

Designing a Business Plan of Developing an Innovative Product Meat

Viorica-Mirela and Popa¹, Diana Nicoleta and Raba^{1*}

¹USAMVB Timisoara, – 300645-Timisoara, Aradului, 119, Romania

Abstract

The main goal of this paper was to design a business plan for an innovative product assortment of meat. In this order we thought a way in which is possible to implement the developed product, named „pork ham roulade with wild fruits powder” to a meat processing company. This objective aims for increasing quality and diversifying of meat products assortment by developing of a natural product which combines the high quality of animal proteins and the bioactive compounds from fruits.

Keywords: bussines plan, innovative product, meat products, pork ham roulade

1. Introduction

In recent decades the food market is increasingly beset by processed foods with additives and preservatives, with production, how to reduce the selling price and increase as much as possible, the shelf life of the product. Therefore, research and development in this area food was oriented approaches and concepts on innovative products that have the ability to provide nutritional balance, health and consumer welfare and the process with little impact on costs [1,2].

In this context, in the processing of pork it should be noted that in Romania, in 2015, production was 410 million pigs, and consumption was 550 million pigs, recorded a total consumption of pork domestic per capita of 37 kg per person [3,4].

The raw material becomes from integrated farm management, so the valorification of pork meat offer a support for the whole integrated system (agriculture, zoo technical, and production sectors) which aims to deliver more sustainable agriculture system. On top of those aspects, out of the pork carcass the ham part represent approximately

30%, being a raw material easy to purchase for the industry sector [5,6]. Out of the most preferred food products from the Romanian market, pork meat specialties have been identified as a growing segment, and on domestic market pork meat represent 60% out of total meat category.

In addition, lingonberries and seabuckthorn, which are known as one of the most valuable fruits due their exceptional nutritional properties, are found in large amounts in our country, but about 90% of the total crop is exported as IQF to countries from Western Europe, where are highly appreciated. Like all kind of fruits, these are typically used as jams, juices or candied for direct consum and dried or frozen in confectionery and pastry products.

Based on those aspects, the idea of designing a new product concept which brings an added value to the pork ham can be very well perceived by big and small producers.

In this way, an innovative product consisting of pork ham roulade stuffed and covered with wild fruits powder have been developed, which can be consume as cold snack at every meal of the day.

Since the state goals, its orientation will be held from market according to its requirements. The business plan must be realistic, reliable, credible, ambitious and encompassing technical financial

* Corresponding author: Raba Diana Nicoleta, Email dianaraba@yahoo.com

indicators that can be achieved in the medium term and long term. Plan of setting clear objectives and indicators of substantiation must outline concrete measures and solutions that enable achievement of goals proposed increasing the power company to provide competitive and maximize profits [7].

2. Materials and methods

In this study regarding implementation of an innovative product, we thought a company with 100% Romanian capital, a company that will main activity object the conservation and distribution of meat and meat products.

Society would have to have the most efficient distribution networks in Romania, consist in many logistics centers strategically located to transport and distribute products throughout our country,

which could provide for our project team, a capital gains from sales of products realized.

Variants of product presentation

Pork ham roulade stuffed and covered with wild fruits powder will be sold packing in two ways:

1. In bulk, uncalibrated, at to shop front assisted: 22.15 lei/kg
2. In vacuum, 150g/package, at self service vitrine: 3.35lei/150g

Manufacturing recipe of the pork ham roulade stuffed and covered with wild fruits powder is shown in Table 1.

Financial calculation

Expenses were calculated for a monthly production of 250to which include all assortments of products processed in the factory. 20to are represented by pork ham roulade stuffed and covered with wild fruits powder. There have been taken into consideration an average of 20 days working/month.

Table 1. Recipe of the pork ham roulade stuffed and covered with wild fruits powder

Material name	Material in the receipe
Fresh pork ham boneless	91%
dried fruits powder from which	6%
powder of dried lingonberries	4.2%
powder of dried seabuckthorn	1.8%
Brine containing:	5%
water	10kg
salt	5kg
curing agent	0.100kg
Kombucha extract	0.350kg

3. Results and discussion

The results of this paper are found in tables 2 - 7.

Table 2. Swot analysis

Strengths	Weaknesses
<ul style="list-style-type: none"> - 100% natural product - advanced technological equipment of company which will process the product - product made from high quality raw material - short supply chain for raw materials - clear marketing strategy - favorable price quality ratio of the product - for all consumer categories - optimal nutritional profile of the product - attractive appearance of the product 	<ul style="list-style-type: none"> - relatively low shelf life because of using only natural ingredients - delays in delivery both raw materials and auxiliary materials - inconstancy quality of raw materials - longstanding processing times compared to other meat processing technology
Opportunities	Threats
<ul style="list-style-type: none"> - The upward trend of natural products the market - high absorption capacity of the market of food - large work force, internship opportunities for students - the image impact of the top companies on the innovative product 	<ul style="list-style-type: none"> - Leaving the place of work by employees -Strong competitive environment - Inflexibility to market changes - Promotion of certain products in some ranges less healthy - raw materials price increase

Table 3. Expenses with raw materials and packing materials in lei

Materials	Quantities [kg/months]	Unit price [Lei/kg]	Total cost [Lei]
Fresh pork leg	20000	11.5	230000
Salt	1000	0.7	700
Spices	20	21.91	438.2
Herba pure	70	26.08	1825.6
Expenses with raw and auxiliary materials			232963.8
Packing materials	Quantities/ months	Unit price [Lei/UM]	Total cost [Lei]
Twine [m]	6000	0.75	4500
Vacuum pack [buc]	65000	1.5	97500
Expenses with packing materials			102000
Total product cost for 21090 kg/month			334963.8

Cs (specific consume) = 1.14, so that the total quantity of final product/month = 18500kg
 Product cost/kg at 1.14 Cs (specific consume) is calculated as: $334963.8/18500=18.106\text{lei/kg}$

1. Utilities costs- the process requires only electricity costs, water, sewage and trash, which were estimated by the quantity of products to be processed. The estimated cost for energy is 0.5 lei/Kwh

Table 4. Utilities costs in lei

electricity	10000
water	10000
wages	2000
Total utilities cost [lei]	22000

2. Wages cost

Table 5. Total wages cost included social taxes

Name post	No	Wage/person/month [lei]	Total Wage/month
Manager	1	6000	6000
Technologist	2	3300	6600
Accountant	1	2640	2640
Facturist	2	2000	4000
Warehouseman	2	2000	4000
Guardian	1	1700	1700
Maintenance mechanic	1	2000	2000
Operator	10	1700	17000
Total wages cost [lei]	20		43940

3. Amortization costs/months = 3500lei

Total indirect expenses/month calculated as a sum of costs (2+3+4+5) at 25to/month= 85370lei

Indirect expenses of the product without product cost/kg = $85370/25000 = 0.34\text{lei/kg}$

Total product cost calculated as product cost + indirect expenses: $18.106+0.34 = 18.45\text{lei/kg}$

Target net price: $20\% * 18.45 = 3.69\text{lei/kg}$

Selling price: 22.15lei/kg (without TVA) and Price/150g: 3.35lei/pack.

If we take into consideration the 25% adding on the selling price of the stores, the final selling price of the product in the market would be 27.70 lei/kg and 4.2lei/pack.

Other operating expenses

Table 6. Operating expenses

Expense type	Cost/month [lei]
fuel for industrial furnaces	1500
processing equipment maintenance	132
repairs of processing equipment	132
various inventory items necessary in production	132
cleaning equipment	132
chemicals and detergents for cleaning	132
protection equipments	3300
administrative	6600
pest control services	100
laboratory services	100
metrology services	20
fix phones	500
mobile phones	1000
internet subscription	50
supermarket taxes	500
marketing materials	100
marketing actions	1500
TOTAL OPERATING EXPENSE	15930

Table 7. Financial study on three years calculated considering a cost increase by 5% per year for the same total quantities/month: 250 to

Type of cost	2017	2018	2019
Product cost for 18.5to/month	351712	369297.6	387762.5
Product cost/kg	19.01	19.96	20.96
Utilities costs	23100	24255	25467.75
Wages cost	46137	48443.85	50866.04
Operating expenses	16726.5	836.32	878.14
Amortization costs	367.5	385.87	405.16
Indirect expenses/25to/month	86331	73921.05	77617.10
Indirect expenses/kg	3.45	2.95	3.10
Tot product costs/kg	22.46	22.91	24.06

4. Conclusions

Based on the marketing research, in the last 3 years, ham segment have been gained an increase both in volumes and value, for all preparation types. Furthermore, another encouraging aspects is the fact that specialties segments are also gaining in importance (+0.2pp, respectively +0.5pp vs. '14) for the processed meat products, this fact representing another encouraging aspect, because the consumers are looking more and more for those type of products. From packaging perspective of processed meat products, bulk market represent 60.1% in value and 57.7% in

volume, fix weight represent 33.1% in value 39.4% in volume, and slices represent 6.3% in value and 2.9% in volume. Our product Pork ham roulade stuffed and covered with wild fruits is suitable to be packed in all those variants in order to comply with all the consumer category needs.

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