

**MAJANDUSTEADUSKOND
ÄRIKORRALDUSE INSTITUUT
TEADUS- JA ARENDUSTEGEVUSE AASTAARUANNE 2014**

1. Instituudi struktuur

**Ärikorralduse instituut, Department of Business Administration
Instituudi direktor Toomas Piliste**

- Ettevõtluse õppetool, Chair of Entrepreneurship, Ene Kolbre
- Organisatsiooni ja juhtimise õppetool, Chair of Organisation and Management, Mike Wahl
- Tootmis- ja teeninduskorralduse õppetool, Chair of Operations Management, Aleksandr Miina
- Turunduse õppetool, Chair of Marketing, Anu Leppiman
- Töökeskkonna ja ohutuse õppetool, Chair of Labour Environment and Safety, Piia Tint
- Keskkonnaökonomika õppetool, Chair of Environmental Economics, Üllas Erhlich
- Ergonoomia labor, Laboratory of Ergonomics, Piia Tint
- Ettevõtluskeskus, Centre for Entrepreneurship, Urve Venesaar
- Äriuuringu ja -arenduskeskus, Centre for Business Research and Development, Urve Venesaar

2. Instituudi teadus- ja arendustegevuse (edaspidi T&A) iseloomustus

(NB! punktid 2.1- 2.6 täidab struktuuriüksus)

2.1 struktuuriüksuse koosseisu kuuluvate uurimisgruppide teadustöö kirjeldus *(inglise keeles)*;

Uurimisgrupi nimetus *(eesti ja inglise keeles)* **ja juhi nimi**

- uurimisgrupi teadustöö kirjeldus *(inglise keeles)*;
- uurimisgrupi aruandeaastal saadud tähtsamad teadustulemused *(inglise keeles)*;
- uurimisgrupi kuni 5 olulisemat publikatsiooni aruandeaastal.

Ärikorralduse instituudi teadustöö toimub 2 uurimisgrupis, milles osalevad õppetoolidele ja keskuste töötajad.

1. Ettevõtlus ja ettevõtete arendamine. Entrepreneurship and business development (Prof. U. Venesaar)

The research group focuses on the research of entrepreneurship and innovation processes, entrepreneurship education, and the development of internal (management, marketing) as well as external (e.g. entrepreneurial ecosystem and sustainable utilisation of natural resources) environment for business development.

Research on entrepreneurial activities of Estonian population under the Global Entrepreneurship Monitor showed relatively high share of early-stage entrepreneurs in Estonia compared with the countries of relevant development phase, but a large share of new businesses fail before three years of activities. However, perceptions of opportunities and individual perceptions of entrepreneurs are contributing positively towards the intention of starting a business in Estonia. Research on exploring the processes, challenges & implications on innovation performance of knowledge & technology transfer across national boundaries developed through a programme of staff exchange, a new

international & multi-disciplinary research community under the International Research Staff Exchange Scheme (IRSES). Research on innovation and sustainability management in manufacturing is focused on the possibilities of using ethical theories for assessment of corporate social responsibility and relationships between corporate sustainability, corporate social responsibility and management values.

Research on entrepreneurship education includes results of international survey GUESSS (Global University Entrepreneurial Spirit Student Survey) which has improved the understanding of both the similarities and differences of student entrepreneurial activities in European countries, supplementing previous studies. The most influential factors in causing the differences in the process of enterprise foundation in country groups are students' gender, their study level and the type of industry the student enterprise is operating in. For the development of favourable entrepreneurial ecosystem for university, the study on how to become an entrepreneurial university initiated. Also the analysis of the international business school survey (based on 100 schools worldwide) was continued to identify the role of management in organisational learning improvement process.

Research in real estate was mainly concentrated on the public sector real estate asset management models. The research on green transport corridors tries to solve the strategic weakness of the existing green corridor controlling approaches by integrating cooperative and network-oriented concepts from supply chain management. The research on sustainable development of core logistics clusters representing hubs in green transport corridors points out actions for hub development with a future-oriented compilation of sustainable development measures of infrastructural, legal or organizational nature.

The main implication of current ownership research is the understanding that a strategic audit is useful for developing systemically a successful ownership strategy. Practically, in order to stay sustainable and be able to develop further there is a need for professional corporate governance and also enlightened ultimate owners. The proposed use of strategic audit gives the owner an opportunity to analyse its own actions and behaviour, learning, managing knowledge, and finally clearly expressing his will in the form of an ownership strategy.

Research on dynamic capabilities includes different types of capabilities influencing the performance outcome of a company. Capabilities mostly influence financial performance and less project performance (PP). Traditional project time/scope/cost management (iron triangle) and project delivery capabilities significantly influence the variance of outcome indicators. Surprisingly, companies should be careful in aligning projects with strategy and pay great attention to teamwork threats, as these present the most negative influence on the outcome in circumstances where they have been conventional benefit factors.

Project-based Experience Marketing Studies rest up on theoretical and empirical international and national analysis including studies on experience marketing and country branding, social media marketing, and involving consumers in the marketing process through experience design and increased effectiveness and visibility of the off-the-job organizational skills training by creating a holistic customer experience.

Research on sustainable utilisation of environment and evaluation of environmental resources includes different areas. In the area of non-market valuation of the environment, research on the Estonian coast as an important natural resource continued under the study "Regional differences in recreational preferences of Estonian coastal landscapes" which clearly demonstrates that differences

within counties were obvious and the most preferred shores are the ones less represented in the respondents' county of residence. These results are similar to previous studies indicating that unfamiliar landscapes are found more interesting and the further one lives from certain landscape, the less negative aspects one sees in it. The results of study on Estonia's oil shale industry taxes showed that central economic concepts, including marginal costs and willingness to pay was not correctly understood by the previous studies. Since external cost estimates have been wrongly interpreted as average costs this has led to false policy implications concerning environmental taxation. The study in the field of public environmental funding found out that pollution charges were fiscally successful only in the beginning of the 2000's and starting from 2004 the charges were successful for environmental purposes. The research on different demand aspects of weather forecasts as a public good is continued.

Research is based mostly on international research projects (e.g. GUESSS, 7.FP Programme - IRSES; GEM, TEMPUS IV, Baltic Sea Region Programme), base-line funding and contracts with public sector institutions.

The most important articles:

Täks, M., Tynjälä, P., Toding, M., Kukemelk, H., Venesaar, U. (2014). Engineering Students' Experiences in Studying Entrepreneurship. *Journal of Engineering Education*, 103(4), 573 - 598.

Prause, G. (2014). A Green Corridor Balanced Scorecard. *Transport and Telecommunication*, 15(4), 299 - 307.

Rungi, M. (2014). The impact of capabilities on performance. *Industrial Management & Data Systems*, 114(2), 241–257

Riivits-Arkonsuo, I.; Kaljund, K.; Leppiman, A. (2014). Consumer Journey from First Experience to Brand Evangelism. *Research in Economics and Business: Central and Eastern Europe*, 6(1), 5 - 28.

Reimann, M.; Ehrlich, Ü.; Tõnisson, H. (2014). Regional differences in recreational preferences of Estonian coastal landscapes. *Journal of Coastal Research*, SI.70 , 420 - 425.

2. Tööstustoodete ja –süsteemide ohutus ja töökindlus ning töökeskkond. Safety and Reliability of Industrial Products and Systems and Work Environment (Prof. P.Tint)

The main issue of the research in the OHS area is the improvement of health and safety of workers in Estonia. The members of the research group have investigated the following topics: safety and health of office-workers, safety management, audit and safety culture, risk assessment of chemicals the work, health issues connected with kidneys (PhD studies) and investigation of noise at workplace, the influence of non-ionizing electromagnetic fields on the health of the workers and environment, e-learning in OHS in Estonia and abroad.

The novelty of the results consists in the improvement of the risk assessment model for the chemicals using the experimental data derived with FTIR measurements (Project SF0140022s10: Chemical Engineering Aspects in Environmental Risk Assessment), in the investigations of noise at

the workplace, in the part of the safety culture improvement through the management of human capital, in the influence of the non-ionizing electromagnetic fields on humans' health, in the e-learning involvement into the safety education.

In the field of the research in safety management, the studies focused on how the organizations influence and deal with the congruence between the human factors, safety and general management with respect to knowledge management. The study results concerning empirical examination of the relationships between different aspects of positive safety culture based on an innovative conceptual model for the improvement of safety culture, employee well-being and organizational learning. This study contributes important empirical evidence on how SMEs address occupational health and safety and what the major challenges in SMSs are. The data from the study reveal key issues in safety culture and learning possibilities in industrial SME. A statistical analysis of safety culture questionnaires shows many organizations with an outstanding safety culture and positive safety perceptions and attitudes. However, qualitative data indicate some important safety flaws, such as: the management of health and safety hazards at work is not included in management practice, corporate risk management or strategic management; there is a lack of management awareness and commitment to safety; in all investigated enterprises written safety guidelines and procedures exist, but their fulfilment was not periodically updated and monitored; in some companies there were established a formal but not used safety programs, like a strictly formal use of preventive observations and audit, etc. Employees' involvement in different activities in health and safety as well as the possibility to learn in the investigated organization were limited and weak. In addition, the study showed a lack of commitment, cooperation and social capital in SMEs as well as that OH&S is not a company's core issue and safety is not considered as a vital factor for promotion/advocacy in the companies' homepages as one part of the company identity. The study provides proposals on managerial intervention on how to improve management of safety knowledge and overall safety within enterprises, through managing the store of safety social capital inherent in an organization, implementing organizational structures which allow for managers and employees to interact and cooperate, and learning from safety practice and experience. The authors confirms through new empirical findings the importance of the notion of a Community of Practice (CoP), as a source of safety culture and as the 'one important focus' of (collective) learning and transmitting practical safety knowledge. In addition, the study provides knowledge on the essential aspects in the process of evaluation of safety culture, like organizational, human and social perspectives in safety. The study revealed that a quantitative approach using a reliable and valid tested questionnaire can provide an overview of the safety climate (employees' perception and attitudes) and an overall safety organizational picture. However, safety documentation and questionnaires tend to reflect only 'formal' procedures in the organization. It is not enough in order to understand the 'real' state of the safety, procedures, the shared and active values and beliefs that guide behavior patterns and OH&S activities in the organization. Therefore, integrated approaches should be used, which allow to reveal important safety culture flaws and fix underlying safety risks.

The most important articles:

Reinhold, K., Pallon, L. 2014. Metal workers exposure to chemicals and noise caused by using incorrect safety measures, *Iranian Journal of Public Health*, 43(3), 186-193.

Tint, P., Traumann, A., Järvik, O., Oja, V. 2014. Determination of volatile hazardous components from shale fuel oil during handling. *Materials Science*, 20(3), 351-356

Reinhold, K., Tint, P., Siirak, V. 2014. The development of higher education in occupational health and safety in Estonia and selected EU countries. *Procedia*, 142, 52-56.

Järvis, M., Virovere, A., Tint, P. 2014. Managers' perceptions of organizational safety: implication for the development of safety culture. *The Scientific Journal of Riga Technical University: Safety of Technogenic Environment*, 5, 18-28.

Reinhold, K., Kalle, S., Paju, J. 2014. Exposure to high/low frequency noise at workplaces: differences between assessment, health complaints and implementation of adequate personal protective equipment. *Agronomy Research*, 12(3), 895-906.

2.2 Loetelu struktuuriüksuse töötajate rahvusvahelistest tunnustustest.

2.3 Loetelu struktuuriüksuse töötajatest, kes on välisakadeemiate või muude oluliste T&A- ga seotud välisorganisatsioonide liikmed.

Anu Leppiman:

Lapland Centre of Expertise for the Experience Industry (LCEEI) Certified Experience Expert,
UWE-University Women of Europe, member,
Finnish Association for Socialpolice and Social Work Research, member.

Aleksandr Miina

EuroMA, member

Gunnar Prause

Board Member of the Institute of Cooperative Studies at Humboldt University Berlin
Board Member of Baltic China Science Park Network
Member of the Institute of e-Government at Potsdam University

Virve Siirak, Human Factors Ergonomics Europe Chapter, member

Piia Tint Human Factors Ergonomics Europe Chapter, member

Mike Wahl:

Indian Academy of Management (IAM), member
European Institute for Advanced Studies in Management (EIASM), liige
International Corporate Governance Studies Network, member
Int. Federation Cusinier Exclusive D'Europe e.V., member

Urve Venesaar:

Entrepreneurship Education Think Tank (a member), Estonian Chamber of Commerce and Industry
European Foundation of Management Development (EFMD) Steering Committee, member
Hanseatic Institute for Entrepreneurship and Regional Development (HIE-RO), Germany,
University of Rostock, member
ESU- European University Network on Entrepreneurship, faculty member
Estonian Economic Association, a member
Member of the European Council for Small Business and Entrepreneurship (ECSB);

Emeriitdots. Ülo Kristjuhan

European Commission Working Party of Self- Employed Workers, member
European Union Geriatric Medicine Society, member

2.4 T&A-ga seotud tunnustused (va punktis 2.3 toodud tunnustused), ülevaade teaduskorralduslikust tegevusest, teadlasmobiilsusest ning hinnang oma teadustulemustele. Teaduskorralduslikud tegevused

Turunduse õppetool prof A. Leppimani juhtimisel korraldas 06.05.2014 konverentsi “Elamus turunduses-Turundus elamuses”, et tähistada viia aasta möödumist elamusturunduse õpetamise ja uurimise algusest.

Anu Leppiman: EKKA Sotsiaalteaduste õppekavade hindamiskomisjoni liige/ EKKA Member of the commissions for accreditation of study programs in social sciences

Teadusajakirjade toimetuskolleegiumides toimetaja või retsensent

Ene Kolbre

International Journal of Housing Markets and Analysis (reviewer)

Anu Leppiman

Journal of Research in Economics and Business: Central and Eastern Europe (guest editor)

Journal of Marketing Trends (JMT), Editorial&Reviewing Northen Europe Committee member

Gunnar Prause

Journal of Entrepreneurship and Sustainability Issues (editor)

Journal of Economics and Management Research (editor)

Publication Series "Regional Business & Social Economic Development" at Berliner Wissenschaftsverlag (chief Editor)

Maksim Saat

Baltic Journal of Management, (editorial advisory board member and reviewer)

Publisher „Reinhold Kolb Verlag“ (scientific literature board member)

Piia Tint

Organization and Management (editorial board member)

Safety and Technogenic Management (editorial board member)

Environmental Engineering and Management (reviewer)

Agronomy Reseach (reviewer)

Organization and Management (reviewer)

Urve Venesaar

Research in Economics and Business: Central and Eastern Europe. Publisher: Tallinn School of Economics and Business Administration (editor-in-chief)

Baltic Journal of Management (reviewer);

European Journal of Innovation Management (reviewer)

African Journal of Science, Technology, Innovation and Development (reviewer)

Em.dotsent. Ülo Kristjuhan

International Journal of Occupational Safety and Ergonomics" (International Editorial Board member)

Teadlasmobiilsus – loengud välisülikoolides

René Arvola

Karlshochschule International University, Teaching, ERASMUS, 10-14 Feb 2014, 20 ac. hours

Rünno Lumiste

Université Claude Bernard Lyon 1, IUT Lyon 1, département GEA, Lyon, Prantsusmaal 20-24.04.2014, lecturs

Anu Leppiman

Külalisprofessor Lapi Ülikoolis/ Visiting professor of University of Lapland

29.11-10.12.2014 Lapi Ülikool, teaduskoostöö

21.10-30.10.2014 ERASMUS, Ettevõtlus õpiränne Ca L Élvira, Barcelona

21.05 – 25.05.2014 ERASMUS, CEEMAN õpiränne, Viin

Oliver Parts

CEEMAN IMTA (International teachers academy) training about case writing ja case teaching, Sloveenia in town Bled in Bled School of Management. 8 - 20.06.2014

Gunnar Prause

Université Claude Bernard Lyon 1, IUT Lyon 1, département GEA, Lyon, Prantsusmaal 3-7.02.2014, lecturs.

Universidad Externado, Bogota, Colombia, 28.07-01.08.2014, lecturs

HSE Moskow 01.05-19.06.14 and 01.09-29.10.14, research

University of Bremen, 23-27.06.2014

Eliis Salm

Karlshochschule International University, Teaching, ERASMUS, 10-14 Feb 2014, 20 ac. hour

Piia Tint,

Riga Technical University, lectures, ERASMUS 8 hours, 13.10-16.10.2014

Mike Wahl

„International Strategies” Université Claude Bernard Lyon 1, IUT Lyon 1, département GEA, Lyon, Prantsusmaal 24-25. märtsil 2014, külalislektor.