As the first decade of the millennium comes to a close, a new integrated model of innovation is offering increased hope for building successful societies in the new era. This model is emerging from the convergence of theory and practice in business innovation and social innovation. Distinctions are fading between ‘business innovation’ as technological innovation for economic growth and competitiveness through the private sector, and ‘social innovation’ as behavioural and institutional innovation to meet social needs through the public and non-profit sectors.

A consensus is developing about the urgency to embrace this new integrated model of innovation. Recent events and trends have set a trajectory for the 21st century that is not favourable. The dot-com crash, 9-11, the Enron scandal, tsunamis, increasing inequality and failing states have focused attention on the challenges of the digital age, geo-political governance, climate change, sustainability, and globalization, particularly as exposed by the international financial turbulence. In this context, the integrated model of innovation recognizes that making a successful future is far more complex than technological fixes, miracle drugs, or easy solutions of policy or practice.

The following discussion begins with an analysis of why theory and practice in business innovation and social innovation are converging to their mutual benefit. The profound implications of this convergence for the research community are then described with particular reference to the increasing expectations for the social sciences and
humanities both on campus and in collaboration with the private, public and not-for-
profit sectors. The conclusion offers encouraging reasons for optimism about our ability
to accelerate implementation of the integrated model of innovation - to move from smart
ideas to smart action, and thereby, to enhance quality of life.

This conclusion may be surprising since there are certainly many reasons to be
pessimistic. As published by the Conference Board of Canada, Canada’s Competition
Policy Review Panel, Canada’s Science, Technology and Innovation Council, the
Canadian Council of Academies and the Public Policy Forum, report after report has
emphasized Canada’s poor record of innovation.¹ Most recently, the Canadian Policy
Research Networks has shown how Canada is falling behind other countries, such as
Australia, the UK and the US in recognizing the value of social innovation.² But these
reports also suggest that the events and trends of recent years are providing a wake-up
call and, increasingly, have inspired new thinking about innovation. Indeed, leaders
across society are now calling for an integrated model that recognizes the inherent
oneness of economic, social, cultural and political quality of life. Thus far, talk has
exceeded action but the reasons for optimism have never been greater.

During the 1980s and 1990s, theory and practice generally assumed that business
innovation concerned the private sector while social innovation involved the public and

*Compete to win*, final report of the Competition Policy Review Panel, Industry Canada, Ottawa, 2008;
Strategy: Why Canada Falls Short*, report of the Expert Panel on Business Innovation, Canadian Council of
Academies, Ottawa, 2009; John Macaulay, with direction from Paul Ledwell and David Mitchell,
*Innovation Nation: Building a culture and practice of innovation in Canada* Public Policy Forum, Ottawa,
2009.
² Mark Goldenberg, Wathira Kamoji, Larry Orton, and Michael Williamson, *Social Innovation in Canada: An Update*
non-profit sectors; business innovation addressed business challenges while social innovation focused on social challenges. In doing so, business innovation emphasized technological innovation while social innovation stressed policy and behavioural change.

Along the way, however, perspectives about both processes changed significantly to set the stage for their conceptual convergence in recent years. During the 1990s, the dominant model of business innovation evolved from a linear transfer model to a “chain link” model that recognized innovation as a more iterative process connecting researchers, entrepreneurs and others in multiple ways. This evolution reflected the increasing recognition of critical feedback loops with interactions and discontinuities as well as unintended consequences such as ‘locked-in’ dominant technologies that frustrate further innovation. Along with way, the emphasis in business innovation also began extending beyond products to services and beyond technological innovation to business strategy. Overall, the focus expanded to understanding and promoting systems of innovation that operated at local, national and international levels.\(^3\)

One reason for the changing views of business innovation was that the technology transfer offices that multiplied on campuses by the 1970s have not worked as expected. While still playing useful roles for many campuses and communities, the technology transfer offices have not fulfilled the ambitions imagined in the linear push-model of business innovation. Revealingly, they have not produced much revenue with some exceptions such as at the University of British Columbia and the Université de Sherbrooke.

Moreover, researchers have now also shown that the technology-transfer approach characteristically misses a key and increasingly important dimension of innovation that does not involve goods but rather services. This is crucial since, like other modern countries, almost 70% of Canada’s GDP is now composed of the service economy. From retail to real estate to banking, such services in the private sector are characteristically informed by research in the social sciences and humanities through campus-community connections beyond the familiar purview of technology transfer offices. This limitation is being further exposed by the burgeoning creative economy which depends upon a complex engagement across the social sciences and humanities that is often associated with knowledge co-creation and exchange rather than transfer.

But an even more important reason for the new thinking about business innovation has been an increasing recognition that economic growth does not make successful societies possible in a sequential, linear way; rather, economic growth is increasingly seen as resulting from, and interacting with, succeeding societies in integrated, multi-dimensional ways to make them even more successful. The key insight is that, more often than not, the significance of any technology or product depends on the relationships within which it is embedded. Society matters. This development is reflected in new expressions such as the customer-driven marketplace - the pull rather than the push. Sound business principles now include deep understanding of the context within which production and consumption occur, and of the actual and potential impact of production and consumption on that context including how that impact will be perceived. In other words, there is a growing recognition of the intertwined technological and social
dimensions of innovation. Technology depends upon the human context that gives meaning to new ways of doing things.

The increasing attention to the now-dominant service sector is also contributing to the blurring of private-public dichotomies as well as to a sharpening focus on the social economy. One significant example is the collaborative research initiative led by Ian MacPherson, at the University of Victoria, that is assessing the current roles and future possibilities of the social economy in all Canadian regions. Funded by SSHRC, the Canadian Social Economy Research Partnerships is a pan-Canadian and internationally-connected initiative that includes over 300 researchers (from within and beyond the academy) with engagement by 79 universities.

While business innovation has been evolving toward social engagement, social innovation has begun engaging the for-profit as well as public and non-profit sectors. New forms of collaboration, both within and across sectors, and new ways of working are reflecting new understandings about complex systems, about how people organize, and how ideas move, increasingly enabled by the new media. These new ways of working involve multiple types of partnerships (public/private, profit/non-profit and public/profit/non-profit), the adoption of cross-sectoral strategies, and the development of new networks and means of networking. Fields such as social entrepreneurship, design, public policy, and community development, are increasingly using social innovation as a central strategy. In other words, social innovation is now being recognized as priceless in terms of long-term and widespread benefit for all of society. Just think of the focus

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5 An important example of recent work includes Kerri Golden, Allyson Hewitt, Michael Lewkowitz, Michelle McBane, and Lisa Torjman, Social Entrepreneurship MaRS Whitepaper Series, 2009.
now on greater hand washing as a key behavioural innovation with enormous consequences even for those seemingly most advantaged.

Over the years, the changing views of business and social innovation have increasingly made clear that people, their mindsets, their intellectual assets — what economists call human capital — are central. The new focus within innovation is on the individuals who make the crucial, small-scale improvements and large-scale transformations in product design, production processes, knowledge management, services and service delivery standards – both commercialization and social innovation on two feet. For this reason, the knowledge and mindsets – including the crucial tacit knowledge - cultivated through the social sciences and humanities in particular—such as critical thinking, creativity and the ability to embrace complexity and diversity within our increasingly interconnected world— are characteristic of the talented graduates who have become Canada’s greatest “natural resource.”

The increasing integration of business and social innovation helps explain the rising demand for types of economic growth that enhance rather than damage human relationships and well-being. Corporate social responsibility is becoming an increasingly used phrase across Canada. The “triple bottom line” of “people, planet, and profit” has become a business strategy for sustainable growth. It is worth remembering that it was a Canadian, John Kenneth Galbraith, who most forcefully challenged the post-World War II assumption that ‘a sufficiently expanding economy will sweep away other social problems.’ He showed how societal health and economic growth must be intertwined to produce resilient societies and economies. Examples of this inter-sector collaboration include philosophers collaborating with scientists and artists to interpret the legal and
ethical dimensions of biomedical technologies; geographers working with demographers and economists to rethink international public policy on agriculture; and business leaders identifying critical research questions with scholars of sustainable development.

Tima Bansal, a leading scholar at the University of Western Ontario, and her colleagues illustrate how researchers can help foster action in keeping with an integrated model of innovation. Bansal leads the SSHRC-funded Network for Business Sustainability, composed of researchers, business managers, and policy-makers. One of the network’s activities is to assemble annually a diverse group of fifteen leading organizations in sustainability to identify the issues for which better research is needed. Representatives from these organizations are able to discuss social and environmental issues in a non-threatening environment. At the May 11, 2007 meeting, representatives from the TD Bank and the Pembina Institute attended the Network’s Leadership Council meeting. This initial encounter resulted in the TD Bank announcing on February 5, 2008 that it would become carbon neutral by 2010 – the first such commitment by a major Canadian bank. The move will reduce Canada’s carbon footprint by 140,000 tons of CO2 per year. Bansal emphasizes that the magnitude of this commitment cannot be overstated since banks watch each other closely. With TD Bank showing such leadership, it is likely to shift the mindset of other major banks. Moreover, banks are important agents of change in the business community because they lend money to so many organizations.

In such ways, the characteristic focus of social innovation on vulnerable populations and on environmental consciousness is now informing dominant thinking about business innovation.6 The trajectory and itinerary of our lives are now increasingly

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6 For an example of recent public discussion, see ‘Everybody in the Pool of Green Innovation,’ New York Times, November 1, 2009.
recognized to be multi-causal and non-linear reflecting tastes, preferences and behaviour within complex group dynamics. In an uncertain and turbulent world, individuals are facing changing patterns of employment and demands for skills in a knowledge-based economy, an increasingly diverse social fabric, transformations in family life, changing values, new constraints on organizations and public services, and rapid urbanization. Business innovation is thus drawing upon insights from social innovation to contribute to the robust 21st century model of innovation that contextualizes the potential meaning of material technological developments in social and cultural settings; in other words, an integrated model that keeps the focus on people - on lives lived, on communities, on societies.

In this context, Canada’s three research granting agencies (SSHRC, NSERC and CIHR) as well as the Canada Foundation for Innovation (CFI) are collaborating closely to foster interdisciplinary research as well as distinctive contributions from specialized research fields. We have increased collaboration in order to support research on complex topics that transcend the expertise of any one discipline or that represent new research areas that fall between established distinctions among the humanities, engineering and the social, natural and health sciences. Scholars in the social sciences and humanities are embracing this development; two-thirds of Canadian professors in these fields now view their research as ‘quite’ or ‘extremely’ interdisciplinary.

The research granting agencies are also increasing their collaborative efforts in order to enhance the effective use of the benefits of research. Our goal is to enhance the quality of life by fostering partnerships - where appropriate - between researchers and the larger society. One of the best examples of this type of collaboration has been SSHRC’s
Community-University Research Alliance program which, for more than a decade, has helped bring together university researchers with community partners — organizations, businesses, and all levels of government. In this way, CURAs have helped promote the new era of engaged scholarship and community-based research.7

Since the launch of CURAs in the late 1990s, SSHRC has continued to build on this initiative. For example, researchers found that connecting the campus and the community is resource-intensive and time-consuming; building meaningful relationships takes sustained commitment with appropriate support. One response has been the Knowledge Impact in Society program which emphasizes the ‘connectors’ in an innovation system - the knowledge brokers and institutions who mobilize knowledge across the campus and community. Our Clusters program further extends this initiative by connecting researchers and partners to enable engaged scholarship across institutions and communities.

Last year, as part of its consultation activities, SSHRC asked that the Council of Canadian Academies (CCA) assess the overall strengths and weaknesses of management, business and finance research, broadly defined. CCA convened a stellar expert panel led by David Zussman from the University of Ottawa. The expert panel’s central finding was that the Canadian scholarly community’s activities in these areas rank above the world average but that considerable opportunities exist to connect much more effectively

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7 Budd Hall and colleagues at the University of Victoria who have played a key role in fostering such campus-community connections recently prepared a report for SSHRC entitled *The Funding and Development of Community University Research Partnerships in Canada* Office of Community-Based Research, University of Victoria, May 2009.
scholars with collaborators across the private, public and not-for-profit for their mutual benefit.  

As the next phase of moving forward with its management, business, and finance strategy, SSHRC is focusing on three interrelated themes: Innovation, Leadership and Prosperity. Our focus on Innovation captures how research underpins successful change to enhance a society’s well-being. Our focus on Leadership emphasizes issues of governance, people management, risk-taking, ethics, policy issues, and new models of leadership, especially those involving teams working ‘organically’ and often connected digitally. Prosperity underscores the importance of quality of life, and not just for some but for all. 

Such developments reflect the fact that, since opening its doors in 1978, SSHRC has consistently evolved its programs to support the top students, scholars and partners in the changing world of research. Until now, our main tactic has been to add programs such as the CURAs, KIS and Clusters. A second tactic, used in our Standard Research Grants program, has been to add adjudication committees to accommodate new research specializations or proposals that span specializations. While serving us well, these tactics have now resulted in a program architecture that is very complex for applicants as well as for administration. Moreover, the two tactics of adding programs and adjudication committees to enable new types of research activity have meant that existing programs and committees have not always immediately benefited from new concepts and approaches.

In this context, SSHRC is renewing its program architecture in order to create an up-dated and nimbler system of application, adjudication, and reporting. SSHRC will be

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moving from more than thirty specific programs to three umbrella programs guided by the core principles of excellence, simplicity, flexibility, integration and quality of service. These umbrella programs will focus on ‘Developing Talent’ through scholarships and fellowships and by funding eligible institutions for innovative approaches to student training through research; on ‘Building Knowledge and Understanding’ by supporting all forms and modes of research on the past and present undertaken by individuals, groups, institutions including those using formal partnerships and alliances.; and on ‘Mobilizing Knowledge’ across campuses and communities by similarly supporting activities involving individuals, groups, institutions with or without formal partnerships and alliances. This new structure will use a fresh vocabulary, remove unnecessary complexity, eliminate overlaps in program objectives and minimize logistical barriers for applicants. The new program architecture will also embrace throughout the three umbrella programs the new and emerging forms of research, partnerships, talent development and knowledge mobilization that may fit into only some – or none - of SSHRC’s current programs.

In renewing our program architecture, we are jettisoning the out-dated distinctions of pure and applied research, and of strategic - and thus presumably not strategic – research. We are also rejecting any hierarchy of types of research activity in terms of prestige or importance either among the different ways of knowing or the amount of money needed to address a research question. And we are recognizing a much more inclusive definition of scholarly contribution that builds upon the familiar emphasis on journal articles and books to include diverse means of mobilizing knowledge both on and beyond the campus. Moreover, we want to include in our reporting the substantive benefits, influence and impact of research defined as inclusively as possible: how
research has explained and supported or questioned our thinking about the past and present; how research has introduced new interpretations and new insights by challenging established wisdom about the past and present; and how research has analysed and reinforced or changed behaviour, including both policies and practices. Obviously, no research makes a difference in all these ways especially in the short or mid-term; indeed, history shows that the significance of the most transformational research often becomes clear only many years after its completion. Nonetheless, by asking inclusive questions that can be addressed when and as appropriate on a continuing basis following the completion of specific research grants, we can offer scholars and their research partners the occasion to do better justice to the importance of their work.

An up-dated recognition and reporting of research contributions are especially timely since scholars in the humanities and social sciences have embraced the challenge of sharing their research with non-specialist audiences. Not that long ago, this challenge was miss-characterized as ‘dumbing down’. In contrast, scholars today recognize that effective communication beyond specialized groups is a difficult rhetorical challenge. New scholars are especially seizing on the possibilities of the digital age. In addition to writing for scholars and students, more and more scholars now provide the general public with online course content, videos, podcasts and social media to diffuse information, stimulate debate, and advance knowledge and understanding. Institutions are also helping researchers develop new means to connect with diverse audiences such as Memorial University’s Yaffle and York University’s ResearchImpact.

In sum, and in keeping with the new integrated model of innovation, SSHRC has embarked on a path of innovation called continuous improvement. The most recent
forward steps began in 2006 with major innovations in governance to ensure high levels of stewardship, accountability and transparency through the separation of the functions of the Chair of Council and the President. The Council has also welcomed leaders from across the larger society to collaborate as members with scholars from diverse research fields. In 2007, SSHRC appointed the first Vice-President, Partnerships, in keeping with the new model of innovation that calls for intensified collaborations depending on the research activity between the research community and the private, public and not-for-profit sectors. More recently, the first Director of Knowledge Mobilization and Program Integration was appointed in order to nurture the development of KMb including a community of practice.

A series of additional steps have been taken since last year to enhance SSHRC as an outward-looking organization. Universities were invited to establish the position of SSHRC Leader in order to enhance collaboration with our primary institutional partners. The tricouncil document on ethics for research involving humans is being updated through extensive consultation to include meaningful changes such as the notion of research participant rather than research subject. SSHRC is also promoting open access in order to increase the sharing rather than the hoarding of the benefits of research, and to facilitate the exchange of ideas in order to inspire new and better ideas. In all this work, we are seeking to enable positive change, to bring down unnecessary barriers, to become more agile, and thereby to do our part to foster the continued blossoming of research in the social sciences and humanities.

Why should we be optimistic about the potential of such changes to help make successful societies in the 21st century? One key reason is the forceful and compelling
calls-to-action now being articulated by leaders across Canadian society. On the occasion of receiving the David C. Smith award on October 15, 2009, former University of British Columbia President, Martha Piper, urged all decision-makers to help universities, in general, and the social sciences and humanities, in particular, to step up to the challenge of preparing for peace in the 21st century.

‘If we are to live in one world—one small, interconnected world—we must all assume and fulfill our responsibilities as citizens of that world. For this is not a war in the conventional political sense. The opponent is not another country that can be defeated or suppressed militarily. The enemy is ignorance and apathy.

This is, indeed, a fight that a university, every university, must lead. Indeed, universities in the 21st century, Canadian universities in particular, need to rise to the occasion and assume their role in educating the future global citizens, global citizens who will understand the world in which we live, global citizens who will ensure the survival of a civil society—a society in which all individuals, regardless of race, ethnicity, intellectual ability, sexual orientation or religious beliefs, can express themselves without fear, exercise their individual human rights and live in healthy, safe, respectful, and economically strong and trusting communities.’

Martha Piper went on to ask,

‘We have never as a nation questioned the need to conduct research to cure diseases such as cancer or to understand nuclear fusion or to develop innovative weaponry. Why then can we not accept the notion that we need the same level of scholarly inquiry to help us solve the “diseases” of war and violence; poverty and hunger; hatred and aggression?’

Current university presidents have similarly been speaking out about the value of drawing upon all the ways of knowing to enrich our understanding and to promote innovation for the 21st century. Indira Samarasekera, President of the University of Alberta, emphasized on National Science Day, May 27, 2009, that

‘Our support for excellence must span engineering, the natural and health sciences, and include the human sciences – the social sciences, humanities and the arts. Learning, culture and societies are being transformed in this rapidly changing.

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technologically driven world. The human sciences will be central to understanding and advancing human and social well being in this new milieu.'

University of Toronto President David Naylor told the Economic Club of Canada last spring that ‘Successful societies are built around creative and well-balanced communities. You can't have them without the social sciences, the arts and the humanities.’

Last summer, David H. Turpin, President of the University of Victoria, collaborated with historian, Eric Sager, to call for a new partnership between universities and the knowledge economy that integrates material well-being and quality of life.

‘Simply put, in Canada and British Columbia we need nothing less than a new level of engagement between universities and society as a whole. We need to create a culture that is passionate about creating, acquiring and sharing knowledge and skills. We need to build a passion for applying knowledge and skills to improve the economic, social and environmental fabric of our society.’

This fall, Drew Gilpin Faust, the President of Harvard University, asked readers of the New York Times

‘As the world indulged in a bubble of false prosperity and excessive materialism, should universities – in their research, teaching and writing – have made greater efforts to expose the patterns of risk and denial? Should universities have presented a firmer counterweight to economic irresponsibility?....As a nation, we need to ask more than this from our universities. Higher learning can offer individuals and societies a depth and breadth of vision absent from the inevitably myopic present. Human beings need meaning, understanding and perspective as well as jobs. The question should not be whether we can afford to believe in such purposes in these times, but whether we can afford not to.’

Such university presidents are not alone in speaking out.\textsuperscript{14} Other public figures are similarly supporting the new integrated model of innovation. Preston Manning asked on last May’s National Science Day, ‘If it is possible – and it surely is – that the application of science, technology, and innovation to all the above challenges can have unanticipated consequences, some of them negative, is it not to the social sciences and humanities that we must look to conduct the ethical, economic, environmental, social, and legal impact assessments that will forewarn us of those negative possibilities and enable us to avoid or mitigate them?’

For Tom Jenkins of Open Text in Waterloo, recently cited by \textit{Fortune} magazine as one of the world’s fastest growing IT companies, the increasing importance of the social sciences and humanities reflects the maturing of the digital age.

‘The internet economy has thus far belonged to the toolmakers (some of them Canadian) that built the infrastructure that made the digital age possible. But the torch is being passed. The future now belongs, at least equally, to the tool users, the creative people, content providers, service deliverers, who have learned how to take the images, sounds, ideas, and concepts and share them digitally.’\textsuperscript{15}

In reporting on the annual meeting last year in Davos, Switzerland, the World Economic Forum highlighted the central conclusion that ‘a multistakeholder approach is critical for any authentic and viable solutions to global problems. The World Economic Forum has underscored that…government, business and civil society must engage each other to find effective approaches to the most pressing issues. This year we placed particular emphasis on corporate global citizenship, the principle that companies must be involved in addressing the major challenges we face today, aligning their engagement in society with their business goals. This commitment is at the core of what the Forum stands for.’\textsuperscript{16}

\textsuperscript{14} More generally, see John Goddard, \textit{Re-inventing the civic university}, Provocation 12, National Endowment for Science, Technology and the Arts, October 2009.
\textsuperscript{15} Tom Jenkins, ‘Infrastructure for the New Economy,’ \textit{National Post} January 20, 2009.
The good news then is that, despite the disturbing events and trends of recent years, we have succeeded in “getting to maybe” to use the compelling book title and conceptualization of the path to meaningful innovation described by Frances Wesley, Brenda Zimmerman and Michael Quinn Patton.\textsuperscript{17} ‘Hope and history’ may, indeed, be starting to ‘rhyme.’ We do seem increasingly determined to ‘catch this moment’.

Perhaps, the ‘door is opening’ as we collaborate across research councils, universities, governments, businesses, foundations, community organizations, and other partners across society, doing our best to balance reflection and action.

Clearly a great deal of work remains to be done to cultivate the emerging 21\textsuperscript{st} century integrated model of innovation. We need continued research to enhance our understanding of the benefits and further potential of such innovation. We need better evidence and measures to track innovation and assess its full economic, cultural and social impact. We need more research on how to connect appropriately the campus and the larger community for their mutual benefit, keeping in mind their distinct roles and responsibilities in promoting successful societies now and for the future.

In Helga Nowotny’s book, \textit{Insatiable Curiosity: Innovation in a Fragile Nation}, she emphasizes how innovations arise from the past, take form in the present and shape the future. Nowotny aptly describes innovation as a ‘collective wager on the future.’\textsuperscript{18} It is in this spirit that the recent report by the Public Policy Forum calls for an \textit{Innovation Nation: Building a culture and practice of innovation in Canada}.

\textsuperscript{17} Frances Wesley, Brenda Zimmerman and Michael Quinn Patton, \textit{Getting to maybe: How the world has changed}, Random House, Toronto 2006.

To do so successfully, we must keep in mind that the desirable future will not follow a contest to determine superiority among cultures and societies in a zero-sum game; rather the new thinking assumes a win-win effort to enhance all societies by drawing upon the most compelling insights, evidence, and experience. The integrated model of innovation calls upon us to re-kindle, indeed, to re-ignite the relationship between scholarship and society; to re-imagine and re-new the historic covenant between universities and the public; to exploit all the ways of knowing about the past and present to tackle the world’s toughest challenges.

Let me close by thanking all the scholars across the social sciences and humanities, the partners across campus and beyond, and all those who are helping Canada harness knowledge and understanding, the true power of innovation, to create a prosperous, resilient, safe, just society in the 21st century.