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Preface

These proceedings represent the work of researchers participating in the 10th International Conference on Intellectual Capital, Knowledge Management & Organisational Learning - ICICKM 2013, which this year is being held at The George Washington University. The Conference Chair is Dr Michael Stankosky and the Programme Chair is Dr Annie Green, both from The George Washington University, Washington, DC, USA. The conference sessions are being held at the The George Washington University and the conference dinner is being held at the Smith & Wollensky restaurant in Washington.

The conference will open with keynote speaker Debra Amidon, from ENTOVATION International, Ltd. Wilmington, Massachusetts, USA who will address the topic of The IC Bretton Woods: A Global Innovation Frontier. The second keynote presentation will be by Jonathan Low, from PREDICTIV, USA on the topic of Competitive Advantage in the Age of Intangibles.

The ICICKM Conference constitutes a valuable platform for individuals to present their research findings, display their work in progress and discuss conceptual advances in many different branches of intellectual capital, knowledge management and organisational learning. At the same time, it provides an important opportunity for members of the KM community to come together with peers, share knowledge and exchange ideas. ICICKM has evolved and developed over the past nine years, and the range of papers accepted in this year's conference ensures an interesting two-day event.

Following an initial submission of xx abstracts that have undergone a double blind peer review process, 57 research papers, 21 PhD research papers, 2 Master's research papers and 1 non-academic papers are published in the ICICKM 2013 Conference Proceedings, representing work from Australia, Barbados, Brazil, Canada, Chile, Colombia, Czech Republic, Denmark, Estonia, Ethiopia, Finland, France, Greece, Hong Kong, India, Indonesia, Iran, Kazakhstan, Lithuania, Macedonia, Malaysia, Mexico, New Zealand, Nigeria, Poland, Romania, Russia, Russian Federation, Saudi Arabia, Slovakia, South Africa, Spain, Sweden, Thailand, Turkey UK, United Arab Emirates and the USA.

I hope that you have an enjoyable conference.

Dr Annie Green

Programme Chair

October 2013
Conference Executive

Dr Michael Stankosky, The George Washington University, USA
Dr Annie Green, The George Washington University, USA
Vincent Ribiere, Bangkok University, Bangkok, Thailand
Kevin O’Sullivan, New York Institute of Technology, New York, USA
Mark Addleson, George Mason University, USA
Denise Bedford, Kent State University, USA
Dr. Sebastián Díaz, West Virginia University, USA
Dr. William “Bill” E. Halal, The George Washington University, USA
Patrice Jackson, Lockheed Martin, USA
Jim Lee, Knowledge Management, APQC, USA
Dr. John Lewis, Kent State University, USA
Dr. Arthur J. Murray, CEO, Applied Knowledge Sciences Inc., USA
Dr. Alfredo Revilak, The George Washington University, USA
Dr. Anthony J. Rhem, A.J. Rhem & Associates, Inc, USA
Douglas Weidner, International Knowledge Management Institute, USA
Ellen Ensel, Information Services, United States Institute of Peace
Dr Anne L. Washington, George Mason University, USA
Mary Adams, Trek Consulting, USA
Verna Allee, President, ValueNet Works, USA

Mini track chairs

Mary Adams, Smarter-Companies, USA
John Dumay, University of Sydney, Australia
Dr G. Scott Erickson, Ithaca College, Ithaca, New York, USA
Dr Helen N. Rothberg, Marist College, Poughkeepsie, NY, USA
Professor Eunika Mercier-Laurent, IAE Lyon, France
Camilo Augusto Sequeira, Institute of Energy of PUC-Rio, Brazil
Dr Susanne Gretzinger, University of Southern Denmark, Sønderborg
Dr Kalsom Salleh, Universiti Teknologi MARA, Shah Alam, Malaysia.
Dr Anthony J Rhem, Knowledge Systems Institute (KSI), Illinois, USA
Dr Mark Addleson, George Mason University, Virginia, USA
Dr. John Lewis, Kent State University, USA

Conference Committee

The conference programme committee consists of key people in the intellectual capital, knowledge management and organisational learning communities; the list includes leading academics, researchers, and practitioners from around the world. The following people have confirmed their participation:
Mohd Helmy Abd Wahab (Universiti Tun Hussein Onn Malaysia, Batu Pahat, Malaysia); Prof Marie-Hélène Abel (Compiegne University of Technology, France); PROF. PHD. Maria-Madela Abrudan (University of Oradea, faculty of Economics, Romania); Dr. Bulent Acma (Anadolu University, Turkey); Mary Adams (Trek Consulting, USA); Mark Addleson (George Mason University, USA); Faisal Ahmed (FORE School of Management, New Delhi, India); Prof. Dr. Dr. Ruth Alas (Estonian Business School, Tallin, Estonia); Dr Joao Pedro Albino (UNESP, Brazil); Mulhim Al-Doori (American University in Dubai, United Arab Emirates); Tahseen Al-Doori (American University in Dubai, United Arab Emirates); Dr Alex Alexandropoulos (American University in Dubai, United Arab Emirates); Verna Allee (ValueNet Works, USA); Prof. Mohammed Allehaibi (Umm Alqura University, Makkah, Saudi Arabia); Dr Luis Alvarado (Universidad Catolica del Norte, Chile); Dr/Prof Xiaomi An (Renmin University of China, China); Dr. Gil Ariely (School of Government, Interdisciplinary Center Herzliya, Israel); Dr Fátima Armas (CISUC, Coimbra University, Portugal); Dr Yousif Asfour (Injazat Data Systems, Abu Dhabi, United Arab Emirates); Derek Asoh (Ministry of Government Services, Ontario, Canada); Bijan Azad (AUB school of Business, Lebanon); Mahjabin Banu (Jayoti Vidyapeeth Women's University, India); Professor Michael Banutu-Gomez (Rowan University, USA); Dr. Neeta Baporikar (Sultanate of Oman Ministry of Higher Education, Oman); Dr Bob Barrett (American Public University, USA,); Dr. Tomas Gabriel Bas (Pontificia Universidad Catolica de Chile, Chile); Dr Belghis Bavarsad (Shahid Chamran University, Ahvaz, Iran); Abdullah Bayat (University of the Western Cape, Bellville, South Africa); Prof. Dr. Aurilla Bechina Arnzten (Hedmark University College, Norway); DR Denise Bedford (Kent state University, USA); Esra Bektas (TU Delft, The Netherlands); Diana Belohlavek (The Unicist Research Institute, Argentina); Dr David Benmahdi (Laboratoire Paragraphe EA349, Paris, France); Prof. Galiya Berdykulova (International IT university, Kazakhstan); Prof Constantin Bratianu (Academy of Economic Studies, Bucharest, Romania, Romania); Jean Pierre Briffaut (UTT, Université de Technologie de Troyes, Troyes, France); Sheryl Buckley (Unisa, South Africa); Dr Acma Bulent (Anadolu University, Eskisehir, Turkey); Dr Francesco Calabrese (Institute for Knowledge and Innovation (GWU) - USA, USA); Dr. Delio Castaneda (Pontificia Universidad Javeriana, Colombia,); Saban Celik (Yasar University, Turkey); Eric Chan (Knowledge Management Development Centre, Hong Kong, Hong Kong); Fernando Chaparro (Universidad del Rosario, Bogotá, Colombia); Prof David Chapinski (Rutgers, The State University of New Jersey: Newark, United States) Daniele Chauvel (SKEMA Business School, France); Prof Phaik Kin Cheah (Universiti Tunku Abdul Rahman, Malaysia); Dr Benny Cheung (The Hong Kong Polytechnic University, Hong Kong); Dr. Vikas Choudhary (National Institute of Technology, Kurukshetra, India); Rashid Chowdhury (Independent University, Bangladesh, Chittagong, Bangladesh); Dr Reet Cronk (Harding University, USA); Prof. Marina Dabic (University of Zagreb, Croa-
Administration, Greece); Dr Amrizah Kamaluddin (Universiti Teknologi MARA, Malaysia); Dr SilvaKarkoulian (Lebanese American University Beirut Campus, Lebanon); Dr Jalil Khavandkar (Zanjan Science & Technology Park, Iran); Dr Prof Aino Kianto(Lappeenranta University of Technology, Finland); Hans-Peter Knudsen (Universidad del Rosario, Bogotá, Colombia); Dr Andrew Kok (University of Johannesburg, South Africa); Eric Kong (University of Southern Queensland, Australia); Prof. Dr. Richard Lackes (Institute of Business Informatics, TU Dortmund, Germany ); Jim Lee (APQC, USA); Prof. Rongbin W.B. Lee (The Hong kong polytechnic university, Hong Kong); Rene Leveaux (University of Technology, Sydney, Australia); Dr John Lewis (Kent State University, USA); Dr Antti Lönnqvist (Tampere University of Technology, Finland); Professor Ilidio Lopes ( Polytechnic Institute of Santarém; University of Coimbra, Portugal, Portugal); Dr. Palmira Lopez-Fresno (University of East of Finland, Finland); Dr Fergal McGrath (University of Limerick, Ireland); Prof Eunika Mercier-Laurent (University Jean Moulin Lyon, France,); Kostas Metaxiotis (National Technical University Athens, Greece); Dr Marina Meza (Universidad Simón Bolívar, Venezuela,); Dr Ian Michael (Zayed University, Dubai, United Arab Emirates); Associate Prof. Ludmila Ml dkov (University of Economics Prague, Czech Republic); Dr Sandra Moffett (University of Ulster, UK); Dr Kavoos Mohannak (Queensland University of Technology, Australia); Muhammad Izwan Mohd Badrillah (UITM, Malaysia); Dr. Alunica Morariu, (“Stefan cel Mare” University of Suceava, Faculty of Economics and Public Administration, Romania); Maria Cristina Morariu (The Academy of Economic Studies, Romania); Elaine Mosconi (Université Laval, Quebec, Canada); Dr Claudia Mueller (Innsbruck University School of Management, Austria); Hafizi Muhamad Ali (Yanbu University College, Saudi Arabia); Dr Arthur Murray (Applied Knowledge Sciences, Inc., USA); Maria Mylopoulos (University of Toronto, Canada); Prof. Nader Nada (College of Computing, AAST, Egypt); Dr Atulya Nagar (Liverpool Hope University, UK); Tasawar Nawaz (Kozminski University, Poland); Dr Artie Ng (The Hong Kong Polytechnic University, Hong Kong); Prof Emanuela Alisa Nica (Petre Andrei University from Iasi, Romania); Dr Chetsada Noknoi (Thaksin University, Songkhla, Thailand); Dr. Kevin O’Sullivan (New York Institute of Technology, USA); Reese Olger (USMC, USA); Dr Abdelnaser Omran (School of Housing, Building and Planning, Universiti Sains Malaysia, Malaysia); Professor Ibrahim Osman (American University of Beirut, Lebanon); Kevin O’Sullivan (School of Management, USA); Dr. Jayanth Paraki (Omega Associates, Bangalore, India); Prof Robert Parent (Université de Sherbrooke, Quebec, Canada); Dr Shaun Pather (Cape Peninsula University of Technology, South Africa); Dan Paulin (Chalmers University of Technology, Göteborg, Sweden); Dr Parag Pendharkar (Pennsylvania State University at Harrisburg, USA); Pramuk Perera (Aviareps FZ LLC , Dubai, UAE); Milly Perry(The Open University of Israel, Israel); Dr. Monika Petraite (Kaunas University of Technology, Lithuania ); Dr
University, Elazig, Turkey); Nurhayat Varol (Firat University, Turkey); Francisco Vasquez (Universidad Jorge Tadeo Lozano, Bogotá, Colombia); Jeannette Vélez (Universidad del Rosario, Bogotá, Colombia); Professor Jose Maria Viedma (Polytechnic University of Catalonia, Spain); Dr Anne L Washington (George Mason University, USA); Douglas Weidner (International Knowledge Management Institute, USA); Dr Ismail Wekke (State College of Sorong, West Papua); LaNae Wheeler (Johnson Controls, UK); Tanakorn Wichaiwong (Kasetsart University, Thailand); Dr Roy Williams (University of Portsmouth, UK); Dr Tiparatana Wongcharoen (Bangkok University, Thailand, Thailand); Dr Lugkana Worasinchai (The Institute for Knowledge and Innovation Southeast Asia (IKI-SEA) of Bangkok University, Bangkok, Thailand); Dr Les Worrall (University of Coventry, UK); Dr An Xiaom (Renmin University of China, China); Dr Mohammad Hossein Yarmohammadian (Health Management and Economic Research Center, Isfahan University of Medical Sciences, Iran); Dr. Pitipong Yodmongkon (College of Arts Media and Technology, Chiang Mai University, Thailand); Aw Yoke Cheng (The Asia Pacific University of Technology and Innovation(A.P.U) UNITAR International University, Malaysia); Dr Malgorzata Zieba (Gdansk University of Technology, Poland); Philip Zgheib (American University of Beirut, Lebanon); Prof. Qinglong Zhan (Tianjin University of Technology and Education, China) Dr Suzanne Zyngier (Latrobe University, France)
Biographies

Conference Chair

Dr Michael Stankosky obtained his doctorate from George Washington University (GW) by researching organizational effectiveness. His subsequent research focuses on how to engineer and manage a global enterprise in a knowledge-based economy. He created the theoretical constructs required for the master’s and doctorate in knowledge management (KM) – a first in academia. He is Editor Emeritus of VINE: The Journal of Information and Knowledge Management Systems - part of Emerald Group Ltd.

Programme Chair

Dr Annie Green is a Knowledge Strategist/Architect and has led several KM initiatives. Her initial research efforts were focused on intangible asset valuation. Her subsequent research efforts are focused on the development of two methodologies: 1) PLANT (Plan, Layout, Actualize, Nourish, Transition) a performance based Knowledge Management methodology, and 2) BRAIN (Business Reasoning, Analytics and Intelligence Network) an intangible asset valuation methodology and measurement tool.

Keynote Speakers

Debra Amidon is a global innovation strategist and founder of ENTOVATION International Ltd, and is considered an architect of the Knowledge Economy demonstrating how theories can be applied for practical results. An international author and thought leader, she has published 8 books in foreign translations, including a trilogy on Knowledge Economics and The Innovation Superhighway – acclaimed as the “Innovation Book of the Decade”. She has 45 years of experience in academic administration, serving as Assistant Secretary of Education for the Commonwealth of Massachusetts, Dean at Babson College and as a corporate executive in the Office of the President. Debra has delivered hundreds of articles and keynote presentations in 38 countries on 6 continents. Her seminal research has focused on intellectual capital, stakeholder innovation, knowledge innovation zones and collaborative advantage. She advised the first student entrepreneur association [1972], established the first corporate office of technology transfer [1982]; and
last year hosted the World Summit on Innovation and Entrepreneurship in Boston [WSIE 2012]. With a Network of 200+ across 68 countries, her clients include Fortune 50 companies, government agencies and enterprises such as the EU, OECD, IADB, Confederation of Indian Industries, Arab Knowledge Economy Association, UN and The World Bank. She has received several honors including Outstanding Young Professional of New England, Pi Lambda Theta Scholar, the Sigma Kappa Colby Award, selected for the Festival of Thinkers, and IC2 Institute Global Fellow for the University of Texas at Austin. She’s taught courses at IPADE, Tartu University, the Banff Center and Tilburg University. Debra holds degrees from Boston University, Columbia University and the MIT where she was an Alfred P. Sloan Fellow.

Jonathan Low is a Partner and Co-founder of Predictiv Consulting and PredictivAsia. Predictiv assists corporations, government agencies, family-owned businesses and not-for-profits improve management performance, organizational effectiveness, marketing and strategy. Predictiv has particular expertise in evaluating the impact on financial results of factors such as strategy execution, reputation, organizational effectiveness, brand, innovation and post-merger integration. Clients have included Southwest Air, Pfizer, Major League Baseball, Petrobras, General Motors, UPS, United Technologies, Trump Holdings, the US Joint Chiefs of Staff, Novartis and Visa.

Jon has served in a number of positions related to his work such as Co-Chair for Strategic Organizational Issues of The Brookings Institution’s Task Force on Intangible Sources of Value. He has presented his findings to the US Securities and Exchange Commission, the Financial Accounting Standards Board, the European Commission, Chinese Ministry of Technology and the New York Federal Reserve Bank. His work has appeared in Forbes, the Wall Street Journal, Harvard Management Update, New York Times and Business Week. Jon has appeared on ABC, CNN, CNBC, PBS and other electronic media. He was co-editor of Enterprise Value in the Knowledge Economy, a joint publication of the OECD and Ernst & Young in 1997. He co-authored the book Invisible Advantage, published by Perseus Press in 2002. He has contributed chapters to Business Power; Creating New Wealth from IP Assets (Wiley, 2007) and From Assets to Profits (Wiley 2009). He blogs for The Low-Down.

Jon currently serves on the Board of the Center for International Understanding at Dartmouth College whose Nominating Committee he chairs; is a Director of the Athena Alliance, a Washington, DC-based policy research organization; Chairman of the Board of Classical South Florida, an NPR affiliate radio station; a Director of IPTI, a research and innovation NGO in Brazil; a Faculty member of the Reputation
Institute Management Training Program; an Executive Committee member of the Palm Beach County Ethics Initiative and a member of the Advisory Committee to the Baccalaureate Degree Program at Palm Beach State College. He is a graduate of Dartmouth College and Yale University’s School of Management.

**Mini Track Chairs**

**Mary Adams** is the co-author of Intangible Capital: Putting Knowledge to Work in the 21st Century Organization and the founder of Trek Consulting, a firm that helps private companies improve their performance and value. Mary is also the author of the Smarter Companies blog and creator of the IC Knowledge Center, a global community of 350+ IC thought leaders. Prior to starting Trek in 1999, she spent fifteen years as a high-risk lender at Citicorp and Sanwa Business Credit.

**Dr Mark Addleson** is on the faculty at George Mason University, Virginia, USA. He has taught the knowledge management course in the OD and KM Masters program for nearly 20 years and consults in the area of organizational change. His book, Beyond Management: Taking Charge at Work, about organizing knowledge-work, was published by Palgrave in 2011.

**Dr John Dumay** is a Senior Lecturer at the University of Sydney Business School and a leading international scholar and academic author on the topic of intellectual capital. His research questions and critiques IC theory by focusing on understanding the impact of IC in practice and whether it “makes a difference

**Dr Scott Erickson** is Professor in the Marketing/Law Department in the School of Business at Ithaca College, Ithaca, NY. He holds a PhD from Lehigh University and Masters degrees from Thunderbird and SMU. He served as Fulbright Visiting Chair at The Moneson Centre for the Study of Knowledge-Based Enterprise at Queen’sSchool of Business, Kingston, ON in 2010/2011. He has published widely on intellectual property, intellectual capital, and competitive intelligence.
Dr Susanne Gretzinger is Associate Professor (PhD) at the University of Southern Denmark, Sønderborg. Her research interest is in the areas of: Social Capital, Innovation-Management, Cooperative Networks, Value Adding Webs. Susanne Gretzinger is teaching Strategic Marketing Management, Business Marketing and Consumer Behaviour. Susanne Gretzinger took her PhD from University of Paderborn (Germany) and was studying one Semester as PhD student at the Illinois State University at Urbana/Champaign (USA). She was appointed as Marketing Manager at the BWI-Bau GmbH, Düsseldorf, Germany before she was appointed to the University of Southern Denmark.

Dr John Lewis is an accomplished leader, author, and consultant in Knowledge Management, Strategic Management, and Performance Improvement, within multiple industries, education, and the government. He frequently presents at conferences, and has been a Masters Series speaker at ISPI and a Thought Leader speaker at CSTD. He holds a Doctoral degree in Educational Psychology from the University of Southern California, with a dissertation focus on mental models and decision making. John teaches Organizational Learning as a Knowledge Management Faculty Associate at Kent State University, and is the founder and president of Explanation Age LLC, a management consulting company that focuses on knowledge management and strategic planning. John is a proven leader with business results, and was acknowledged by Gartner with a “Best Practice” paper for a knowledge management implementation.

Professor Eunika Mercier-Laurent is Global Innovation Strategist and President of Innovation 3D, researcher with IAE Lyon and professor of "knowledge innovation". Her previous positions include: research in computer architecture at INRIA, computer designer, artificial intelligence methods and tools and innovative applications with Groupe Bull. She holds degrees from Politechnika Warszawaska (electronic engineer), PhD in Computer Science (Paris Diderot University) and HDR (University Jean Moulin, Lyon). She's author of over 80 publications, her last book: Innovation Ecosystems was published by Wiley2011. She is member of Institut F.R. Bull, multidisciplinary group working on influence of IT on various fields, of New Club of Paris, on board of French Association for Artificial Intelligence, expert for ANR and European Commission and Chairman of IFIP group devoted to Knowledge Management.
Dr Anthony J Rhem, PhD. is an Information Systems professional with thirty (30) years of experience and currently serves as the CEO/Chief Scientist of Tacit Ware, Inc., a Knowledge Management Software company located in Chicago, Illinois. As a Knowledge Management (KM) consultant and software engineer Dr. Rhem has worked with fortune 500 corporations in retail, communications, financial, insurance and the military in implementing KM programs, policies and KM software solutions. Dr. Rhem serves on the Board of Trustees at the Knowledge Systems Institute (KSI), where he also teaches and heads the Research Department within KSI’s Computer Science Masters program.

Dr Helen Rothberg is Professor of Strategy in the School of Management at Marist College, Poughkeepsie, NY. She holds a PhD and MPhil from City University GraduateCenter, and an MBA from Baruch College, CUNY. She is on the faculty of the Academy of Competitive Intelligence and principal of HNR Associates. She has published extensively on topics including competitive intelligence and knowledge management. Helen & Scott’s latest book is Intelligence in Action: Strategically Managing Knowledge Assets, published by Palgrave Macmillan in 2012.

Dr Kalsom Salleh is Associate Professor (PhD) is a senior lecturer at the Faculty of Accountancy, Universiti Teknologi MARA, Shah Alam, Malaysia. Her research areas of interest include Knowledge Management, Intellectual Capital, Accounting and Auditing. She has published many of her research papers in international refereed journals, conference proceedings and book chapters as well as sitting on the editorial board and reviewing committee members of several journals.

Camilo Augusto Sequeira has a Master’s degree in Electronic Engineering from Catholic University, Rio de Janeiro, and has taught in both undergraduate and graduate programs. He has an MBA from Salford University, England. Sequeira has been top executive for multinational companies and international lecturer. He is currently a consultant and a researcher for the Institute of Energy of PUC-Rio.
Biographies of Presenting Authors

Natasha Ali BA, MA is a PhD student at the Faculty of Information at the University of Toronto. Her research interests include organizational behavior, information-seeking and the strategic management of information and knowledge.

Salwa Alhamoudi is an Assistant Professor and High Level Programs Coordinator in Institute of Public Administration in Saudi Arabia. Salwa is serving as a Lecturer and Consultant specializing in Public Administration, Strategic Management, knowledge management, Balance Scorecard and Electronic Governments. She got her Ph.D from University of Portsmouth, UK. She had Msc double major in Public Administration and Research Methods.

Sawasn Al-Husseini is currently a PhD candidate at Plymouth University School of Management in the UK and a lecturer at Foundation Technical Education, Baghdad, Iraq. She has published five journal papers in innovation, leadership style, organizational loyalty, knowledge management, and sharing in Iraq. Recently she published three papers on knowledge sharing in proceedings of the 10th European conference on E-learning in the UK, leadership and knowledge sharing in proceedings of the 4th and 5th European conference in intellectual capital in Finland and Spain.

Hanan Abdulla Al Mehairi is currently doing her PhD at Wollongong University in Dubai. She acquired a Distinction with honours Bachelor degree in applied sciences and in applied media communications from Dubai Women's College in June 2008. Hanan earned her Master's in strategic human resources management at Wollongong University in Dubai. Mrs Al Mehairi has participated in many academic conferences in different parts of the globe as she is progressing in her PhD such as Chicago, Greece, Turkey, and Las Vegas.

Doğan Altuner is a professor of finance who has been working as a head of department of international trade and finance in Yaşar University. Previously, he worked as a tenured professor in East Carolina University and head of financial analyst in NATO. His primary research interests are corporate finance, behavioral finance, investment analysis.

Xiaomi An is a professor of records and knowledge management at School of Information Resources Management, Renmin University of China (RUC). She is leader of Knowledge Management Team at Key Laboratory of Data Engineering and Knowledge Engineering, Ministry of Education at RUC. She is Fulbright Research Scholar of University of California, Los Angeles, at California.
Stella Anumnu is a lecturer in the Department of Educational Foundations, Federal College of Education (Technical) Akoka, Lagos, Nigeria. She teaches Educational Management and Research. Her areas of interest are Human Resource management, Entrepreneurship and Gender studies. She has published articles in professional journals and authored books. She belongs to various professional associations.

Teresita Arenas is a Professor at the Department of Industry, at the Technical University Federico Santa Maria (UTFSM), Finance and Accounting courses. She has had senior positions in the academic administration of the University, as Head of Career and Academic Director of Campus Santiago. Her research has focused on knowledge management and intellectual capital. has developed some studies in regions, particularly in the V Region of Valparaiso, along with other authors wrote the book "Towards a new concept of Cluster "and has participated in several international conferences related to the subject.

Joshua Bardfield, MPH has over a decade of public health communications, research and writing experience. He currently leads communications and knowledge management strategies for HEALTHQUAL, a capacity building initiative to build sustainable national and local quality management programs to improve population health in low- and middle-incomes countries.

Denise Bedford is currently the Goodyear Professor of Knowledge Management at the College of Communication and Information, Kent State University. She is currently engaged in expanding the M.A. program and the future Ph.D. program in Knowledge Management, as well as outreach and support to the national and international knowledge management communities.

Kiranmai Bhamidi is a Masters student in the Department of Management Studies, IIT Madras. She received her Bachelor’s from Osmania University, Hyderabad in Textile Engineering. Her other research interests include Strategic Management, Technology and Innovation management and Organizational Behaviour.

Andrijana Bogdanovska Djurovic is a Sheffield MBA graduate. Andrijana is a Researcher in the area of Strategic Management. Mrs. Djurovic has more than 5 years of work experience in managing and administering international donor projects, 3 years in lecturing at a University level and 3 years in leading research projects.

Donley Carrington Lecturer in Accounting and Coordinator MSc. Investment and Wealth Management programme at the University of West Indies (UWI), Cavehill
Campus, Barbados. He is a Graduate of UWI, Iowa State University, USA, Institute of Management Accountants USA and University of Hull, UK. Has published articles on Intellectual Capital in the Caribbean and is co-author of two books on cost accounting.

Linlin Cai graduated from Jilin University in July of 2011. Her major is archive science. When she was a junior, she got a good opportunity to go to Taiwan as an exchange student. This trip has greatly broadened her horizons. Now she is a master of Philosophy of HK PolyU. Her areas of interest are intellectual capital.

Delio I Castaneda is an Associate Professor of HRM and KM, School of Management, Pontificia Universidad Javeriana, Colombia.

Vincenzo Francesco Cavaliere is an Associate Professor of Business Organization at Department of Business Administration, University of Florence. His research interests include entrepreneurship and organization learning in SMEs, knowledge sharing and strategic human resource management. He is member of AIDEA (Accademia Italiana di Economia Aziendale). He served as a referee for The International Journal of Knowledge, Culture & Change Management and for Nonprofit and Voluntary Sector Quarterly.

Agnieszka Chlon-Dominczak, Ph. D. is an Assistant Professor in the Educational Research Institute in Warsaw as well as at Institute for Statistics and Demography in Warsaw School of Economics. Previously she was a Deputy Minister and Head of Department of Economic Analyses and Forecasting in the Ministry of Labour and Social Policy. Her research interest include: demography, pension systems, labour markets, social policy, health and education.

Souad Demigha. Has a PhD in computer science from the Sorbonne-University. Souad is a Lecturer in computer science at the University of Paris XI and researcher at the CRI (Research Department of Computer Science) of the Sorbonne University. Her research lies in the area of information systems, educational systems, medical imaging and data warehousing systems.

Dagmar Caganova, assoc. prof. in the field of Industrial Engineering, is the Vice director for Foreign Affairs and International Projects of the Institute of Industrial Engineering, Management and Quality at the Slovak University of Technology, Bratislava, Slovakia. Her professional interests lie in Human Resource Management, Intercultural Management and Gender Diversity. She is a tutor on PhD study programmes in Intercultural Management and Professional Language Communication and has participated in EU research programmes. Her numerous
publication activities are closely connected to her professional as well as research interests.

**Marcelo Moreira Campos** holds a Master’s Degree in Information Science in the field of knowledge management. His professional experience encompasses information and knowledge management in government organizations in Brasília, strategic management of information, and research project management. Since 2005, he is in charge of information management and organization at the R&D Department of the Brazilian Agricultural Research Corporation (Embrapa).

**Natalia Dnerpovskaya**, PhD, Associate Professor and Head of Knowledge Management Department of Moscow State University of Economics, Statistics and Informatics (MESI). Professional activities include the academic knowledge management, online training courses design and E-learning development.

**José Esteves** is an Associate professor of Information Systems at IE Business School. José Hold a Ph.D. in Information systems, a Diploma in Business Administration, MSc. and engineer degrees in Information systems. He has been an Author of many published articles about ERP systems. Interests focus on the implementation and use of enterprise systems, ERP systems, and impact of information systems on organizations, benefits of information systems, knowledge management and its use at organizational level.

**Max Evans** BSc, MI, PhD is an Adjunct at the University of Toronto (Faculty of Information and Institute of Communication, Culture and Information Technology (Digital Enterprise Management program)) where he teaches strategy, innovation, and information systems/technology. Max’s is also an Affiliated Researcher at the Knowledge Media Design Institute (KMDI) in the area of knowledge management.

**Helio Aisenberg Ferenhof**, M. Eng., MBA, PMP PhD candidate in Production Engineering (UFSC). Has Master degree in Knowledge Management from UFSC (2011). MBA in E-Business from FGV / RJ (2001); Specialist in Ditatics for Higher Education from SENAC/SC (2012); Bachelor's degree in computer science from UNESA (1999);

**Johanna Frances** has worked 10 years in the fields of computer science before going back to school in 2004. She did a Master 1 of History and Ethnology and a Master 2 of Sociology. Today she is a PhD in Knowledge Management in partnership with the PSA (French car manufacturer) and Telecom Ecole de Management (France).
Adela Anca Fucec Adela is a 2nd year PhD Student at the Management Doctoral School of the Bucharest University of Economic Studies, Romania. The author’s main focus of research is the knowledge economy and its effects on micro and macroeconomic level, especially from the point of view of the quantitative and qualitative managerial efficiency.

Tatiana A. Garanina Currently Tatiana A. Garanina is Senior Lecturer, Department of Finance and Accounting and Associate Director of Master in Management Programs at Graduate School of Management, St. Petersburg University. Tatiana got her Specialist Degree and Ph.D. from the same University in 2009. She also participated in Executive Programs at Harvard Business School (2011, 2012).

Mahmood Ghaznavi Has 12 years of professional experience in the field of Banking and Information Technology (IT). Mahmood was involved in planning and managing IT initiatives/investments of a bank and played a key role in the development of National Credit Information System of Pakistan. Mahmood is currently pursuing his PhD degree in knowledge management (KM) in Massey University, New Zealand.

Ales Gregar, Ph.D. is a Vice-Rector at Tomas Bata University in Zlín, Czech Republic. He teaches in the Faculty of Management and Economics for master and doctoral degree courses in Human Resource Management and Operating Systems. He has led many international research projects focused at strategic HRM for competitiveness, Knowledge management, and managing the Careers of elderly employees.

Hussain Hamed PhD student in health care management. My research area is focused on improving performance and quality of care in acute hospitals. The focus of my PhD thesis is on the role of intangible resources (IR) in improving quality of care in hospitals. I am also interested in service improvements in health care settings.

Ionut Viorel Herghiligiu is currently a PhD student in the last year at “Gheorghe Asachi” Technical University from Iasi, Romania and in the first year at University of Angers, ISTIA, and France. The title of Ionut PhD thesis is “Research on the Environmental Management System as a Complex Process at Organizations Level”

Jukka Huhtamäki, M.Sc. (Hypermedia) is a researcher and a teacher at the Intelligent Information Systems Laboratory at Tampere University of Technology and a founding member of Stanford’s Innovation Ecosystems Network. His research is
focused on developing methods and processes of data-driven visual analytics for insights on the structure and dynamics of business and innovation ecosystems.

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Knowledge Management Strategies Balanced Systems in Public Sector
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Abstract: In an era of sweeping technological and economic change, interest in Knowledge Management (KM) and the Balanced Scorecard (BSC) has grown among public administrators because these address issues of change, innovation, and environmental adaptation, all of which have been major concerns in organisation theory and practice for decades and are clearly important now as public organisations are being reinvented and reengineered. This study aims to investigate how do Knowledge Management Strategies influence the development of an organisation’s strategies, and Could BSC be used to develop Strategic Knowledge Management Balanced System (KMBS) for strategic management. The research provides a theoretical theory through linking research and literature on Strategic Management (SM), Knowledge Management (KM), and Balance Scorecard (BSC). This study examines the underappreciated influence of strategic Knowledge Management on performance management by using the Balanced Scorecard in the Public sector.

Keywords: knowledge management, balance scorecard, strategic management; information technology, organizational learning

The Linkages Among Intellectual Capital, Corporate Governance and Corporate Social Responsibility
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Abstract: The purpose of present study is to explore the linkages among Intellectual Capital (IC), Corporate Governance (CG) and Corporate Social Responsibility (CSR) through direct and indirect empirical inquiry. In related literature, IC has been conceptualized within different perspective of assessments. Empirical studies conducted on IC have previously analyzed IC in terms of its measurability and linkage with firm performance. On the other hand, CG and CSR have been evaluated by using their rating value such as CG and/or CSR Index. Since their importance for all stakeholders became more and more necessary for preventing organization from any types of chaotic environment, there is a need to comprehend their interrelated dynamics. Empirical investigation is conducted on manufacturing firms listed in Istanbul Stock Exchange from 2007 to 2011. Empirical results do support a positive relationship among these important constructs.

Keywords: intellectual capital, corporate governance, corporate social responsibility, manufacturing industry, Turkey
Knowledge Management in Support of Collaborative Innovation Community Capacity Building

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Abstract: Collaborative innovation is a trans-disciplinary approach for developing the wholeness synergy through holistic, competitive and complementary interactions between and among innovation participants in a specific environment. It is a formal process of collaborative innovation community capacity building (CICCB). Much research has been done on how to make collaborative innovation work effectively, efficiently and economically. While collaborative innovation is increasingly gaining attention in both theory and practice, it is still under-explored from a trans-disciplinary perspective of knowledge management (KM) and community capacity building. This paper aims to fill in this gap by addressing the following two questions: (a) what are the roles of KM in collaborative innovation, and (b) what are the KM approaches for supporting CICCB? To effectively answer these two questions, this paper presents a comprehensive review of the related literature that identifies three demands for CICCB including (a) trust building for enhancing the effectiveness; (b) sustainability building for improving the efficiency, and (c) extensibility building for developing better economy. It identifies three roles of KM in support of CICCB including (a) reformation of KM for convergence in collaboration; (b) remediation of knowledge activities for synergy in communication; (c) reconfiguration of knowledge artifacts for integration in connectivity. To adequately meet the three demands, this paper suggests a holistic approach for effective CICCB including (a) multi-dimensional convergence and trust building in collaboration; (b) multi-directional synergy and sustainability building in communication; and (c) multi-layer integration and extensibility building in connectivity. The contribution of this paper is mainly reflected in three ways. Firstly, it provides insights into the way in which the collaborative innovation literature currently lacks attention but crucial for its success. Secondly, the paper identifies the demand for CICCB and the roles of KM in support of collaborative innovation. Thirdly, this paper proposes a holistic approach for effective CICCB. This paper is the first step of a comprehensive study on the role of KM in support of CICCB. It is therefore conceptual on the definition of the basic concept and the identification of the KM approaches in support of CICCB.

Keywords: knowledge management; collaborative innovation; collaborative innovation community capacity building; community capacity building; community capacity
Knowledge Management Systems for Attrition Control Activities in Private Higher Learning Institutions

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Abstract: Private Higher Learning Institutions (PHLI) are concerned about student attrition because they are in competitive stage gaining numbers of students recruited into the institutions. While mentoring programmes are a useful approach for attrition control, such systems are often not well established in PHLI due to higher turnover of lecturers who play the role of mentors and also attributed to weak institutional follow-through process. Apropos Knowledge Management System (KMS) can help to equip the mentors with the requisite capabilities, as well as, facilitate the reinforcement of the institutional networks and commitments to effectively deal with student attrition. Following a structured path of KM, the paper recommends a KMS arrangement for attrition control in the context of a mentoring program in PHLI, and outlines an analytical approach for implementing KMS through KM mechanisms and KM technologies. The core of the idea in this paper is based on case studies involving two PHLI in Malaysia, which were analysed according to exemplar student integration and attrition models and espouses intervention strategies through a mentoring program. The structured analysis focuses on the knowledge and information needed by mentors and students, and the KM processes and the sub-processes involved to identify suitable KM mechanisms. The latter set the ground for the proposed KMS availed through a KM portal.

Keywords: knowledge management system, attrition control strategies, analytical approach, higher learning institution

Knowledge Management and Development of Entrepreneurial Skills Among Students in Vocational Technical Institutions in Nigeria

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Abstract: This study examined the extent to which learners in vocational technical institutions, capture, distribute, network and effectively use information made available to them during and after lectures that are entrepreneurially and skill oriented in other order to furnish the labour market with relevant school products. Development of an entrepreneurial skill is capable of equipping the Nigeria students to fit into different aspects of the economy after graduation. The study
adopted a descriptive design. A twenty-item unstructured questionnaire was used to assess 150 randomly selected final year students’ capacity to transform ideas gained in class into creative problem-solving strategies in three vocational technical colleges in Lagos in south west Nigeria. Three research questions and hypotheses were used as guides to the study. Data obtained were analyzed using descriptive statistics, Pearson Moment Correlation. The major finding revealed that there is a significant relationship between knowledge sharing and networking and students’ capacity to translate some curriculum elements into the world of work. Given the importance of knowledge sharing, innovations and connectivity through networking in today’s competitive world of work, it was recommended that students be linked up with several entrepreneurs who serve as mentors to students during and after training. Students should be made to participate in seminars and workshops that are entrepreneurially oriented. There should be regular visits of students to small cottage industries in the form of field trips. There should be a collaborative effort between vocational institutions and some government agencies, for example’ Small and Medium Entrepreneurial Development Agency of Nigeria (SMEDAN)

Keywords: knowledge, knowledge sharing, networking, entrepreneurial skills, vocational, technical, innovation and creativity

An Individual-Centred Model of Intellectual Capital

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Abstract: A detailed search of the Intellectual Capital (IC) literature has revealed that in the last few years much energy has been devoted to developing models on how to manage IC in organisations, and how IC impacts the organisation’s performance. Significant progress has also been made on how to identify and manage IC in Regions, and how this impacts their growth and benefits their inhabitants. However, surprisingly little has been found on people-centred or employee-centred studies on IC. All individual members of an organisation have their own knowledge, skills, competencies, networks and potential for innovation so, on the one hand, it is hypothesised that there must be a way to define an individual’s IC. On the other hand, if an individual identifies his or her IC and manages it effectively, will this lead to personal benefits? This research is exploratory and aims to address these issues by departing from the present IC models for organisations to propose an IC model for individuals and possible links to the individual’s performance and benefits. It applies a quantitative approach based on structural equation modelling and arrives at some reassuring findings.
Abstract: BACKGROUND: Peer communication about quality management (QM) between governments occurs rarely, if ever. The HEALTHQUAL All Country Learning Network (ACLN) is a knowledge management strategy providing a forum for peer exchange among 17+ countries to reinforce institutional improvement and QM. Panel and expert presentations together with participant-driven discussion sessions advance quality improvement (QI) knowledge and build countries’ capacities to achieve sustainable national performance measurement strategies, improvement techniques and quality management frameworks. ACLN promotes knowledge exchange between Ministry of Health leaders and managers, with changing annual themes focused on programmatic priorities aligned with President’s Emergency Plan for AIDS Relief (PEPFAR) goals. METHODS: ACLN joins national delegations of Ministry of Health and US-supported technical staff who are directly involved with HEALTHQUAL implementation. Plenary speakers provide expert technical information on improvement implementation emphasizing impact on specified health outcomes. Panels and country presentations feature Ministry of Health teams, allowing country representatives to share improvement challenges and successes. Open space, a meeting format of participant-chosen and led discussion sessions, facilitates further investigation on improvement topics. Workshops, case studies and a storyboard competition encourage peer exchange and motivate reflection about implementation. Learning and knowledge exchange activities include dedicated time for peer-to-peer discussion and informal networking opportunities which continue throughout the week and beyond the formal schedule, further reinforcing important south-to-south links between participants. RESULTS: ACLN fosters cross-country peer exchange between Ministry of Health leadership, managers and data analysts, where subgroups based on professional roles exchange knowledge and expertise. ACLN supports the development of sustainable national improvement programs through the sharing of strategies for practical implementation of quality management capacity building;
highlights accomplishments in improvement across countries, including alignment of improvement activities with other national initiatives and priorities; fosters exchange about performance measurement strategies, including indicator development and data collection, data quality and analysis techniques while accelerating understanding of QI knowledge, skills and strategies in core technical areas; and promotes communication of national improvement work through country presentations and a formal storyboard competition. In year four of the ACLN, country teams will be undertaking various leadership roles and responsibilities for key components of the agenda, including coaching of other country teams in core technical areas and management of country presentations. CONCLUSION: Peer exchange facilitated by the ACLN is fundamental to building sustainability through shared experience, knowledge and expertise, and in establishing an international community of practice to reinforce effective improvement strategies and spread.

Keywords: improvement, performance measurement, south-to-south, country ownership

Business Capability Modeling as a Foundation for Intellectual Capital Audits

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Abstract: This paper presents a conceptual model for identifying and aligning intellectual capital assets with business capabilities. The methodology draws from the disciplines of business architecture, knowledge management, and knowledge economics. Universities are presumed to be knowledge organizations with high levels of intellectual capital assets. Universities are also presumed to manage those intellectual capital assets well by definition. The research leverages a use case grounded in a university to illustrate how a capability base approach, coupled with a traditional intellectual capital structure, can (1) brings into question the perception that universities are by definition knowledge organizations; (2) provide a more robust approach to asset valuation at the organizational level; (3) offer a context for identifying asset liabilities; (4) make explicit intellectual capital assets which are not now considered for valuation; and (5) support a conversation among business, stakeholders, intellectual capital managers, knowledge managers and business architects.

Keywords: intellectual capital assets, universities, business capability modeling, business on a page, bottom-up asset valuation, aggregated intellectual capital asset valuation
Research Management at the Brazilian Agricultural Research Corporation (Embrapa): Development of an Information Management System

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Abstract: This paper addresses the deployment of a web-based system for information management – IDEARE – of the Brazilian Agricultural Research Corporation (Embrapa), in the context of its knowledge management (KM) process. Embrapa is a Brazilian government corporation for agricultural research recognized worldwide, whose mission is to provide feasible solutions for the sustainable development of Brazilian agribusiness through knowledge and technology generation and transfer. Embrapa is comprised of 42 research centers scattered in all Brazilian regions, and laboratories established abroad, besides the headquarters at the capital of the country. The strategy used in this report was a single case study that supports the whole process of planning, preparation and submission of projects on research, development and innovation (RD&I) to the Embrapa Management System (EMS), with a focus on research management. The qualitative nature of the study covered the strategic, human and technological factors of KM, highlighting the technological factor. Two distinct non-exclusive phases were considered for deployment: the planning phase, based primarily on the Process Analysis and Improvement methodology, using its conceptual framework and some of its techniques; and the development phase that was based on the development patterns of Embrapa’s computerized systems, following the most reliable standards established worldwide. The results revealed a robust web-based management information system with highly complex development patterns, but strongly flexible and adherent to Embrapa’s management strategy. Furthermore, the system is available full time for all Embrapa’s employees and external partners, and its use has proved that this tool is essential for all research activities. The conclusions suggest that the implementation of IDEARE promotes transdisciplinary team organization and collaborative work encouragement. The use of technology, contextualized in a research institution such as Embrapa, also showed that the implementation of this system is consistent with the Embrapa’s KM Model.

Keywords: Embrapa; IDEARE; RD&I; knowledge management; information management; information management system
Intellectual Capital and Its Influence on the Financial Performance of Companies in Under Developed Capital Markets – the Case of the Caribbean

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Abstract: Intangible assets play an important role in determining the value of a company in this knowledge based economy. The extent to which lack of information on intellectual capital may affect the performance of companies in inefficient capital markets is yet to be determined. This study investigates the impact of IC efficiency measures on financial performance of companies in inefficient capital markets, using Pulic (2000) VAIC methodology. The empirical data for this study were drawn from the annual reports of 70 companies listed across the five stock exchanges in the region for the years 2006 to 2011. The independent variables were IC efficiency scores VAIC, HCE, CEE and SCE. The dependent variables were performance indicators (ROA, ROE, EPS, ECIN, MB). Results of the regression analysis demonstrate that there is significant positive relationship between HCE and three financial ratios (ROA, ECIN and EPS). CEE has a significant and positive relationship with ROA, MB and ROE. There was no significant relationship among SCE and the five independent variables. The only significant relationship between composite VAIC and the independent variables was ECIN. This study extends the efforts of previous researchers to empirically validate the VAIC methodology to different settings. The originality of this study rests upon the use of the VAIC model in capital markets that can be considered inefficient and undeveloped.

Keywords: VAIC, Caribbean, measurement of IC, inefficient capital markets

Human Resource Practices and Knowledge Sharing: The Mediator Role of Culture

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Abstract: A big question for both academics and practitioners in ICKM is: How can human resource (HR) practices effect maximum leverage of the human capital pool in contemporary organizations through knowledge sharing? We know that HR practices are culture bound. The research evidence does not reinforce universal best HR practice because of the uniqueness of organizational cultures, comprised of both past and present social networks of employees providing both a historical and a current uniqueness in any organization. The resource-based theo-
Theoretical view suggests that an organization’s human capital pool is valuable. The empirical evidence reinforces this. The literature stresses the importance of knowledge sharing in the development of new knowledge for innovation and sustainable competitive advantage. So the nature and extent of knowledge sharing in an organization is also culture bound, and we suggest that organization culture becomes a mediating influence in the nature and extent of knowledge sharing, rather than simply HR practices. The role of culture as a mediator is often ignored or minimized in the practice of knowledge sharing. It is like the hidden part of an iceberg, and becomes visible when there is a clash between knowledge sharing activities and organization culture. So this is an important consideration to be included in knowledge management activities in organizations, and its role needs to be made clear. In this paper we review briefly the concepts of knowledge sharing, HR practices, and organizational culture, and the empirical literature of their relationships, in particular the role that culture plays in these relationships. The paper concludes with the development of a conceptual model of the role of culture as a mediator, which will provide the framework for future research in this area to test its importance.

**Keywords:** human resource practices; human capital value; knowledge sharing; organizational culture

**Organizational Antecedents Shaping Knowledge Sharing Behaviors: Empirical Evidence From Innovative Manufacturing Sectors**

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**Abstract:** How can firms act upon organizational tools when trying to foster employees’ knowledge sharing (KS) orientations? Given the lack of a clear understanding about how organizational factors affect KS processes, this paper aims at addressing this issue by starting from the criticality of knowledge assets especially for firms operating in dynamic markets. It has been shown that in order to be more valuable and be a source of competitive advantage, knowledge needs to be shared, as sharing ideas leads to new ideas creation and interpretation. Despite knowledge is hard to transfer and employees may be reluctant in sharing what they know, firms should know that managers can affect workers’ behaviors by dealing with organizational factors. In order to address this issue, we analyze web-survey data of 758 knowledge workers from 24 international innovative manufac-
turing firms. By using Ordinary Least Square regression, we empirically test the relationship between hard and soft organizational KS antecedents and employees’ voluntary behavior in sharing knowledge (i.e. knowledge donating). On one hand, the results show significant and positive relation between innovative culture, top management support, autonomy in the job and knowledge donating, supporting our hypotheses; on the other hand, we found counter-intuitive evidence about the positive and significant impact of both bureaucratic culture and operating procedures on our dependent variable. We hope this study may be a starting point for building a new understanding about the organizational interventions likely to stimulate intra-firm KS activities. From a managerial perspective, this research suggests that being aware of the role played by job design as well as by organizational culture in shaping employees’ KS behavior may be fundamental to managers that are planning their strategies to better manage and exploit individual and collective knowledge. We conclude the paper by providing directions for future research that may help improving this contribution.

Keywords: knowledge donating, job design, formalization, job autonomy, organizational culture

Teaching Cases for Capturing, Capitalizing and Re-Using Knowledge: A Case Study in Senology

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Abstract: This paper deals with the use of multiple ‘teaching cases’ based on multiple models and method-based reasoning in the field of senology (breast cancer domain). ‘Teaching cases’ can be a good support in helping both expert and junior senologists in teaching and learning. Thanks to these ‘teaching cases’, the experts provide quality training to trainees (junior radiologists). In medicine, the method used in teaching is based on experiments, called ‘clinical cases’. We use the Case-Based Reasoning (CBR) approach to represent these ‘teaching cases’. CBR starts with a set of cases or training examples; it forms generalizations of these examples, by identifying commonalities between a retrieved case and the target problem. This set of cases (experience) may then be re-used when solving new problems, for example, when making new diagnoses decisions. The radiologist-senologist can benefit from prior experience and cases. According to Kolodner (the founder of the CBR approach), CBR can mean adapting old solutions to meet new demands, using old cases to explain new situations; using old cases to critique new solutions, or reasoning from precedents to interpret a new situation or
create an equitable solution to a new problem. We rely on these concepts to de-
velop our reasoning for developing teaching strategies to accompany trainees in
their learning advance and decision making. The paper will show that the CBR
approach is very much suited to representing the knowledge in medical field, both
in learning and training. With the CBR approach we can reason in many ways and
represent knowledge efficiently, using the multiple models and methods we have
developed. We combine object modelling with UML2 (Unified Modelling Lan-
guage) with Case-Based Reasoning to represent the knowledge present in the
‘teaching cases’. The outcome of the research is both conceptual and practical. It
also has a methodological dimension.

**Keywords:** teaching cases, models, methods, CBR, knowledge, senology

**The Influence of ICT on the Communication of Knowledge in Academia**

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**Abstract:** MESI has conducted research into knowledge communication within the
academic environment. Participants from different Russian universities were in-
volved in the research. The results show new ways of delivering knowledge to
students, and of improving knowledge management tools and methodology.

**Keywords:** information competence, knowledge flow, academic knowledge,
online resource

**The Learning Journey of IC Missionaries: A Staged Approach**

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**Abstract:** The utilization of intellectual capital has often not been taken up as
much as the proponents of IC may have wished. As Dumay (2012) outlines, there
are barriers to implementing IC in organisations, and as academics and practition-
ers we need to overcome these barriers. We propose one way to do this is to pro-
vide reflections of the journey the authors have taken as a successful IC practi-
tioner and a successful IC academic. Based on a constructivist learning theory
(Chiucchi, 2013) we offer a staged model of IC development (Guthrie et al., 2012)
outlining how we went through similar stages in personally understanding and
deploying IC. To do this, Mary Adams and John Dumay trace their IC learning
journey in three stages of understanding, knowledge-izing and socialization. This paper contributes to the IC literature by providing an understanding of the growth a person may need to take in order to become an IC missionary, rather than merely an IC preacher (Dumay, 2013, p. 8). If this can be achieved, we can provide a forum for open conversations about the concept of IC and the tools available so we can empower people and organizations to experience their own IC.

**Keywords:** intellectual capital, intangible capital, learning journey

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**Knowledge Sharing and Innovation: An Empirical Study in Iraqi Private Higher Education Institutions**

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**Abstract:** Knowledge and knowledge sharing are recognised as being important resources for competitive advantage, and key to enhancing the innovation of organisations. It is argued that the encouragement of knowledge-sharing cultures within learning environments such as universities, can increase the quality of education and can create opportunities for innovation. This research aims to examine the impact of sharing (donating and collecting) knowledge on product and process innovation. A total of 230 usable questionnaires were collected from private colleges in Iraq. Structural equation modelling with AMOS 20 confirmed the importance of knowledge sharing in developing innovation in higher education. The results revealed that collecting knowledge has a greater effect on product and process innovation than donating knowledge. Guidelines are developed for academics as well as leaders, and evidence is provided in support of the use of sharing knowledge in enhancing product and process innovation within higher education in developing countries generally and in Iraq in particular. The implications of the findings and suggestions for future research are discussed.

**Keywords:** knowledge sharing, product innovation, process innovation, higher education, developing countries
Big Data and Intellectual Capital: Conceptual Foundations

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Abstract: The fields of knowledge management and intellectual capital have always distinguished between data, information, and knowledge. One of the basic concepts of the field is that knowledge goes beyond a mere collection of data or information, including know-how based on some degree of reflection. Another basic concept is that intellectual capital, as a field, deals with valuable organizational assets which, while not formal enough to rate a designation as intellectual property, still deserve the attention of managers. Intellectual capital is valuable enough to be identified, managed, and protected. So what do we make of current trends related to big data, business intelligence, business analytics, cloud computing, and related topics? Organizations are finding value in basic data as well. How does this trend square with the way we conceptualize intellectual capital and value it? This paper will work through the accepted literature concerning knowledge management and intellectual capital to develop a view of big data that fits with existing theory. As noted, knowledge management and intellectual capital have both recognized data and information though generally as non-value precursors of valuable knowledge assets. In establishing the conceptual foundation of big data as an additional valuable knowledge asset (or at least a valuable asset closely related to knowledge), we can begin to make a case for applying intellectual capital metrics and knowledge management tools to data assets. We can, so to speak, bring big data into the KM/IC fold. In developing this theoretical foundation, familiar concepts such as tacit and explicit knowledge, learning, and others can be deployed to increase our understanding. As a result, we believe we can help the field better understand the idea of big data and how it relates to knowledge assets as well as provide a justification for bringing proven knowledge management strategies and tools to bear on big data and business analytics.

Keywords: knowledge management, intellectual capital, data, information, big data, business analytics
A Risk and Benefits Behavioral Model to Assess Intentions to Adopt Big Data

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Abstract: Everyday a constant stream of data is generated as a result of social interactions, Internet of things, e-commerce and other business processes. This vast amount of data should be collected, stored, transformed, monitored and analyzed in a relatively brief period of time. Reason behind is data may contain the answer to business insights and new ideas fostering competitiveness and innovation. Big Data technologies/methodologies have emerged as the solution to this need. However, being a relatively new trend there is still much that remains unknown. This study, based on a risk and benefits perspective, uses the theory of planned behavior to develop a model that predicts the intention to adopt Big Data technologies.

Keywords: big data, perceived benefits, risks, decomposed theory planned behavior, adoption

Bridging Knowledge Management Life Cycle Theory and Practice

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Abstract: Knowledge Management (KM) research has focused separately on identifying valuable knowledge assets of the firm; understanding the KM life cycle; and suggesting initiatives, practices, and technologies that could enable effective KM. These three elements are vitally important, but very few studies have presented a holistic view of all three perspectives. This paper proposes three main objectives that together form a general framework for understanding and implementing knowledge management. The first objective is to explain and describe valuable, distinctive knowledge assets (Boisot, 1998) available to the organization. Knowledge assets may be understood as both the tangible assets that can be codified or encapsulated (referred to as knowledge containers (McElroy, 1999; 2003) and the intangible assets in the minds, bodies and relationships of the employees. Focusing on the knowledge asset is what distinguishes knowledge management from document management (McElroy, 1999). The second objective is to understand the life cycle of managing organizational knowledge, including its general
stages and major activities. Many models of the KM life cycle have been proposed, and it may be possible and useful to integrate important elements from past research into a single model. To accomplish this, the paper will identify similarities and gaps from influential life cycle models, existing integrated models, and additional practice-based KM models and frameworks. The third objective is to build on the core principles and activities of previous frameworks and life cycle models to create a simple, practical incorporated second-generation KM life cycle model. The IOSAEC model is introduced and the main stages are summarized. Finally, to highlight the practical application of the IOSAEC KM Life Cycle model, sample initiatives and technologies are presented.

**Keywords:** knowledge management; knowledge assets; life cycle; framework; initiatives; technologies

**Intellectual Capital Disclosure in IPO Prospectuses: Evidence From Technology Companies Listed on NASDAQ**

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**Abstract:** There is quite a number of papers, concerning Intellectual Capital itself, research on why the company should disclose the information on Intellectual Capital (IC), in which way, who is the target audience and why this information is of interest to participants of stock market. Mainly research covers official annual reporting and separate IC Statements. Much less time and attention was dedicated to IPO prospectuses IC information disclosure and even less to post-issue stock performance in connection to the disclosure. This paper extends this line of investigation. It follows the existing research conducted by Singh and Van der Zahn (2009) in the index chosen and time of observation. Although, while the academics were concentrating on Singapore exchange, the focus of this paper are the IPOs of Technology companies on NASDAQ before and after the crisis 2008. Findings from this study provide a broader, long-term image of the potential consequences of Intellectual Capital disclosure in IPO prospectuses and share price returns of Technology companies, which is of particular interest to investors due to sadly famous events of 2001. To measure the level of disclosure of Intellectual Capital, Disclosure Index is used. Post-issue stock-performance is calculated as buy-and-hold return for 500 days after listing. The sample consists of the technology companies (according to NASDAQ) that were listed on NASDAQ from 2002 to 2010. The goal of the paper is to define the relationship between the disclosure of
information on Intellectual Capital and the 500-day post-issue stock performance on example of NASDAQ companies; The main objectives are to create a regression model with Intellectual Capital elements that will best possibly reflect the connection between Intellectual Capital disclosure and post-issue stock performance, to compare the results with other similar studies and to interpret the differences. The main results are: Intellectual Capital disclosure has a positive effect on post-issue stock performance; The influence of Intellectual Capital disclosure is higher for non-manufacturing firms, small companies and firms that issue American Depositary Shares.

**Keywords:** intellectual capital, initial public offering (IPO), intellectual capital information disclosure, NASDAQ, technology companies, IPO prospectus

**Organisational Learning and Problem Solving Through Cross-firm Networking of Professionals**

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**Abstract:** This paper provides empirical evidence to explain the underlying mechanics involved in cross-firm informal knowledge collaboration among socially connected individuals. Data is collected through a questionnaire survey to investigate how knowledge workers develop and sustain informal knowledge collaboration outside of their work organisations; and how such knowledge collaboration affect problem solving and organisational task performance. Results indicate that norms of reciprocity, interpersonal trust, and informal information exchanges develop network transactive memory systems (TMS) among socially connected individuals. TMS is defined as: awareness about the locus of expertise, belief in others’ competence; and ability to coordinate diverse expertise. Network TMS provide larger pool of expertise to help knowledge workers resolve complex work problems and improve task performance.

**Keywords:** informal knowledge collaboration, norms of reciprocity, interpersonal trust, transactive memory systems, problem solving, task performance
Knowledge Orientation in Information Intensive Organisations: Is There a Change in Paradigm?

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Abstract: In a prior paper published in 2008 a framework to align intellectual capital (IC) management with business strategy was proposed. The framework presents two alternative orientations to managing IC: People-based networks, and Technology-based networks. Doing a multiple case study the research led to a useful finding: Organisations that operate in an Operational Excellence value discipline favour technology-driven knowledge networks, while organisations that operate in Customer Intimacy or Product Leadership tend to favour people-driven networks.. The key paradigm detected in that study is (a) that technology-based networks are top-down initiatives and require significant investments, while people-driven networks are bottom-up and require small cash investments but significant man-hours; and (b) that organisations did not push for a high development on both types of networks, but opted for one or the other (aligned with its value-proposition). Under the suspicion that the advent of Web 2.0 and other recent developments could have undermined the prior paradigm, this exploratory research surveys 16 companies in Chile and finds indications that there could be significant changes; the paper attempts to find explanation for this and proposes the need for further research in this field.

Keywords: IC alignment, strategy, knowledge orientation, people-based networks, technology-based networks

The Impact of HRM Practices on Knowledge Sharing Behaviour: Unexpected Results From Knowledge Intensive Firms

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Abstract: This paper will investigate the effect of specific human resource management (HRM) practices on knowledge sharing behaviour among employees of knowledge intensive firms (KIFs). Based on previous research, a conceptual model is developed for the study and hypotheses are formulated. The cross-sectional dataset comes from a sample of 390 employees from 19 KIFs in Pakistan. Structural equation modeling (SEM) techniques are applied to test the proposed hypotheses. The results suggest that collaborative HRM practices have a direct positive
effect on employees’ knowledge sharing behaviour. Surprisingly, we find that employees’ knowledge sharing behaviour is independent of reward systems and employees’ recognition. We suggest that organisational learning environments based on collaborative HRM practices can help employees’ knowledge sharing behaviour and improve the capability of both individual and organisational capability. This empirical study is based entirely on employees’ perceptions; therefore, the results of this study are from an employee’s perspective, rather than from a management perspective. Therefore the paper makes a valuable contribution, given the lack of empirical studies focusing on the South East Asian region. The two main contributions of this study are: first, the examination of the impact of specific HRM practices on employees’ knowledge sharing behaviour; second, the examination of knowledge-sharing outcomes in terms of improved individual and organisational capability. This study is beneficial for researchers, practitioners, and those interested in organisational structure and relationships across organisations in the knowledge context.

**Keywords:** collaborative HRM practices, knowledge sharing, reward systems, employees’ recognition, individual capability, organisational capability

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Looking Further Into Externalization Phase of Organizational Learning: Questions and Some Answers

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**Abstract:** Organizational learning during which organizational knowledge is created is a necessary condition if the organizations seek for competitive advantage. SECI model proposed by Nonaka and Takeuchi (1995) is probably the most successful explanation of organizational learning. It describes the process as based on four phases: socialization, externalization, combination and internalization. Later the model was improved by including Ba, which means place where organizational learning occurs (Nonaka, Toyama and Konno 2000). Many authors agree that the externalization phase is the most complicated one from the four phases described in the SECI model. It is because that during this phase an explicit collective knowledge has to be created from the tacit knowledge of the individuals belonging to that group. In order to enable this phase it has to be provided with an especially ingeniously organized Ba. What kind of implications could be helpful? The aim of this paper is to discuss the opportunities for the development of the Ba for the externalization phase of organizational learning. The aim is reached by exploring the idea of the reflective team suggested by T. Andersen (1991). Until now it has been used mostly in family therapy. The interdisciplinary analysis provided in
this paper resulted with the conclusion that the reflecting team can enrich the
dialoguing Ba as it keeps the boundaries open, tolerates the variety of the opin-
ions, additionally creating a safe and respectful space, supporting the dialogue
and reflecting the processes that occur in the knowledge creating group. This the-
oretical investigation allowed to raise the questions that requires an empirical
investigation in order to be answered; that investigation would allow to deter-
mine the peculiarities of the use of reflecting team in the process of knowledge
creation during the externalization phase.

**Keywords:** organizational learning, externalization, tacit knowledge, explicit
knowledge, dialoguing Ba, reflecting team

**Smart Development: A Conceptual Framework**

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**Abstract:** The article addresses a relatively new and complex problem in social
sciences. The term *smart development* has been transferred from technological to
social sciences several years ago. Researchers have been analysing the fragment-
ed aspects of the problem, however, systemic research in the field is hard to find.
A theoretically sound concept of smart development is yet to be created. In social
sciences, the substance of *smart* is quite different and more complex, compared
to technological sciences. This is due to the nature of social systems because it is
widely acknowledged that biological and social systems are among the most com-
plex ones. This is why the scientific analysis of *smartness* in social systems and the
substance of *smart development of social systems* is an important and challenging
scientific endeavour *per se*. Another aspect of the theoretical problem is the posi-
tioning of the *smartness* category in social sciences among other related catego-
ries, such as knowledge, knowing, innovativeness, and intelligence. Some re-
searchers regard smart development as the integration of ICT into everyday life
and state functions (Komninos, 2011; Bailey and Ngwenyama, 2011), while others
highlight the importance of knowledge management (Garcia, 2007; Yigitcanlar,
2010). Still others emphasize the coherence of infrastructure with objectives, the
importance of learning, innovation, and networks (Allwinkle and Cruickshank,
2011; Kuk and Janssen, 2011), or stress the importance of business systems being
a critical element of any competitive economy (Whitley, 1992). The idea of smart
specialization which has been proposed by a group of researchers back in 2008
has been spreading fast in practice and has successfully become a platform for
economic and social development. However, we still see a lack of a more detailed
scientific interpretation and conceptualization of this phenomenon. Not clearly
understanding what those categories really mean, what criteria should be used in
assessing the *smartness* in strategic documents, many costly mistakes are likely to be made.

**Keywords:** smart, smartness, knowledge, intelligence, digital, learning, social system

### Big Data, Tacit Knowledge and Organizational Competitiveness

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**Abstract:** In the process of conducting everyday business, organizations generate and gather a large number of information about their customers, suppliers, competitors, processes, operations, routines and procedures. They also capture communication data from mobile devices, instruments, tools, machines and transmissions. Much of this data possesses an enormous amount of valuable knowledge, exploitation of which could yield economic benefit. Not too long ago, to obtain value from data, it was necessary to collect data on purpose based on specific objectives. Today, to keep up with the information explosion, and possible use of the data in future, combined with decreasing cost of storage capabilities and ubiquitous connectivity, intentionally or being compelled due to regulatory or other reasons, organizations are amassing big amount of data. Many organizations are taking advantage of business analytics and intelligence solutions to help them find new insights in their business processes and performance. For companies, however, it is still a nascent area, and many of them understand that there are more knowledge and insights that can be extracted from available big data using creativity, recombination and innovative methods, apply it to new knowledge creation and produce substantial value. This has created a need for finding a suitable approach in the firm’s big data related strategy. In this paper, the authors concur that big data is indeed a source of firm’s competitive advantage and consider that it is essential to have the right combination of people, tool and data along with management support and data-oriented culture to gain competitiveness from big data. However, the authors also argue that organizations should consider the knowledge hidden in the big data as tacit knowledge and they should take advantage of the cumulative experience garnered by the companies and studies done so far by the scholars in this sphere from knowledge management perspective. Based on this idea, a big data oriented framework of organizational knowledge-based strategy is proposed here.

**Keywords:** big data, tacit knowledge, big data strategy, knowledge management, knowledge strategies and organizational knowledge
The ADIIEA Cycle: Creating an Integrated Framework for Business Processes and Organizational Learning

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Abstract: This paper introduces the Innate Lesson Cycle (ADIIEA) as a uniting and integrated framework for business process operations and organizational learning. Thus far, the Knowledge Management (KM) and Organizational Learning (OL) movements have tried to “teach KM” to organizations as an “add-on” while assuming that current business models are sound. Instead, we find that current business models are based on industrial age factory process work, and fail to keep up with the learning and innovation demands of the knowledge economy. This paper suggests that these current business models be replaced, not complemented, with a learning-based model. In the epistemological formulation of this learning model, ADIIEA is compared with the SECI model, and its underlying assumptions about tacit and explicit knowledge as appropriate foundational underpinnings are challenged. Instead of a “noun” approach to knowledge foundations (tacit and explicit knowledge), a “verb” approach (questioning, reflective, and reactive modes) to knowledge foundations is illustrated to be appropriately compared to required business process operations. Additionally, this approach is shown to be epistemologically aligned with the fundamental symbols of language, where we universally find the question mark, period, and exclamation point, respectfully. From this verb-based foundation, several applications of ADIIEA are then illustrated to address current issues found in business processes, policy-making, talent management, and knowledge system’s user experience and information architecture.

Keywords: organizational learning, epistemology, theory of knowledge, process management, innovation, human capital

Working Meetings as a Tool for Knowledge Management and Trust Building

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Abstract: This paper discusses and examines the role of working meetings as a tool for knowledge management and trust building. Given the prevalence and practical significance of meetings for organizations, it is important to study their role and impact. Working meetings are one of the basic tools in organizations for
collaboration and group cohesion, and a significant vehicle for communication. They play an important role in information and knowledge sharing, knowledge creation, coordination, decision making, problem solving and strengthening of group relationships, inside and outside the organization, and contribute to build or destroy trust. As necessary as meetings are, they are also very costly - costs can exceed 100 million dollars per year in big organizations— and frequently unproductive. Unless properly managed, they can be a waste of valuable financial and emotional resources, with negative impact on trust, vitality, innovativeness and competitiveness. So, there is a need to assure meeting effectiveness. Good meeting planning, preparation, realization, assessment and follow-up are needed to achieve it. But also meeting facilitators, as “leaders”, play a critical role, as they are responsible for creating a trustful climate, and for successfully conducting the meetings to achieve the objectives each meeting should have, covering the topics on the agenda and doing it in a positive environment and within the planned time frame. The main point of discussion is crystallized in the suggestion that meetings have an impact in integrative group behaviour, cooperation, knowledge creation and sharing. Building and maintaining trust are of utmost importance to develop human capital for sustaining innovativeness and vitality in organizations. Originality of the paper is based on exploring the role of working meetings in knowledge management, and trust building as an essential element of meetings. Implications are made of how to increase effectiveness of working meetings.

Keywords: collaboration; knowledge management; meetings; teams; trust; vitality

Knowledge Management: A Business Plan Approach

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Abstract: When viewing a business opportunity in the market and wanting to exploit it, is necessary to make a business plan. This plan will draw a new company to attend to the needs of a particular market niche. However, if we take into consideration the current marketing context, in the new era of knowledge-base firms, there is great need to deal with Knowledge Management, it is necessary that new companies born differently. This article aims to highlight the importance of Knowledge Management (KM) in Business Plans. This article is an exploratory literature review, establishing the relationship between intellectual capital and its importance for new businesses through a business plan. The method used in the paper is structured in three parts: Literature Review, Research Development and Empirical Evidence. Through the questionnaire applied to 21 professionals (ma-
agers, consultants and lecturers) from Brazil, Spain and Germany. It was identified that there was an agreement of most experts highlighting the importance of the inclusion of KM in the preparation of Business Plans.

**Keywords:** knowledge management, business opportunity, business plans

**Relationship Between Knowledge Management and SME’s Performance in México**

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**Abstract:** At the moment, the area of Knowledge Management has been considered in the literature on business management as a new discipline with an important contribution to the development and the implementation of business strategies in organizations. At the same time, companies, independently of their size, have considered and adopted knowledge management as an additional strategy to improve operations and revamp its profitability. These companies have obtained important benefits, among them, major levels of general performance. However, even though there are many studies regarding those Knowledge Management studies, describing its impacts and factors to improve companies’ performance, nowadays these approaches have demonstrated an evolution of such elements and performance benefits in organizations. Therefore there is a need of empirical evidence about the benefits from Knowledge Management initiatives and consolidated implementations onto the organizations’ performance. In other words, such benefits should not be only investigated based on financial terms but on a broader sense that allows focusing on the accomplishment of today pursued ‘total customer satisfaction’ in businesses. Moreover, this kind of research needs to be carried out in small and medium-sized enterprises (SMEs) and not only in global enterprises located in well-developed countries, like the case of Mexico country. This research presents then a study with the objective to measure the impacts of Knowledge Management through four main dimensions to SMEs performance, workers training, knowledge management policies and strategies, acquisition of external knowledge and organizational culture. In this research a structural equation modeling (SEM) has been applied using EQS® in order to validate the established hypotheses. This is by using a sample of 124 companies. Thus, this research presents the relationship between Knowledge Management and SME’s performance, in Aguascalientes, one of the most industrial states in the country of México, which is describing a significant positive relationship between these elements.

**Keywords:** knowledge, performance, knowledge management, SMEs
Knowledge Sharing and Intellectual Liabilities in a Global Perspective
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Abstract: Intellectual capital (IC) and knowledge sharing (KS) are key elements for fostering firm value. Recently, this assumption has been called into question as there may exist negative and destructive effects in both IC and KS. Through a case study of ‘Engineering Ltd.’, this paper examines the ‘dark side’ issues associated by improperly implementing knowledge sharing. The subject of our study, “Engineering Ltd.”, is an engineering consultancy company with 10,000 employees and $1.5 billion in revenue. The case study is used to scrutinize the major risks of knowledge sharing and to introduce possible solutions.

Keywords: knowledge sharing, intellectual liabilities, global

Innovating Corporate Management: Introducing Environmental Aspects to Design Activities
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Abstract: The recent trends of innovation, social innovation and environmental concern as well as the current economic context require a different management. The transition is not trivial as it involves another way of thinking and acting. Companies pushed by new ISO norms and Corporate Social Responsibility movement focus on sustainability but forget often the economic aspects, the vital component of firms ecosystems. This paper describes a way of innovating in management via strategic knowledge management related to eco-design process. This applied research project connects several areas, such as eco-design, sustainability and information system. The principal objective is to elaborate a smart toolbox to assist all management levels in integrating the environmental aspects into their design process and other relative activities, including real time innovation. The applied method is that of holistic and system knowledge management. Experimentations are made with an international company and results will be tested in other companies, mainly SME. This article briefly mentions all system components of a design process and points out main difficulties. Then we discuss principal results and give some perspectives for the future.

Keywords: innovation, management, eco-design, eco-innovation, knowledge management, innovation ecosystems
Examining the Transfer of Academic Knowledge to Business Practitioners: Doctoral Program Graduates as Intermediaries

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Abstract: The relevance of academic research and its transformation into practice has become one of the most frequently debated topics within and outside of academia. Many academics, practitioners and government officials state that academic research has made little impact on business practice. Little empirical research, however, has been done to support or refute this claim. The purpose of this study is to explore whether practitioners, who hold a business or management Ph.D. degree, act as intermediaries in the transfer of academic knowledge from academia to industry. A model of knowledge transfer was used as a lens of analysis. Twenty Ph.D. graduates were interviewed and the data were subjected to deductive content analysis to test current knowledge transfer theory. First, it was found that doctoral program graduates employed in the non-academic sector acquire new knowledge through a variety of channels. The most popular knowledge acquisition source is academic journals, followed by practitioner outlets and discussions with colleagues. Second, the knowledge that practitioners received during their Ph.D. training is applied outside of academia. Third, the lack of demand for evidence-based knowledge in industry deters practitioners from using academic research. Fourth, when practitioners remain involved in the academic domain, they are more likely to access and apply academic knowledge. Fifth, the attitude of an employer or a client impacts the probability of the practitioner using academic literature in his or her decision-making processes. Sixth, the findings emphasize the influence of organizational culture in determining the sources of knowledge that practitioners access and apply to perform their tasks. It is recommended that doctoral program curricula include more applied knowledge, and non-academic organizations provide their knowledge workers with access to academic literature. The results reinforce the importance of understanding the relationship between a source and a receiver as studied in this case between academia and practice where doctoral program graduates act as intermediaries.

Keywords: knowledge transfer, knowledge worker, research relevance, research impact
The Influence of Cultural Factors on Creation of Organization’s Knowing

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Abstract: Organization’s knowing (Stankeviciute, 2002) is the most common category which describes all the knowledge (explicit, implicit and tacit), existing in the organization (according to Juceviciene, Mozuriuniene (2011), characteristic for individual, group and organization’s levels). This knowledge also includes the type of knowledge which is significant for organization and created within the organization. It is called an organizational knowing. However, some knowledge in organization exists ‘unofficially’, since organization considers it insignificant. It is created in non-formal way, sometimes even accidentally. This is informal organization’s knowing. The model of organizational knowledge (SECI) by Nonaka, Takeuchi (1995) reveals that the interaction and transformation of tacit and explicit knowledge takes part during the interaction of individuals. The authors indicated four stages of organizational knowing creation: socialization, externalization, combination and internalization. Johnson (2007) criticized the theory of organizational knowing creation developed by I. Nonaka and claimed that knowledge could be treated only on individual level, but not on group’s level, since all knowledge is related to an individual person as a primary carrier. Johnson (2007) submitted his own approach to the creation of explicit knowledge from tacit knowledge. Precisely, creation, and not the conversion, of tacit knowledge into explicit knowledge are emphasized in Johnson’s approach. Juceviciene, Mozuriuniene (2011) did not contrast the approaches developed by Nonaka, Takeuchi (1995) and Johnson (2007). They believe that each stage of SECI model by Nonaka and Takeuchi (1995) could be accompanied by Johnson’s individual learning which emerges in the process of constructing his/her own personal knowledge. Juceviciene, Mozuriuniene (2009) argue that this knowledge is not necessarily recognized as important for organization. This is a significant assumption to discuss not only organizational knowledge and knowing, but also organization’s knowledge and knowing. As Czarniawska (2007) states, knowledge is essentially related to the human actions, and the different types of business activities are the deep reflection of cultural roots and knowledge structure. Hofstede (1990) claimed that national cultural dimensions influence the organization’s culture and its activity results. Can national cultural dimensions make influence on the creation of organization’s knowing and to what extent? Which stages of creation of organization’s knowing are considerably influenced by cultural dimensions? The aim of the article is to reveal the cultural factors that influence the creation of organization’s knowing. Aiming to highlight the characteristics of or-
ganization’s knowing creation and the cultural factors that influence this process, the analysis of scientific literature is applied. The empirical study was carried out in the multinational company within its subsidiaries in three Baltic countries. Firstly, the article presents the characteristics of organization’s knowing creation and the cultural factors influencing this process revealed in the analysis of scientific literature. Secondly, the methodology of empirical study is introduced. Thirdly, the analysis and discussion of the empirical findings on the influence of cultural factors on the creation of organization’s knowing is presented. The conclusions make the final section of the article.

**Keywords**: organization’s knowing, cultural dimensions, tacit knowledge, explicit knowledge

### A Structural Equation Model of Organizational Learning Based on Leadership Style in Universities

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**Abstract**: The purpose of the present study was to provide a structural equation model of organizational learning based on leadership style in universities. The population of the research included all employees of Islamic Azad University (Roudehen, Damavand, Pardis, and Bomehen branches and educational centers) in Iran. 559 employees were selected using stratified and cluster random sampling methods. The research instruments were as follows: Bass and Avolio’s (1996) leadership style questionnaire which consisted of 41 items with two underlying constructs of transformational leadership and transactional leadership and Cronbach Alpha of 0.93; and Watkins and Marsick’s (1997) organizational learning questionnaire which consisted of 43 items with three underlying constructs of individual level, group level, and organizational level and Cronbach’s Alpha of 0.97. The results of path analysis using LISREL software indicated that dimensions of leadership style had a direct effect on organizational learning with the indices of 0.92. The model also showed that the factor of transactional leadership had the highest direct effect on the organizational level in the factor of organizational learning. It was also concluded that the proposed model showed full fit.

**Keywords**: structural equation model, organizational learning, leadership style, universities
The Compilation of a Structural Model for Organizational Learning Based on Social Capital in Universities

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Abstract: The purpose of the present study was to provide a structural model of organizational learning based on social capital in universities. The population of the research included all employees of Islamic Azad University (Roudehen, Damavand, Pardis, and Bomehen branches and educational centers) in Iran. 559 employees were selected using stratified and cluster random sampling method. The research instruments were as follows: Watkins and Marsick’s (1997) organizational learning questionnaire which consisted of 43 items with three underlying constructs of individual level, group level, and organizational level and Cronbach Alpha of 0.97 and Abili and Abilis’ (2010) social capital questionnaire which consisted of 24 items with three underlying constructs of cognitive dimension, relational dimension, and structural dimension with Cronbach Alpha of 0.94. The results of path analysis using LISREL software indicated that dimensions of social capital had a direct effect on organizational learning with the indices of 0.95. The model also showed that relational dimension in social capital had the highest direct effect on the organizational level in organizational learning. It was also concluded that the proposed model showed full fit.

Keywords: structural model, organizational learning, social capital, universities

Structural Equation Modeling of Intellectual Capital Based on Organizational Learning in Iran's General Inspections Organization

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Abstract: This study is to present a model of intellectual capital based on the organizational learning in Iran's General Inspections Organization (GIO). The population of the study included all the employees of GIO in Tehran city totaling 675. Using simple random sampling, 392 were finally selected. The research instruments were two questionnaires: Watkins and Marsick's (2004) Organizational Learning Questionnaire with 43 items and the reliability index of 0.97 which has three levels of individual, group (team), and organizational, and Bontis's (2004) Intellectual Capital Questionnaire with 50 items and the Alpha Cronbach index of
0.97 which includes three dimensions of human capital, structural capital, and relational capital. The results of path analysis indicated that aspects of organizational learning have a direct impact on intellectual capital (0.66). The authors' suggested model showed that the variables of individual and group learning in organizational learning have the highest impact on the structural capital. The results also revealed that the model has an acceptable fit.

**Keywords**: intellectual capital, organizational learning, Iran's general inspections organization

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The Construction of an Operational-Level Knowledge Management Framework

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**Abstract**: This paper focuses on responding to the area of frameworks for conceptualising Knowledge Management. The primary aim of this research is to operationalize a Knowledge Assessment Framework (KAF). The development of a KAF is important for organizations for three reasons. It moves away from macro knowledge indicators and suggests more succinct knowledge activities. Firstly, the use of knowledge assessment allows firms to pinpoint knowledge gaps. Secondly, it allows firms to manage knowledge more effectively. Thirdly, it gives organizations a diagnostic tool with which to gauge their knowledge base. The effective management of knowledge can be considered a competency that enables a greater level of service to be extracted from other resources within the organization. The methodological underpinning of this research is outlined below. This paper presents a new framework with which organisations can use to gauge their knowledge gaps. An interpretivist paradigm was followed while using two case studies to achieve the research strategy. Some of the methods of data collection included; interviews; observation; document and record investigation and computer assisted analysis using nVivo. This paper constructs a conceptual Knowledge Management framework for use by practitioners by employing a research strategy that builds a working framework. The proposed framework would offer a lens to organisations with which they could use to gauge their knowledge base. This would improve awareness in the areas of knowledge acquisition, sharing, learning and reuse. A growing area of KM is its application in the public sector. Insights from this study may also be important across both private and public sector.

**Keywords**: knowledge management; knowledge assessment framework; case study
Facilitators, Inhibitors, and Obstacles – a Refined Categorization Regarding Barriers for Knowledge Transfer, Sharing, and Flow

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Abstract: Within the KM area, numerous terms are frequently used. Among terms that have high significance for change in the knowledge structure, terms related to distribution or dispersion are common. Four of those terms are Knowledge Transfer (KT), Knowledge Sharing (KS), Knowledge Flow (KF), and Knowledge Barriers. Barriers come in many forms, ranging from strictly individual/personal barriers through group-related barriers, intra- and inter-organizational barriers, barriers related to national differences, as well as an array of technology-related barriers. Several authors have developed categories with the purpose to create a structure. However, these categories only focus on type of barrier. There is a lack of categorization that divides barriers due to their relative effect on the KT and KS or KF. The purpose is to present a refined categorization regarding factors that influence knowledge transfer, sharing, and flow and to show how previously identified barriers fit into this new categorization. This research has been carried out as a literature review. Previously identified influencing factors have been re-categorized. The research has resulted in a proposition of factors influencing knowledge dissemination and the following terms are suggested: (1) Facilitators (which denominate factors with positive influence), (2) Inhibitors (factors with negative influence) and (3) Obstacles (factors that obstruct knowledge dissemination, until certain conditions or levels are fulfilled). The proposed categorization is supported by descriptive examples taken from in-depth case studies of four multinational manufacturing companies with product development in Sweden and manufacturing in China. The refined categorization will enable practitioners and academics alike to develop suitable tools to further enhance the collective (or individual) understanding of the mechanisms behind knowledge dissemination.

Keywords: knowledge sharing, knowledge transfer, knowledge barrier, facilitator, inhibitor, obstacle
The Influence of Intellectual Capital on Firm Performance Among Slovak SMEs

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Abstract: Intellectual capital, which incorporates skills and knowledge at all levels of an organization, has become the most important economic resource and is replacing financial and physical capitals as the most important capital in the new economy. Uniqueness, and hence the possibility of a longer validity of chosen competitive strategy lies within the internal environment of the organization, not external. The ability to identify opportunities does not make the competitive ability long-term, or even sustainable. Sustainability is built and affected by the ability of a company to set up correctly its internal resources, not only tangible but intangible as well, with a focus on maximizing the creation of value added in the value chain. In relation with this view, the explanation why some companies have long been successful, while others fail, may just be answered through the analysis of their resources and capabilities. Issue of intellectual capital and its influence on firm performance is still under investigated among SMEs in Slovakia. Positive influence of intellectual capital on firm performance has been proved in numerous studies around the world, but the empirical evidence in case of Slovak SMEs has not yet been provided. In these studies, to measure the level of intellectual capital and its respective components in SMEs, value added intellectual coefficient (VAIC™), as developed by Ante Pulic, providing the information about the efficiency of tangible and intangible assets that can be used to generate value to a firm, is being applied.

Keywords: intellectual capital, firm performance, VAIC™, SMEs, forward stepwise regression analysis

Indicators for Assessment of Innovation Related Intellectual Capital

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Abstract: Innovation and the promotion of innovation are increasingly reflected in the goals and objectives of organisations. To increase the likelihood and frequency of innovation, organisations strive to develop their innovative capacity. The ability or capacity to innovate is a determinant factor for survival and success in a free market economy. This research views innovative capacity as a subset of intel-
lectual capital, referred to as innovation related intellectual capital. It draws upon literature on intellectual capital and on innovation to identify possible indicators for innovation related intellectual capital. These indicators span across the major categories of intellectual capital, including human capital, relational capital and structural capital. Indicators for innovation related intellectual capital are context dependent and therefore need to be customised for individual contexts, taking into account factors such as purpose of or motivation for assessment, level of assessment, goals and objectives of organisation, industry and line of business, business sector, size of organisation and resources the organisation is willing to commit. It is argued that the relevance, importance and significance of indicators proposed for measurement of innovation related intellectual capital need to be evaluated. This research subsequently explores possibilities for evaluating the suitability of these indicators for predicting innovation performance. This is done, for example, by analysing the extent and significance of the correlation of such indicators with innovation performance and subsequently the extent and correlation of innovation performance with organisational performance. Examples of indicators for assessment of innovation performance and organisational performance, retrieved from literature, were also provided. This research is of a qualitative, theoretical and explorative nature. The findings are expected to form the basis for future research towards determining appropriate indicators for assessment of innovation related intellectual capital in various contexts. Possibilities for such further research are provided. The resulting indicators are furthermore expected to be of value to practitioners and consultants by assisting in identification of development areas for promotion of innovation.

**Keywords:** innovative capacity, innovation performance, intellectual capital, assessment, indicators, performance management

**Voluntary Sector Organisations: Untapped Sources of Lessons for Knowledge Management**

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**Abstract:** Voluntary sector organisations are an important element of UK society and its economy. Since 1999 the number of charitable organisations in the UK has remained relatively stable at around 162,000; the annual gross income of these organisations has continually increased from £24 billion in 1999 to £56 billion in 2011 (based on Charity Commission figures). To continue with the statistical theme, it is estimated that around 25% of adults in England and Wales formally volunteer at least once a month (www.thirdsector.co.uk). With an emphasis on the development of the Big Society in the UK, and concepts of empowerment,
localism and participation being fundamental to its success, there is much that can be learned from volunteer-led organisations for the contemporary social agenda. Hence, one might expect a noticeable increase in the amount of research undertaken in the voluntary sector in coming years; the knowledge management (KM) research agenda is one that could be shaped and informed by this sector. Voluntary sector organisations are different from those in the private and public sectors where, to date, many of the KM studies have been undertaken. They have particular characteristics that can present extreme challenges for managing knowledge therein. For example, the transient nature of volunteer workers means that knowledge retention can be difficult; the lack of opportunity to plan strategically, due to financial insecurity, can prevent long term investment in KM initiatives that require technological support; and the lack of formal contracts for volunteers means that knowledge activities are not determined by job descriptions and formal rewards. The other side of the coin reveals a set of characteristics that can support effective KM practices. For example, volunteers operate within a particular ethos that can trigger the development of a wide range of types of trust that are not obvious in the workplace setting; additionally their behaviour with respect to knowledge is likely to be influenced by motivators that are not common in a place of employment. Given the current economic situation, more private and public sector organisations are struggling to retain their workforce and to secure budgets for new projects – their overarching organisational struggles are aligning more with longstanding ones of the voluntary sector. Since organisations in the voluntary sector have experience of overcoming such challenges it would seem reasonable to suggest that there is much to be learned from voluntary sector organisations per se but, in terms of this contribution, with respect to their KM practices.

Keywords: knowledge management, voluntary sector, research agenda

Proposal of Indicators for Reporting on Intellectual Capital in Universities

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Abstract: There is a growing interest in applying an intellectual capital approach in universities, since knowledge is the main output and input of these institutions. Universities produce knowledge, either through technical and scientific research (the results of investigation, publications, etc.) or through teaching (students trained and productive relationships with their stakeholders). Their most valuable resources also include their teachers, researchers, administration and service staff, university governors and students, with all their organisational relationships
and routines. Furthermore, necessities like the increasing stakeholder demand for greater transparency, the increasing competition between universities and firms, and greater autonomy, push universities towards the adoption of new reporting systems which should necessarily incorporate intangibles. This paper has two purposes: to determine the extent to which university stakeholders are interested in having information relating to the intellectual capital; and to propose a battery of indicators for measuring and reporting intellectual capital in Spanish universities. In this study we developed a questionnaire which was sent to members of the Social Councils of Spanish public universities in order to identify which intangible elements university stakeholders demand most. Our study’s results served as basis to develop a battery of indicators which allows these intangible elements to be measured. The results of our empirical study show that the respondents consider it essential that universities provide information on intellectual capital. These results allow us to recommend extending the limits of universities’ financial statements so as to include the information on different intangible elements demanded by the different stakeholders. Furthermore, our proposal is an attempt at the standardization of indicators for measuring and reporting the universities’ intellectual capital. Our proposal of indicators aims to provide guidelines to help universities on the path to presenting information which is useful to their stakeholders, contributing to a greater transparency, accountability and comparability in the higher education sector.

**Keywords:** intellectual capital, stakeholders, proposal, indicators, higher education institutions

### 10 Years of IC and KM Research – a Content and Citation Analysis

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**Abstract:** Celebrating the first decade anniversary of the International Conference on Intellectual Capital and Knowledge Management Conference (ICICKM), this paper presents a meta-analysis of the citation, keywords and contents of all articles published in the proceedings of ICICKM conferences over the last decade. The study covers all nine proceedings with its 465 articles. The main knowledge management and Intellectual Capital themes, concepts, authors who published over the past 10 years are presented and discussed.

**Keywords:** content analysis, keyword analysis, citation analysis, knowledge management, ICICKM
Towards an Anthropological-Based Knowledge Management

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Abstract: “To make the knowledge useful [...], the KM manager must create a single shared understanding among people of what the knowledge means to the organization within the context of its business domain and how it is intended to be used.” (Malafsky and Newman) However people possess their own knowledge, meaning that useful knowledge from an individual or a collective will be useless for another. We defend the idea that knowledge isn’t determined by a context of use but by people who own it. So, to enable knowledge management, we have to first classify knowledge according to people. This paper proposes a way to organize knowledge based on an ontological classification of people. An ontological representation comes from Philippe Descola’s book "Beyond nature and culture" (2005), which explains that humans use their experience to organize the world, following a logical process in two parts, namely Identification and Relations leading to the modeling of their Ontology – Ontology with a capital “O” will be used in the context of the specification by an individual of what exist in the world and their relationships. That’s the classification of these Ontologies into ontologies – “a formal, explicit specification of a shared conceptualization” (Studer, Benjamins, Fensel, 1998) – which leads us to an ontological classification. By linking an ontology to the knowledge that comes from its people, we will prove that both are related. In fact these ontologies determine knowledge and thus ontologies classification organize knowledge. While investigating the relation between ontologies and knowledge, we observe that using inadequate knowledge in a multi-ontological context can trigger crisis due to the information interpretation, strengthening the need to manage it. In an attempt to expand the scale of knowledge use which is determined by people ontologies – echoing an ontological capital of people –, we shall discuss about merging informations to create an heterotopic phenomenon by using several knowledges resulting of a consultation process based on mutual knowledge.

Keywords: anthropological knowledge management, ontological classification, ontological capital, multi-ontological situation, information heterotopy
Intelligence in the Oil Patch: Knowledge Management and Competitive Intelligence Insights

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Abstract: The fields of knowledge management and competitive intelligence have been joined in the literature for over a decade, as scholars recognized the emphasis in each field on developing knowledge, albeit of different types. While knowledge management is often limited to the human, structural, and relational capital of the firm, competitive intelligence is more outward looking, building a broadly sourced knowledge base concerning competitors. In fact, practitioners are one step ahead of academia in this application as many organizations have a connection between their knowledge management and competitive intelligence functions. In extensive depth interviews to ascertain the state of intelligence work of all types in contemporary industry, we found such an inclination to be prominent in a number of specific industries. One of these was oil and gas. While exploration, recovery, refining, transportation, and retail are all separate aspects of this broad field, it is collectively of interest, in large part because of this extensive scope. In this paper, we compare and contrast knowledge management and competitive intelligence practice in oil-based industries. In doing so, we draw upon an extensive database including financial returns of thousands of companies in a broad range of industries over a five-year period. Looking specifically at industries related to oil and gas, we review data concerning the level and importance of knowledge assets in each industry. Included in the database is additional information on competitive intelligence activity in each industry. We add these figures to the analysis, allowing us to assess the relative competitive intelligence threat levels. Finally, we discuss the results from the depth interviews we conducted with practitioners in these industries, sharing their perspective on the nature of knowledge management, competitive intelligence, and the interplay between them in this complex industry.

Keywords: knowledge management, competitive intelligence, strategy, Tobin’s q
To Study the Relationship Between Knowledge Utilization and Learning Capability in a Team

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Abstract: In this empirical paper, we study the relationship between knowledge utilization and learning capability in a team environment. The knowledge utilization concept has received scant attention so far. While knowledge transfer rests solely on the knowledge flows, the novel construct of knowledge utilization involves the knowledge linkages. These linkages provide a channel through which information may flow from one sub-system to the other in an organization. But, the effectiveness of these linkages in terms of insights gained and actions taken incorporating the gained know-how is what typifies the knowledge utilization in a team. The knowledge utilization capability builds upon certain intra-organizational mechanisms and processes (Backer, 1991). The high quality knowledge utilization may be considered strategic asset for learning capability in a team and vice versa. Hamel (1991), for instance suggests that conditions within the teams and the relationship itself provide the platform for higher learning. The Learning Capability is classified in five dimensions. Firstly, the learning intent entails the team’s goal directed behavior with regard to learning (MacInnis, Mooreman, & Jaworski, 1991). Secondly, transparency concerns the opportunity to learn. Thirdly, receptivity connotes the team’s capacity or potential to learn. Fourthly, dissemination of knowledge means that the knowledge is passed around the team to the relevant managers in relevant functional areas. Fifthly, shared interpretation of knowledge inputs means that there is consensus about the meaning of the knowledge. These components of learning capability thus form a team’s learning platform. It is hypothesized that the knowledge utilization levels increase when learning capability is present. Likewise, the intra-team learning is enabled strategically. Such teams would perform better by accomplishing their management defined goals if the above discussed learning activities and their supporting learning platform are present simultaneously.

Keywords: knowledge utilization, learning capability, learning intent, receptivity, transparency, shared interpretation
Competency-Based HRM and Lifelong Learning in Poland

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Abstract: The strategic importance of intellectual capital and knowledge management is expressed primarily in the ability to build an organization capable of delivering value to the customers. This potential is demonstrated especially service sector companies, which due to the nature of value creation and value transfer to the customer, are largely knowledge- and intellectual-capital dependent, particularly in the knowledge-intensive services (KIS). However the representative empirical evidence of lifelong learning and competency-based HRM practices in KIS in developing economies, such as Poland is scarce. Based on the results of the large-scale representative survey of medium and large companies, we show that KIS sector engages employees more in various LLL activities compared to companies in less knowledge intensive service. Moreover, company approach to human resource management is an important determinant of decisions of educational activity of workers.

Keywords: competency-based human resources management, lifelong learning, human capital, knowledge-intensive services (KIS)

Following Traces of Collective Intelligence in Social Networks: Case of Lithuania

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Abstract: One might argue that social technologies continue to grow in popularity driving economic and societal changes and thus gain potential to influence policies. “In the last few years groups of people, connected by the Internet, collectively creating a very large and high quality intellectual products with almost no centralized control, determined emergence of a new kind of intellectual capital - collective intelligence” (hereinafter CI) (Goyal, Akhilesh, 2007). Volumes of literature published exhibit the growing interest in the field of CI thereby justifying the rele-
vance of the problem CI’s emergence, development and employment. Despite some efforts (e.g. Luo et al. 2009, Gan et al. 2007, Malone et al. 2010), generally accepted frameworks for studying collective intelligence in human behaviour either does not exist or research is fragmented and lack of complex structure. Furthermore, due to the lack of a common framework, it is not possible to assess what is already known and to tie the efforts of different disciplines together (Salminen, 2012). The variety of mediums where products of CI could be introduced is extensive. Exploring the potential of CI could help communities become more productive and help societies solve their problems more effectively. The paper aims to investigate possibilities and barriers to employ social networks as participatory instruments in terms of introducing CI developed in these networks into public policy. An expansion of forms of public participation is extremely relevant for young democracies like Lithuania where the culture of participation in public policy is still ill developed. Therefore it is very important to stimulate and support the emergence of innovative participatory instruments that could foster public engagement in policy formation. In order to achieve the research goal, applying analytical and case study methods, following activities were undertaken. We analysed the phenomena of CI and its potential, benefits for tackling of societal changes as well as preconditions of co-creation of value in social networks. Theoretical analysis is followed with examination of the environment of public participation in Lithuanian policy formulation in and overview of social technology based Lithuanian networks (platforms) that are targeting to influence public policy. The preliminary research demonstrates that the number of social projects, funded by public organizations or private persons, is constantly growing in Lithuania. However other researches demonstrate that Lithuanian policy makers are conservative enough in selection of participatory instruments. Thus introduction of intellectual capital in form of CI developed in social networks in public policy remains fragmented in Lithuania and requires the shaping of new framework of participation.

**Keywords:** intellectual capital, social technologies, social network, collective intelligence, community management, public participation, virtual community project
Relational Capital and Social Capital: One or two Fields of Research?

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Abstract: In this paper, we start from relational capital, which is one of the components of intellectual capital addressing the intangible values of organizations. In popular usage, the concept seems to be closely related to social capital, with similar words (such as relationships and network) explaining it, and with claims that scholars use social capital instead of relational capital despite their differing origins. As we observe these terms to be used interchangeably in business management literature, we will elaborate on the question: should relational capital and social capital be seen as one or two fields of study? We proceed to use bibliographic data from Scopus with the method of social network analysis in finding and comparing the authorities for relational capital and social capital. We define authority with Kleinberg’s HITS algorithm, hence linking authority to citations (the number of citations as well as who does the citation), as citations are generally seen to indicate recognition and merit in the world of scientific writing. We then compare the resulting lists of top 20 authorities in the two fields as well as provide insights with network visualizations. Our findings reveal only 4 names on both lists (Hitt, Nahapiet, Ghoshal and Kogut), suggesting that the fields are separate but related, which is made explicit with the network visualizations that show these citation-based linkages between the two fields. The visualized networks suggest further that relational capital literature is using social capital literature in its citations. Overall, these findings reveal the linkages between the concepts of relational capital and social capital in scientific literature as well as provide means for showing the roles of specific actors, in this case certain core authors. Hence, the findings provide a shared understanding for scholars and practitioners interested in these concepts and can provide support for future studies in these areas.

Keywords: relational capital, social capital, social network analysis, bibliographical analysis, scientometrics, visual analytics
The Personalised Computer Support of Knowledge Management

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Abstract: In real life, one must understand such terms as knowledge acquisition, management, transfer, creation, dissemination, sharing, as well as intellectual capital, knowledge management systems, organisational knowledge and learning. From another point of view, there are different types of knowledge - tacit, explicit, and some authors use the term - embodied knowledge. However, the concept of knowledge is often poorly defined; it has different meanings from the various points of view belonging to knowledge management, information technology, education, or philosophy. In terms of computer support, individuals work mostly with unstructured knowledge. This complicates any computer support related to the processing of knowledge. Such knowledge issues mentioned above were first solved at an individual’s level within an industrial R&D laboratory (a knowledge-based organisation). Afterwards in the university, this system was modified with knowledge processing by the use of the in-house developed, supportive personalised system of BIKE (Batch Information and Knowledge Editor). This took place within the research on Technology-enhanced Learning at the Slovak University of Technology. The preliminary results of the long-term research were gradually presented at conferences in the USA, Asia, Australia, and the EU. The system of BIKE was also presented as a multipurpose knowledge based system, including its application as a teacher’s personalised management system. It covers several fields in informatics that are ongoing from an interdisciplinary definition of knowledge, knowledge tables, and the formulated batch knowledge-processing paradigm. Knowledge is defined as being a set of information structured and unstructured, having a specified content stored in one row of the knowledge table within a default structure. This paper explains and illustrates how it works in practice on a personal level for individuals, i.e. as a supportive informatics tool for knowledge processing, creation, management, including some examples of the conversion of tacit knowledge into explicit knowledge, and the sharing of explicit knowledge within customer oriented knowledge management or teaching and learning processes.

Keywords: knowledge sharing, knowledge management, knowledge processing, technology-enhanced learning, knowledge management systems
The Moscow State University of Economics, Statistics and Informatics (MESI) on the way to Smart Education

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Abstract: The paper deals with the penetration of the smart concept into society with respect to education development. Emerging “smart” technologies have a great impact on students, course design, and knowledge communication, and this needs to be taken into account in the development of e-learning and knowledge management at universities. The author examines methods of university development using the MESI example.

Keywords: smart, e-learning, knowledge management, academic knowledge

The Management of the Intellectual Capital in the Russian Industrial Networks

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Abstract: One of the most vital issues of intellectual capital management is the transformation of the Intellectual Capital (IC) in the results of activity of the industrial enterprises. The solution of this problem can be offered, based on the formation of the Network Navigator of The Intellectual Capital (NNIC). The theoretical basis of the creation of IC navigators was developed for the micro level (see J.Roos, S.Payk and L.Fernstrem (2006) or the Skandia Navigator model developed by L. Edvinsson(1997). Authors suggest using these principles on the meso level. Considering the network of innovative and production firms as macro-corporations, we have an opportunity to extend approaches to the management of the intellectual capital from the micro level to the meso level. In the paper, authors consider the case of constructing NNIC for the automobile cluster in St. Petersburg (Russia).

Keywords: intellectual capital, navigator of the intellectual capital, Russian industrial networks
Intellectual Capital Practices of SMEs and MNCs: A Knowledge Management Perspective

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Abstract: Intellectual capital (IC) –from intellectual property and patents through staff technical skills to relationships and networking with customers– has been identified as a critical business success factor and as a source of competitive advantage. In fact, the key conjecture in IC research is that IC is more likely to be the key source of a firm’s competitive advantage than tangible resources. Yet the empirical evidence on the causal relationship between IC and organizational value has provided mixed results. This is due to the fact that IC is a complex phenomenon of interactions, transformations and complementarities and thus IC measurements are difficult and often vague. Divergent, even suspect, standards of recording IC practice worldwide and forced generalizations across business sectors and regions at varied stages of development do exasperate the problem. This paper is based on the premise that IC praxis follows varied patterns exhibiting distinct characteristics across industry sectors, company types and geographical locations. Knowledge management and IC practices of small and medium enterprises (SMEs) and multinational corporations (MNCs) are compared and contrasted to examine this premise. The thesis of this paper is that IC praxis will have to be customized for individual companies based on their particular traits and that the appropriate term for such an approach is mass customization of IC recommendations.

Keywords: intellectual capital, knowledge management, SMEs, MNCs

Managing Knowledge and Overcoming Resistance to Change: A Case Study at Firat University

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Abstract: The purpose of this paper is to examine the relationship between knowledge and overcoming resistance to change in class projects at Firat University in Turkey. Resistance to change among departments is a major issue for individuals at organizations. It may cause stress and frustration at work environments. Even, the change can extend to layoffs which eventually destroy the overall work atmosphere within departments. Employees often set in their ways, and
don’t want to modify their routine. However, organizations need to change to continue delivering the right products and services on time and effectively due to emerging demands in industry. The major reason behind resistance to change is strongly correlated to knowledge management aspects. The lack of individual’s knowledge in another field may fear him or her losing the job if an interchange occurs among departments. Because the employee is assigned to adopt a designated duty, it is unlikely to appoint the individual in another field that he or she is unfamiliar with. Thus, the learning curve for an existing experienced operator is much longer than a new employee. Besides organizations, the assignment changes in classroom project tasks may also create similar atmosphere among students. However, the causes of this hypothesis are firmly depending upon managing motivation and knowledge factors. Therefore, in this research, a matrix chart will be presented that evaluates students’ performances at different in class projects at Firat University, which interprets how managing knowledge leverages the issues of resistance to change in order to increase productivity and decrease potential conflicts among students.

**Keywords**: learning curve, managing knowledge, motivation, organization, resistance to change

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**Organizational Learning Rate Dependence on National Wealth: Case Study of Business Schools**

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**Abstract**: Globalization presents new challenges to business schools: all of them are rivals in the global market. In order to look for better opportunities to survive in growing competition it is needed to be a learning organization which helps to increase the competitive advantage of the business school. Business schools worldwide are facing unequal situations economically, since their operating environments vary largely in terms of economic welfare. The research seeks to clear up whether the prosperity of the business school’s location country provides an advantage to the school, which is indirectly revealed in a higher organizational learning rate or whether a smaller GDP per capita in the location country is an obstacle to the school’s development. The paper investigates the dependence of business schools’ (BS) organizational learning rate (LR) on GDP per capita of the school’s country of location. The authors used an instrument invented by them for measuring the BS learning rate. The structure of the instrument is based on Watkins and Marsick’s learning organization questionnaire, but it takes into consideration the specific features of BS. The measuring instrument consists of three
levels, which in turn are divided into 7 dimensions and 45 characteristics addressing all learning aspects of BS as organizations. They measured the organizational learning rates of 105 BSs from 44 countries. To identify the dependence between the BS LR and the school’s location country they conducted a regression analysis for average LR as well as separately for individual components of learning (levels, dimensions, characteristics). The results of the analysis reveal that the dependence of BS’ average LR on GDP per capita of the school’s location country is not statistically significant. However, they identified a negative correlation between the rates of individual BS learning components and GDP per capita of the school’s location country. Additionally they investigated dependence of the possession of international accreditations awarded to BSs that show organizational quality (EQUIS, AACSB) on GDP per capita of the school’s location country. Here the analysis shows a strong positive correlation.

**Keywords:** business school, organizational learning, business school learning rate measurement instrument, business school learning rate dependence on GDP

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**Ready For Open Innovation or not? An Open Innovation Readiness Assessment Model (OIRAM)**

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**Abstract:** Since the Chesbrough’s seminal contribution many academic papers have documented the challenges associated with open innovation strategies. Furthermore, several case studies have illustrated the benefits that firms can derive from open innovation initiatives but only a few of them analyzed the difficulties associated with the implementation of these initiatives. The implementation of open innovation is a tricky business and there is a gap in the literature for a conceptual framework that guides managers in such a process. The aim of this paper is to provide a conceptual framework that can help managers assessing and enhancing readiness for open innovation. Based on an in-depth review of the current literature, this study proposes a synthesized conceptual framework called Open Innovation Readiness Assessment Model (OIRAM) that provides a set of guidelines on how companies can both assess, as well as improve their ability to implement open innovation initiatives successfully.

**Keywords:** open innovation, innovation implementation, readiness assessment, innovation framework
PHD Research Papers
Cultural Influences on Knowledge Sharing Behaviours Through Open System Vs. Closed System Cultures: The Impact of Organisational Culture on Knowledge Sharing

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Abstract: In the highly dynamic business environment, organisations are required to adapt quickly in response to the changing needs of their customers. To meet those needs, many organisations have invested in knowledge management. A recent body of literature has highlighted an organisation’s culture as one of the best strategies to enhance knowledge management via knowledge sharing among their workers. This research paper will focus on the association between knowledge sharing and the dichotomy between cultures with either open or closed systems. A closed system culture believes that newcomers cannot influence the effectiveness of either the workforce or management. An open system culture is different, because it recognises the influence of newcomers on workers behaviour (Lee and Lai 2007). This dichotomy is important because some have suggested that systems encourage knowledge sharing by accommodating newcomers. The current study aimed to test the hypothesis that open cultures encouraged knowledge sharing, while closed cultures inhibited knowledge sharing, focusing on participants of Emirati nationality. To that end, a field survey was distributed to 207 professionals at more than 10 firms, including both private and the government sectors. The results of our study were not significant, but surprisingly found preliminary evidence indicating a positive relationship between closed cultures and knowledge sharing, We believe this suggests that closed system cultures either have no effect on knowledge sharing, or may promote knowledge sharing through some unknown mechanism. Further study is needed to definitely conclude how closed and open cultures affect knowledge sharing behaviour within Emirati participants.

Keywords: knowledge sharing; knowledge management; organisational culture; behaviour; hofstede; organisational culture dimensions; open system culture; closed system culture
Knowledge Management as a Competitive Advantage of Contemporary Companies
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Abstract: By merging existing theory, discussion and research in the areas of strategic and knowledge management, the paper argues in favor of the basic assumption of all schools on strategy – competitive advantage results into a superior performance of contemporary companies. Causation, however, can only be justified when knowledge management is introduced as a moderator in the relationship. Although recognized as an important resource as early as 1950s, knowledge did not gain in strategic value until the emergence of the Resource Based View on Strategy in the 1990s. Realizing that knowledge is a dynamic capability and that today’s knowledge although protected, is not a guarantee of tomorrow’s success, contemporary organizations approached knowledge management as a system comprised of four knowledge management processes: creation, organization, dissemination (transfer and sharing) and use (applicability), open to the influence of the wider external and internal environment considered through the social and technological context of the organization. By focusing on the internal context, the paper presents an empirical model which can be tested in different environments. The internal context reflects the influence of three predominant KM platforms: structure, culture and technology. In the process, technology is recognized as a main enabler for capturing, storing and distributing codified knowledge, while organizational structure that fosters KM processes as flexible, lean, team based and customer focused. In regards to organizational culture, adaptive and flexible cultures are recognized as supportive to knowledge generation; while stable and hierarchical cultures supportive to knowledge storage in organizational routines. At the end, the effectiveness of KM as a competitive advantage is approached through identifying superior financial and non-financial performance.

Keywords Knowledge management, strategic management, competitive advantage

The Importance of Knowledge Waste for Intellectual Capital Management and Enterprise Performance
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Abstract: Companies look to be ahead in its segment, or remain in the market. Therefore, it is necessary to obtain competitive advantage, going to have to con-
tinuously improve their management strategies. One of these is directly related to how innovative production processes are and how well they are managed, resulting in the launch of new portfolio of projects equal or superior to those previously produced. For this, intellectual capital and its knowledge are fundamental and its wastage management is a factor that could be determinant. Scholars sustains that the effective management of people planning must be a part of overall corporate strategy. But, how about the knowledge waste? In this context, the research highlight the problem associated with the performance of intellectual capital, may be impacted, or not by the use of knowledge in part or in whole process, the loss and / or forgetfulness, or use knowledge that does not add value for the company, its customers consequently. This work researched the databases: EBSCO; Emerald; Compendex; Scopus; ISI; and Wiley that occasioned in 506 articles which were systematically analysed, resulting in this theoretical article that presents the main references on the subject and a scientific essay regarding the importance of managing the intellectual capital knowledge waste. We concluded that managing the forms of knowledge waste, it is expected an improvement of performance and competitive advantage.

Keywords: intellectual capital, intangible assets, knowledge waste, waste of knowledge, knowledge management, portfolio management

Dissemination of Professional Routines, a Case Study in the Automotive Industry

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Abstract: This paper aims at studying the mechanisms that contribute to the dissemination, the transmission and the creation of professional knowledge. It is based on observations led within a French large company of automobile industry. Our approach was empirical. We carried out some observations in different technical fields. What we observed is how people, individually or collectively, gather the information available in their environment, how they transform this information progressively into knowledge, how eventually they apply this knowledge and embed it in what we called professional routines. This article deals with a model of the professional routines acquisition and transmission, both from an individual point of view and from a collective point of view. The model we built is divided into five parts: Learning, Experiment, Embodying, Routinization and Mastering. Individual and collective routinization is a key for understanding the learning phenomenon and the transmission and dissemination of knowledge. Routinization can be defined as a regular and mechanical act, being more the re-
sult of a habit than of a thinking. Acting routinely is acting without thinking about the act. The routinization process is core in our daily practices. In a professional environment, routinization refers to know-how which became “innate” as a result of repeated experiences. Routinization describes a process based on knowledge acquired from trial and error experiences. It is the result of a more or less long confrontation with the environment that allows to understand the world of this new knowledge. It helps to develop skills, hand-tricks, tips and knowledge. In a factory, routinization is essential for the organization of the manufacturing, but can lead to blockages: difficulties to modify the working processes, the dissemination of knowledge across the company as well as to new comers. Routinization is intrinsically conservative. We described a comprehensive process that leads from one step to the other. This process is by nature non-linear, cyclic, and retroactive. The aim of our work is to confront the model with reality. It was done using the observations we made, and we applied it in order to better understand the dissemination of tacit knowledge in a professional context.

**Keywords:** tacit, learning, knowledge dissemination, routines, organizational learning, automotive industry, knowledge management

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**Cluster Analysis of the European Countries: The Europe 2020 Point of View**

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**Abstract:** The European Union devotes a lot of attention to the development of knowledge economies and the main result of this concern is the Europe 2020 strategy. From this point of view, the present paper aims to provide a clearer picture of who’s who in the European Union with respect to the development of knowledge based economies is concerned. In order to attain the above mentioned objective, first of all is presented the state of art regarding knowledge economy development, by presenting the values that a country is able to register at the 8 indicators of the Europe 2020 strategy objectives. Secondly, the paper presents the results of the quantitative research undergone with the help of Principal Components Analysis and Cluster Analysis on the principal components previously found. The two principal components previously discovered and used for this Cluster Analysis are the Shame Factor and the Environmental Concern Factor and they hold 94.43% of nonredundant information from the 8 initial strategy objective indicators. We analysed the 27 European Union countries, plus Switzerland, Norway and Iceland and the level of the Europe 2020’s indicators in 2010. This paper shows the full results of the Cluster Analysis, which gives us the panel of the European Union from the perspective of development of knowledge econ-
omies. The results show three groups of countries and allow a summary of several features for each group. Furthermore, this research also provides an additional quantitative support for a previously discovered ranking of the European countries, from the point of view of knowledge economies. The main advantage of this study is that it can raise the interest of research scientists interested in knowledge management and comparative management, for it shows the kinds of countries that have best managed so far to achieve the status of a knowledge economy. It can also be relevant for anyone interested in a professional picture of how the main countries in Europe currently look like from the new economic perspective.

**Keywords:** Europe 2020 strategy, knowledge economy, European Union, cluster analysis

**Literature Review:** The Role of Intangible Resources in Improving Quality of Care in Hospitals: A Framework to Evaluate Technical and Functional Quality

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**Abstract:** Intangible resources (IR) impact an organisation’s performance and its ability to deliver high quality services. Health care quality is described as having technical and functional aspects; and many of these quality systems are underpinned by human capital (knowledge and expertise), structural capital (quality management programmes and information systems) and relational capital (patients’ perspective on quality). Despite the extensive research on IR across commercial and business sectors, little is known about the management of IR in health care systems. We describe the role of IR in health care systems by focusing on identifying types of IR that can play a significant role in improving the quality and safety of care. Hospitals face recurrent challenges in improving quality. We propose a framework for assessing how IR might improve health care quality. Knowledge, professional expertise, professional competences and skills, information systems, processes, safety culture, quality management programmes, guidelines, interpersonal skills and patients were found to have a significant impact on the quality of care. The suggested framework introduces a checklist that might be used by hospital managers to audit whether they are maximising their use and aligning their intangibles with delivering quality.

**Keywords:** intangible resources, health care, quality, improvement
Organizational Employee Seen as Environmental Knowledge Fractal Agents as a Consequence of the Certification With ISO 14001

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Abstract: The paper aims to analyze at the organization level - organizations that has implemented an environmental management system - EMS - (designed in accordance with ISO 14001) and such as it can be considered at least, theoretically speaking, adaptable to the internal change that occurred - the relationship established between (a) EMS, (b) the environmental knowledge management process, and (c) employees of the organization - considered to be (c1) environmental knowledge fractals agents (adapted idea after Shoham S. and Hasgall A. in 2005) and (c2) as one of the most important factors which leads to successful the integration and the functionality of the EMS. The main objectives of this paper are to: 1. to present the idea that organizational employees can be seen as dynamic fractals agents, and thereby connecting the fractal philosophy with environmental management; 2. present a theoretical research model, based on the following: (a) the relationship between: a1. environmental objectives and targets of the EMS – a2.environmental knowledge management process and – a3.environmental knowledge fractals agents; (b) the relationship between: b1.internal/external responsiveness to different organizational needs (emergency situations / demands of stakeholders and so on) – b2.environmental knowledge management process and – b3.environmental knowledge fractals agents; (c) the relationship between: c1.different environmental responsibilities (environmental planning/ monitoring the environmental performance, and so on) – c2.environmental knowledge management process and – c3.environmental knowledge fractals agents; (d) the relationship between: d1. allocation of resources for specific activities at ems level – d2. environmental knowledge management process and – d3. environmental knowledge fractals agents; (e) the relationship between: e1. personal development level in environmental management issues – e2. environmental knowledge management process and – e3. environmental knowledge fractals agents; 3. test this proposed model by applying questionnaires on organizations in the department of Maine-et-Loire, Angers, France.

Keywords: environmental knowledge fractal agents, environmental management, ISO 14001
Career and Knowledge Management Practices and Occupational Self Efficacy of Elderly Employees

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Abstract: Organizations are paying increased attention on Career Management practices, in their quest for organizational growth and the career development of employees. Knowledge sharing has been found an important weapon of sustaining competitive advantage and improving performance. Occupational self-efficacy reflects the conviction of a person’s ability to fulfill his job related behavior competently. The role of career management practices adopted by organizations has a special significance to the occupational self-efficacy with the progress of employees in their careers. Study has focused the impact of Career and Knowledge management practices adopted by Czech organizations of thirty elderly employees holding administrative positions. Major objectives of the study were to examine the effects of Career and Knowledge management practices to the occupational self-efficacy of elderly employees. Impact of gender was also examined. Descriptive and inferential analyses of data were conducted using the SPSS package. Career and Knowledge management practices of organizations were identified and assessed. Major factors contributing to the occupational self-efficacy of elderly employees were assessed. Findings revealed a positive relationship of Knowledge management practices to the Occupational Self Efficacy, and career development of elderly employees. Study provided insights to improve the occupational self-efficacy, and longevity of elderly employees.

Keywords: career management, knowledge management, occupational self efficacy, elderly employees

Easy, Economic, Expedient – an Effective Training Evaluation Model for SMEs

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Abstract: Firm overall performance highly depends on its human capital. This potential therefore needs to be maintained and improved by various development strategies. Training in this regard is esteemed to be the most effective measurement to reach this aim. However, the effectiveness of training highly depends on training design and its evaluation. Especially SMEs hesitate to invest in training
due to financial restrictions and concerns of training benefits. Therefore there is a need for a training evaluation model which not only is simple and affordable but also appreciates the fact that training is a complex web of relationships between trainer, trainee, content, work environment and organisational goals. To formulate such a model a three-step process was adopted which facilitated filtering out the appropriate assessments. The resulting evaluation model is capable of taking into account factors lying inside as well as outside the training realm while still playing a crucial role in the effectiveness of a training program. Thus, besides assessing the effectiveness of training it even works as a navigation tool for designing future training programs. Finally, the proposed training evaluation model was applied on a training program in a small-scale service oriented organisation and the analysis of the results showed that the model successfully attained the anticipated aims.

**Keywords**: human capital development, training evaluation model, SME training, and training efficiency

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**An Exploratory Study of Knowledge Management in the UK Local Government Planning System for Improved Efficiency and Effectiveness**

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**Abstract**: This research paper provides some pragmatic evidence to review the linkage of knowledge management to technological and human resources for efficient and effective delivery of planning services in the UK local government. This exploratory research work commenced with the participation of five local planning authorities in the South East Midlands. Case studies have been used to explore the role of emerging technologies and consolidated ICT strategies within the planning service. The goal is to establish a better integrated knowledge based planning system. The study has allowed the examination of the contemporary state of the planning system and its transition towards smart and sustainable development. The work forms part of the fieldwork for a PhD study and has an exploratory goal which can acknowledge the complexity of this organizational environment. This investigation begins by examining the existing status of the local planning system by identifying the key supportive and preventative knowledge factors in both tacit and explicit domains. It is followed by a detailed discussion of how and when the smart and sustainable development can be initiated and where this would lead the local authorities in future. This is done by exploring the innovative communication channels, effective coordination strategies and integrated knowledge management initiatives in the five participating local planning...
authorities. The rationale for the fieldwork is to understand how participating local authorities are moving through the transition period towards smart and sustainable development. The main proposition is that an integrated knowledge based approach would lead the planning system towards smart and sustainable development. The local planning authorities are using emerging technologies to deliver their services with greater efficiency and effectiveness. In looking at the processes at work the relationships among major supportive and preventative knowledge factors and frequency of each category are discussed in order to identify a research framework. The outcome of this research is a hybrid socio-technological system for an integrated knowledge based planning system.

**Keywords:** knowledge management; local authorities in the UK; sustainable development; innovation; socio-technical system; planning system; eGovernment

**Characterization of Knowledge Sharing Practices in a Project Based Organization**

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**Abstract:** Knowledge sharing within and across projects is important to the performance and competitiveness of project based organizations. However, the temporary nature of projects raises multiple challenges for the transfer of knowledge across project boundaries such that: best practices are not shared, mistakes are repeated, work is duplicated and many projects fail to meet expectations. Using a web-based, self administered survey to collect data from project team members, this paper describes knowledge sharing in a small telecommunications organization.

**Keywords:** knowledge sharing, cross project learning, project knowledge management, case study, project based learning

**Person-Organisation fit as an Organisational Learning Tool in Employee Selection**

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**Abstract:** The current trends in the international business environment have been giving rise to increased cultural interconnections and interactions, reflected in the rapid global movement; both: geographical and interpersonal. It is indisputable
that companies are seeking the most effective workforce to integrate within the organisational structure and to achieve the stated objectives and further expansion. Global companies nowadays are shifting from the perspective where cultural encounters are perceived inevitable and rather undesirable to such where culture is seen as an attribute to be exploited and benefited from. Thus, a clear understanding of cultural issues has become an essential prerequisite and imperative to ensure competitive advantage and success. By the same token employee satisfaction lies at the centre of a companies’ management attention with equal importance. “Matching the right people with the right organisation” can now be applied as a suitable phrase to accurately describe the early stages of a recruitment process. This is particularly true when taking the subtle nuances of culture with its manifestations into account. It is worth noting that cultures across the world have a significant effect on perceiving various elements that occur in working life and influence the individual job performance. The match between this culturally developed individual value orientation and the nature of corporate culture in a particular organisation is referred to and amongst specialists well-known as person-organisation fit. This paper presents and describes the theoretical background of person-organisation fit and its various conceptualisations as portrayed in the literature. It goes even further by introducing the Schwartz value model as one of the most comprehensive for assessing person-organisation fit. The paper initially identifies the differences between various levels of working environment related fits, starting with person-job fit, later person-group fit, ending with person-vocation fit. Since each of them has a different meaning and reflects different attributes, they require also different approaches for exploring and assessing. The main focus is subsequently placed on person-organisation fit. The main contribution of this theoretical study steams not only from offering a different view on the matter of recruitment process itself but also from underlining the limitations of every attempt to develop the usable tool for assessing the person-organisation fit within an organisation. The main limitation arises from the ambiguity and lack of clarity in distinguishing between the culturally influenced attributes resulting in recognized, acknowledged and shared values and core beliefs on one side and what is referred to as personality attributes. The latter, unlike the former is, not only learned through the process of our upbringing but largely inherited. Therefore it is a task and at the same time a challenge for those striving for making the employee selection process as complex as possible to choose or develop the best value orientation assessing tools. Defined as the tools, which help to improve the organisational learning and ensure best possible outcome from the employee selection process.

Keywords: knowledge management, organisational learning, recruitment, person-organisation fit, Schwartz value model
Models for Describing Knowledge Sharing Practices in the Healthcare Industry

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Abstract: Recently, healthcare organisations realised that if they want to gain or sustain advantages, medical knowledge needs to be not only managed but also shared among professionals and patients. Inadequate knowledge sharing in healthcare organisations can lead to medical errors. As a result, knowledge sharing in healthcare industry may no longer be a “nice to have” process but changes into a “must have” one. Acknowledgement of the importance of knowledge sharing in healthcare organisations has resulted in some valuable contributions trying to understand this phenomenon. Most of these contributions are about the nature of knowing, knowledge sharing means, and governance mechanisms. Despite the richness and depth in these three streams of research, at present there is no study integrating these various insights. Hence, there remains uncertainty about the intrinsic relationship among these three kinds of concepts. Therefore, it is worthwhile to examine firstly, the relationship among these concepts and secondly, their impact on knowledge sharing performance. This study provides a comprehensive view of knowledge sharing practices from the three mentioned perspectives. Drawing upon the descriptive process of theory building, a model for these three aspects of knowledge sharing practices is built through literature review, and the relationship among them is explored. It is proposed that both knowledge sharing means and governance mechanism impact the knowledge sharing process directly. Also, the governance mechanism has an indirect impact on the knowledge sharing process by influencing the choice and usage of the means. This study will provide organisations and policy makers with a framework to better understand knowledge sharing practices from different perspectives. It also provides a valuable insight of how to choose the appropriate knowledge sharing means and take into account the governance mechanism to enable the knowledge sharing process to be more effective.

Keywords: knowledge management, knowledge sharing, knowledge sharing process, knowledge sharing means, governance mechanism, healthcare
The Systemic “Learning by Sharing” Diamond: How to Implant it Concretely in Private Organization?

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Abstract: Purpose – To design a research methodology in order to test the conceptual model of learning by sharing process in concrete firms. Methodology – Based on literature review, the process of learning by sharing is built on four key differentiations inside organization: knowledge, competency, cooperation and competition. Findings – The sustainability of this research methodology proposal should ensure that organizations can assess by their own employee attitudes and behaviors concerning the learning and knowledge sharing as one integrated process. Practical implications – The learning by sharing process could involve three advantages for firms. Learning by sharing approach is firstly a dynamic way to increase in the long run the competitiveness of firms. Secondly, the learning by sharing process could be applied in each firm without additional budget. Finally, all employees will work in a peaceful environment and they could be more creative. Originality/value – Although knowledge management and intellectual capital are a very widespread in present literature, the concept of learning by sharing is less approached. This paper propose to show how the diamond analysis of learning by sharing is a new approach to conciliate “supply factors” and “demand factors”, “codified knowledge” and “tacit knowledge” as well as “cooperative actions” and “competition actions” inside each firm in order to be more efficient in knowledge economy.

Keywords: learning by sharing, methodology, individual and organizational benefits

A Leadership Framework for Organizational Knowledge Sharing

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Abstract: Many organizations have discussed the need for better organizational knowledge sharing. However, a framework for organizational knowledge sharing from a leadership and management perspective with emphasis on communication effectiveness and organizational trust has not been demonstrated. This paper is an excerpt of the research study conducted at the George Washington University. It provides research findings that help leaders integrate effective communication into everything they do to achieve organizational performance excellence. Com-
communication has long been recognized as the most important element in leadership. It is also one of the most difficult challenges in any business. To get the right information to the right person at the right time for effective knowledge sharing, leaders need to be cognizant of the impacts of effective communication. Insights such as traits of leadership communication, timeliness for source of information, channel of communication to use for sharing knowledge are part of a framework created from the results of this research that can assist leaders in driving organizational results, build trust between leaders and followers, and create a successful enterprise. A focus on how organizations can learn, collaborate, share knowledge and innovate using the four pillars of knowledge management: leadership/management, organization, technology, and learning will be discussed. Understanding the importance of organizational trust and communication effectiveness will help leaders in enhancing organizational knowledge sharing.

**Keywords:** knowledge management, organizational knowledge sharing, communication effectiveness, organizational trust, leadership and management

**Project Context and its Effect on Individual Competencies and Project Team Performance**

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**Abstract:** This paper presents a study of how a project context affects the competencies and performance of innovation project teams. Project context is understood as a work context in project environment. It is a set of conditions that guides team members to act. It is described in terms of organizational culture, organizational climate, team and manager characteristics, etc. If a project context is appropriate and well matched with the employees, it leads to a higher individual and team performance. The paper aims to discuss the theoretical and methodological issues of studying the effect of project context factors on team performance in innovation projects. It provides a conceptual model of project context and its relationship to individual competencies. The methodology to study the proposed relationship is also discussed. Competencies are considered as individual characteristics (including skills and knowledge) that are manifested in employee behavior and causally related to and can predict high level of individual performance. Individual competencies provide a basis for high level of team performance. The understanding of relationships between individual competencies and project context factors provides an important means to improve the management practices. The study not only provides methods for optimal matching between
work context and individual competencies but also provides tools for the improvement of team performance by facilitating the required competencies in specific work context. A framework of a conceptual model is proposed which attempts to predict the performance and the competencies that will develop in the specific work contexts. Applications of the research results will have significant impact on business practices and help to develop a comprehensive view of organization management practices and their effect on team performance. Applications include decision making about forming project teams that are more likely to achieve high levels of performance as well as improving management practices and workplace environment.

**Keywords:** competency, performance, innovation project, team, project context, individual competencies

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**The Influence of Emotional Intelligence on Employees’ Knowledge Sharing Attitude in Organizations in Thailand**

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**Abstract:** Employees are the most important factor in sustaining successful organizational strategies, especially a strategy for sharing knowledge. However, determining the influences which shape the attitude and intention to exercise a sharing behavior are still in need of additional exposure (Bock and Kim, 2002). Therefore, it is important to develop a further understanding of those influences affecting the employees’ attitude for knowledge sharing within both an individual and an organizational context. In the working environment, emotional intelligence, trust and organizational citizenship behaviour are necessary for knowledge sharing. Emotional intelligence is the ability to control emotions. It will facilitate the high value tacit, implicit or explicit knowledge sharing, of employees and customers, among team members (Othman, A.K., & Abdullah, H.S. 2011). The influences/factors to motivate a knowledge sharing attitude resemble many of the same attributes described in the past decade to components of emotional intelligence (EI). It will add to the existing body of knowledge to study and understand how different EI profiles influence employees’ knowledge sharing attitude. The following document presents my ongoing literature review and proposed research models regarding the influence of emotional intelligence on employees’ attitudes for knowledge sharing in organizations.

**Keywords:** emotional intelligence, employees’ knowledge sharing attitude
Quality of Higher Education Institutions as a Factor of Students’ Decision-Making Process

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Abstract: This paper deals with quality in higher education (HE). The quality of HE institutions can mean different things to different people, depending on their roles and perspectives. Therefore, quality is, as is generally known, very difficult to be evaluated, although the question of how to do this has been studied for many years. Nevertheless, the intention to improve the quality of HE institutions and their services is agreed by all stakeholders and innervated further by the current worldwide economic recession and the urge to overwhelm the impact of the crisis on economic growth. This study is a continuation to and a further extension of our previous work in which we have developed a system-dynamic knowledge-based model characterising the decision-making process of prospective students when choosing a HE institution and later on in the course of their studies. Many factors which influence the process have been identified and the quality of HE institutions has appeared to be one of the most important of them. This is caused especially by the fact that various characteristic features of quality have an impact on a number of students in each stage of the study process. The paper attempts to contextualize many influential research papers and reviews on the perception of HE institutions’ quality from the students’ point of view. During the last few years, many of them have been published. Generally the most obvious finding is that the academic domain significantly differs from the well-known business principles. This is primarily due to the inconsistent goals of service providers (HE institutions) and their students. Some students prefer just the tangible product, i.e. a diploma or a degree while others are interested rather in the content and the quality of the educational process, leading to intangible knowledge. The primary aim of this paper is to identify and examine the most important determinants of the quality of HE institutions that influence students’ interest in their studies. Research data have been obtained from 175 undergraduate business students currently studying at Prague’s University of Economics’ Faculty of Management, Czech Republic. The study will help HE institutions’ managers to better understand the wants and needs of their customers in order to meet their expectations.

Keywords: higher education, quality, students’ perception, students’ behaviour, knowledge-based modelling
Business Clusters and Knowledge Management: Information Flows and Network Concepts

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Abstract: Business clusters, as geographical concentrations of vertically and horizontally integrated firms in related lines of business, are extremely popular with policy-makers. The basic premise behind the concept is that by clustering together firms can achieve economies of scale and scope and lower their business costs. Furthermore, clusters have been associated with innovation capacity and are assumed to confer competitive advantages to their members and their regions. It appears though that the case that clusters invariably boost business performance and local development is not conclusively proven and even the demonstration of a positive association between clusters and innovation capacity has not been consistent. Despite scant empirical evidence to support these claims, business clusters remain at the forefront of regional development policies. As ambiguities in defining clusters and identifying their members and their borders prevent accurate policy evaluation, the objective of this paper is to show that knowledge management mapping maybe the critical first step. Identifying the type of networks present and recognizing information flows within the cluster boundaries may allow for objective assessment of the wealth of data collected around the world. Success factors may then be shown to depend upon a multitude of issues, in that clusters seem to behave differently in different parts of the world, in different economies and in different stages of their development.

Keywords: clusters; business networks; intellectual capital; knowledge management; innovation

An Analysis of Mobile Applications for the Purpose of Facilitating Knowledge Management

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Abstract: The purpose of this paper is to understand the extent to which a group of selected mobile applications facilitate knowledge management (KM). The proliferation of mobile devices is changing the way people enter and access information. Mobile applications facilitate quick and easy access to information. Users can enter and access information from almost any location on a wide variety of hardware. The research question is: “to what extent do mobile applications facili-
tate knowledge management”? In this study, several android applications are chosen based on their similarity and popularity. Rubrics based on sound KM principles were developed to analyze the extent to which these selected applications facilitate KM. A small group of faculty and students evaluated the mobile applications using the rubrics. The results of this preliminary study are presented. Results of this study will be valuable to those companies seeking to use mobile applications as part of their knowledge management strategy.

**Keywords:** knowledge sharing, mobile applications, mobile devices, android

**The Implications of Tacit Knowledge Utilisation Within Project Management Risk Assessment**

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**Abstract:** The capabilities of an organisation to create, share and utilise knowledge effectively are today regarded as one of the key drivers of competitive advantage for industrial enterprises, predominately for those operating within increasingly globalised marketplaces. The elevated significance of knowledge management is particularly evident in the context of Slovakia due to the rapid influx of large-scale industrial enterprises since the country joined the EU and the necessity to utilise sector specific knowledge. The knowledge held within an organisation can typically be categorised as either explicit or tacit. Explicit knowledge relates to information which is formal and systematic; it can be easily communicated and shared throughout the organisation, and embodied in a computer program or set of procedures. In contrast, tacit knowledge relates to human interactions and is regarded as “highly personal” and not easily formalised or standardised. The terms tacit and explicit knowledge directly reflect the two dominant perspectives on knowledge management relating to “people” and “technology”. From a tacit, “people” perspective, the strategy is to develop knowledge sharing between individuals, and while IT is useful it is often peripheral to issues. From the “technology” perspective, the strategy is to capture, codify, store, and distribute knowledge through the use of IT systems. Both perspectives assert that knowledge is a critical asset for the organisation and the delivery of projects. The primary aim of the paper is to adopt a cross-disciplinary approach to knowledge management by assessing the implications and utilisation of explicit and tacit knowledge in the context of project management risk assessment. Within project
management, evaluating the opportunities and risks of a new project proposal is a complex process including objective and subjective factors, not only in the process itself but also in the selection of the data used to support or justify the evaluation. The systematic nature of project management ensures that practitioners and academics alike often prefer explicit knowledge which can be expressed by defined scientific or technical principles. In contrast the ability to quantify and articulate the role of tacit knowledge and the impact of human capital within the process remains highly problematic. The paper aims to address the issue through the creation of a reference model of organisation and project management which codifies knowledge in terms of fuzzy set theory. The constraints are specified in the form of fuzzy rules that develop the knowledge base. The main purpose for the use of fuzzy rules is that human interaction has many characteristics which are difficult to quantify and measure precisely. The proposed approach therefore allows for the codification of explicit and tacit knowledge and a new model is presented which integrates both explicit and tacit knowledge as measures within the project risk assessment process.

**Keywords:** knowledge management, project management, project risk assessment, tacit knowledge
Non Academic Papers
Managing Learning Style Across Generation in Workplace

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Abstract: PT Telekomunikasi Indonesia, Tbk. (Telkom) has dominated the competition in telecommunication and information industry in Indonesia for years. Businesses today face serious challenges as they set a path forward through unprecedented, uncertain and challenging economic times. Nowadays, Telkom is currently facing issues related to business growth because of area of business growth potential in Indonesia is getting smaller. In the meantime, amid increasingly fierce competition, business growth is the key to long term survival of the company. Therefore, Telkom decided to expand its business outside Indonesia and stop relying on a single service. Diversification is a consideration to expand the business growth. In order to cope with business growth issue, Telkom must prepare its human resources to become employees with high capability and possess global mindset. Human resource with strong will to continuously learn to improve their competency and able to adapt to a variety of changes is important key to meet company goal. It is well known as a “fast learner”. The company wants all employees have equal ability to be a fast learner or even exceed the speed of business growth. Now, Telkom has 18,285 employees and there are 4 (four) generations in it, which are the mature generation, baby boomers, generation X and generation Y/ millennium. Each of generation has different speed in learning process. Telkom’s competency development system (learning system) that exists today was designed based on the fact that the needs and pace of learning for all employees is basically the same. Learning system was designed to only consider the needs of the company, not the needs and characteristic of employee learning style. Consequently, although Telkom’s organizational learning system provides a fairly comprehensive, such as classroom learning, e-learning, and knowledge management systems, the result does not very motivate employees to learn and not significantly impact on business growth. Company’s investment in learning is quite large (1.5% of revenue), which is established by agreement between management and Telkom employee union. Considering the fact above, this paper tries to identify each learning style from all generation of Telkom employees. Based on writers’ survey, recommendation will be provided for managing needs of learning and method, which is appropriate for the employees to be expected to get optimal result. This paper provides some proposed solutions, which addresses to the company and also be given as a contributions of practitioners to the enrichment of human resource management science in the academic world.

Keywords: across generations, fast learner, learning organization system, learning style, learning method
A Critical Analysis of Intellectual Capital Reports in Banking Industry from 1994 to 2011

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Abstract: As a supplement to financial reports, Intellectual Capital (IC) reports are indispensable for disclosing intangible assets values. However, IC reporting has also received some negative arguments. In this paper, the development of IC reports published by five European banks from year 1994 to year 2011 is reviewed by manual content analysis. The original IC management Models (ICMMS) in the IC reports are used to examine the actual practical application. In the present study, not only the quantitative (IC metrics) and qualitative (Narratives) IC-related information are concerned, but also, the negative and positive aspects are included in the analysis during the study. Although the banks being investigated are found to have partially similar IC frameworks, it is interesting to note that each bank makes use of its own set of metrics for reporting. Hence, it is very difficult to compare IC among the banks due to the varied metrics being adopted. Every bank uses narratives to construct their IC reports. However, the main part of each IC report is still composed of quantitative IC metrics. Narratives are just used as the introduction and description. Furthermore, little negative IC-related information is being disclosed. This makes IC reports to be ineffective to serve as internal management and external communication tools. Even though pictures, tables, diagrams and charts in the reports are discarded in the analysis, which may undermine the accuracy of the findings, nevertheless, it is extremely tedious and time-consuming to manually identify metrics from 51 IC reports. Based on the results in the study, some suggestions are provided for addressing the latest IC practice and theories in IC reporting.

Keywords: intellectual capital reports; IC metrics; IC model; narrative; content analysis; critical analysis

Research on Intellectual Capital Elements Synergy in Research Organizations

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Abstract: Research organizations take the important task of producing knowledge for our society, and they are the main forces of national independent innovation.
Nowadays, the competition in science and technology at home and abroad has become increasingly fierce, and how to improve the research organizations’ competitive advantage and enhance their performance levels have been the focuses of researchers and research managers. Fortunately, study shows that the intellectual capital (IC) is the key to competitive advantage of research organizations. And what’s more, the synergy of intellectual capital elements is the prerequisite for the long-term performance. This paper finds that IC is the core of the research organizations and gets a clear understanding of the roles of three IC elements. According to the theory of knowledge production mode and the innovation-driven factors, the research organizations are divided into three categories. Respectively, this paper pointed out the IC elements characteristics of each kind of research organizations. What’s more, it offers a theoretical support to classification management in research organizations. An empirical study was then handled on six research institutes of which got 343 valid questionnaires. The empirical test results show that Chinese scientific research organizations’ strategic goals and their individual researchers’ targets are in a relatively higher degree of synergy in Type 2 organizations. To realize different goals, human capital needs different characters; and the value of research organization's human capital is positively influenced by the synergy degree of its structural capital and relational capital.

**Keywords:** research organizations, intellectual capital elements, synergy, knowledge production mode, classification management
Abstracts
Only
Industry and Academia Collaborations and Their Influence on Innovation Capability: A Study on IT Companies Operating in India

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Abstract: Academia and industry collaborations have been considered as a tried and tested model of strategic alliance, most of which have resulted in positive outcomes. These collaborations are considered important because of the knowledge they create which further contributes to innovative products and processes and also new ways of doing business. This in turn improves innovation capability of an organization. Besides, there is no dearth of examples (like Silicon Valley) where these collaborations resulted in creation and enhancement of social, intellectual and human capital. Further, in the Indian context, apart from a few studies which throw light on successful collaboration models, a systematic study of industry and academia collaborations and their influence on innovation capability has been largely neglected. The context of the study is Indian IT industry, which has played a predominant role in the service sector led economic growth. This study aims at understanding the same in a comprehensive fashion by employing an elaborate model formed based on literature. We further aim at examining the mediating effect of absorptive capacity in context of collaboration with academia and its influence on innovation capability. Future work aims at empirically testing the model.

Keywords: innovation capability, academia, industry, collaborations, IT sector

Obstacles to Knowledge Sharing in Project Environments

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Abstract: Although knowledge has been recognized as a strategic resource of companies as early as the middle of the past century, it is actually the organizational school on strategy which lifted its significance to strategic relevance at the beginning of the 1990s. What once was the predominant view on knowledge focused on knowledge exploitation and protection, rapidly changed towards the importance of internal capabilities for strategically coordinating knowledge resources. As a result a new concept emerged focused on managing knowledge made out of an agreed set of processes: (1) generation, (2) organization and storage, (3) transfer and sharing and (4) application. The organizational view on knowledge proved to be too limited to cover the complexities of its actual use. In
a global world of interconnected economies, increased competition and a micro-
vironment rapidly favoring inter-organizational synergies, accompanied with
radical internal changes in organizational structure of companies where the tradi-
tional hierarchical structure has been rapidly replaced with project based matrix-
es, superior knowledge was no longer created in closed environments, rather it
increasingly depended on the process of sharing knowledge which occurs in inter
and intra-organizational teams. In majority of the cases these teams are project
teams. Researchers so far have tackled the knowledge sharing mechanisms which
arise in these hybrid environments; however, there is a gap in literature regarding
the obstacles to knowledge sharing. The critical analysis identifies the most co-
mon obstacles to knowledge sharing with and within project teams grouped into
three specific categories: organizational, technological and individual/people re-
lated barriers. Organizational obstacles cover parent company’s organizational
structure, culture, lack of project leadership and/or poor project management
practices – all factors which create a lack of trust among team members and hin-
der the sharing of tacit knowledge. Technology obstacles are related to the lack of
IT platforms for collecting and disseminating explicit project knowledge and les-
sions learned as well as the lack of strategic alignment of technology with the ex-
isting absorptive capacity of project team members. Individual factors cover the
lack of motivation to share or receive knowledge, the poor communication skills,
the gap in experience among project members and the low absorptive capacity of
knowledge receivers in general. The paper therefore provides a good categoriza-
tion of the obstacles which can be further adjusted and explored with empirical
research on the subject.

**Keywords:** barriers, knowledge sharing, project teams

**The Impact of Intellectual Capital and Absorptive Capacity on Value Co-Creation; Theoretical Arguments, Measures and Empirical Findings**

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**Abstract:** Growth oriented SMEs are more responsiveness in matters of acquiring
new business partners and/or orders when they have a sound base of absorptive
capacity. This paper is having a look on the process of value co-creation in a value
adding webs. A dynamic model is formulated and measures of absorptive capacity
are discussed. Empirically this contribution is sticking to a cooperative network of
SMEs in the Danish offshore industry. The bundle of initiatives which had been
implemented and applied by the cooperations’ facilitator in order to improve the
capabilities on the level of the single company as well as on the web level will be
described and the impact on the absorptive capacity will be analysed. Based on an event analysis this paper is discussing how to strengthen and to foster SMEs absorptive capacity and how to manage the process of value-co-creation in cooperative networks.

**Keywords:** value adding web, absorptive capacity, intellectual capital, social capital, cluster facilitation

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**Corporate Knowledge Management Needs Assessment; Findings in Governance, Data-security, Systems, and Training**

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**Abstract:** Background: Knowledge and management of knowledge assets play a critical role in the success of any organization. Particularly within the development field, the success and growth of a public health organization relies heavily on its ability to harness and leverage institutional knowledge and strategic learning from its professional networks, relationships with clients, program and study results, and successes in project management and implementation. Recognizing the central role of knowledge in our business, in 2012 GRM Futures Group revised and updated its organizational KM strategy and began implementing a comprehensive knowledge management (KM) needs assessment and mapping effort. The goal of these activities was to systematically understand the group’s knowledge needs and explore options for ensuring better access to and use of information across the organization and to advance the global health agenda. Methodology: Between September and December 2012, GRM Futures Group’s KM Working Group (KMWG) conducted a knowledge management needs assessment to gain a better understanding of the organization’s KM practices, identify unmet KM needs to support business development and program management, and inform the further implementation of the KM strategy. The needs assessment included mapping of all organizational databases and information capture systems, interviewing 42 staff members across the organization, identifying perceived needs, analyzing information flow within business processes, and documenting solutions suggested by staff members. Results: Findings from the needs assessment were reviewed by members of the KMWG and refined into a set of key recommendations including both long term initiatives and potential quick-win solutions. The actionable recommendations centered around ten key issues:

- Systems and processes in business development
- Access to key project documents and information
Discussion: Recommendations covered every department within the organization and touched on a wide range of KM-related issues, demonstrating the relevance and importance of KM in every aspect of the business. The findings illustrated the interconnectedness of issues such as IT systems governance, data security, and training. The needs assessment identified best practices that can be scaled up and resources which should be promoted and shared. Yet it also uncovered some problematic practices and steps that could be taken to address them. It offered solutions to leverage existing systems for greater utility and impact and strategies for integrating knowledge management strategies within departments such as HR and Business Development and for aligning KM systems and practices with corporate strategic goals. Conclusion: The KM needs assessment identified many challenges and opportunities to better retain and leverage an organization’s knowledge assets for improved business growth, technical innovation, and impact. This paper outlines a rationale for investing in KM, identifies business areas with common KM challenges, and provides a reference and lessons learned for other organizations to analyze their KM practices and needs.

Keywords: knowledge management, needs assessment, knowledge assets, systems governance, strategic plans

Intellectual Capital and Information Security – a Critical Reflection

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Abstract: Intellectual Capital is regarded as one of the major resources of sustainable competitive advantage. Consequently it should go without saying that Intellectual Capital management (ICM) should also include the protection of this valuable asset of a company. However the discussion about its protection has mainly focused on the issue Intellectual property which only included those aspects of IC
that can be protected legally. Nevertheless recent incidents have shown dramatically, that a lack in information security can do a lot of harm to all components of intellectual capital. This paper therefore wants to broaden the discussion by integrating general information security issues of those parts of IC which cannot be protected by patents etc.

As intellectual capital is based on its different components (human/structural/relational) on different organisational levels (e.g. personal level/group level/company level) its management and its protection requires special recognition. In the first part of this paper information security aspects will be examined due to their relevance for the different components of IC (Human Capital, Structural Capital etc.). Having determined the relationship between IC and information security in general, the different organisational levels (personal/group/company) are taken into consideration in order to work out critical issues in this perspective. As information security is influenced by various aspects on different organisational levels, different measures in intellectual capital management as well as information security management are presented to meet these specifications.

The second part of the paper mainly focuses on human capital and information security, as on the one hand human capital is the major and most valuable source of innovation for a company and on the other hand information security is based on the individual as its smallest element. Information and human capital is generated by the individual and therefore information and human capital protection and security have to start at that level. To be able to understand the manifold aspects of information security on a human capital level as a first step privacy is taken into account. Privacy aspects include in general information privacy, bodily privacy, privacy of communication and territorial privacy. Starting from and reflecting on the definition of privacy as “the claim of individual, groups or institutions to determine when, how, and to what extent information about them is communicated to others.” (Westin 1967) necessary steps of privacy integration into ICM integration are proposed. Hereby a special focus is laid on the issue of IT security on an individual and as well as on the company’s level. The paper finally concludes with aspects for further research to keep the started discussion on information security, privacy and IC going.

**Keywords:** Intellectual Capital; information security; privacy; innovation
Turning Data Into Action: A Real-World Case Study of Organizational Learning and Strategy Development Through Applied Knowledge Management

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Abstract: Today’s global environment demands constant motion and anticipatory proaction instead of simple reaction. Businesses must always be on the move; never settling for “good enough” and constantly seeking an improved advantage over the competition. It can be argued that this is the only way to survive over the long-term in a global economy. Moreover as industry and manufacturing face a new so-called Third Industrial Revolution, one which further diffuses and pushes down capabilities and opportunities to smaller and smaller entrepreneurs, this concept of constant motion and proaction becomes even more important. Therefore, based on this premise, organizations, no matter how big or small, must identify the specific steps to take so that their never-ending evolution achieves a consistently-rewarding forward path to growth and prosperity. These steps, this path is in essence, an organization’s strategy. Invariably the question then becomes: what are the right steps that an organization needs to follow; what are the right decisions to make – what is the right strategy? Of course this also depends on various internal and external factors which are unique to each company, situation, and environmental setting; thus the more fundamental question our research case-study addresses is – How does one identify and develop the right strategy? This paper presents a real-world case study methodology of how organizational learning can be developed thru the transformation of data into knowledge; and, how that knowledge and learning can be effectively utilized to create competitive strategy. Our model is an applied variation of the commonly-known DIKW Hierarchy (Data, Information, Knowledge, Wisdom), incorporating organizational learning and resulting in the optimization of operational strategy. Initially, industrial technology tools and equipment is utilized for establishing and gathering operational performance data. From this “smart” machinery as the starting-point we develop our conceptual model and establish the process of organizational learning and strategy development. The case involves a well-known industrial/ logistics organization with global presence but one that is significantly decentralized in certain functional areas of its business. This decentralization presents certain inefficiencies and risks to the organization’s operation and growth. The specific applied knowledge management model / methodology we propose has been under investigation within this and similar industrial settings since 2010. The actual feasibility project which takes the idea beyond its conceptual stage was approved and initiated in 2012 with good initial results, indicating suitability of the model in this and other potentially similar industrial-organizational applica-
From utilizing measurement technology and creating raw data, to transforming that data to knowledge and deploying that knowledge through organizational learning so that optimal operational strategies can be established, our research shows that such a model can be successfully utilized in organizations to create value, and competitive advantages in this highly-demanding global environment.

**Keywords:** DIKW hierarchy, applied knowledge management, organizational learning, strategy development, analytics, industrial applications

**How is Electronic Lab Note Book Being Adopted by an R&D Organization for Innovative Collaboration and Knowledge Flow?**

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**Abstract:** In the R&D organizations, it is estimated that the majority of them did not yet adopt Knowledge Management (KM) implementation. Moreover, only very few among the KM adopters have been considering the implementation of electronic Laboratory Notebooks (eLN). This paper discusses the practical benefits as well as the real challenges in the global roll out of the eLN to an R&D organization. Special consideration is given to the innovative approaches in using eLN for knowledge capture and sharing, while preserving Intellectual Property (IP) rights. The benefits span beyond the global access to research experiments running in remote sites, thus leading to resource leverage and speedy entry to market. In addition, scientific experiments can be duplicated faster, cheaper, and more efficiently. The challenges include the fine balance between open access for the R&D researchers and scientists and compliance to international technology trade regulations. Moreover, the protection of IP while opening up the e-lab notebook to the entire organization was proven difficult but achievable. It is important to stress that organizations have to be well prepared to comfortably overcome the hurdles of the adoption and implementation at the field level; these included hardware, software, scientific equipment, and standard operating procedures which varied widely across the globally spread organization. All success stories, failure aspects, learned lessons, and recommendation will be discussed at the meeting.

**Keywords:** e-LN; laboratory; notebook; share; Intellectual property
The Core Programme; a Collaborative Approach to Leveraging Intangible Capital

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Abstract: Effectively leveraging the intangible capital can be an stimulating driving force for organisational success. However, the challenge that many organisations face is how to practically create an environment that enables the interaction and the interconnection between the four intangible areas i.e. strategic, human, structural and relationship. A further challenge is deciding on the approach to designing, developing and maintaining this interconnected environment and on whom does this responsibility rest? This case study tells the on-going story of a mid-sized company in South Africa that chose a practical and collaborative approach to create an environment that puts all their intangibles into play. The objective was to get the organisation fit and ready for the future and to actively leverage their significant intangible capital that they had worked so hard to establish. The Core Programme is a story about a team of 10 young leaders, encouraged by a futuristic CEO and a strategic Sponsor to learn, experiment, think, design, change and create an environment that encourages interconnectedness between all their intangibles. It documents the collaborative journey from the initial decision to start the programme through to the rapid ascent to a Level 3 on a knowledge management maturity scale in a mere six months. The value of this case study to IC practitioners and Knowledge Management practitioners alike is the intrinsic usefulness of the practical and collaborative aspects of this programme and the importance of taking these factors into consideration. This case study will serve as an example of the power of creating collaborative programmes to engage and propel intangible capital solutions in the future. The case study can be presented in 30 minutes and requires the technology to show brief video highlights.

Keywords: collaboration, intangibles, strategy, implementation