



# INNOVATION & ENTREPRENEURSHIP

Feature Article by Susan Müller\*

## The Transformative Power of Social Entrepreneurship

How Social Entrepreneurs Induce Change on a Firm, Institutional, and Societal Level

“The social responsibility of business is to increase its profits.”

Milton Friedman, 1970 [1]

“I think things are going wrong not because of ‘market failures’. The problem is much deeper than that. Mainstream free-market theory suffers from a ‘conceptualization failure’, a failure to capture the essence of what it is to be human.”

Muhammad Yunus, 2007 [2]

Milton Friedman’s statement reflects the thought that if market actors follow their own economic interests, they will, ultimately, benefit society. The current state of the world seems

to speak a different story. While capitalism has spurred economic growth and lifted millions out of poverty, major challenges such as poverty or a lack of basic medical care remain unsolved in many parts of the world. Even worse, the current implementation of capitalism does not only leave urgent problems unsolved but threatens the social (e.g. increasing income inequality) and ecological stability (e.g. climate change) of the world. Social entrepreneurship, the combination of pursuing a social mission and applying entrepreneurial creativity[3,4], is for sure no cure-it-all, but it might help rethinking the current way we do business.

Social entrepreneurship is by far not a new phenomenon. It has been discussed in research for more than twenty years now[5]. However, defining the phenomenon remains challenging and numerous studies evolve around a definitional debate. After a review of definitions and descriptions of social entrepreneurship from various literature sources and entrepreneurship centers from leading business schools Zahra et al.[6] provide the following definition that summarizes common viewpoints of social entrepreneurship: “Social entrepreneurship encompasses the activities and processes undertaken to discover, define, and exploit opportunities in order to enhance social wealth by creating new ventures or managing existing organizations in an innovative manner”. The first part of the definition sounds familiar in the entrepreneurship arena. Entrepreneurs, no matter if they are social or commercial entrepreneurs, enact opportunities[7]. The second part of the definition, however, is the differentiating factor: Social entrepreneurs follow a social mission and aim to enhance “social wealth”. This clearly distinguishes social entrepreneurs from commercial entrepreneurs with the latter aiming to create economic value for themselves and their shareholders.

This does not mean that social entrepreneurs do not create economic value. Also, it does not mean that commercial entrepreneur do not create social value. However, the priorities are reversed. Putting social wealth generation as first priority means to take leave of profit-maximization (since we can never maximize on two outcome variables!). This decision has enormous consequences for firms and their beneficiaries, institutions, society, and, potentially, for capitalism itself.

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### Firm level: Social ventures reach beneficiaries that have been left out before

The Aravind Eye Hospital, an organization located in India, is a good example to illustrate the beneficial consequences of focusing on a social mission versus on appropriating wealth for the shareholders. In 1976 Dr. Venkataswamy, a retired doctor and specialist in cataract surgery, opened an eye care clinic with the mission to eradicate needless blindness. He was inspired by an article that he had read in the economist. The article talked about McDonald's principle of automation that allows the company to provide the same quality of hamburgers throughout the world. Dr. Venkataswamy decided to transfer this principle to cataract surgery, a ten-minute operation in which the old eye lens that has lost transparency is replaced by a new, artificial lens. Left untreated patients can lose sight.

The business model of Aravind works as follows: Patients, regardless of their ability to pay, are provided high-quality eye surgery. The clinic specializes in cataract surgery, which is the major cause of blindness in India. The processes in the clinic are streamlined. People living in rural areas are screened during "eye camps" held by Aravind in remote villages. If patients need treatment, they are brought to the clinic and taken care of by highly trained staff. The ophthalmologists working in the clinic concentrate on the final decision on whether or not the patient receives the operation and the actual surgery. Due to this division of work, each doctor conducts more than 2,000 operations per year, while a doctor in other clinics might only complete 200 per year. The high degree of standardization helps to save cost. Another important factor to reduce costs are low-cost, high-quality lenses, provided by Aurolab, a company located next door to Aravind. Due to the low costs Aravind is profitable even though only about one third of the patients can afford to pay for the surgery. Costs for the other patients are cross-subsidized by paying customers. Profits are reinvested in the development and the expansion of the company. No dividends are being paid to shareholders. For decision makers it is very important that the priorities are clearly set. If the company would try to somehow balance social and economic goals, each patient who cannot afford the operation and thus does not contribute to the bottom line would confront the decision makers with the question whether or not the patient should be treated. Today, Aravind provides more than 300,000 eye surgeries in six hospitals.

### Institutional level: Social entrepreneurship can change institutions

The case of Aravind shows that social entrepreneurship offers new possibilities on a firm level, it changes why and how businesses are launched and operated. But social entrepreneurship can also have an influence on an institutional level. For example, Muhammad Yunus, founder of the Grameen Bank, changed the landscape of financial institutions by providing micro-credits to the poor. Grameen Bank provides micro-credits to self-selected borrower groups of women without demanding collateral. Before Grameen Bank offered its services, poor people lacked access to regular financial institutions and were trapped in the vicious cycle of owing debt to moneylenders and paying usurious interest rates. As of October 2011, Grameen Bank has over eight million borrowers and recovery rates of about 97 % [8]. Grameen Bank initiated a movement that has spread around the world and has reached 100 million families in 2006 already [2]. And Grameen Bank is just one enterprise that induced changes on an institutional level. Sen [9] reports that more than half of the 2,300 social entrepreneurs in the Ashoka network, the world's largest organizations supporting social entrepreneurs, influenced national legislation within five years of launching their venture.

### Societal level: Social entrepreneurs can increase the "adaptive efficiency" of a society

Dees [10] argues that social entrepreneurs can increase the "adaptive efficiency" (a term coined by Nobel Laureate Douglass North) of a society through decentralizing social problem-solving efforts: "With social entrepreneurs we have more and smaller bets on varied efforts to tackle the same social problem". Decentralized solutions have the advantage of using local knowledge, applying it to develop a solution and testing various ideas. Dees puts it this way: "Decentralization is critical because finding out what works depends on having the right knowledge, being able to envision new combinations, and having the freedom to test ideas through action". Thus, various decentralized, entrepreneurial experiments of which some will fail and some will succeed, can provide better solutions than governments initiating centralized efforts.

### Could social entrepreneurship change capitalism?

As set out above, social entrepreneurship has implications on a firm level, on an institutional level, and on a societal level. Social entrepreneurs can apply the thought of social entrepreneurship to alleviate poverty, fight unemployment, provide basic medical care, enhance integration of disabled people, or improve education, to name only a few. But does social entrepreneurship have the potential to change the way we do business in general? The answer lies in what current and future social entrepreneurs, politicians, economists, and customers will decide to do. However, the successes of social entrepreneurship should at least stimulate reconsideration of basic assumptions of our economic system. Is it true that following self-interest will ultimately serve society? Is profit-maximization necessary to stimulate entrepreneurial activity and innovation? Is economic growth, if it remains to be linked to pollution and resource consumption, the right metric to measure the development of the world? And, after all, wasn't the ultimate goal of business to live a better (not richer) life?

\* Dr. Susan Müller is a senior research associate at the Swiss Research Institute of Small Business and Entrepreneurship at the University of St. Gallen.

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## Reviews

Fauchart & Gruber on Social Identity Theory

### Entrepreneurs' Social Identities May Help Predict their Decision-Making

Social identity theory states that an individual's self-concept is derived from perceived membership in a relevant social group, and has long been used by psychologists to examine individual decision-making. This paper expands that theory to entrepreneurs, attempting to discover whether various social identities can help predict decision-making through the firm creation process.

By studying 49 firm founders of companies in the sports-related equipment industry that were independently held and less than eight years old in the West European Alpine region, the authors identify three main social identities exhibited by the entrepreneurs:

The 'Darwinian' identity focuses their attention mainly on making profits and accumulating wealth, and may not feel a personal connection to the market they enter. The 'Communitarian' identity is strongly engaged with the sports community, and may have developed their own solutions to perceived deficits in the market, then noticed that their innovations would be beneficial to the community. Finally, the 'Missionary' identity believes that firms can be powerful agents of change, and use their firms to pursue a political vision or to advance a particular cause.

The authors note that the founders behaved and acted in ways consistent with their identities, and had imprinted their self-concepts onto key dimensions of their firms. Darwinians, for example, will often outsource their materials to find the cheapest options; communitarians view their work as a piece of art and will choose their materials accordingly; and missionaries will often ally themselves with like-minded distributors who share their vision.

The results of this data analysis, the authors believe, explains why founders with different identities make vastly different decisions in new firm creation, and they show that examining founder identities can help improve understanding of entrepreneurs. These three identities, however, may not have equal importance in all industries, and the authors state that more research needs to be done to see if their results can be generalized to a broader market and to make this concept accessible for large-scale empirical studies.

Fauchart, E., & Gruber, M. Darwinians, Communitarians, and Missionaries: The Role of Founder Identity in Entrepreneurship. *Academy of Management Journal*, 2011. 54, 5, 935-957.

Review contributed by Courtney Symons.

### Parker & van Praag on Entrepreneurial Entry All Entry Decisions are Not Equal

Individuals can become entrepreneurs by starting new ventures from scratch or by taking over an existing business, including a family business if they come from a business owning family. This article highlights that these entry modes are quite different, especially in terms of the entrepreneurs they attract.

The study is based on a data set of over 600 Dutch entrepreneurs. In this sample, 9.5% of the entrepreneurs took over an existing family business, 7.4% took over an unrelated business, and 83.1% started an entirely new venture. Entrepreneurs who had at least one parent mainly engaged in entrepreneurship during the respondent's youth made up 46% of the Dutch sample in this study; and 9.5% of businesses in the sample are inherited or taken over from the family. In addition, the authors document that individuals from families that own businesses are likely to invest less in formal education, relying instead on the informal education received in the family business.

Results from regression analyses show that – among entrepreneurs from families with businesses – the decision to take over the family firm is not related to the level of education, nor to gender or age. The number of siblings and the year of entry have negative effects, likely accounting for greater competition between siblings and indicating a declining trend in entry into family businesses. The tendency of individuals to take over family businesses is higher in agriculture as compared to other industries.

Additional regression analyses show that this pattern is quite different for take-over versus new firm formation decisions in non-family businesses. Here, individuals are more likely to choose new venture formation if they have higher levels of education and lower levels of management experience, and if entry costs and income risk in the industry are lower. Individuals from families that own businesses are likely to prefer take overs of existing businesses. Gender, education, general labour experience, industry experience, and previous business experience are not significant determinants of the entry mode choice.

In terms of policy implications, the authors suggest that entrepreneurship education programs also address topics related to taking over existing businesses, instead of focusing exclusively on new business formation. Policy analysis also needs to be aware of the very distinct characteristics of different entry modes. Failing to account for these differences could lead analysts to underestimate the effect of education on new venture creation or overestimate the limiting effects of financial constraints.

Parker, S. C., & van Praag, C. M. The entrepreneur's mode of entry: Business takeover or new venture start? *Journal of Business Venturing*, 2011, 27, 1, 31-46.

Review contributed by Sandra Schillo.

## Editorial Notes

Innovation & Entrepreneurship is a bi-monthly summary of current academic literature on innovation and entrepreneurship with a focus on policy implications. The electronic version will be accessible to subscribers at [innovationentrepreneurship.com](http://innovationentrepreneurship.com). We welcome contributions of feature articles and reviews.

For subscription information and other details please contact Sandra Schillo at [schillo@innovationentrepreneurship.com](mailto:schillo@innovationentrepreneurship.com).

Brehm on a Holistic Framework

## A Framework Combining the Literature on Innovation and Entrepreneurship

Based on a comprehensive review of current literature on innovation and entrepreneurship this article underlines the conceptual linkages between both research areas. Although both areas implicate a strong process orientation, novelty, and commercialization, no bundled literature stream has emerged. Hence, a holistic framework that combines research findings from both areas is presented.

This paper begins with an review of recent models and their implications for a holistic framework. From an organizational embeddedness view on the innovation process, Brehm integrates several types of strategies (Mintzberg & Waters, 1985), critical functions in the innovation process (Roberts & Fusfeld, 1981), and organizational implementation alternatives (Burgelman, 1984; Linz, 2001).

As the main result, an innovation and entrepreneurship framework that focuses on organizational issues from the corporate management perspective is developed. The framework suggests that the corporate innovation process begins with a trigger in the form of environmental change, and ensuing innovation and entrepreneurship activities may be partly overlapping or parallel. Where the initial idea is implemented internally, innovation activities prevail, including project management, gatekeeping and sponsoring. Where the entrepreneurial route is chosen, it triggers organizational implementation alternatives, which include future partnerships or possible 'spin-ins' into the original company.

The author emphasizes that the focus of this framework is on organizational issues at the corporate management level and calls for future research to empirically found the introduced framework with both qualitative and quantitative research methods.

Brem, A. Linking innovation and entrepreneurship: Literature overview and introduction of a process-oriented framework. *International Journal of Entrepreneurship and Innovation Management*, 2011. 14, 1, 6-35.

Review contributed by Ronny Baierl.

Wagner on Prizes to Stimulate Innovation

## Well-Designed Prizes can Jump-Start Innovation.

The author suggests that when used correctly, prizes to stimulate innovation can be very effective. By looking at previous examples of innovation prizes – from Napoleon who crowd-sourced the invention of canned food in response to the needs of his army, to Richard Branson who sought out a vehicle supplier for his private spaceflight industry – this article explains what circumstances are most effective for utilizing prizes. The author draws on his experience at the X Prize Foundation, an American initiative that has spent millions of dollars spurring innovation since its inception in 1996 to outline benefits of innovation prizes and lessons learnt.

Benefits of prizes include casting a broad net and reaching innovators one otherwise may not have; the fact that the innovators themselves pay for their performance; the creation of a parallel innovation process rather than a sequential one; and the attraction of public interest. Corporate prizes may be particularly beneficial in the context of new-product and new-business development, cor-

porate philanthropy, creative idea generation, developer engagement and marketing. These benefits can often realized because the prize winners will be outside the expected area of expertise. The diversity of motivations that a prize attracts – money, glory, competition, validation – ensures that various viewpoints will be represented. It also opens up the door to future endeavors with unlikely partners.

The article outlines five lessons to be learned about prize development. Businesses should use prizes when they don't know who can best solve their problem, and when they want to attract multiple solutions. They should define the problem but not the solution to ensure there are no limitations on the creativity of the entries. Businesses should make sure to set clear criteria for playing and winning, and tap into intrinsic motivators that will make people work harder than they normally would to win.

Establishing a prize may mean divulging private R&D information, so pros and cons should be weighed before choosing whether to initiate a prize. Smaller challenges can be implemented first to test the waters. Anonymity can also be granted when necessary. In closing, the author proposes that by attracting mavericks who may not have had previous access to this sort of opportunity, innovative and previously unheard of solutions are possible.

Wagner, E. B. Why prize? The surprising resurgence of prizes to stimulate innovation. *Research-Technology-Management*, 2011. 54, 6, 32-36.

Review contributed by Courtney Symons.

Therrien, Doloreux & Chamberlin on Service Innovation

## Innovation Intensity boosts Service Firms

The objective of this empirical study is to investigate whether innovation intensity in service firms impacts the percentage of sales firms derive from innovations. Data from 2123 Canadian companies with at least \$250,000 in sales and 15 employees are analyzed. The companies operate in the service industries in information and communication technologies, professional and scientific services, transportation, and natural resources.

The authors use two measures of innovation intensity. The market-based measure differentiates between world-first, Canada-first, and establishment-first innovations, while the originality-based measure captures the degree of novelty or radicality of the company's most innovative new service. Regression analyses show that establishment-first and totally new innovations have the strongest association with high percentages of sales from innovations, followed by world-first totally new and highly new innovations. World-first lowly new and Canada-first totally new innovations are also significant. Control variables including market-pull and technology-push measures, as well as firm size are not significant.

Sub-sample analyses show that the pattern in the ICT sector is similar, but professional, scientific and technical services are quite different: Here, only world-first and Canada-first, totally new innovations are significantly associated with high percentages of sales from innovative products. Thus, the analyses demonstrate that world-first innovations perform well, even if their degree of novelty is not high, and totally new innovations fare well even if they are not world-first. These patterns are sector-dependent.

Therrien, P., Doloreux, D., & Chamberlin, T. Innovation novelty and (commercial) performance in the service sector: A Canadian firm-level analysis. *Technovation*, 2011, 31, 12, 655-665.

Review contributed by Sandra Schillo.

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Dr. Sandra Schillo is the Founding Editor of Innovation & Entrepreneurship and President of Innovation Impact Inc.

# The Back Page

By Sandra Schillo

## Open Innovation - Concept and Studies

Open Innovation is hotly debated in the innovation management literature and has found its way into policy debates around the world. The term was originally coined by Chesbrough[1]: “open innovation is a paradigm that assumes that firms can and should use external ideas as well as internal ideas, and internal and external paths to market, as firms look to advance their technology”.

Although it is widely acknowledged that the importance of collaborations for innovation has long been known, the introduction of the term ‘Open Innovation’ has resulted in a renewed and vigorous debate among academics, managers and policy developers. There are numerous reasons why the OI has common currency[2]. Globalization and social and economic changes in working patterns have increased labour division and the need to integrate talent outside traditional full-time employment arrangements. Improved market institutions such as intellectual property rights, venture capital, and technology standards allow for organizations to trade ideas, and new technologies allow for new ways to collaborate across distances. In addition, research and development are now highly multi-disciplinary and in some areas more resource-intensive, requiring more collaboration, in other cases less resource-intensive to the extent that many distributed researchers can make substantial contributions.

The academic interest in the topic remains strong and the papers listed in this issue’s bibliography alone include four papers with the term “open innovation” in the title. These papers are an interesting cross-section of the type of work published on the topic and their contribution is summarized in the following discussion.

**Related Concepts.** While early publications on open innovation often lamented the lack of consideration of previous concepts, the recent papers published explicitly establish those links. Malecki [3] presents a theoretical piece connecting ‘local entrepreneurial ecosystems’ and ‘global innovation networks’, and places open innovation in this context. He points to the changes in the organization of research and development, especially the increased decentralization, co-location of design engineers with manufacturing engineers, outsourcing, and internationalization. He also refers to the innovation systems literature, which documents open and closed aspects of the innovation process and regional and national differences.

Other concepts related to OI\* include collaboration and networking. Collaborations in the R&D context have long been the focus of research, including user-producer interactions[4], lead-users, gatekeepers, strong and weak ties with various stakeholders, relationship formation, network centrality, the interaction approach, and various related capabilities and behaviours, for example the absorptive capacity required to integrate external knowledge.

**Types of Open Innovation.** One way to categorize types of Open Innovation that is particularly useful in the policy context is based on the notion that innovation can be open in terms of the innovation process and/or its outcomes[5]. ‘Closed Innovation’ occurs if both process and outcomes are held confidentially within the innovating organization. Although it is often held that companies are currently moving from the ‘closed innovation’ into the ‘open innovation’ paradigm, this is a matter of degrees.

Innovators have always engaged with their environment, and there are many examples of highly interactive companies, research organizations and networks reaching as far back as the 19<sup>th</sup> century. ‘Private Open Innovation’ refers to situations where innovators engage with external partners in the innovation process, but have provisions in place to keep innovation outputs proprietary. This is often the case in research collaborations and consortia, and increasingly in innovation platform arrangements, e.g. many innovation competitions and prizes. ‘Public Innovation’ sees organizations develop innovations internally, and then provide them openly to the public or collaborators. While this scenario is perhaps counter-intuitive from an economic point of view, companies are developing many business models that allow them to reap benefits from this arrangement, e.g. by selling services based on a freely available technology, through advertising, or to reinforce branding. This form of open innovation may also be appropriate to for applications that are outside an organization’s core markets. Finally ‘Open Source Innovations’ openly involve contributors in the process and make the outputs available as well. Key examples in this category are open source development communities and standard setting activities.

**Implementation Models.** Mortara and Minshall[6] identify four distinct patterns of Open Innovation (OI) implementation through a qualitative study of large multi-national companies. The first pattern ‘OI Conscious Adopters’ is mainly found among companies in the fast-moving consumer goods sector, which have traditionally relied on internal sources of innovation. These companies are adopting an open approach as a direct consequence of the popularity of Chesbrough’s framework with strong top management support, but focusing primarily on opening the innovation process to source ideas and knowledge. ‘OI Ad-Hoc Adopters’ open their innovation process as a consequence of requirements of specific projects or clients, or to reduce costs. ‘OI Precursors’ have a long history of engaging with external stakeholders in their innovation, even though they may not think of these activities as ‘Open Innovation’. Finally, ‘OI Communities of Practice’ have emerged as formalized innovation modus on the basis of previous collaborations, e.g. with suppliers or universities.

**Empirical Findings.** Researchers have started to investigate the impact of openness on innovativeness and company performance. In this research stream, Laursen’s recent publication[4] reconfirms that the breadth of interactions with external partners generally has a  $\cap$ -shaped relationship with sales from innovative products.

Frey et al. [7] focus on open innovation platforms, following a stream of research related to open source software development. They find that intrinsically motivated participants are particularly valuable as contributors, posting high numbers of substantial contributions. The authors find that, participants with a higher desire for monetary rewards engage in frequent postings of less substantial suggestions. These findings are slightly different from other studies, which highlights the importance of carefully designing open innovation efforts for their specific purpose.

In summary, open innovation is an important element in innovation practice and research, it takes many different forms, and its impacts are starting to be documented. This brief article can only scratch the surface of a concept like open innovation, and we hope to discuss explicit policy implications in future issues of Innovation & Entrepreneurship.

Please refer to the previous page for all references.

\* These concepts can easily be found using standard search strategies. .