

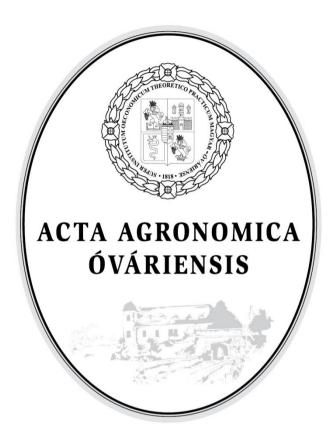
# ACTA AGRONOMICA ÓVÁRIENSIS

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Faculty of Agricultural and Food Sciences Mosonmagyaróvár Hungary

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# **INTRODUCTION**

#### **Business networks**

Creation of business networks and collage of business models in EU and Canada regions is one of outputs of international project implemented under Erasmus+ Knowledge Alliances Program, - Sector Skills Alliances from 2015 untill 2018. The title of this project is "Empowering Regional Development and Innovations" (ERDI). ERDI is a project based on a multidisciplinary and international network of higher educational institutions in Finland, the Czech Republic, the Netherlands, Hungary, Slovakia and Canada. The lead partner of the project is the Karelia University of Applied Sciences in Finland.

One of main objectives of the project is to seek solutions problems with declining economic levels, unemployment and migration, especially in rural regions of the EU, through strengthening knowledge, entrepreneurship and bioeconomy cooperation. The ERDI project aims to improve graduates' employability and improve the competitiveness of the regional economy in order to increase revenue in the future. Therefore, as a part of the project consortium, in addition to universities, there are also regional businesses (working life partners, WLPs) in Canada, Finland, the Czech Republic, the Netherlands, Hungary and Slovakia, which together with universities create regional networks for the exchange of experiences. The partnership and the business networks are described in subchapters of the realized survey.

#### MISSION OF THE PUBLICATION

This publication named "BUSINESS NETWORKS - COLLAGE OF BUSINESS MODELS - Cases from the ERDI Partner Regions", is the second one, issued in the frame of this project. The first publication was issued under title PERSPECTIVES ON BIOECONOMY - Cases from the ERDI Partner Regions, in 2017 by Karelia UAS, University of Pardubice, ISBN: 978-952-275-245-1).

This publication is one of the outputs of workpackage No. 6, called "Business networks" This workpackage is aimed at strenghtening the link between the higher education, research and private sector. The survey realized in networks of entities in all

partners region shows how the educational institutions share the business models and ideas in their networks and regions. Moreweover, the good examples of bioeconomy business models in the regions shall be transfered between different regions with an aim to empower businesses and improve the employability of higher educational institutions graduates. Also applied research study based on the gathered data shall be implemented into learning material about the business models and possibilities.

The conclusions and especially the recommendations of this publication shall be used in the educational programs so they are tailored to the labour market needs. Students, future employees in businesses, need more comprehensive practical skills for certification of products, services and processes, from submission of application to final processing of documents. Study programs should be enriched by practical skills in communication, motivation and leadership. More attention should be payed to training sessions with business partners in networks to solve conflict situations in future jobs of graduates.

Since the higher educational institutions shall be motivated to launch tailor- made study programs, thus the business oriented networking will result in boosting regional economies.

#### KNOWLEDGE ALLIANCES MODELS

The well established networks in partners regions guarantee to fullfill to create innovative and systematic participatory networks for co-creation of knowledge and active co-operation in each of the region. The Workpackage No.5 of the project with name "Knowledge alliances models and tools" is developed in close connection with analysis of the Business networks and business models.

It shall support the rise of the level of higher education and its relevance to the labour market needs. It also works as an impulse to the regional economy providing new tools, ideas and deeper understanding with an international dimension to the regional development.

Cooperation between higher educational institutions, their pedagogical staff and the working life has impacts to the students and teachers professional development. Professional expertise between educational organisations and WLPs are thus embedded

to the educational organisation's practises, curricula and working life practises. It shall serve to regional working life andstrengthens the educational organisations' role in regional development and supports the flow of knowledge.

# METHODOLOGY OF THE COLLAGE OF BUSINESS MODELS

Key logic of the methodology is based on business value chain model developed by Porter (2001).

A value chain is used to describe the process by which businesses gain raw materials, give a value to them through various processes to create a finished product, and then sell it to their customers. Analysis of the value chain is conducted to identify ways to increase the efficiency of their business activities. The model breaks down the flow of production activities into five categories of primary activities and other support activities (*Figure 1*).

All five primary activities are essential in adding value and creating a competitive advantage.

Support activities facilitate the efficiency of the primary activities in a value chain. Increasing the efficiency of any of the four support activities increases the benefit to at least one of the primary activities. Support activities are normally denoted as overhead costs on a company's income statement (Hansen and Birkinshaw, 2007).

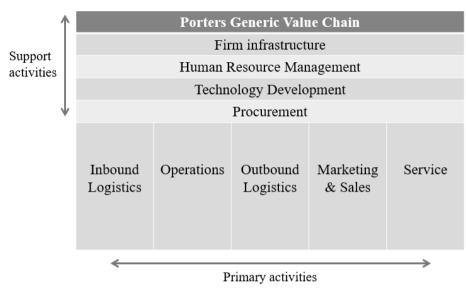


Figure 1: Porter's value chain model

Source: Porter (2001)

Company business models were analyzed. The common feature of all analyzed businesses was bioeconomy as principal sector of activity. Methodology of the business model analysis was based on primary qualitative data collection. Method of interview was used. Face-to-face interviews were made in 5-8 selected enterprises located in regions/countries of the project partners (the working life partners and regional partners were included). Together 42 entities from 8 regions of 6 countries were object of the research (*Table 1*).

Table 1: Research sample

Country	Region	Number of interviewed entities
Finland	N. Karelia	5
	N. Savo	6
	Savonia	3
Netherlands	Noord-Brabant	4
Czech Republic	MAS ZD	7
Slovak Republic	Nitra Region	6
Hungary	Győr-Moson-Sopron region	5
Canada	New Brunswick	6

Source: own processing (2017)

The enterprises were differently sized (micro, small, medium, large enterprise) within the country sample (*Table 2*).

Emphasis was placed on micro (family business), small (managed by one person), medium (managed by small team) enterprises. Large companies have their own staff to evaluate and improve their business model, but benchmark of their good practice was applied.

Company category	Staff headcount	Turnover	Balance sheet total
Medium-sized	< 250	≤€ 50 m	≤€ 43 m
Small	< 50	≤€ 10 m	≤€ 10 m
Micro	< 10	≤€2 m	≤€2 m

Table 2: Categories of interviewed companies

Source: own processing (2017)

Information was gathered according to classic business model scheme reflecting principal value chain activities (*Figure 2*).

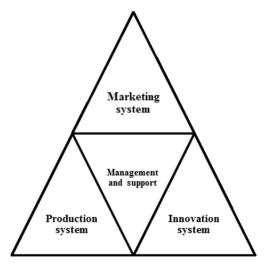


Figure 2: Classic business model scheme

Source: own processing (2017)

The questions were selected by subsystems (*Figure 2*) into two following sections: information about the business network and evaluation of enterprise in business network.

The subsystem "Management and Support" was delimited to eight components: strategy planning (Vision and Mission), monitoring of trends of the business development, certifications used in the entity, monetization, revenue model, employment issues, description of partners and networks, and component of resources. "Marketing system" was analyzed via questions focused on marketing and customers components. Within the "Innovation" subsystem offer, value proposition and sustainability was questioned. The last subsystem of interest was "Bioeconomy production", where offer issues, capacity and capacity planning, sustainability, quality management and suppliers were questioned. Several questions in each component were formulated.

Data gathered from 42 entities settled in 8 regions of 6 partner countries were analyzed. Recommendations for business models in bioeconomy were subsequently formulated. The recommendations were incorporated in the ERDI curricula to tie the ERDI teaching with working life.

# **BUSINESS NETWORKS - COLLAGE OF BUSINESS MODELS**

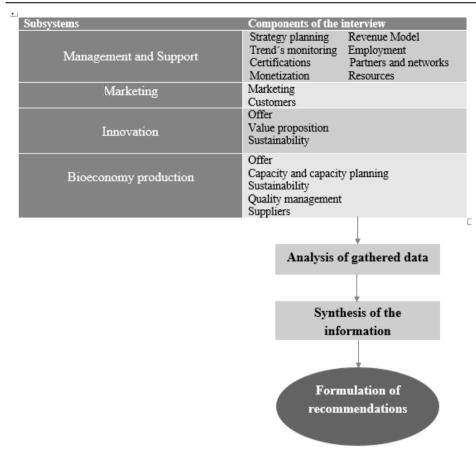


Figure 3: Design of the research

Source: own processing (2017)

# ANALYSIS OF THE SURVEY RESULTS

# Finland

Helena Puhakka-Tarvainen, Anna Liimatainen, Marja Pulkkinen, Hilkka Kamarainen, Marjatta Rasanen

Region	Number of entities	Entity
		Fortum
N. Karelia	5	Sekatyöliike Suokuokka Oy/Niittykummun maatila
i vi ixai cha	5	ProAgria North Karelia
		Toiminimi Aila Hovattala
		Biokymppi Oy
		Paloharjun maatila /Siilin Mylly
NG	6	Jauko Kotilainen and Yaowaman "wan" Mundee - Family- company
N. Savo	0	Farm Juuso Voutilainen
		Mansikkatila Juha Nenonen/Kesäkahvila&puoti
		Valoisa/Villa Forestime Maitomaa cooperative
		Pekka Vehviläinen farm
Savonia	3	JÄTEKUKKO OY
Savoilla	3	PONSSE
		Remeskylän Kotiliha

# **Interviewed entities:**

#### MANAGEMENT AND SUPPORT

Companies included in research mostly prefer linear organisational structure. 36% of respondents belong to micro enterprises, 36% belongs to small enterprise, 14% belong to medium sized enterprises and 14% belong to large enterprises. They have different legal forms such as cooperation, limited company, association, private owned company, family company, farmer, trader, sole trader and practitioner.

# STRATEGY PLANNING (VISION AND MISSION)

All of investigated companies except one have wrought a strategy plan. They have clear vision and mission of the company for the future. They approach responsibly for a strategic planning on regular basis in 28% usually on long term and the rest in shorter terms by discussions or workshops.

#### **TREND'S MONITORING**

64% of investigated companies run KPI's monitoring system. Also the same part of respondents has corrective action plan in any case of trends deviation, what is quite good.

# CERTIFICATIONS

All investigated companies have different certificates according to the area of activity – production and services provided. This demonstrates a rational and responsible management approach not only to the company itself but also to customers and clients. It is one of the basic presumptions for building and consolidating the positive image of the enterprise in the eyes of the public. Owned certifications are following: ISO 9001, ISO14001, ISO18001, ISO 22000, SQMS, GLOBAL GAP, Farm Owned Control, Evira Oiva Mark, organic certification and licence for production of organic fertilizers. 36% of respondents do not own any certification which may not be good for them.

# MONETIZATION

86% of respondents have revenues predictable and the rest of respondents have it seasonal or don't mention it in the interview. Companies have access to different favourable funds. They make use of different funds, for example EU funds, loans, own funding, TEKES, LFA and Finish funds.

#### **REVENUE MODEL**

Only 28% of respondents use specific tool within the pricing policy which are special offers, new products for free, direct sales and wholesales. The rest of respondents do not use any of these specific tools.

# EMPLOYMENT

57% of respondents are able to attract and retain a skilled workforce by education, tailored trainings, good reputation, good conditions, motivation, long-term employee

and well paid work. The majority of investigated companies consider their fluctuation rate low or very low, and the rest of them are not familier with this indicator's value. 57% of the respondents have training program for their employee. Evaluation of labor force diversity shows up, that none of the respondents employ disables and only 28% of them employ seniors in their companies. 71% of investigated companies accept students for an internship.

# **PARTNERS AND NETWORKS**

Only 36 % of respondents invest into the social community, through co-working with schools and children, projects, sponsoring and local sport-club. 43% of companies participate in monetary community involvement by charity, low cost services, schools, village people, sport etc. 79% of respondents are in a partnership with other companies such as local restaurants, farmers and Lidl. Half of the respondents apply the HEI-company-research triangle. 79% of respondents cooperate with local or regional government specifically with municipalities, cities regional and local authorities. 64% of asked companies process wastes from its production by another company. Only 7% of respondents are in a partnership with social enterprise by Konti and Tukeva. Only 36% of them cooperate with universities of east Finland. 43% of investigated companies participate in educational process by courses or mentoring programs and only 36% of respondents think that there are taught study programs tailor made their needs.

#### RESOURCES

The financial resources for the business are profit, loans, EU funds, shareholders, customer's fees, EU subsidies. Companies develop human resources through special courses, university degrees, agricultural education, further education, language skills and so on. Just 29% of respondents encourage their employees to attend personal development. The critical skills of employees are working with hand and machines, knowledge of substance, IT technology, work with people, active attitude, social skills, customer service, environment things, legislation, motivation skills good hygiene, animal care, milking, farming, process management, quality management, technical

skills, problem solving and to have passion for work. 76% of respondents have proven and analysed structure of expenses and all of them make profit.

# MARKETING SYSTEM

#### Marketing

The most used channels for marketing and promotion are Internet, Facebook, website, newspapers, fairs, TV, calendar, Youtube, B2B and billboards. 57% of respondents have a marketing strategy and 43% of respondent is considering extend the strategy in the future by social media and virtual glasses.

#### **Customers**

The number of individual business customers is very diverse and is directly related to the focus of selected businesses. It moves between 3 - 2 400 customers. Investigated companies focus on following customer segment: families, future farms, diary company, forestmashine owners, local shops, tourist, food factory and food supplement. 36 % of respondents focus only on local and regional customers, 14% target only on national customers and the rest of them target also on local, national and international customers.

#### **INNOVATION SYSTEM**

#### Offer

79% of investigated companies apply the process of the product or service development. 43% of respondents consider make their production more diversified with organic farming, biogas for traffic and organic products.

#### Value proposition

71% of respondents maintain relations with customers from the marketing point of view and they would improve them with Facebook and social media, face to face, advising system, active communication, straight feedback and consulting. Product is marketable for 71% of investigated companies. For the same part of respondents can their customers clearly differentiate their products. For 64% is their brand meaningful in the customer perception.

#### **Sustainability**

The investigated companies have a different market position. Advantages in comparison with the competitors are: new innovations, keep updated, be the first in the sector, special tools, effective teamwork, modern tools, patents, special knowledge, high quality and copyright mark. 57% of respondents can innovate more successfully than competitors.

#### **BIOECONOMY PRODUCTION SYSTEM**

# Offer

The asked companies provides following products/services: electricity, heat, cooling, research, strawberries, cereals, grasshopper feed, businesses services for farms, milk, high breed heifers, organic fertilizers, collecting wastes, skills in milk production, know how in feed production, expertise in animal production, economic knowledge and coffee-house products.

# Capacity and capacity planning

79% of respondents have analysis of how many percentage of their capacity is filled with customers order. It is between 60and 100%.

#### **Sustainability**

The investigated companies remain sustainable with following: integrated farming system, more digital services, to be well documented and tracked, circular economy, to be economical, social, ecological, economic sustainability, cultivation plan, crop rotation, plant feritilization, waste sorting, protection zone, nutrient recycling and IP production system.

#### Quality management

79% of respondents have target value for customer quality claim. Half of asked companies don't have escalation system than the costumer claim is higher than expected. 57% of them have action plan to develop their product quality.

# Suppliers

Investigated respondents have key supplier between 3-180. Only one company is for 100% dependent on it's key suppliers. Other companies are not dependent or for a low range.

# The Netherlands

# Sandra van Willigen

#### **Interviewed entities:**

Region	Number of entities	Entity
		Den Elhorst
Noord- Brabant	5	Cagerito BV
		Bioboerderij 't Schop
		Province Noord-Brabant

# MANAGEMENT AND SUPPORT

The companies joined in research have all linear organisational structure. One belongs to micro enterprise, two in small enterprise and the last in large enterprise. They have different legal form such as private company, farmer, partnership and regional government. None of them give out turnover.

# STRATEGY PLANNING (VISION AND MISSION)

All of investigated companies have wrought a strategy plan. They have clear vision and mission of the company for the future. They approach responsibly for a strategic planning on regular basis.

#### **TREND'S MONITORING**

Except one, all companies run KPI's monitoring system. But only half of them have corrective action plan in any case of trends deviation, what is not very good.

#### **CERTIFICATIONS**

Three from four investigated companies mentioned that they are holders of different certificates according to the area of activity – production and services provided. This demonstrates a rational and responsible management approach not only to the company itself but also to customers and clients. It is one of the basic presumptions for building and consolidating the positive image of the enterprise in the eyes of the public.

#### MONETIZATION

All respondents have revenues stable and quite predictable. Companies have access to different favourable funds. One of them use only own-funding and other make use of different funds, for example EU fund or Rural Development Program.

#### **REVENUE MODEL**

None of respondents use specific tool within the pricing policy. They do not have space for application of these specific tools.

#### EMPLOYMENT

Three quarters of respondents are able to attract and retain a skilled workforce. None of investigated companies published their fluctuation rate or they do not have idea about this indicator. Half of the respondents have training program for their employee, for example Brabant Academy where employee can follow seminars for Excel, take management training or other seminars. Evaluation of labor force diversity shows up, that 50% of the respondents employ disables and also the same part employ seniors in their companies. All investigated companies accept students for an internship.

# **PARTNERS AND NETWORKS**

75 % of respondents invest into the social community, through construction projects for education and care, sport events or stimulating cooperation between schools and businesses. All investigated companies participate in monetary community involvement and except one they are in a partnership with other companies. None of the respondents apply the HEI-company-research triangle, but all of them cooperate with local or regional government. Only one company process wastes from its production. 100% of respondents are in a partnership with social enterprise, for example with municipalities or Amarant organization which specializes in supporting people with intellectual disabilities and/or autism. All of them cooperate with universities such as HAS University, Radbound University, University Tilburg and Avans University. Investigated companies also participate in educational process through traineeships on schools. Only for half of respondents there are taught study programs tailor made their needs.

#### RESOURCES

The financial resources for the business are profit, loans and in one case POP program money. None of asked companies develop human resources but all of them encourage their employees to attend personal development. The critical skills of employees are being independent and innovative, tractor driver's licence, environmental awareness, contentable expert, politically sensitive, collaboration, good speaking skills and writing skills. 75% of respondents have proven and analysed structure of expenses and all of them make profit.

# MARKETING SYSTEM

#### Marketing

The most used channels for marketing and promotion are website, social media, Facebook, television, internet, newspaper and information boards. 50% of respondents have a marketing strategy and only on respondent is considering to extend the strategy in the future through the internet.

#### **Customers**

The number of individual business customers is very diverse and is directly related to the focus of selected businesses. It moves between 1 to 2.5 million customers. Investigated companies focus on following customer segment: municipalities, medium sized companies, provinces, highly educated customers (30+ year) and everyone in Brabant. 75% respondents have target customers for 100% local and regional customers and rest respondent have target 20% local and regional, 60% national and 20% international customers.

#### **INNOVATION SYSTEM**

# **Offer**

Three quarters of investigated companies apply the process of the product or service development with third part or organization development. 50% respondents consider

make their production more diversified (for example in herbs and grain) and for rest of respondents it's not relevant.

#### Value proposition

100% of respondents maintain relations with customers from the marketing point of view and they would improve them with making customer day or account and environment managers which will maintain relations with customers. Product is marketable for 75% of investigated companies. For the same part of companies can their customers clearly differentiate their product, and also is their brand meaningful in the customer perception. For the one company were these questions not relevant.

#### **Sustainability**

The investigated companies have a different market position, some of them have a leadership position, naturally built position, and they think more locally than globally. For one company it is not relevant. 50% of respondents can innovate more successfully than competitors.

#### **BIOECONOMY PRODUCTION SYSTEM**

#### **Offer**

The asked companies provides following products/services: sustainable innovations in services and processes, meet and experience, organic meet, vegetables and diary, grants, licensees, advices.

# Capacity and capacity planning

75% of respondents have analysis of how many percentage of their capacity is filled with customers order. It is between 90% and 100%. It is not relevant for one respondent. 50% of respondents have process to balance the customer order fluctuation with their capacity.

#### **Sustainability**

The investigated companies remain sustainable with following: stay sharp and good monitoring, keep thinking about new possibilities, for the control of SKAL certificate and using environmental and management system.

# Quality management

In this field were respondents very restrained and don't give us relevant answers.

# **Suppliers**

For half of respondents are suppliers not relevant, one respondent have one key supplier. One respondent have own farm and colleagues biofarmers such as key suppliers and 50% of its performance depend on its suppliers.

# CZECH REPUBLIC

Josef Blažek, Martin Pisar

# **Interviewed entities:**

Region	Number of entities	Entity
	circities	Cyklos výrobní družstvo Choltice
	_	Jaroslav Kutílek (operator of microbrewery Žlebské Chvalovice and distilleries)
MAS ZD	7	MAS Železnohorský región, z.s.
		Ing. Jaroslav Nevole – Sady Svinčan
		Obzor výrobní družstvo invalidů v Praze
		Vodní zdroje Chrudim
		ZOD družstvo Stolany

# MANAGEMENT AND SUPPORT

71% of companies joined in research have linear organisational structure. 14% of respondents have linear-staff organizational structure and the rest don't mention organizational structure in interview. 29% of respondents belong to micro enterprises, 29% belongs to small enterprise and 42% belong to medium sized enterprises. They have different legal form such as cooperative, limited liability company, non-profit organization, self-employed and agricultural entrepreneur.

#### STRATEGY PLANNING (VISION AND MISSION)

All of investigated companies have wrought a strategy plan. They have clear vision and mission of the company for the future. They approach responsibly for a strategic planning on regular basis in 57% usually on short term and in 43% on long term.

#### **TREND'S MONITORING**

86% of investigated companies run KPI's monitoring system. 71% of them have corrective action plan in any case of trends deviation, what is quite good.

# CERTIFICATIONS

All investigated companies have different certificates according to the area of activity

- production and services provided. This demonstrates a rational and responsible

management approach not only to the company itself but also to customers and clients. It is one of the basic presumptions for building and consolidating the positive image of the enterprise in the eyes of the public. Owned certifications are following: ISO 900, ISO 9001, Association of Regional product Badge of the Czech Republic, Czech Service Quality System, GLOBAL G.A.P. certification and SISPO.

#### MONETIZATION

86% of respondents have revenues predictable and the rest of respondents have it irregular and seasonal. Companies have access to different favourable funds. They make use of different funds, for example EU funds, loans, subsidies, national grants and loan from Czech-Moravian Union of Production Cooperatives.

#### **REVENUE MODEL**

43% of respondents use specific tool within the pricing policy which are trigger prices, quantity discounts or individual offers. The rest of respondents do not have space for application of these specific tools.

#### EMPLOYMENT

71% of respondents are able to attract and retain a skilled workforce by stable job, career growth, bonuses, above-standard social policy, home-office and variable work tasks. All of investigated companies consider their fluctuation rate low or very low, but they do not have idea about exact indicator. 43% of the respondents have training program for their employee. Evaluation of labor force diversity shows up, that only 29% of the respondents employ disables and 71% employ seniors in their companies. 57% of investigated companies accept students for an internship.

#### **PARTNERS AND NETWORKS**

86 % of respondents invest into the social community, through company events, public events (sport, leisure time, beneficial events), regional events, lifelong learning, association of athletes, volunteer fire brigade, local primary school, kindergarten and programs for students. 71% of companies participate in monetary community involvement by Local Action Group Železnohorský region, Association of

Microbreweries, Association of Regional Brands of The Czech Republic, Nationwide Rural Development Network, Local Action Group Chudimsko, Cooperative society of Pardubisko, Czech Agrarian Chamber and Czech Agrarian Union. 71% of respondents are in a partnership with other companies. 43% of the respondents apply the HEI-company-research triangle. 86% of respondents cooperate with local or regional government. Only 43% of asked companies process wastes from its production. Also 43% of respondents are in a partnership with social enterprise by sheltered workshops and with children's home. Only 28% of them cooperate with universities such as University of Pardubice, Charles University, Mendel University of Agriculture, Masaryk University in Brno and University of Krakow. Also only 28% of investigated companies participate in educational process and only 14% of respondents think that there are taught study programs tailor made their needs.

# RESOURCES

The financial resources for the business are profit, loans, EU funds, subsidies and Czech national grant program. Companies develop human resources through trainings, specialized courses, external trainings, multidisciplinary projects, work safety, increasing qualification and excursions. 71% of respondents encourage their employees to attend personal development. The critical skills of employees are technical skills, language skills, business talent, personal responsibility, communication skills, creativity, knowledge and expertise. 86% of respondents have proven and analysed structure of expenses and all of them make profit.

#### MARKETING SYSTEM

#### Marketing

The most used channels for marketing and promotion are Internet, Facebook, website, newspapers, exhibitions, catalogues, leaflets, video-spots and direct mailing. 57% of respondents have a marketing strategy and only one respondent is considering extend the strategy in the future by active search of new customers.

#### **Customers**

The number of individual business customers is very diverse and is directly related to the focus of selected businesses. It moves between 5-200 customers. Investigated companies focus on following customer segment: users of printers and air-condition, beer consumers, small traders and companies. 43 % of respondents focus only on national customers and the rest of them target also on local, national and international customers.

# **INNOVATION SYSTEM**

#### **O**ffer

71% of investigated companies apply the process of the product or service development. 57% of respondents consider make their production more diversified.

#### Value proposition

86% of respondents maintain relations with customers from the marketing point of view and they would improve them with constant monitoring, positive relations, personal communication and good relations. Product is marketable for 86% of investigated companies. For all companies can their customers clearly differentiate their products. For 71% is their brand meaningful in the customer perception.

#### **Sustainability**

The investigated companies have a different market position, some of them have registered mark, trademarks and also loyalty is very important. 57% of respondents can innovate more successfully than competitors.

# **BIOECONOMY PRODUCTION SYSTEM**

#### **Offer**

The asked companies provides following products/services: machines and device for adjusting papers after printing, sheet materials, air-conditioning, beer and distillery services, work and protective means, milk, beef, poultry, cereals, grass seeds, sugar beet and oil seeds.

# Capacity and capacity planning

Only 43% of respondents have analysis of how many percentage of their capacity is filled with customers order. It is between 85% and 100%. 71% of respondents have not process to balance the customer order fluctuation with their capacity.

# Sustainability

The investigated companies remain sustainable with following: respecting business and natural laws, tracking efficiency, statistic and effectiveness and monitoring efficiency.

# Quality management

All respondents have target value for customer quality claim. 43% of asked companies don't have escalation system than the costumer claim is higher than expected. 57% of them have action plan to develop their product quality.

# Suppliers

Investigated respondents have key supplier between 3-20. Only one company is for 100% dependent on it's key suppliers. Other companies are not dependent or for a low range.

# SLOVAK REPUBLIC

Miriam Bitterova, Janka Martinovicova, Peter Martinovic, Jan Bitter

# **Interviewed entities:**

Region	Number of entities	Entity
	Cintrates	AGROPODNIK, a.s. Trnava FELIS
Slovakia	6	MANNET, s.r.o.
		MOREAU AGRI, s.r.o. AGROBIOP, s.r.o.
		AGROMART, a.s.

# MANAGEMENT AND SUPPORT

An examination of the organizational structure of entrepreneurial subjects involved in research has shown that up to 50% of them use a classical line structure that occupies the first place in terms of historical development of organizational structures. Typical is the transparency of management relationships, a simple definition of competencies and responsibilities. Two entities (33.3%) apply its modifications - the line-staff and the line-branch structure, which are typical of the input of the top factors in the creation of the organizational structure - staff departments and the sectoral principle of creation and division of organizational units.

The largest surveyed company applies the sectoral organizational structure. In view of the consequent results presented, it is surprising that he did not proceed to innovate the organizational structure toward more progressive - flexible structures, type of project structure. The respondent states that the company carries out its own research. Creating a relatively separate organizational unit for this important activity would support the bonding of its perception not only within the enterprise but also in relation to its surroundings.

# STRATEGIC PLANNING (VISION AND MISSION)

All surveyed companies are working out a strategic plan, have a clear vision and mission for the future, which we value very positively. They are approached eruditely to

process strategic planning documents, which indicate good professional readiness of responsible managers.

#### **TRENDS MONITORING**

Within the examined sample, none of the enterprises operate the KPU monitoring system. However, it is highly appreciated that all enterprises have a prepared reserve (default) plan for the deviation of the business trend. This is usually based on the rational diversification of business activities.

#### CERTIFICATION

Five out of six surveyed enterprises (83.3%) said they were holders of various certificates by industry - production and services, which reflects a rational and responsible management approach not only to their own business but also to customers and clients, which is one of the basic prerequisites for building and consolidating the positive image of the enterprise in the eyes of the public.

#### **CASH FLOW**

In assessing the stability and anticipation of sales, up to 50% of respondents said that their income levels can only be expected and affected in part, mainly due to the unpredictability of the market situation. Two micro enterprises (33.3%) are not at all able to predict their income levels. The most favorable situation in this respect was presented by the largest of the companies surveyed, which is part of the holding. The success of businesses in this area is heavily influenced by access to preferential forms of funding, subsidies, and EU funds.

#### **REVENUE MODEL**

In the area of price policy instruments, up to 50% of respondents said that there is no room for their use in terms of their focus. Two entities (33.3%) provide their customers with a price advantage in the form of a quantity rebate, or warranty and post-warranty service.

#### EMPLOYMENT

When asked whether business management is capable of attracting and retaining a skilled workforce, almost all respondents responded positively, but with the condition of good financial evaluation and the provision of various material and spiritual benefits (13th salary, corporate car, corporate actions for employees and their family reimbursement of costs for additional education, etc.), which is not easy in the conditions of the agriculture sector. Workforce fluctuation in surveyed businesses is fairly favorable, ranging from 0 to 10%, indicating that businesses are successfully pursuing employee stabilization activities.

All surveyed enterprises have training programs for their employees. Normally focused on legally compulsory education in the area of BOZP and PO, professional courses and training oriented to acquisition, and building skills in manipulating with technical and technological equipment in the production process, working with chemicals and animals. Almost absolutely absent training programs aimed at shaping social skills and communication in foreign languages.

The assessment of labor force diversity showed that the bulk of businesses (66.7%) employ people with a changed work ability by 1-2 employees and pensioners by 1-10 employees. The same share of enterprises (66.7%) enters support for student practical training through internships.

#### **PARTNERS AND NETWORKS**

All surveyed businesses invest in their social community, mainly by increasing loyalty, contributing to the social fund, organizing corporate events, supporting community and general stock, and more. Similarly, all businesses are in partnership with other companies. Relationships are build through personal contacts.

Only two (33.3%) of the surveyed subjects joins to university - practice - research. On the contrary, very rich is cooperation with local, or regional administration, involving all the companies under investigation.

The waste from its own production activity is processed by only one of the examined enterprises, with the exception of wastewater treatment plants operated by three entities. There is extensive cooperation with other waste disposal organizations, mainly used tires and engine oils. Feedback with organizations manufacturing primary production waste works only in primary agricultural enterprises - composting, use of non-standard cereals and wildlife seed.

Only two (33.3%) of the surveyed companies are in partnership with social business, in the form of sheltered workshops, municipal social enterprises and enterprises for integration into work.

Half of the surveyed enterprises cooperate with the university, specifically with the SUA, and partly engage in the learning process - through excursions for students, internships, practice and lectures.

To evaluate study programs to meet practice needs, all interviewees have stated that current study programs are tailored to the needs of practice only in part, but without specific reminders or constructive design.

#### SOURCES

As a main source of coverage of entrepreneurial activities, all respondents reported a profit from entrepreneurial activity. Almost all interviewees also use credit resources, and primary agricultural enterprises also draw on EU and PPA funds.

As part of the development of human resources, all surveyed companies have mandatory BOZP training, training courses, and education activities aimed at enhancing capabilities in handling production facilities, working with chemicals, gas and pressure vessels, and live animals. To a lesser extent, educational activities to support managerial skills and PPA training courses are organized.

All surveyed businesses are very positive and accommodating to the personal development of their employees and cover all the costs of their education.

Critical skills most often featured communication, the quality of which is absent in almost all subjects. Other critical skills are lack of knowledge of foreign languages, flexibility and then professional skills.

For a very positive partial result, it is possible to state that all the surveyed companies are analyzing and analyzing the structure of their expenditures in detail, which is the first and indispensable step towards their rational use in future periods.

# MARKETING SYSTEM

#### Marketing

The most used marketing and promotional channels are personal meetings of managers, conferences, training, print media and the internet.

Only half of surveyed business entities have a well-developed marketing strategy. Other businesses are considering processing, but entities in the micro-enterprise category do not see the merits of this document.

#### **Customers**

The number of individual business customers is very diverse and directly related to the range of product range, provided services. It ranges from 3-1500.

In terms of customer segmentation, the largest share is represented by primary agricultural, food, forestry and wood-processing enterprises, followed by construction enterprises and wholesalers.

The target group of customers is made up of 90-100% of Slovakian customers, with the exception of a micro-enterprise whose business is a pet shop where the ratio is only 5% relied on by domestic and 95% foreign customers, mainly from Italy.

# **INNOVATION SYSTEM**

#### Offer

The development of new products is dealt with only by two of surveyed companies. In the latter case, it is an enterprise which is part of the holding and has a separate research and development base, the second case is a micro-enterprise dealing with live animals. With the diversification of production, services are not yet considered by medium-sized enterprises with a relatively stable market position. Micro-enterprises are more favorably prone to the process of divergence, especially with regard to market developments.

#### Value menu

Customer relationships from a marketing point of view have been marked by all respondents as good or above standard. The possibilities of their improvement are seen in the expansion of Internet services and communication.

The question of the tradability of their products was given only by two companies. The problem with the tradability of our own products is in particular small businesses that do not produce organizational products, which has also been confirmed in our research.

Despite the fact that all respondents presented their brand as meaningful in perceiving customers, only a 50% success rate was achieved with the ability to distinguish specific products.

#### **Sustainability**

In the choice of measures to prevent the copying of products, services, the respondents are very skeptical, they are not convinced that any measures have been sufficiently effective.

They seek to strengthen loyalty between their own staff and partners and strictly respect the business secrets.

Compared to competitors, they see benefits in good personal relationships, providing better service in the field of service and cooperation with customers.

Better conditions for successful innovation compared to competition are only a medium-sized enterprise with its own research and development base.

#### **PRODUCTION SYSTEM – BIOECONOMICS**

#### **Offer**

In the surveyed sample, the largest share of service enterprises - sales and service stands for agricultural primary production, food industry, forestry, woodworking, construction, trade in chemicals, agriculture, agricultural products and agricultural advice.

#### Capacities and capacity planning

Two-thirds of businesses have a thoroughly elaborated capacity analysis for customer orders. Worse results were presented in the area of the ability to swing fluctuations in customer orders, which is ready to handle only one of the surveyed companies.

#### **Sustainability**

Its sustainability connects all surveyed enterprises with rigorous day-to-day management, management of the statistical system of monitoring and evaluation of selected indicators, rational interconnection of operational tactical and strategic management.

#### Quality management

All respondents have unequivocally stated that their target value is customer quality. Two-thirds of businesses presented the ability to meet the increased customer demands over expectations. All surveyed companies have presented experience in action plans to improve the quality of their products, which means they pay extra attention to the quality of their products and services.

#### Suppliers

The surveyed enterprises list key suppliers in the number of 2-20 subjects, except for the micro-enterprise dealing with live animals. The dependence of business performance on suppliers varies between 40-100%, which forces businesses to ensure high-quality logistics.

## HUNGARY

Attila Kovacs, Gabor Milics

#### **INTERVIEWED ENTITIES:**

Region	Number of entities	Entity
		ENAMRO GLOBAL CONSULTING Kft
Hungary	6	Pisztráng Kör Waldorf Természetvédő és Természetjáró Egyesület
		Szemes Művek Kft Szigetköz Turizmusáért Egyesület, TDM
		Szigetközi Szatyor Közösség

## MANAGEMENT AND SUPPORT

The companies joined in research don't mention organisational structure in the interview. 60% of respondents belong to micro enterprises and 40% belongs to small enterprise. They have different legal form such as limited company, non-governmental organization and society.

## STRATEGY PLANNING (VISION AND MISSION)

All of investigated companies except one have wrought a strategy plan. They have clear vision and mission of the company for the future. They approach responsibly for a strategic planning on regular basis usually on long term.

#### **TREND'S MONITORING**

60% of investigated companies run KPI's monitoring system and for rest 40% it is not relevant. Only 40% of them have corrective action plan in any case of trends deviation, what is not very good.

## CERTIFICATIONS

Only one from investigated companies mentioned that they are holders of some certificates exactly environmental and education certificate.

#### MONETIZATION

All respondents have revenues stable and quite predictable. Companies have access to different favourable funds. One of them use only support from government. Other make use of different funds, for example EU funds, loans, government support, own-funding or ERDI WLP.

#### **REVENUE MODEL**

Only one of respondents use specific tool within the pricing policy which are discounts for groups. The rest of respondents do not have space for application of these specific tools.

#### EMPLOYMENT

40% of respondents are able to attract and retain a skilled workforce. None of investigated companies published their fluctuation rate or they do not have idea about this indicator. 40% of the respondents have training program for their employee for two weeks per year. Evaluation of labor force diversity shows up, that 40% of the respondents employ disables and only 20% employ seniors in their companies. All investigated companies accept students for an internship for example in dual education with universities.

#### **PARTNERS AND NETWORKS**

80 % of respondents invest into the social community, through local events, student organizations, programs, NGO, cooperating whit schools, kindergartens and recreation centre. Only one company participates in monetary community involvement and 80% of respondents are in a partnership with other companies. 40% of the respondents apply the HEI-company-research triangle, but 80% of respondents cooperate with local or regional government. Only 40% of asked companies process wastes from its production. 80% of respondents are in a partnership with social enterprise, for example with Lions Club or local business association. 80% of them cooperate with universities such as ERDI University and Szechenyi István University. All investigated companies also participate in educational process. 60% of respondents think that there are taught study programs tailor made their needs.

#### RESOURCES

The financial resources for the business are profit, loans and EU funds, founder investment, membership fees and support from government. 60% of asked companies develop human resources through personal trainings, higher educational degrees or secondary education. 40% of respondents encourage their employees to attend personal development. The critical skills of employees are communication skills, knowledge in natural resources, outdoor skills, pedagogical approach, agricultural engineering, machinery systems, IT, organizational skills, marketing and tourism destination management. 60% of respondents have proven and analysed structure of expenses once in year and all of them except one make profit.

#### **MARKETING SYSTEM**

#### Marketing

The most used channels for marketing and promotion are Internet, social media, website, newspapers, TV, radio, personal communication, local media, local events, leaflets and travel expos. 40% of respondents have a marketing strategy and only one respondent is considering extend the strategy in the future through the investments.

#### **Customers**

The number of individual business customers is very diverse and is directly related to the focus of selected businesses. It moves between 3 to 200 000 customers. Investigated companies focus on following customer segment: small companies, urban people, young families, local people, international customers. First respondent has target on 50% local and 50% regional. The second has target on 95% Hungarians. The third and fourth have target spread evenly and the last has target on 100% locals.

#### **INNOVATION SYSTEM**

## Offer

40% of investigated companies apply the process of the product or service development. 60% of respondents consider make their production more diversified (for example in higher value, new tours or natural advertising).

#### Value proposition

20% of respondents maintain relations with customers from the marketing point of view and they would improve them with daily contact whit customers and reacting very fast. Product is marketable for all investigated companies. For 60% of companies can their customers clearly differentiate their product, and also is their brand meaningful in the customer perception. For the one company were these last two questions not relevant.

#### **Sustainability**

The investigated companies have a different market position, some of them is the oldest company, have naturally built position. For 60% of companies it is not relevant. 40% of respondents can innovate more successfully than competitors.

### **BIOECONOMY PRODUCTION SYSTEM**

## Offer

The asked companies provides following products/services: printing, consultant, project management, canoe tours, water camps, eco-park, educational centre, hostel, interactive exhibitions, rubbish-collecting days, food and feed production, laying hens, egg production, tourism management, destination management and food market organisation.

#### Capacity and capacity planning

All respondents have analysis of how many percentage of their capacity is filled with customers order. It is between 80% and 100% in three cases and very low in the rest. 40% of respondents have not process to balance the customer order fluctuation with their capacity and for the rest respondents it is not relevant.

#### Sustainability

The investigated companies remain sustainable with following: do their best, daily management and expending of products.

## **QUALITY MANAGEMENT**

80% of respondents have target value for customer quality claim. Any asked company don't have escalation system than the costumer claim is higher than expected. 40% of them have action plan to develop their product quality.

## SUPPLIERS

Investigated respondents have key supplier between 1-15. Only one company is for 100% dependent on it's key suppliers. Other companies are not dependent or for a low range.

## Canada

Jocelyne Landry, Pierre-Marcel Desjardins

## **Interviewed entities:**

Region	Number of	Entity
	entities	
Canada	6	McGraw Seafood Tracadie, N-B
		A.L.P.A. équipement Balmoral, NB
		Groupe Savoie Saint-Quentin, NB.
		DBM Charlo, NB
		Triangle Kitchen Ltd, Dieppe,
		Lepage holding

## MANAGEMENT AND SUPPORT

The companies included in this research are mostly private companies. One is a micro enterprise, one is a small enterprise, three are medium enterprises and one is a large enterprise.

## STRATEGY PLANNING (VISION AND MISSION)

100% of investigated companies have put in place a strategy plan. The strategic planning process is according to the respondents: Growth and to be aware of what will happen in the future. The process usually takes the form of once a year retreat with or without an external consultant.

## TREND'S MONITORING

All of investigated companies run KPI's monitoring system .Two companies has corrective action plan in any case of trends deviation and one does not.

#### CERTIFICATIONS

2 of 3 investigated companies mentioned that they are holders of some certificates: ISO 9001 2008 and Dozens of certifications for quality SFI (2015..2019 Fiber Supply Standard) PEFC (ST 2002-2013) SBP (Sustainable biomass partnership) ISPM15, Heat Treatment Program.

## MONETIZATION

66 % (2 respondents from 3) respondents have revenues stable and quite predictable. One respondent doesn't, they are in the field of construction and customers, including the government are very slow to pay. 2 companies have access to Banking loans, workforce expansion fund, Opportunity New Brunswick (a provincial government entitity) and the National Research Council.

#### **REVENUE MODEL**

One of respondents uses a specific tool within the pricing policy like Discount for "great clients". The rest of respondents do not have specific measures.

#### EMPLOYMENT

One of respondents are able to attract and retain a skilled workforce but do not have a 100% success rate. They try to attract and retain people by promoting our corporate culture and opportunities to internal developments for example.

Another respondent employs disables and only all employ seniors in their companies. 100% investigated companies accept students for an internship. For other respondents it is difficult, since they are still a small company.

#### **PARTNERS AND NETWORKS**

33% of respondents are in a partnership with other companies. All companies in the network are from the same sector (construction). 66% of the respondents apply the HEI-company-research triangle and 100% of respondents cooperate with local or regional government.

As for waste use, this is very diversified. One of the companies process wastes from its production. The other - domestic waste is sent to the sites, one respondents use services of Eco360 Southeast company.

0 % of respondents are in a partnership with social enterprise but 66 % of them cooperate with universities (CCNB, University de Moncton). 66 % of investigated

companies also participate in educational process. 66 % of respondents think that there are taught study programs tailor made their needs.

#### **RESOURCES**

All respondents analyzed the structure of their expenses and all declared making profit. The financial resources for the business are profit, loans and EU funds, founder investment, membership fees and support from government. 60% of asked companies develop human resources through personal trainings, higher educational degrees or secondary education. 40% of respondents encourage their employees to attend personal development. The critical skills of employees are mathematics and science . 60% of respondents have proven and analysed structure of expenses once in year and all of them except one make profit.

#### MARKETING SYSTEM

#### Marketing

The most used channels for marketing and promotion are online, word to mouth, references and all kinds,(social media, specific sites), one of respondents is not in retail. One company is in the process of formulating the marketing strategy. The respondents are not considering to extend the strategy in the future, however one respondent plan but not yet determined which tool.

#### **Customers**

The number of individual business customers moves between 100 to 200 customers. Investigated companies (3) focus on following customer segment: Professional working, retirement, new arrival / migrant / immigrant, Environmental products. That is to say any contruction which aims at eliminating the losses and improve the environment. Sector of the pallet handling.

First respondent has target customers on 50% local, 30 % national and 20 % international, the 2nd one Local 2%, regional 68% and national 30%. The third have target National and international.

#### **INNOVATION SYSTEM**

## **Offer**

100% of investigated companies apply the process of the product or service development.

#### Value proposition

33 % of respondents consider to make the production more diversified, 33% want to focus on the services they are good at and for the rest primary goal is to maximize the value of the raw material available to them. The product is easily marketable for one company, the 2nd is yes and no, our walk is general, for the 3rd company is not easily marketable except for ecological fuels. Customers can clearly differentiate the product of one of investigated company, the rest replied "no". One respondent declared that the brand is meaningful in the customer's perception.

#### **Sustainability**

The investigated companies have declared the relations, from the marketing point of view as great customers due to prompt service. One respondent would suggest to improve it by speaking to them and meet regularly, face to face.

The measures so the competitors don't copy the products of the respondents are similar - maintenance and customer service creative at solving problems.

The advantage in comparison with other competitors is for one company that they are local, prompt, maintained, present, the other declares their way of dealing with difficult projects and the 3rd company declared that they have guaranteed supply.

All respondents replied that they can you innovate more successfully than your competitors.

#### **BIOECONOMY PRODUCTION SYSTEM**

#### **Offer**

The asked companies provides following products/services: Real Estate accommodation, apartment, office rental, challenge resolution for customers, turnkey service for mechanical services, environmental Services.

#### Capacity and capacity planning

Respondents are different in this respect. One company doesn't have any analysis, one company no and yes, depends on conditions and customers, for one it is not relevant. All companies process the balance the customer order fluctuation with their capacity.

#### **Sustainability**

The investigated companies remain sustainable with following: Daily management, communication for emergency,salaries are adjuster for each region and customers,with creativity, they can do more with less.Continuous improvement of their processes, cost control.

#### **QUALITY MANAGEMENT**

100% of respondents have target value for customer quality claim. One of 3 asked company has escalation system than the costumer claim is higher than expected. One of them has until a certain point because of a big lack of manpower to qualify(Pipefitters, plumbers, welders, electricians, etc.) One company declared some flexibility but limited in terms of resources and manpower.

Two respondents have action plan to develop the product quality, for one i tis not relevant.

#### SUPPLIERS

Investigated respondents have key supplier between 20-50. For one company it is not relevant. One company answered that 5% of their performance depend on their suppliers, for the 2nd company 20% and for the 3rd the question is not relevant.

## CONCLUSION AND RECOMMENDATION FOR ENTITIES (WORKING LIFE PARTNERS) IN EACH COUNTRY

### MANAGEMENT AND SUPPORT

The results of the research unambiguously confirmed that the most frequently applied organizational structure is the classical line, respectively linear staff structure, in all countries involved in the research. The above-mentioned way of organizing of organizational resources of the enterprise, prefers 83-100% of the respondents. Organizational structures of this type are relatively simple and transparent in terms of the definition of competency relationships, in particular the responsibility for the results achieved in the various fields of activity. For a category of small and medium-sized enterprises, this type of structure can be considered appropriate and effective.

The evaluation of organizational-legal forms of business has already shown greater diversity. Largest representation, up to 66.6% are limited companies. Their representation is even higher in Central European countries (Slovakia, the Czech Republic, Hungary), where it represents almost 90% of all enterprises involved in research. Due to the high representation of micro-enterprises and small enterprises in the research sample, it is logical that the second most pronounced organization-legal form is a self-employed person, respectively. Private entrepreneur or farmer - 24.89%. In Western European countries (Finland, the Netherlands) there is a relatively high representation (28.3%) of companies operating within the association.

## STRATEGIC PLANNING (VISION AND MISSION)

Strategic planning focuses on the surveyed enterprises in general. Only one business entity stated that it did not develop a strategic plan, but because it is part of the business association, it is possible that the strategic planning is carried out at the level of the association as a whole.

#### **TREND MONITORING**

In assessing the implementation of the KPU monitoring system, the greatest diversity among the participating countries was found - from 0% (SR) to 86% (the Czech Republic and the Netherlands), which on average represents 64.6%.

However, it is positively worth assessing that a substantial part of the enterprises, even those from the non-monitoring category, have prepared back-up plans and programs to offset possible deviations (68.6%). Back-up plans are generally based on the diversification of the operations being carried out.

#### CERTIFICATIONS

The issue of certification of products and services is devoted to the attention of enterprises of the countries surveyed from 20% (Hungary) to 100% (Finland). On average, 78.3% of the enterprises devote their attention to the issue of certification, which, given their focus, can be assessed positively.

## **CASH FLOW**

The best results were recorded in a group of Hungarian and Dutch enterprises, where up to 100% said their revenues were stable and predictable; the lowest level of equity in this area was presented by Slovak enterprises - only 50%. On average, the tested sample represents stability and predictability of sales up to 84.6%, which, given the fact that a significant part of the respondents is active in the agriculture sector, is very positive. 23.6% of enterprises identified their own profits as the main source of business development. A substantial part (86.2%) documented good access to external sources of funding - state budget funds, EU funds.

#### **INCOME MODEL**

The application of pricing policy instruments identified a substantial part of the respondents as rather difficult and difficult to implement, which is understandable to the examined sector. Especially Western European enterprises are very skeptical about this issue and do not use energy to prepare and implement price advantages (they can secure revenue in a more effective way). Central European businesses are trying to attract and retain customers, clients in the form of quantitative rebates, individual prices, introductory prices, etc.

#### EMPLOYMENT

The question: whether business management is capable of attracting and retaining a skilled workforce, almost all respondents answered positively, but with the condition of good financial evaluation and the provision of various material and spiritual benefits (13th salary, service car, mobile phone, corporate events for employees and their family members, reimbursement of the costs of additional education). This is not easy in the conditions of the agriculture sector, especially in the countries of Central Europe. Enterprises in Western European countries do not have the problem of rewarding employees in line with their ideas and claims.

Fluctuation of the labor force is relatively favorable, usually ranging up to 10%. A part of the respondents, especially from Hungary, Finland and the Netherlands, said that the turnover rate did not count, which meant that it was low and negligible for them. The above assessment shows that agricultural enterprises surveyed European countries are doing to stabilize their employees despite difficult working conditions arising from the character of the resort - the impact of natural conditions, seasonality of production, biological character of production and products and the specifics of the food market.

About half (53.6%) of companies surveyed have training and training programs for their employees. In addition to the obligatory OSH and OP training courses resulting from the legislation, these are primarily specialized courses and training courses aimed at acquiring or, respectively, deepening of skills in manipulation with technical and technological devices in the production process, working with chemicals and animals, periodic educational activities focused on information and communication technologies. Almost absolutely absent training programs aimed at shaping social skills and communication in foreign languages.

The labor force diversity survey showed that the bulk of businesses (76.8%) employed people with altered workforce and retirees. Relatively significant differences were noted in the structure of disadvantaged categories of employees. In the number of disabled workers employed, the differences between countries are not as important as employing people in post-productive age. Businesses from Central Europe (Slovakia, the Czech Republic and Hungary) employ almost 100% more retirees than Finland and the Netherlands.

Virtually 80% of the companies surveyed are involved in the support of practical training of students in the form of internships. Differences between countries are insignificant.

#### **PARTNERS AND NETWORKS**

All surveyed businesses invest in their social community, mainly through contributions to the social fund, organizing corporate events, community support and general events, sports clubs, children's facilities, and disabled citizens. Similarly, all businesses are in partnership with other companies. Relationships are built through personal contacts. Nearly half of the respondents (46.6%) are involved in the research triangle "University - Practice - Research". Surprisingly, the Netherlands (0%) and the highest (50%) Finnish business entities. Very extensive and rich cooperation with the local, respectively. Regional governance confirmed by more than 80% of the research sample companies.

Only 33.6% of the surveyed enterprises process the waste from their own production with the exception of sewage treatment plants, which increase this share to 46.8%.

Almost all businesses, however, presented co-operation with other waste disposal organizations - disposal of used tires, recycling of engine oils, composting of bio-waste, use of non-standard cereals and wildlife seed. Significant differences were noted in the area of partnership with social entrepreneurship. Most businesses in this direction presented Dutch businesses with 100% involvement, at least 7% of Finnish business entities. The average business share of the surveyed sample is 46.3%.

Collaboration with universities has been declared by up to 100% of Dutch enterprises, the least active in this area are enterprises in the Czech Republic only 28%.

Collaboration with universities is based on selective lectures of practice experts for individual faculties, excursions and student placements in enterprises. To assess study programs in terms of meeting the needs of practice, a substantial part of the respondents (80.0%) said that the current study programs are tailored to the needs of practice only in part. None of them, however, specified what is totally absent in the study programs, which should be supplemented, strengthened e.g. changed. Satisfaction in this direction was expressed only by representatives of Hungarian companies, who also stated (100%) that the study programs fully correspond to the requirements of the practice.

### RESOURCES

As a main source of coverage of entrepreneurial activities, all respondents reported a profit from entrepreneurial activity. Almost all respondents use funds from EU funds, the state budget and credit resources.

As part of the development of human resources, all surveyed businesses are interested in the professional growth of their employees, practically by organizing training courses and courses aimed at developing employee competence in the production process, information and communication technologies, quality management, marketing and business operations. More than half of the surveyed subjects (56.4%) motivate their staff for personal development by partial (48.6%) or full (36.4%) reimbursement of the costs of their provision.

Among the critical skills were social skills, effective communication, environmental and legislative awareness, lack of knowledge of foreign languages. Technological knowledge and skills were subsequently introduced.

A very favorable partial result can be considered as the fact that more than three quarters of the surveyed enterprises (76.8%) have detailed knowledge and then analyzes the structure of their expenditures, a first and indispensable step towards their rational use in future periods. The best results in this respect were achieved by Slovak companies, all of which declared strict records and analysis of expenditures.

#### **MARKETING SYSTEM**

#### Marketing

The most widely used marketing and promotion channels are the internet, Facebook, websites, television, newspapers, magazines, exhibition catalogs and trade fairs. Businesses from Central European consider the crucial importance to personal contact with partners, established at promotional and presentation events or on bilateral meetings.

Approximately half of the surveyed enterprises (53.8%) have a developed marketing strategy and another 32.6% are considering its expansion, respectively. processing. No significant differences between the countries involved in the research were recorded in this area.

#### **Customers**

The number of individual business customers is very diverse and is directly related to the width of the product range and the nature of the final products, intermediate products, provided services. It ranges from 1 - 2.5 million. The largest variability according to customers was recorded by businesses in the Netherlands. In this respect, however, it should be noted that the assessment of this aspect from the national point of view, the nationality of business entities is absolutely irrelevant. In terms of customer segmentation, the largest share consists of business entities and organizations, agricultural and food businesses, service companies, retail chains, wholesale and retail operations, farms and craftsmen. A high proportion of customers in terms of abundance are final consumers.

Comparison of the volume of purchased products by final consumers and business entities, respectively. Organizations would have be relevant. A substantial part of the enterprises surveyed (72.4%) sells their products preferably on the domestic market (local, regional, national market), the rest also trades on the international market. Enterprises aimed exclusively at foreign trade did not appear in the sample under review.

#### **INNOVATIVE SYSTEM**

#### **Offer**

The assessment of the development of new products is strongly influenced by the regional relevance of individual companies. The most important attention is given to enterprises in Finland (79%), the Netherlands (75%) and the Czech Republic (70%). The Hungarian and Slovak entities, which consistently report the development of new products at the level of 40%, have declared significant results in these trends. Most of the attention is devoted to the innovation process by companies that have their own scientific research and development base, but part of the Dutch enterprises use the services of external, especially partner enterprises, respectively organizations.

This experience is very inspirational and could also serve as an incentive for businesses in other countries, especially in cases where they can not afford to finance and run their own research and development base. More than half of the enterprises surveyed (56.8%) consider their production to be sufficiently diversified, almost a third (31.8%) do not consider the development of diversification to be justified.

There was no significant difference in the diversification appraisal between enterprises in different countries.

As an incentive, the approach to the diversification process can be assessed by some Finnish and Dutch businesses that focus on expanding organic farming, producing organic food and biogas.

#### Value menu

84.6% of respondents rated relations withcustomers as very good or above standard. The best results were presented by Slovak and Dutch subjects (100%), some reserves were granted by Hungarian enterprises (20%).

The best ways to improve customer co-operation have been personally recommended for personal contacts, whether bilateral or formed through presentation activities customer days, open days, exhibitions, seminars, and more.

About 40-100% of respondents (40% of Slovaks, 100% of Hungarian companies) received a positive opinion to the question of tradability of their products. On average, for the sample under examination, the marketability is 78.2%. In this respect, however, it should be noted that the differences are not due to regional belonging but to the nature of products. More than two-thirds of respondents (68.4%) said their products were easily recognizable on the market, which is a very positive finding in terms of building the image of the business and the positive relationship of customers to products and to the business as a whole.

The same share of respondents (68.4%) assesses their brand as meaningful, with a positive impact on consumer awareness. Regional differences in the assessment of these aspects are insignificant.

#### **Sustainability**

The market position of companies in terms of long-term sustainability is very diverse. A major advantage in this respect is the ownership of the trademark, respectively a brand that is widely known and recognized on the market. Such a position was presented by nearly a third of companies surveyed, mainly from Finland, the Netherlands and Hungary. Manufacturers of ordinary consumer products are reasonably skeptical in this respect.

Effective protection against competition is built by businesses, both by strengthening the loyalty of their own employees, by protecting production and business secrets, by permanently forming good relationships with business partners.

Compared to competition, businesses see their strengths in building and maintaining good personal relationships with partner organizations, offering better services in the field of service and additional services (Slovakia, Czech Republic), but also by giving priority to local markets at the expense of global (Holland) and permanent innovation of its products and services (Finland, the Netherlands). Better conditions for successful innovation compared to competition were declared by more than half of Finnish, Dutch and Czech companies (56%) and about one third of Slovak and Hungarian businesses (35%).

#### **PRODUCTION SYSTEM OF BIOECONOMICS**

#### Offer

In the surveyed sample, the largest share (48%) represents the service enterprises - sales and servicing of machinery and technologies for agriculture, forestry, woodworking, construction, trade and brokerage organizations, organizations providing services of an intellectual nature - counseling, quality management, education. Another group (31%) consists of production and processing enterprises from the food industry (breweries, dairies, meat products), cosmetics and waste processing. The smallest group (21%) consists of primary agricultural enterprises - the production of cereals, oilseeds, sugar beet, fruit, vegetables, organic products, milk and meat.

Capacities and capacity planning

More than two-thirds of respondents (69%) have thoroughly processed capacity analyzes for customer orders. The most consistent in this direction are Finnish and Dutch businesses (75-79%). In general, worse results were presented in terms of the ability to swing fluctuations in customer orders, which is below 50%.

#### **Sustainability**

Sustainability brings together all surveyed businesses with rigorous day-to-day management, management of the statistical system of monitoring and evaluating selected indicators, rationalization of operational, tactical and strategic management. Finnish and Dutch businesses also place greater emphasis on environmental aspects of business, rational crop rotation, biological protection of soil and animals.

#### **Quality Management**

On average, 92% of respondents (79-100%) said their target value was customer quality.

More than half (52%) of businesses presented the ability to meet the increased customer demands compared to expectations.

A substantial part of the enterprises (62.8%) have developed an action plan to improve the quality of their products (Slovakia 100%), Hungary 40%), meaning that they pay due attention to the quality of their products and services.

#### **Contractors**

The surveyed companies list key suppliers in the number of 1 - 180 subjects, depending on the subject of the activity.

The dependence of business performance on the supplier ranges from 20 to 100%, which forces businesses to provide high-quality logistics.

# SUGGESTIONS AND RECOMMENDATIONS FOR CREATION OF STUDY PROGRAMS

- Pay more attention to the creation of organizational and governance structures of enterprises focusing on progressive types of flexible structures (of the project and matrix type).
- Comprehensively process the strategic management system as well as creation of business and functional strategies, and interconnection between strategic, tactic and operative management.
- Provide students with comprehensive practical skills for certification of products, services and processes, from submission of application to final processing of documents.
- Include a comprehensive methodology of business plan formulation (especially for the needs of grant applications from EU funds and the state budget) into the study program.
- Form a positive students' attitude towards the precious and systematic work at monitoring and evaluation of business results and external impact.
- Strengthening human resource management programs (from search and selection of staff, through their adaptation, development and education, to evaluation).
- Enrich the lessons by practical skills in communication, motivation and leadership. We recommend paying more attention to training sessions with business partners and solving conflicting situations at the workplace.
- In marketing, to pay more attention to pricing (use of pricing policy tools) and distribution policy (not only to promotion and advertising).
- Include quality management and innovation management into the study program.

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