



Riga Technical University

56 International Scientific Conference

Section

“National Economy and Entrepreneurship”

Faculty of Engineering Economics and Management

6 Kalnciema Street, Riga

15 -16 October, 2015



LATVIJAS
UNIVERSITĀTE
ANNO 1919

Vidzemes Augstskola
UNIVERSITY OF APPLIED SCIENCES



VENTSPILS
AUGSTSKOLA



RĪGAS STRADIŅA
UNIVERSITĀTE



Subsection: National Programme “Economic Transformation, Smart Growth, Governance and Legal Framework for the State and Society for Sustainable Development – a New Approach to the Creation of a Sustainable Learning Community” (EKOSOC-LV)

Project 5.2.2. “The Development of Innovation and Entrepreneurship in Latvia in Compliance with the Smart Specialization Strategy”

&

Project 5.2.7. “Involvement of the society in social innovation for providing sustainable development of Latvia”

Subsection Chairs: N. Lace & K. Oganisjana

Faculty of Engineering Economics and Management

6 Kalnciema Street, room 301, Riga

Thursday, 15, October, 2015

Scientific Committee:

N. Lāce, Dr. oec., Riga Technical University, Latvia

K. Oganisjana, Dr. paed., Riga Technical University, Latvia

G. Ciemleja, Dr. oec., Riga Technical University, Latvia

M. Pelše, Dr. oec., Latvia University of Agriculture, Latvia

M. Leščevica, Dr. oec., Vidzeme University of Applied Sciences, Latvia

S. Hiļkevičs, Dr. phys., Ventspils University College, Latvia

T. Volkova, Dr. oec., BA School of Business and Finance, Latvia

A. Sauka, Dr. oec., SSE Riga, Latvia

A. Čirjevskis, Dr. oec., SIA “Sinergija”, Latvia

M. Tvaronavičiene, Dr. oec., Entrepreneurship and Sustainability Center, Lithuania

T. Põlajeva, Dr. oec., Tallinn University of Technology, Estonia

Section programme (1)

9.00–9.15

WELCOMING SPEECH

Nataļja Lāce, Karine Oganisjana, Riga Technical University, Latvia

9.15–9.30

SUSTAINABILITY OF THE INVESTMENT CLIMATE IN LATVIA: THE VIEWPOINTS OF FOREIGN INVESTORS

Arnis Sauka, SSE Riga, Latvia

9.30–9.45

COMPARATIVE ANALYSIS OF TECHNOLOGY TRANSFER MODELS

Sergejs Hiļkevičs, Ventspils University College, Latvia

9.45–10.00

RETURNS ON INTERNET MARKETING IN LATVIA — RESULTS OF RECENT COMPANY SURVEY

Biruta Sloka, Ināra Kantāne, Renāte Vidruska, University of Latvia, Latvia

10.00–10.15

SUSTAINABILITY IN HIGHER EDUCATION: DISCOURSE ON DYNAMIC CAPABILITIES OF LATVIAN PRIVATELY RUN HIGHER EDUCATIONAL INSTITUTIONS

Andrejs Čirjevskis, SIA “Sinergija”, Latvia

Section programme (2)

10.15–10.30

DOES FIRM'S HIGHER INNOVATION POTENTIAL LEAD TO ITS SUPERIOR PERFORMANCE?

Jūlija Bistrova, Nataļja Lāce, Riga Technical University, Latvia

10.30–10.45

INNOVATIONS IN THE PROMOTION OF THE HOME PRODUCED PRODUCTS IN THE MARKET

Modrite Pelše, Sandija Zēverte-Rivža, Zane Rone, Latvia University of Agriculture, Latvia

10.45–11.00 Coffee break

11.00–11.15

THE SEXTUPLE HELIX INNOVATION MODEL

Nataļja Lāce, Gintare Rumbinaite, Riga Technical University, Maira Leščevica, Vidzemes Augstskola, Latvia

11.15–11.30

CHALLENGES FACED BY SMART MATERIAL COMPANIES TOWARDS SUSTAINABLE DEVELOPMENT

Guna Ciemleja, Riga Technical University, Latvia

Section programme (3)

11.30–11.45

ORGANIZATIONAL CREATIVITY AS A DRIVING FORCE FOR COMPANY'S INNOVATIVE DEVELOPMENT

Natalja Lāce, Riga Technical University, Latvia, Natalja Buldakova, GE Global Operations — Finance, Hungary, Gintare Rumbinaite, Riga Technical University, Latvia

11.45–12.00

COACHING AS A TOOL FOR ACCELERATING INNOVATION IN ORGANIZATIONS

Angelina Roša, Natalja Lāce, Riga Technical University, Latvia

12.00–12.15

DEVELOPMENT OF THE ENTREPRENEURIAL COMPETENCE IN LATVIA IN THE EU GOALS CONTEXT

Andra Šenberga, State Service Education Quality, Ventspils University College, Latvia

12.15–12.30

INNOVATIONS IN VOCATIONAL EDUCATION IN COMPLIANCE WITH THE REQUIREMENTS OF EMPLOYERS TO PROVIDE SUSTAINABLE DEVELOPMENT OF LATVIA

Ilze Brante, Ogre Technical School, Latvia

12.30–13.00 Coffee break

13.00–13.15

CHALLENGES FACED TO THE PROMOTION OF SOCIAL INNOVATION IN LATVIA: FROM THE PERSPECTIVE OF ECONOMICS

Lasma Dobele, Gunta Grinberga-Zalite, Linda Kelle, Latvia University of Agriculture, Latvia

Section programme (4)

13.15–13.30

**CHALLENGES FACED TO THE PROMOTION OF SOCIAL INNOVATION
IN LATVIA: FROM THE PERSPECTIVE OF EDUCATION**

Karine Oganisjana, Riga Technical University, Latvia, Svetlana Surikova, University of Latvia,
Latvia

13.30–13.45

**CHALLENGES FACED TO THE PROMOTION OF SOCIAL INNOVATION
IN LATVIA: FROM THE PERSPECTIVE OF MANAGEMENT**

Iveta Ozoliņa-Ozola, Jeļena Titko, Riga Technical University, Latvia

13.45–14.00

**MAKING A COMMON PLATFORM FOR THE INTEGRATION OF DIFFERENT
PERSPECTIVES OF SOCIAL INNOVATION RESEARCH WITHIN
INTERDISCIPLINARY FRAMEWORK**

Karine Oganisjana, Riga Technical University, Latvia

14.00–14.15

**THEORETICAL OLD-AGE PENSION BENEFITS AND REPLACEMENT RATES
IN THE BALTIC STATES: A RETROSPECTIVE SIMULATION**

Olga Rajevska, University of Latvia, Latvia

14.15–14.35 Coffee break

14.35–14.50

**THE ANALYTIC HIERARCHY PROCESS AS A TOOL FOR PROMOTION OF YOUTH
EMPLOYMENT AND SUSTAINABILITY IN LATVIA**

Līva Grineviča, Baiba Rivža, Pēteris Rivža, Latvia University of Agriculture, Latvia

Section programme (5)

14.50–15.05

SMART SPECIALIZATION STRATEGY: REALIZATION OPPORTUNITIES AND PROBLEMS IN LATVIAN

Sandra Jekabsone, Irina Skribane, University of Latvia, Latvia

15.05–15.20

ON CHARACTERISTICS FOR STAKEHOLDERS' HOMOGENEITY IN INNOVATION AND TECHNOLOGY TRANSFER

Mikus Dubickis, Elīna Gaile-Sarkane, Riga Technical University, Latvia

15.20–15.35

INDUSTRIALISATION FACTORS IN POST-INDUSTRIAL SOCIETY

Vladimirs Šatrevičs, Valentīna Strautmane, Riga Technical University, Latvia

15.35–15.50

VALUES AND INNOVATIVE ENTREPRENEURSHIP. IMPACT ON RESULTS

Anita Straujuma, Elīna Gaile-Sarkane, Riga Technical University, Latvia

15.50–16.05

INNOVATIVE METHODS OF TEACHING AND LEARNING FOR PROMOTING ENTREPRENEURIAL COMPETENCES

Alla Sorokina, Belorussian National Technical University, Belorussia

16.05–16.20

EFFICIENCY OF LATVIAN PENSION SYSTEM

Konstantins Kozlovskis, Jūlija Bistrova, Riga Technical University, Latvia

16.20–16.35

INVESTMENTS IN RESEARCH AND DEVELOPMENT IN LATVIA

Tālis Laizāns, Riga Technical University, Latvia

Parallel workshops: seminars 1 & 2

Faculty of Engineering Economics and Management

6 Kalnciema Street, room 411 & 310, Riga

Friday, 16, October, 2015

9.00–12.00

Discussion of the results of the conference section on National Research Program EKOSOC-LV: «The Development of Innovation and Entrepreneurship in Latvia in Compliance with the Smart Specialization Strategy» & «Involvement of the society in social innovation for providing sustainable development of Latvia».

PARALLEL WORKSHOP: SEMINAR 1

The results and perspectives of the development of the project 5.2.2 “The Development of Innovation and Entrepreneurship in Latvia in Compliance with the Smart Specialization Strategy”.

PARALLEL WORKSHOP: SEMINAR 2

The results and perspectives of the development of the project 5.2.7 “Involvement of the society in social innovation for providing sustainable development of Latvia”.

Welcoming words

Nataļja Lāce & Karine Oganisjana



Participants of the conference subsection



Fragments from presentations



Sustainability of the investment climate in Latvia: the viewpoint of foreign investors



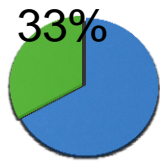
Arnis Sauka
SSE Riga, Latvia

Foreign Companies in Latvia (slide 2)

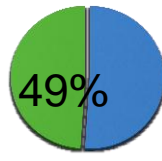
The number of companies above 145K EUR turnover and 50% foreign capital (majority)

3859

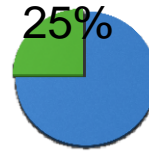
or 1/5 of total number of companies in Latvia



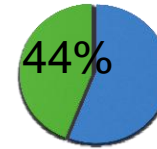
of total social tax



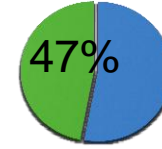
of total taxes paid



of total workforce



of total turnover



of total profit

Source: Firmas.lv, Data: 2014

Introduction

Companies that took part in the study (slide 4)

Microsoft

Narvesen

Balta/PZU

NASDAQ

Knauf

Cytec Latvia

TAV

Swedbank

EVRY

Klasmann-Deilmann

Neste

Bucher Schoerling

Vitol

SPI Group

Ernst & Young

MTG

Norvik

Linstow

Statoil Retail & Fuel

NCH Advising

SEB banka

Bosch

PWC

Fortum

Food Union

KMPG

Topics covered



Economic development

Investments

Overall evaluation & suggestions



Concerns



Success



Decisions



Dynamics



Expectations
v.s. reality



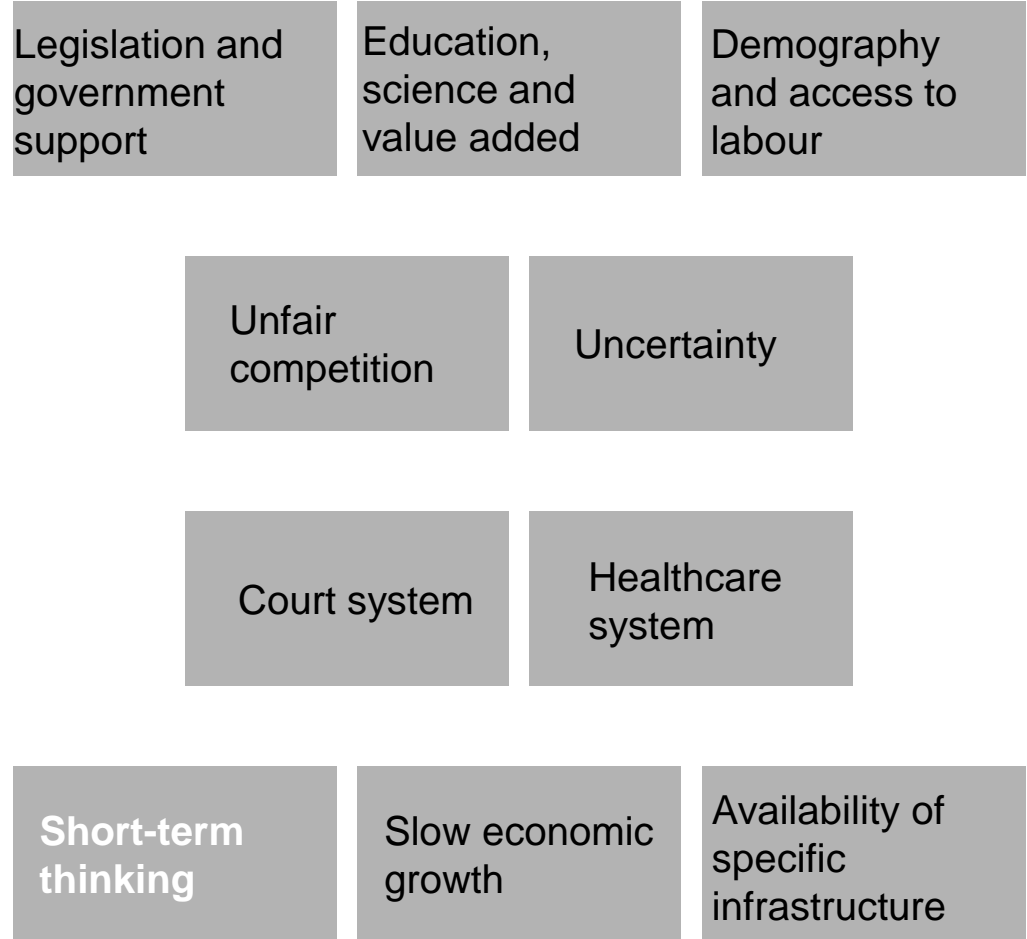
Potential



Communication

Topics covered, Slide 6

Concerns prioritized (slide 16)



Concerns

The top of successes (slide 22)

Environment -
political and
business

Logistics and
overall
infrastructure

Financial
infrastructure and
markets regulation

Shared service
centres

Efficiency of labor

Stability that is brought by
integration of Latvia within EU
and NATO

Quote:

“Overall, we experienced a complicated but very supportive local environment on both a political and a business level. We did not expect that Latvia’s integration westwards would happen so fast, that it would be a member of the EU, NATO and the Eurozone in so short a time.”

(Real estate company)

Comparative analysis of technology transfer models



Sergejs Hiļkevičs
**Ventspils University
College, Latvia**

Comparative analysis of technology transfer models (fragments)

Technology transfer definitions (slide 3)

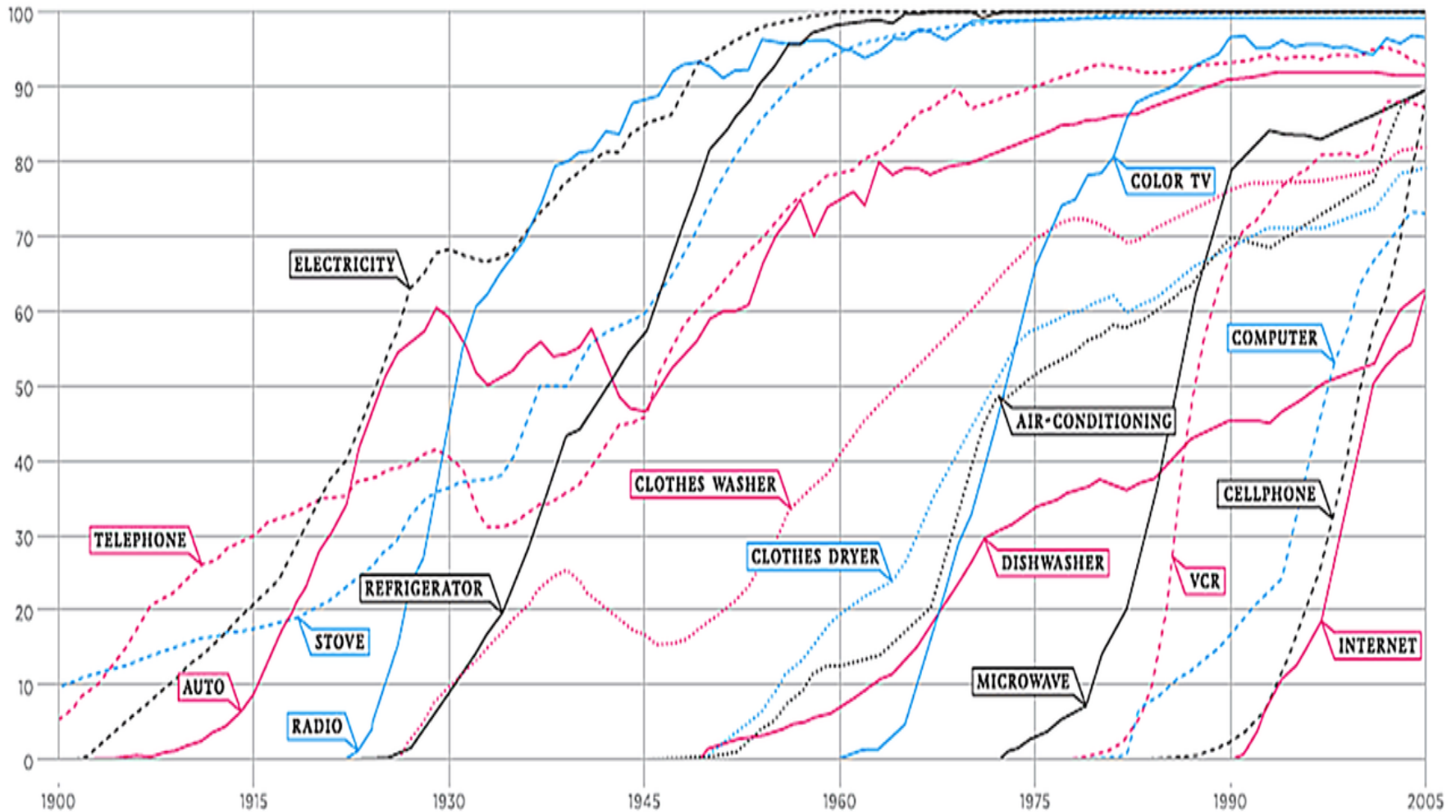
Using search engines it is possible to find more than 100 definitions of technology transfer:

- Technology transfer is the process of sharing of skills, knowledge, technologies, methods of manufacturing, samples of manufacturing and facilities among governments and other institutions to ensure that scientific and technological developments are accessible to a wider range of users.
en.wikipedia.org/wiki/Technology_transfer .
- The sharing of technological information through education and training; The use of a concept or product from one technology to solve a problem in an unrelated one.
en.wiktionary.org/wiki/technology_transfer
- The communication or transmission of a technology from one country to another. This may be accomplished in a variety of ways, ranging from deliberate licensing to reverse engineering.
www-personal.umich.edu/~alandear/glossary/t.html

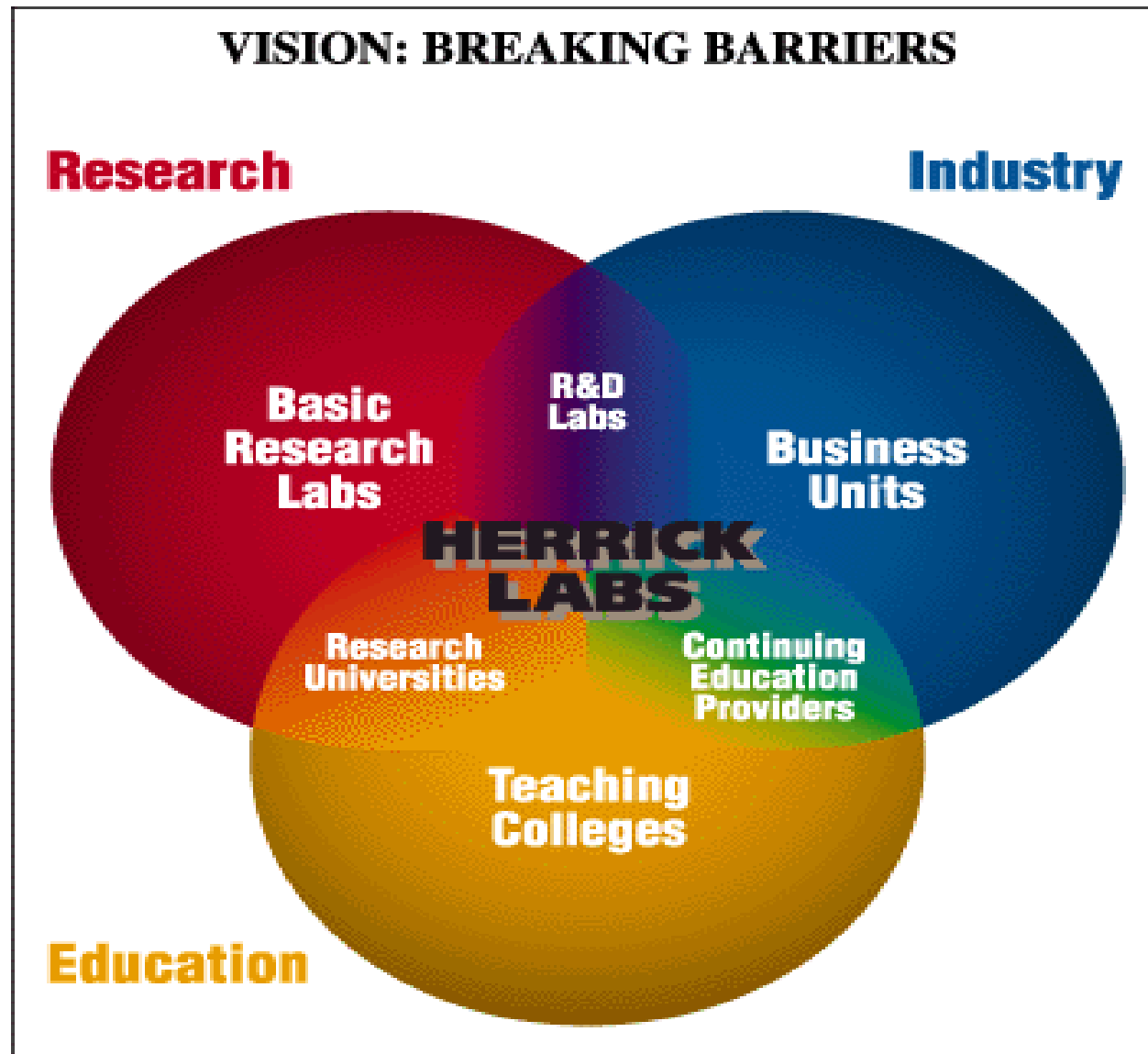
Technology transfer in historical retrospective (slide 15)

PERCENT OF
J.S. HOUSEHOLDS

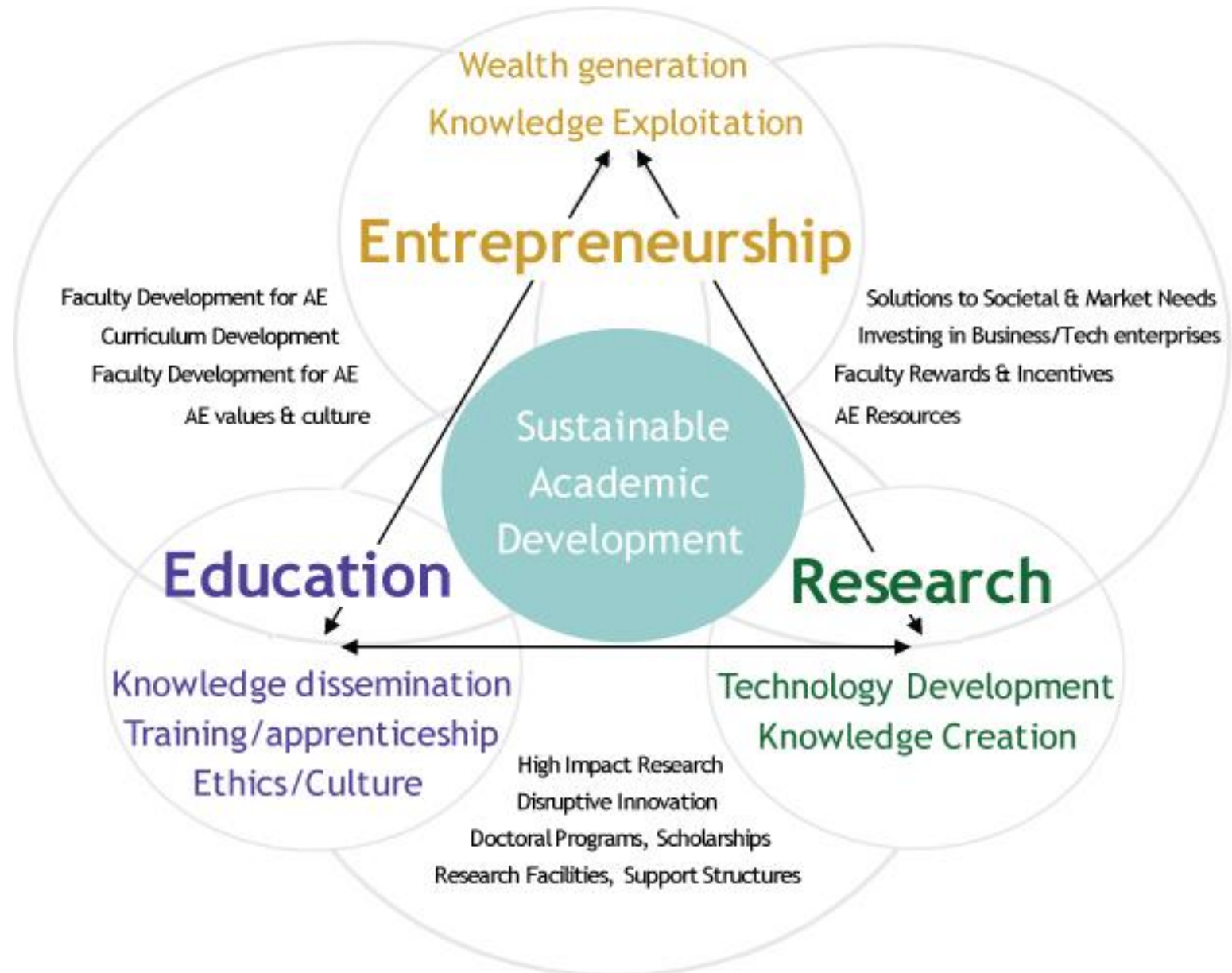
CONSUMPTION SPREADS FASTER TODAY



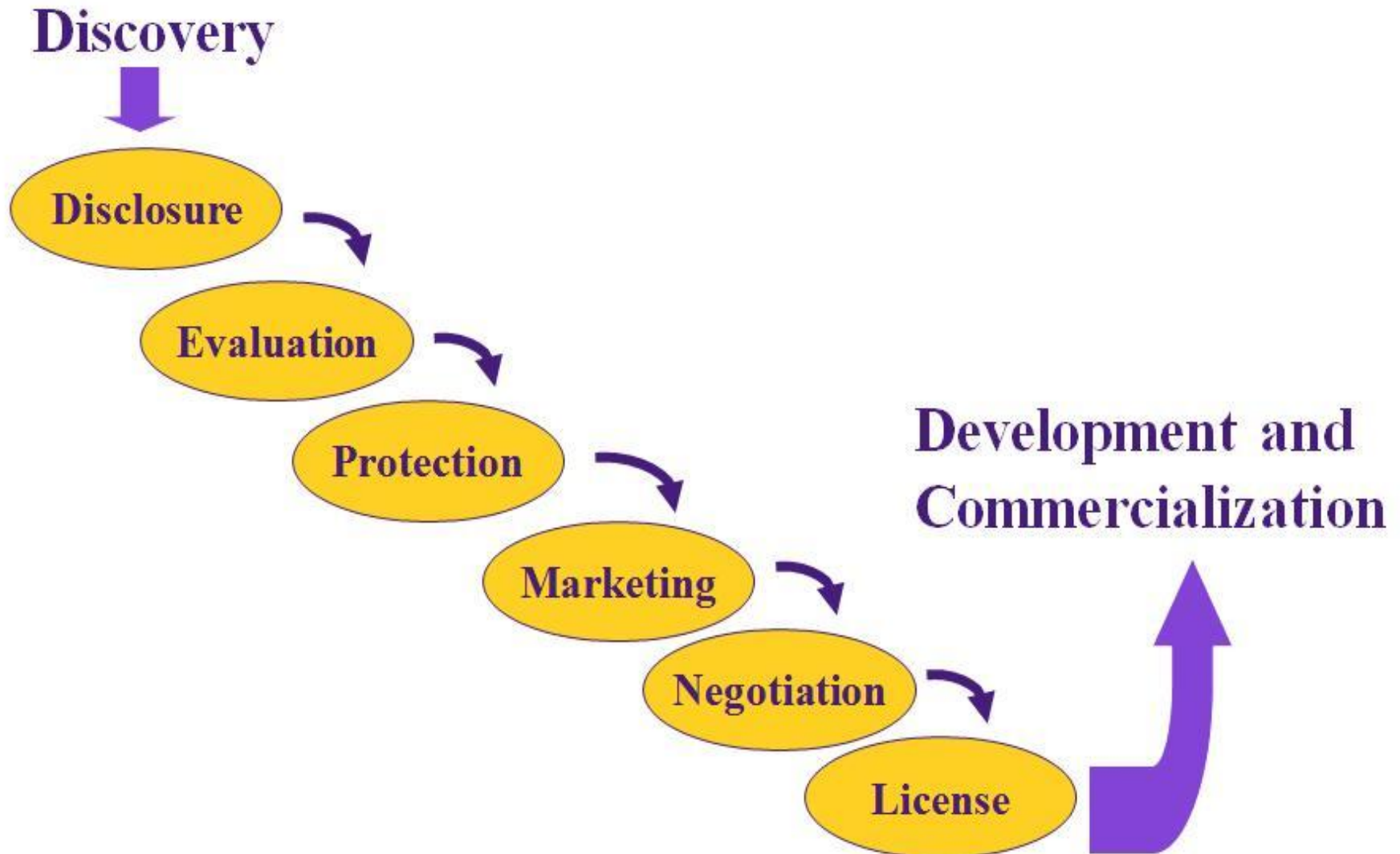
Technology transfer models (slide 17)



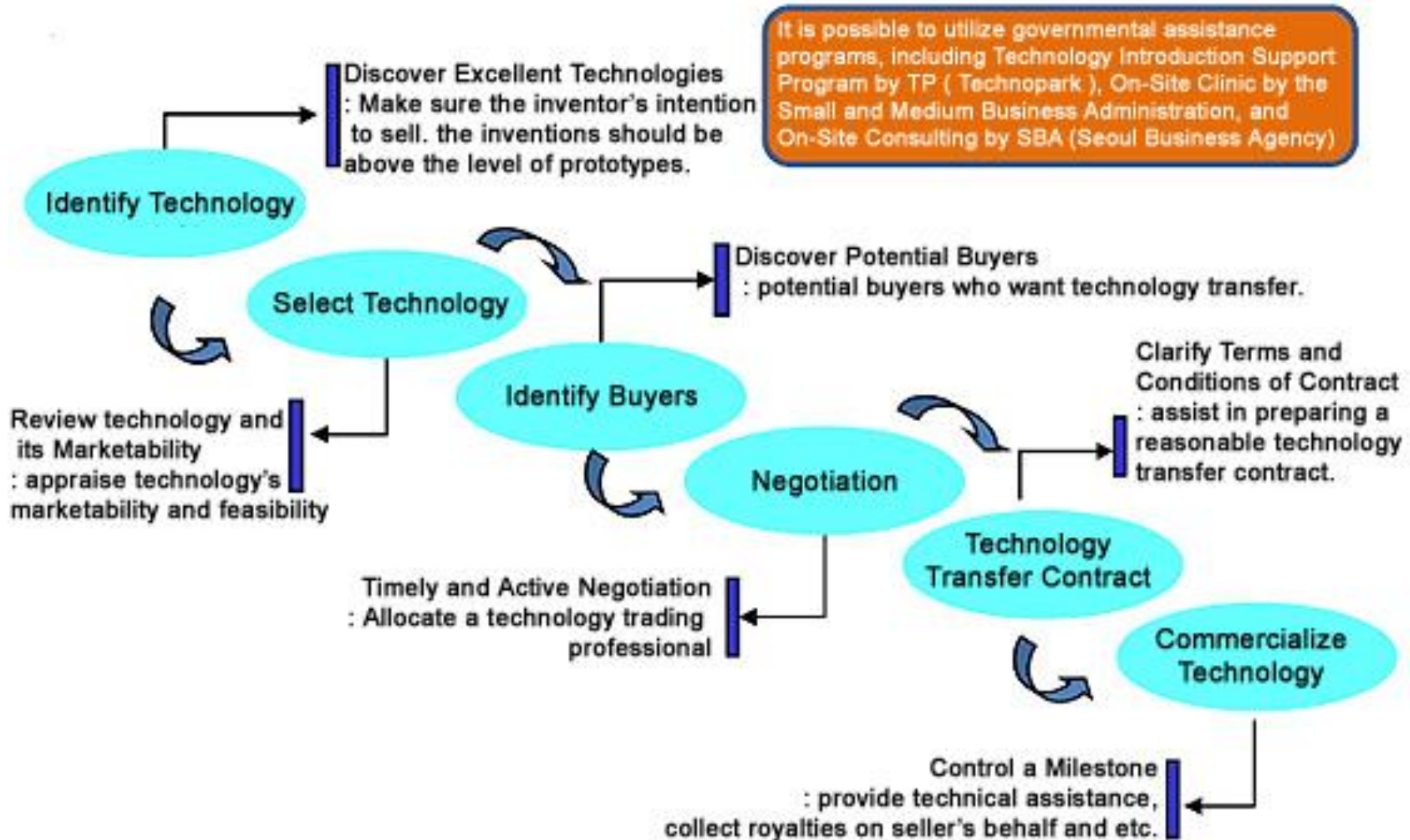
Technology transfer models (slide 18)



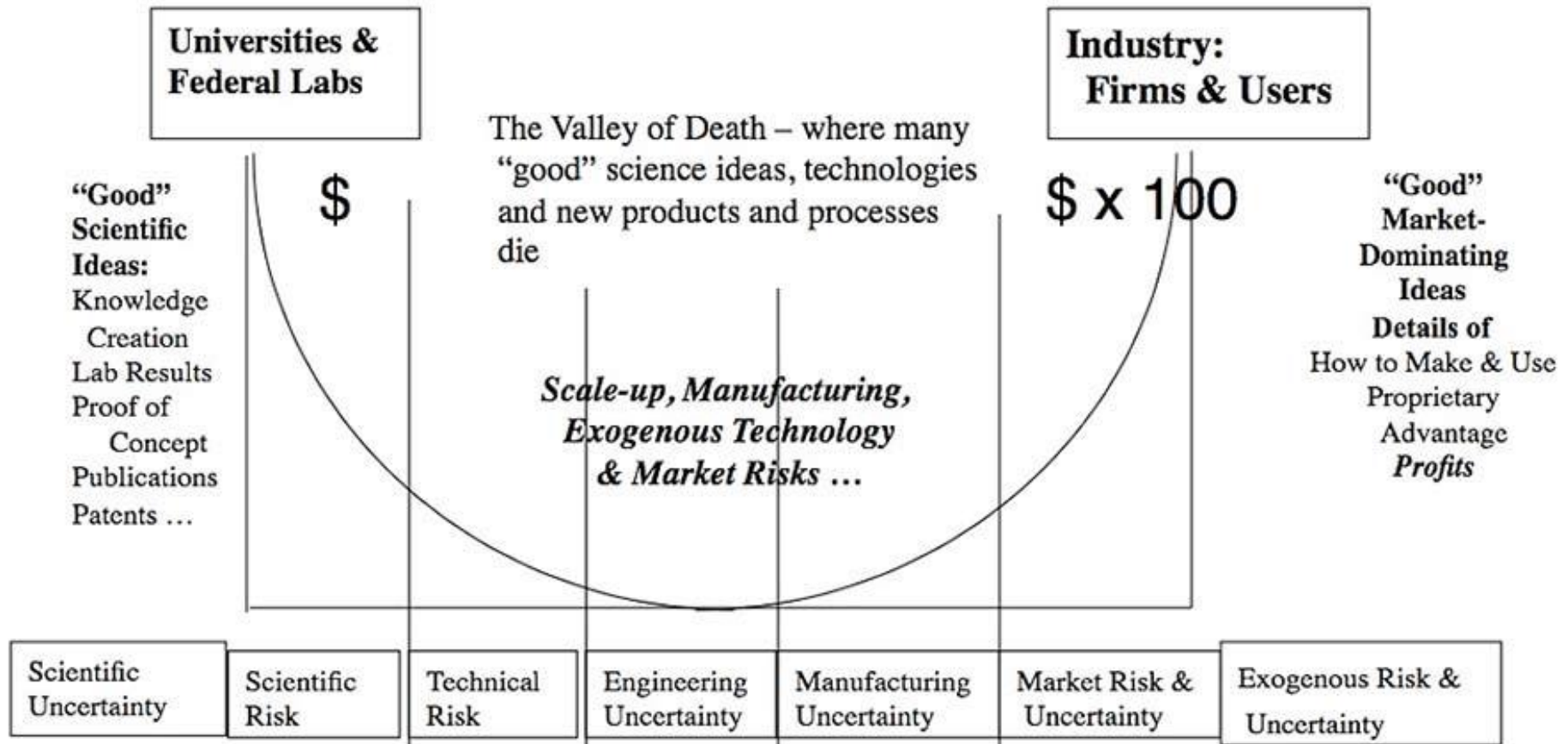
Technology transfer models (slide 20)



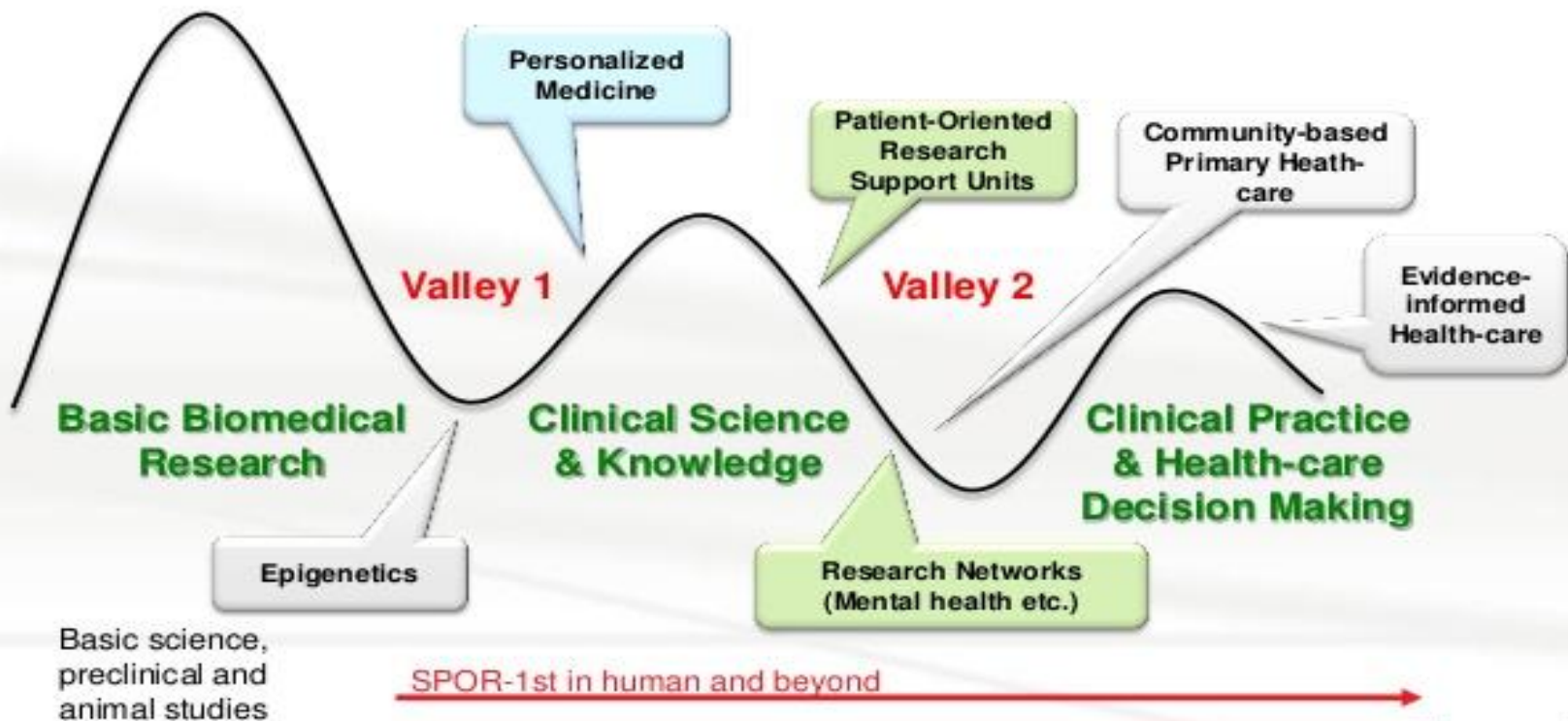
Technology transfer models (slide 21)



Technology transfer models (slide 32)



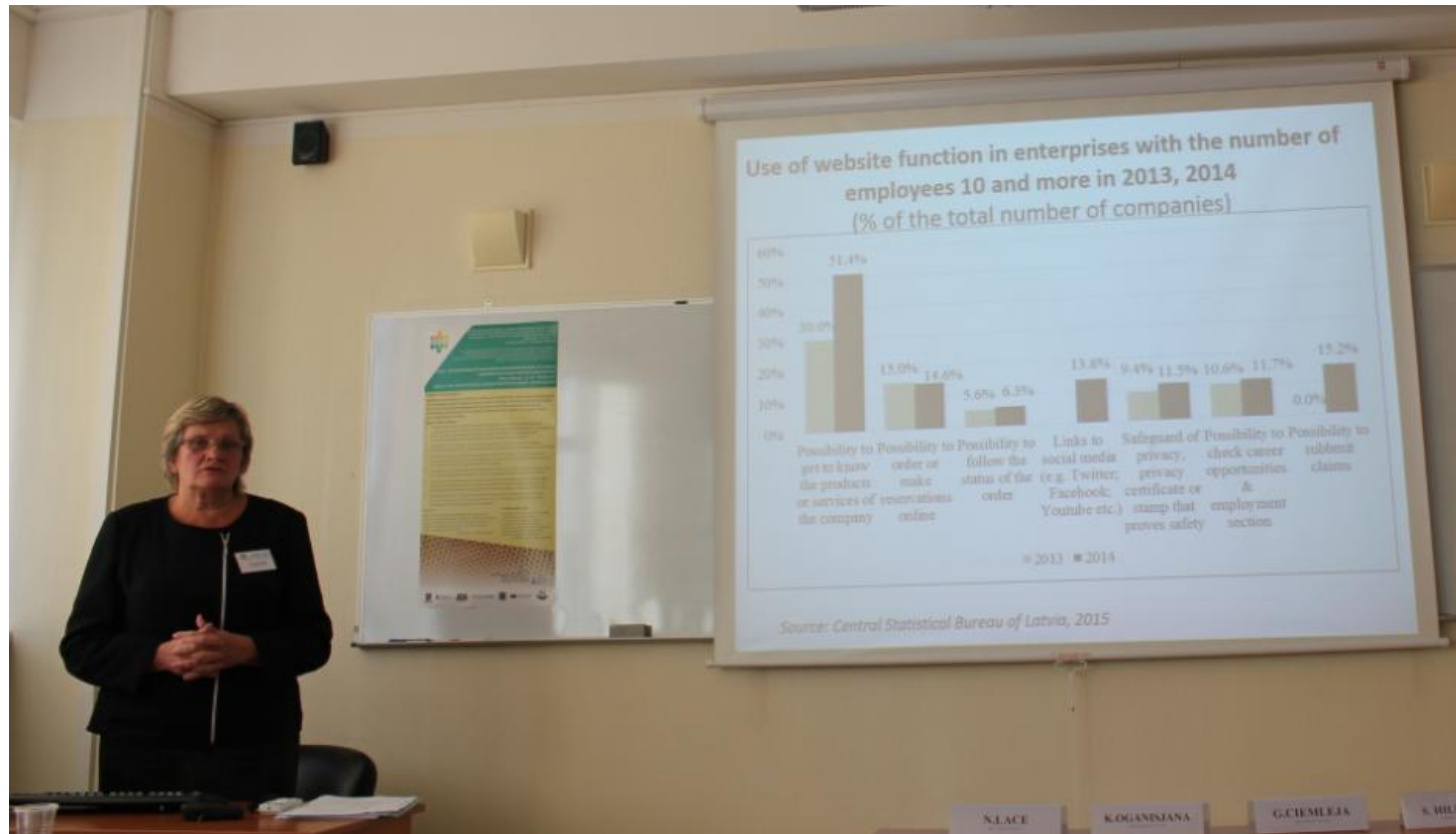
Technology transfer models (slide 33)



Comparative analysis of TT models (slide 51)

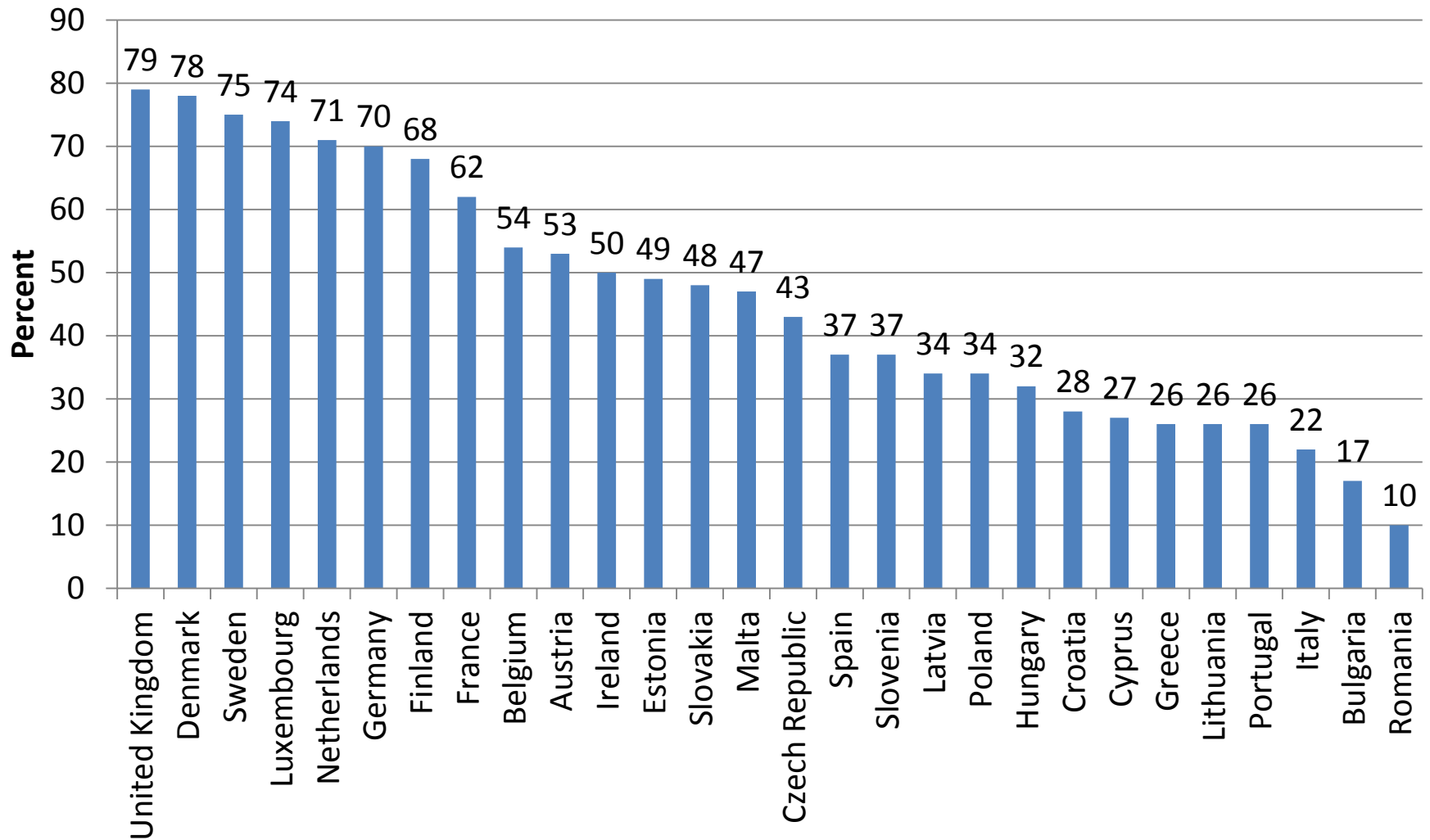
1. During last 30 years three generations of TT models have changed.
2. From 1985 to 1995 – “Linear models”.
3. From 1995 to 2005 – “Non-linear models”.
4. From 2005 to 2015 – “Backfeed models”.
5. The growth of TT models complexity corresponds to the growth of complexity of academic, cultural and business environment.
6. The critical success factor for TT efficiency is the time.

Returns of internet marketing in Latvia – results of recent company survey



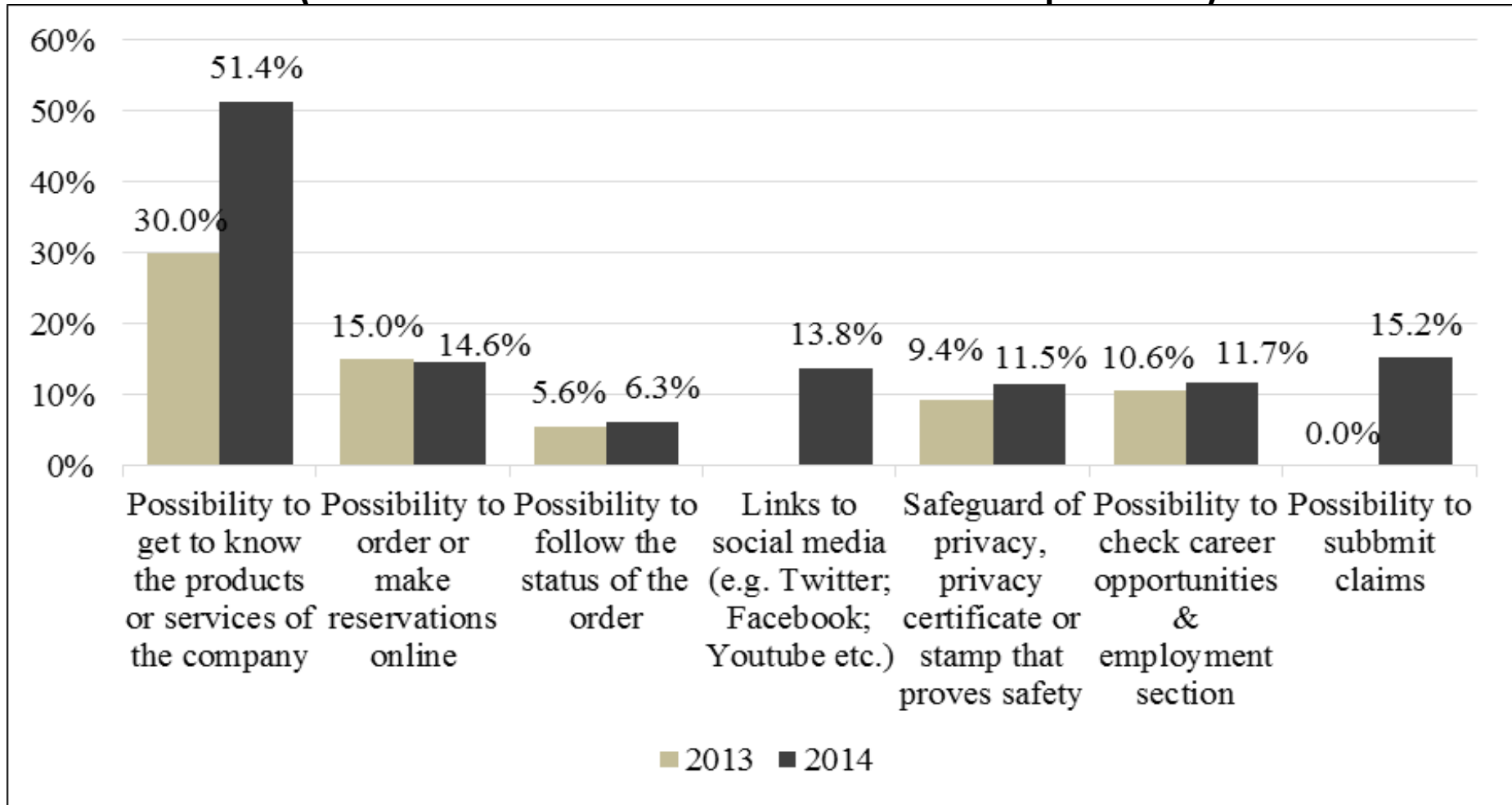
Biruta Sloka, **Ināra Kantāne**, & Renāte Vidruska
University of Latvia, Latvia

Internet purchases by individuals in the 12 months in EU countries in 2014, percentage of individuals (slide 3)



Use of website function in enterprises with the number of employees 10 and more in 2013, 2014 (slide 4)

(% of the total number of companies)



Source: Central Statistical Bureau of Latvia, 2015

Main statistical indicators of internet marketing significance and impact on the marketing and sales objectives (slide 10)

| Statistical indicators | The significance of internet marketing in company | The impact of internet marketing on the marketing and sales objectives |
|------------------------|---|--|
| Mean | 7.0 | 6.8 |
| Standard Error of Mean | 0.120 | 0.111 |
| Median | 7 | 7 |
| Mode | 8 | 8 |
| Standard Deviation | 2.380 | 2.178 |
| Range | 9 | 9 |
| Minimum | 1 | 1 |
| Maximum | 10 | 10 |

Source: Author's calculations based on manager's survey conducted in 2015 (n=406), evaluation scale 1 – 10, where 1 – not significant; 10 – very significant

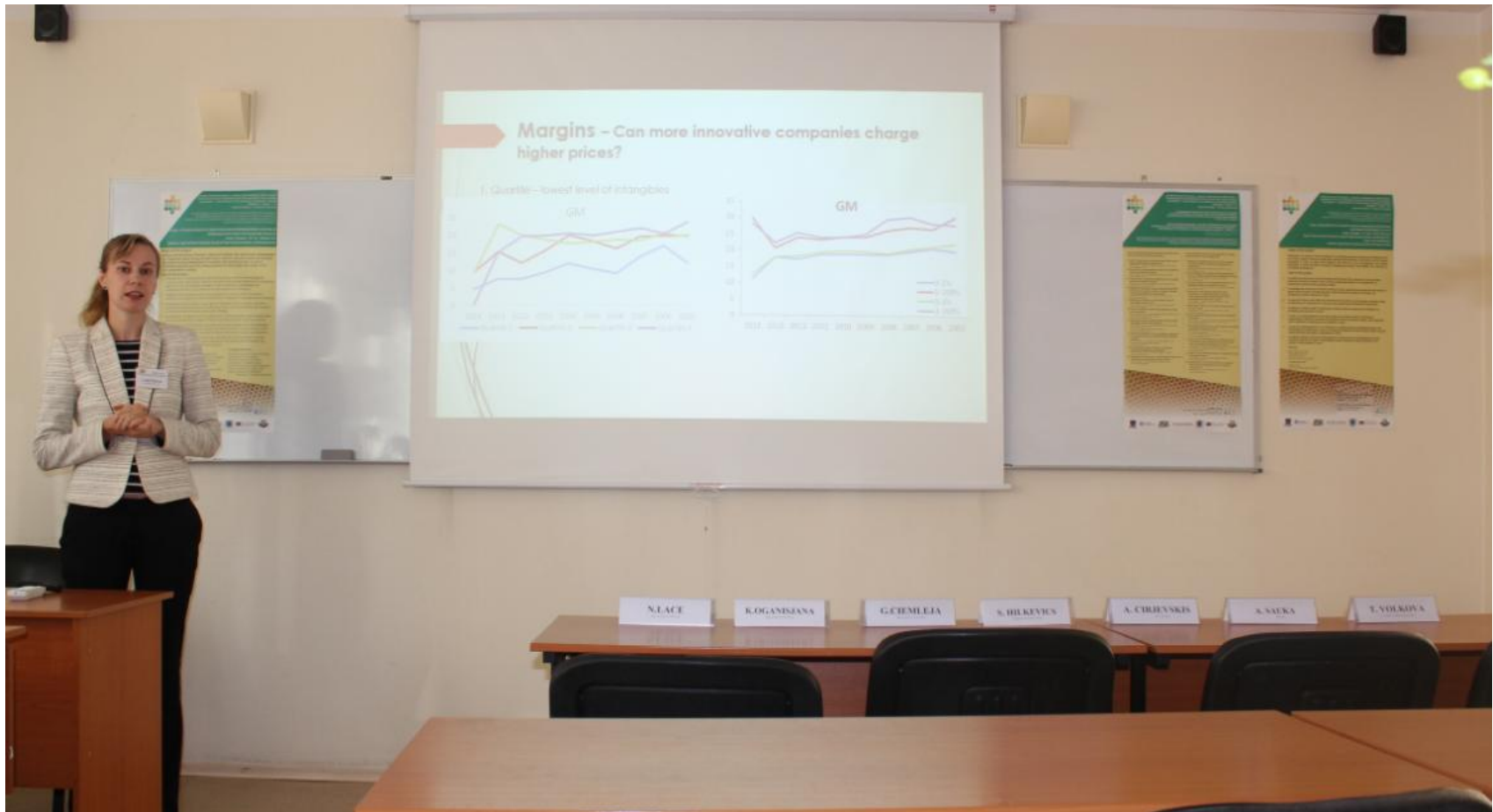
Main conclusions I (slide 14)

- The companies' survey results showed that companies, which used internet marketing, did not use it properly
- The significance of internet marketing and the impact of internet marketing on the marketing and sales objectives companies evaluated rather high. The variability of evaluations was high
- The companies' managers considered that internet marketing has very big impact on brand/product/company popularisation and big impact on sales quantities
- The impact of internet marketing on gaining feedback, marketing expenses reduction and analysis of digital communication channel efficiency managers evaluated lower
- The variability of evaluations on the role of internet marketing was high

Main conclusions II (slide 15)

- The opinions of the managers about the role of internet marketing on sales quantities differed statistically significant in companies with high and increasing turnover and companies with high and not-increasing turnover, and in companies with high and increasing turnover and companies with not-high and not-increasing turnover
- The role of internet marketing on company sales quantities higher evaluated managers of companies with high and increasing turnover

Does firm's high innovation potential lead to its superior performance?



Julija Bistrova & Natalja Lāce
Riga Technical University, Latvia

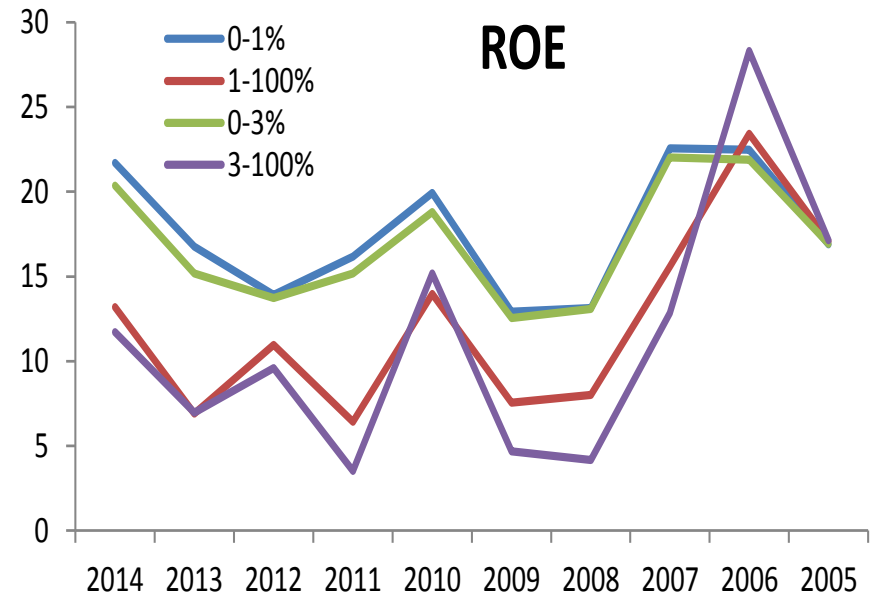
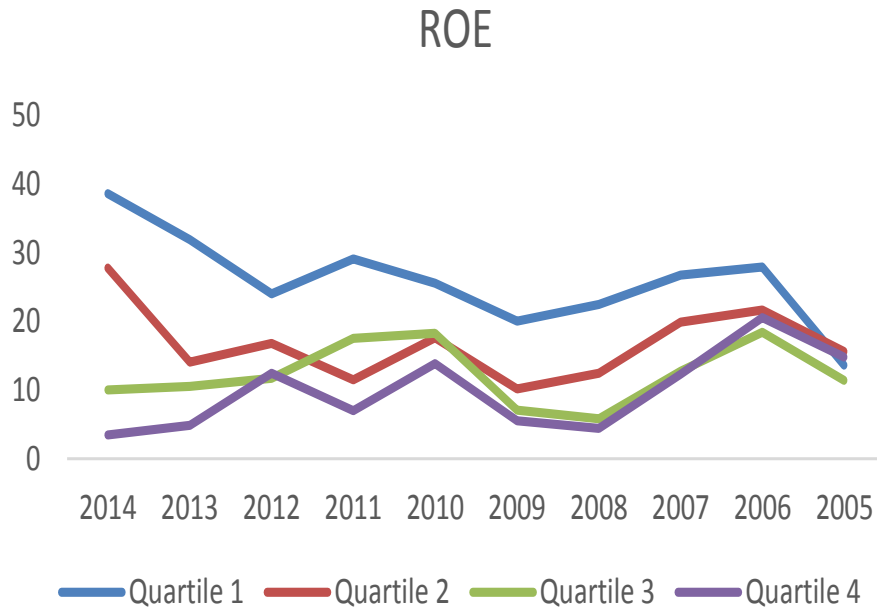
Research Purpose (slide 3)

Research Aim: To study whether firm's innovation potential as proxied by level of intangibles positively influences corporate performance in Central and Eastern European countries.

Research hypothesis: The companies, which are eager to invest in the research and development that is either capitalized or later turned into the intangible values (patents, copyrights, etc.), are able to demonstrate higher profitability.

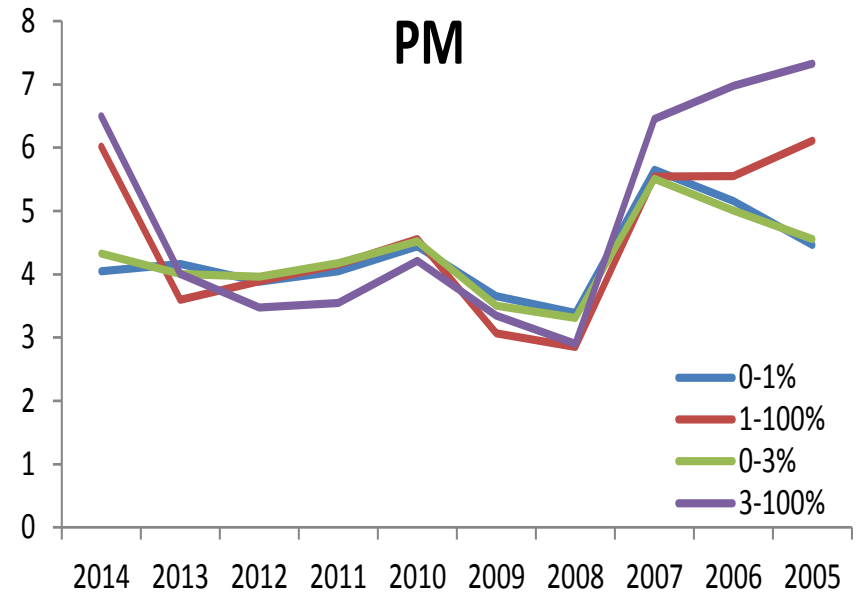
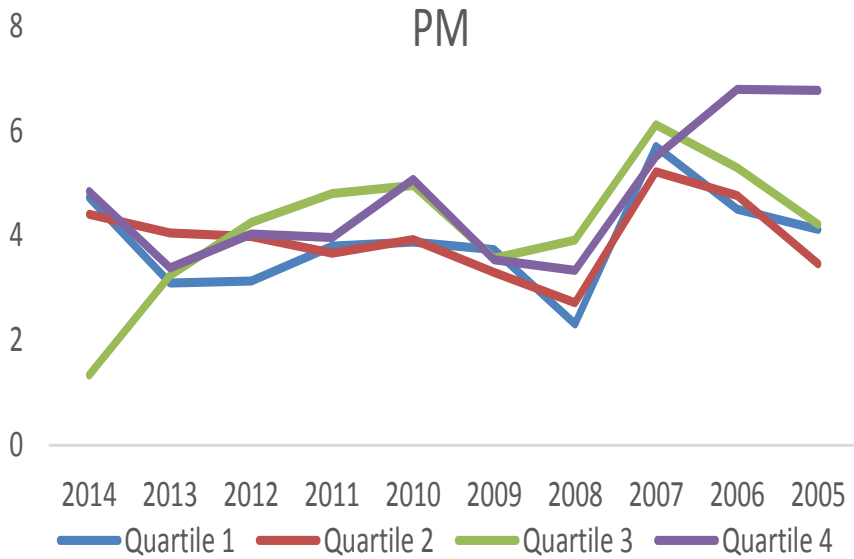
Capital Profitability – Is it reasonable from shareholders' point of view to invest in intangibles? (slide 8)

1. Quartile – lowest level of intangibles



Profit Margins (slide 11)

1. Quartile – lowest level of intangibles



Conclusions (slide 12)

- Overall level of intangible assets in the developed countries' operating companies is higher than that booked by their peers in less developed countries, which might point to the lower innovation potential.
- Lower intangibles are associated with the higher capital profitability, meaning that they are not able to generate returns higher than the returns generated by the other fixed or current assets;
- However, the companies with higher level of intangibles are able to demonstrate higher gross profit margins (assumption: innovative products are sold at higher prices), but this advantage diminishes when net profit margin is reported.
- There is no significant difference in the operating results of the companies having intangible level above 1% or above 3%.

Innovations in the promotion of the home – produced products in the market



Modrite Pelše, Sandija Zēverte- Rivža & Zane Rone
Latvia University of Agriculture, Latvia

Home production (slide 2)



- Home production is one of the forms of micro entrepreneurship.
- It is acknowledged for promoting self-employment and business involvement of local communities.
- A home producer is a person who has registered as a food manufacturer in home and small scale manufacturing and processing.
- Home production has been one of the traditional occupations of households in Latvia, however, at present, returning to traditional, natural and cultural heritage values in producing and distributing products may be considered an innovation.
- Home production helps to preserve the traditional rural environment and ancient food processing techniques and generates additional revenue.

Promotion and distribution of home produced products I (slide7)

- Home producers also use several market channels for selling their production.
- Traditionally most of the production is sold in local markets and via direct sales to customers, but there are several innovative examples of cooperating with local sales groups, producer cooperatives, eco-stores etc.



Promotion and distribution of home produced products II (slide 8)

Recent years, home producers have successfully competed with large producers in the food market by choosing a number of sales channels such as:

- farmers' markets;
- collective purchase and direct purchase groups;
- community supporting agriculture initiatives;
- farm visits;
- local food supplies to grocery stores etc.



Best sales techniques employed by the home producers (slide 11)

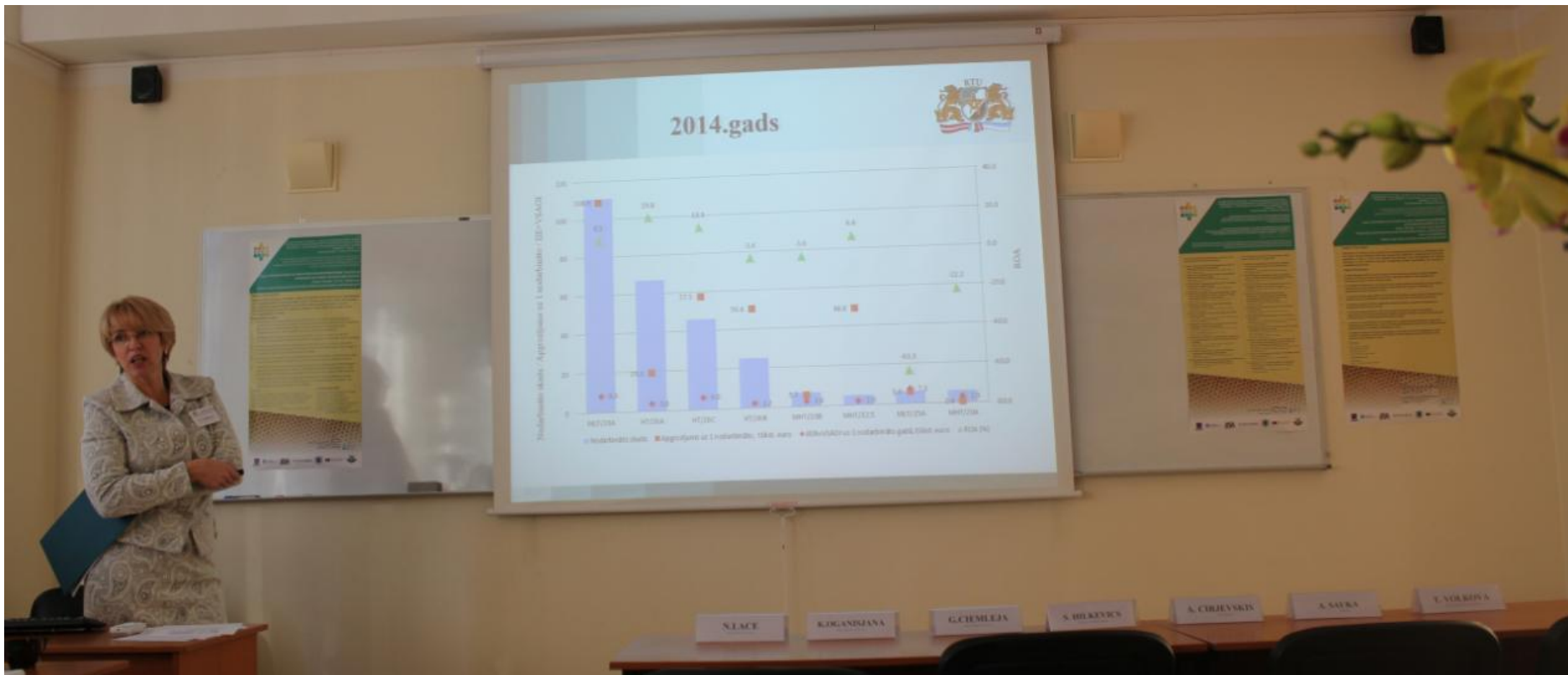
| Communication with a buyer | | Attraction of attention | |
|--|--|--|--|
| <p>Speak straight to the buyer</p> <p>Honesty</p> <p>Tell about the quality of the product</p> <p>In communication, analyse every customer's desires</p> <p>Active but unobtrusive communication</p> <p>Polite and friendly service</p> <p>Conversation and positive attitude</p> <p>Ability to tell about the product, its origin</p> | | <p>Attractive seller</p> <p>Smile</p> <p>Original product</p> <p>Attractive name of the product</p> <p>Interesting packaging</p> <p>Starting a conversation: Dear young lady, look at and taste it</p> <p>Discounts, presents</p> <p>Tasting</p> | |
| Focus on values | Visual design | Information flow | |
| <p>Story about the product</p> <p>Properties of the product</p> <p>Quality of the products and the diversity of its tastes</p> <p>Flavour and external appearance of the product</p> <p>Broad assortment</p> | <p>Unique and appropriate visual design of the product</p> <p>Prudent personal appearance</p> <p>Appearance of the sales place</p> <p>Placement of products</p> <p>Packaging of products</p> | <p>Information is passed from one to another</p> <p>Recommendations and comments from other customers</p> <p>Activity in social networks</p> <p>Story about the product in mass media</p> <p>Tours to the producer</p> | |

Source: authors' construction based on the survey

Conclusions and proposals (slide 14)

- Home production is one of the ways of starting up one's own business if an individual wants to produce and sell food products, initially, in small quantities. However, at present in Latvia, there is no single definition regarding what is home production, although already 1104 home producers had been registered at the end of 2014, and their number grows from year to year, while the proportion of unregistered home producers is still high.
- Promoting products in the market is an important key element in marketing home-produced products, and a great role is played by communication with consumers. Home producers have to be able to arouse interest and desire in consumers for their products. For this reason, studying and assessing the steps of consumer behaviour is important to be able to offer products and information about them in the way consumers wish it.
- Of the surveyed home producers, 72% marketed their products in their local community and delivered them to customers upon request. The products were also marketed in specialty shops and sold directly on the farm or production facility. Of the respondents, 68% had noted that it was necessary to promote product awareness and provide sufficient information to the customers through the Internet and social networks, thus acknowledging the necessity of innovation in communication with the customers.

Challenges faced by smart material companies towards sustainable development



Guna Ciemleja, Riga Technical University, Latvia

Latvijas Nacionālais attīstības plāns 2014. – 2020. gadam (slide 2)

Mērķis: Komercializējot zināšanas, veicināt inovatīvu, starptautiski konkurētspējīgu produktu ar augstu pievienoto vērtību radīšanu un ieviešanu ražošanā, šādi paaugstinot minēto produktu izlaides apjoma īpatsvaru tautas saimniecībā

Rezultatīvie rādītāji:

- 1) Inovatīvo uzņēmumu īpatsvars (% no visiem uzņēmumiem)
- 2) Inovatīvo produktu apgrozījums (% no kopējā apgrozījuma)

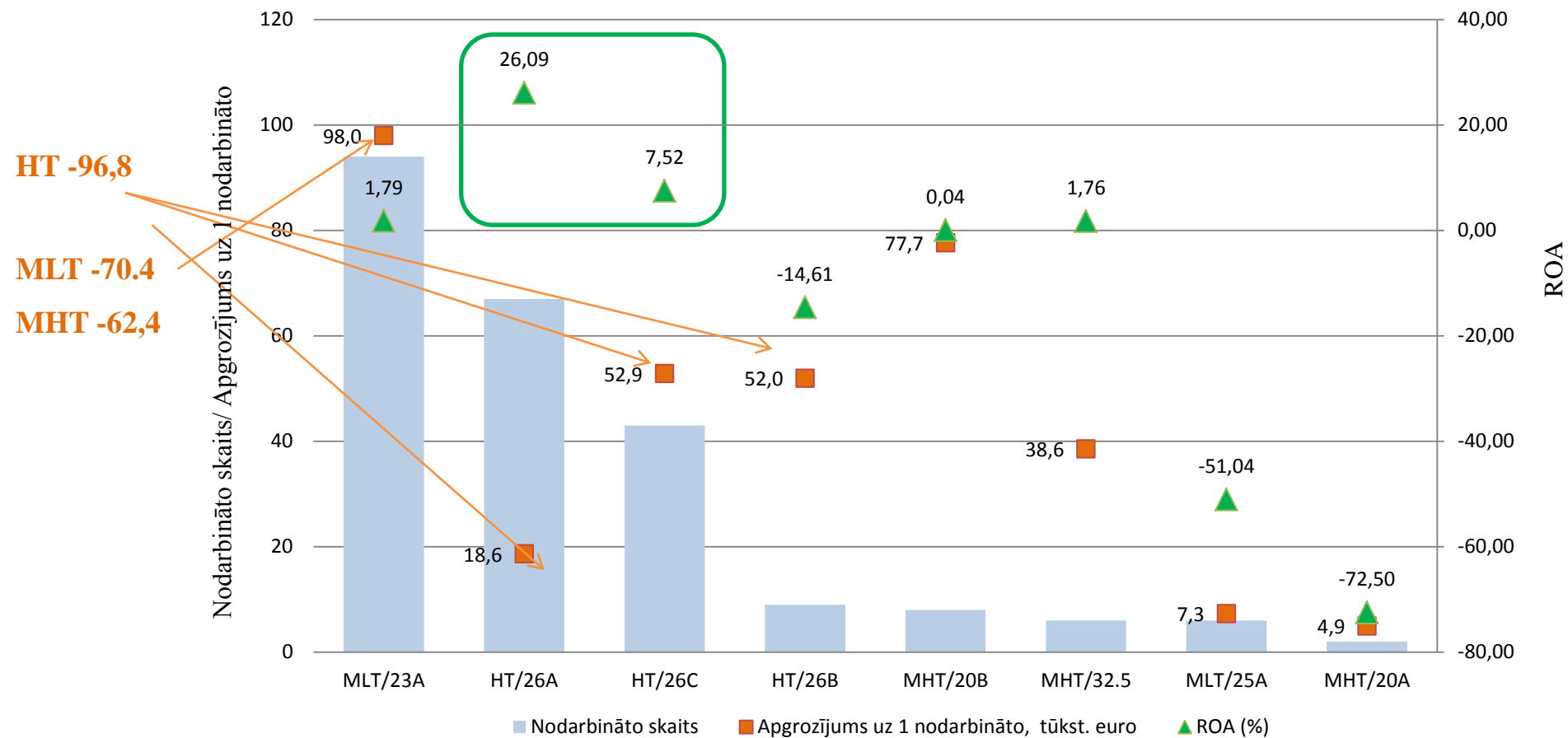


Viens no uzdevumiem : Zinātnes un privātā sektora sadarbības platformas izveide un attīstība nanostrukturēto materiālu jomā (Finansējuma avots: Eiropas Savienības budžeta instrumenti, valsts budžets un privātais finansējums).

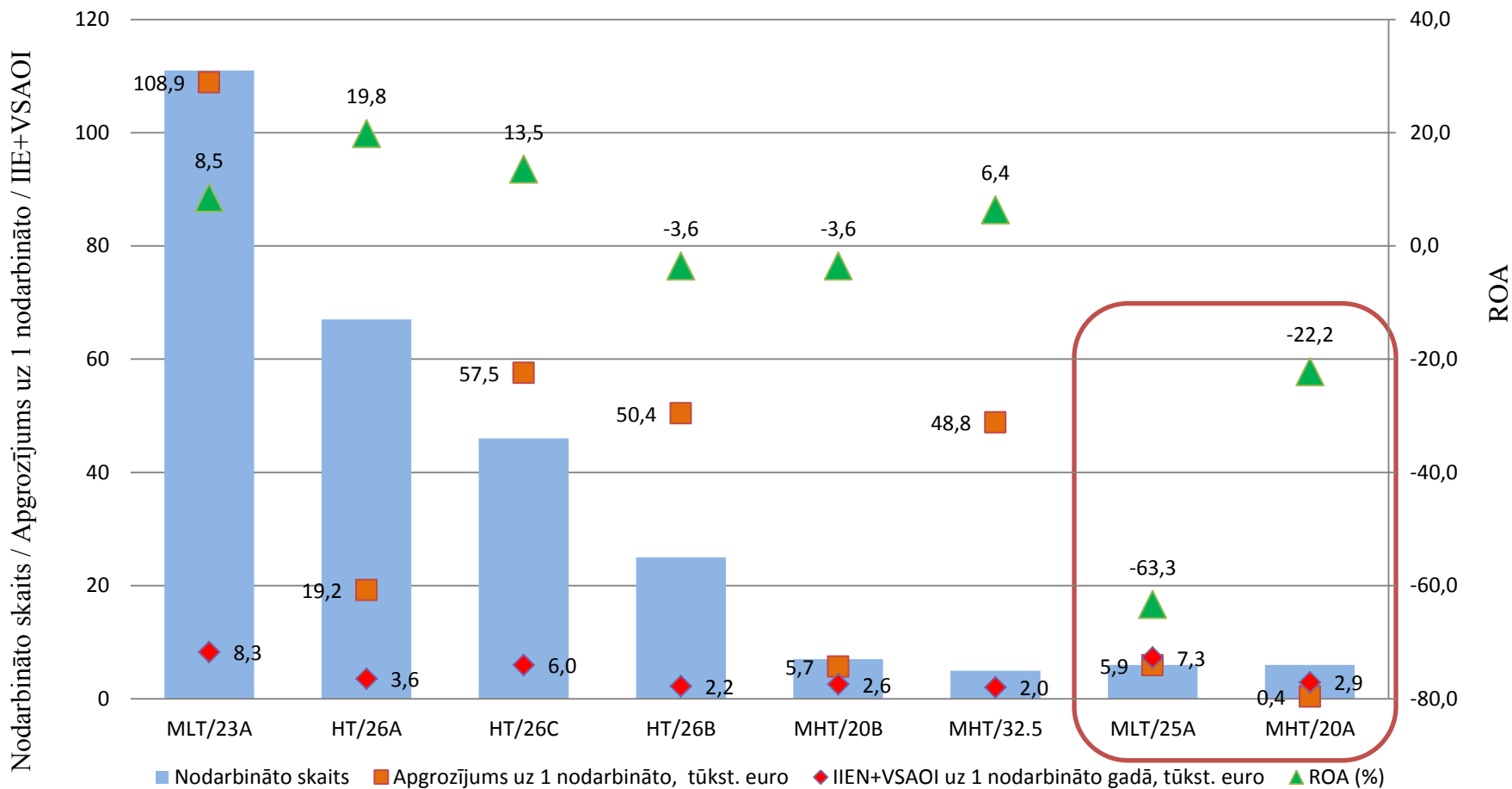
Pētījuma metodoloģija (slide 3)

- Nano jomas zinātnisko aktivitāšu rezultātu apkopojums un analīze.
- Statistikas datu atlase par apstrādes rūpniecību pēc tehnoloģiskās intensitātes, datu apstrāde un analīze.
- Uzņēmumu atlase, kuru darbības profils ir saistīts ar nanostrukturētu materiālu ražošanu.
- Uzņēmumu rezultatīvo rādītāju par 2013. un 2014.gadu atlase Lursoft datu bāzē, apstrāde un analīze.
- Uzņēmumu dzīves cikla koncepcijas vizualizācija.

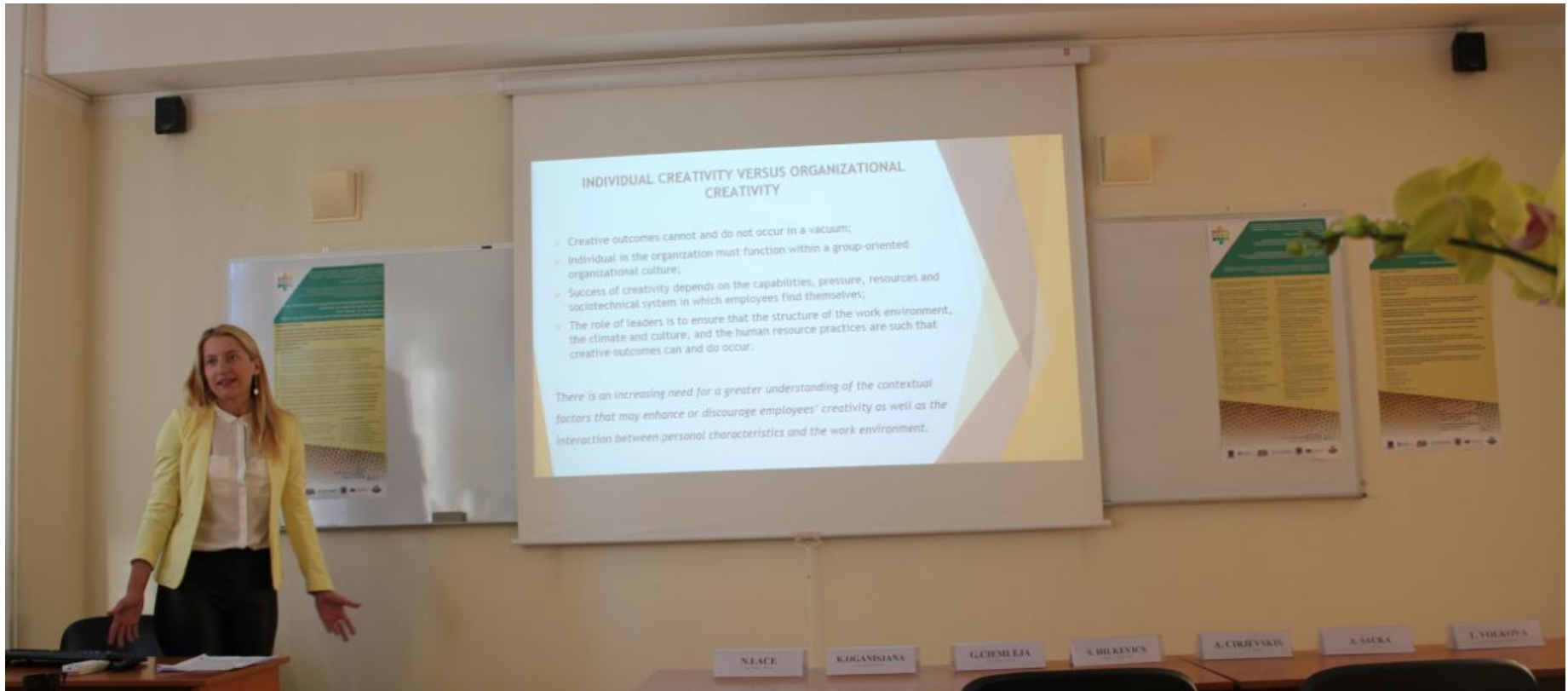
2013.gads (slide 11)



2014.gads (slide 12)



Organizational creativity as a driving force for company's innovative development



Natalja Lāce, Riga Technical University, Latvia; **Natalja Buldakova**, GE Global Operations – Finace, Hungary;
Gintare Rubinaite, Riga Technical University

Individual creativity vs organizational creativity (slide 5)

- Creative outcomes cannot and do not occur in a vacuum;
- Individual in the organization must function within a group-oriented organizational culture;
- Success of creativity depends on the capabilities, pressure, resources and sociotechnical system in which employees find themselves;
- The role of leaders is to ensure that the structure of the work environment, the climate and culture, and the human resource practices are such that creative outcomes can and do occur.

There is an increasing need for a greater understanding of the contextual factors that may enhance or discourage employees' creativity as well as the interaction between personal characteristics and the work environment.

Factors of organizational creativity (slide 8)

| Individual Factors | Group Factors | Organizational Factors |
|------------------------------|-------------------------------|--|
| Dispositions | Challenging work | <u>Diversity and complexity of processes</u> |
| Expertise | Friendly competition | Organizational structure |
| Intellectual abilities | Groups composition | Organizational culture |
| Intrinsic motivation | Intra-team communication | Organizational size |
| Knowledge | Knowledge-sharing culture | Reward system |
| <u>Motivation</u> | Methods of problem solution | <u>Supportive climate</u> |
| Particular style of thinking | <u>Network structure</u> | Strategy |
| Skills | Personal freedom | Sufficient resources |
| | Role distribution in the team | <u>Team leaders' vision, behavior</u> |
| | | <u>Time</u> |
| | | Technologies |
| | | Work load |

Conclusions (slide 9)

1. Creativity occurs only when the appropriate mix of individual, social and environmental elements interact;
2. Creativity success in context of organization depends on the resources, opportunities, communication of group members and technical system in which employees find themselves;
3. To create a favorable environment for creativity is possible by combining as many positive factors as possible;
4. The challenge for organizations is to achieve a balance between of thinking and performing, so that creative ideas are available and are cultivated within the organizational setting.

Coaching as a tool for accelerating innovation in organizations

Angelina Roša & Nataļja Lāce
Riga Technical University
Latvia

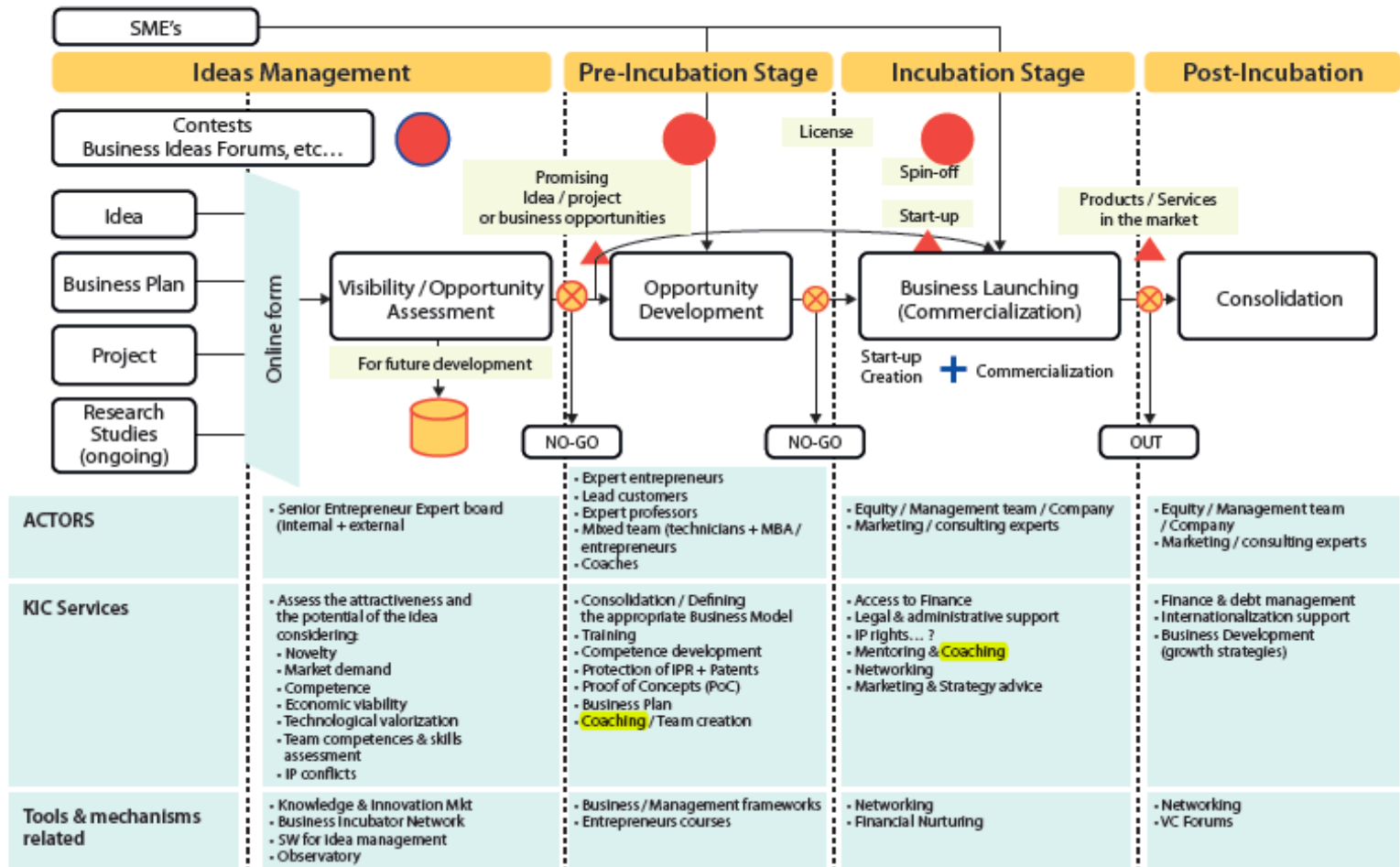


The aim of the research (slide 4)

Considering the peculiar issues of the use of coaching in Latvia and Lithuania, to study how coaching can accelerate the innovation processes in organization by analyzing the literature, exploring the manifestation of coaching in organization and examining the conditions to promote coaching in organization

Knowledge and Innovation Communities (KICs) (slide 7)

Figure 5: Examples from the KICs: KIC InnoEnergy Highway



The KICs — a particular new type of innovation networks bringing research, higher education and business together.

Coaching for innovation (slide 11)

- Coaching ***facilitates*** moving beyond innovative technologies from finding ideas and developing them to ***linking innovations to the company's strategy*** (Kelley et al.,2005).
- Coaching ***promotes*** the development of ***entrepreneurial skills*** through facilitating implementation of the own strategic vision (Audet and Couteret 2012).
- Coaching ***accelerates*** the process of ***converting*** a good idea into a profitable product or service (McCarthy,2014).
- Coaching ***creates environment*** that enhances “***collective partnership*** between leaders and their employees” (Gilley et al.,2008)

Benefits and challenges of coaching (slide 13)

Previous research findings

| Benefits | Threats |
|--|---|
| For individuals | |
| New opportunities for development | Stereotype of coaching |
| People are becoming more open | A lot of simplified interventions in coaching |
| Development of relationship based on trust and respect | A lot of misunderstanding what happens around the coaching |
| Ability to organize individually thinking process | Dependence on coach |
| Self-awareness and social awareness | Sometimes people need training or mentoring |
| For organisations | Challenges |
| Change in the style of management | Not possible to start coaching if a client is not engaged or interested in. |
| Greater goal clarity | Difficult to know exactly how and at what level coaching is effective. |
| Better alignment with the role in the organization | It is challenge how to look at the coaching in the systematic way. |
| Impact on employees' and managers' motivation | It is difficult to measure the outcomes of coaching |

Methodology (slide 14)

Study 1 Manifestation of coaching in organisations

- On-line questionnaire for coaches
- Type of questions: Likert scale type, ranking, open ended questions
- Structure: 24 questions, 7 parts:
 - Section 1. Professional Background and Experience
 - Section 2. Client Profile
 - Section 3. Professional Practice
 - Section 4. Coaching Process
 - Section 5. Measuring Coaching Result
 - Section 6. Benefits and Challenges of Coaching.
- Questionnaire pre-testing

Study 2 Identifying condition to promote coaching in organizations

- On-line questionnaire for coaches and coaching clients
- Type of questions: closed-ended importance questions
- Structure: 2 parts
 - Section 1. The respondents' profiles
 - Section 2. The importance of the conditions:
 - external indirect conditions,
 - external direct conditions,
 - internal conditions at the level of organisation,
 - internal conditions at the level of groups,
 - internal conditions at individual (client's) level.
- Questionnaire pilot test

Triangulation of research results through cross verification from the sources.

Study 1. Results (slide 15)

August – December, 2013

Respondents: 15 coaches: Latvia

Lithuania, Poland, Germany

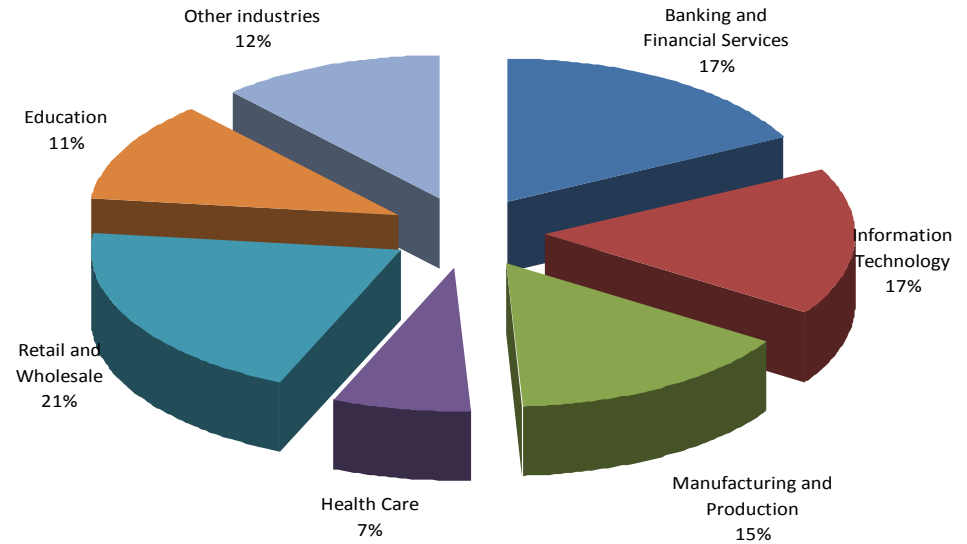
Professional background:

➤ executive coach (87 %)

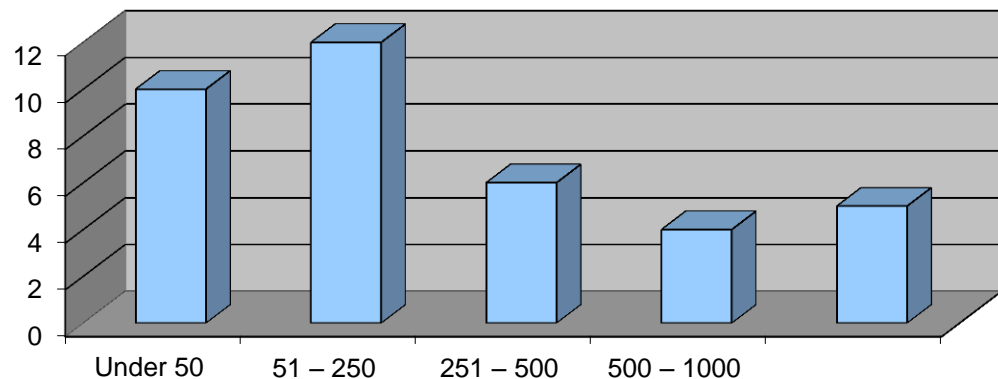
➤ 80% of coaches graduated from an accredited coach training program

➤ average experience in coaching is 3-5 years.

Companies of different sectors used coaching service

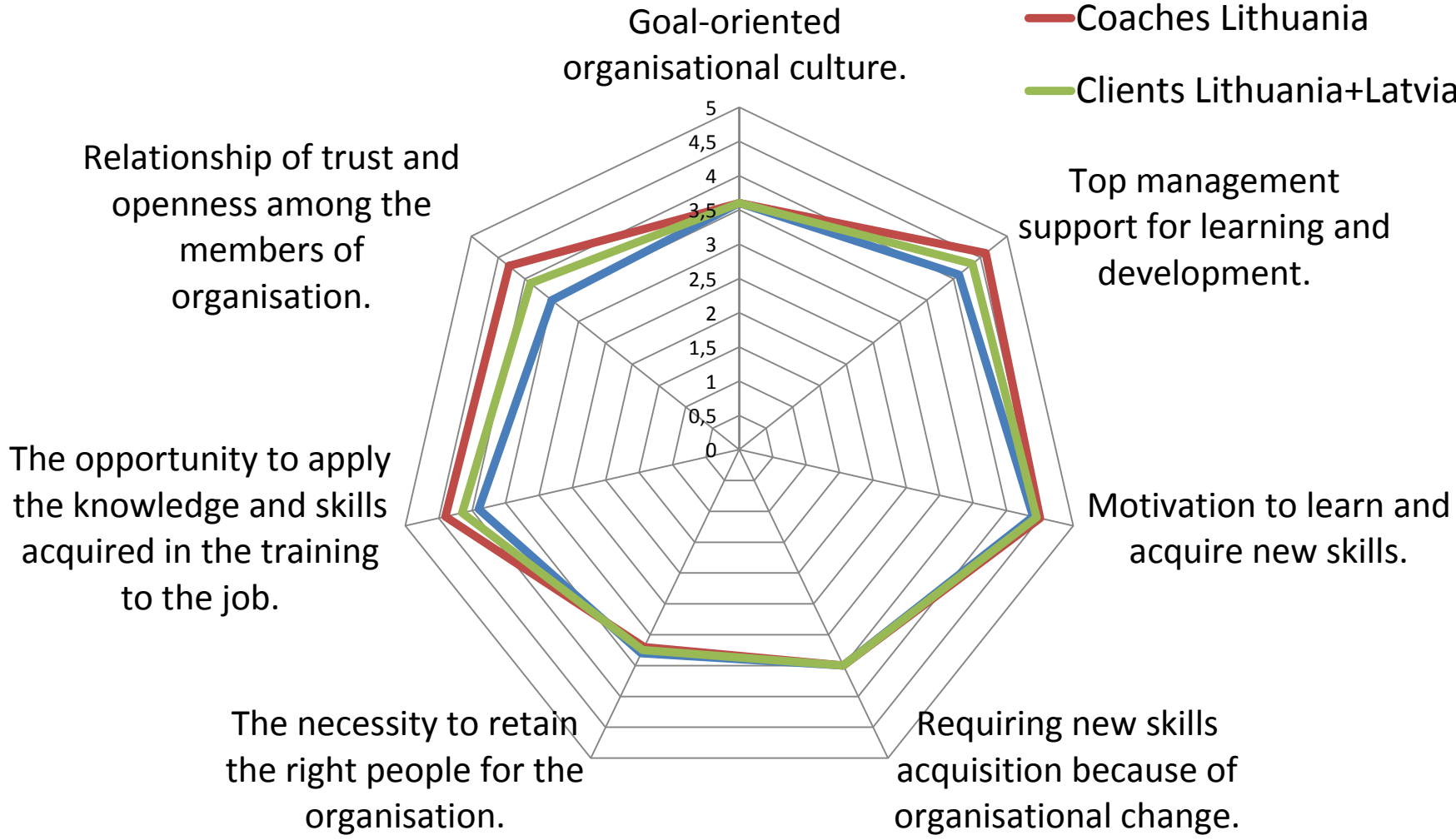


Company size. The number of employees.



Internal conditions at the level of organisation (slide 23)

- Coaches Latvia
- Coaches Lithuania
- Clients Lithuania+Latvia



Concusion (slide 24)

The results of literature review and survey demonstrate that coaching can accelerate the leadership development, strategic thinking and collaboration within and across teams. These processes are crucial for organization's innovation capabilities.

Development of the entrepreneurial competence in Latvia in the EU goals context



Andra Šenberga

State Service Education Quality, Ventspils University College, Latvia

Current State

DG&CEDEFOP evaluation; Conclusions (slide 6)

Mainly **individual initiatives** with no general framework and little impact

Most students **do not have access** to entrepreneurship courses and programs

Entrepreneurship is included in the **national curriculum** of general secondary school in a **minority** of countries

Entrepreneurship is **included in the national vocational education curricula** in a majority of EU countries, but entrepreneurship education in vocational schools are **still far from being fully satisfactory**

In **Higher Education** the majority of entrepreneurship courses are offered in **business and economic studies**

Only **1/4** of specialized and **1/3** of multidisciplinary institutions without a business school offer entrepreneurship

HEIs problems

DG&CEDEFOP evaluation; Conclusions (slide 9)

- Entrepreneurship is **not sufficiently integrated** in the curriculum of HEIs
- The majority of entrepreneurship courses are **offered in business and economic studies**
- Chances of being exposed to Entrepreneurship Education are **higher when the student is enrolled in a business school or a multidisciplinary institution** with a business school.
- More than half of the student population in Europe **do not have access to Entrepreneurship Education**
- Entrepreneurship most commonly offered to undergraduate or graduate students, **fewer courses for PhD students**
- **Only 20% of HEIs teaching staff** are trained to teach entrepreneurship

Curriculum

DG&CEDEFOP evaluat. Conclusions (slide 15)

Make entrepreneurship an integral part of the Curriculum:

- ✓ Key role for ministries of education (standards)
- ✓ Changes in teaching methods: experiential learning, teacher as a facilitator, coach, moderator
- ✓ Changes in education context: take students out of the classroom (into local community and real businesses)
- ✓ Combine a mandatory cross-curricular approach with a selectable training as a specific subject
- ✓ Offer the opportunity to students/young people to have at least one practical entrepreneurial experience before leaving compulsory education, such as running a mini-company, being responsible for an entrepreneurial project for a company or a social project

Innovations in vocational education in compliance with the requirements of employers to provide sustainable development of Latvia



Ilze Brante, Ogre Technical School, Latvia

Significance of vocational education in sustainable development of society (slide 2)

Vocational education is playing more and more important role in sustainable development of society. These are exactly the students of vocational education institutions who acquire knowledge and professional qualifications in accordance with:

- the requirements of an ever-growing labour market;
- new technologies;
- new forms of work organization;
- dynamic socioeconomic conditions.

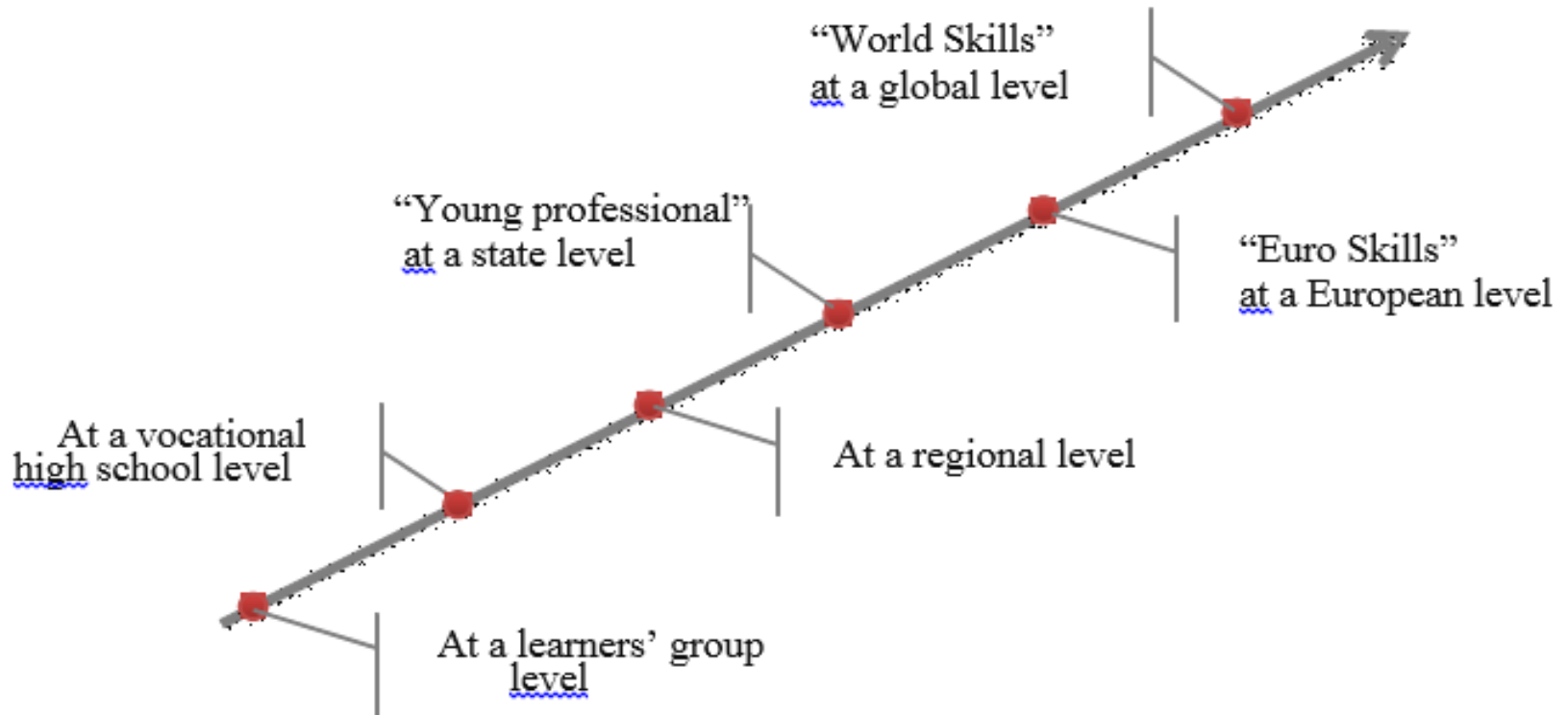
The impact of changes in the society upon the vocational training process (slide 11)

Globalization tendencies require paying more attention to education, because it is education and teaching staff that plays an important role in the implementation of changes and new tasks. (*Blūma, 2008, 13.*). Globalization and the knowledge-based society associated with it influence changes in the nature of education:

- education is becoming massive and continuous;
- education is becoming important both to the individual and the society;
- education is oriented towards the development of active human cognitive activity;
- educational process is getting adapted to personal needs;
- learning process is focused on the student's personality, allowing self-determination of the student (Кларин 1998 3.).

Challenges for vocational education in Latvia (slide 25)

Participation of the students and graduates of vocational education in contests of professional mastery



Challenges faced to the promotion of social innovation in Latvia: from the perspective of economics

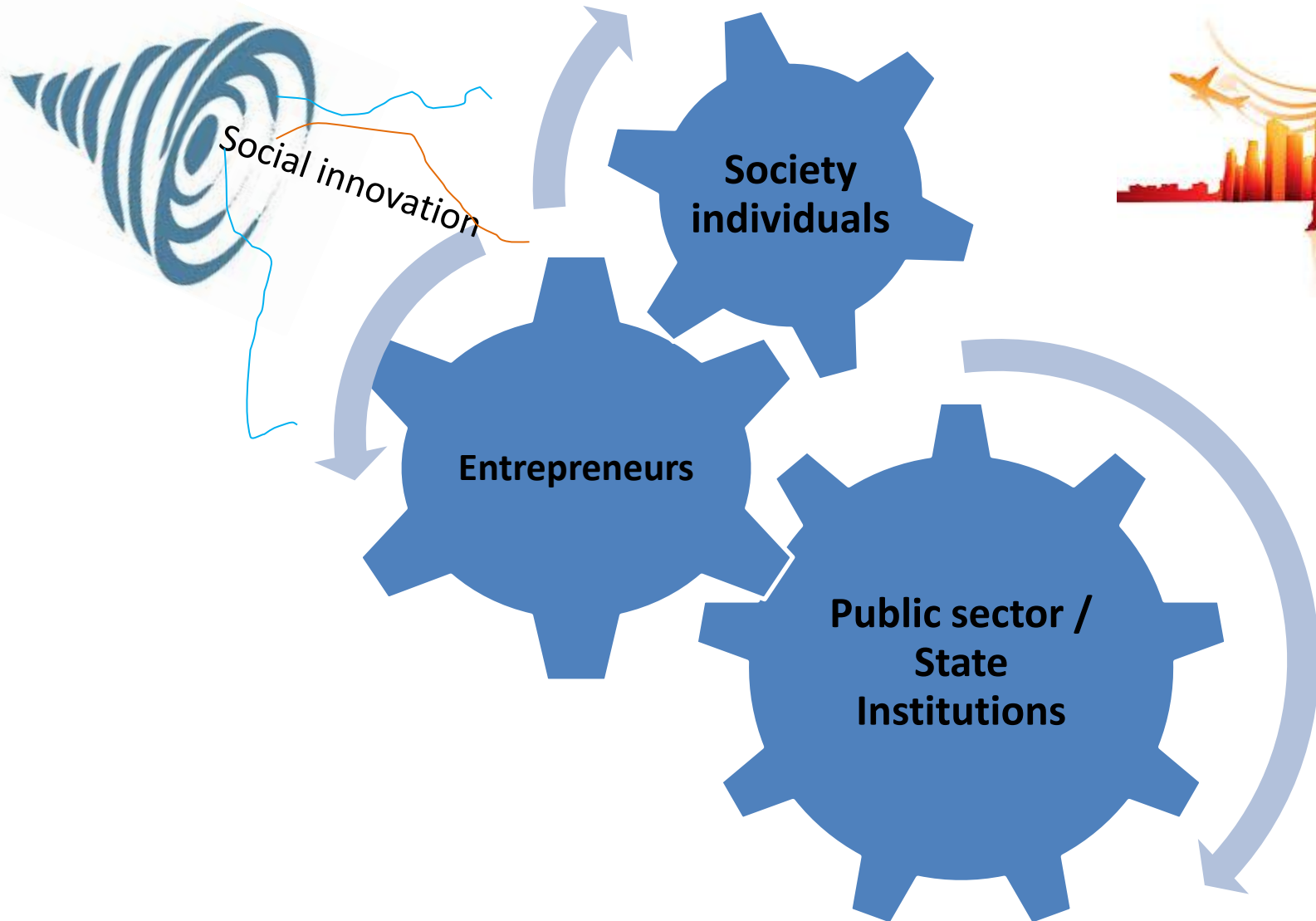


Lasma Dobele, **Gunta Grinberga-Zalite** & Linda Kelle,
Latvia University of Agriculture, Latvia

Topicality of the research (slide 3)

- Since 2009, an increasing number of **discussions on social innovation** initiatives and their implementation opportunities in the Member States have taken place **at the European Commission level**.
- Social innovation is one of the “Europe 2020” strategy’s seven flagship initiatives that the European Commission has drawn up to determine the national, European and international measures that would be implemented in the field of innovation in order to achieve the goals set by the “**Europe 2020**” strategy.
-
- However, in **Latvia there is lack of research on the importance of social innovation development for the growth of the economy of Latvia**.

Stakeholders of economic development process (slide 6)



The scenario method (slide 7)



Self-initiative scenario

- Social innovation as voluntary work motivated by particular community's unmet needs



Enterprise-initiated scenario

- Social innovation as an economic existence security guaranty (e.g. mentoring)



Public-participation scenario

- State is the main initiator and promoter of social innovation (financial, informative motivation)

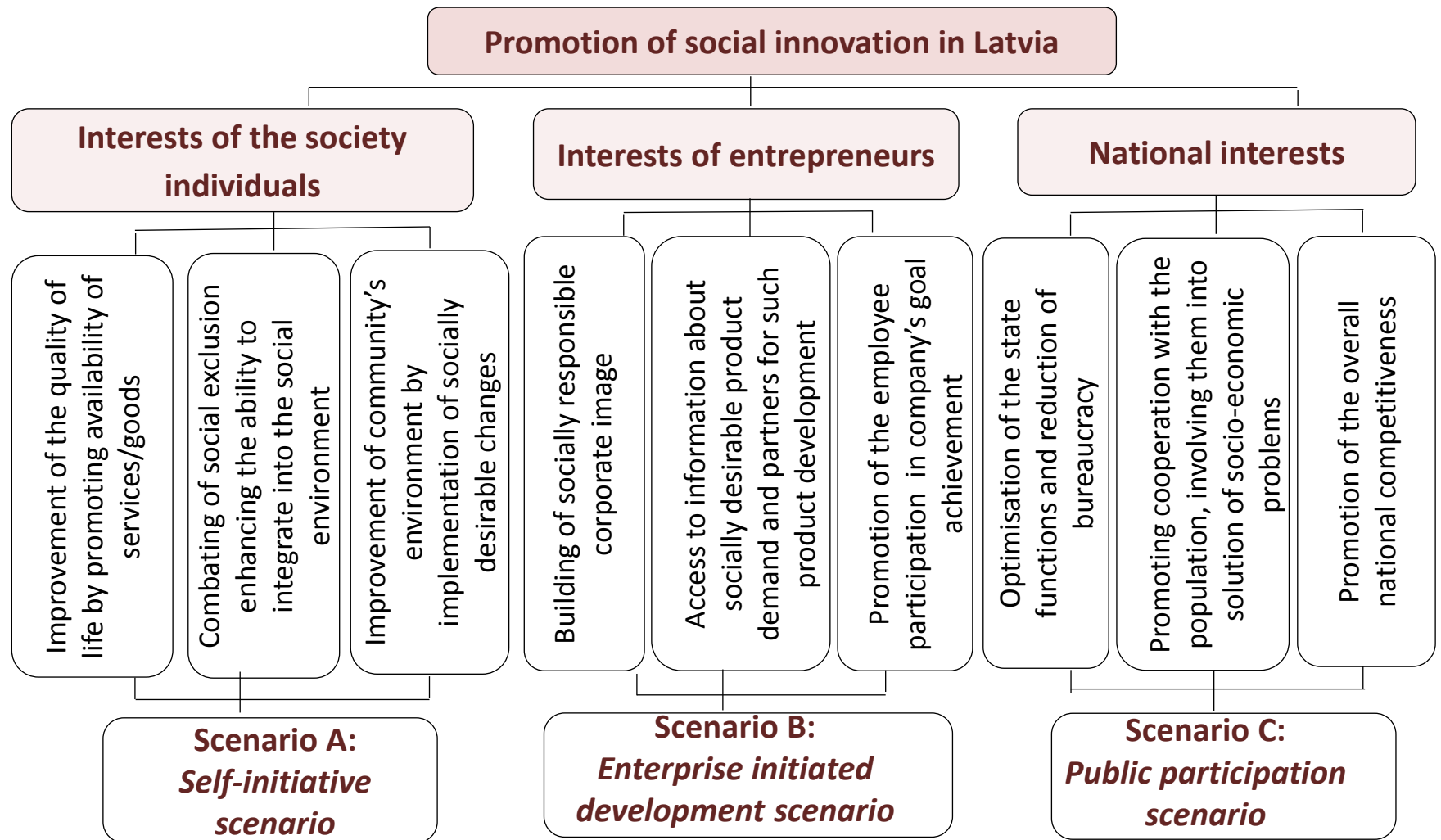
Analytical Hierarchy Process (slide 8)

The three scenarios of promoting social innovation were evaluated by using AHP.

AHP is intended for complex decision making. The essence of the method lies in a systemic hierarchical arrangement of the problem elements. The problem is gradually divided into several simpler parts that are compared eventually in pairs, thus assessing the level of the problem elements' interaction in hierarchy.

AHP experts:

- 1. An entrepreneur** and founder of a small enterprise “Oskars un partneri” Ltd.
- 2. An entrepreneur**, the member of the board of “Gaļas pārstrādes uzņēmums Nākotne” Ltd.
- 3. The State Secretary of the Ministry of Economics** of the Republic of Latvia .
- 4. The leading manager** of the State JSC “State Real Estate”.
- 5. The chairman of the board of rural partnership “Lielupe”** who has been awarded a special prize of the Ministry of Agriculture of the Republic of Latvia for active promotion of social projects with rural initiative groups in 2013.



Hierarchy of the evaluation criteria of social innovation promotion (slide 9)

Source: elaborated by the authors

Conclusions 1 (slide 12)

- 1. Social innovation** is a new, sustainable, effective solution to social problems and its created value primarily provides benefit for the society as a whole, rather than individuals. Social innovation can be a product, a production process or technology; it can also be an idea, a principle, a part of a legal act, social movement or a combination of these elements.
- 2.** In Latvia, specific instruments for social innovation promotion are not specified at the national level; therefore the authors elaborated three scenarios for social innovation development: **self-initiative scenario; enterprise initiated development scenario; public partnership development scenario.**
- 3.** In the process of the scenario elaboration, the authors determined two main pre-conditions: initiative taking over social innovation promotion and intensity of support instruments for the development of social innovation. The scenarios were evaluated based on the hierarchy analysis method, which led to the discovery that **the most appropriate scenario for the development of social innovation in Latvia is public participation scenario**, because it is essential to create an appropriate legislative framework for promoting social innovation and the development of financial and information support tools for social innovation promoters and implementers.

Conclusions 2 (slide 13)

4. Since the **Ministry of Economics of the Republic of Latvia** is the leading state administration institution in the field of economic policy as well as to implement and develop innovation policy in the country, it **should take the initiative to create the legislative framework for promoting social innovation in Latvia.**

5. In the further research directions it would be **necessary to explore the experience of other European countries in creating their legislative framework** for promoting social innovation as well as available support tools in these countries for innovation promoters and implementers. Future studies should also gather experience of other countries in measuring the efficiency of support measures provided by different public partnership projects.

Challenges faced to the promotion of social innovation in Latvia: from the perspective of education



Svetlana Surikova, University of Latvia &
Karine Oganisjana, Riga Technical University

Project goal (slide 3)

- **Elaboration of a model of social innovation** for: promoting economic democracy; developing social and human capital; **improving collaboration** among state institutions, enterprises and the Latvian population **in order to solve social problems** and **motivate to** get self-organised and **actively participate in social innovation processes** strengthening society's securitability and ensuring its sustainable development.

The main results of the stage 1 (slide 5)

- **The interaction between social innovation (SI) and education (E) was analysed in two directions:** (1) social innovation for education (SI for E) and (2) education for social innovation (E for SI);
- **The two conceptual models have been elaborated:** (1) A conceptual model of interaction between social innovation and education (see Figure 1) and (2) A conceptual model of the triple role of education in promoting social innovation (see Figure 2):

Figure 1.

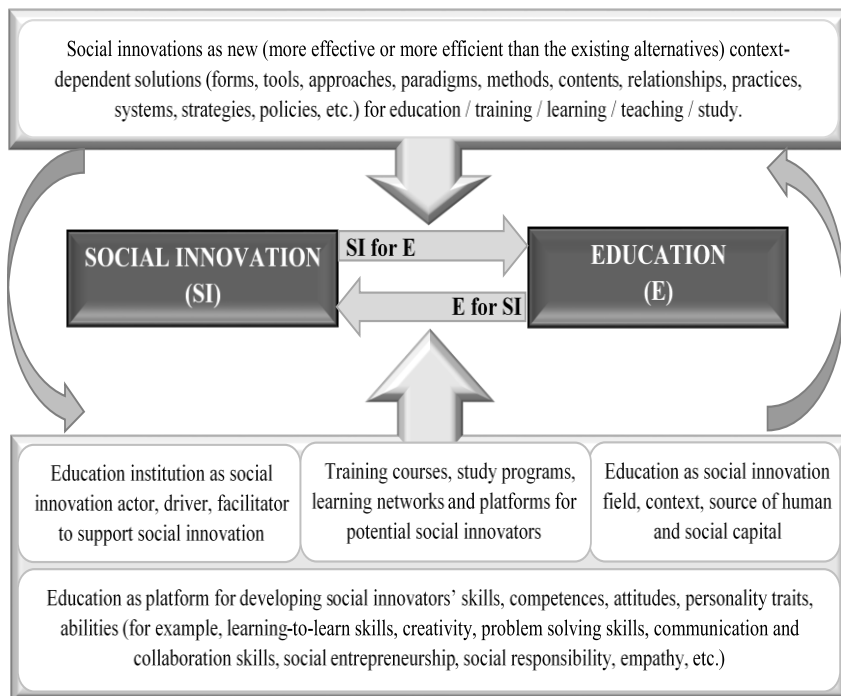
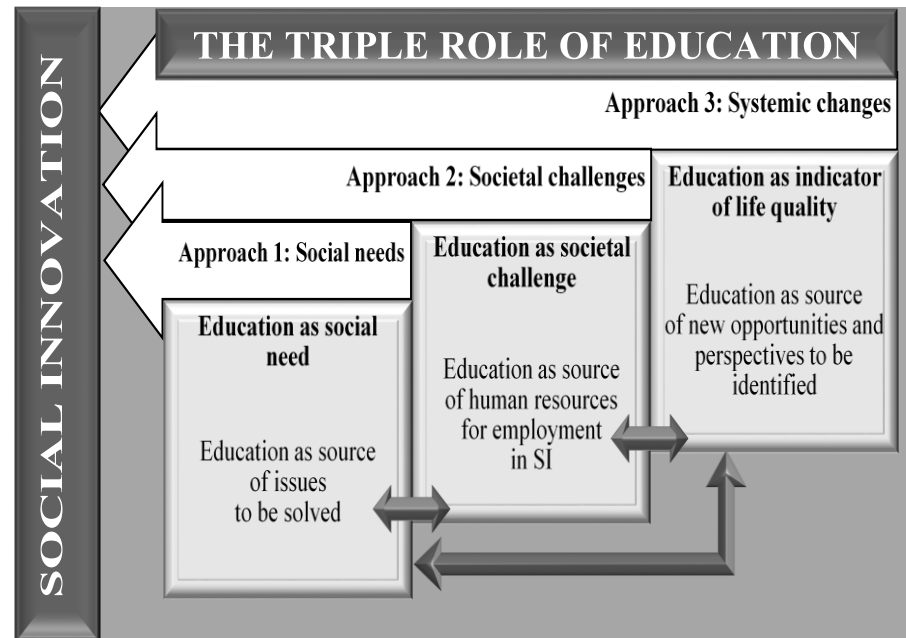


Figure 2.



Source: Surikova, Oganisjana & Grinberga-Zalite, 2015

The first results of the stage 2 (slide 7)

Empirical research

Preparing, organising (April-May 2015) and moderating (20 May 2015) the focusgroup discussion:

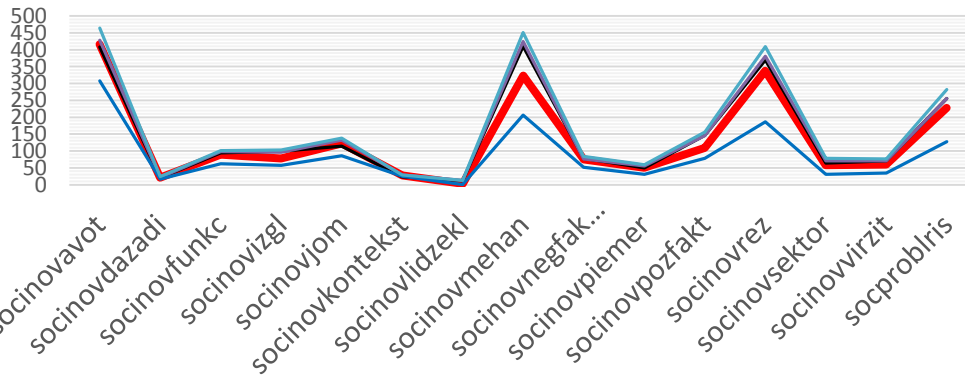
- 15 participants (8 invited specialists, 7 members of project team);
- 14 questions;
- videorecording the discussion.



The first results of the stage 2 (slide 9)

The distribution of frequencies of the metacodes by the field represented by the participants of the focusgroup discussion

— Education
— Communication
— Sport
— Charity
— Entrepreneurship



| | A | B | C | D | E | F | G |
|------------------|-----|-----|-----|-----|-----|-----|-----|
| socinovavot | 464 | 428 | 416 | 408 | 428 | 308 | 464 |
| socinovdazadi | 24 | 21 | 21 | 20 | 21 | 17 | 24 |
| socinovfunkc | 101 | 93 | 89 | 94 | 98 | 62 | 101 |
| socinovizgl | 103 | 86 | 78 | 99 | 96 | 57 | 103 |
| socinovjom | 138 | 132 | 122 | 114 | 132 | 86 | 138 |
| socinovkontekst | 29 | 28 | 28 | 23 | 29 | 25 | 29 |
| socinovlidzekl | 13 | 3 | 3 | 12 | 13 | 1 | 13 |
| socinovmehan | 451 | 370 | 323 | 410 | 424 | 206 | 451 |
| socinovnegfakt | 81 | 73 | 72 | 76 | 73 | 49 | 81 |
| socinovnegfaktor | 84 | 76 | 75 | 78 | 76 | 52 | 84 |
| socinovpiem | 58 | 55 | 49 | 49 | 55 | 30 | 58 |
| socinovpiemer | 59 | 56 | 50 | 50 | 56 | 31 | 59 |
| socinovpozfakt | 156 | 127 | 109 | 147 | 146 | 78 | 156 |
| socinovrez | 409 | 363 | 338 | 369 | 381 | 186 | 409 |
| socinovsektor | 78 | 67 | 58 | 64 | 71 | 31 | 78 |
| socinovvirzit | 76 | 66 | 60 | 71 | 71 | 35 | 76 |
| socproblris | 282 | 248 | 228 | 256 | 256 | 128 | 282 |

A: /vir
B: /siev
C: /izgl
D: /kom
E: /sport
F: /labd
G: /uzn

Table analysis (Project: fokusgrupa) Frequencies

Challenges faced from the perspective of education will be analysed within the following metacodes:

- Solving social problems;
- Mechanisms of the social innovation processes;
- Drivers and implementors of the social innovation;
- Sources of social innovation;
- Factors hindering the development of social innovation;
- The context of the development of social innovation;
- Social innovation and education;
- Social innovation (different thoughts).

Summary of the results of the stage 2 (slide 19)

The challenges faced to the promotion of social innovation in Latvia (from the perspective of education) are divided into three groups

Developing the personality traits

Skilling, reskilling and upskilling

Researching and improving the context

Summary of the results of the stage 2 (slide 20)

In order to promote the social innovation in Latvia (from the perspective of education) people which have certain personality traits and skills (e.g., social innovators and their supporters) are needed.

Developing the personality traits

- conscientiousness;
- responsibility;
- interest;
- openness to novation;
- perseverance;
- purposefulness;
- entrepreneurship;
- etc.

Skilling, reskilling and upskilling

- leadership;
- proactive thinking;
- discerning and implementing the opportunities of development and collaboration;
- discerning and solving the social problems;
- social skills (exchange of information, participation, networking, respect of others' interests, etc.);
- etc.

Researching and improving the context

- the rapid change of society;
- the intergenerational gap;
- the spiritual vacuum in society;
- the problems in the field of education (lifelong learning);
- the role of family;
- _____
- showing the positive examples and activating the processes;
- generating the opportunities of positive experience;
- promoting the spiritual intergenerational education;
- disseminating the educational institutions as collaboration partners of citizens, enterprises, NGOs, etc.

Challenges faced to the promotion of social innovation in Latvia: from the perspective of management

Conceptual model of social innovation

BTU

INPUTS

- Informational support
- Exchange of ideas & good practices
- Knowledge sharing
- Social relationships
- Financial support
- Skills & competencies
- Leadership
- Governmental support
- Infrastructure

SOCIAL INNOVATION

OUTPUTS

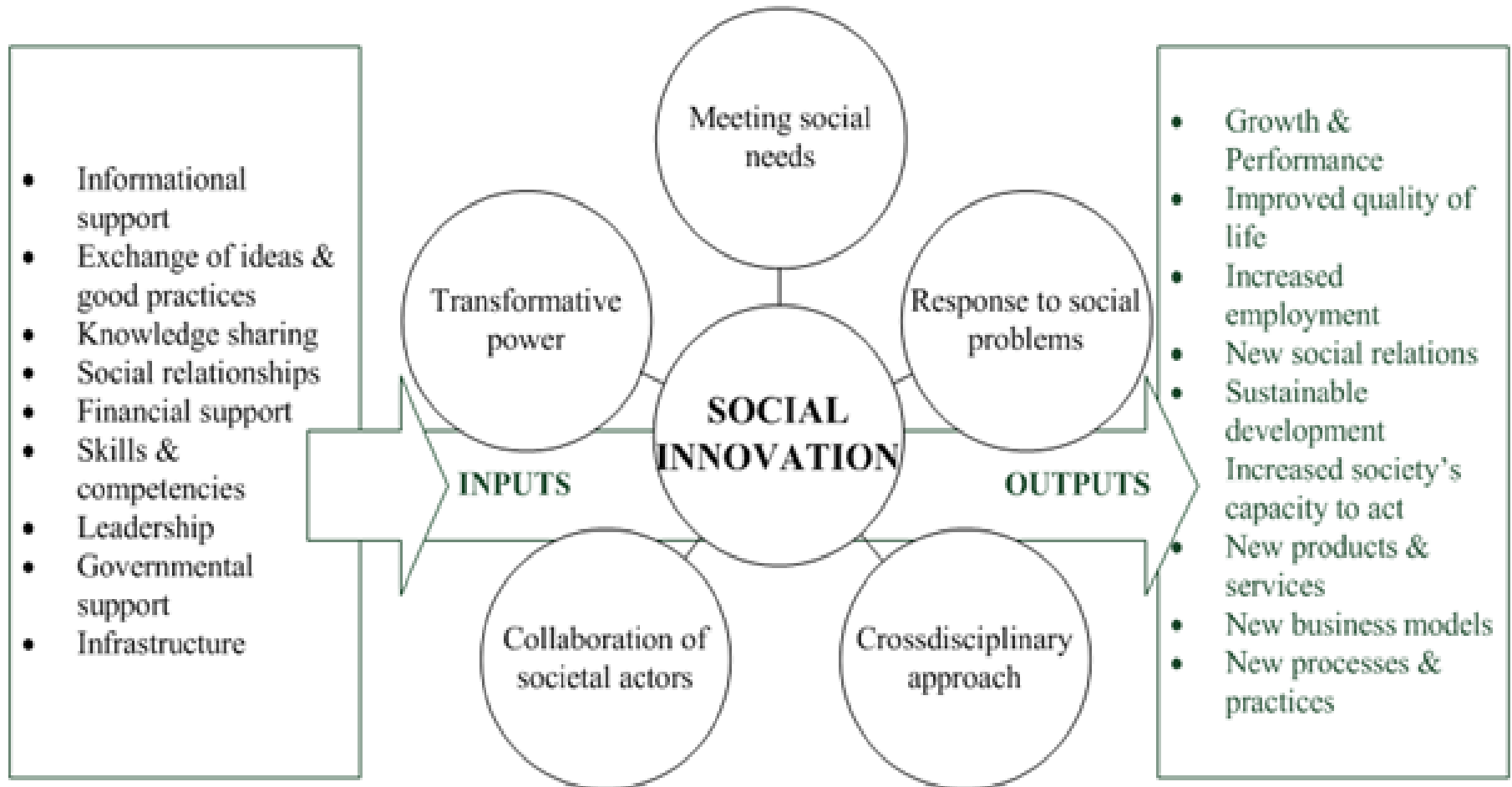
- Meeting social needs
- Response to social problems
- Collaboration of societal actors
- Crossdisciplinary approach

- Growth & Performance
- Improved quality of life
- Increased employment
- New social relations
- Sustainable development
- Increased society's capacity to act
- New products & services
- New business models
- New processes & practices

N. LACE K. OGANISJANA G. CIEMLEJA S. BILKEVICS

Iveta Ozoliņa-Ozola & Jelena Titko
Riga Technical University

Conceptual model of social innovation (slide 8)



Content analysis I (using AQUAD; slide 11)

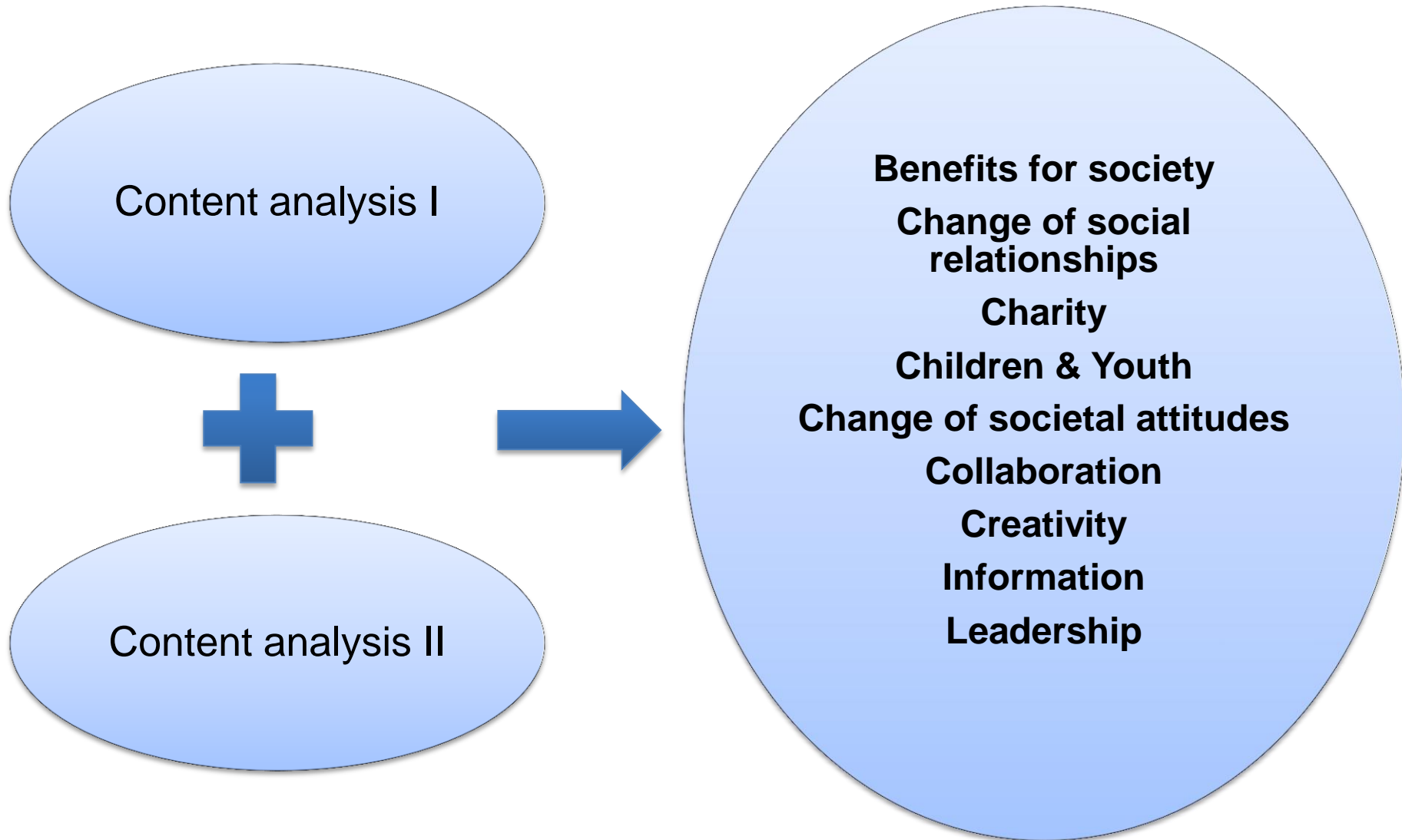
| Code | Frequency |
|-----------------------|-----------|
| Collaboration | 10 |
| Children | 8 |
| Charity | 6 |
| Youth | 6 |
| Solve social problems | 5 |
| Positive experience | 4 |
| New products | 4 |
| Creative | 4 |
| Society development | 3 |
| Self-development | 3 |
| Novelty | 3 |
| Life quality | 3 |
| Human relationships | 3 |

Content analysis II (using Nvivo; slide 12)

- Initially - 93 nodes; after first aggregation - 37 nodes

| Code | Frequency |
|---|-----------|
| Collaboration | 32 |
| Benefits for society | 15 |
| Information | 13 |
| Leadership | 12 |
| Sport | 11 |
| Activities for successful implementation of innovation | 10 |
| Areas for improvement | 10 |
| Children and youth | 9 |
| Change of societal attitudes | 7 |
| Problem solving | 7 |
| Charity | 6 |
| Education | 5 |
| Negative experience | 5 |
| Resolving social matters as precondition for innovation | 5 |
| Training and development | 5 |
| Business goals | 4 |
| Creativity | 4 |
| Individual responsibility | 4 |
| Contradictory culture | 3 |
| Feature of idea that gain support | 3 |

Results of content analysis I and II (slide 13)



Conclusions (slide 14)

- 1.** Social innovation in areas of education, health care and sport helps to develop qualitative human resources in terms of their knowledge, skills, motivation and physical condition. That in turn impacts the demand and supply of these resources in labour market, including employment in high-paid workplaces.
- 2.** There is a necessity of employee training and development to provide society with useful and qualitative services and products.
- 3.** Some forms of social innovation can be new methods of management and work organisation.
- 4.** One of the precondition for successful implementation of social innovation in Latvia is society motivation, that in turn is depends on initiators-leaders.
- 5.** At organisational level, successful implementation of social innovation requests innovative culture (openness, proactivity, striving for excellence), secure employment, supportive and fair relationships.

Making a common platform for the integration of different of social innovation research within interdisciplinary framework



Karine Oganisjana Riga Technical University, Latvia

The interdisciplinary research team (slide 4)



Economy

Management

Finance

Education



Economy

Management



**LATVIJAS
UNIVERSITĀTE**
ANNO 1919

Education



**RĪGAS STRADIŅA
UNIVERSITĀTE**

Education



Finehouse, Ltd.
Entrepreneurship

The characteristics of interdisciplinary research (Birnbaum, 1981) (slide 5)

- Different bodies of knowledge are represented in the research group.
- Group members use different problem solving approaches in their attempts to solve problems.
- Members of the group perform different roles in solving problems.
- Members of the group work on a common problems.
- There is group responsibility for the final product.
- The group shares common facilities.
- The nature of the problem determines the selection of group personnel.
- Members are influenced by how others perform their tasks.

Participants of the focus group discussion

20 May, 2015 (slide 6)

| N.p.k. | Vārds, uzvārds | Organizācija | N.p.k. | Vārds, uzvārds | Organizācija |
|--------|------------------------|---|--------|-------------------|---|
| 1. | Konstantīns Kozlovskis | RTU docents | 11. | Matīss Barkovskis | Labdarības fonda "Eurika" vadītājs |
| 2. | Iveta Ozoliņa-Ozola | RTU doktorante | | | |
| 3. | Karine Oganisjana | RTU docente | | | |
| 4. | Tālis Laizāns | RTU docents | | | |
| 5. | Gunta Grīnberga-Zālīte | LLU asociētā profesore | | | |
| 6. | Linda Kelle | LLU doktorante | | | |
| 7. | Natalja Lāce | RTU profesore | | | |
| 8. | Aivars Žimants | SIA „Pure chocolate” līdzīpašnieks un valdes loceklis | | | |
| 9. | Jānis Palkavnieks | Draugiem.lv grupas runasvīrs | | | |
| 10. | Raimonds Elbakjans | Ghetto Family daddy, "Ghetto Basket" vadītājs | | | |
| | | | 12. | Madara Jakovļeva | RTU IEVF Studentu pašpārvalde, Kultūras un sporta nodaļas vadītāja |
| | | | 13. | Aija Kļaviņa | LSPA Sporta medicīnas un fizioterapijas katedras asociētā profesore |
| | | | 14. | Inita Juhņēviča | Izglītības kvalitātes valsts dienesta vadītāja |
| | | | 15. | Agnese Irbe | SIA Finehouse |

Some of the issues considered in the focus group discussion (slide 7)

- The matter of social innovations
- The role of social innovation for the development of the Latvian society.
- Examples of social innovation in Latvia.
- Ways of motivation of the Latvian society to participate in the solution of social problems.
- The collaboration of governmental organisations, enterprises and individuals for joint solution of social problems.
- The factors which promote or hinder the collaboration of the stakeholders involved in social innovation.
- Changes to be made in the educational system to promote students' motivation and readiness to initiate and realise social innovation projects, etc.

Inerdisciplinary research design of the 2nd stage of the project (slide 8)

Data collection: Video recording of focus group discussion, 20 May, 2015

Data organization: preparation of scripts of the focus group discussion

Qualitative content analysis of the texts of the scripts

Economics

**Analytic hierarchy
process**

The most appropriate
social innovation
development scenario
elaboration

Management

**Qualitative
content analysis**

Nvivo un AQUAD 6
integration of the
results

Education

Open coding

Analysis of
frequencies of
conceptual codes
Software: AQUAD 6

Data interpretation: comparison & integration of the results, finding similarities and explaining differences; creating a common platform

Theoretical old-age pension benefits and replacement rates in the Baltic States: a retrospective simulation



Olga Rajevska
University of Latvia, Latvia

Pension systems in Estonia, Latvia and Lithuania (slide 2)

- I pillar – mandatory public pay-as-you-go scheme
 - ✓ Lithuania – basic pension + points system since 1995
 - ✓ Latvia – NDC system since 1996
 - ✓ Estonia – basic pension + points system since 1999
- II pillar – mandatory private pension funds
 - ✓ since 2001 in LV and EE
 - ✓ since 2004 in LT
- III pillar – voluntary funded pension funds

I pillar in Latvia (NDC) (slide 4)

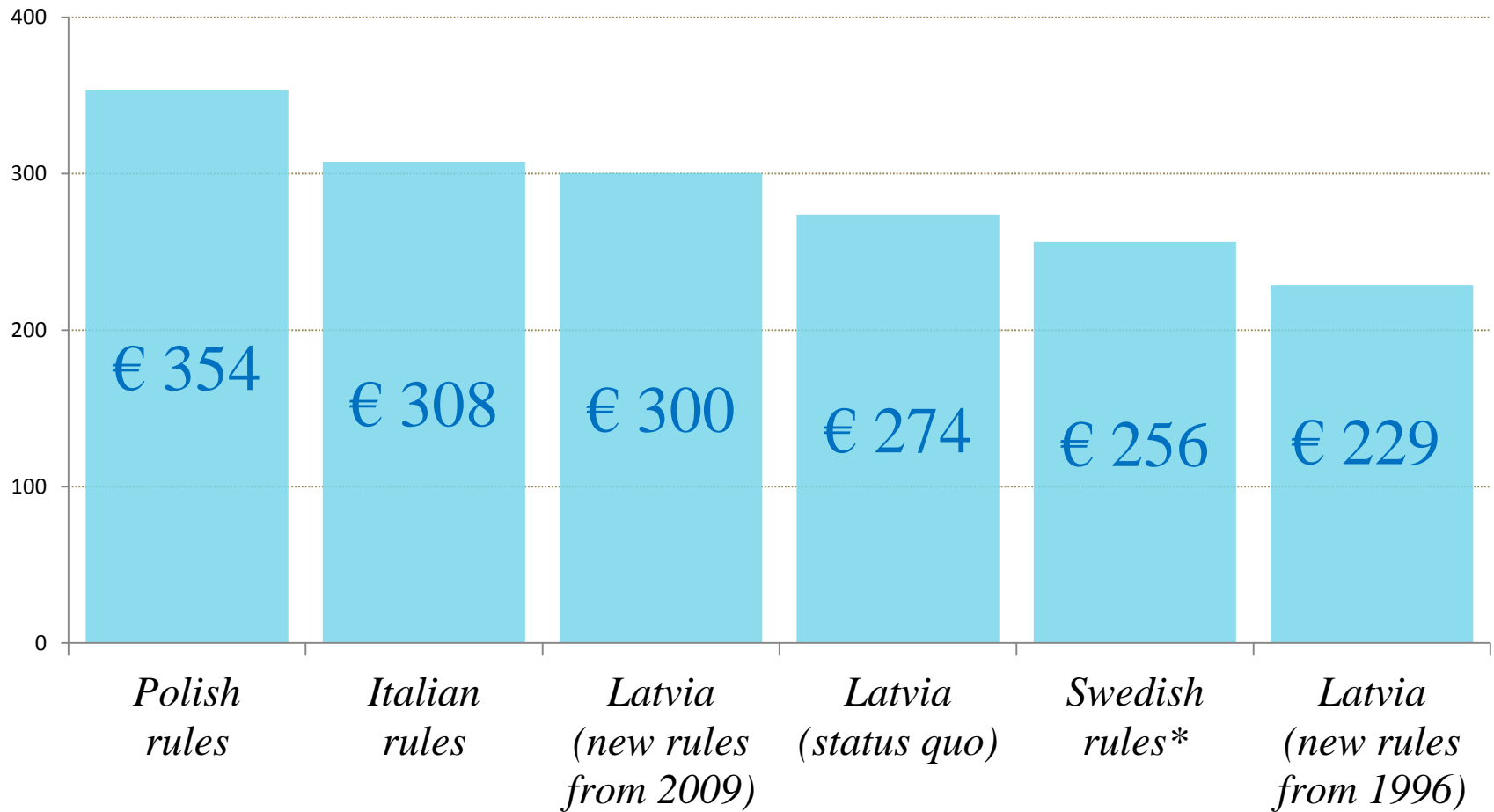
$$\frac{\sum K_i \times A_i}{G \times 12}$$

- K_i – is the sum of contributions paid in year i ,
 - A_i – is the earnings index for the year i , and
 - G - is the average life expectancy at retirement age
-
- ✓ Individual accounts
 - ✓ Virtual notional pension capital
 - ✓ Annual capital indexation
 - ✓ Capital is converted into annuity at the time of retirement

Latvia: revised rules for pension capital valorisation (slide 9)

| | 0.5 AW | 0.75 AW | 1 AW | 1.25 AW | 2 AW | 2.5 AW |
|---|---------------|---------------|---------------|---------------|---------------|---------------|
| Net pension, old rules (EUR) | 143.15 | 214.72 | 273.99 | 328.38 | 491.58 | 600.37 |
| Net pension, new rules (EUR) | 160.56 | 239.44 | 300.45 | 361.46 | 544.50 | 666.53 |
| Gain, EUR | 17.41 | 24.72 | 26.46 | 33.08 | 52.92 | 66.16 |
| Gain, % | 12.2% | 11.5% | 9.7% | 10.1% | 10.8% | 11.0% |
| Replacement rate, new rules | 69.9 % | 71.4 % | 68.1 % | 66.0 % | 63.0 % | 61.9 % |
| Gain in replacement rate, percentage points | +7.6 | +7.4 | +6.0 | +5.8 | +6.2 | +6.1 |

Latvia: revised rules for pension capital valorisation (II) (slide 10)



Latvia: II pillar participants (slide 11)

| | Active strategy | Balanced strategy | Conservative strategy | 'Average' strategy |
|----------------------------------|-----------------|-------------------|-----------------------|--------------------|
| Accumulated capital, EUR | 1098.98 | 1121.71 | 1116.16 | 1101.88 |
| Net pension, EUR | 274.34 | 274.41 | 274.40 | 274.35 |
| Gain compared to non-participant | + 0.35 EUR | + 0.42 EUR | + 0.41 EUR | + 0.36 EUR |

Conclusions (slide 12)

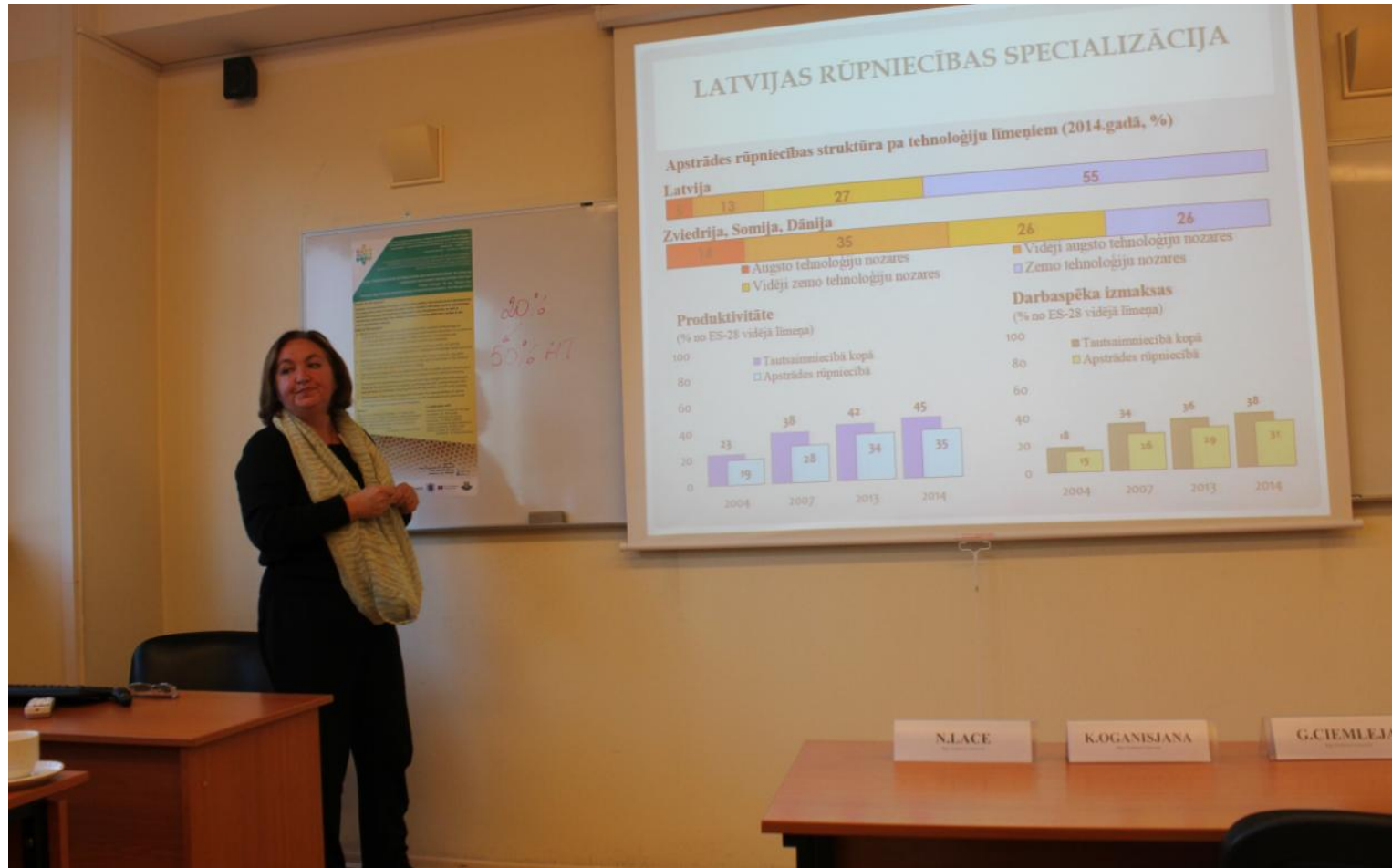
- 1.** Estonia and Lithuania have introduced pension-point systems accompanied by basic non-contributory component; Latvia uses a NDC-system with no basic component. Lack of non-contributory basic pension in Latvia leads to high degree of progressivity, with inexcusably low pensions to low-earners, and excessively generous pensions to high-earners.
- 2.** The approach of translating the pre-reform service years into pension rights varies the most significantly. The most equitable method of translating the pre-reform service record into new systems was chosen by Lithuania, the Estonian approach is too egalitarian, while Latvian formula looks more like an extemporary measure.
- 3.** The difference in replacement rate for low- and high-earner in Latvia is less than 10 percentage points. With the lowest average wages, Latvia has highest replacement rates.
- 4.** On the opposite side is Estonia with a strongly pronounced redistribution from rich to poor: among all three countries its pension system provides the highest replacement rate for low-earners – 80.3% and the lowest replacement rates for high-earners – 25.6%, the amplitude reaching almost 55 percentage points.
- 5.** Participation in II pillar has not brought any significant raise in pension benefit by now.
- 6.** Notional capital valorisation rules significantly influence pension amount.

The analytic hierarchy process as a tool for promotion of youth employment and sustainability in Latvia



Līva Grineviča, Baiba Rivža & Pēteris Rivža
Latvia University of Agriculture, Latvia

Smart specialization strategy: realization opportunities and problems in Latvia



Sandra Jekabsone & Irina Skribane
University of Latvia, Latvia

Latvijas esošās priekšrocības (GCI metodoloģijas kontekstā) (slide 5)

Attīstības stadija

Pāreja no efektivitātes virzītās ekonomikas uz inovācijas virzīto ekonomiku

GCI 2015-2016

44. Vieta (vērtējums – 4,5)

Pamatnosacījumu faktori

37. Vieta (vērtējums – 5,1)

Efektivitātes stiprināšanas faktori

39. Vieta (vērtējums – 4,4)

Inovācijas un izsmalcinātības faktori (smard factors)

58. Vieta (vērtējums – 3,7)

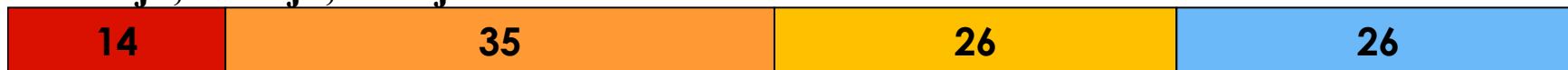
Latvijas rūpniecības specializācija (slide 6)

Apstrādes rūpniecības struktūra pa tehnoloģiju līmeņiem (2014.gadā, %)

Latvija



Zviedrija, Somija, Dānija



■ Augsto tehnoloģiju nozares

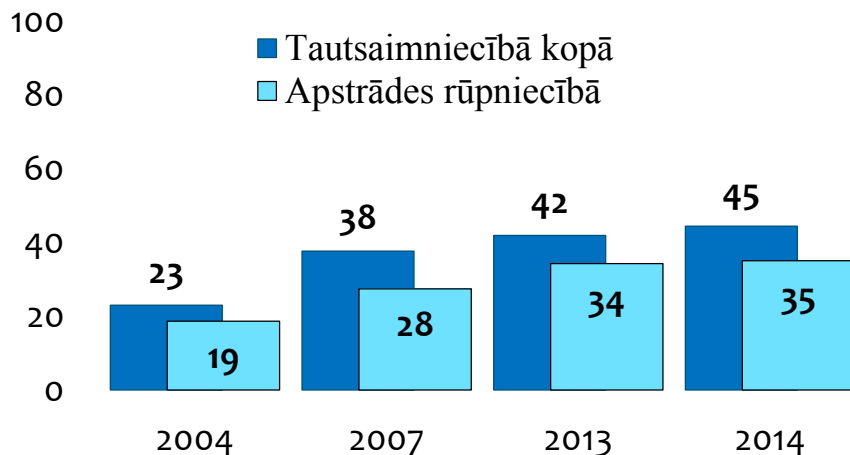
■ Vidēji augsto tehnoloģiju nozares

■ Vidēji zemo tehnoloģiju nozares

■ Zemo tehnoloģiju nozares

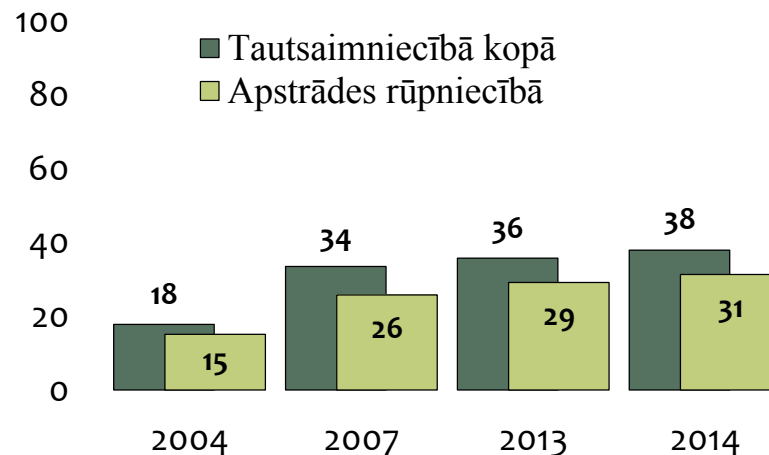
Produktivitāte

(% no ES-28 vidējā līmeņa)



Darbspēka izmaksas

(% no ES-28 vidējā līmeņa)










Viedās specializācijas stratēģijas izvēle (slide 8)

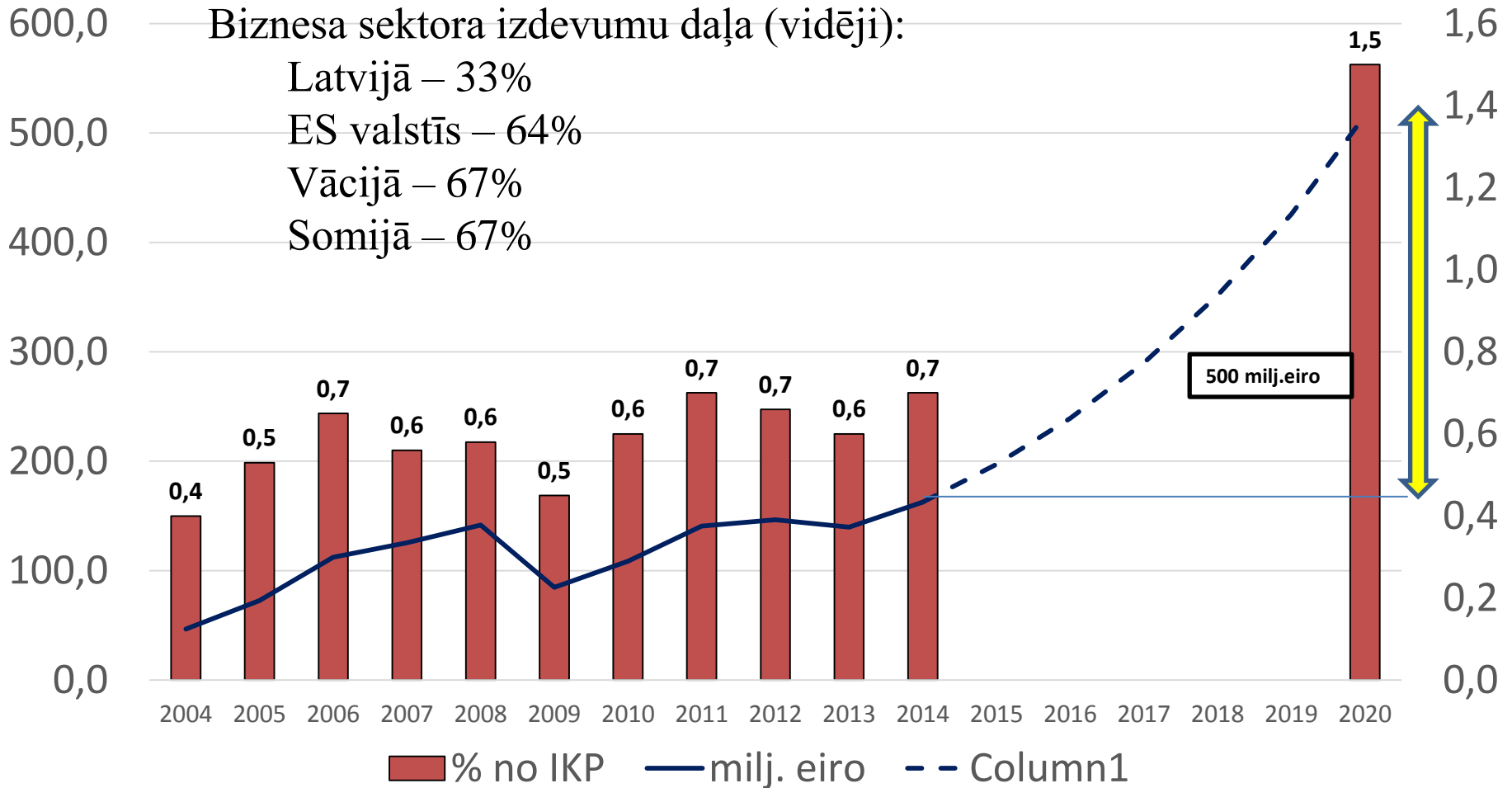
- Latvijas situācijā lielākais uzsvars ir jāliek uz **atbalstu ekonomikas transformācijai** - veicināt ekonomikas strukturālās izmaiņas par labu preču un pakalpojumu ar augstāku ienesīgumu ražošanai



Kur Latvijas vājākās vietas? (slide 15)

| | | 2015-2016 | 2006-2007 | ES līdervalstis (vieta GCI) |
|---|--|-----------|-----------|-----------------------------|
| 12th pillar: Innovation |  | 62 | 71 | Somija (2) |
| 12.01 Capacity for innovation |  | 61 | 47 | Zviedrija (4) |
| 12.02 Quality of scientific research institutions |  | 50 | 70 | Lielbritānija (2) |
| 12.03 Company spending on R&D |  | 81 | 49 | Somija (4) |
| 12.04 University-industry collaboration in R&D |  | 63 | 54 | Somija (1) |
| 12.05 Gov't procurement of advanced tech prod. |  | 100 | 96 | Luksemburga (5) |
| 12.06 Availability of scientists and engineers |  | 101 | 99 | Somija (1) |
| 12.07 PCT patents, applications/million pop. | | 30 | | Zviedrija (3) |

Leguldījumi pētniecībā un attīstībā Latvijā (% no IKP) (slide 16)



Industrialisation factors in post-industrial society



Vladimirs Šatrevičs

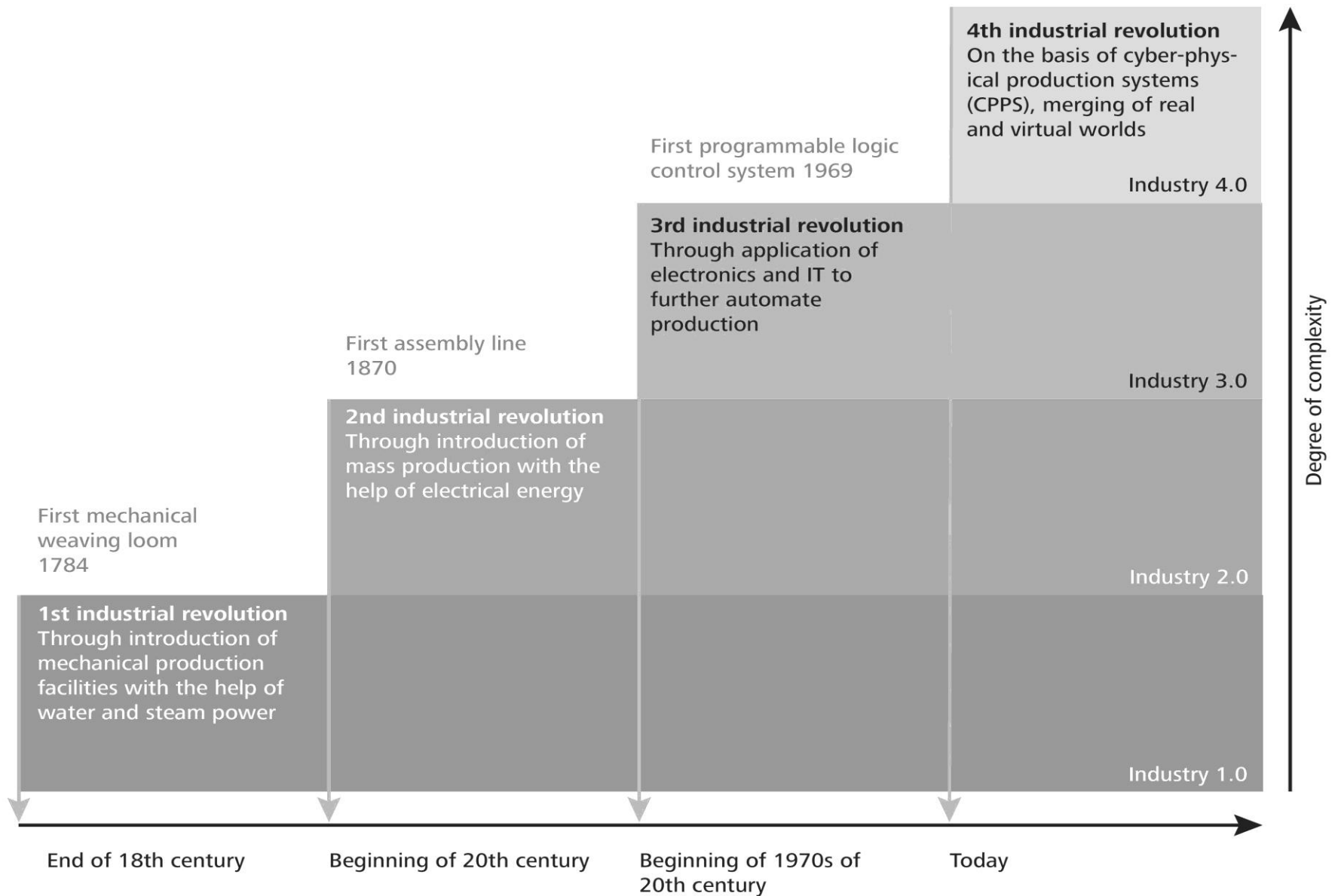
Valentīna Strautmane

Riga Technical University, Latvia

Industrialisation and post-industrial society (slide 7)

| | | Industrial society | Information society (Postindustrial) |
|---------------------------|--------------------------|--|---|
| Innovation/ Technology | Core | Steam engine (power) | Computer (memory, computation, control) |
| | Basic function | Replacement, amplification of physical labour | Replacement, amplification of mental labour |
| | Productive power | Material productive power (increase in per capita production) | Information productive power (increase optimal action-selection of capabilities) |
| Socio-economic structure | Products | Useful goods and services | Information, technology |
| | Production centre | Modern factory (machinery, equipment) | Information utility (information networks, data banks) |
| | Market | New world, colonies, consumer purchasing power | Increase in knowledge frontiers, information space |
| | Leading industries | Manufacturing industries (machinery industry, chemical industry) | Intellectual industries, (information industry, knowledge industry) |
| | Industrial structure | Primary, secondary, tertiary industries | Matrix industrial structure (primary, secondary, tertiary, quaternary/systems industries) |
| | Economic structure | Commodity economy (division of labour, separation of production and consumption) | Synergetic economy (joint production and shared utilisation) |
| | Socio-economic principle | Law of price (equilibrium of supply and demand) | Law of goals (principle of synergetic feed forward) |
| | Socio-economic subject | Enterprise (private enterprise, public enterprise, third sector) | Voluntary communities (local and informational communities) |
| | Socio-economic system | Private ownership of capital, free competition, profit maximisation | Infrastructure principle of synergy, precedence of social benefit |
| | Form of society | Class society (centralised power, classes, control) | Functional society (multicenter, function, autonomy) |
| | National goal | GNW (gross national welfare) | GNS (gross national satisfaction) |
| | Form of government | Parliamentary democracy | Participatory democracy |
| | Force of social change | Labour movements, strikes | Citizens' movements, litigation |
| | Social problems | Unemployment, war, fascism | Future shock, terror, invasion of privacy |
| Most advanced stage | High mass consumption | High mass knowledge creation | |
| Values | Value standards | Material values (satisfaction of physiological needs) | Time-value (satisfaction of goal achievement needs) |
| | Ethical standards | Fundamental human rights, humanity | Self-discipline, social contribution |
| | Spirit of the times | Renaissance (human liberation) | Globalize (symbiosis of man and nature) |

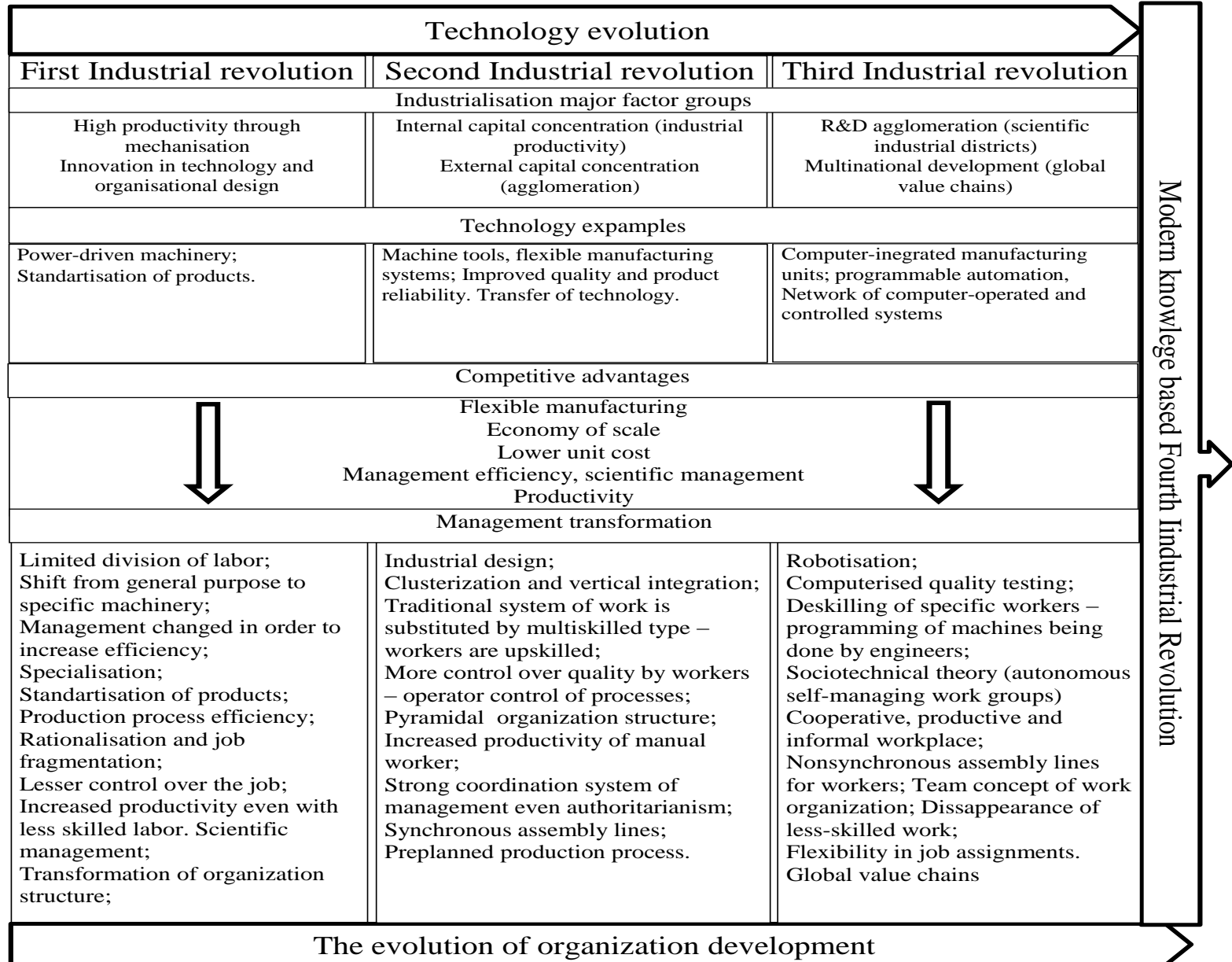
Industrialisation and post-industrial society (slide 8)



Industrialisation and post-industrial society (slides 9)

As a result, nowadays performance depends not only on the production processes; therefore, new performance expressions are considered both on strategic level and decision levels (strategic, tactical and operational). Thus, knowledge in performance expressions of the modern company must be considered from top to bottom for all the activities or processes to be controlled.

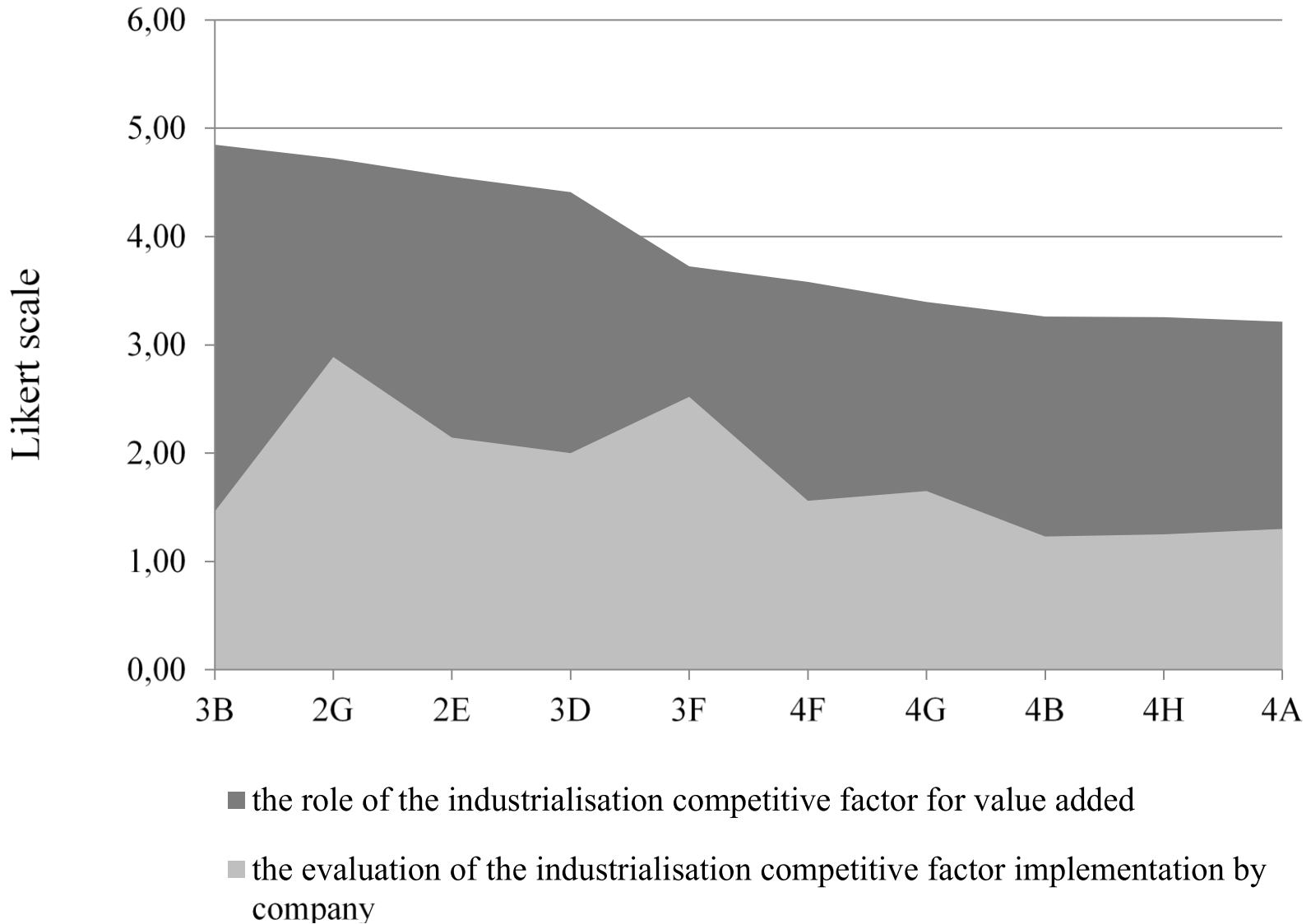
Evolution of industrialisation system and industrialisation factors; Superimposing (slide 11)



Results (slide 15)

- The first conclusion is that SMEs still highly evaluate industrialisation factors, but could not take full advantages of them.
- Currently Latvian SMEs are exploiting operations management and flexible manufacturing system. In case of SMEs, associations and Industrial Parks could provide necessary transactional cost reduction.
- Exploiting economies of scale and transactional cost factors will significantly reduce operation cost and increase profit margin.

Results (slide 16)





Thank you !

