

Entrepreneurship: A Proposal for a Research and Teaching Program

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1. Entrepreneurship: A Core Component of A Canadian Business School's Curriculum

The Entrepreneurial Investigation and Support Landscape in Canada

1. Canada faces a world in which Canada's "value adding" enterprises, whatever their sector, will be increasingly challenged by competitors from emerging and traditional nations. All of the Canadian players in the "value adding" value chain will need to innovate in order to meet this challenge. Individual players on these value chains focused on domestic market places will face increased competition from international competitors. Players focused on export markets already face such competition.

While some elements of these Canadian value-added chains recognize this, and even welcome it, others do not. At the same time, there are a number of outstanding examples of innovative entrepreneurs in these value-added chains, who have developed new businesses, creating new products or selling existing products to new markets.

More and more, government policy makers look to such examples and create funding programs that seek to increase their numbers. However, many of these programs are not based on a robust, empirically validated model of entrepreneurship.

2. During the past four decades, there has been a large amount of on-going academic research into the defining characteristics of entrepreneurs. This work has focused on:
 - The difference between entrepreneurs and small business owners,
 - The psychological makeup of entrepreneurs,
 - Typologies or different types of entrepreneurs,
 - The persistent nature of efforts exhibited by successful entrepreneurs,
 - The policy, social and business environments that impact on the success of entrepreneurs.

As a result, there is a rich bed of existing information about entrepreneurs¹. Unfortunately, **enterprise level entrepreneurial success** depends on far more than the abilities of entrepreneurs. Many entrepreneurs fail, even

¹ For instance, the Babson College Entrepreneurship Research Conference annual publications. Founded in 1981, this conference has brought together academics and practitioners annually, and serves as an integration point for empirical work on entrepreneurship. See <http://www.babson.edu/Academics/centers/blank-center/bcerc/Pages/home.aspx>
In 2014, the Ivey School at Western will be hosting the Babson College Entrepreneurship Research Conference.

though they exhibit all of the personal characteristics of successful entrepreneurs.

3. Most Canadian university business schools have programs oriented to entrepreneurs and entrepreneurship². Some have PHD programs that focus on entrepreneurs³. Some have centers or institutes that are directed towards entrepreneurship⁴.
4. In 2010, Industry Canada published a review of the entrepreneurship activities in Canadian colleges and universities. Generally, such efforts are located within a single faculty and reflect the vision of the senior academic individual responsible for the program. Much of the current university activity around entrepreneurship represents a short term approach to developing course content in order to attract students. There is little effort to create or to communicate a more general research approach to entrepreneurship that could lead to some degree of voluntary alignment among Canadian entrepreneurship researchers. If this were done, the individual research endeavors could deliver results that were “more than the sum of the parts”.
5. There are a large number of “entrepreneurship / innovation” support organizations or “seed” accelerators / business incubators across the country. The Canadian Association of Business Incubation has a “partial list” on its web site that spans 3 pages⁵. These organizations seek to bring together individuals who are seeking to start up businesses with individuals and organizations who can give them advice, support, and resources. Their general approach is to support local “small business” individuals and entrepreneurs with:

² See as an example the Canadian universities participating in the Nicol Award competition for 2012-2013 at <http://nicol-award.com/universities.htm> and the listings at Canadian-universities.net at [http://www.canadian-universities.net/Universities/Programs/Small Business and Entrepreneurship.html](http://www.canadian-universities.net/Universities/Programs/Small_Business_and_Entrepreneurship.html)

³ 1) University of Calgary, PHD in Entrepreneurship and Family Business Management, see <http://haskayne.ucalgary.ca/phd/areas-study>

2) University of Manitoba, PHD in Entrepreneurship and Small Business, see <http://umanitoba.ca/faculties/management/programs/graduate/phd/design.html>

⁴ 1) Ryerson University, Toronto see <http://www.ryerson.ca/eri/>

2) University of Waterloo, Waterloo, see <http://gradcalendar.uwaterloo.ca/group/Business-Entrepreneurship-Technology>

3) Concordia University, Montreal, see <http://johnmolson.concordia.ca/en/faculty-research/research-centres/centre-small-business-entrepreneurship>

4) Western, London, Pierre L. Morrisette Institute for Entrepreneurship, see <http://www.ivey.uwo.ca/entrepreneurship>

⁵ See the Canadian Association of Business Incubators website listing at <http://www.cabi.ca/docs/Incubators-in-Canada.pdf>

- educational material,
- advice from “entrepreneurs in residence” or other experienced business individuals,
- connections to “support professionals”, such as local accountants and lawyers,
- connections to potential sources of funding, either on a loan or investment basis,
- coordination of networking events in which business individuals can connect with one another, potential suppliers and customers.

The majority of the service delivery by these organizations is “for profit” oriented. Some also provide support to individuals working in the “not for profit” and social innovation spheres⁶.

Broadly speaking, the funding of these organizations demonstrate a broad level of support for entrepreneurship at the provincial and federal levels.

6. Jim Collins, in his book “Good to Great” and other writings, has demonstrated that complex business questions are often best addressed by a collaborative team of researchers **working as coordinated individuals under the guidance of a general project or research plan**. The wide acceptance of the importance of his findings is also an implicit acknowledgment that his research approach makes sense⁷.
7. Entrepreneurial activity in Canada is often locally or North American focused. At a Communitech⁸ breakfast with the CEOs session, a number

⁶ The author has personal experience with two of these organizations, Communitech in Kitchener-Waterloo and the Guelph Innovation Center in Guelph. Both are funded by provincial government dollars. Both are part of an Ontario Network of Excellence, which attempts to provide some degree of voluntary coordination among their efforts and approaches. See <http://www.oce-ontario.org/> for information on the Ontario Centres of Excellence. See <https://www.communitech.ca/> for Communitech. See <http://www.innovationguelph.ca/> for Innovation Guelph. There are a number of other such organizations in the South West Ontario region.

⁷ Jim Collins’ web site (see <http://www.jimcollins.com/>) contains the information on his books. “Good to Great” continues to be just one of his highly respected books. Since Collins’ intent is to impact business practice, he tends to put his methodology comments in his appendices. He leads research projects that involve both collaborative and project management elements. The Wikipedia article on him provides some insight into the widespread acceptance of his work: see http://en.wikipedia.org/wiki/James_C._Collins.

⁸ Communitech has over 10 years experience with supporting entrepreneurial startup in the tech sector in Kitchener – Waterloo, Ontario. Recipient of consistent government funding, it states its mission as “We help tech companies, start, grow and succeed”. With strong links to local academic institutions, it provides a strong “practical support component” to those institutions’ delivery of innovative technology education. See <http://www.communitech.ca/> for more insight.

of start up CEOs who cultural heritage is Asian or European have commented that their peers are too focused on doing business within Canada or the United States. They do not have business visions or develop business plans that address building business partnerships or client bases in emerging economics. Adding a “international business component” to business school based entrepreneurship programs will be an essential component for their long term success.

8. In summary:

- Canadian academic entrepreneurship programs focus on individual education. Although these programs may take into account recent research findings on entrepreneurship, their goal is by and large to teach individuals to be entrepreneurs. This is an important goal. However, it is a limited one.
- Individual faculty members in these institutions may conduct research into any of the many aspects of entrepreneurship which intrigue them. There is little explicit coordination of their efforts. Indeed, many academics would argue that any effort to explicitly do so constitutes an inappropriate limitation on academic freedom.
- Canadian entrepreneurial incubators and support organizations are by necessity focused in local delivery efforts. They tend to use approaches and materials that are at best provincially coordinated. Often, their approaches reflect the personal experience and insights of the individuals involved in these organization’s front line delivery activities to local small business people and entrepreneurs. They are generally “for profit” oriented because their staff has little experience with “not for profit” and social innovation entrepreneurship.

The Need

1. In 1989, William Gartner argued in ““Who is an Entrepreneur” Is the Wrong Question”⁹ that entrepreneurship research needed to focus on what entrepreneurs did instead of their personality characteristics.
2. In 2007, Rauch and Frese¹⁰, in a thorough review of past entrepreneurship personality research, once again made a strong case for benefits of investigating the personality of the entrepreneur.

⁹ Gartner, William B. " Who is an Entrepreneur? is the Wrong Question." Entrepreneurship Theory and Practice, Summer 1989, pages 47-67

¹⁰ “Born to Be an Entrepreneur? Revisiting the Personality Approach to Entrepreneurship.” Baum, J. Robert (Ed); Frese, Michael (Ed); Baron, Robert A. (Ed), (2007). The psychology of entrepreneurship. The organizational frontiers., (pp. 41-65). Mahwah, NJ, US: Lawrence Erlbaum Associates Publishers, xxxi, 400 pp.

Both views have merit. Together they give insight into what is needed for entrepreneurial research to succeed.

3. Gartner's point, that understanding entrepreneurship requires investigation of how entrepreneurs behave when they create entrepreneurial enterprises, makes it clear that effective research on entrepreneurship **must work at the enterprise level**.
4. Rauch and Frese's work makes it clear that such enterprise level understanding of entrepreneurial success can only produce socially valued results when it **is transformed back into education for individuals** that helps them develop and extend the personality characteristics that motivate them to lead entrepreneurial enterprises.
5. Education for the individual entrepreneur needs to be coordinated with educational, advice giving, and support programs that help enterprise leadership teams understand what it takes to successfully manage successful entrepreneurial enterprises.

Without such a wider approach, the investment that individuals, academic institutions, and entrepreneurial / small business support organizations make in this personally oriented entrepreneurship education will not return substantial society-wide benefits. Much of the Canadian provincial and federal funding currently devoted to these efforts will not achieve the expected impact on the changing Canadian economy.

The Opportunity

A leading edge academically based effective entrepreneurship program can provide this "entrepreneurship leadership" by doing the following.

1. The individuals at the institution can take a broad conceptual approach to understanding enterprise level entrepreneurial success. This framework can be communicated as a working model to be developed and validated. Over a relatively short time, the institution will be perceived as the Canadian thought leader on entrepreneurship, demonstrating the benefits that aligning with this approach will have on entrepreneurial research, education, and local entrepreneur / small business support.
 2. An institutional commitment to taking this broad conceptual approach to entrepreneurship in the profit, not-for-profit, and social innovation spheres can act as an invitation to the institution's faculty members and graduate students to undertake research that aligns with and fits into this framework. Over time, the research results and publications by these individuals will add to a sum that is greater than its individual parts.
-

3. The faculty members at the institution can incorporate this general framework, the research results produced under it, as well as other cutting edge entrepreneurship research, in their course content.

Given the institution commitment to the broad entrepreneurial framework, it will be possible to work with them to translate some part of this course content into appropriate educational content that can be used by individuals working with the Canadian incubators, seed accelerators and entrepreneurial support organizations. If this material were “formatted” as e-learning content, it could be delivered to the individual utilizing the services of these organizations using a distance education model under the institution’s brand. Indeed, it might even be possible to design “certificate” and other distance education programs which encourage these organizations to promote these institution programs¹¹.

4. The thoughtful investigation of successful **enterprise level entrepreneurship** will have dramatic benefits for:

- Federal / provincial governments,

which will be able to craft supportive policies and practices that truly create enterprise level entrepreneurial success, as opposed to policies and practices that reflect personal / pressure group / lobbyist perceptions of what is needed.

- Investors,

who will be able to ensure that the investments they make in entrepreneurial start ups have a “maximum” probability of success.

- Innovative entrepreneurs,

who will be able to shape their entrepreneurial business start ups, break outs and turnarounds in ways that maximize their probability of success.

There is a high degree of interest in promoting entrepreneurship and small business success at the provincial and federal government levels in Canada. Given this, appropriate Ministers could be contacted to solicit seed funding for establishing this broad entrepreneurship program at the institution.

¹¹ Affinity marketing schemes are very prevalent on the Internet. Under them, an individual registering for such a “certificate” program uses a “pin” which identifies the organization that guided them into the program. This results in a “pay back” of some kind to the “referring” organization. It may even be possible to enter into arrangements with provincial governments by which shared job creation or “retraining” incentive funding is available to the individual, the referring organization and the institution, facilitated by a relatively simple web based tracing program.

Making It Real – The Approach – in Broad Terms

1. A research and education program based at a Canadian academic institution which desires to produce these benefits must address **enterprise level entrepreneurship**. Such a program is likely to:
 - Be multi-year in duration,
 - Be multi-individual in scope,
 - Be multi-discipline in expertise (leadership, technology, communication, management, and the future of education),
 - Address enterprise level entrepreneurship in both technology oriented and non-technology oriented enterprises,
 - Require input from both research oriented academics and pragmatic leaders of both successful and UNSUCCESSFUL entrepreneurial enterprises,
 - Cross national and cultural boundaries,
 - Investigate entrepreneurial activities in the for profit, not for profit and social innovation spheres.
2. To be effective, such a research and education program must be based in an academic institution that has practical experience in all of these areas. To succeed, the program:
 - will require a degree of collaboration among academics who normally follow personal research avenues, rather than team coordinated ones.
 - will mean reaching out to, and getting input from, individuals who have led or are leading entrepreneurial enterprises in the profit, not-for-profit and social innovation spheres.
 - will mean convincing leaders of unsuccessful entrepreneurial enterprises in these spheres to be as forthcoming and honest in their contributions as leaders of successful ones.
 - will need to occur in an institution that has an active tradition of cross discipline work and dialogue.
3. The institution which houses the program will:
 - have the ability to work in ways that bring together academic leaders from a number of academic disciplines: - business / management, education and technology, leadership in the for-profit, not-for-profit, and social innovation spheres.

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- understand that education without application does not deal to the kind “whole individual” education which underlies eventual success in the business world,
- be open to the emerging trends in e-learning, building in-house expertise in e-learning program content development that takes advantage of:
 - the current dramatic progress in e-learning content authoring tools¹²,
 - the coming adaptation of game development software platforms as a means of producing cases and simulations for e-learning¹³,
 - the emerging technical innovations in video compression that will allow the more effective delivery of video type content over the Internet in the coming years¹⁴.

The Benefits for the Institution

At the same time, the academic institution which succeeds at “housing” such a broad research and education program on enterprise level entrepreneurship will:

¹² See <http://elearnmag.acm.org/featured.cfm?aid=2221186> for a 2012 review of some of these tools by Judy Unrein in eLearn Magazine.

When I was Vice-President, E-commerce Development Services and IT Architecture for Manulife Financial, my general approach to development tools was to select a “good enough” one, which had a high probability of having an a useful life for a number of years. This approach may not be possible in an academic institution which encourages individual faculty members to be personally creative in their choice of topics and tools.

However, it may be possible to create a “centre of excellence” within the institution which provides e-learning development services to faculty members. It may also be possible to negotiate special relationships with appropriate e-learning content development tool vendors which substantially reduces the cost of access to such tools sets. Finally, exceptional funding for such a center may be sought from external business and government sources.

Sheridan College in Ontario took an analogous approach some years ago to creating and developing its now acknowledged capability in “cgi = computer based imaging” education for the film industry.

¹³ See <http://www.pixelprospector.com/the-big-list-of-game-making-tools/> for one of the many reviews of game development software tools that are currently available. In my view, a case or a simulation is a “learning game”. I believe that there will be a growing understanding that these “game development” software tools are very good tools for producing “learning games” that are appropriate to e-learning and education in general in the coming years.

¹⁴ Video codecs are an area in which there has been significant development in the past decade. Much of this advance, as well as additional advances, are now becoming part of the “proven edge” mainstream on the micro-computer and Internet delivery platforms. See “Comparison of video codecs” on Wikipedia for an overview at http://en.wikipedia.org/wiki/Comparison_of_video_codecs.

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1. Achieve a high level of prestige that will allow it to attract the best students in a competitive playing field for good students.
2. Allow the institution to effectively compete for increasingly limited government, business and foundation funding dollars for its research, teaching and scholarship programs.
3. Provide a rich “ground” for students looking for research topics for masters and PHD dissertations in business, leadership, communications, and technology, as well as the working connections needed to allow those individuals to access qualitative and quantitative data from on-going enterprises.
4. Create real working relationships between faculty, students and individuals in the profit, not-for-profit and social innovation spheres that will have life long benefit to all of the individuals involved in these relationships.
5. Infuse its academic programs with content drawn from the day-to-day world of enterprises meeting real world challenges in the profit, not-for-profit and social innovation spheres.
6. Create the opportunity for the Institution to appeal to and to partner with the many “innovation / entrepreneur / small business” support organizations that are funded by the Canadian provincial and federal governments through:
 - “selling” them branded e-learning educational material that they can use in their day-to-day delivery of services to local small business people and entrepreneurs,
 - “partnering”¹⁵ with them, perhaps through some version of an Internet based” affinity model, in connecting some of the individuals they service with “entrepreneurship” based “certificate” or other such programs delivered by the institution to these individuals.

¹⁵ “Selling” and “partnering” are in quotes because the precise business models need to be worked out after dialogue among leaders at the institution and representative individuals from provincial and federal governments, generally senior members of the Industry Ministries.

2. A Research Proposal on Canadian Entrepreneurship

Intent and Objective

1. To begin to outline the nature of a potential research program into Canadian entrepreneurship that takes advantage of the fact that Ernst & Young has been sponsoring an “Entrepreneur of the Year” award in Canada since 1994.
2. To provide a “straw model” that will facilitate dialogue about the establishment of such a program among appropriate members of the hosting academic institution, as well as potential sponsors / supporters in Canadian business and government. The ideas which follow should in no sense be taken as final or definitive. They are simply meant to illustrate what might be possible.

The Opportunity

Every year, Ernst & Young¹⁶ conducts an Entrepreneur of the Year contest¹⁷. They have been doing so for the past 20 years. The finalists are judged on the following criteria.

“The judges are educators, business and community leaders, and past winners. They know what it takes to be an outstanding entrepreneur and what really matters when it comes to building and operating a successful business.

Financial performance:

A strong track record of financial performance, including raising equity and debt financing

Vision:

The ability to create a business concept and implement it effectively

Leadership:

The focus and strength of character that enable the entrepreneur to move forward — and inspire a team to do the same

Innovation:

Driving business success by pioneering new approaches and investing in ongoing research and development

Personal integrity and influence:

Setting high standards and demonstrating a desire to be

¹⁶ Ernst & Young will be abbreviated EY in future.

¹⁷ <http://www.ey.com/CA/en/About-us/Entrepreneurship/Entrepreneur-Of-The-Year/Article>

successful, taking risks and overcoming significant obstacles, and demonstrating perseverance and learning from experience.

Community engagement:

Knowing that commitment and responsibility are not confined to business, and putting energy and resources to work in giving back to the community.”¹⁸

The fact that this has been in place for 20 years creates a significant opportunity for a Canadian academic institution interested in enhancing its “reputation” and “brand” around Canadian entrepreneurship. To do so, the institution will set up and structure an entrepreneurship research program, which is likely to have the following characteristics.

The Program’s Characteristics

1. The program will have significant longitudinal components, in that the life history of the companies and the individuals included in the early years of the EY nominations can be followed over a number of years, depending on the year of nomination and the enterprise’s history (hopefully 15-plus for companies nominated in 1994 through 1999).
2. The program will investigate national and regional entrepreneurial dynamics, since the EY nominations are made for 5 regions in Canada:
 - Atlantic
 - Quebec
 - Ontario
 - Prairies
 - Pacific
3. The program will investigate:
 - the factors leading to success on the entrepreneurial enterprise level,
 - and the characteristics of successful entrepreneurial individuals,since the EY nominations include both.

¹⁸ From <http://www.ey.com/CA/en/About-us/Entrepreneurship/Entrepreneur-Of-The-Year/EOY2013-What-do-the-judges-look-for>

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4. The program will establish good working relationships with EY and the companies that are included in the study, creating synergistic beneficial relationships for the institution's faculty members and for students with working executives in the entrepreneurial enterprises included in the study.
5. The program will lead to effective working relationships among the institution's faculty members and academic administrations and senior individuals in the industry and trade-related policymaking elements of both Canada's national and provincial governments. These individuals are openly supportive of, and interested in, fostering successful entrepreneurial innovation in their provinces and across Canada.
6. The program will create a multi-year research framework within which masters and doctoral students who can choose to do thesis work. They will benefit from appropriate access to raw data, as well as from the support and previous work of other members of the research team.
7. The program will deal realistically with the conceptual complexity that underlies investigating successful entrepreneurship. (See the Appendix for more on this.)
8. The program will establish a regular program of "research reports" that are distributed to the participating companies and the research sponsors, thereby forwarding the practice of entrepreneurship in Canada in a practical, concrete way.
9. The program may have secondary benefits for the institution, such as the inclusion of program findings in the teaching of entrepreneurship at the institution, and in the creation of educational material that the institution might market under its brand. (For example, entrepreneurship education material that is made available in a distance / e-learning format to the many Canadian "small business centres" and "entrepreneur support organizations" that receive funding from the provincial and federal government.

Support for the Program

1. Internal Support within the Institution

The program will need the support of the senior faculty and academic administrative leaders in the institution. They will need to understand the program, its purpose and intent. They will need to support the program in principle, since the institution's name will be used to solicit support for, and participation, in the program.

As well, some part of the program's results will be published under the institution's name (i.e. brand). Senior individuals in the institution must be aware that this is an activity of the institution intended to enhance its "brand" and potentially to bring in revenue. Supportive positive comments by faculty

members and institution leaders made in the context of their normal dialogue with external academic colleagues and business connections will enhance the reputation of the program, and of the institution.

2. External Support From Major Business Players

The program will require cooperation and collaboration from a number of external organizations and individuals. The program will seek financial and other resource sponsorship, both to increase its prestige and to pay for the program over a number of years.

1. EY will clearly be a key player. Although most of the individual data (names of individuals and companies nominated since 1994), is probably available publicly, establishing an effective working relationship with EY will do much to move the program forward. Access to data, as well as positive support by EY leaders, will do much to move the program forward over time.

As the same time, the existence of the institution's research program can advance EY's commercial interests. Clearly, EY uses the "Entrepreneur of the Year" program to enhance its commercial brand and professional reputation. By associating its program with an ongoing "independent" research program in an independent educational institution, EY will further achieve these goals.

2. The Canadian Banks and other Established Canadian Businesses

Each of the Canadian banks, and the Canadian Business Development Bank, wish to be seen as supporting new business and innovation in Canadian industry. Consequently, they are potential sources of funding for the program. In return, they can become "sponsors" of the program, and use this in their own branding activity. Other well established Canadian businesses may also wish to enter an association with these benefits.

By establishing an appropriate governance structure, and a regular "results" publication program, it will be possible to get this support while ensuring the independence of the research program. The program, through its governance structure, will want to:

- create enough of a connection so that the banks (and perhaps other major Canadian business) gain the commercial prestige and branding benefits from being "associated with" and supporting the program through contributions in cash and kind,
- while ensuring that this connection does not compromise the research and academic independence of the program.

Comments on the program's governance structure will follow later.

3. External Support From Government Policy Makers

Politicians will be interested in the program, and their public positive commentary on the program should be welcomed. However, it will be more important to establish ongoing support relationships with senior government bureaucrats.

Each of the national and provincial governments has a ministry dedicated to trade and commerce. The Deputy Minister in each of these Ministries will be contacted to solicit support for the program. Support from government groups, beside public endorsement of the program, is best received in the form of funding that is incremental to the normal government funding for the institution. Some care will need to be taken to ensure this.

Program Governance

As a research program based in an academic institution, the program must maintain its academic and operational freedom. At the same time, it is crucial that senior business and senior government leaders who provide support to the program have a means of influencing the nature and the direction of the program.

One way of maintaining this balance is to establish a program advisory Board that meets a number of times a year (say 2) to review the work of the program and provide input into the program's future directions. Although this Advisory Board would have the feel of a "Board", it would not have the authority that is associated with a normal institutional or enterprise Board.

Having such an Advisory Board will have a number of benefits.

1. It will provide input into the research activities of the program from individuals currently active in established Canadian business organizations and in government activities intended to foster Canadian innovation and entrepreneurship.
2. It will establish a vehicle for regular meeting of the "Board Members", enhancing their ability to network with one another. If the meetings of the Board were properly set up, and included an "update on research" component, this networking opportunity could be extended to members of the research team and other faculty and academic administrators of the institution.
3. It allows the possibility of creating one to two Board positions for "academic" advisors to the program. Invitations to take these Board positions could be to well known academics outside of the institution, who have established reputations as entrepreneurship researchers. This will enhance the prestige of the program, and the institution's reputation in the academic world.

4. It allows the possibility of soliciting funds for periodic conferences on Canadian entrepreneurship. These conferences could bring together members of both the business community and the academic community. The sponsorship of members of the Advisory Board of these conferences could go a long way to increasing the attractiveness of such meetings to individuals in the business world, to policy making individuals in government, and to individuals active in the entrepreneurship support agencies funded by government. Canadian in focus, these conferences could also be attractive to research oriented academic individuals in other academic institutions, especially if the conferences included an “invited paper” component.

The Nature of the Research Program

The following ideas are not intended to be cast in stone. Instead, they provide insight into the nature of the research program, and several of its core success factors.

1. Establish a Broadly Understood and Accepted Research Strategy

Jim Collins¹⁹, in his well known books on successful and unsuccessful companies, has described a research method for complex business questions that has a great deal of potential. It has exploratory and comparative components. His work suggests that the following approach will be productive for looking at entrepreneurship in Canada.

1. Identify a topic of research interest. Clarify it initially by asking a set of preliminary high level questions that focus the efforts of the researchers. Use these to frame the initial exploratory steps in the research project.

On Entrepreneurial Enterprises:

1. What distinguishes successful entrepreneurial enterprises from unsuccessful ones in Canada?
2. Are the things which distinguish them consistent across all the regions of Canada, or do they vary?
3. Are the things which distinguish them consistent over time, or are they different at some “economic periods” as opposed to others?
4. Compared to what is available in the literature, are these Canadian findings consistent with or different from findings in other geographical and political locations?

¹⁹ <http://www.jimcollins.com/>

On Leaders of Entrepreneurial Enterprises:

5. What distinguishes the individuals who led successful entrepreneurial enterprises from the individuals who led unsuccessful ones in Canada?
 6. Are the things which distinguish these individuals consistent across all the regions of Canada, or do they vary?
 7. Are the things which distinguish these individuals consistent over time, or are they different at some “economic periods” as opposed to others?
 8. Are the things which distinguish these individuals innate in some way (e.g. the result of fixed personality factors or genetic endowment), or are they things that the individuals learned as a result of education and experience?
 9. Compared to what is available in the literature, are these Canadian findings consistent with or different from findings in other geographical and political locations?
2. Based on preliminary exploratory research, identify a number of “matched companies” that vary along the major research line – that is success versus lack of success as entrepreneurial enterprises.
 3. Engage in in-depth research on one set of these “paired” companies- get all the data that is possible to get about them – from public sources – from private sources – financial, anecdotal. Immerse yourself in these companies. Collect both quantitative and qualitative data.
 4. Engage in structured comparative dialogue that identifies the characteristics and factors that are clear distinguishers.
 5. Take another set of “paired companies”. Repeat in-depth research. See if the same factors distinguish them.
 6. Repeat as many times as feasible given your database of companies.
 7. Generalize, document and publish.

Some variation of this general research strategy will be the right way to approach this opportunity.

2. Designing and Establishing the Research Database

EY publishes the names of the finalists by Canadian region. In each case, the individual who leads the organization is identified, as well as the company she or he leads.

The first step in the research program will be to build a database of all of the finalists from the past twenty years. EY will be contacted to provide the

information needed for this step. Given that there are around 100 or so finalists in each year, this means the final database would contain the names of around 2000 Canadian companies who were publicly recognized as being “entrepreneurial” at some point in the past 20 years.

The database will be organized into two major components. The first will hold the individuals who are named as the entrepreneur. The second will hold the information on the companies of which they were the head. Appropriate relationships will exist between the two.

The design of this database needs to be addressed from a data architecture / data modeling perspective as well as a research use perspective. Although it is intended to be a research database, its underlying structure will be that of a business database. A full data modeling and database design will need to be done and maintained over time.

1. The database will need to be built in a way that is capable of supporting the research work and effort of multiple individuals, located in a variety of geographical locations, over a number of years. Essentially, this means that a secure, Internet browser based interface must be created.
2. The database must be capable of holding all of the research data. As the research continues, its underlying design and structure will need to adapt to the findings of the researchers, and the new directions of the research.
3. It will need to be capable of allowing the data extracts that will be required by the qualitative and quantitative research of research team members. These data extracts will need to be done in ways that ensure the “privacy of the original” suppliers of the data. That may mean “stripping” away identifying data elements, as well as “summarizing” data in ways that protects companies and individuals.
4. The database will need to be created in a relational database tool that is capable of holding both qualitative and quantitative data.
5. It will need to be “secured” so that access to its contents is restricted to appropriate members of the research team. They will need to agree to appropriate “confidentiality agreements”. This will be necessary to meet privacy requirements, as well as to assure participating companies and individuals that their specific data will be kept secure and not be made available to individuals / organizations outside the research team that could use the data for competitive or invasive reasons.

3. Researching the Current Status of Each Company

The public history of each company needs to be traced. A “roll up your sleeves” and search exercise, this means the following.

1. Determining if each company is still in existence. Verifying its current status (public, private, address etc – all of the basis data.) Identifying the current key management players. Establishing a basis for contacting the current leaders of the companies and inviting them to participate in the study.
2. Determining the current status of the individual identified as the entrepreneur associated with the company at its time of nomination. Finding current contact information for that person using tools like Linked In. Using the Internet and newspaper archive based searches to try to develop an outline of that person's public history from the time the individual was nominated until today.

Initial dialogue with EY will determine the extent to which their data archives could "kick start" this work.

This early investigation work will break the companies into the following sub-sets.

- Still Operating Today
 - Under their own name (or a new name that is clearly still the same company that has changed its branding at some point in time)
 - As a clearly identifiable part (e.g. business unit) of another company)
- Not Operating Today
 - Went out of business
 - Was bought by another company and absorbed – that is, lost any sense of being a separate entity or group or business unit within that company

Because the database will include companies that were active 20 years ago, the ones that are still operating today will be of great interest to the research team. Members of the research team will be able to contact the management leaders of those organizations. These individuals can provide access to financial data that will be important to the team. As well, these individuals will be the source of the "memory" that will help the team uncover the qualitative component of the company's history.

4. Researching the Current Status of Each Individual

The individuals included in the database will also break into a number of subsets:

- Still With Original Firm For Which Person was Nominated

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- Either as the designated leader / member of senior management team
- As an individual active in the company which acquired the originally nominated enterprise
- No Longer with the Originally Nominated Company
 - Started one or more other enterprises since the original nomination
 - Active with another enterprise not associated with originally nominated company
 - No longer active in business but accessible for follow up
 - No longer accessible for whatever reason

Qualitative follow up could potentially be done with all individuals who are still active in business or are accessible, regardless of their current activity. In some sense, their memories are a collective store house about the nature of entrepreneurial success and failure in Canada.

Preliminary categorization of the individuals, and location of their contact information, will be much easier today with on line databases such as Linked In, and the current norm for enterprises to have at least a brochure type website on the Internet.

5. Assessing What has Been Collected So Far

Systematic data collection of this kind begins to generate interpretive hunches about the patterns that are in the data. Bringing together the individuals who are doing this “data collection work, and asking “what do we see” in what we have collected so far is a powerful exercise. Their dialogue will be guided by the initial set of research questions. Examining what has been collected to date in this way:

1. Engages the research team and builds a sense of collaborative momentum for future research work,
2. Refines the initial guiding research questions into a more precise set for the next phase of work,
3. Begins to clarify what questions can be answered with the data collected so far, as well as lay out what data must be collected in subsequent work,
4. Clarifies the qualitative criteria which will be used to categorize both the companies into types like “successful and unsuccessful” over time,
5. Develops a “library of research ideas” that can be made available to other researchers, including students doing doctoral and masters theses.

It also provides a “first” set of findings for publication and reporting to the Advisory Board.

Finally, this step will produce a program plan for subsequent years and a project plan for coordinating the next phase of the research.

Conclusion – The Benefits

Without attempting to be definitive, this proposal has suggested the following:

10. that the fact that Ernst & Young has run a “Canadian Entrepreneur of the Year” competition creates a significant opportunity for a Canadian academic institution;
11. that engaging in a systematic long term research program on Canadian entrepreneurship has significant benefits for the hosting institution:
 - financial - in that it can seek external funding for the program from government and established Canadian businesses,
 - academic - in that it will provide a framework that will allow “the whole is greater than the sum of its parts” results from the doctoral and master students who choose to align their thesis work with the program, and from the faculty members who do the same in their research on entrepreneurship,
 - reputational - in that the institution will be able to add this longer term expertise in Canadian entrepreneurship to its “brand”;
12. that the technological infrastructure and expertise exist to build the underlying database that could support this kind of a longer term, multi-year, multiple company, multiple researcher program.

The only critical success factor missing is leadership. It will take a leader who:

13. has both business and academic experience, since it involves insight into the dynamics of both environments,
14. has significant program / project management experience, since it involves coordinating work over a number of people over a number of years,
15. has “statesperson” skills, since leading the program involves representing the program with business and government sponsors,
16. has conceptual and theoretical skills, since leading the program also means acting as the collaborative architect of the research activity,

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17. has personal passion for both education and business, since the leader of the program is required to build it up through its initial stages and then move it to a state where it has stable momentum so that a next generation of program leaders can keep moving it forward.

3. Appendix One: A Conceptual Model For Investigating Entrepreneurship At the Enterprise Level

Introduction

The following conceptual model of Enterprise Level Entrepreneurial Success is framed using a multivariate analysis of variance conceptual model. That is, each factor on the left of the conceptual equation is in some ways produced by or the result of the factors on the right side of the equation. The words “function of” in the conceptual equations is the shorthand used to convey this idea.

The model is presented on two levels. Each of the elements of the first level is subsequently broken down into a further level showing the factors that contribute to or produce or result in or impact it.

The Model is intended to do two things.

First, it operates a conceptual organizing framework. Individual pieces of research into enterprise entrepreneurial success can be related to one another through reference to the model. In this way, the model provides a degree of coherence to an already vast body of existing research.

Second, it acts as an “invitation” to individual researchers. By framing their own research work to align with the boundaries set out in the model, they can ensure that their contribution will be part of the effort that leads to the whole being “more than the sum of its parts.”

It is a first draft. The working assumption is that it is sound in general structure without being correct in all its particulars. Time might lead to important changes on the 2nd level, but not to major change on the 1st.

High Level Model

Success of entrepreneurial enterprise = function of:

1. Entrepreneurial founder
2. Management team
3. Technology employed / deployed
4. Business model employed
5. Funding
6. Competition in the marketplace

7. Customers
8. Relationships with suppliers / partners

2nd Level Models

Each of these then depends on its own contributing factors.

1. Characteristics / personality of the entrepreneurial founder = function of:

1. Personality trait or competency profile of the founder
2. Education of the founder
3. Past business experience of the founder

This 2nd level model can be complicated when there is more than one founder. In that case, these characteristics need to be investigated for each founder. The interaction among the founders, however, will fall in the “management team” 2nd level model.

2. Management team = function of:

1. Past business experience of individuals
2. Personality of individuals
3. Synergy / cohesiveness of individuals as a team
4. Capability of the “designated leader” to inspire, to motivate and to organize the work of the team.

3. Technology employed / deployed = function of:

1. Underlying Idea
2. Stage of development
 - Proof of concept
 - Prototype
 - Field testing
 - Commercialization / manufacturing
3. The maturity of the technology in the marketplace
4. The relationship of the technology to the rest of the technology in the marketplace (it’s disruptiveness)

4. Business model employed = function of:

1. Financial soundness
2. Market acceptance / success history of analogous business models
3. Size of customers
4. Size of single or average buy
5. Sustainability of revenue stream

5. Funding = function of:

1. Availability compared to needs at various stages
2. Term sheets
3. Exit needs / demands on the part of investors

6. Competition in market place = function of:

1. Existing potential competitors
2. Cost of entry into the marketplace
3. Patent protection or copyright if applicable

7. Customers = function of:

1. Loyalty to existing “alternatives”
2. Ability to penetrate customer segments
 - Early champions
 - Innovators
 - Early adopters
 - Late adopters
 - Laggards

8. Relations with suppliers / partners = function of:

1. Personal relationships between key individuals on both sides
2. Business terms
3. Strength of partners / key suppliers

4. Alternative sources of supply

An Illustrative Note

**Showing How the Model Can Frame the Research and Education Dialogue
Focusing on the Personal Characteristics of Entrepreneurs**

An investigation into the factors that lead to successful enterprise level entrepreneurship must always be concerned with the “personal characteristics” of the individual or individuals who found an entrepreneurial organization. Research on entrepreneurial enterprise founders must address the **psychological trait or competency profile of entrepreneurs**, which reflects genetic gifts or factors that develop in early family and pre-adult socialization.

Without entering into the entire nature / nurture debate, this work must tackle “what makes an individual an entrepreneur”. One way of dealing with this is to focus on “entrepreneurial competencies,” which are generally regarded as the behavioral expression of internal factors, whether they are the result of genetic underpinning, early socialization, education, or life experiences. Another approach is to search for patterns in personality factors, using the big five²⁰ or another model of personality.

Both approaches are present in the literature. This is not the place to favor one over the other. Rather, the broad conceptual framework needs to be able to work with past and future research which takes either approach.

Insight into psychological traits or competency profiles of entrepreneurs will be useful to individuals who are considering taking on an entrepreneurial challenge. Given sufficient self awareness and personal maturity, individuals who do not

²⁰ See the “Big Five personality traits” article in Wikipedia for a general overview. The following are all illustrative of this research approach.

Barrick and Mount do a meta analysis of the literature up to 1991 in their well cited “The big five personality dimensions and job performance: a meta analysis” Barrick, Murray R., and Michael K. Mount. “The big five personality dimensions and job performance: a meta-analysis.” *Personnel psychology* 44.1 (1991): 1-26.

John and Srivastava take a historical and measurement perspective on the big five in “The Big Five Taxonomy: History, Measurement and Theoretical Perspectives” in John, Oliver P., and Sanjay Srivastava. “The Big Five trait taxonomy: History, measurement, and theoretical perspectives.” *Handbook of personality: Theory and research* 2 (1999): 102-138.

Ciavarella and all’s “The Big Five and venture survival: Is there a linkage” illustrate one way in which the big five personality model is used in research. Ciavarella, Mark A., et al. “The Big Five and venture survival: Is there a linkage?” *Journal of Business Venturing* 19.4 (2004): 465-483.

demonstrate these characteristics could make productive decisions about NOT engaging in entrepreneurial activities.

At the same time, such insights will be useful to educators. Ultimately, academic institutions translate research findings back into educational program content, which they deliver to individuals. Understanding the trait or competency profile of individuals who lead successful and unsuccessful entrepreneurial enterprises will impact that translation activity.

These insights will also be useful to investors, financiers, public officials and others who make decisions about supporting intended entrepreneurial activities, as they sort through which entrepreneur's proposal to fund, with all the risks associated with such investment decisions. Entrepreneurs and individuals in the investment community have a body of "shared sense" about what underlies entrepreneurial success. This "shared sense" is not the result of systematic, structured investigation. Rather, it is the result of dialogue that occurs in these communities of interest, and is generally based on:

- analogical reasoning from personal experience as a business leader,
- analogical reasoning from learning about leadership and management practice acquired as a result of undergraduate and graduate education.
- analogical reasoning from business best practices,
- anecdotal reasoning from the self perceptions of either self declared, or reputation declared, "masters of entrepreneurship".

This body of information can and does have great impact on the decisions that are made by entrepreneurs themselves, by the investors / financiers who invest in and finance their businesses, and by public officials who develop policy and programs to support entrepreneurial activity.

Documenting the "shape" of this body of "shared sense" in a particular community of interest is important for the following reasons:

- Insight into the differences between this "currently held shared sense" and the results of more systematic investigation clarifies the education that needs to be done in the community of interest in order to make that community more effective in their interaction with, and support of entrepreneurs.
- Insight into the differences between the "perceptions" of entrepreneurs and the results of more systematic investigation into

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internal psychological characteristics and the learned factors that lead to entrepreneurial success will help:

- entrepreneurs realign their efforts with what in fact leads to success,
- members of the community that support entrepreneurs take more effective action in their support of entrepreneurs.

The characteristics of entrepreneurs are not likely to be the major reason why some entrepreneurial enterprises fail and others succeed. In fact, although these personal characteristics may be **necessary, they are very likely not sufficient**, to explain entrepreneurial success on the enterprise level.