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Preface

These proceedings represent the work of contributors to the Fifth European Conference on Entrepreneurship and Innovation hosted this year by the National and Kapodistrian University of Athens in Greece. The Conference Chair is Panagiotis Georgiadis, and the Programme Chair is Alexandros Kakouris both from the Faculty of Informatics and Telecommunications, University of Athens, Greece.

The opening keynote is given by Elena Panaritis, Panel Group, Washington DC, USA on the topic of “Exploring social entrepreneurship”. The second day will be opened with a keynote from Amar Bhidé, Visiting Scholar, Kennedy School of Government, Harvard University. Amar will address “Dangerous Divergences: How Modern Finance Undermines Real Innovation”.

ECIE has grown and evolved over the past four years, but the key aim remains the opportunity for participants to share ideas and meet the people who hold them. The scope of papers will ensure an interesting two days. The subjects covered by the papers illustrate the wide range of topics that fall into this important and growing area of research.

With an initial submission of 208 abstracts, after the double blind, peer review process there are 95 papers published in these Conference Proceedings. These papers represent research from Albania, Belgium, Brazil, Canada, China, Czech Republic, Denmark, Finland, France, Germany, Greece, India, Iran, Ireland, Israel, Italy, Kuwait, Malaysia, Norway, Pakistan, Poland, Portugal, Romania, Russia, Slovenia, South Africa, South Korea, Spain, Sri Lanka, Sweden, Taiwan, The Netherlands, Turkey, United Arab Emirates, Uganda, UK and USA.

I hope that you have an enjoyable conference.

Alexandros Kakouris, Programme Chair  
Faculty of Informatics and Telecommunications  
University of Athens, Greece.  
September 2010
Biographies of Conference Chairs, Programme Chairs and Keynote Speakers

Conference Chair

Dr Panagiotis Georgiadis is Professor at the Faculty of Informatics and Telecommunications of the University of Athens. He holds a B.Sc. in Physics, M.Sc. and Ph.D. in Computer Science. He has been a regular member of the Senate of University of Athens (1992-1994), director of the Computer Systems & Applications Division of the Faculty (1994-1996), Secretary General for Information Systems by the Greek Ministry of Finance (1997 - 2002) and Secretary General of Public Administration and e-Government by the Ministry of Interior and Decentralization (2003 - 2004). His research interests include Innovative Entrepreneurship, Distributed Systems, Simulation and Management of Information Systems. He has authored more than 60 scientific articles in international journals and conferences, and he is the editor of the International Journal of Electronic Governance (IJEG).

Programme Chair

Dr Alexandros Kakouris is a part time lecturer of innovation and entrepreneurship at the University of Athens. He received his Ph.D. in Physics from the same university (1997) and postgraduate training on Distance Learning from the Hellenic Open University where he served as a tutor for one academic year. He has been a part-time professor of Space Science at the Hellenic Air Force Academy (1995-2001) and has coordinated the Career Office of the University of Athens from 2004 to 2008. He has written a book, articles in Physics, Education and Entrepreneurship, and his current research interests include experiential learning in Entrepreneurship Education.

Keynote Speakers

Elena Panaritis is an institutional economist. She spearheaded property rights reform, particularly in Peru, while working at the World Bank. She lectures at Insead, the Wharton School and Johns Hopkins University-SAIS. A social entrepreneur, she now heads the investment advisory firm Panel Group, which invests in undervalued property and provides counsel on transforming informal real estate and
Dr Amar Bhidé, previously the Laurence D. Glaubinger Professor of Business at Columbia University, is currently a visiting Scholar at Kennedy School of Government, Harvard University, USA and is writing a book on the financial crisis. Bhidé served on the faculties of Harvard Business School (from 1988 to 2000) and the University of Chicago's Graduate School of Business. A former Senior Engagement Manager at McKinsey & Company and proprietary trader at E.F. Hutton, Bhidé served on the staff of the Brady Commission which investigated the stock market crash. Bhidé earned a DBA (1988) and an MBA with high distinction as a Baker Scholar (1979) from Harvard. He received a B.Tech from the Indian Institute of Technology in 1977. His most recent book, The Venturesome Economy: How Innovation Sustains Prosperity in a More Connected World, (Princeton University Press 2008) won the Association of American Publishers’ PROSE Award for Professional and Scholarly Excellence in Business, Finance, and Management, and was in the “Best of 2008” lists of the Economist, BusinessWeek and Barrons. Amar has been studying entrepreneurship for more than 20 years and has written a number of books, business reviews and other articles.

Mini Track Chairs

Claire Auplat is in charge of a program which explores the relations between institutional change and entrepreneurship in the field of new technological ventures, with a focus on the development of nanotechnologies. Her areas of interest cover public policy and entrepreneurial dynamics, innovation and sustainable development. She has published widely in these areas and is a member of the editorial board of Society and Business Review, International Journal of Entrepreneurship and Small Business and Scandinavian Journal of Management.

Dr Heather Fulford is Reader in Entrepreneurship and Academic Director of the Centre for Entrepreneurship at Aberdeen Business School, The Robert Gordon University, Scotland. Her research interests include social enterprise start-up and governance and social entrepreneurship.
education. She is currently lead academic on a funded project with a social enterprise in Aberdeen. Her lecturing commitments included postgraduate and undergraduate modules on new venture creation.

**Ina Freeman** is an Associate Professor at Groupe Sup de Co, La Rochelle. Her research interests are in the human aspects of international business and marketing including ethics and human behaviour. She is also interested in various aspects of tertiary education including corporate governance across national borders.

**Brendan Galbraith** is a lecturer in the Ulster Business School, University of Ulster, Northern Ireland. He is the guest editor of an upcoming special issue in the Technology Analysis and Strategic Management Journal “Managing open innovation intermediaries in the technology transfer process” and has published widely in academic journals. He is a principle investigator for two newly funded FP7 open innovation-related projects – ‘MAPEeR SME’ (Making Progress and Economic Enhancement a Reality for SMEs) [FP7-SME-2009] and PARTERRE (Electronic Participation Tools for Spatial Planning and Territorial Development) [ICT-PSP-2009-3bis] and is a co-founder of the TRAIL Living Lab.

**Liang Guo** is researcher of Groupe Sup de Co La Rochelle, a private teaching and research institute in France. He is doing his PhD in social and political sciences at the University of Cambridge, UK

**Dr. Jun Li** is a Senior Lecturer of Entrepreneurship and Innovation at University of Essex, and Editor of Journal of Chinese Entrepreneurship published. He is a Visiting Professor at Fudan University, Zhejiang University, Zhongnan University of Economics and Law and Shantou University in China. He recently edited three special issues on topics of entrepreneurship and innovation in China.

**Dr Jukka Ojasalo** is at Laurea University of Applied Sciences in Espoo, Finland. He is Principal Lecturer and the Head of Master's Degree Programme. He has earlier been Professor of Marketing at Lappeenranta University of Technology. He has also been Professor of Marketing at Turku School of Economics and Business Administration and the head of Marketing Program in the Pori Unit. He is
Docent (Adjunct Professor) of Professional Services Management at Helsinki School of Economics. He is also Docent (Adjunct Professor) of Quality Management at Helsinki University of Technology. He completed his Ph.D. in Business Administration at the Swedish School of Economics and Business Administration in Helsinki, Finland in 1999. He holds M.Sc. (Marketing) from University of Tampere and M.Sc. (Software Engineering) from Tampere University of Technology.

Dr Renaud Redien-Collot is Professor of Entrepreneurship and Deputy Director of Advancia, the School of Entrepreneurship of Paris Chamber of Commerce. He founded the Masters Degree in Entrepreneurship at Advancia in 2005. He launched the French-American Conference of Entrepreneurs (FACE) in 2007. He is presently a member of the Board of Administration of Académie de l'Entrepreneuriat and at the head of the Académie de l'Entrepreneuriat's network dedicated to the development of research in the field of gender, entrepreneurship, and innovation. Since 2008, he has been a member of the Jury of the DELL and ICSB global Prize that rewards the most innovative SMEs for their development of Information System. As a member of the Board of Administration of the E. Roosevelt Foundation (1994-2000), he was in charge of several projects that have stimulated the development of entrepreneurship education and the emergence of innovative start-ups in the USA and in Europe. He will be the Chair of the 2010 EFMD Entrepreneurship Conference. His research interests include minority entrepreneurship, theories of innovation, leadership and intrapreneurship, entrepreneurship education, epistemology of the praxis in the realm of entrepreneurship, and the development of public and private discourse about entrepreneurs and entrepreneurship.

Professor Chunlin Si is Professor of Management Science, Director of Research Centre for Entrepreneurship and Venture Capital at Fudan University, China, and Editor of R&D Management in China. He is also the Honorary Professor at Zhejiang University and Changan University, China. He has published widely in the field of entrepreneurship and innovation in China and abroad.

Elaine Thompson is with Invest Northern Ireland (INI), prior to which she worked as commercial manager for Smurfit Recycling and was Sales and Marketing Director in start-up CWS Recycling, which she was a share holder.
Elaine has recently carried out empirical research on open innovation practices in UK high-tech SMEs. Through Elaine’s role with INI, she has been involved with programmes that support and develop collaborative networks in Northern Ireland including Smart Grid Ireland, Global Marine Alliance and Global Wind Alliance.

Dr Sebastien Tran is the Academic Director of Groupe Sup de Co, La Rochelle. He is a graduate of L’Universite Paris IX Dauphine (Ph.D.). His areas of interest are Strategy, Management of People and Organizations, and Environment. He is active in publications in this area, having published in some international conferences, Revue Française de Gestion, and International Journal Technology Management.

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Joy Tuoyo Adu holds a B.Eng Degree in Civil Engineering and two M.Sc Degrees in Structures and Water resources and Environmental Engineering. She joined the Department of Civil Engineering, Yaba College of Technology in January 1999. She is presently a trainer/facilitator in the Centre for Entrepreneurship Development of the college.

Chrysa Agapitou is Ph.D Candidate at the Business Administration Department of the University of Piraeus, Greece. She holds bachelor
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**Maria Antikainen** is a Research Scientist in the Business and Technology Knowledge Centre at VTT. She leads an open innovation virtual team and has been involved in various projects related to open innovation and social media. Maria has also worked as a part-time lecturer and supervisor at Tampere Polytechnic. Maria finished her PhD studies at the University of Tampere in March 2007. Her doctoral thesis concerned the attraction of company online communities from the relationship marketing perspective. She has several publications on open innovation, company online communities and social media.

**Christos Apostolakis**, Ptychio (Pireas-Greece), MA (Bournemouth-UK), MA (York-UK), Ph.D. (DMU-UK) Having acquired an academic knowledge background in Strategic and Public Management, Christos currently works as a Lecturer in Strategy for Bournemouth Business School. His interest on social entrepreneurship was triggered after a visit for research purposes to Newfoundland, Canada in 2007.

**Zahra Arasti** is Assistant professor, entrepreneurship faculty, university of Tehran, Iran. She has a PhD. in management, University of Toulon, France. M. Sc in Industrial Engineering, Institute National Polytechnic of Grenoble (INPG), France. B. Sc in Industrial Engineering, Sharif University of technology, Tehran, Iran. Research interest: women’s entrepreneurship, entrepreneurship environment, entrepreneurial policy, entrepreneurship education

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**Selvamalar Ayadurai** is a Consultant Trainer with a Training & Consultancy Firm based in Malaysia and an Adjunct Lecturer with the University of Newcastle, Australia. She is the Founder and President of a Malaysian NGO called TECH Outreach which creates self sustainable
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Martin McDermott is from Williams Township, PA in the United States. He is a full-time Marketing Professor for Kaplan University. He is also pursuing a doctorate degree with a concentration in Marketing from Argosy University. He has hosted a weekly radio show for 4 years on the topics of entrepreneurship and franchising.

Judith McKnight is a final year PhD student in the School of Management, Queens University Belfast. She has a first class honours degree from the same university in Business Management. Her thesis explores the relationship between Network Structure and Firm Innovation within a high and low technology sector.

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The Effects of Process Innovation in Logistics Service

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Abstract: As a key determinant of competitiveness and economic growth, innovation is an important issue for many industries in modern economies. Accordingly, the concept of innovation becomes a topic of interest among academicians and practitioners. There are many studies and classifications concerning innovation such as technical, process, product and administrative. However, much of what is written about innovation focuses generally on product innovation while underestimating the process dimensions of innovativeness. Thus, it is a great mistake to consider the concept of innovativeness only in the frame of product and high-tech issues. Process innovativeness is also a main theme to acquire competitive advantage in many industries such as logistics. Logistics is a basic activity in the context of value chain. It is widely acknowledged that logistics and its sub-factors are vital for utilizing business strategies successfully through distribution flexibility and responsiveness. As a result of the blurring boundaries from local to the international and global in globalizing economies, logistics industry today seems to be highly dynamic. Innovativeness on logistics processes appears to be an important way to differentiate the logistics capabilities and ultimately to achieve sustainable competitive advantage. Whether the literature abounds of evidences about the positive effects of logistics capabilities on business performance; there are only a few studies on logistics in concept of innovation. Based on contents of logistics and innovativeness, and in the context of process innovativeness, this paper aims to investigate the relationships among logistic capabilities, process innovativeness and firm performance. For this purpose a survey is conducted on 39 logistics firms from the database of Istanbul Chamber of Commerce. The collected data is submitted to validity, reliability and exploratory factor analysis. Then we used regression analysis to explore mutual relationships between the variables. As a result, the effects of process innovativeness on business performance of logistic firms are revealed and the moderator role of process innovativeness on the relationship between logistic capabilities and quantitative business performance is uncovered.

Keywords: innovativeness; capability; logistics; process innovation
Exploring Underlying Beliefs on Youth Entrepreneurship of Higher Education Graduates in Greece

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Abstract: The complex phenomenon of entrepreneurship is thought as generally divided to its exogenous and endogenous parts. The former concerns the existing market structure which incubates entrepreneurial opportunities while the latter concerns the human potential that habitually acts entrepreneurially. The socio-economic environment also shapes certain beliefs of individuals about the holistic process of business venturing. Such an obscure set of beliefs, or assumptions, underlies the frames of reference of latent or nascent entrepreneurs, being an influential factor of their cognition during entrepreneurial education, counselling or lifelong informal learning. An exploration of the entrepreneurial beliefs of graduates, i.e. next generation entrepreneurs, is crucial since it is expected to depend on the local culture and economic conditions. The present study seeks to reveal certain beliefs of Greek graduates on business venturing. A survey of consisting of a 34-item questionnaire was conducted amongst both science and economics graduates. The research methodology falls into the Theory of Planned Behaviour and the questionnaire includes affirmatively stated opinion items where individuals agree or disagree following a 5-item Likert scale. The items concern five major subjects of entrepreneurial thinking: conceptualizing entrepreneurship, entrepreneurial factors, motivation, risk management and business financing. Descriptive statistics, correlations and factor analysis are used to discuss the results for the distinct subgroups of latent or nascent entrepreneurs compared to the normal population. The results are contrasted to the latest GEM report for entrepreneurial activity in Greece. Gender dependencies and differences in beliefs between science and economics graduates are also presented in order to discuss implications of the results on entrepreneurship education and counselling.

Keywords: graduate entrepreneurship, nascent entrepreneurs, latent entrepreneurs, beliefs, entrepreneurial motivation
The Capitalization of Intellectual Assets: Evidence From the Innovative Technology Sector in Israel

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Abstract: In today’s knowledge-based world, ideas drive growth and development. It takes a long time to turn ideas into actual cash flows. Only by selling ideas for future goods, services and processes, can entrepreneurs gain immediate benefit from their innovative ideas. Venture capital industry is an industry that brings together ideas and high risk capital to generate value. In some cases, entrepreneurs and investors reside in different countries. In this paper we show that such cases provide two types of benefits; benefits to the entrepreneurs and the investors and benefits to the entrepreneur’s country. The first type requires the success of the technology firms (start-ups) that attempt to realize the innovation. The second type of benefit only requires the flow of high-risk capital from the investor's country to the entrepreneur’s country. This national benefit has two main components: increased wages and increased tax revenues. Israel is an example of a country that benefits substantially from high-risk capital, imported primarily from the US via venture capital funds. We compute the total benefit to the Israeli economy from foreign high-risk venture capital investment. We show that the foreign investment driven benefits to the Israeli economy from wages and payroll taxes are much larger than the benefits from successful start-up companies (“Exits”). Therefore, the government might be virtually indifferent to the start-ups’ success rate.

Keywords: public sector, high technology, venture capital, start-ups, economic growth, value generation

Business and Entrepreneur Characteristics influence on Business Performance of Professional Small Medium Enterprises

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Abstract: This study aims to examine the determinants of business performance of Small Medium Enterprises (SMEs) professional service
businesses based in Malaysia. Specifically, the study analyses the relationships between entrepreneur and business characteristics with business performance. Factors associated with entrepreneur characteristics include gender, age, ethnicity, education, and working experience. While the business characteristics examined were based on years of establishment, start-up capital, number of employees, business’s origin and legal status. The study adopts a quantitative approach whereby a questionnaire survey was used to gather data. The questionnaires were distributed to the owners of SMEs in Malaysia who are involved in providing professional services in the areas of law, architecture, engineering and accounting. A total of 2,376 businesses were identified and questionnaires were distributed via the conventional mail. Despite numerous efforts taken to improve the response rate, only three hundred and fifty three completed questionnaires were returned. It was found that generally the respondents perceived that the business performances of their companies were satisfactory and that they were gaining some form of financial profit. Further analysis on the relationship between the business characteristic and business performance found that the Years of Establishment, Business Set-Up, Number of Employees, Nature of Business, Business Ownership, Start-Up Capital, Business Structure, Source of Capital are significant to business performance. The study also examined the relationship between the entrepreneur characteristic and business performance and found that the gender and age of the entrepreneur significantly affect business performance. Businesses whose owners were male entrepreneurs and older comparatively perform better than businesses whose owners were females entrepreneurs and younger. It is hoped that the results of this study give insights into the characteristics of successful professional businesses, thus, assisting governments in formulating policies for the development of these SMEs.

**Keywords**: business performance, professional service businesses, small medium enterprises, entrepreneur and business characteristics

**The Relationship Between Intellectual Capital, Innovation and Competitive Advantage**

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**Abstract**: The main purpose of this study is to evince the influence of intellectual capital (IC), on innovation by constructing the relationship based on the three components of (IC) namely human, organizational
and relational capital. The shift of the traditional tangible assets’—land, facility, work force, physical and financial capital—role considered as genuine capital, towards more subtle forms of capital creates a crucial factor for the achievement of the competitive advantage and successful firm performance through the mediating role of innovation. Amid in this research agenda three partial gaps have been explored: First previous works have almost exclusively focused on the co-alignment between IC and innovation as compelled to deliver competitive advantage and firm performance. Although a robust IC-innovation relationship appears to be plausible in the literature, a little empirical evidence has so far been offered to support this relationship. In doing so this study investigates the three forms of IC in the context of their impact to innovation. Second, while the relationship between innovation and firm performance has been theoretically inspected, the relationship has not been analyzed empirically along with the innovation’s influence on competitive advantage. Third, the paper investigates the multidimensional and contingent gradual effect of IC on competitive advantage and firm performance through the conjunctive role of innovation. Hence this study develops a platform through which IC will shape innovation, and progressively firm performance and competitive advantage.

Keywords: intellectual capital, competitive advantage, firm performance, innovation

Towards Collaborative Open Innovation Communities

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Abstract: Open innovation (OI) communities have changed our conceptions of how innovation can and should be managed and have prompted calls for new theories of innovation. OI communities with customers can act as a source for learning and producing external ideas or even solutions to companies. As earlier studies indicate that collective problem solving improves the quality of ideas, motivating and supporting collaboration in online OI communities is important. This explorative study explores collaboration in online OI communities by answering two questions. The first question considers users’ motivations to collaborate in OI communities, while the second one explores how rewarding can be used to motivate collaboration in OI communities. The study consists of three cases: CrowdSpirit, FellowForce and Owela. The preliminary results are based on the data gathered by interviewing maintainers of the communities and by a questionnaire to the community members. According to the results, the users were motivated to collaborate by
interesting objectives and the concept of the community, gaining new viewpoints from other users, obtaining better products and receiving rewards. The results also indicate that the lack of proper tools inhibits collaboration in OI communities. Furthermore, an OI community’s rewarding strategy should be transparent and logical. Rewarding should be based on the efforts and quality of the work rather than on giving rewards based on the quantity of ideas or lotteries. The system should be flexible so that rewards vary in different situations and phases of the work. The equity and democracy of the rewarding system are important factors for OI community users. Additionally, customisability of the rewarding strategy ensures that users can influence, on some level, the nature of the rewards they receive, and the rewards will therefore be more valuable to everyone. This explorative study is one of the first studies of collaboration in online OI communities. In addition to serving academia, the study provides practical knowledge on how to reward and motivate groups of members on the web to companies and the growing number of OI intermediaries building or planning to build innovation communities.

**Keywords:** online communities, open innovation, intermediaries, rewarding, collaboration, monetary, non-monetary, tangible, intangible, recognition, motivation, case study

**Perceived Causes of Business Failure: An Empirical Study of Iranian Entrepreneurs**

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**Abstract:** New firms create new jobs and opportunities for social mobility, foster economic flexibility, and contribute to competition and profitable efficiency. Business discontinuation is an important feature of dynamic economies and entries and exits of businesses are closely connected. Our understanding of entrepreneurship will never be complete without deep acknowledge of entrepreneurial failure. Most of the entrepreneurship literature has focused on successful ventures, so, little is known about why ventures fail. The annual report of Global Entrepreneurship Monitor shows that there are significant inter-country differences in SME failure rates. On the other hand, most of researches on business failures have been done in developed countries and there is limited knowledge on causes of business failure in other countries with different economical, political, social, and cultural conditions. As entrepreneurship is newly developed in Iran, analysis of the entrepreneurship process, and the causes of failures and successes,
considering the economical, social, and cultural conditions of the country would provide critical information for individual entrepreneurs, venture financiers, and government policymakers. The purpose of this current study is to identify the main causes of business failure based on an empirical study in Iran. Research samples are not limited by characteristics of entrepreneurs and businesses or geographical location of businesses, in order to study more cases of unsuccessful entrepreneurs. Data gathering was done with the help of a questionnaire implemented face-to-face in a sample of 51 failed business-owners/managers. The results of this research point out that the main causes of business failures are due to lack of good management, no support from banks and financial institutions, inadequate economic circumstances, and government policies. This study also indicates differences in some causes of business failure by gender and business sectors. These results help to better the programs, the entrepreneurship education and business skills for entrepreneurs, as well as an effective policy to remove entrepreneurial barriers and provide a secure and encouraging environment to entrepreneurship.

Keywords: entrepreneurship, business, failure, causes, Iran

Significance and Impact of Internet on the Entrepreneurial Process: E-Entrepreneurship and Completely Digital Entrepreneurship

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Abstract: Much has been written about the affect of Information Technology (IT) and the internet on the Net Economy and the rise of E-Business. E-Entrepreneurship is typically known as the process of creating these eBusinesses. We discuss the concept of Completely Digital Entrepreneurship (CDE) where IT and the internet not only affect the E-Business, but also the entrepreneurial process of creating the E-Business as well as the way these eBusinesses are managed using Virtual Teams. We provide a Conceptual Framework for CDE and provide examples of how IT and the internet affect the entire E-Business value chain during the Pre-Seed, Seed, Startup, and Expansion phases of the entrepreneurial process. The main advantages of Completely Digital Entrepreneurship that help newly formed eBusinesses compete with established businesses include: reduced transaction and administration costs, increased agility, internationalization (CDE means
that companies are born global), and enhanced customer participation in the businesses’ processes. Disadvantages include difficulties with protecting Intellectual Property, creating a corporate culture, employee loyalty, and inter-company communication.

Keywords: e-entrepreneurship, internet start-up, web 2.0

The new Laws of Technological Innovation: Looking at the Case of Nano-Entrepreneurship and Policy-Making

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Abstract: This paper explores the emergence of new societal norms governing technological innovation. It is based on an empirical study of the impact of nano-entrepreneurship on policy-making. Nanotechnologies refer to the science and technologies of developing new materials and devices by working at the atomic and molecular level, typically defined as at a scale which is inferior to 100 nanometers in at least one dimension \(1\text{nm}:10^{-9}\text{ meters}\). At this scale, materials can present entirely new properties never observed in the natural state before. This leads to the development of a wide range of applications in such fields as medical treatments, agro-food, electronics, advanced manufacturing or energy. Both intrapreneurship and entrepreneurship are extremely active in the field of nano-applications. Analysts predict that the market of manufactured products incorporating nanotechnologies will reach a trillion euros within less than a decade, with a projected annual growth of around 20% till 2013. However, the very differences between materials in their nano- and bulk- formats that make them of interest in new applications also suggest that these materials may interact differently with ecosystems and living cells. This raises questions linked to the management of the unknown and of potential harms to the environment or to human beings. Nano-entrepreneurship is therefore highly dependent on the regulatory context which surrounds the emergence of nanotechnologies. Using a grounded theory approach and a methodology which rests on a comparative analysis of archival sources complemented by focused interviews, the paper firstly analyzes the specific characteristics of nano-entrepreneurship by focusing on three variables: research, patenting and the arrival on the market of new products and services. It then examines compulsory and voluntary forms of nano-regulation and discusses their popularity and their competitive advantage for nano-entrepreneurs. It shows that these are also institutional entrepreneurs because the choices they make contribute to shape nano-governance. They
participate in the development of a new form of technological democracy which has the following characteristics: it is global, it pushes back the notion of national ownership of regulatory frameworks and it rests on benchmarks that embed sustainable development and are testable and certifiable. The findings contribute to the new institutional theory literature as well as to the entrepreneurship literature. The potential for generalization of the study to other sectors of innovation could mean that the findings also contribute to the innovation and policy literature.

**Keywords:** innovation, nanotechnologies, regulation, governance, technological democracy

**A Conceptual Model for Developing Venture Capital in Emerging Economies**

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**Abstract:** Innovation, new ventures and entrepreneurship fuel the engine of the modern economy. Venture capital (VC) has had tremendous impact on the world’s economy since the end of the Second World War. It plays a pivotal role in the entrepreneurial process. It creates value by stimulating innovation in new ventures especially in technology-based firms (TBFs), and sustains economic growth. This paper identifies the importance of venture capital in entrepreneurship development, as a catalyst for innovation, technological and economic development. The study uses an exploratory approach to gain insight into the activities of venture capitalists in emerging economies and concludes by proposing a conceptual model for accelerating the development of their VC industry through commercialisation of patents and intellectual property (IP). The study suggests recommendation on policy changes that could make VC a more viable and preferred alternative to traditional debt financing, and public funding options for entrepreneurial start-ups and expansion.

**Keywords:** venture capital, innovation, emerging economies, portfolio companies, model, intellectual property
What About a Fresh new Start? Public Opinion on Bankruptcies in Flanders

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Abstract: Although authorities acknowledge the importance of entrepreneurship in the current economic climate, the entrepreneurial activity rate in Flanders is compellingly low compared to its surrounding regions. Following EU recommendations, reactivating failed entrepreneurs as part of the overall stimulation of entrepreneurship, has to become one of the spearheads of any government because it is widely acknowledged that after a first failure, restarters can be much more successful. However, in Flanders it seems that entrepreneurs who have failed, are often not inclined to set up a new business. One of the most important thresholds is the image failed entrepreneurs suffer. Underlying study examines several prejudice opinions among the Flemish population about entrepreneurship and more specific about bankruptcies and second chancing. The key question in this article is: “Do bankrupts in Flanders suffer a social stigma?"

Keywords: bankruptcy, fraudulent, failure, stigma of failure, restart

Entrepreneurial Networks: The Analysis of a Micro-Firm Entrepreneur’s Personal Network

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Abstract: Social networks represent the immediate environment in which entrepreneurs are embedded, and therefore they have a significant impact on the entrepreneurial process. In extant entrepreneurship research the entrepreneur’s personal success and the success of their firm’s were often attributed to personal relationships or social networks. Entrepreneurs have access to many valuable resources, information, advice and moral support through their personal networks. In order to accurately manage the personal relations in the network, it is important to know the structure of the network. The main focus of this study is on the structural characteristics of a micro-firm entrepreneur’s personal network. In this study a single case analysis approach is used. The study’s principal goal is to present an analysis of the structural characteristics of the entrepreneur’s personal network, and each entrepreneur’s personal sub-network. The study provides
significant contributions to entrepreneurship network theory and practice. The key contribution of this research is the thorough examination of the structural characteristics of the entrepreneur’s personal network, and the analysis of the characteristics of each entrepreneur’s personal sub-network. By knowing the network characteristics that are required for an efficient network, the network formation process can be more successful. The findings of this research could be helpful for entrepreneurs who are in the process of forming their personal networks as well as for entrepreneurs who want to improve the efficacy of their personal networks.

**Keywords:** entrepreneurship, personal networks, resource acquisition, information acquisition, friendship, growth

**Organizational Framework Conditions, Organizational Culture and Intrapreneurship in Hospitality: A Case-Study**

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**Abstract:** The Ritz-Carlton Hotel Company is well renowned for its successful human resources practices and famous for its motto: “We are Ladies and Gentlemen serving Ladies and Gentlemen”. What is less studied is how the company’s culture e management practices are related to corporate entrepreneurship. In this article we will present the case of Penha Longa, a Ritz-Carlton resort in Portugal. Based on in-depth interviews, with the General Manager and Human Resources Manager, secondary data and in-site observation, we describe how Penha Longa succeeds at being one of the most innovative resorts in the luxury market by establishing some organizational framework conditions to foster entrepreneurial employee behaviour: opportunity and availability of information; idea generation processes; simplicity and speed of decision-making; and, flow of resources to innovative initiatives.

**Keywords:** corporate entrepreneurship; intrapreneurship; hospitality; innovation
Improving Creativity Results and its Implementation in Organizations Using Creative Techniques Through Experiential Learning Training

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Abstract: In this paper we investigate the application of experiential learning training in a new field and its benefits: how experiential learning of the creative technique of brainstorming can increase idea generation effectiveness in organizations and subsequently faster idea implementation and easier operational execution. This paper presents a comparison between ‘experiential learning training’ versus ‘no kind of training’ and ‘experiential learning training’ versus ‘non-experiential learning training’ of eighty five groups from different organizations. Some groups participated in a brainstorming session in an ‘experiential learning training’ through a competency training programme, other groups participated in a brainstorming session without ‘any kind of training’ and finally the rest of the groups participated in a brainstorming session with ‘non-experiential learning training’. Team activity was recorded for further analysis and quantitative data was gathered and processed related with, i.e. number of ideas generated and number of ideas implemented. The findings showed that learning brainstorming through Experiential Learning training significantly increased the fluency and flexibility of ideas generated. The results also showed an increase in the number of creative ideas implemented.

Keywords: organizational innovation, experiential learning, creative techniques, brainstorming, creativity training, creative projects

Technology Transfer Approaches for Early Stage Desalinization Technologies

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Abstract: Fresh water scarcity is one of the major challenges facing our society. Established technologies exist, though they are still very expensive preventing them from the immediate use and possible final solution. In this work it is analyzed an innovative technology developed...
at the Massachusetts Institute of Technology (MIT) for desalination, using Ionic Concentration Polarization (ICP). Economic viability and a potential business model to deploy this technology are described in this work. Construction of a prototype with several microchannels, and product development are still necessary, but the adoption of the niche market for small emergency devices to produce fresh water for boats can potentially be a successful path to deploy this technology.

**Keywords:** desalination, ICP, business model, early stage technology, boat

### Phasic Effects of R&D Subsidy on Firm Innovation

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**Abstract:** R&D and innovation have emerged as crucial factors for economic growth and welfare, and government policies designed to promote them are widely observed all over the globe. Particularly, financial supports including direct R&D subsidies are among the most effective policy measures. Accordingly, there have been a number of theoretical and empirical studies on effects of government R&D subsidy. In the literature, however, the discussion has been focused on its impacts on R&D investments. This report extends the discussion to analyze the whole procedure of firms' innovative activities: i.e., the stages of (1) participating in innovative activities; (2) deciding investment level; (3) achieving (technological) innovation; and (4) reaping (economic) outcomes of innovation. Utilizing the detailed information on firms' characteristics and innovative activities of 2008 Korea Innovation Survey, effects in the four innovation stages are estimated separately by Probit or OLS. Lastly, the results are compared with the matching estimators in each stage. The results show that a government R&D subsidy (1) increases the probability of participating in innovative activities by 50%, (2) increases the R&D investment level by 0.44%, (3) the probability of achieving technological innovation by 13~14%, and (4) the economic outcomes of innovation is little affected by government R&D subsidies.

**Keywords:** R&D subsidy, innovation, Korean innovation survey, matching estimation
Business Start-up and Growth Motives of Entrepreneurs: A Case Study in Bradford, United Kingdom

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Abstract: This study attempted to investigate start-up and growth motives of entrepreneurs who operate in small and medium scale in Bradford, UK. Despite entrepreneurial motivation being considered as a strong predictor of entrepreneurial outcome and success there is no consensus with respect to the nature of the effect of wide array of motives in determining entrepreneurial outcome. Further, literature has mainly focused on investigating entrepreneurial motivation to form new ventures and rarely did it attempt to explore whether start-up motives change with business growth and if so, how. The reinforcement of the employment strategy of the Government of the UK is based on premise that entrepreneurial success in a region is functionally related to achieving socio-economic success of the country. Accordingly, if entrepreneurial activity in the UK to be encouraged, an in-depth understanding of the entrepreneurial motivation to form and achieve the growth of business ventures in a particular context is crucial. In-depth interviews were conducted using ‘storytelling’ approach and narrative analysis was used for data analysis. The findings of the study revealed that each entrepreneur was motivated by a combination of ‘pull’ and ‘push’ motives at the start-up stage and entrepreneurs were unable to identify single overarching type of motive. Accordingly, this article questions the appropriateness of differentiating entrepreneurs at a broader level as ‘push’ and ‘pull’ based on these two types of motives. The findings also revealed that motivation to start a business widely varied from that of growing it where even though start-up was a combination of ‘pull’ and ‘push’ motives growth was mainly motivated by ‘pull’ motives. This finding led to question the appropriateness of using start-up motive as a predictor of entrepreneurial outcome since the growth and success were determined by growth motives. Based on patterns observed between growth motives and entrepreneurial outcomes, three types of entrepreneurs were identified. Practical implications and avenues for future research were highlighted.

Keywords: start-up, motivation, entrepreneur, small and medium scale, business growth
Bringing Enterprise Alive – Two ‘International’ Case Studies in the Innovative use of Simulation Based Entrepreneurship Education

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Abstract: The European Commission report on “Entrepreneurship in Higher Education” (2008) reported that the “benefits of entrepreneurship education are not limited to start-ups, innovative ventures and new jobs. Entrepreneurship refers to an individual’s ability to turn ideas into action and is therefore a key competence for all, helping young people to be more creative and self-confident in whatever they undertake.” The challenge is therefore, how do we bring enterprise alive with limited resource in terms of both funding and staff; disparate academic departments working in isolation; large student numbers; a combination of student apathy and student enthusiasm; staff apathy and staff enthusiasm. This paper provides a case study in the delivery of entrepreneurial learning in two university contexts and as such will be of value to those involved in the design and development of such courses in higher (post 18 years) education setting. Both universities use the same business simulation software although in different ways and both include an element of either assessed reflective learning and/or business analysis. The first case study is taken from research-led institution Swansea University [Prifysgol Abertawe], Wales and is taken from the professional skills module which is compulsory for all (1	extsuperscript{st} Year) undergraduate students in the School of Business and Economics. Students are asked to demonstrate that they have developed a practical appreciation and basic knowledge of enterprise and entrepreneurship and an ability to work as part of a team; problem solve; understand and respond to demands on a variety of resource issues; make decisions and review and reflect on the impact of those decisions. The second case study is concerned with the delivery of a module for Level 2 (2	extsuperscript{nd} Year) undergraduate university students studying at the Faculty of Business and Law, Leeds Metropolitan University, England. The module aims to ‘provide a simulated experience of how organisations work, enabling skills and knowledge from disparate subject areas to be synthesised and assimilated in solving relatively complex business problems.’ [Leeds Met Module Specification 2009]. Both case study modules are placed within courses that are core to some of the most
popular undergraduate programmes of study and therefore potentially involve delivery to hundreds of students simultaneously.

Keywords: business simulation, entrepreneurship assessment, sustainable innovative teaching, embedding entrepreneurship, entrepreneurship pedagogies, entrepreneurial learning

Opportunities in Projects and Innovative Thinking

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Abstract: Projects are popular work-form in the modern organisational world. They can be considered as learning arenas, where new knowledge and solutions can be developed and applied. This paper considers an important aspect of the concept of project, namely uncertainty. Dealing and managing with uncertainty in projects is then looked at in connection with creativity and innovation. In order to establish the connection between managing uncertainty in projects and innovative thinking, this paper utilises relevant organisational theories, as well as observation and reflection on practice. Projects generally encounter uncertainty. Studies that were carried out in Norway and England concluded that focusing on threats is the dominating aspect in managing uncertainty in projects. Firstly, this paper tries to look at the positive side of uncertainty, i.e., opportunities. In this regard, the paper attempts to characterise opportunities in projects – in general as well as with respect to different types of objectives that are associated with projects. Secondly, this paper suggests ways of finding / creating opportunities. The suggestions have two elements. They are (1) cooperation between project managers and project owners and (2) project members’ attitudes and reflection. Cooperation between project managers and project owners can produce a holistic understanding of projects. Attitudes point out the manner that project members approach and deal with uncertainty (and opportunities) in projects. Thirdly, this paper tries to connect the major concepts of this paper; connecting cooperation (between project managers and project owners), project members’ attitudes, reflection, innovative thinking and managing uncertainty and opportunities. In addition, this paper discusses how important it is to focus on the issue of innovation in project work and in the development of the field of project management.

Keywords: uncertainty, opportunity, holistic understanding, attitudes, innovative thinking
Recycling Stock Market Using Information and Communication Technologies: An Innovative Service to Create a Micro-Trend for the Environment

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Abstract: European Commission in recent research findings regarding waste management introduced the relation between wealth and waste. As European society has grown wealthier, it has created more waste. Each year in the European Union, 1.3 billion tons of waste is thrown away. According to European Environment Agency statistics, this amounts to about 3.5 tons of solid waste for every man, woman and child (European Commission). A review made by the Organization for Economic Cooperation and Development found that between 1990 and 1995, the amount of waste generated in Europe had increased by 10%. The same organization estimated that by 2020, Europe could generate 45% more waste than it did in 1995 (OECD, 2006). This paper proposes a service on recycling by bringing together technology, economy and environment. The main idea is to establish a service which is expected to increase the recycling rates and create added value in a region through a micro-trend. The purpose is to create a micro-trend among inhabitants trying to change the attitude over recycling and attract them to involve in the protection of valuable resources. This research paper investigates the acceptability and value of the proposed service among consumers as well as the potential obstacles that might be raised on its implementation. A theoretical framework was adopted on three complementary perspectives by integrating technology (ICT theories and practices), economy (finance and stock markets) and environment (waste management & prevention). A cross-sectional web survey design was employed in a global diversified sample of 100 participants (consumers, researchers, industry experts and members of non-governmental institutes). The survey has been carried out in two phases: pilot phase and the survey. Three types of analysis were conducted: descriptive data analysis, bivariate correlation and group comparison. The global issue of environment's sustainability combined to low recycling rates in the region of European Union was strong motives for this study. The framework introduced has proven to be useful in improving the recycling percentages in the region. Consumers are willing
to participate in the new service. On the contrary, recycling industry and local authorities might raise obstacles for the implementation, since its introduction request changes to be made. The specific paper contributes to the recycling industry sector as well as to other professional sectors that are involved in the recycling business.

**Keywords:** recycling, innovation, information and communication technologies, regional development, environment, technology

**Entrepreneurial Intents of University Students: Evidence From Greece**

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**Abstract:** Over the last thirty years or so, we have witnessed an exponential increase of the number of entrepreneurship courses delivered in higher education institutions mainly due to claims that link relevant education to entrepreneurship and employment creation. Current economic crisis gave further impetus to this development which now appears to be on almost every government’s educational agenda across the world. Despite, however, the merits of the above endeavors there is no consensus regarding the real impacts of entrepreneurship courses with regard to the creation of new ventures. Along this line of thought, many scholars suggest that entrepreneurship education differs from country to country and even across the same country from one educational institution to another, mainly due to differences in learning practices and actual administrative support. This paper seeks to add further information in this field by examining the students’ propensity towards the creation of new ventures in an institution–specific context of certain Greek Economics and Business University (a discipline-specific one), located in the metropolitan area of Athens. In particular, by exploring students’ entrepreneurial attitudes and intents in terms of establishing new business as well as the way they perceive the support provided by the university environment, we try to identify the intrinsic and extrinsic factors that nurture or hamper new ventures’ creation intents in the context of formal academic institutions. The present research constitutes only a part of a multi-lateral academic research project on the students’ propensity towards business foundation, initiated in 2008 by the German Centre for Entrepreneurship (ZMG), located in Mannheim, Germany. For the present paper we conducted a structured questionnaire survey collecting data from 257 undergraduate and graduate students in the university under investigation. Based on this sample we explore certain motivational, socio-demographic and
environmental factors that might influence students’ attitudes towards founding new business. Contrary to popular perceptions dominant in other western economies, our results indicate that the majority of the university students surveyed are not inclined towards any startups’ creation and have no grand business foundation ideas. Further, our findings related to socio-demographic characteristics suggest that the propensity towards the creation of new business is statistically significant only for factors such as the students’ prior entrepreneurial experience, their father’s entrepreneurial background and the students’ prior experience in leadership. No environmental barriers were found to significantly affect those students’ business establishment propensity. The paper concludes with recommendations for making entrepreneurship education more customized to individual institutions’ and the countries’ needs, thus, more efficient in encouraging students’ actual entrepreneurial activities.

**Keywords:** entrepreneurial intent, university students, experience for start-ups, university support, Greece

**Failing to Find the Business Model in the Case of Mobile Direct Sales**

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**Abstract:** Mobile Direct Sales (MDS) was a pilot case in an EU funded integrated project Collaboration@Rural (C@R) implemented in Åboland the Turku Archipelago Living Lab. The aim of the MDS case was to develop tools for local producers and entrepreneurs in the Archipelago area in the South west Finland. Three cycles of prototypes were co-developed with the local producers. The originally identified needs were fulfilled and the C@R goals were reached. Nevertheless, the project did not proceed to the commercialization phase due to the lack of a viable business model for producers to employ. This paper discusses the software developer’s point of view on the reasons of the failure to identify the business model early enough in the project to be able to implement it. Additionally it compares the results on a parallel case in the C@R project - eDemocracy Toolbox (eDT), which introduced systematic use of video conferencing in local administration and local government. The two cases used Living Lab methodology which is assumed to be more efficient in capturing the actual users’ needs in real life environments and use situations than traditional methods. Both
cases were also considered to be both a success and a failure depending on the point of view.

**Keywords:** Living lab, Collaboration@Rural, social software engineering, requirements engineering, test-driven software development, business process modelling

**The Importance of History for Entrepreneurial Activities: A Regional Perspective**

Sabrina Florkowski, Blekinge Institute of Technology, Sweden

**Abstract** In this conceptual paper, the concept of path dependency is used as an interpretive lens to examine the relationship between entrepreneurship and regional development. A critical review of the path dependency literature showed that the concept needs to be complemented first to fit the purpose of this paper. Three suggestions have been made. By using path dependency as an interpretive lens, five interrelated propositions could be made addressing the suggested complements. First, discussing entrepreneurship in a regional context, three different dimensions of path dependency should be taken into consideration: the technological, cognitive and social dimension. So far the cognitive and social dimension of path dependency has been neglected. Second, entrepreneurial activities form a regional path which is linked to the industries within the region. Third, there are two different types of entrepreneurship, namely radical and related entrepreneurship. Fourth, the same types of entrepreneurship will trigger different regional development processes depending on the specific situation of the region. Fifth, entrepreneurs who possess new information from outside the region will more likely alter the path of the region.

**Keywords:** path dependency, entrepreneurship, regional development, innovation

**Resources for the Student Entrepreneur: Classification and Application**

Heather Fulford, Robert Gordon University, Aberdeen, UK

**Abstract:** Student entrepreneurs today have at their disposal a vast array of both online and offline resources which they can draw upon when generating business ideas, screening and evaluating business opportunities, formulating written business plans, and preparing investor pitches. These resources present the entrepreneurship educator at
university level with a pool of support and examples which, if used carefully and thoughtfully, can become invaluable vehicles for illustrating and conveying some of the key messages of both entrepreneurial theory and practice. The purpose of this paper is to provide an overview and classification of the principal resources available for use in university entrepreneurship programmes, and to indicate ways in which resources can be applied and integrated into the university entrepreneurship curriculum to aid and enhance student learning.

**Keywords**: Entrepreneurship education; entrepreneurship educator; online resources; business advice; business plan

**An Examination of Reduced Potential for Innovation and Enterprise in an ICT Cluster**

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**Abstract**: The paper identifies the potential for enterprise and new venture creation problems in the ICT industry in Scotland due to the withdrawal of several large multi-national firms. Marks and Huzzard (2010) identify two core competencies associated with innovation and competitiveness in the ICT sector: vocational skills and employability skills. Employability skills are advocated as key to generating innovation and enterprise in organisations, and consequently they are often called enterprise skills, implying the anticipation of new firms as an integral part of developing a competitive knowledge economy. Skills development post education has traditionally been within large firms in the ICT industry, but the majority of large firms withdrew from Scotland just under a decade ago. Remaining SMEs have maintained their position in the market by creating one or two core products, or providing developmental services to larger organisations. New graduates are lacking in employability-enterprise skills which are not being developed by smaller employers. This has led to a skills stagnation and ultimately sector stagnation. For entrepreneurship to be facilitated or indeed to flourish, theory relates that a dynamic, healthy sector with a diversity of players and participants is necessary. The withdrawal of the large firms from Scotland may have removed a vital part of the enterprise process.

**Keywords**: large firms, enterprise, ICT, small firms
The Relation Between Organizational Learning Capability and Product Innovation Performance: An Empirical Test in Iranian Organizations

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Abstract: This paper assesses the relation between organizational learning capability and product innovation performance in Iranian companies. We consider organizational learning capability as a function of seven dimensions or mechanisms: open environment and experimentation, risk taking, interaction with the external environment, distribution and sharing of internal knowledge, system thinking, ongoing training and participative decision making. The impact of these mechanisms on product innovation performance is also analyzed. We used correlation and linear regression to test our research hypotheses on a data set from food, medicine and cosmetic industries of Iran. Results support our conceptual model and underline the importance that learning has for innovation performance.

Keywords: organizational learning capability, product innovation

The Relationship Between Strategic Leadership and Innovation

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Abstract: Innovation is created in organizations through implementation of innovative and new ideas resulted from individual or organizational learning. Organizational innovation thus involves exploratory as well as exploitative innovation. Prior theoretical studies show that explorative and exploitative innovations are related to the quality of strategic leadership in terms of transformational and transactional respectively. This research considers how transformational and transactional leadership behaviors affect two kinds of aforementioned innovations. In this study, data was collected via questionnaires from some Iranian innovative organizations. The data were analyzed and a model was developed. Our results show that transformational leaders may achieve exploratory innovation through developing new knowledge or new products. On the other hand, transactional leaders rely on extension of existing knowledge to accomplish exploitative innovation.
Keywords: exploitative innovation, explorative innovation, transformational leadership, transactional leadership, organizational learning

From Bad to Worse? The Survival of Guanxi and Corruption in the Evolving Institutional and Legal Context

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Abstract: Recent history has not favoured China with a stable legal and regulatory environment. Instead, personal connections – guanxi – enabled individuals and their networks access to support and resources. As the clarity of laws improves, functioning markets established and mechanisms for enforcement developed, a decrease in relationship practices and an increase in impersonal, bureaucratic interactions should occur, the latter enabling transactions at lower cost than ones mediated by time-consuming social relations. The Chinese legal system has supposedly improved and difficulties of doing business should logically have decreased. However, some studies as well as the empirical evidence presented herein suggest that this might not have happened. This study extends extant research to see if this has happened by exploring the resilience of relational practices to the formalising institutional system. Specifically, extant theory and empirical evidence from the institutional and guanxi literatures are employed to investigate one research question: how has the evolution of the institutional and legal context affected guanxi practices? Our research methods were exploratory and qualitative, conducted among long-standing foreign and Chinese business managers in China. To enhance validity, data were collected through multiple sources: non-participant observation, semi-structured interviews and internal documents. Systematic content analysis was performed in a thematic way with qualitative research software. The data supports recent observations suggesting that the business environment has become more difficult and that network and gift-giving practices are both required and perhaps transforming into something altogether less pleasant. Five themes emerge from our research: 1) relationship practices continue, 2) in a changed legal and moral context; 3) as a result, the emphasis of the practices has changed; 4) institutional change and moral collapse provide exploitation opportunities; and 5) a fallacious orientalism drives the inter-cultural management industry. Our paper contributes to the emerging understanding of China's transition, particularly with respect to
the formal and informal institutions governing the overlap between economic and social behaviour. From a theoretical perspective, it augments the institutional literature on China. From an empirical perspective, it provides a rare in-depth qualitative description and analysis of perceptions of Chinese business practices from Chinese and foreign managers. For practice, it provides insights to managers as to how relationships with Chinese partners should be considered and developed.

**Keywords**: guanxi, social relationships, institutional and legal environment, China

### Intermediaries in the Management Process of Innovation: The Case of Danish and German SMEs

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**Abstract**: Information is a critical resource in innovation processes. SMEs are therefore advised to draw on consulting in innovation processes, as they cannot ensure the necessary information flow internally due to lesser resources. From the strategic point of view, the involvement of intermediaries is accompanied by the risk of losing specific knowledge to the business environment. But the other way around: To neglect the integration of consultancies could mean a deficit in the process of information management. Based on an empirical comparative study of Danish and German SMEs – Danish companies utilize public as well as private consulting services more often – determinants of the usage of business consultancies in innovation processes are explored. One important implication of the paper is, that the consulting system has difficulties in reaching smaller SMEs and should be modified to reach SMEs much better.

**Keywords**: SMEs, consultancies, innovation, network
Technology Audit: An Empirical Study on SMEs of Istanbul

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Abstract: Technology, as being identified by Porter (1998), is one of five forces that drive industry competition. Firms have to face the fact that they should innovate by using advanced technologies for their survival. Accordingly evaluating the technological strengths and weaknesses becomes an imperative for both academics and practitioners. However traditional performance audits are biased against technological innovation. This gap results in a new type of performance measurement model called “Technology Audit”. Technology audit is an analysis performed to identify the strengths and weaknesses of the technological assets of an organization and to evaluate the opportunities and threats from which potential for international competitiveness arises. The instrument of technology audit can provide a sound basis for policy making for both small and medium sized firms (SMEs) and big firms. Here the term SME has a vital importance. SMEs account for more than 80 percent of jobs in developing countries. The economists claim that economic activity moves away from large firms to SMEs and so their survival and growth becomes very important. This empirical study tries to describe the technology audit process and with a comprehensive literature review and conduct a technology audit on SMEs located in Istanbul. Even though it has been widely accepted that the SMEs that survive are important sources of innovation and contribute to a large proportion of growth at the economy-wide level there has been little study done of the innovative behavior of SMEs in general and of the innovative behavior of SMEs in developing countries in particular. Based on a survey conducted on 53 manufacturing SMEs, we found that there is i-) a medium level of awareness considering the importance of technology and innovation within SMEs of Istanbul, ii-) a deficiency in networking and collaboration, 3-) lack of university industry collaboration and 4-) economic insufficiencies for funding innovative activities in Istanbul.

Keywords: technology, innovation, technology assessment, technology audit, Istanbul
An Evolutionary View of Innovation and Economic Performance: A Firm Level Analysis

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Abstract. It is rather consensual that firm growth driven by financial long run profits seeking, depending on market structures and how firms adapt to it thanks to their productive resources (Penrose, 1959; Nelson and Winter, 1982; Teece, 2006). However, some differences emerge when it comes to the origin of the productive resources that raise growth. Considering an industrial market structure, evolutionary approaches describe innovations as a source in favour of the emergence of “path dependencies” (because of lock-in effects and sub-optimal behaviours on the market and inside organisations) affecting innovativeness inside organisations. In fact, even minor exogenous shocks may affect the occurrence of a particular path, changing the structure of a given competitive model. This paper examines with two-stage least squares method economic performance’s impact on the persistent dynamics of innovation inside the French industry using two waves of community surveys starting from 2002. It appears that the more firm growth raises (at upper quantiles), the more innovativeness increases, and rises above the medium rate when the productive opportunity of the firm is not limited within the studied period.

Keywords: innovation, capabilities, complementary assets, economic performance, two stage least squares

Competent to Innovate: An Approach to Personal Development to Improve Innovation Competency in SME’s

John Howard, University of Central Lancashire, Preston, UK

Abstract: This paper builds upon earlier work presented at ECIE in 2009 by Howard and Gillies. The Excellence in Innovation Framework (EiI) is a Maturity Model framework for organisational development and change management to enable SMEs to assess their current capability in innovation in order to maximise the return on their investments and prioritise developments in organisational processes encapsulated within an on-line tool which is available to SMEs via the Internet. The paper describes the theoretical basis for a competency framework applied as part of an overall change management approach which identifies competency and development needs for individuals within the organisation based on both their role and the maturity of the organisation determined by assessment against the maturity model. Competency is
assessed against performance levels which identify the individual’s degree of skill or proficiency in relation to each identified competency item. Once development needs have been identified these can then be addressed in learning and development programmes tailored to the specific needs of the individual with re-assessment of competency producing an evaluation of the effectiveness of the learning.

**Keywords:** innovation, small medium-sized enterprise (SME), competency, maturity model, education, training

**Identifying Entrepreneurial Characteristics and Opportunities in Technology Entrepreneurship**

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**Abstract:** This paper examines the unique characteristics and context of engineers-turned-entrepreneurs. In terms of the innovation process, this research analyzes the advantages and disadvantages of a technology-push strategy versus a market-pull strategy for innovation in two ways, i.e. by primary data gathered from engineering students and by discussing two case vignettes of new ventures founded by engineers-turned-entrepreneurs in Newfoundland, Canada. The two industries include video gaming software and artisan craft beer. From this analysis, it is proposed that potential product or business opportunities are identified and pursued uniquely by engineers-turned-entrepreneurs, the information processing styles of engineers-turned-entrepreneurs are unique to the current literature addressing entrepreneurial attributes, and the knowledge environment that these engineers-turned-entrepreneurs typically incubate in is highly conducive to the success of their new ventures. The paper also explores how engineers-turned-entrepreneurs recognize and manage the weaknesses in their approach to innovation and entrepreneurship, with the main shortcomings being a lack of marketing expertise and a feeble assessment of demand conditions. Under the premise of being inventors who are pursuing the idea of “following their dreams”, the research proposes that engineers-turned-entrepreneurs do not put enough focus on “fitting” their invention into the lifestyle, well-being, or habits of potential customers. The research discusses how knowledge conditions in the environment that engineers-turned-entrepreneurs typically develop in can facilitate a better understanding of market demand and customer fit. Technological innovation and entrepreneurial effort should be matched with customer
understanding and attractive demand, and this can be accomplished with the unique perspective that engineers bring to entrepreneurship.

**Keywords:** technology, strategy, marketing, opportunity, engineering

**Radical Innovation Versus Transformative Learning: A Kuhnian Reading**

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**Abstract:** It is widely accepted in literature that radical innovation challenges contemporary industries. Given the spectacular scientific achievements of the twentieth century, the potential of radical innovation inspires entrepreneurs in new product, services or processes development. Modern innovation has become more complex since it embodies marketing and organizational innovations in its original technological content. Notably, the definition of innovation has been broadened in the latest Oslo manual in order to meet and measure the way that modern enterprises or individuals innovate. At the same time, innovative entrepreneurship education and innovation management expands in both formal and informal learning. It is well documented by agencies in governmental reports that the impact of entrepreneurial courses depends on new and innovative teaching methods introduced in courses. Since attendees of such courses are have personal assumptions or beliefs about the complex phenomenon of business venturing, transformative learning offers an efficient, yet poorly exploited, approach towards introducing innovative entrepreneurship in classes.

The present paper aims to discuss the two different concepts of radical innovation and transformative learning under the same Kuhnian perspective. We argue that despite their unrelated nature, both concepts involve a Kuhnian core-process based on “discontinuities”, similar to epistemological paradigm shifts. Key similarities, differences and difficulties are discussed while the innovator, or the innovating organization, is contrasted to the educator that follows transformative methods. Furthermore, the relevance of different aspects or types of innovation and those of entrepreneurial learning to radical innovation and transformative learning are examined. Implications in entrepreneurship education of a possible common understanding are presented in order to suggest embedment of educational elements in
teaching that trigger transformations and thus, openness of participants in entrepreneurial learning.

**Keywords:** radical innovation, transformative learning, paradigm shift, Kuhnian theory, entrepreneurial education

**The use of Interactive new Media art in Education: Crossings**

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**Abstract:** Interactive media facilitates communication and transmission of information between human and computer. Interactivity plays an important role as it changes passive viewer into an active one. Nowadays, interactive media are used in education because they help student become more active and critical. Interactive media have reshaped the traditional relationship between teacher-learner and the way they interact with each other. As classroom needs, change rapidly, the demand that new teaching methods are used, urges. Through interactive media projects the student has the opportunity to challenge oneself in a diverse, complex, multicultural environment. At the same time, the student/participant can get familiar with the new technologies and think about diverse topics through an innovative approach. In this context, interactive media art projects can be used to encourage students/participants/audience to express themselves about current issues, notions in an entertaining way. Interactive media art projects are the output of multidisciplinary academic approach and they reflect the complexity of the society we live in. The media art project ‘Crossings’ is chosen as an example of interactive work which can be used in the education. ‘Crossings installation’ is an interactive educational tool for people/students/participants of varying ages, teaching tolerance of others from different religious texts. The interactive tool allows students to play a game exploring the relative similarities of sacred texts. Participants learn by their own experience and can evaluate why they chose specific texts and how different religions relate to each other. The project encourages people/students/ participants to interact, gives some information about religious texts and makes people think about differences and conflicts. It can be the base for a discussion in a classroom or an after workshop event at a museum. It also encourages further research and it suggests how to approach a difficult topic like religion in a multi cultural and globalised world. The same concept can be used to engage participants with a number of topics.
Innovation, Technology and Expression: Audience and Media Art Practices-The Example of the Vienna Underground/Third Woman Project

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Abstract: This paper examines the implications for audience participation in increasingly complex art and technology collaborations. Three artist/scientist modes of engagement are outlined: Interactivity, interdisciplinary collaboration and new modes engagement. The development of audience engagement is also described and deconstructed, using a recent example of cross-disciplinary art practice mixing genres and working over national boundaries, as part of the EmobilArt workshop.

Keywords: interactivity, media art, collaboration, audience, innovation

Regional Innovation and Competitiveness: Analysis of the Thessaloniki Metropolitan Region

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Abstract: The importance of innovation and knowledge-based policies in restructuring economies and increasing their competitiveness has repeatedly drawn the attention of policy makers and stakeholders. Regional policy is no exception to this trend. This paper attempts to map the demand and supply of Research and Development (R&D) in the metropolitan region of Thessaloniki and to draw a knowledge model that demonstrates the flow of knowledge in the region and the process of knowledge diffusion using the triple helix approach to depict the current situation and future dynamic emphasising issues that policy makers face. It analyzes Central Macedonia (CM) and East Macedonia and Thrace (EMTH) regional systems of knowledge flow and innovation, illustrating the institutional architecture and infrastructure associated with
these systems. The data for this research was collected through in depth literature review and a number of in-depth interviews. Semi-structured face-to-face interviews were held with several key personnel within the research institutes, intermediaries and policy makers and triangulated with additional available information. The findings of this paper point to the conclusion that knowledge transfer is a priority and a starting point for regional initiatives regarding the increase in investment in R&D and innovative actions. The interest expressed by local agents to invest in knowledge transfer activities positively indicated the changing regional innovation environment. This optimism originates in a set of policy recommendations for the increase in knowledge investments, which were previously discussed widely in public and had been accepted as regional policy priorities by all local actors. The specific paper contributes to identifying and assessing knowledge assets and flows, as well as interactions of SMEs with support organizations, in the regions of CM and EMTH of Greece, and accordingly provides policy recommendations for the future economic development in the region.

**Keywords**: Innovation and regional development, innovation policy, research and development policies, knowledge economy, northern Greece

**The Entrepreneurial Framework in the Greek Market of Renewables**

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**Abstract**: The development of the renewable energy is a key priority of the European Union policy. By 2020, renewable energy should account for 20% of the EU’s final energy consumption. E.U. has set a national goal for Greece, which is 18% share of renewable in final consumption of electricity in the country in 2020. To achieve this objective, the EU Member States define support measures and criteria for harmonized the renewable policies, such as simplifying licensing procedures, ensure connectivity to networks, support renewable energy investments, guaranteed sale price / kWh. Despite these measures and policies, the productivity in this sector is very low in Greece and far away from its targets. The three areas, where the most important problems identified, are: a) The licensing system. b) The networks. c) The incomplete zoning - regional planning for renewable projects. In order to investigate, this entrepreneurial environment and its diseases, we have made this qualitative research. The first goal is to highlight these diseases as well
as to identify some other individual problems. Continuously, we try to consider the strategy that these enterprises apply in order to face them. The survey was carried out in three particular directions: a) at executives of large and smaller companies doing business in all renewable energy technologies, b) at executives of companies that manufacture equipment for renewable energy technologies and construct renewable energy projects in Greece and c) at executives of ministries and institutions that supervise the market. The survey performed by the method of interviews and its results were analyzed. The results of this research will form the basis for a future quantitative research. This will be carried out by the questionnaire method for almost all companies that deal with the field of Renewable Energy Sources (RES) in Greece.

Keywords: renewable energy market, entrepreneurial activity, qualitative research

Consumer Integration: Antecedents and Consequences

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Abstract: Continuous development of new products and innovations remain an imperative for companies’ long-term success. Future success increasingly depends on a company’s ability to acquire external knowledge and to use it for new product development (NPD). Consumers are recognized as the most important source of external knowledge. For firms to tap into this knowledge they need to integrate consumers in NPD. Research in consumer integration (CI) has previously focused on customer integration in B2B. Recently, an empirical base is developing regarding CI in a B2C-context, but so far this research focuses mostly on single industry contexts such as the leisure industry. Further research is needed to fully understand important antecedents and outcomes of CI in consumer goods industries using cross-sectional data. We propose a conceptual model that investigates different potential company-related and process-related antecedents of CI. Based on an extended literature review, we focus on the following antecedents: consumer orientation, competitor orientation as well as interfunctional coordination. On the basis of qualitative interviews with managers from consumer goods industries we also consider additional factors: the dependence on retailers and the incentive system of managers. It is also of interest to investigate how CI impacts new product success. So far, research on CI shows a positive effect on new product success. However, based on the transaction cost theory we propose an inverted U-shaped relationship between CI and new product
success. Following recent literature on new product success we measure it as a second-order formative construct. Altogether, we test the hypotheses with data from 205 firms spanning multiple B2C industries. The empirical findings show that a very important antecedent of CI intensity is consumer orientation. Furthermore, the incentive system of managers involved in NPD must depend on the new product success. The more the incentive system is based on new product success, the more are consumers integrated in NPD. In addition, consumers are integrated more intensively the more companies depend on retailers. We find that CI intensity shows an inverted U-shaped effect on new product success.

**Keywords**: new product development, transaction cost theory, consumer integration

**Is Open Innovation Open? Evidence From the Most Innovative Firms and the Most Valuable Brands**

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**Abstract**: Due to the constantly developing technologies on the Internet, it is becoming both easier and more common for customers to express their opinions and ideas online. A natural channel for this ongoing dialogue is social media and online communities. Open innovation has been coined as the principle where firms may embrace these inputs from customers and involve them in the innovation processes of the firm. Open innovation is formally defined as “the use of purposive inflows and outflows of knowledge to accelerate internal innovation, and expand the markets for external use of innovation, respectively”. Logically, to find examples of these principles and to observe the forefront of open innovation, one could assume that the firms that are considered the most innovative and the brands that are considered the most valuable would posses these qualities. However, are these firms actually embracing the notion of open innovation, and if so, in what way? In this paper we explore how firms incorporate open innovation principles online. Specifically, our research question is: “How are the most innovative firms and the most valuable brands allowing innovation inflow from end-users on the Internet?” To tackle this research question, we use an exploratory research design where the websites of the firms are examined in detail. We use BusinessWeek’s lists from 2009 of the 50
most innovative firms and the 50 most valuable brands to derive the sample of firms under investigation. This results in 75 analyzed cases, as some appear on both lists. The sample includes business-to-business as well as business-to-consumer firms/brands. We only examine the international, English-language sites, or US-sites of the firms. The inquiry follows a defined observation protocol, which includes recording the input possibilities for innovation as well as the online community or social media efforts on the websites. The main finding of the study is that the use of open innovation principles over the Internet or in social media and online communities is still relatively limited. Furthermore, although some of the firms have adopted these principles, the way for users to communicate their ideas to the firms remain underutilized with a few exceptions. Results of this study can help practitioners depict the current state of open innovation and to direct their efforts accordingly. Academically, our study contributes to the developing discussion on open innovation, and the results raise the question of whether open innovation is, in fact, necessary for firms to still remain innovative. There are several limitations to this study. The main limitation is that the most innovative firms are often very large and multinational, and therefore often have multiple websites, e.g. for each country, and these country sites may have very different content than the ones that were studied. In addition, separate sites may be launched for short marketing campaigns, or for specific products, that could be used for these activities. We suggest that future studies should be directed toward confronting these limitations, and to identify the firms and their characteristics that in fact do use open innovation aggressively.

**Keywords:** open innovation, co-creation of innovation, user participation, online community, social media

**Entrepreneurship, the last chance for Indogenous Development?**

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**Abstract:** The "new economic geography" that first appeared in the 1990s suggests that local endogenous potential can foster economic development. Policy-makers are advised to create a positive business climate by using new growth factors such as knowledge, confidence and cooperation networks combined with old factors (land, capital, labour) in order to promote the hidden potential of certain areas. Furthermore, international organizations (OECD, European Council, World Bank, IMF)
have also registered this approach in their programmes. However, results to date have been relatively inconclusive. For Jouen (2007), the capitalization and implementation of successful experience remains problematic because it relies on the personalities of the proponents. Thus, regions are variously receptive, while return on investment is extremely low in the long term. In addition, people are often reluctant to get organized. Our paper analyzes the actual ‘endogenous’ tools related to the specific entrepreneurship topic, and indicates that these objections have not been confirmed. We verify the existence of both efficient and transferable models to support entrepreneurship (in response to market failures, to enhance resources, etc.). We take an in-depth look at two specific tools, namely business angel networks and loans on trust in a specific region of France. For these tools to be effective, it is important to clarify the methods of implementation, including seeking explanations for their qualities, presumed common to such models: i.e. locally built and appropriate with local ‘pacts’, and ‘meshing’ various resources, including peer learning. Last but not least, we want to investigate the possibility of including these tools in regional public policies with significant results.

**Keywords:** entrepreneurship, policy-making, endogenous tools, business angels, loan on trust

**Perceived Value of Entrepreneurship: A Study of the Cognitive Process of Entrepreneurial Career Decision**

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**Abstract:** The purpose of this paper is to address the question of ‘why some people choose to be an entrepreneur?’ We proposed a new construct of perceived value of entrepreneurship to explain the formation of entrepreneurial intention. Building on the concept of value perception from the marketing literature, we conceptualized the perceived value of entrepreneurship in benefit-sacrifice components and empirically tested the argument that entrepreneurship-related career decision-making is a cognitive process in which entrepreneurial intention results from a cognitive trade-off between perceived benefits and perceived sacrifices.

**Keywords:** perceived value, perceived benefits, perceived sacrifices, entrepreneurial intention
High-Tech Start-up Innovation in Wuxi and Shanghai, PR. China Embedded in the Institutional Environments

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Abstract: What are the special characteristics of High-tech start up innovation in China? Amid the continuous transformation of institutions in China and the Chinese government’s urgent call for innovation, how does the institutional environment influence the High-tech start-up innovation? Because of ineffective enforcement of property rights, entrepreneurs have to acquire political protection or depend on informal norms, such as Guanxi. However, what are the special characteristics of Guanxi of High-tech start-ups to local regulators in influencing the innovation activities? The nature of the research questions of this study suggests case studies are the preferred research method. Our sample selection is not random. We adopt the purposive case selection approach. This approach enables us to choose the most appropriate cases for the comparative study. Data collections are mainly via the contacts and networks of the author and through local High-tech parks administration officers. This research focuses on private Chinese High-tech start-ups in the ICT sector. We conducted semi-structured field interviews with CEOs from High-tech start-ups, High-tech park managers and governmental officials from government-owned venture capital fund between August/September 2009 and December 2009 in Shanghai and Wuxi. The interview languages were Mandarin Chinese, English and German. Based on case-study qualitative analysis, several propositions are drawn from different theoretical perspectives, namely political economy theory, institutional theory and social capital theory. An integrative framework is proposed to understand the Chinese High-tech start-up innovation. We hope to shed some light on understanding the special properties and the influencing factors for High-tech start-up innovation in China.

Keywords: innovation; high-tech start-up; china; institutional environment; Guanxi; entrepreneurship

Do Veterans Make Significantly More Successful Franchisees? A Comparative Study on the Traits of Veterans and Successful Franchisees Literature Review

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Abstract: Franchising has played a huge role in the United States and throughout the world. It is a big part of a nation’s economy and creates
millions of jobs. Even with its long history, success and popularity, franchisors most frequent problem is finding qualified franchisees for their system. Franchisors seek special traits in their candidates. The right match can produce significant results while a bad choice in a prospective franchisee can lead to many problems down the road. The purpose of this research is to seek if veterans or those that have served in the military make significantly more successful franchisees than those that didn’t serve in the armed forces. It seeks to identify if veterans possess the ideal traits that franchisors seek on a higher level than nonveterans. Ideal traits of franchisees and characteristics of veterans were identified to learn the similarities and differences of both groups. Several quantitative and qualitative studies were reviewed in both groups. One study showed military that served in combat were three times more likely to become an entrepreneur than his counterpart who did not serve in a combat unit. Some theories show risk taking as a relationship between entrepreneurship and serving in combat. Other studies suggest that many serving in the military face preretirement anxiety. The average age of retirement from the military is 45 years old. Some of the commonalities discovered among franchisees and veterans in the literature review include discipline, highly cooperative, risk taking, training, the ability to follow a system and national affiliation.

**Keywords** franchisees, veterans

**Design Against Other Determinants of Polish Firms Competitiveness**

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**Abstract:** The role of design in creating competitiveness for products has recently increased. The competition between cheap labour cost countries has a positive impact on this process in well developed states. Polish industry is growing relatively well in comparison to others during the global economic crises. The production is still playing an important role in GDP structure in this country. The article presents some results of the research designed by the author for Institute of Industrial Design in Warsaw of 280 production firms in Poland. The research was conducted from October 2009 until January 2010 by using personal interviews with firms representatives. Firms were categorized into two groups from the perspective of their design activity: passive and active. The research shows the structure of determinants, which, according to representatives of these firms, allow them to increase the innovativeness of their products. The most important factor was analyzed as *access to the*
finance resources (average mark 3.62 in five points scale, where 1 is not important at all and 5 the most important). The second place was determined to be employment of specialist (average mark 3.41). What is interesting is that the cooperation with designer was ranked at third place with mark 3.30 in this scale (11 determinants were proposed for selection). Determinants of products competitiveness, which were characterized as relatively unimportant, were the establishment of cooperation with R&D unit (average mark 2.73) and the establishment of cooperation with universities (2.56). The following categories of firms were covered in the research: clothing/textiles and shoes, furniture and furnishings, household goods and computer equipment, transport equipment, ceramics and glassware, sports articles, and lighting. The research showed that firms, which were categorized in the group design leaders are more active in export activity. The position of design activity in firms was characterized by their representatives as having important or key roles by ¾ of the total group. More than half of the firms pointed at an increase in the role of design in recent years. This role was observed by firms as an especially important factor for clients satisfaction, and later for the image of the firm and its competitiveness, increase of profits and communication with clients. The article presents relations between the scale of the firm and turnovers versus opinions about determinants of products innovativeness.

Keywords: design, competitiveness, innovation

Open Innovation: Activating the Entrepreneurial Mindset

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Abstract: Extant research on Open Innovation (OI) reflects the importance given to how established firms shift towards the new paradigm of OI in order to enhance innovation. OI, by definition, is a game for two, at least: One firm that seeks to acquire knowledge, and a pairing party that supplies the knowledge. Knowledge is referred to broadly to denote either explicit codified knowledge in the form of a concept or a business model, or knowledge embedded in technologies and products. The majority of the extant research focuses on the firms engaged in OI seeking external knowledge to reap innovation benefits and build competitive advantage. This counts for the one side of the coin. Research on the knowledge suppliers acting in OI is scarce. Limited as well is the examination of the role and the setup context provided by Web-Based Intermediaries (WBIs). In this changing landscape of the innovation game, 'new' demands, which seem to re-
unite innovation and entrepreneurship in a Schumpeterian logic, can be identified. More precisely, OI drives a need for enhanced entrepreneurial mindset, broad opportunity seeking behavior coupled to a strong strategic alignment with innovation objectives. We find theoretical support for such an approach in the literature on strategic entrepreneurship (SE), which we briefly review and link to the OI context. Initial approach to this inquiry is to explore a particular OI practice, namely the operation of WBIs. We examine secondary data coming from WBIs to gain insights about how firms both seek and provide solutions through these service providers. We identify areas of conformance to theory and discuss issues raised due to idiosyncrasies of OI practice via WBIs. Indeed, WBIs seem to provide a breeding ground for the applied implementation of several of the much researched but still largely theoretical concepts of OI and SE. WBIs nurture the opportunity side of the innovation process, smoothening out the problem of information idiosyncrasy that entrepreneurs encounter. Simultaneously, the exploitation side is also reinforced as the WBIs environment provides the means to leverage unutilized knowledge in new collaborative schemes. Issues for further research are identified and discussed.

Keywords: open innovation, entrepreneurship, strategic entrepreneurship, entrepreneurial mindset

Marketing Innovation and Innovative Capability of Marketing: Study of Portuguese Firms

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Abstract: The present article aims at identifying and analyzing factors that boost the innovative capability of marketing, in the scope of the Portuguese firms. Innovative capability of marketing considered while innovation in design and packing of goods, services and innovation in the sales and distribution methods. Starting from this purpose, a theoretical frame is considered from which the characterization of marketing innovation is part, as well as its underlying determinants. On the literature basis several hypothesis of research are formulated which are tested using the secondary data authorized by the Observatory of Science and Higher Education belonging to the 4th Community Innovation Survey (CIS 4), supervised EUROSTAT. The method to be used will be the logistic regression model. The obtained results show
that the R&D activities, regarding internal R&D activities, acquisition of machinery, equipment and software, knowledge and accomplishment of other procedures, and the factor marketing activities, influence firms to innovate in marketing

**Keywords:** innovation, marketing innovation, innovative capability, CIS

**Are Ugandan Entrepreneurs That Insulated From the Global Economy?**

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**Abstract: Objectives:** The study focused on the following objectives; to determine the effect of the global economic crisis on the entrepreneurial environment in Uganda. To compare entrepreneurs’ perceptions of the entrepreneurial environment in the other factor driven economies with those of entrepreneurs in Uganda during the last twelve months. Factor driven economies are described as those countries with low levels of economic development, with a typically large agricultural sector, which provides subsistence for the majority of the population who mostly still live in the countryside. They include Uganda, Venezuela, Saudi Arabia, Kingdom of Tonga, Yemen, Jamaica, Guatemala, Algeria Lebanon, Syria and West bank and Gaza strip. **Methodology:** Data is derived from the Global Entrepreneurship Monitor survey which uses a multi stage random sampling. It was conducted in all four regions of Uganda; with a sample size of 2091 adults (18-64years). Similar data collection was done in the other factor driven economies. **The findings** of the study show that although the Total Entrepreneurial Activity (TEA), in Uganda has improved albeit not significantly since 2004 to 2009 when a similar study was done, 35.91% of the Ugandans believed that starting a business during the economic crisis was more difficult than it was a year ago. This figure however is lower than the 42% average of the other factor driven economies. Furthermore, 35.66% of the Ugandans believed that growing a business this year was more difficult than it was a year ago which in comparison is lower than the 43% average of the other factor driven economies. Only 47% of Ugandan entrepreneurs in comparison to 65% of other factor driven economies believe that there are fewer business opportunities. 52% and 42% respectively, of the established businesses owners in Uganda believed that starting and growing a business this year was more difficult than it was a year ago. All these are below the factor driven economy’s average. In summary Ugandan entrepreneurs unlike their counter parts in other factor driven
economies perceive a lower negative effect of the crisis to their entrepreneurial effort.

**Keywords:** entrepreneurship, global economic crisis, Uganda, factor driven economies, total entrepreneurial activity

### Promoting Service Culture in Technical Trade: Co-Learning in Roundtable Discussions

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**Abstract:** This paper aims to present empirical results from a study focusing on challenges faced by technical trade companies when targeting growth in the service business. A further aim is to present lessons learned from facilitating co-learning in the roundtable work of companies. Roundtable working was used as a tool for companies to develop and share their ideas and experiences, benchmark and discuss service business development. The study was conducted within the context of the roundtable process started in May 2009 and ending in May 2010. Six persons from six companies participated in roundtable sessions. The data consists of observations and dialog memos in meetings, particular exercises and “homework” prepared by researchers, completed by company participants and discussed together in the group. As a facilitators and service business researchers we applied an approach we have developed for evaluating service culture and capability in manufacturing companies aimed at growth in service business. The method is aimed at enhancing analysis of the present situation in a company, common learning, service innovations and supporting cultural change. The results can be summarised into four key points. Firstly, the effect of the economic recession on challenges expressed by the members was significant and present in almost every discussion. Secondly, the effect of current organisational culture was evident not only in the limitations and possibilities of the development but also in the opinions of the roundtable members. Thirdly, the group members view of roundtable working were mainly positive, though some negative issues were also recognised. Finally, the group dynamics is a very sensitive subject and in this case, there were common motives to learn from each other and strong shared concern over the economic situation that united the group. We also recognised several supportive features as well as some inhibitory features for co-learning and cultural change and formulated some tentative general principles of how to enhance the overcoming of challenges in the transformation from
product-oriented culture towards service-oriented culture in technical trade.

Keywords: service culture, technical trade, co-learning

Fast Forward to a Standard Business Information System: Strategic Business Management Tool for Businesses in South Africa

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Abstract: Over the past few years different ways of accessing information and computer resources available to users have increased dramatically. Therefore South African businesses are forced to keep abreast of their international counterparts to compete internationally. Currently traditional Executive Information Systems (EISs) provide information to executives and top management, but the need exists to expand EISs to other decision-makers, problem-solvers and users in business. This in turn means that a need exists for innovation and fast forwarding to a standard Business Information System (BIS). The BIS is used as a strategic business management tool that: focuses on an information system that is in a standard format to enable users to access information quickly, is user-friendly, is interactive and includes the global business environment. Users need systems that provide them with access to diverse types of information in order to make decisions, to solve problems and to be competitive. Businesses have chosen information technology to provide relevant and accurate information to users. The study is an exploratory study and the research methods are of a quantitative and qualitative nature. The data was acquired through distributing a questionnaire via e-mail to 334 listed Johannesburg Stock Exchange (JSE) companies and conducting interviews with top management and users of EISs. The research questions investigated were to establish what traditional EISs offered in order to identify unmet needs to determine the need for a standard BIS, and to establish a BIS that would ensure sustainable strategic competitiveness for businesses. In addressing these problems both these systems were compared along several dimensions which were derived from the definitions, characteristics, capabilities and functions. The value of the study explains that the trend has increasingly shifted towards employee empowerment and decision-making at all levels of the businesses. The findings of the study concludes that companies which operates in a
traditional EIS environment are continually forced to fast forward from a traditional EIS to a standard BIS in an ever-changing digital environment in order to ensure a competitive strategy. This changing environment requires businesses to adapt to this ‘new’ environment to exploit opportunities to their advantage. The results of the questionnaire indicated that nearly 60% of the respondents have an EIS or planning to implement an EIS of which 50% proposed a standard BIS for all businesses. Reasons for implementing a standard BIS varied: it is an excellent management tool which makes use of standard tools and built-in features, critical for real-time decision-making, familiar to users in businesses, a competitive edge for competitors and it is not the technology that matters but how the information is used. In conclusion it can be stated that a strategic business management tool, a standard BIS, was introduced to support the evidence gathered.

Keywords: business information system, competitive advantage, executive information system, strategic management, system innovation

The Role of Information and Enterprise Systems in the Achievement of the Organization’s Internal Process Innovations: Findings From an Investigation in the USA Manufacturing Sector

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Abstract: Enterprise Application Systems (EAS) and Information Application Systems (IAS) can significantly impact on the market-oriented aspects of products and services as well as on the manufacturing processes, working practices, management practices and innovation achievements. In order to deepen the knowledge and further advance theory, this paper seeks to explore the role of EAS and IAS to for the achievement of innovations in the context of the internal processes in the USA manufacturing firms. This multipurpose study initially examines if there is a relationship between specific EAS (ERP, SCM and CRM) and internal process innovations (IPI) capability while it investigates the possible association between specific IAS (PLM and CAD) and innovations developed in the internal processes of the firm. The second purpose of this study focuses on the measurement of the nature and the strength of the relationships resulting from the calculation of relevant odds ratio. The examination of the association between variables and its hypotheses are tested in the context of an empirical
study of a multi-industry sample of the USA manufacturing firms. Our data were picked from the ‘e-Business Survey 2007’. This survey was part of the "e-Business Watch", a service launched in 2007 and provided by empirical GmbH to the European Commission, Enterprise and Industry Directorate General, in co-operation with renowned international partners. 300 Interviews were conducted in the USA manufacturing firms from August to October 2007, with the use of computer-aided telephone interview (CATI) technology. The questionnaire contained about 70 questions and focused on three manufacturing sectors ‘Chemical, rubber and plastics’, ‘Steel’ and ‘Furniture’. The results of the study indicate that a direct positive relationship exists between ERP, SCM, PLM and CAD on the one hand and the innovations achieved in the internal business processes in the USA manufacturing firms on the other. Furthermore, no significant contribution was found to the innovations achieved in the internal business processes by CRM systems. It is believed that the results, as validated empirically in this study, will provide useful guidelines to the manufacturing firms for launching or improving their goods or services. Finally, it is hoped that this exploratory research has laid the foundation for further examination of the contribution of EAS and IAS in the innovation activity of the manufacturing firms. Future studies should be able to replicate the process in more sectors and information and communication technologies.

**Keywords**: innovation, ERP, CRM, SCM, PLM, CAD, manufacturing sector

**Conceptual Fundamentals of the Long Wave Theory and the Innovative Potential of the Russian Economy**

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**Abstract**: Some aspects of innovative development in terms of the long wave concept are studied in this paper. The stage of the sixth long wave, which is reached by the United States as the leader of the nanotechnological development, is specified. The innovative potential of Russia in the area of nanotechnologies is estimated.

**Keywords**: big cycles, long waves, economic development, financial crisis, nanotechnologies, innovation
The new Approaches in Logistics Services Accomplishment

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Abstract: The primary modes of transportation available to the Czech National Movement Coordination Centre are trucks, rails or air. Comparison between price levels of different modes of transport is very debatably due to strategic distances and places where the Army of the Czech Republic (ACR) Units are deployed for foreign operations. Nowadays, strategic distances, relatively low host national support level and military operational excellence is becoming even more essential for a defence department’s ability to drive greater military logistics management value through outsourcing and knowledge innovation. Based on the findings the requirements of the transport and movement knowledge are continuously increasing. The development of knowledge potential of military specialists – graduated students in the future to be more oriented to professional knowledge.

Keywords: logistics services, military transport, commercial transport, education

Fostering Innovation in Brazil Through Private Equity and Venture Capital Public Policies

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Abstract: It is well documented the positive impact of the Private Equity and Venture Capital (PE/VC) industry on the creation and development of highly successful innovative companies in a few countries, mainly in the United States. PE/VC firms provide not only capital to startups and small and medium enterprises (SMEs) that usually have financing gap, especially in emerging markets, but also strategic resources that enable these enterprises to commercialize innovation. As consequence, government incentive and nurture of local PE/VC industries would be expected in emerging economies due to innovation’s importance to economic growth. This paper aims to identify if the Brazilian government has supported local PE/VC industry throughout the years in order to foster favorable conditions to creating and developing successful innovative businesses. It also analyzes Brazil’s main public policies towards PE/VC and if they encompass all the three stages of its cycle –

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fundraising, investing and exiting. I conducted an empirical research which collected primary data from a sample of 127 PE/VC firms (90% of the population) operating in Brazil as of June, 2008. All firms answered a web-based questionnaire that collected quantitative data regarding their investment vehicles, portfolio companies, investments and exits. I compared the data obtained from the survey with the main local governmental PE/VC support programs. First, I confirmed the hypothesis that the Brazilian government has been using the PE/VC industry as a public policy towards entrepreneurship and innovation. Second, I identified that although PE/VC public policies in Brazil are mostly concentrated in fundraising phase, they have been able to positively impact the whole cycle. Third, it became clear that the Brazilian government became more concerned about Seed and Venture Capital (VC) Early stages due to their importance to the entire PE/VC value chain. As consequence, I conclude that those public policies have been very important to build a dynamic and strong local PE/VC industry, whose committed capital grew 50% per year between 2005 and 2008 to achieve US$27 billion, which invested US$ 11 billion, which employs 1,400 professionals (75% with post-graduate degrees) and maintains 482 portfolio companies, mostly SMEs. In addition, PE/VC-backed companies represented one third of the Initial Public Offerings (IPOs) that occurred in Brazil between 2004 and 2008 (approximately US$15 billion).

Keywords: innovation, private equity, venture capital, public policy, entrepreneurship

Innovation Diffusion and non-Equity Networks: The Impact of Biased Perception

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Abstract: Non-equity organizations, e.g.: consortiums in various juridical forms, are one of the most widely spread ways for setting up formalized collaborations among enterprises that aim to share resources and results, with the goal of reaching economies of scale - both financial and related to knowledge. A simulation model is described and implemented, based on computational agents, with the purpose of representing non-equity collaboration dynamics among small and medium enterprises (SMEs). We show that innovation diffusion, under optimal conditions, leads to clusters creation and link strengthening, starting from non-equity networks. After showing this, the concept of biased perception is
introduced. We show that proper perception of the benefits granted by the adoption of an innovation is a crucial element in order to understand its circulation potential and its growth rate.

**Keywords**: negative conjuncture, collaboration, delayed perception, enterprise strategic management

**Eco Innovation Practice and Romanian SMEs**

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**Abstract**: According to European Commission figures, more than 99% of all European businesses are SMEs. They provide two out of three of all private-sector jobs and contribute to more than half of the total value-added created by businesses in the EU. Moreover, SMEs are the true backbone of the European economy, being primarily responsible for wealth and economic growth, in addition to their key role in innovation and R&D. All these enterprising companies are trying to find their niche in the economy and respond to needs in society. But, while they are creative and dynamic, their size is such that their market influence is very small. The creativity and dynamism of SMEs means they have a crucial role to play in this area - both as eco-innovators and as recipients of green technologies. Eco-innovation is key to supporting our society over the next 50 years and to minimize the gap between environmental pressures and a standard of living with which we will feel comfortable in our society. Technology will have to bridge that gap and the development of that technology involves eco-innovation in products, processes and – increasingly – services, much provided by SMEs. This paper is an examination of the role of SMEs as agents for eco-innovation and market transformation in Romania. We tried to show the importance of policy and the role of eco-innovation in these times of crises.

**Keywords**: eco-innovation, Romania, small and medium sized enterprises, economic crisis
Business Transfer Decisions; What Matters? Evidence From Scotland and Ireland

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Abstract: There comes a time when entrepreneurs of small firms choose, or are forced, to retire. This decision gives rise to a business transfer decision, where the entrepreneur must decide whether to transfer the business to a family member, sell the business, or shut down the business and dispose of its assets. While the choice of succession mode is a key business decision, which impacts on the long run survival and profitability of the firm and the region in which it is located, very little is known about what factors influence the entrepreneurs' transfer choice. In this paper, we explore how firm and regional specific characteristics impact on the entrepreneur's expectations for his/her business transfer decision. Using evidence collected on Scottish (N=63) and Irish (N=211) entrepreneurs expected exit choices we find evidence that the age of the firm, the size of the firm, the location of the firm and the motives of the entrepreneur play an important role in the transfer decision.

Keywords: entrepreneur, exit, succession, business transfer failure, small firms

Banks Lending To Farmers in India

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Abstract: Purpose: The paper seeks to investigate the access to finance for small marginal farmers in India and examines how bank managers make lending decisions to farmers. Context: The study builds on the findings of the UK SMEs access to finance (Deakins and Hussain, 1993; Fletcher, 1995). This empirical study is unique in that it examines a sector that has not been examined in the literature. This research examines the unique structural characteristics of farmers (borrowers) and banks (lenders) and focuses upon the differences in SMEs studies which have examined commercial businesses and the specific needs, experiences of farmers and banks. In specific, the paper examines the Indian farming context, banks dedicated to farming sector, commercial banks engaged in lending to farmers. Findings: Findings of survey carried out with loan officers and farmers suggest Indian farming sector is a complex and multidimensional sector that is supported by private
and public sector due to its national importance. Financial lending structures depend upon several non-quantifiable factors (cultural, caste, family size, education) and relational bank lending practices are prominent in bank’s lending decisions. Such practices have an adverse impact on bankable loan applications and gives rise to moral hazards. Relational banking and recommendations through word of mouth minimises default rate but there is no evidence to suggest it minimises information asymmetry. Subjectivity in decision making persist, which is compounded through underdevelopment of financial markets for small farmers and gives rise to financial exclusion and negatively impacts on economic growth. There is evidence of banks relying on the qualitative factors when making lending decisions but excessive reliance on collateral is also evidenced to minimise adverse outcome and limiting potential economic prosperity. Methodology: A qualitative approach is employed, involving in-depth, face to face questionnaires amongst 185 farmers (demand side), and 42 financial institutions (supply side), located in Punjab, India. The questionnaires and semi-structured interviews were carried out on one to one basis and in focus groups.

Keywords: relational lending, farmers, SMEs, bank finance, collateral

SME Market Entry in Transition Economies: The Potential of Cluster Initiatives to Fill Institutional Voids

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Abstract: Transition economies are potential new markets for companies in well-developed market economies and vice versa, but trade between these two institutional setups seems costly. Whereas larger companies can surpass institutional differences to offset higher transaction costs, SMEs are constrained by their limited stock of resources. However, transition economies rely heavily on SMEs to improve their trade balance and foster economic development. On a conceptual level, this article analyzes whether a cluster in a transition economy, through the services it provides, has the potential to reduce transaction costs for SMEs entering the institutional environment. To explain the extensive transaction costs in trade, the concept of institutional voids, which emphasizes missing intermediary institutions in emerging countries, is transferred to the situation in transition economies. A review of two literature streams serves to draw hypotheses for possible modes of entry for SMEs in such institutional environments. International strategy literature suggests the establishment of wholly-owned subsidiaries as an entry mode in
environments with institutional voids, whereas the literature on business groups focuses on transaction-cost-reducing modes for companies situated within such an environment. As a result, the article suggests that a cluster initiative in the transition economy can fill certain institutional voids, since the cluster management functions as an intermediary and reduces search and initiation costs for both trading partners. The article contributes to the literature on the concept of institutional voids, transferring it to the context of transition economies and elaborating a link to the cluster concept.

**Keywords:** SMEs, institutional voids, transition economies, cluster, transaction costs

**Challenges Faced by Women Refugees in Initiating Entrepreneurial Ventures in a Host Country: Case Study of UNHCR Women Refugees in Malaysia**

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**Abstract:** As of December 2009, 80,000 refugees and asylum-seekers have been documented by the Office of the United Nations High Commissioner for Refugees in Kuala Lumpur, Malaysia and of this, 35% are refugee women. As Malaysia is not a signatory to the 1951 Convention, refugees and asylum-seekers in Malaysia are considered to be “illegal” and are subjected to arrest, detention and deportation. They live in constant fear and often prefer to make themselves invisible, living in unsafe and dangerous places that are overcrowded and lack proper ventilation, sanitation and hygiene. This research paper addresses two major challenges faced by women refugees in Malaysia; firstly, challenges faced as a refugee in a host country, and secondly, challenges faced in initiating an entrepreneurial venture in an adverse environment. The paper focuses on four main research objectives: i) reasons why the women refugees chose Malaysia as their host country; ii) challenges faced by the women refugees in Malaysia; iii) challenges faced in initiating their entrepreneurial venture; and iv) skills they require to succeed in their entrepreneurial ventures. Five community groups were identified for the purposes of the study, namely, the Myanmar Muslims, Rohingyas of Myanmar, Sri Lankans, Somalis and Afghans. Exploratory research in the form of in-depth interviews was conducted with a minimum of 2 sample groups of each community group. The women in this study were given micro-credit financing not exceeding USD 600.00 using the concept of the Grameen Banking
System to initiate small home-based businesses under an initiative by the UNHCR in partnership with a Malaysian NGO. Whilst much research has been conducted on women entrepreneurs, there has been minimal research on entrepreneurship by women refugees. This study aims to highlight the plight of women refugees in initiating entrepreneurial ventures in Malaysia.

**Keywords:** women refugees, women entrepreneurs, UNHCR, entrepreneurial ventures, micro-credit financing

**Innovative Approach for Forming Information Infrastructure of a Company**

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**Abstract:** Companies applying Information Communication Technologies (ICT) are paying more and more attention to the ability to build and develop Information Infrastructure. They can succeed in carrying out their development strategies by following modern trends, adding intellectual information tools to management systems and creating an adaptive information infrastructure. This theoretical research studies the role of information infrastructure in management and the major aspects of forming information infrastructure. This issue is undoubtedly important for more and more companies facing the necessity to improve information infrastructure and recognizing their need for modern Information and Communication Technologies and approaches. This research aims at analyzing applicability and adaptability of the customer relationship management (CRM) and Multi-Agent technologies for forming comprehensive external information infrastructure for companies with growing clientele. Thus, the research should study the concept of adaptive infrastructure, its modern technologies, and construction of external adaptive information infrastructure. Companies’ profits are growing with both cost and management optimization, and more clients brought by client-oriented strategies. It is an international information infrastructure development trend that the CRM technology is getting more and more popular, and companies are allowing customers to form their requirements on their own. Yet, customer relationship management systems are most often built on standard solutions based on CRM module as connection tool between the Enterprise Resource Planning (ERP) system and external environment. CRM technologies in their essence cannot be a comprehensive tool to form information infrastructure of a company developing information interactions in the external environment. That is
why it seems very interesting and perspective to study how external information infrastructure can be built to organize comprehensive client networks with the widely used CRM technology along with a rare but perspective Multi-Agent Systems (MAS) approach. This area is as of yet understudied, however it is developing quickly.

**Keywords:** management, information and communication technologies, information infrastructure

**Limited Absorptive Capacity, Distinct Performance Outcomes: Toward a Differentiated Performance Framework of Knowledge Acquisition within Knowledge Intensive Alliances**

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**Abstract:** The valuable contribution of knowledge acquired in an alliance and its relationship with performance outcomes, in terms of growth, innovation rate and survival, has already been investigated by management scholars (Grant and Baden-Fuller, 2004; Inkpen and Beamish, 1997). Additionally, the relative existing literature illustrates numerous empirical studies which point out the role of absorptive capacity in organizational performance outcomes, for instance, in terms of innovation development (Cohen and Levinthal, 1990; Lane and Lubatkin, 1999; Rocha, 1999; Stock et al., 2001). However, prior literature lacks evidence, firstly, to support factors which may obstruct the beneficial outcomes for an organization which implements knowledge that is externally derived and, secondly, to distinguish between different dimensions of performance i.e. between those that are positively affected by the incoming knowledge and the ones which are negatively affected. We develop a differentiated performance framework of knowledge acquisition within strategic alliances, which supports that an organization's limited absorptive capacity has distinct performance outcomes. The hypothesized relationships supported by this framework are better illustrated in the case of company services (knowledge seekers) which are in great need of obtaining new knowledge in order to develop business model innovations in new dynamic sectors in which they did not do business in the past. Hence, knowledge seekers form strategic alliances with organizations which possess the necessary knowledge. In a study of 109 business model innovations of Mobile Virtual Network Operators (MVNOs) we find that the limited absorptive capacity that business model innovations manifest may impair the
benefits of the knowledge acquisition, thus decreasing their business and management performance. In contrast, the limited absorptive capacity of business model innovations has no impact on their economic performance. These outcomes may challenge the claim that the limited absorptive capacity of an organization which acquires knowledge from its strategic partner(s) negatively affects all of its performance dimensions. Indeed, a micro-foundation is provided to understand why and how a limited absorptive capacity is not an obstacle to a service company’s ability to survive in dynamic environments in which it did not operate previously.

**Keywords:** absorptive capacity, business model innovation, knowledge acquisition, strategic alliances, organizational performance

**The Dynamics of Innovation Networks: The Role of Higher Education Institutions in Venture Creation**

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**Abstract:** This research aims to analyse whether venture creation is stimulated by higher education institutions through innovation networks. The literature review makes use of the current approaches of reference to the creation of ventures and models of innovation networks. The theoretical approach developed supports the basic idea of the importance of innovation networks in the process of venture creation, since they allow weaknesses to be covered and positive aspects to be strengthened, and consequently influence the process of venture creation. Primary data are used in the analyses. To collect data, a questionnaire was completed by nascent entrepreneurs belonging to HEIs, obtaining 255 answers. The results obtained, through the empirical analysis made, show that cooperation and development of relationships with other agents in the innovation network emerge as the principal way HEIs stimulate venture creation, and the results also show that the attitude of the HEI towards venture creation influences the nascent entrepreneurs’ decision to go ahead with the process of creating a venture. As for identification of the factors facilitating venture creation supported in innovation networks, the principal ones are network actors and organizational resources. Furthermore, determining, identifying and analyzing the obstacles to venture creation supported in innovation networks, we find that the main factors are knowledge and location. The main conclusions of this thesis highlight the relevance of the HEI in the
phenomenon of venture creation, when it is inserted in an innovation network.

**Keywords**: new venture creation, innovation networks, higher education institutions, nascent entrepreneurs

**Patterns in Student Business Ideas: Experience at the University of Thessaly**

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**Abstract**: Since 2003, drawing funds from the Operational Programme on Education and Initial Vocational Training, education in entrepreneurship and innovation was (uniformly) introduced into non-economic Schools and Departments in Greek Higher Education Institutions. Entrepreneurship education was introduced in the form of a Programme, which involved entrepreneurship courses, as well as related support activities (e.g. mentoring, production site visits etc.). One such (interdepartmental) Programme commenced in 2003 in the University of Thessaly and is currently at its 7th year of operation. Business ideas proposals were an integral part of the Programme and, over the course of time, more than 350 business ideas were submitted (in either idea proposal form or business plan form) by University of Thessaly students participating in the Programme. The purpose of this paper is to examine those business ideas, using descriptive statistics methods, in order to determine and identify patterns regarding the subject and the quality of the proposed business ideas. At the same time, an attempt is made to correlate any emerging patterns to a variety of factors, such as (but not limited to) field of studies, student team number of participants and synthesis, main instructors background, maturity of the Programme etc. The identified patterns and correlated factors can be extremely helpful in determining successful practices or failures in the implementation of entrepreneurship education endeavours and allow for improvements in the approach of students coming from different fields of study. Additionally, differences between the students’ perception of entrepreneurship and actual entrepreneurial practices may be revealed.

**Keywords**: entrepreneurship education, student business plans
Policy Shifts in Labour Market Liaising and Entrepreneurship in Greek Higher Education

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Abstract: In the early 2000s, funded by the Operational Programme on Education and Initial Vocational Training, education in entrepreneurship and innovation was introduced into non-economic Schools and Departments in Greek Higher Education Institutions. At approximately the same time, higher education career offices and student internship programmes (practicum) were independently funded by the same Operational Programme. Despite the fact that all these initiatives shared common goals and objectives, mainly to strengthen the link between Higher Education Institutions and the labour market and facilitate their graduates’ transition to it, there was no coordination or synergy between them. After two Operational Programme cycles, there is a major shift on the way entrepreneurship education and connection to the labour market initiatives in Higher Education Institutions will be realised. This paper examines this shift, as it is demonstrated in the new Operational Programme funding, in an attempt to determine its nature and the main factors that lead to it. This shift was by and large based on a research study commissioned by the Ministry of Education, Lifelong Learning and Religious Affairs to the Research Unit of Infrastructure, Technology Policy and Development (RUITPD), University of Thessaly, and was carried out by the authors of this paper. Drawing data from evaluation studies and the proposals of this study on the planning and implementation of entrepreneurship education, career offices and student internship programmes in Greek Higher Education, the paper examines the evolution of the implementation of the above mentioned initiatives and their internal efficacy (in Higher Education Institutions) and external networking (with the labour market), as well as the problems faced by higher education graduates entering the labour market. Emphasis is put on the characteristics of the recent changes which involve both scope and organisational issues, and an account on what is anticipated with the proposed shift is given.

Keywords: entrepreneurship education, policy shift, labour market liaising
Knowledge Integration: The Case of a Portuguese Organization

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Abstract: Knowledge integration is one of most critical factors for organizations competitiveness, but also a critical factor because the constraints of knowledge nature. Sharing knowledge and effectively integrate it in organization practices and processes seems to be a very powerful strategy and at the same time a very difficult achievement. This research focuses on how knowledge is integrated within the work processes. The purpose is hence to describe and analyze how knowledge is integrated in a Portuguese organization and all the implicit constraints, supported in an intensive case study. A main result of the research is that knowledge integration became part of the strategy of competitiveness of the organization for the last decade and to implement it they have developed a culture of knowledge and mechanisms that facilitate the sharing and the integration of knowledge in day-by-day work practices.

Keywords: knowledge integration, organization, action research

Enforcing the local embedding of enterprises by networking activities in business centres

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Abstract: The paper provides insights in the effects of networking activities of tenants located in business centres. These tenants are deemed to contribute to the local or regional economy by means of their performances in terms of generating employment and turnover. Drawing of a sample of tenants, and confronting them with a matched sample of firms not located in a business centre, assesses the networking possibilities that business centres are said to offer. Because business centres are part of the policy toolbox of local and regional actors their initiatives aimed at stimulating entrepreneurship are included. The results demonstrate that the critical mass of tenants in business centres is too small to exert a significant effect on the local or regional economy.
Policy agencies at local or regional level can see in the creation of business centres at best a supporting role to counter unemployment.

**Keywords:** business centres, tenants, networking activities

**An Attempt at Explaining the Present Economic Crisis: A Heterodox View**

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**Abstract:** The most important economic issue for the leaders of the world’s economically most powerful states is how to restore economic growth in their economies. The central point, around which the present global society circulates, a goal, for which everybody makes his effort and contributes his share (GDP growth), exactly that does not come to existence now. From the 2nd quarter of 2008 to the 3rd quarter of 2009, GDP in OECD significantly and constantly decreased (in developing countries, GDP growth has decreased significantly in 2009 compared to 2008). In 2009, international trade (exports of commodities, private capital flows and foreign direct investments) has globally decreased. Many worlds largest companies have booked huge or even record sales and profit losses, and have consequentially reduced their costs still more, dismissed many employees and put on halt parts of their production. From the end of 2007 until now, growth of real average wages has been constantly decreasing globally, the number of working poor is increasing, the number of unemployed people is globally increasing (in OECD constantly from the 1st quarter of 2008 until now). And finally, the number of people, living in (extreme) poverty, is globally increasing. The purpose of the paper is to propose a rather different, heterodox explanation of why GDP, trade, profits, wages, employment have been globally decreasing and why poverty has been globally increasing between the 2nd quarter of 2008 and the 3rd quarter of 2009. I try to explain these facts by deriving the present state of global economy (crisis) from the principles of the present global economy. I therefore try to prove that the crisis necessarily follows from the way the present global economy functions. I argue that the reason for the crisis is the fundamental contradiction between the purpose of companies (increasing profits) and necessary ways, in which companies try to increase profits.

**Keywords:** global economy, GDP growth, profits, credits, employment, poverty
Pragmatism as a Philosophy for Education for Entrepreneurship - Case: Laurea Business Ventures

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Abstract: Pedagogical solutions used in a university are built on foundations of an educational philosophy. The learning results are to a great extent based on the tools and pedagogic approaches used. The article firstly discusses about the use of pragmatism as the basis of education for entrepreneurship. Based on the theoretical discussion, a case-presentation of Laurea Business Ventures as an example of use of pragmatic philosophy of education for entrepreneurship is provided. The case is analyzed in the framework of pragmatism and some concrete implications are provided.

Keywords: pedagogy, entrepreneurship, philosophy, pragmatism

The Process of Social Innovation: Multi-Stakeholders Perspective

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Abstract: This paper focuses on the process of how social innovation is created. Recent years have seen the increasing emergence of social entrepreneurs, who are expected, as social innovators, to tackle social problems and change society. There have been many case studies on and research about social enterprises and entrepreneurs. However, few studies have been made about social innovation in comparison to the vast volume of research into business innovation. A numbers of studies focused on a single charismatic social entrepreneur concentrate on the description of his/her success story, with little attention paid to the process of social innovation. Most social innovation is not created by a single entrepreneur. There is a need for research into how social entrepreneurs encounter collaborative stakeholders, and how they bring about social innovation through unique ideas. Business innovation studies have shifted focus from the closed process of creating innovation within an organization to the open process: now, many studies argue that customers and users play an important role in creating innovation. In the case of social innovation, it is created not only by entrepreneurs and producers alone, but by various related stakeholders as well as customers and users. The social entrepreneur identifies social problems, gets ideas and resources, and creates social innovation in collaboration with related stakeholders. This paper tries to clarify this process through a case study of the Hokkaido Green Fund (HGF), an environmental
NGO. HGF has introduced the first community wind energy business to Japan. This system, built by the local community, is not the primary innovation but a secondary/derivative innovation. It is not easy to transplant social innovation created in another area or country to a new location. In the process of introducing and creating the system, entrepreneur has been supported by and collaborated with related stakeholders, and has had an impact on the social system. This paper tries to present a new perspective for the analysis of the social innovation process, from the viewpoint of multi-stakeholders.

**Keywords:** social innovation, multi-stakeholders, derivative innovation, collaboration

**Developing Indicators for Sustainable Entrepreneurship in Flemish Agriculture**

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**Abstract:** Current Flemish (and European) policy makers encourage the sustainable development of farming, in which a balance between People, Planet and Profit is required. As craftsmanship alone will no longer be enough to integrate these divergent aspects, farmers need to develop entrepreneurial and managerial skills. For this reason, complementary to the economic, ecological and social aspects, sustainable entrepreneurship and management is seen as an extra pillar in the indicator based Monitoring Tool for Integrated Farm Sustainability (MOTIFS) and needs to be addressed profoundly. However, the concepts of sustainable entrepreneurship and management are multidimensional and therefore difficult to grasp. In the current paper following research question is addressed “Which themes can be identified for assessing and/or stimulating sustainable entrepreneurship/management of Flemish farmers?”. First, viewpoints on entrepreneurship, management and sustainable development were explored with a literature review and expert consultation, resulting in a preliminary framework of themes. Although in most cases indicators for sustainable development are developed by experts, the participation of stakeholders is essential if the indicators need to be locally relevant, practicable and accepted. Accordingly, a “multistakeholder” approach was used involving 24 local stakeholders related to Flemish agriculture. They generated several aspects of sustainable entrepreneurship and management during a brainstorm session. These aspects were then
clustered by means of an interactive group process, making use of the preliminary framework of themes determined in the first stage of the research. After evaluation and adaptation of the preliminary framework by the stakeholder group the definitive themes were determined. At last, a prioritization process was performed by asking each stakeholder to assign weights to the several themes. As a result top priority was assigned to the following themes (i) Vision/strategy and (ii) Planning/organization/control/evaluation, followed by the topics (iii) Networking/cooperation, (iv) Risk management, (v) Opportunity recognition and realization/pro-activeness, (vi) Searching and learning behaviour, (vii) Innovation and Craftsmanship (viii). The results indicate that the participating stakeholders attach a higher importance to management aspects (vision/strategy, management processes, risk management) than to entrepreneurial aspects (opportunity recognition and realization/pro-activeness, innovation and risk taking) and craftsmanship in order to stimulate sustainability in Flemish agriculture. During further research, indicators for each of the themes will be developed and applied at farm level, allowing to increase the understanding of their influence on the economic, ecological and social performance at farm level.

**Keywords**: entrepreneurship, management, craftsmanship, integrated sustainability, indicators, agriculture

**Research Experts’ Role in Knowledge Development and Exchange in Formal Research Cooperation**

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**Abstract**: The literature on ‘distributed’ and ‘open’ innovation emphasizes the need for enterprises to exchange external knowledge in order to perform R&D and to innovate. This paper focuses on research partnerships as a way to do so. More particularly, a distinction is made between the development and the exchange of in house knowledge in formal research cooperation agreements. Learning efficiency in absorbing external knowledge, reduction of outgoing spillovers, and access to tacit knowledge and know-how are main drivers for research cooperation and are largely related to capabilities in terms of internal R&D employment. Using micro-level data provided by the OECD business R&D survey for Belgium, insights are offered in the way R&D personnel qualifications and occupations are related to knowledge generation in R&D collaboration. More specifically, it is demonstrated
that both the occupational positions and the level of education of R&D managers and researchers are positively related to knowledge development and knowledge exchange in formal R&D collaboration agreements. Moreover, in terms of absorptive capacity it is found that patent registration and innovative outputs are positively related to the propensity to engage in knowledge development in R&D collaboration, but not to the engagement of knowledge exchange in R&D collaboration.

**Keywords**: R&D collaboration, knowledge development, knowledge exchange, R&D personnel skills, absorptive capacity

**Social Networks and Social Capital Formation by Entrepreneurs: A Multiple Case Study in the State of Paraná, Brazil**

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**Abstract**: This study has as an objective to understand how social networks are used by entrepreneurs in the construction of their social capital during the stages of business foundation and growth. Specifically it analyzes what types of social networks are developed by entrepreneurs and what resources are accessed through these relationships that contribute to business creation and development. Attention is paid not only to the tangible resources, but also to resources considered as social, physical and financial. The main contribution of this study is to assist entrepreneurs understand the practical contributions of social networks for developing social capital. A qualitative study of multiples cases was carried out in three companies, each one belonging to a different industry sector, situated in the northern region of the state of Paraná in Brazil. Data was collected through semi-structured interviews with entrepreneurs as well as through observation and document analysis. Analytical categories, such as types of social networks, were delineated as formal and informal. The formal type, for example, includes professionals like accountants, bank managers, lawyers, and consultants. The informal type of network consists of family, friends, colleagues and employees. Another analytical category was the type of resources, which was divided into other sub-categories such as social, physical and financial resources. Data was analyzed by using content analysis and the three cases were described individually and comparatively. The results of the study suggest that in the creation and development phases, entrepreneurs’ social networks granted
access to different resources that meaningfully influenced their trajectory and the results achieved. It was observed that the relationships evolved and became more involved when the entrepreneurs had the opportunity to show that they could be reliable. Furthermore, considering the idea that social capital is beneficial and can be derived from social networks, it is logical to state that the different resources accessed by the entrepreneurs of this study contributed to the formation of their social capital.

**Keywords:** social networks; entrepreneurial social networks; social capital

**Development of Education and Potential Opportunities for Entrepreneurship in Romania**

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**Abstract:** It is important to linking students with the business community. That means completing theory with practical: action-oriented instruction, applied learning, hands-on experiences, business leaders, community supporters. In this way we help the student elaborate the essential parts of a business plan as well as techniques of presenting to investors. Also, students will learn best practices of Entrepreneurial Leadership to develop opportunities to create strategies and implementation in for profit or non-profit ventures. The development of entrepreneurial education and specific programs in Romania will give students a solid understanding and knowledge of the potential opportunities in entrepreneurship from micro-enterprise in different areas and family businesses to high growth ventures and corporate entrepreneurship. We have to implement the specific objectives as: diversify the financial sources for financing the university activities; deployment and extent of university periphery: research centres, training facilities, scientific park, adjacent activities (industrial contacts, research contracts, IP department, PR etc.); stimulate the academic staff; enabling an integrated entrepreneurial culture (use of performance indicators, rewards for success, adequate internal and external advertising). Second paper objective is to build a sustainable partnership between universities from South Muntenia region and its most distressed communities that adds civic capacity to communities, strengthens the mission of universities, and provides a powerful context in which to train students to become non-profit leaders and social entrepreneurs who can assume leadership roles across South Muntenia. The results of this
study can increase the knowledge about entrepreneurial paths followed by Romanian individuals. Also, we can attract the interest of academia researchers to demonstrate that increasing the level of entrepreneurial activity we have positive influence on employment generation and on economic growth in Romania. We can say that we view education as an investment. Finally, they will have the opportunity to apply their skills toward a specific concept, while non-business students will learn how to develop a business plan within their own field of study.

**Keywords**: entrepreneurship education, innovation, partnership, regional policies, strategy

**Digital Games for Entrepreneurial Learning, Innovation and Creativity: Examples and Evaluation Criteria**

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**Abstract**: This paper introduces (a) some good examples of digital games freely available on the web that can be used as educational tools supporting entrepreneurship, innovation and creativity skills, as well as (b) an evaluation framework for identifying such examples. To this end, in the first part of the paper, indicative examples will be provided for digital games purposed for entertainment and/or learning, drawn from the broad array of online available business games. In the second part of the paper, the examples provided will be evaluated along three dimensions: a generic dimension related to digital-games based learning (DGBL) aspects; and two more specific dimensions, focused on the innovation/creativity and entrepreneurship skills that can be encouraged (and gradually exercised and learnt) through gameplay. The final objective of this evaluation is twofold: firstly, to locate similarities, differences, strengths and weaknesses of the games currently available, that can help identify specific needs for digital games-based entrepreneurial learning material; and secondly, to provide a set of findings and issues that need to be considered while developing (or re-purposing) digital games for entrepreneurial learning.

**Keywords** digital games-based learning (DGBL), games-based teaching, evaluation of digital games for learning, entrepreneurial learning, innovation and creativity skills
Space Image and Entrepreneurs’ Life: Aesthetics in Entrepreneurial Process

Dun-Hou Tsai, Shao-Yi Lin and Chih-Hao Tsai, National Sun Yat-sen University, Taiwan

Abstract: This paper intends to illustrate the entrepreneurial process through portraying changing spaces, which was ignored in mainstream researches. In this paper, the realistic space refers to both the building and interior design, while the metaphysic space refers to the image of entrepreneurs’ lifestyle. Combining the phenomenological inquiry and researchers’ observation, we analysis four cases of Bed & Breakfast (B&B) in Kenting, Taiwan. Kenting is a famous sightseeing location in Taiwan by its gorgeous beach and tropical scenery, where clusters a few high-priced and designed B&Bs. We conclude three findings in this paper. First, entrepreneurial process is initialed by an unfamiliar experience from space. Kenting as an innovative space triggers entrepreneurs’ imagination to escape from former ill-fitting condition and create a dream house as solution. Second, B&B entrepreneurs build up an inimitable space as realization of their unique imagination. Each of their dream houses represents a distinctive image which is referred to their ideal life or personal aesthetic feeling. It also influences how they receive guests. Third, entrepreneurial process reveals a transformation of life, revealing a new possibility of entrepreneurship except economics (profits orientation) and social (resource orientation) explanations. These entrepreneurs endeavor to make their lives into an oeuvre, an aesthetics practice from out of existed ones. In conclusion, we suggest an aesthetic perspective in entrepreneurship inspired by Foucault’s “aesthetics of existence”. Following Foucault's philosophy, entrepreneurial process involves "care of the self" and represents as a “technology of the self”, which may open a novel point of view to entrepreneurship.

Keywords: entrepreneurial process, phenomenology, aesthetic

Social Innovations Facilitating the Quick Adoption of eBanking in Finland

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Abstract: The aim of this paper is to study the development and success of Internet-banking in Finland. The focus will be on two social innovations that have played a major role in the digitalisation of the Finnish banking industry. The evolution of Internet banking will be
studied by looking at the changes in payment systems provided by the banks: how did we get from paying our bills over-the-counter to modern day on-line services. The paper is empirical in nature and it has qualitative research approach. The development in electronic commerce is often illustrated with a cube having three dimensions: the product, the agent and the process. Usually the digital process is the last missing dimension but in this case it is the one starting the entire process. The first social innovation took place in the 1960 when employers started paying wages directly to employees' bank accounts using digital data transmission based payment systems. The banks started to develop their virtual processes and products which, with the help of on-line technology, lead to the introduction of bank cards and PC-banking in 1975-1984. In the late 1980s a large number of private companies and institutions had on-line technology and thanks to the liberal human resource policy the employees were allowed and even encouraged to use the computers for their own purposes. This way many people were introduced to PC-banking at a time when it was still fairly rare to have a computer at home. This was the second social innovation. In 1995 there were 260 000 households and entrepreneurs using PC-banking, which means one computer on-line for every 19 people. This gave the customers the freedom to pay their bills whenever they wanted but, compared to the on-line banking we know now, they were tied to a one particular computer signed up for the task. The Internet provided the missing dimension, the virtual agent. At this point the Finnish banks as well as their customers had plenty of experience and knowledge of digital banking and the whole country was able to shift easily to Internet banking and customers were able to pay their bill whenever they wanted, wherever they wanted.

**Keywords**: social innovation, dimensions in eCommerce, eBanking, adoption

**Strategic Human Resource Management Role in a new Business Development: A Literature Review**

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**Abstract**: During the last three decades, the development of strategic human resource management (SHRM) as a field of study has been supported by research conducted from different angles and perspectives (Lengnick-Hall et al. 2009). This scientific discourse continues to provide an ongoing discussion on the necessity of the human resource
manager's involvement in the decision making process at the strategic level of a company. Nevertheless, no structured information on SHRM opportunities supporting re-direction of companies into new business or the implementation of new and innovative business ideas was found. This review summarises the state-of-the-art approaches defining the SHRM’s opportunities to influence new business development. The research question of this review is: How can strategic human resource management help to solve the challenges of new business development? In order to answer the research question publications from the academic journals and books fundamental in the subject area were reviewed. All relevant theoretical and empirical studies available were compared and analyzed, providing the propositions for further research. The review was conducted in order to structure the existing knowledge at the intersection of SHRM and new business development. A narrower view has been taken with SHRM’s distinctive characteristics in small and medium-sized enterprises (SMEs).

**Keywords:** strategic human resource management (SHRM), knowledge based view, new business development, innovation, SME

**Empirical Study on Commonness of Fast-Growing Private Enterprises in China: Study on Listed Companies on GEM in Shenzhen Stock Exchange**

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**Abstract:** The total number and occupation ratio to Gross Domestic Product (GDP) of private-owned and private-holding enterprises have already become the important parts of Chinese economy after thirty years since the economic reform was implemented and lots of large enterprises, Huawei, Alibaba and Xiwang Group as examples, have become the benchmarking in respective industries. However, the trend which is characterized by the phenomenon that the state advances and the private sector retreats in China has also developed. Shandong Steel Group holding the share of Rizhao Steel Company and the government of Shanxi Province encouraging state-owned coal mine enterprises to purchase the private ones are two typical examples. The historical position and development anticipation of private enterprises have received high attention from both the theoretical circle and business world. This paper aims to conclude the basic characteristics of fast-growing private enterprises by conducting empirical research on listed companies on growth enterprise market (GEM) in Shenzhen Stock
Exchange, emphasize the necessity for existence and development of such enterprises. At the same time, this paper is written to provide suggestions to the Chinese government to reconsider these enterprises and adjust relevant policies to create a more competitive environment for enterprises with different ownerships and different scales.

Keywords: China, private enterprise, fast-growing

Who can be China’s Entrepreneurs?

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Abstract: The power of entrepreneurs not only affects capitalist economies but also effects emerging economies such as China. Entrepreneurs are the main strength contributed to the spurring private sectors and to the flourishing market forces by creating jobs, supplying consumer goods, mobilizing savings, and breaking up the monopolies of state firms. This article mobilises different social theories and examines the different determinants of China’s entrepreneurship with the national sampling survey data set of the 2003 China General Social Survey. The results of the Binary Logistic Regressions support psychological supply-side, sociological and organisational perspectives. However, the results of pooled analysis indicate that psychological traits cannot account for entrepreneurship. Instead, the sociological and organisational perspectives (i.e. unemployment, social learning, and social network), framing their analyses in terms of interaction between individual and his or her social contexts, promise to advance our understanding in the field and offer greater explanatory purchase over China’s entrepreneurship.

Keywords: China, entrepreneur, supply-side, demand-side, logistic regression, China general social survey

Can Firms Without Center Technology Gain a Competitive Advantage? Case Study of Sony in the Flat Panel TV Industry

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Abstract: The purpose of this study is to examine how a firm without the center technology can gain a competitive advantage. This study examines the case study of Sony in the flat panel TV industry. Sony did not own the panel device factory and not make by itself, and procured it
from external firms. In its product development, Sony could develop the low cost TV and design oriented TV. As a result, this paper points out Sony gains the two advantages, economic advantage and organizational advantage.

**Keywords:** company without center technology, economic advantage, organizational advantage, flat panel television, Sony

**Entrepreneurial Discovery in a Transitional Economy: China 1979-2009**

Michael Zhang, Nottingham Trent University, UK

**Abstract:** In this paper I discuss two research issues emerging in the field of entrepreneurship research. On the one hand, some scholars in mature and market-based economies begin to pay attention to theory building in entrepreneurship research. On the other hand, empirical evidence of entrepreneurial activities has been increasingly observed and analysed in transition economies such as China. Previous research has mainly focused on institutional analysis of entrepreneurial phenomena with particular emphasis on institutional and cultural factors. Little attention, however, has been paid to the dynamics of institutions and culture, which are influenced by the process of entrepreneurial discovery. Adopting the Austrian theoretical perspective, I will analyse institutional reforms in relation to the emergence and development of entrepreneurial activities during China’s transition from a centrally-planned to a market-based economy. Using mainly secondary data and findings from prior research I contend that we can achieve a better understanding of the market process in China in the past three decades through the lens of entrepreneurial discovery. In so doing we can overcome the deficiency inherent in the institutional analysis of entrepreneurship in China where environment-strategy-performance framework is adopted. Instead, I propose a framework of opportunity-resource-capability which places entrepreneurial cognition-motivation-action at the centre. By the very definition and nature of a transition economy, market process can hardly reach equilibrium state. Neither entrepreneurial actors nor institutional actors have the capacity or ability to acquire the necessary knowledge to equilibrate market process. It is the process of competition for scarce resources rather than profit maximisation that drives the rapid growth and development of the private sector in China, which in turn fulfilled the unanticipated result of privatisation. The proposed opportunity-resource-capability framework is complementary to, rather than replacement of, the environment-strategy-
performance framework. Further, the framework increases the explanatory power of analysing the dynamics of both entrepreneurial and market processes. Institutions, both market and regulatory, are being developed and become mature during this dynamic process. After thirty years of economic reforms, market mechanisms in China are still underdeveloped. Ambiguity in the regulatory regime in relation to entrepreneurial behaviour and activities causes uncertainty in the business environment which can impede entrepreneurial growth and development. Yet, it is the dynamic process of entrepreneurial discovery that augments innovation and efficiency of entrepreneurial activities which will have impact on innovations of institutions and culture.

**Keywords**: entrepreneurship, discovery, institution, resources, dynamic capabilities, China

**Legal Regulation of Innovativeness can Spur Innovation Efforts**

Elizabeta Zirnstein, Valentina Franca and Mitja Ruzzier, University of Primorska, Koper, Slovenia

**Abstract**: The large majority of innovations protected by intellectual property in today’s world are created within the framework of an employment relationship. Faced with the necessity for firms to innovate, there is the problem of encouragement of innovation. This paper examines whether legal regulation of innovativeness can encourage or discourage employees to innovate. In Europe, some basic rules regarding the employee inventions are stipulated already by the state anticipating to set up encouraging surroundings for creation of new ideas and findings; others are adopted by companies themselves in the forms of different internal regulations and within the frames of contractual regulation of relationships. Both set of rules try to fairly and efficiently share the benefits of employee’s innovativeness. On the state level, the legislation regarding employee inventions refers mainly on three viewpoints: (1) which innovation results made by employees may be legally protected with intellectual property (IP) rights, (2) who is the owner of such results (especially if they are protectable with IP rights) and (3) if the owner is not the employed inventor, should he be rewarded for his creative endeavor. On the company level, the regulation of innovativeness in employment relationship refers mainly to the question of rewards for employee inventions. The first view (protection of employee inventions) has already been widely discussed among scholars, while the empirical work regarding the regulation of ownership
and rewards for innovation results made in the course of employment is rather poor. Therefore, the focus of this paper is essentially on the second view. The central issue of this paper is the effect of national and company regulation on ownership and rewards for employee inventions on innovation performance. The question is how states and companies should regulate the ownership of results of employee innovativeness and compensation system in order to encourage innovation. To answer this question, we conducted a qualitative research among Slovenian companies. The results show that companies are aware of the importance of rewards for innovation, but approach this issue in different ways. Some companies support tighter regulation of rewards through regulations and other internal acts and agreements between them and employees or their representatives, others approach it more spontaneously. All agree though, that the regulation at the state level does not spur innovativeness enough.

**Keywords:** employee inventions, employment relationship, remuneration, legal regulation
PhD Research
Network Centrality and Firm Innovation: A Social Network Analysis of the Monaghan Furniture Industry

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Abstract: This research seeks to empirically explore the relationship between the network positions assumed by firms and their capacity for innovation. Using social network analysis techniques this paper examines the effect of network centrality in inter-firm networks on the innovation performance of small firms. Looking at a network of furniture manufacturers, this paper provides a unique insight into the innovation and networking activities of firms within a low technology sector. In addition this paper explores the factors affecting the position a firm assumes within a network. The paper finds some evidence indicating a relationship between network centrality; firm size; strategy and absorptive capacity. The paper also finds evidence of a positive correlation between network degree centrality and firm innovation.

Keywords: Innovation; Networking; Social Network Analysis; Low Technology Sector

IT-Related Innovation Adoption and Entrepreneurship

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Abstract: Researchers in information system area use different theory and model to explain how information technologies make changes in society and organization and how these changes are connected to economic growth. One of the popular theories in this context is Unified theory of acceptance and use of technology, UTAUT (Venkatesh et al 2003). One of the base theories that Venkatesh et al integrated to make UTAUT is the theory of planned behavior (TPB). This is the famous theory in entrepreneurship as well. Krueger and Braezel integrated Shapero model and theory of planned behavior and made the model of entrepreneurial potential (1994). Review of Unified theory of acceptance and use of technology (UTAUT) and Model of entrepreneurial potential, indicate that both theory focus on individual intention to take action. UTAUT is concern about the characteristics of innovation and Model of entrepreneurial potential focuses on individual characteristic. Thus, we have integrated these two theories together to make a more robust theory that can measure dimensions of individual perception and
technological characteristics. The main purpose of this research is to develop new model that is able to measure different dimension of technology acceptance and overcome UTAUT limitations. With integrating (UTAUT) and Model of entrepreneurial potential, we are able to measure entrepreneurial intention toward use of IT-related innovation, and measure technology acceptance in different context. We consider perceived desirability and perceived feasibility (as individual perception), and effort expectancy, performance expectancy, facilitating condition (as innovation and environmental characteristics) toward intention and use of technology. We added credibility as new mediating variable, and precipitating factors as moderating that affects the relationship between intention and use of the technology to overcome UTAUT limitation. This is an ongoing research and at this stage we are mainly developing a theoretical argument and methodology that is currently in the process of being tested.

**Keywords**: entrepreneurship, IT related-innovation, IT-adoption, UTAUT model, entrepreneurial potential model
Work In Progress
Innovation: A Question of Developing and Cultivating a Culture?
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Abstract: In order to stimulate innovativeness in companies, the company culture can be a key factor. This paper introduces a project which goes into companies to study their culture and find out which factors are promoting and which are blocking innovation. It is a work in progress, and no results are available yet, but one initial company case is advancing, and more are being planned.

Keywords: improving innovativeness, cultural aspects, action research

Entrepreneurship and the Equality of Chances: An Inter-Regional Model of Women School of Entrepreneurship
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Abstract: The project entitled: Entrepreneurship and the Equality of Chances. An Inter-regional Model of Women School of Entrepreneurship, financed by the European Social Fund with an amount of over 3.5 million Euros, is the first strategic project in the field of human resources development in Romania that promotes female entrepreneurship. The covering area of the project is the Western part of Romania, and includes Maramureş, Satu-Mare, Bihor, Arad, Timiş, Caraş Severin Counties, being implemented by partner universities from each of these counties. The general objective is to promote the equality of chances in the field of entrepreneurship, by stimulating the implication of women, especially those coming from rural areas, to initiate and develop their own business in the context of sustainable development of their communities. As initial result of the project, a Women School of Entrepreneurship, consisting of 6 territorial, 24 local and 72 rural centres, along the Western part of Romania, was set up, giving the 1800 women composing the target group of the project, the opportunity to acquire entrepreneurial skills in the same place where they leave, by using Action Learning as an educational method. Besides the entrepreneurial training, the project develops a number of innovative activities such as: the elaboration of two packages of didactic supports especially designed for the women’ needs, with pronounced original character, elaborated by an inter-regional team of specialists from the partner universities in both printed and in e-learning format, and entitled:
Training for Trainers of professional competences, and The School of Entrepreneurship - Module I – Business start-up, respectively, Module II – Business development; the elaboration of the economic diagnoses of the 6 counties involved, by the same inter-regional research team, and thereafter, their integration in the training process, in order to facilitate the identification of business ideas according to the development potential of the counties taken into consideration, and the real possibilities for development of the SMEs' sector; the development of some specific methods designed to create the data base selection, and to monitor the project’s target groups, including a set of focused questionnaires; the development of a specific research activity, having female entrepreneurship in the Western part of Romania as main subject. The project development results in: creating an inter-regional educational research, training and communication network; creating an inter-regional data base on female entrepreneurship; generating an inter-regional model of Women School of Entrepreneurship based on Action Learning, as a replicable model, adaptable to other areas; elaborating 1800 business plans addressed to the development needs and specific priorities of the inter-regional area envisaged. By putting into practice, with the support of the project, 50% of the resulted business plans, will lead to the increase of the density of the SMEs sector, to the creation of direct and indirect workplaces, to the decrease of poverty, to the regional development, to the promotion of female entrepreneurship, and definitively, to positive changes in the lives of all those 1800 women from the Western part of Romania.

Keywords: female entrepreneurship and chance equity; entrepreneurial innovative learning and teaching in higher education; business start-up and/or development; action learning, regional development

Study Concerning the Identification and the Improvement of the Romanian Companies Developing External Trade Activities’ Competitive Advantages, for Maximizing the positive effects of the EU accession

Adriana Giurgiu and Anca Dodescu, University of Oradea, Romania

Abstract: “Study concerning the identification and the improvement of the Romanian companies developing external trade activities’ competitive advantages, for maximizing the positive effects of the EU accession” (acronym: SVACEX) is a project financed by the National Centre for Programme Management – CNMP of Romania, by Programme 4 – Partnerships in the priority fields in the framework of
preparing a future FP 7 project, with an amount of approx. 530,000.00 Euros, for pursuing advance research in the field of new managerial, marketing and entrepreneurial methods for organizational competitiveness, in order to establish strategies and to capitalize the competitive advantages of the firms. The project is meant to build a better collaboration between the researchers in the field of economics and international business (including the main partners in the project: University of Oradea – The Research Centre for Competition and Sustainable Development - CCCDD, ASE – Faculty of International Relations and The Romanian Academy National Institute for Economic Research - INCE), the Romanian authorities responsible for the drawing up and carrying out of the foreign trade policy (Foreign Trade Office through Romanian Centre for Trade and Investment - CRPCIS) and the corporate bodies, in order to establish and capitalize the competitive advantages of the Romanian companies with foreign trade activity (which represents the target group of the SVACEX project’s beneficiaries), as a result of our country’s adhering to the European Union, in order to maximize the positive effects of the newly-created opportunities on the Romanian business environment and the corporate bodies performing foreign trade and inter-community production activity and to identify thus new strategies and solutions regarding the reduction of Romania’s commercial deficit, emphasizing the way in which Romania can involve the effects determined by foreign trade economic growth. Taking into consideration the fact that SMEs play an essential role in the European economy, representing a source of entrepreneurial abilities, innovation and creation of work places, the project has in view the drawing up of a study regarding the identification and capitalization of the competitive advantages of the Romanian companies with export activity, in order to maximize the benefits of Romania’s adhering to the EU. In this view, the 5 phases were suggested for the implementation of this project. The project will have therefore as a result a strategy meant to capitalize the competitive advantages of the Romanian foreign trade resulted from our country’s adhering to the EU, for the further use of the interested entrepreneurs.

**Keywords:** international entrepreneurship; internationalization strategy; competitive advantages; EU competitiveness; Romanian external trade
Innovation Platform Design Through Knowledge Services

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Abstract: Consummating innovation service platforms to foster innovative enterprises and talents has been listed as a main task in China’s Technological Innovation Project. A novel solution is proposed in this paper, based on a knowledge service approach to support knowledge-base innovation. Knowledge services provide an ICT-enabled open accessible environment for on-demand knowledge acquisition. The BOKs-based rich knowledge resources repository supports one-stop service for innovation across multiple domains. Innovation knowledge services are also provided as an innovative guide and tools for knowledge workers, innovation champions and CxOs being involved in innovation activities, including innovation management, innovation methods, entrepreneurship, new product development etc. Innovation services are required to cover all level of DIKW framework (Data-Information-Knowledge-Wisdom) to avoid loss anything in lower level. Besides the resource layer, a networking layer is provided for building CoPs and CoIs for collaborative learning and innovation. It is an open innovation platform in which solution seekers can post their issue to find wisdom of crowds and the system provides online assistance for solvers and ideas searching. Then a collaborative innovation network can be formed dependent on attributes of the problem issue. It can either be a volunteer-based community just motivated with a common interest, or a bidding-based knowledge marketplace for crowdsourcing. Knowledge services are looked as a principle infrastructure to promote intellectual capital and continuous innovation in knowledge economy. A pilot development project is underway and has made significant progress. At Shanghai we have collected and developed a set of BOKs in innovation, software engineering, IT, and modern services domains, including New Product Development BOK, CTO BOK and CIO certificate program etc.

Keyword: knowledge service, open innovation, wisdom of crowds, CoP/CoI, body of knowledge (BOK)
Modes of Inbound Open Innovation in the Context of Dynamic Knowledge Creation

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Abstract: Knowledge and its management have been studied extensively in the last decades from many aspects, including the dynamic creation process (Nonaka et al., 2000), the nature of knowledge (Nonaka, 1994) and the knowledge boundaries and boundary objects (Carlile, 2002; Carlile & Rebentisch, 2003). Indeed, the existence (Grant, 1996) and structure (Birkinshaw et al., 2002) of companies have suggestively been explained by the facilitation capability for knowledge accumulation and integration they provide. The innovation processes are dynamic processes that create knowledge through activities that integrate information from multiple sources and transform it into a commercially feasible innovation. This phenomenon, often called open innovation (Chesbrough, 2003), has been paid notable attention on in current organizational research (West et al., 2006). The ability of a company to absorb external knowledge is limited by their current level of expertise (Cohen & Levinthal, 1990), their existing contact network and the limited resource of managerial attention (Laursen & Salter, 2006; Ocasio, 1997). Thus, companies have a need to prioritize the acquired knowledge and the explored sources. Also, the political nature of pragmatic, interorganizational knowledge creation must not be overlooked (Swan & Scarborough, 2005; Carlile, 2004). This paper aims at describing the logic in which these decisions can be made. The study is primarily conceptual, and aims at explaining why the selected modes of interaction and the type of partners the companies resort to in their information acquisition processes have strong path dependencies. Three case interviews are briefly introduced to exemplify our preliminary findings.

Keywords: open innovation, knowledge creation, knowledge boundaries
The Enhancers and Challenges of Collaborative Service Development Within Business Networks

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Abstract: The purpose of this paper is to indicate the enhancers and challenges related to collaborative service development within business networks. We discuss whether the enhancers and challenges the companies face are similar to those found in previous research. The methodology used is a multiple case study of collaborative service development projects. The empirical data is collected from two case-study companies that combine the resources of multiple intra- and inter-organizational actors. These two companies represent large conglomerates that have expanded through acquisitions. We contribute to the service innovation research by increasing understanding of the nature of networked service development in B-to-B networks.

Keywords: service innovation, service development, B-to-B network

Knowledge-Based Spatial Interventions for Economic Competitiveness: The Role of High-Tech Innovation Clusters in Regional Development

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Abstract: Innovation and knowledge-based development have become interconnected in the last decades, due to the globalizing economy and the developments in the information and communication technologies (ICT). High-tech clusters have appeared on the outskirts of cities or elsewhere promoting innovation and supporting cooperation between research and development (R&D) companies and educational institutions. Moreover, incubators offer assistance to start-up firms providing space and the means to enter the entrepreneurial network. Planning for clusters is not a simple task, as there is a variety of requirements to be developed. The success recipe for a dynamic high-tech centre is a mix of education, industrial research, entrepreneurship and availability of risk capital. Recent strategies for high-tech clusters reveal diverse course of actions depending on the specific
characteristics of the region and emphasizing on the need for specialization of the technology focus.

**Keywords:** competitiveness; knowledge economy, high-tech clusters

### Impact of Knowledge Management on Innovation

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**Abstract:** Effective knowledge management and innovative outcomes are both the strongest sources of competencies and competitiveness for organizations. Knowledge management plays the role of capturing organizations’ collective expertise, and it plays an important role in enhancing innovation involvement of organizational members. This study examines the relationship between effective knowledge management processes and organizational innovation performance. Furthermore, it tries to set a model figuring out the mediating effects of organizational innovativeness between knowledge management processes and innovation performance. The major research method followed in this study is a comprehensive literature review, supplemented by analysis of data which was collected through surveys. The results of the research show that knowledge management processes are positively related to innovation performance. Additionally, the results provide evidence that innovativeness plays a mediating role between knowledge management and innovation performance.

**Keywords:** innovation, knowledge management application process, knowledge management acquisition process

### Entrepreneurial Learning: Practice as a Source for Learning and Business Success

Henk Schout and Saskia Harkema, The Hague University of Applied Sciences, The Netherlands

**Abstract:** Entrepreneurship stands high on the political European agenda. Its meaning is twofold: entrepreneurship as a career opportunity, or as a competency. Following the statement made in Europe, national governments have defined an urgent need to stimulate entrepreneurial talent and motivate students to become entrepreneurs to start and develop new businesses that will generate employment and create economic and social wealth. Developing entrepreneurship
education and training initiatives is one way of helping to achieve this goal. According to the European commission (2008), the teaching of entrepreneurship is not yet sufficiently integrated in higher education institutions' curricula. So the real challenge is to build campus-wide, inter-disciplinary approaches, making entrepreneurship education accessible to all students. At The Hague University of Applied Sciences we develop programs to stimulate entrepreneurship. The question is: to what extent do these programs contribute towards the development of entrepreneurial competencies, in other words: can entrepreneurship be taught? And furthermore, to what extent do the programs contribute to the success of new start-ups by students that followed our programs? Over the last five years time more than 200 students have taken part in three different electives developed in our centre. Some of the findings of our research are that students indeed develop entrepreneurial competencies (Harkema & Schout, 2008). This can partly be attributed to the pedagogical concept underlying the programs. The next step is to determine whether the acquired competencies developed in the program among students that have set up their own business, help them in their business and are accountable for their business success. In this paper we report on the preliminary findings of our research among a sample group of alumni that have followed different programs and set up their own business.

**Keywords**: entrepreneurship, education, practice, business success
Non-Academic Contribution
How “open” does your Company want to be Towards External Creativity? Open Innovation Tools and Methods to Access Consumers’ Knowledge and Creativity

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Abstract: “Open innovation” has become a frequently used key word in both academia and practice. It refers to companies which transcend their organizational boundaries to access external source of knowledge, skills, and capabilities. In particular the integration of consumers into new product development has received a lot of attention lately.

The integration of consumers in different parts of the innovation process can take a variety of forms, ranging from pure observational approaches on one side, to freely accessible innovation communities on the other. In this presentation two approaches to integrate consumers into new product development are discussed in detail: Netnography and Innovation Communities. Both methods are illustrated by means of selected cases and success stories. Netnography (Kozinets 1999, 2002) is a qualitative, interpretive research approach to analyze the communication of consumers in online communities. Netnography enables to immerse into consumers’ product-related dialogue and gather unbiased insights into preferences, wishes and ideas. The example of a leading global supplier of fragrances and flavorings which aimed to identify new business opportunities in the field of “citrus beverages” illustrates the method’s applicability. The case shows how Netnography, including a qualitative analysis of more than 600 consumer statements, led to 6 distinctive consumer insight which were then translated into new product solutions.

The case of the Enlightened-Swarovski Elements Watch Design Contest illustrates the implementation of an “Innovation Community” for co-creation and collaborative innovation. The goal of this online contest was to generate new and innovative designs for wristwatches with applied gemstones. During a period of 8 weeks, 1,650 participants from all over the world registered on the platform to showcase their talent and submit their designs. In total, they created more than 2,000 wristwatches and a worldwide buzz for the company.

The two practical examples illustrate the broad spectrum of tools and methods that are available for an integration of consumers. In both
cases the “level of openness” differs. In the first case users’ ideas and product-related expertise are passively observed and the company does not reveal itself as doing research. In the second example the company communicates the specific innovation task to all creative individuals worldwide and invites them to become active co-developers.

In summary, the presentation shows that companies may decide on the appropriate “level of openness” depending on the phase of the innovation process, the product, and IP considerations among other factors. However, the success of open innovation depends not only on methodological expertise to search and acquire users’ collaborative input but also on organizational routines to digest and assimilate this external input. Altogether this implies the need to think of open innovation as a strategic program of continuous user collaboration.

**Keywords:** Open innovation, creativity, netnography, innovation community
Abstract Only Submissions
Social Entrepreneurship Meets Strategy – Impact of Service Delivery in Dorset, UK

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Abstract: The principal aim of this work-in-progress extended abstract is to identify the ways that social entrepreneurship has impacted upon the social and economic life of people in Dorset, UK. Today, social entrepreneurship has been hailed as contributing to satisfaction of needs the state welfare system cannot normally meet. In this light, individuals and groups who realise that could perhaps meet those needs gather the necessary resources and use them to make a difference (Thompson et al, 2000). As a concept social entrepreneurship is not new although it has begun to enjoy a higher media profile. According to Aiken (2006) this is because in a context of increased marketisation of public services there have been isomorphic pressures on social enterprises to deliver those services. Therefore, defining social entrepreneurship activities could be almost exclusively based upon the context it is used for. Social Enterprise Coalition (2003: 7) identifies the concept as a “...business with primarily social objectives whose surpluses are principally reinvested for that purpose in the business or in the community, rather than being driven by the need to maximise profit for shareholders and owners”.

In the UK social enterprises compete in the market place like any other business, no matter their business skills and knowledge to pursue social issues and achieve social goals. As Aiken (2006) suggests the operation of social enterprises indicates a focus on gaining resources as a public sector organisation that functions within a quasi market environment. On the other hand, an enterprise may undertake purely commercial trading activities such as building works or landscape gardening. Leadbeater (1997; cited by Thompson et al, 2000) suggests that the UK (and perhaps of other countries too) welfare system is in need of radical reforms if it is to deal effectively with people’s well-being and a significant contribution to this could be made via social innovations, that is new and creative community initiatives.

In addition, Defourny (2001; cited by Defourny and Nyssens, 2006: 6) suggest that the social dimensions of entrepreneurship can perhaps be encapsulated as follows:

- **An explicit aim to benefit the community**: One of the principal aims of social enterprises is to serve the community or a specific group
of people. In the same perspective, a feature of social enterprises is their desire to promote a sense of social responsibility at local level;

✓ **A participatory nature, which involves the various parties affected by the activity:** Representation and participation of users or customers, stakeholder influence on decision-making and participative management are often important characteristics of social enterprises;

It is envisaged that provision of public services by social enterprises can perhaps be achieved via the identification of strategic dimensions which could define the nature of the delivery body. These elements are: Vision of social entrepreneurs; Decision-making process; Profit distribution. To this elements of the actual delivery can be added i.e. effectiveness of delivery and benefits for the local community (please refer to table below). Notwithstanding, measuring social entrepreneurship is a difficult task that cannot be resolved easily. This is due to the existence of a wide range of interpretations of what and how needs to be measured. Subsequently, not all social entrepreneurs work for revenues (either from grants or sales) and not all of these types of enterprises become social. To this someone would add that much of the discussion about social entrepreneurship has at its core a frustration about its effectiveness (Harding and Cowing, 2004).

Table: A strategy framework for social enterprises

<table>
<thead>
<tr>
<th>Organisational Operation</th>
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<tbody>
<tr>
<td>Mission of social entrepreneurs</td>
<td>A continuous activity of production of goods that incorporates a substantial degree of autonomy and collective mindset amongst participants</td>
</tr>
<tr>
<td>Decision making power</td>
<td>Representation and participation by all stakeholders including the end-user or customer and, participative management</td>
</tr>
<tr>
<td>Profit distribution</td>
<td>Although there is a certain degree of economic risk in establishing a social enterprise profit is distributed to a limited extent, thus avoiding profit-maximising behaviour</td>
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<th>Service Delivery</th>
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<tr>
<td>Effectiveness of service delivery</td>
<td>Encapsulation of the desire to deliver a robust business performance shaped by social goals</td>
</tr>
<tr>
<td>Benefits for the local community</td>
<td>The principal aim of a social enterprise that is shaped by the desire to promote a sense of social responsibility at local level</td>
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Methodology-wise this work relies upon research that can be identified within the geographical context of Dorset, and the South West of England. It is formatted around aspects of investigation as they are described in the framework above. It is anticipated that potential research outcomes would include: insights about collaborative efforts between particular governmental and other agencies from Dorset and South West of England; and evidence of design and development of a cluster on social enterprises and their operation locally and regionally.

The ultimate aim of this investigation is to analyse and interpret the research findings in a manner that can offer evidence about the impact of social enterprise activity in Dorset, UK. Although the research is still in its infancy it is the author’s impression that social entrepreneurship can flourish in the geographical areas under consideration. This is due to the enthusiasm and motivation that participants have already shown in order to achieve specific goals e.g. successful voluntary work on the part of Dorset Reclaim or effective provision of services to the third sector by Sequal Solutions.

**Keywords:** Social Entrepreneurship; Dorset-UK; Strategy; Organisational operation; Service delivery.

**MAPEER SME Project - Making Progress and Economic Enhancement a Reality for SMEs**

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**Abstract:** MAPEER SME is a large scale project funded by the European Commission that aims to support activities to create the background conditions in which Research, Development and Innovation (R&D&I) is welcomed, supported and nourished in European SMEs. The MAPEER SME project was stimulated by several overarching aims, namely:

- To make innovation welcomed by our 23 million European SMEs and elevate it to a central stage of their daily activities and core values;
- To make innovation widely available and visible across regions, member states and economic sectors, helping to remove the barriers
• To support policy-makers and stakeholders to further coordinate and integrate their activities.

SMEs have become increasingly important in our society as providers of employment opportunities and as key players for the well being of local and regional communities. European SMEs represent 99.8% of all European enterprises, 67.1% of private sector jobs and more than 80% of employment in relevant industrial sectors such as metal products manufacture, construction and furniture (Eurostat, 2005). Thus, SMEs must be helped to thrive and being “SME-friendly” should become mainstream policy at all levels.

And today, innovation is more crucial than ever if business is to survive and prosper. Markets are changing faster and there is increased competition from emerging economies in Asia, Latin America and other regions around the globe.

To that extent, and in order to produce maximum benefits and achieve the European Economic Recovery Plan’s (COM, 2008) aims of protecting people and preventing the crisis from deflecting attention from the EU's longer-term interests there is a need to invest in future innovations. SMEs are called to play a key role on all these issues due to their relevance in the European economic framework. Thus, the same European Economic Recovery Plan calls for several SMEs-related actions.

The need for making progress and economic enhancement a reality for SMEs across the EU, that has always been an objective of the European Commission, has now turned out to be an issue of the utmost priority, significance and urgency not only for the benefits of the SMEs themselves, but also as a cornerstone of the European process and plan for getting out and over the economic downturn in the fastest, shortest and most competitive way possible. SMEs are desperately needed to fully support, develop and implement all these activities and short and mid-term actions that will result in long-term economic growth, empowerment and social development.

The MAPEER SME project covers the EU-27 Member States and Bosnia & Herzegovina, with a clear cross-sectoral approach. It aims to acquire a comprehensive insight into the design, implementation and impact of existing SME research and innovation support programmes and initiatives and convey it in the most appropriate way to SME stakeholders and policy-makers.
The methodology adopted by MAPEER SME brings SME needs and requirements in the centre of the development and evolution processes of programmes and initiatives, in a “user-centric” framework. End-users will be an integral part of the process. MAPEER SME is to identify, map and analyse all those programmes and initiatives that assist the collaboration between science and SMEs. Including purely technology-oriented and R&D programmes, but also life-long learning or applications of industrial science results. MAPEER SME will also identify and evaluate the economic, social and environmental impact of identified support measures on SMEs to pro-actively feed in the web platform and to improve and develop recommendations for new support measures better addressing SMEs through the “European SME Council”.

On this basis the MAPEER SME work plan foresees the definition and refining of a (regionally-differentiated, and cross-sectoral) strategy for the future design of new RTD and innovation policies, measures, and support services to assist research actions in favour of SMEs and fully exploit synergies between research, innovation and education activities. The approach guiding the MAPEER SME project is to come up with a comprehensive set of practical recommendations, comparative analysis and consistently effective strategies and policies to improve the performance of SMEs advance research and innovation initiatives and programmes by learning not only from best practices but also mainly from the processes by which they are achieved.

It is envisaged that the preliminary results of MAPEER SME will be disseminated to the research community shortly.

**Acknowledgement:** The MAPEER SME project is funded by the European Commission’s FP7 programme. Project websites are: www.mapeer-sme.eu and www.research4smes.eu

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The Acquisition of Legitimacy: How Guanxi Network Could Cause New Venture Success in China? An Indigenous Study Based on Grounded Theory

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Abstract: Research indicates that entrepreneur’s social network have positive effect on new venture success. However, while literatures about entrepreneur’s network focus on structural and relational features that are correlated with entrepreneurial outcomes, they failed to provide explanation about how networks are mobilized effectively thus contribute to new venture success. In other words, researchers neglect the process and mechanism of entrepreneurs’ network mobilization.

This study uses grounded theory methodology to analyze entrepreneur’s social network mobilizing process, which leads to the conclusion of the purpose, tactics and result of network mobilizing. Result of the study shows that the acquisition of legitimacy is the drive force of entrepreneur’s network mobilization, and the effectiveness of network mobilization depends on entrepreneur’s recognition of legitimacy and adoption of proper networking activities. Therefore, we conceptualize the inner mechanism of entrepreneur’s network mobilizing process.

Keywords: Guanxi; Guanxi Network; Legitimacy; New Venture Success; Grounded Theory

Do entrepreneurs need to enrich their value proposition? Revisiting business models for early-stage ventures

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Abstract: A definition of a business model should give answers to basic, but key, questions such as: How is value created? Who do we create value for? How is value captured? How are we going to be
competitive? Business models are popular in entrepreneurial settings; they are used by entrepreneurs to communicate their business ideas and by investors and stakeholders to assess the attractiveness of the proposed business venture. The concept also has attracted researchers' attention since Internet based ventures became business models best-known users; extant literature provides definitions and taxonomies of the business model concept. However, there is a limited evidence of its relationship to entrepreneurial venture survival options and recent studies are controversial to the adequacy of the business model concept to entrepreneurial opportunities identification.

Entrepreneurial settings combine high levels of uncertainty on both the entrepreneurs' ability to exploit the opportunity and the market opportunity itself. In addition early-stage venture evolution is driven by the use of trial-and-error approaches, the development of dynamic capabilities, and the reconfiguration of value proposal to best fit with the market. Moreover the experimental and discovery character can be hardly reconciled with the conventional nature of the business model. Scholars have indicated the need for a revisited business model concept that would merge the conventional components with these new market trends, mainly based on experimental and discovery traits.

This work in progress aims to shed some light on the suitability of introducing complementary components in the business model concept that would better fit with entrepreneurs, investors, and stakeholders' needs in the assessment of early-stage entrepreneurial opportunities. What this research posits is that the usual structure of a business model is not enough to represent all the tenets that should be considered to assess, in their early-stages, the survivability of an entrepreneurial venture in today's global dynamic environment. The authors expect to get some clues to propose an enriched business model concept that better acknowledges the assessment complexity of the viability of a new entrepreneurial venture.

The authors are using a multiple case study qualitative research, following a grounded theory approach. In-depth interviews are being conducted with a group of entrepreneurs and data is being studied and encoded by a team of three researchers. In the preliminary cases analyzed entrepreneurs emphasized the role of cognitive and organizational learning, as well as risk management mechanisms, as key elements of their venture evolution. For the time of the conference, the authors expect to be able to report initial findings on the suitability of
a revisited version of business models for early-stage entrepreneurial opportunity assessment.

**Keywords**: Business Model; Entrepreneurship; Opportunities; Case Studies; Grounded Theory

**Understanding the product innovation process in the Fast Moving Consumer Goods (FMCG) Industry: towards a comprehensive model of product and packaging development**

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**Abstract**: This paper explores the findings of the second phase of research that form part of a three year Ph.D programme of research sponsored by Chesapeake Corporation an international packaging manufacturer, and one of the largest in Europe. The paper focuses largely on the Fast Moving Consumer Goods (FMCG) industry, as well as investigating the packaging industry, in order to develop an understanding of the product innovation process as a whole. The paper investigates the product innovation process used within the FMCG industry, an industry that is significant in size being responsible for £125 billion of consumer expenditure and contributes over 8% of GDP (Bourlakis and Weightman, 2004). The study focuses on developing an understanding of how the development of new packaging is incorporated into the innovation process. Packaging is a critical part of the product offering (Anselmsson and Johansson, 2009; Wansink and Huffman, 2001; Rundh, 2005), that can be use to gain competitive advantage (Rundh, 2005), and influence consumers product choices and perceptions (Prendergrast and Pitt, 2000; Wells et al., 2007). Furthermore, with increasing competition within the sector, both presently and into the future, developing innovative new packaging represents a significant and important issue for firms within the industry (Anselmsson and Johansson, 2009).

The FMCG industry is a highly competitive industry dominated by international brands, such as Coca-Cola, Procter and Gamble, Unilever, Colgate-Palmolive, etc. Store brands or retailer-own-label products also contribute to the competitiveness within this industry. New product development is a major activity of FMCG brand owners, in fact over a thousand new products appear each month on the shelves of British
supermarkets (Nancarrow et al., 1998), and retailers development volumes alone are typically measured in thousands per annum (Francis, 2004). Yet, despite this, relatively little has been written about innovation and new product development within this industry. The literature that does exist in this area is mainly derived from consultants rather than empirical research (Francis, 2006; Grunert et al., 1997). Likewise the limited research that has been undertaken (for example, Francis et al. 2008; Rudder et al., 2001; Rudolph, 1995; Morris, 1993), has focused on the development of the core product itself and offers little insight into packaging development. This is despite the fact that packaging is an integral part of the product offering that is arguably inseparable from the product itself. For example, the bottle forms a large part of consumers perceptions and the effectiveness of the product for roll-on deodorants, Guinness relies on its in can ‘widgets’ to product a product that is of sufficiently high quality, and microwave meals rely on their packaging for product heating. Likewise a great deal of success has been achieved by a few packaging innovations, for example in the beverages sector innovations such as Tetrapak, PET bottles, and in-can systems (such as the Guinness ‘Widget’), all of which have achieved high levels of success.

Based on the gaps identified in the existing literature, this paper focuses on answering the following research question: What is the model of the innovation process within the FMCG industry, and what role does packaging play within this process? Thus the research focuses on developing an understanding of the wider new product development process, as well as the process being used to develop new packaging. The paper presents the findings of a number of detailed case studies providing insights into the product and packaging development process used by firms in the sector. The case studies undertaken explore both the development of own brand products, and branded product manufacturers products, which are the two most common types of products within the sector. The case studies are developed from a number of semi structured interviews, conducted with product and packaging managers within FMCG firms, and R&D and marketing managers within packaging manufacturers. Because of the exploratory nature of the research, this initial investigation used a semi-structured in-depth interviewing technique. The aim was to get the participants to talk as freely as possible and to discuss the area in their own terms. This technique aims to gain the perspectives of informants so that the research topics could be explored (Daymon and Holloway 2004), and this would allow the interviewees to express their perceptions and feelings at length in their own words, leading the dialogue, thereby
obtaining insight and understanding. In addition to the data gathered through the interviews, the case studies are also derived from observation, and internal reports and documents.

The results of the research identify a number of different product innovation models that currently exist within different firms within the industry. In particular differences are evident in the processes used by both private label brands, and the own brands of the retailers. The study explores the reasons behind these different models, and the implications of this. In particular it is found that in the case of own brand products their manufacture is typically outsourced, which means that much of their new product development is undertaken by suppliers, and this negatively impacts on the relative attention packaging receives and creates a particularly heavy focus on costs.

The research uncovers a number of issues and possible inadequacies in the models used, particularly in regards to the role external suppliers within the packaging development process. The findings also highlight the fact that packaging receives relatively little attention within the FMCG new product development process in general, despite its critical importance. Furthermore the key decision makers within the innovation process are risk averse to changing the format of packaging, and thus the attention packaging does receive is largely focused on costs and basic graphics changes and improvements. Indeed there are few packaging focused staff within new product development teams, which exacerbates this focus on cost and aesthetic design.

Based on these findings this paper concludes that the new product development process of FMCG firms is largely market-driven, and focused on the development of the core product. It has a myopic view of packaging. Consequently, packaging receives relatively little priority and any that it does is largely focused on incremental graphic design changes and cost savings, rather than pursing longer-term improvements or new product opportunities. This leads to a risk averse, incrementally focused new product development process that incorporates relatively minor technical input. Furthermore it seems that the structure of the supply chain for own brand products in some respects further exacerbates these issues. Considering the variety of roles that packaging performs on behalf of the marketing function, this is of concern, as it seems that packaging innovation may be being stifled within these models of innovation currently used within the industry. Furthermore, the lack of involvement of packaging suppliers negatively impacts on the research and development activities of these suppliers,
with possible long-term implications on packaging technological innovation.

Based on these key conclusions, a number of recommendations are generated. In particular it is suggested that FMCG firms should; develop stage gate models that integrate product and packaging decision making at each stage, separate packaging buying from development, and ensure packaging staff with a strategic outlook are employed and that they are incorporated into NPD teams. It is also recommended that companies should develop closer more collaborative relationships with packaging suppliers, and the staff within NPD teams to whom packaging responsibility is assigned should be responsible for developing these relationships. In addition, where external agencies are used in design, it is important that these relationships with suppliers are still developed in order to ensure effective technical input.

**Keywords**: innovation, product development, packaging innovation, food and drinks, packaging.

**Open Innovation Practices in UK High-tech SMEs: An Empirical Study**

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There is currently an awareness of open innovation and its positive outcomes for a wide range of companies, particularly large organisations. Recent empirical research would indicate that open innovation has a positive effect on firms and this is more exaggerated in high tech companies. However, despite the increased attention of this apparent new paradigm amongst policy-makers, academics and practitioners, there is a dearth of empirical research on open innovation activities and practices in Small Medium Enterprises (SME's).

This study investigates the level and type of open innovation practices in a sample of high-tech Northern Irish SMEs. The research attempts to explore a phenomenon and draw inferences regarding the practical applications of open innovation and how widespread it is. The research questions are based in the context of the organisation and at this stage constitute exploratory research. To date no research has been carried out specifically on open innovation practices in Northern Ireland SMEs in particular, and the SME sector in general.
The research questions are:

1. How are firms appropriating themselves to open innovation: Are firms just ‘open’ to outside ideas or are they actively looking for partners and opportunities. Is there an awareness of innovation networks/are NI SMEs co-ordinating their open innovation endeavours?
2. Identify the knowledge sources for NI SMEs for open innovation i.e. mostly clients, suppliers or who?
3. Are there themes across open innovation among the respondents i.e. are most companies using inward or outward innovation is anyone successfully using the coupling approach?
4. Is most open innovation incremental or are SMEs in NI advanced enough to be aiming for breakthrough R&D?

In the first stage of this larger research study, semi-structured interviews were carried out with a sample of eight business leaders in Northern Irish SMEs. The companies were in a variety of sectors from technology to retail and all could be considered high performers. By choosing high performing companies it was expected that they would contain richer insight and potentially may have adopted some forms of open innovation. Thus, it was hoped that different stages in development of open innovation would be investigated.

Key findings highlighted that both inward and outward innovation is apparent, 75% of the respondents felt that their internal R&D alone is not sufficient to meet their innovation needs and looked to open innovation to plug this gap. All of the SMEs were actively looking for partners and opportunities and all used external sources. The external knowledge sources consisted of Universities (75%), Suppliers (50%), Networks (37.5%), other companies in peripheral industries (37.5%), customers (37.5%), VC’s (12.5%) and competitors (12.5%).

The companies were openly innovating for the following outcomes: to help them break into new markets, to increase their speed to market and to increase their revenues or grow profitability. All companies were outcome focused. The companies adopted specific management techniques and leveraged a selection of government-backed programmes to implement open innovation in their organizations.

It was found that all of the companies used intermediaries to assist their innovation process. These intermediaries included: Invest Northern
Ireland (62%), Intertrade Ireland (50%), Universities (62%), NI Science Park (50%), Specialist collaboration intermediaries such as 4IP, The Wellcome Trust and Nesta (37.5%).

Five of the eight (62.5%) respondents had a practice of bringing in outside ideas or IP. However, only one of the companies had a clear strategy and set procedure and it was found that the other for the companies did not feel they were at a mature enough point to merit the implementation of a formal system. In most cases the CEO or senior management team was opportunistically looking for IP or technology. It appears that the SMEs felt that they need to concentrate on getting their products to market before establishing internal management practises to maximise the benefit of using external ideas.

The vast majority of companies surveyed lack a formal system for open innovation and none of the companies used metrics to measure the success of their open innovation. All the UK SME’s interviewed are taking a pragmatic approach to open innovation with no one innovating for innovation sake

Business leaders expressed a wish to become more open but are constrained by lack of resources such as time, funding or access to relevant intermediaries. Further research into open innovation could establish if SMEs are more likely to become involved in R&D as a result of open innovation. It would be interesting to assess if open innovation practices are helping to overcome the reluctance of some SMEs to get involved in R&D as it is considered cost prohibitive.
Round Table Discussion
Social Entrepreneurship for Behavioural Change; A Move Towards Sustainable Food Consumption

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Abstract: The subject of behavioural change dominates the literature on sustainability and sustainable consumption. Described as the holy grail of sustainable development policy, it remains an elusive goal for many key aspects of sustainable consumption and sustainable lifestyles. One significant area of interest for governments in the context of sustainable behavioural change is related to the consumption of food.

Food is becoming increasingly measured by its three component footprints: carbon, water and ecological not just from the perspective of production but through the whole of the food lifecycle including distribution, storage, purchase, consumption and disposal of waste. While it is clear that food consumption is a major contributor to climate change and the problems of landfill food waste disposal there is little indication of a change in consumer behaviour despite efforts from government and other stakeholders.

In the UK, food transport alone has a direct cost of £9 billion each year; the retail value of food waste that goes to landfill is calculated to be £6 billion per year, wasting 6.7 million tonnes. The UK is not alone. Across the EU25 the food and drink sector accounts for 20-30% of environmental impacts, equal to housing and transport impacts.

Concerned with national food security and the re-localisation of food supply, government agencies have already begun to initiate changes in food consumption habits to lead consumers towards a more sustainable lifestyles focusing on 3 food behaviour targets: buying more local / seasonal food, relying less on animal protein and reducing food waste. However, despite government campaigns, pro-sustainable intention on the part of the consumer has not consistently resulted in pro-sustainable behaviour.

This much referred to behaviour-intention gap, the reluctance or inability of consumers to change their behaviour represents an opportunity for entrepreneurial activity. A mixture of social entrepreneurship and social marketing techniques is already being used to change consumer food consumption habits, while the re-localisation of food supply is giving rise to a new kind of local food entrepreneur.
The proposed roundtable discussion will therefore centre on the market opportunities for entrepreneurs to contribute to achieving consumer behavioural change by promoting more sustainable habits among the general population within the context of food consumption.

**Keywords**: sustainability, social entrepreneurship, food