



Ontario's Regional Economic Development and Innovation Newsletter

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ANNOUNCEMENTS

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Government of Canada Invests in Next-Generation Technology

The Honourable Mauril Belanger, Minister for Internal Trade and Deputy Leader of the Government in the House of Commons, on behalf of the Honourable David L. Emerson, Minister of Industry, recently announced a \$7-million investment in the research and development of next-generation systems for wireless infrastructure and networking applications. This Technology Partnerships Canada (TPC) investment is part of a \$28-million project being undertaken by Tundra Semiconductor Corporation of Ottawa to develop switch-fabric-based system interconnect products based on the serial RapidIO interconnect standard.

Ontario Celebrates National Biotechnology Week

National Biotechnology Week runs from September 26 - 30, 2005. BIOTECanada has several events planned for that week, including a lunch event at the M@rs Discovery District, a conference on anti-virals at Trent University, a Golden Horseshoe Biotech Tour and luncheon out of McMaster University, the Ottawa Life Sciences Council Annual General Meeting and Annual Achievement Award Dinner along with many other biotech seminars, receptions and challenges across Ontario.

EDITOR'S PICK

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Social Capital: A Tool for Public Policy

Policy Research Initiative

This report asks what is social capital? Who benefits – and who does not? Is there a role for government? Examining the potential of the concept of social capital to inform policy development and evaluation, the report offers a clear framework for the analysis of the concept, identifies policy and program areas where social capital makes a difference, and offers a strategic set of recommendations for testing new approaches, improved measurement, and policy

action. Social capital may be an important but underestimated component of the well being of Canadians. In combination with other human and financial resources, social capital can significantly influence their social, economic, and political participation. Government policies and programs inevitably affect patterns of social capital development. Taking this into account more systematically could make a significant difference in the achievement of various policy objectives. Social capital has particularly important implications for three key areas of public policy: helping populations at risk of social exclusion, supporting key life-course transitions, and promoting community development.

INNOVATION & RELATED POLICY

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[Regional Economic Development: Exploring the Role of Government in Porter's Cluster Theory](#)

Mark Wickham, University of Tasmania

Porter's Industrial Cluster Theory (ICT) is a theoretical framework that achieved prominence in Australian economic policy development. Despite its widespread adoption, however, Australia has remained significantly below the OECD average in terms of its industrial clusters' contributions to real wealth creation. In order to understand the positive role that (Australian) governments can play in the development of industry clusters, this paper analyses the 25-year history of the Tasmanian Light Shipbuilding Industry cluster. This analysis provides an insight into the set of government policy roles that facilitated the development of this internationally competitive industry cluster. This paper also proposes a re-conceptualization of ICT that will potentially increase its value as a predictive tool for regional economic development.

[SME and Entrepreneurship Outlook 2005](#)

OECD

Encouraging entrepreneurship and facilitating the rapid growth of innovative SMEs is an effective means of creating jobs, increasing productivity and alleviating poverty. This publication describes recent trends concerning SMEs and entrepreneurship in OECD economies and beyond. It reports on a range of policy initiatives taken to enhance the vitality and competitiveness of the SME sector—which comprises over 95% of all enterprises and accounts for two thirds of private sector employment. Among the themes covered in this edition are: the need to reduce regulatory and administrative burdens; the increasing attention given to entrepreneurship education and training; the need to ease SME access to financing, technology, innovation and international markets; the growing importance of women's entrepreneurship; and local policy issues. (Note: this document is *read only*)

[Can Knowledge Management Save Regional Development?](#)

Cecily Mason et al. Deakin University

Australia needs to create innovative regions to sustain economic prosperity and regional development. In order to do this, regions need to systematically address their knowledge needs and identify tools that are appropriate in maximizing their effectiveness. Many initiatives have focused on information and communication technology (ICT) to enable knowledge exchange and stimulate knowledge generation, but active knowledge management (KM) strategies are required if ICTs are to be used effectively. These strategies must respond to the regional economic and social environments which incorporate small and medium enterprises (SMEs). This paper outlines the importance of KM for supporting regional cluster development and the key ways in which communities of practice (CoPs), a KM technique, have been used to add value in similar contexts. How CoPs and their online counterpart, virtual communities of practice (VCoPs), can be used and developed in regional areas of Australia is considered along with a program for further research.

CLUSTERS & REGIONS

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[Divide and Conquer? Decentralization, Coordination and Cluster Survival](#)

Kerstin Wolter, DRUID

This paper investigates the role of decentralization and coordination for the likelihood of successful adaptation by comparing adaptive performance of

clusters exhibiting different degrees of decentralization and alternative modes of co-ordination. Using Kauffman's (1993) N/K model, it is found that there is an optimum degree of decentralization with respect to cluster adaptability while different co-ordination mechanisms face a trade-off between speed and cluster-level optimality of results. In doing so, the model sheds light on an empirical controversy regarding the role of both factors for adaptation that has emerged between the Silicon Valley – Boston 128 comparison on the one and the Italian Industrial District experience on the other hand. Moreover, the identification of the roles played by decentralization and co-ordination for cluster adaptability in changing environments could serve as guidance for future empirical research as well as policy initiatives.

RESEARCH & DEVELOPMENT

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Knowledge Flows and R&D Cooperation: Firm-Level Evidence from Germany

Tobia Schmidt, Centre for European Economic Research

Knowledge is an essential input for firms' innovation processes. The increased complexity of such processes and of new technologies leads firms to look for valuable knowledge externally to complement their own knowledge and skills. While the advent of ICT technologies has made it easier for firms to access, codify and distribute external knowledge it has also made internal knowledge more difficult to protect. It has been argued that one way to achieve both a high level of knowledge flow into a firm and sufficiently protect internal knowledge from leaking out is to cooperate in R&D. This paper investigates the determinants of firms' R&D co-operation decisions

in general, focusing in particular on the role of incoming and outgoing knowledge spillovers. To enhance the analysis the paper not only investigates the decision of firms to cooperate in general, but also analyses firms' decisions to cooperate with research institutes and suppliers/customers. Findings suggest that knowledge flows matter for the R&D co-operation decisions of firms. In particular outgoing spillovers (or rather their prevention through appropriability mechanisms) have a significant influence on the propensity to cooperate in innovation projects. While formal protection methods, like patents, negatively influence the probability to cooperate, strategic protection methods (e.g. secrecy, lead-time advantages) have a positive impact.

STATISTICS

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US Academic Research and Development Expenditures: FY 2003

National Science Foundation, NSF

University R&D is considered a fundamental element of innovation and technological competitiveness. If R&D spending equates to more R&D, then the 10 percent increase between 2002 and 2003 as reported by the nation's academic community to the National Science Foundation (NSF) would be a rosy sign for America's future. This report goes into detail on a number of R&D expenditure statistics. For example, it finds that aggregate academic R&D expenditures in 2003 totaled \$40.077 billion, up from \$36.37 billion in 2002. The burden of funding for academic research continues its shift toward government and away from the nation's industrial community. Furthermore, while total state support has increased over the years, the states' share of total academic R&D has continued a generally downward trend since 1950, when it contributed 15.1 percent.

Indicators for Complex Innovation Systems

J Sylvan Katz, SPRU

Innovation systems are complex systems that can exhibit scaling and emergent properties. Predictable and measurable scaling correlations exist between measures commonly used to characterize innovation systems and national economies. This paper examines scaling relationships between GERD & GDP and between GDP & population and uses them to construct scale-independent indicators of the European and Canadian innovation systems. It discusses the theory and practice of building scale-independent indicators and scale-independent models. The theory is based on knowledge gathered from the study of complex systems. The practice is illustrated using OECD and Statistics Canada data commonly used to construct conventional indicators.

EVENTS

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[Innovations and Entrepreneurship in Functional Regions](#)

Uddevalla, Sweden, 15-17 September, 2005

The objectives of the symposium/conference are: i) to provide a unique opportunity for scholars and senior and junior researchers to discuss path-breaking concepts, ideas, frameworks and theory-essentials in plenary key-note sessions and parallel competitive paper sessions, and ii) to facilitate the development and synthesis of important contributions into cohesive and integrated collections for potential publication. The conference will focus on the themes of international entrepreneurship; innovation, entrepreneurship policy and regional development; entrepreneurship in the public and non-profit sector; innovation, academic entrepreneurship and high tech firms in functional regions; and SMEs, immigrant entrepreneurship and local economic development. Paper submissions will be considered until March 15, 2005.

[Canadian Association of Business Incubation 14th Annual Conference](#)

Edmonton, 18 September, 2005

This conference provides those responsible for managing business incubation programs, providing business advisory services or economic developers valuable information on key issues facing business incubation, as well as networking opportunities and strategic linkages. Sessions discuss a variety of key issues ranging from starting, monitoring and managing successful business incubation programs; creative ideas and valuable resources for assisting clients; to discussing federal privacy legislation and best practices for incubators and our clients.

[THECIS BioProducts Seminar](#) **NEW!**

Saskatoon, 27 September, 2005

Saskatchewan is home to a vibrant and growing bio-products industry. Companies are commercially involved in or developing technologies relating to a wide range of activities including: new industrial plant-based oil products and related technologies including wood treatments and bio-diesel; Bio-energy including ethanol (from cereal grains), manure digesters and waste treatments; gasification of wood-wastes for electricity (and conversion of syngas to liquid fuels); flax fiber use in textiles and in composites, new processing technologies, bio-plastics and absorbents, plant-made industrial products and pharmaceuticals as well as bio-control products.

Come and hear a range of perspectives on this exciting industry, and participate in a stimulating discussion with our expert panel.

[From Research to Revenue](#) **NEW!**

Mississauga, 30 September, 2005

The Toronto Biotechnology Initiative (TBI) is a non-profit organization committed to promoting the growth of biotechnology in Toronto and the surrounding region. This forum will provide outstanding opportunities for CEOs, CFOs and CSOs to discuss and network on National and International issues as their business travels the road to commercialization of their breakthrough technologies. Whether it is therapeutics, medical devices or diagnostics you will find this event thought provoking and informative.

[Creative Places + Spaces 2: Risk Revolution](#)

Toronto, 30 September - 1 October, 2005

This conference is dedicated to unlocking the creative potential of people and places through innovative social, educational, cultural, environmental and economic initiatives. In addition to onstage presentations, the conference will offer a Creativity Marketplace, which will provide organizations an opportunity to display materials and meet with delegates to exchange ideas and share information about their work in a less formal setting. We also invite the submission of feature articles and story ideas for the Creative Places + Spaces News Journal. The conference welcomes submissions of dynamic presentations, demonstration projects and case studies from practitioners in the fields of arts, science, business, government, education and social services suitable for the conference. [Big Lessons from Small Places: A Forum on Governance in Rural North America and the North Atlantic Rim](#)

Twillingate, Newfoundland, 13-15 October, 2005

This conference includes field trips dealing with a number of important themes in rural governance including: economic diversification, fisheries, tourism, heritage and culture and health. Parallel sessions cover governance tools in small jurisdictions, managing urban-rural interaction, fiscal management, devolving power-building capacity, services and infrastructure, natural resource management and regional diversification.

Cities in Multilevel Government Systems: Lessons from Abroad

Toronto, 14 October, 2005

Around the world, new forces are re-shaping the functions of cities and their relations with central and provincial governments. The aim of this one-day conference is to assess international experience, and bring it to bear on Canada. This is particularly relevant in Toronto, for the new status of the City is being negotiated, and it's important across the country as the federal government proceeds with its New Deal for cities and communities. As part of a large research project funded by the Social Sciences and Humanities Research Council, prominent experts have studied nine other systems, all federations except for France. They have examined the new pressures on cities and patterns of change in municipal-federal-provincial relations and institutions. These will be the topics of the first two panels of the conference. Then there is the question of the resources needed by cities and how to secure them. Comparative experience is interesting here, and this is the third session. Finally, the conference will address the issue of what kind of multilevel government system is most conducive to having good public policy in cities.

Building a Brighter Future: Building Tech Based Economies

Atlanta, 19-21 October, 2005

The urgent need to focus public investment on the more distant horizon has been the recurring and underlying theme for all of the national discussion on unbalanced federal R&D budget priorities, the need for a national innovation strategy, and the challenge and opportunity presented by a "flat world" (to borrow a phrase from Thomas Friedman). SSTI's 2005 conference in Atlanta provides a unique and timely forum to advance understanding of the states' and regions' evolving roles as leaders in fostering the continued competitiveness of the U.S. economy.

Creative Clusters

Belfast, UK, 24-26 October, 2005

This is the only annual international conference on policy for the creative industries. The growth of creative industries has been explosive - communities, cities, regions and nations are embracing this shift, leveraging their culture to build valuable assets that can transform their economies. In the UK creative industries are growing twice as fast as any other - at a rate of 8% per year. Creative Clusters are accepting presentation proposals on the following four conference themes: Investing in Creativity, Delivering Skills for Creativity, Inclusion through Creativity, and an open session.

Clusters 2005

Toulouse, France, 27-29 October, 2005

This conference will bring together academic and industrial decision makers and their municipal counterparts with a view to fostering debate and discussion about best practices with respect to the creation, management and development of technology clusters.

Globelics Africa 2005

Pretoria, South Africa, 31 October - 4 November, 2005

Globelics (the Global Network for the Economics of Learning, Innovation and Competence Building Systems) is a framework for scholars who use the concepts of learning, innovation and competence building systems as part of their analytical framework. The network is especially focused on the strengthening of research on learning and innovation systems in developing countries. In the region most in need of human and economic development, Globelics Africa 2005 aims to further examine the links between innovation, development and growth. The conference also aims to build research capacity in Africa by establishing contact between researchers from Africa and from other regions of the world, both from leading academic centres, and from other developing contexts. In addition, the conference aims to rethink and reframe the challenges of the African continent in the light of insights from innovation systems research. Scholars from innovation studies will contribute a range of approaches and perspectives to guide research, policy formulation and action to bring about societal transformation through enhanced learning, innovation and knowledge competencies.

The Future of Industrial Research in Canada

Ottawa, 8 November, 2005

Canada's ability to compete as a nation in the global knowledge economy depends to a large extent on the vitality of its private sector. There is evidence that during the economic boom in the latter half of the 1990s, Canada experienced a drop in the number of firms conducting R&D here. Business leaders from the major high tech sectors will describe their global business strategies and how R&D fits into the overall picture. The conference includes presentations from multinational corporations active in Canada, entrepreneurs running Canadian firms large and small, investors and other experts. They will assess the overall environment for knowledge-based business in Canada and recommend approaches for successful commerce in a global context.

The 8th Annual Conference of the Competitiveness Institute

Hong Kong, China, 8-11 November, 2005

China's emergence onto the world stage has created unprecedented opportunities and challenges to business people and policy makers from all over the world. China has become a market, an investment location, a production platform, and a competitor. But what is China's true underlying competitiveness? In which industries will China lead and in which will it lag? What and where are China's major clusters and how strong will they be? What is China's influence on other economies in the region and the world? How will other economies compete with China? How can companies understand China's different regions and benefit from China's regional development? What programs and policies will be necessary to develop competitive clusters in the new environment? How do my nation or regions' own clusters stack up against the world's best? Several of the world's leading experts on clustering and regional development will address these questions and others at this conference, organized by the Hong Kong Institute of Economics and Business Strategy of The University of Hong Kong.

Innowest 2005

Calgary, 16-17 November, 2005

This conference provides a forum where the innovation community of Western Canada can gather annually to network, review the latest developments, solve problems and take specific industry recommendations forward for action. Among the topics to be discussed are applied research, the culture of innovation, innovation policy and innovation support.

SUBSCRIPTIONS & COMMENTS

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Please forward this newsletter to anyone you think will find it of value. We look forward to collaborating with you on this initiative. If you would like to comment on, or contribute to, the content, subscribe or unsubscribe, please contact us at onris.progris@utoronto.ca.

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