0,2	0,1	0,48
Manufacturers of medicinal / cosmetic products	Other EU countries	3	1	2	5	3	1,5	0,9	0,3	0,6	0,1	0,68
Manufa	CIS	5	1	3	5	4	0,3	0,9	0,3	0,2	0,3	0,4
prises	Hungary	1	3	1	4	1	0,3	1,5	0,3	0,2	0,1	0,48
Food industry enterprises	Other EU countries	3	1	2	5	2	1,5	0,3	0,3	0,6	0,1	0,56
Food i	CIS	5	1	3	5	3	0,3	0,9	0,3	0,2	0,3	0,4
cessors	Hungary	3	5	1	1	5	0,9	1,5	0,1	0,2	0,5	0,64
Enterprises -snail processors	Other EU countries	5	1	3	1	1	1,5	0,3	0,3	0,2	0,1	0,48
	CIS	1	5	1	1	3	0,3	1,5	0,1	0,2	0,3	0,48
	ge value ificance	3 0,3	1,7 0,3	2,0	4,7	2,3			- -		- -	
Sigil	TICALICE	0,5	0,5	U, I	U,∠	U, I						_

(Source:own development)

# 4.2.2 Value proposition

Alex Osterwalder (2016) defines the value proposition as the answers on the questions, "What value do we deliver to the customer?", "Which one of our customers problems are helping to solve?", and "What bundles of products and services are we offering each customer segment?"

We have determined the main values of the product as listed:

- Uniqueness.
- Freshness of the snails.
- Convenience.
- Environmentally friendly.
- Customization and discounts.
- Honesty for long-term partnerships.
- Delivery of the product in time.

A value proposition based on the Alex Osterwalder template (Figure 7) allows to visualize the distinguishing properties, benefits of the product and the impression of its use.

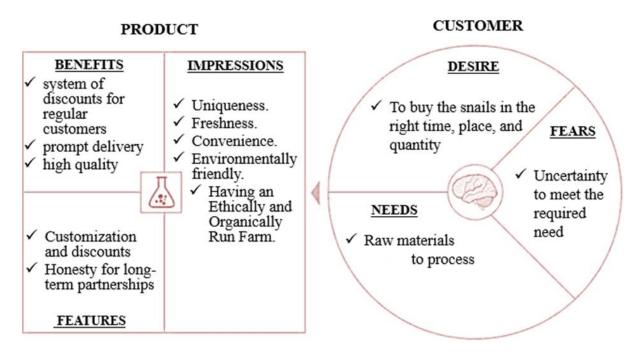


Figure 7: Value proposition (Source: own development based on the Alex Osterwalder's template (2016))

Described characteristics, benefits and experiences of the product meets the desires and needs of the target audience and dispels their fears.

The company's offer and the client's needs are in a perfect harmony.

#### 4.2.3 Distribution channels

On the basis of independence, the enterprise will have two types of intermediaries - its own distribution bodies (sales department of the organization) and trade intermediaries. Since the enterprise uses two ways of transferring goods to the consumer, the distribution channel is mixed. The organization pursues a policy of intensive distribution, that is, strives for the greatest coverage of the market and the creation of the best conditions for the purchase of goods by end consumers.

First of all, the company will carry out a targeted search for clients.

Customer acquisition mechanisms:

- use of professional advertising tools. The appeal will be posted in such media as:
   press, television, Internet, as well as billboards, streamers, signs and other outdoor devices.
  - implementation of periodic direct telephone contacts with potential consumers.

The following incentive techniques will be used to retain customers:

- discounts, promotions, seasonal sales;
- encouragement of regular customers.
- a premium, for example, free shipping when buying a certain amount.

Strengthening customer relationships will be carried out:

- through feedback (for example, polling customers by mail, on the website and in social networks to identify their needs and wishes, as well as to find out opinions on the quality of the feed produced);
  - the establishment of partnerships.

The system of relationships with consumers is presented in Table 9.

The analysis of the attractiveness of product distribution channels in each of the identified potential sales markets is shown in Table 10.

 $Table\ 9: Customer\ relationships$ 

Channel	Channel phases				
types	1. Awareness	2. Evaluation	3. Purchase	4. Delivery	
direct	Seasonal fairs	Customer reviews, certificates	Website	Freight transport, pickup	

(Source:own development)

Table 10: Distribution channels

Characteristics of buyers, goods, enterprises	Target sales market			
1. Characteristics of target buyers	Segment 1	Segment 2	Segment 3	
1.1. Market size	ic	ic	ic	
1.2. Territorial concentration of buyers	ic	ic	ic	
1.3. The size of the purchased batch of goods	ic	ic	ic	
1.4. Regularity of purchase	dc	dc	dc	
1.5. Prompt delivery requirement	ic	ic	ic	
2. Product characteristics	ı			
2.1. Storage period	ic	ic	ic	
2.2. Severability of consignments	ic	ic	ic	
2.3. Technical complexity of the product	ic	ic	ic	
2.4. Purpose (consumer / production)	dc	dc	dc	
3. Enterprise characteristics				
3.1. Financial condition	ic	ic	dc	
3.2. Flexible pricing strategy	dc	dc	dc	
3.3. Full market coverage strategies	ic	ic	ic	
3.4. Brand awareness	ic	ic	ic	
Total:				
a) direct sales channel (dc)	9	9	13	
b) indirect short sales channel (ic)	4	4	0	
Distribution channel recommended:	indirect	indirect	indirect	
Distribution channel reconnicided.	channel	channel	channel	

(Source:own development)

Thus, the most attractive distribution channel for all the segments (European manufacturers of medical / cosmetic preparations, which include components of the grape snail; enterprises in Europe specializing in the processing of seafood, as well as the local enterprises – snail processors.) is indirect channel (the sale of goods through resellers).

An indirect distribution channel involves intermediaries that perform a company's distribution functions. Indirect distribution frees the manufacturer from certain startup costs and responsibilities that can cut into the time it needs to spend on running the business.

Plus, with the right vendor relationships, an indirect distribution channel can be much simpler to manage than a direct distribution channel. It can give a company welcome support and distribution expertise that the company may not have.

## 4.2.4 Key competitors

Based on the relationship between location and the size of the organization of produced goods, a map of market positioning was created to identify the major rivals (Figure 8).



Figure 8: Market positioning map based on the geography of distribution and company's size (Source: own development)

With the aid of the market positioning map, we can categorize the top rivals of the farm into two strategic subgroups:

- 1. Companies that produce an average volume of products and only market them in Europe (Nordic Snails, UAB DARVĖJA, etc.).
- 2. Big businesses that sell their goods on the global market (VAS Escargots, Aspersa Snails International, etc.).

The farm will hold a negligible share of the market. Yet, the extremely high market demand for the product and the lack of competitors (none on the local market) will foster the increase of production volumes in a sustainable manner.

At the same time, the enterprise will face no competitors on the local market.

## 4.2.5 Key activities

The key activities are required to deliver the company's value proposition. These activities will aid to the distribution channels, customer relationships, and revenue streams of the farm.

The complete structure of the value chain through which the products pass can be clearly seen in Figure 9. However, not all activities involved in the production are involved in creating value.

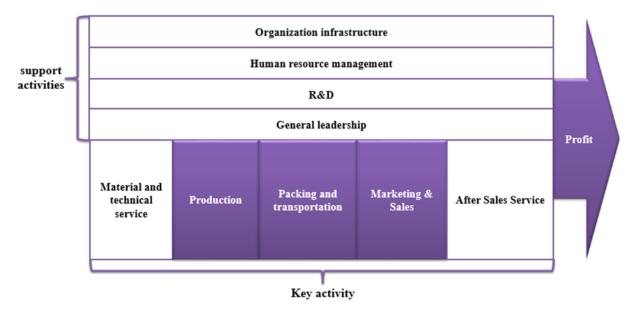


Figure 9: Porter's Value Chain (Source: own development)

The key activities determined are:

- Production of snails building containment structures, and purchasing, breeding, growing and maintaining snails. The production of snails aims to generate the revenue goal.
   It is clear that the production of snails is what would make the company successful.
- Marketing through website, online sales, excursions for those interested, social,
   master-classes, participation at festivals (gastronomic).
  - Delivery of the snails, meaning the sales, what will bring the money to the firm.

#### 4.2.6 Key resources

In order to produce and convey value propositions to the consumer, maintain connections with consumers and make a profit, a company will need the following main types of resources: labor, material, intellectual, financial.

Shall we consider each type of resource separately.

The key resources involved in the implementation of the project are shown in Figure 10, while the description of their functions in the activities of the enterprise are described in Table 11.

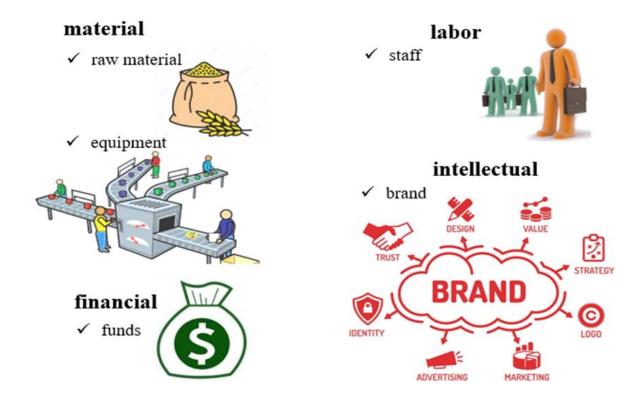


Figure 10: Key resources (Source: own development)

Table 11: Description of key resources

Resource	Key	Description
type	resource	
Human	Staff	- Owner - Chief operating officer, full-time (Creates the
resources		organization's vision, mission, and overall direction - i.e.
		leading the development and implementation of the overall
		organization's strategy; increases management's
		effectiveness and evaluates the success of the organization;
		and responsible for signing checks and documents on behalf
		of the company)
		- Specialist in heliciculture, part-time
		- Farmer who will also have the role of guardians (responsible
		for feeding snails as instructed by the specialist; cleaning the
		snail farm/ cage; assists in handling the breeding and
		harvesting of snails)
Material	Raw	As raw materials, snail consumption products are needed, as
resources	materials	well as calcium fertilizers for the formation of their shells.
	Equipment	Equipment necessary for the construction and arrangement of
		a winter greenhouse.
Intellectual	Brand	- increasing awareness and breadth of coverage;
resources		- strengthening differences from competitors with identical
		products and offers;
		- increasing loyalty and expanding the base of regular
		customers;
		- further increase in the price of goods and services due to
		additional value: positive associations, emotions, confidence
		in quality.
Capital	Funds	Sources of financing investment costs for the project:
resources		– income received from the sale of products, works, services,
		as well as other types of economic activity;
		- loans from banks and other creditors if needed.

(Source:own development)

Thus, in order to create its own value proposition, the farm first of all needs labor, material, intellectual and financial resources.

#### 4.2.7 Key partners

There were identified four key partners for starting and running the business:

- OTP Bank Group provides the necessary financial support at all stages of the enterprise's activities. Benefits of this partnership: low interest rates; the possibility of setting a convenient repayment period.
- Suppliers for building the farm the company Gundel Investment Kft. will be a
  partner for providing all the necessary materials and install them in order to have the farm
  built.
- Suppliers of snails and herbs the first snails in order to start the business will be bought from a Ukranian company «Snails House». The snails type is Helix Aspersa, for which is the highest demand on the European market.
- Partner for delivering the snails –transportation company Targoforg Kft.
   (provides equipment/tractors and trailers for agriculture) to deliver the snails.

The snail farm is a network of suppliers and partners that allow the company to optimize its activities, reduce risks and, most importantly, obtain the necessary resources for the production of products.

# 4.3. Business model assessment. Business environment analysis

Based on the information provided in the previous sections, we filled out the Osterwalder and Pignet business model template (Figure 11). It consists of 9 blocks that allow you to simply and visually present the activities of the organization.

The developed simulation economic model allows, if necessary, to provide multivariate alternative calculations to obtain objective assessments of the possible development of the project in a specific economic situation.

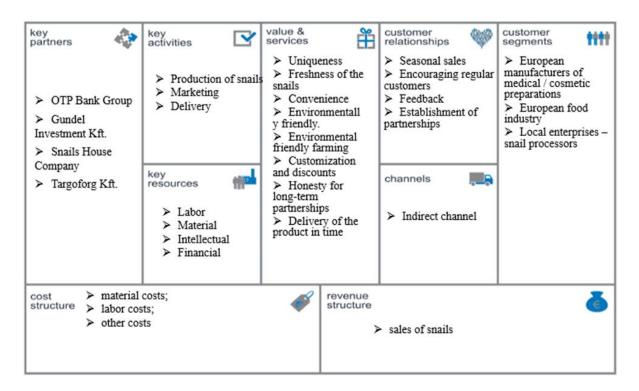


Figure 11: Business model of the project (Source: own development based on the Alex Osterwalder's template (2016))

#### Porter's Five Forces analysis

According to the Porter's Five Forces, the company can analyze its position and determine a strategy according to five factors that may have a direct impact on the business. In this specific case, the will be analyzed from a snail farm perspective:

- 1. Rivalry: Snail farming is a new and profitable business that requires a low investment. There is no snail farm in Hungary, that was mentioned in the above section. As for the European market, there is the need in snails that is not yet addressed, and competition is a beneficial aspect, as it advances the sector and technology.
- 2. Threat of substitutes: The threat of substitutes is moderate for a snail farm in Hungary. Snails are not a common ingredient in Hungarian cuisine, and there may be limited demand for snails as a food source. However, snails can be used for other purposes such as cosmetics and medical products, which may create additional demand.
- 3. Bargaining power of buyers: The bargaining power of buyers is moderate for a snail farm in Hungary. Buyers have a variety of options for sourcing snails, including imports from other countries. However, the demand for locally grown snails may create some bargaining power for the snail farm.

- 4. Bargaining power of suppliers: The bargaining power of suppliers is low for a snail farm in Hungary. Snail farming requires minimal inputs, and most of the necessary materials such as soil and food can be sourced locally. This reduces the power of suppliers to dictate prices or terms.
- 5. New entrants: Considering how underdeveloped this industry is and how low demand is, new entrants are not yet a threat at the local level. Another issue is that most individuals do not explore this potential because it is a small and underdeveloped sector of the economy.

All things considered, the Porter's Five Forces analysis suggests that the snail farming industry in Hungary has relatively low competitive pressure, which may create opportunities for a new entrant to establish a successful snail farm. However, it is important to carefully consider the risks and challenges associated with snail farming in Hungary before investing in this industry.

#### The risk analysis

The risk analysis is done in order to identify potential risks that may affect the business. At the same time, it helps to have a plan that would minimize or eliminate each of the risks that might affect the business.

Potential risks of the project with this development forecast are presented in Table 12.

Measures to reduce production risks are effective control over the course of the production process and increased influence on suppliers through diversification and duplication of suppliers.

It is important to research and carefully consider these risks before starting a snail farm in Hungary. Only by monitoring and timely resolving all the risks listed one can maintain a sustainable business.

## PESTEL analysis of the project

A PESTEL analysis highlights the external factors that can affect snail farms. Factors include political, economic, legal, social and environmental factors. At the same time, predict the time horizon, the type of factors (positive or negative) and their importance that can affect the company (see Table 13).

Table 12: Potential risks of the project

Risk	Level of risk	Guarantees, way out
Extinction of snails due	below the	proper care, timely cleaning of the terrarium
to non-compliance with	average	and complete processing of the soil every six
the conditions of their		months
maintenance, etc.		
Extermination of	below the	breeding snails in enclosures and cuvettes
mollusks by their	average	
enemies		
Slow growth of snails	average	timely study of available information on how
due to non-compliance		to properly care for snails, what to feed, how
with the conditions for		to increase the number of available herds and
their life		when is the best time to select goods for sale;
		partial or complete transition to artificial
		feeding
Sales problems	below the	entering new (foreign) sales markets;
	average	promotion of snail meat among the
		population;
		establishing contacts with pharmaceutical
		companies that are engaged in the production
		of certain drugs
Instability of the	average	creation of a commercial risk fund, where it is
economic situation		necessary to deduct % of the net profit of the
		enterprise; an alternative method of risk
		reduction would be cooperation with
		insurance companies
Delay in payment from	average	there will be concluded a contract from the
partners		beginning in which will be stipulated the
		penalties in case of not respecting the
		agreement. At the same time, there will be
		paid a certain amount of money before the
		delivery as a guarantee
	<u> </u>	

(Source:own development)

Table 13: PESTEL analysis of the project

PESTEL	Description	Impact		Impl	ication
factor			Time frame (months)	Type	Relative importance
Political factors	Political factors can affect the snail farming industry in Hungary. For example, changes in government policies and regulations related to food safety, animal welfare and environmental protection can affect agricultural operations. In addition, changes in trade agreements and tariffs may affect the import and export of snails.	L	12+	+	important
Economic factors	Economic factors can affect the demand for snails and the profitability of the farm. For example, changes in consumer income and consumption patterns can affect the demand for premium foods such as snails. In addition, inflation, currency fluctuations and interest rates affect the cost of investment and financing on the farm.	L	3+	ı	unimportant
Socio-cultural factors	Socio-cultural factors can affect the demand for snails and the image of the farm. For example, cultural attitudes towards snails as a food source influenced the demand for snails in Hungary. Additionally, healthy and sustainable food trends can create opportunities for snail farming.	M	12+	+	unknown
Technical factors	Technical factors can affect farm efficiency and competitiveness. For example, advances in agricultural technology such as automatic feeding and watering systems can increase farm productivity. In addition, technological innovations in packaging and distribution can help farms reach new markets.	M	24+	+	important
Environmental factors	Environmental factors can affect the snail farming industry in Hungary. For example, climate change can affect the growth and survival of snails. In addition, environmental regulations and issues related to pollution, water use and waste management can affect agricultural operations.	Н	1+	-	critical importance
Legal Factors	Legal factors can affect the operation of snail farms. For example, regulations related to animal welfare, food safety and environmental protection can affect agricultural operations. In addition, changes in labor laws and regulations may affect the hiring and management of employees.	M	12+	-	important

(Source:own development)

In conclusion, the PESTLE analysis shows that the snail farming industry in Hungary is affected by several external factors that can affect agricultural activities. Understanding these factors and their potential impact is critical to snail farm success.

# **SWOT** analysis of the project

The conducted SWOT analysis of the enterprise allows to identify its strengths and weaknesses, opportunities and threats. The data obtained during the SWOT analysis determine the critical (key) points of the enterprise.

The results of the SWOT analysis, obtained in the study of the market situation and the potential of the project, are presented in Table 14.

Table 14: SWOT analysis of the business project

	Helpful	Harmful
Internal	STRENGTHS	WEAKNESSES
2110 0 1 1 1 0 1	Temperate and damp climate	Weather conditions in cold
	• Low land requirement	summers and harsh winters can
	• Produce available throughout winter	deliver low yields
	(unlike wild snails which are harvested	• Helix Aspersa Muller is no. 2 or
	in April)	3 choice in key market of France
	<ul> <li>Strong Hungarian image in key</li> </ul>	• Lack of domestic processing
	European markets for quality and	capability
	farming	Transportation costs
	<ul> <li>Quality of farmed snails</li> </ul>	• Classification vs. other
	<ul> <li>Diversification to other farming</li> </ul>	international competitors
	practices	(transportation limitations)
External	OPPORTUNITIES	THREATS
	<ul> <li>Strong global market that is</li> </ul>	• Industrialisation of farming in
	undersupplied	other markets
	<ul> <li>Reopening of foodservice and HoReCa</li> </ul>	• Supply of cheap wild snails and
	industry	large scale farmed snails
	• Presence of Helix Aspersa Muller in	• Low pricing from other Eastern
	value-add products in French retail	European and African countries
	• "Me-Too" or disruptive value-add	• Supply to key EU markets is
	products for international retail	almost monopolised
	<ul> <li>Development of domestic snail</li> </ul>	
	consumption	
	• EU regulation to block a lot of wild	
	picked snails	
	Organic certification	
	• Increase of other uses for snails	
	(leveraging no waste)	

(Source: own development)

Thus, the benefits created by the implementation of this project can maintain the level of profitability of the company in the face of rising cost of energy resources.

The BMC was used as an analytical tool to create the framework to start up a small Snail Farm business in Hungary. It provided guidance and the structure for the development of the business plan.

# **Project implementation schedule**

A project management plan is critical for the success of any project. An implementation plan is a project management tool that facilitates the execution of a strategic plan for a company or a project by breaking down the implementation process into smaller steps. The list of activities of project implementation is presented below (Table 15).

*Table 15: The list of activities of the project implementation* 

Phase	Name	Description
A	Research and	To research the market demand for snails in Hungary, identify
	planning	potential buyers or distributors, determine the size of the snail
		farm, select a suitable location, and create a business plan.
В	Secure funding	To secure funding for our snail farm, either through loans, grants, private investments, etc.
С	Obtain necessary	To obtain the necessary permits and licenses to operate a snail
	permits	farm.
D	Site preparation	To prepare the site for the construction of the snail housing facilities, including clearing the land, installing fencing, and preparing the soil.
Е	Construction of the	To construct the snail housing facilities, including the enclosure,
	housing facilities	the breeding area, etc.
F	Hire employees	To hire employees to help with the operation.
G	Purchase snails for breeding	To purchase snails from a reliable supplier.
Н	Introduce snails to the enclosure	To introduce the snails to the enclosure and monitor their behavior and health.
I	Provide suitable diet and care for the snails	To provide the snails with a suitable diet, clean water, and regular care and monitoring to ensure their health and wellbeing.
J	Breed and incubate snail eggs	To create a breeding area where adult snails can mate and lay eggs, collect the snail eggs, and incubate them until they hatch.
K	Rear snails until maturity	To rear the hatchlings until they reach maturity, which can take between 6 and 12 months.
L	Market and sell the	To market and sell the snails to local restaurants, food markets,
	snails	and distributors, and continue to promote your products to increase demand and expand the customer base.

(Source: own development)

Length of each phase and its predecessors are defined in the Table 16.

The timeline of the project is presented using the Gantt chart (Figure 12).

According to the Gantt Chart, the total time of the project realization is 82 weeks – this is also the time of the first sale. During this period of time, only one whole cycle from the snail breeding process till the first delivery of snails was analyzed. Consequently, the business will proceed with its activities.

Table 16: Length of each phase and its predecessors

Activity	Activity length (weeks)	Predecessor
A	2	_
В	4	A
С	4	В
D	4	C
Е	8	D
F	2	E
G	2	F
Н	2	F
I	ongoing	F
J	4	H
K	52	J
L	ongoing	J-K

(Source: own development)

week 0 10 20 30 40 50 60 70 80 90 Α В C D Е F G Η Ι J K L

Figure 12: Gantt chart of the project implementation (Source: own development)

# 4.4. Economic assessment of the efficiency of the project

The economic calculations of this business model take into account the preliminary parameters of the project, including the estimated cost of the project.

The investment project is planned to be implemented during 2023-2024 starting in September 2023 so that, according to the project implementation plan, the breading process takes place in March 2024.

The approximate start-up costs are calculated and shown in Table 17.

Table 17: Start-up costs

Item	Cost (HUF)
Land purchase	7,000,000
Farm construction	5,000,000
Equipment	1,000,000
Legal fees	500,000
Initial inventory	1,500,000
Total start-up costs	15,000,000

(Source: own development)

To conduct the sales plan of 4 tones of snails per year, it is required to obtain at least 2 hectares of land. The cost of buying 2 hectares of land in Hungary can vary significantly depending on various factors such as location, type of land, accessibility, and market demand. The price of land in Hungary can range from a few hundred thousand HUF to several million HUF per hectare, depending on these factors.

As of April 2023, the average price of agricultural land in Hungary is approximately 3-4 million HUF per hectare. Therefore, the cost of buying 2 hectares of land in Hungary can range from 6-8 million HUF.

However, it is important to note that these are average prices and the actual cost of land can vary depending on the location, market demand, and other factors. It is advisable to consult with a local real estate agent to get more accurate and up-to-date information on the current prices of land in Hungary before the project implementation.

The cost of constructing a greenhouse for snails in Hungary can vary depending on the size of the greenhouse, the materials used, and other factors such as labor costs and location. However, to give you a rough estimate, a medium-sized greenhouse suitable for snail farming in Hungary can cost approximately 5 million HUF.

Aditionally, obtaining the needed equipment and legalazing the farm will cost around 2 million HUF.

Operational expenses outline the projected operating expenses for the snail farm, including labor costs, feed for snails, utilities, insurance and others and are presented in the Table 18.

Table 18: Operational expenses per month

Item	Cost (HUF)
Labor costs	800,000
Utilities	100,000
Insurance	50,000
Logistics	100,000
Marketing expenses	50,000
Total monthly expenses	1,100,000

(Source: own development)

Table 19 demonstrates the cost of production per kilogram of snail, including feed, labor, and utilities costs. The numbers are given based on the production scale planned (4 tons of snail per year).

Table 20 presents the revenue per kilogram of snail. The price of snails per kilogram in Europe can vary depending on various factors such as the type of snail, its origin, size, and market demand. However, as of April 2023, the average price of live edible snails in Europe is approximately 20 EUR per kilogram.

Table 19: Cost of production per kilogram of snail

Item	Cost (HUF)
Feed	400
Other expenses	1,000
Total cost per kg of snail	1,400

(Source: own development)

Table 20: Revenue per kilogram of snail

Item	Amount
Sale price per kg of snail	10,000
Total revenue per kg of snail	10,000

(Source: own development)

The price can vary depending on the country, with some countries such as France, Italy, and Spain having a higher demand for snails, resulting in higher prices. The price can also vary depending on the season, with prices being higher during the winter season when snails are more difficult to find. It is planned to set price on the level of 10,000 HUF to sell in the year 2025.

Table 21 outlines the projected revenue for the snail farm based on the estimated production volume of 4 tones of snail per year and the selling price of 10,000 HUF per kilo.

Table 21: Annual revenue projection

Item	Amount
Sale of 4 tons of snail	40,000,000
Total annual revenue	40,000,000

(Source: own development)

Production costs per year based on the Table 4.18 and the production plan are presented in the Table 22.

Table 22: Production costs per year

Item	Cost (HUF)
Cost per kg of snail	1,400
Production (4 tons)	5,600,000
Total production costs	5,600,000

(Source: own development)

Table 23 outlines the net profit per year for the snail farm, showing the total revenue, production costs, gross profit, operating expenses, and net profit.

Table 23: Net profit per year

Item	Amount
Total revenue	40,000,000
Production costs	5,600,000
Gross profit	34,400,000
Total expenses	16,100,000
Net profit	18,300,000

(Source: own development)

The calculation of the net cash flow and the main performance indicators of the investment project is shown in Table 24.

For the implementation of the project, it is required to request a loan from the bank. As a partner bank presented in the business model, OTP Bank Group is chosen. It is planned to take a loan in the amount of 40,000,000 HUF at 10% per annum for a period of three

years. In this case, the monthly payment will be 1,377,019.36 HUF, amounting up to 16,524,232.32 HUF a year.

Table 24: Cash flows of the project in the next six years (2023-2028), HUF

Item	2023	2024	2025	2026	2027	2028
Cash flow		40,000,000	40,000,000	40,000,000	40,000,000	40,000,000
Cash	-15,000,000	35,324,232	35,324,232	35,324,232	18,800,000	18,800,000
outflow						
Margin		4,675,768	4,675,768	4,675,768	21,200,000	21,200,000
Net		4,208,191	4,208,191	4,208,191	19,080,000	19,080,000
income						
Discount	1	0,87	0,76	0,66	0,57	0,50
coefficient						
(at a rate of						
15%)						
Discounted	income	3,661,126	3,198,225	2,777,406	10,875,600	9,540,000
NPV		3,661,126	6,859,351	9,636,757	20,512,357	30,052,357
Payback			3,	26		
period						
IRR			54,0	08%		
ROI			100,	35%		

(Source: own development)

It is necessary to note that the calculations are carried out based on the same costs and prices for the next 5 years, though the outcome and income streams are discounted.

The payback period of the project is approximately three years (3.26 years) with the proposed volumes of implementation. The return on investment for this project is 100.35%, and the internal rate of return (IRR) is 54.08% (which is significantly higher than the proposed discount rate of 15%). First of all, this is due to low initial investments and rather low prices for raw materials with significantly higher prices for the finished product. This project is cost effective.

Table 25 and Figure 13 outlines the break-even analysis for the snail farm, showing the total fixed costs, contribution margin, and break-even tons for each year.

Table 25: Break-even analysis for 2024

Volume of	Fixed costs	Variable	Total costs	Revenue	Margin	Net profit
production,		costs			revenue	
tonnes						
0	29,724,232.32	0	29,724,232	0	0	-29,724,232
1	29,724,232.32	1,400,000	31,124,232	10,000,000	8,600,000	-21,124,232
2	29,724,232.32	2,800,000	32,524,232	20,000,000	17,200,000	-12,524,232
3	29,724,232.32	4,200,000	33,924,232	30,000,000	25,800,000	-3,924,232
4	29,724,232.32	5,600,000	35,324,232	40,000,000	34,400,000	4,675,767
5	29,724,232.32	7,000,000	36,724,232	50,000,000	43,000,000	13,275,768

(Source: own development)

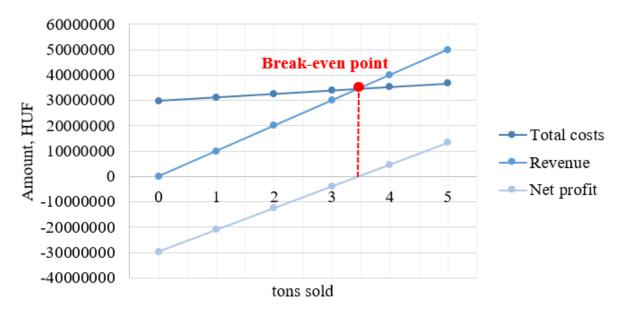


Figure 13: Break-even point of the project (Source: own development)

As we can see in the Figure 13, the break-even point arises at the sales level of 3.45 tons. Taking into account the proposed sales volume of 4 tons (which is 14% higher than the break-even point), we can expect profit from the project implementation.

Thus, as a result of evaluating the economic effectiveness of the investment project of a snail farm, it can be concluded that it is advisable to implement it in Hungary.

#### 5 CONCLUSIONS AND RECOMMENDATIONS

#### 5.1. Conclusions

Someone might think that snails are not the most profitable type of business, but this is not so. Snail farming can bring significant income.

There are many reasons why the snail business is relevant.

Firstly, it is a tasty and healthy product that is increasingly appearing on store shelves and in restaurants. Snails are rich in protein and iron, and also contain many other beneficial substances that have a beneficial effect on human health.

Secondly, snails are an environmentally friendly product that is grown without the use of chemical fertilizers and pesticides. This is important for people who take care of their health and choose high quality products.

Thirdly, snail farming does not require large expenditures on equipment and infrastructure. One can start your business with a small amount of shellfish and grow as the demand for the products grows. As a result of evaluating the economic effectiveness of the investment project of a snail farm, it can be concluded that it is advisable to implement it in Hungary.

At the same time, the difficulty for our area lies in the fact that in many countries snails are almost never eaten for food. They are bought only by individual restaurants focused on European recipes and offering exclusive dishes. Snails are not a staple food for most people, so demand may be limited. In addition, snails can be an expensive product, so many consumers may not be willing to pay a high price for them.

In addition, the snail business is not as widespread and well-known as, for example, a business in the field of agriculture or animal husbandry. Many people do not know that such a business even exists and how to start it.

Therefore, in order not to be left without buyers, it is necessary to establish distribution channels for products in advance. In order for the snail breeding business to become successful within the country, it is necessary to popularize them among the population. To do this, in every possible way one has to spread information about the benefits of this product when eaten, offer delicious recipes for ready-made dishes based on them, and

it is also worth establishing contacts with pharmaceutical companies that produce certain drugs.

## 5.2. Recommendations

#### 1. To increase production volumes.

So, for example, it is possible to increase production capacity, gradually turning from a small farm into a complex for growing and processing snails. Also, one of the options will be the opening of a restaurant with products of its own production. This will help not only increase the awareness of the local population, but also create a completely new need for Hungary, to change the food culture of the population.

# 2. To open new markets, including local ones.

To achieve this goal, for example, it will be possible to enter the market of the CIS countries, such countries as Russia, Belarus. European restaurants, including French cuisine, are everywhere, however, the range of dishes offered is limited due to the impossibility of importing some ingredients. So Hungary, due to its favorable geographical position, may even be the only supplier of fresh snail meat to restaurants in Minsk, Moscow, St. Petersburg and other large cities of the CIS countries.

#### 3. To promote Cleaner Production Policies and ecofriendly production

In the world, according to experts, every year there is an increasing interest in the consumption of environmentally friendly products. In the conditions of the city, where the state of the environment leaves much to be desired, the citizens, maintaining their health, tend to purchase natural products, which are an order of magnitude higher than usual. This means that the management of environmentally friendly production should become one of the key activities of the farm, which will subsequently ensure the competitiveness of the enterprise in the international market and a steady increase in farmers' incomes.

#### **SUMMARY**

The master's thesis is devoted to the creation and development of a business plan for a snail farm, which will be located in Hungary.

Small enterprises are an important component of a market economy. Snail farming is a new and profitable business. This industry is practically not developed in the country due to the lack of local demand. On the other hand, in some European countries there is a need that is not covered by current supplies. This defines the relevance of the chosen topic.

The work was aimed at the development and justification of the economic feasibility of implementing a business project of a snail farm for growing snails, producing four tons per year and their further sale on the external and internal markets. After having finalized the thesis work, we can conclude that the aim of the work is acomplished successfully.

Additionally, according to the objectives presented in the Introduction part, we can draw the following conclusions:

1. Business plans are well known to investors, entrepreneurs and students. The business plan describes the vision and goals of the business, as well as the strategy and tactics that will be used to achieve them. The plan can also serve as the basis for operational budgets, objectives, procedures and management controls. The logic behind a business plan is to try to predict the future of a company through specific marketing, strategy, financial research, and planning tools. In fact, while spending time and money, entrepreneurs who want to increase their chances of success must plan their business and test it against several scenarios.

The nature of startups arises, and the uncertainty and risks that can be associated with attracting enterprises, make it difficult to create a startup business plan compared to the emergence of a business plan. However, a well-thought-out start-up business plan is critical to funding, managing business operations, and achieving success in the intended future.

2. The breeding of snails, otherwise known as helix breeding, is a profitable practice widespread throughout the world. Snails are sold on meat and used in popular snail dishes. To start and maintain a healthy snail farm, one need to make sure that the right types of snails are used, a favorable habitat and care for the health of snails have been created. Having

shown patience and devotion to the cause, one can turn a snail farm from a personal hobby into a profitable business enterprise.

- 3. To reach the aim of the work, cover the topic, and estimate the results achieved, we have used the following materials and methods: Business Model Canvas, Startup Business Plan, Porter's Five Forces analysis, the Risk analysis, PESTEL analysis of the project, SWOT analysis of the project, Project implementation schedule, Breakeven point. As a result, we have concluded that, despite all the risks and external conditions, the right management and proactive actions will transform the snail farm into a successful business.
- 4. In 2023, starting a business in Hungary seems to be profitable. Since the state is a member of the EU, businesses can access the market there. The nation has a sophisticated infrastructure and is situated in the middle of Europe. Production, logistics, and the service industry are all strongly established in this area. The registration of a general partnership, a limited partnership and a limited liability company is free of statutory fees. With some restrictions, the company can start business activities as from the filing. On average, it may take up to 15 days to start a company in Hungary. This covers the time required for all legal processes, such as consulting with a lawyer and going to the registration court.

There are many laws and regulations that one needs to know about, and consequently abide by, when opening a farm. It is recommended that one consults a lawyer or snail farming expert in Hungary to ensure compliance with all legal requirements and obtain all necessary permits and licenses for the particular snail farming project.

- 5. The growing demand for snails, especially in Europe, has created market conditions that guarantee the sale of the quantity produced. With over 80% market share, the most commonly consumed snail species is Helix Aspersa. It is well known as an excellent and highly regarded gastronomic product due to the quality of its meat and slime. The climatic conditions of the Mediterranean countries fully satisfy all the conditions for the reproduction of this species of snails. In 2022, the total global snail consumption market reached \$156 million. In France, there was a significant shortage of 7,000 tons of snails in 2021 due to their high consumption. Based on the above information, it is expected that the need for snails will not be satisfied even in the next 10 years.
- 6. Based on the information provided in the chapter 4, the Osterwalder and Pignet business model template was filled out. It consists of 9 blocks that allow you to simply and visually present the activities of the organization. The developed simulation economic model

allows to provide multivariate alternative calculations to obtain objective assessments of the possible development of the project in a specific economic situation. The BMC was used as an analytical tool to create the framework to start up a small Snail Farm business in Hungary.

7. In the last chapter, the financial analysis of the proposed business is implemented and the key financial indicators of the project are estimated. The payback period of the project is a bit higher than three years (3.26 years) with the proposed volumes of production and prices. The return on investment for this project is 100.35%, which means that the cash flows of the project covers the related cash outflows doubly. The internal rate of return (IRR) is 54.08% (which is significantly higher than the proposed discount rate of 15%). It means also that all sources of financing, the cost of attracting which is less than 54.08%, are potentially able to ensure the profitability of the project. The break-even point of the project implementation in the first year arises at the sales level of 3.45 tons. Taking into account the proposed sales volume of 4 tons (which is 14% higher than the break-even point value), we can expect profit from the project implementation.

It is possible to achieve such results, first of all, due to low initial investments and rather low prices for raw materials with significantly higher prices for the finished product. This project can be considered cost effective.

Thus, as a result of evaluating the economic effectiveness of the investment project of a snail farm, it can be concluded that it is advisable to implement it in Hungary. Aditionally, the thesis work is concluded with a number of recommendations that can be better planned and achieved in the future (such as to increase production volumes, to open new markets, including local ones, to promote Cleaner Production Policies and ecofriendly production).

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# **Appendix 1: Declaration of Consultations with Supervisor**

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