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- C entre for
- Entrepreneurship
- Research
- Exchange

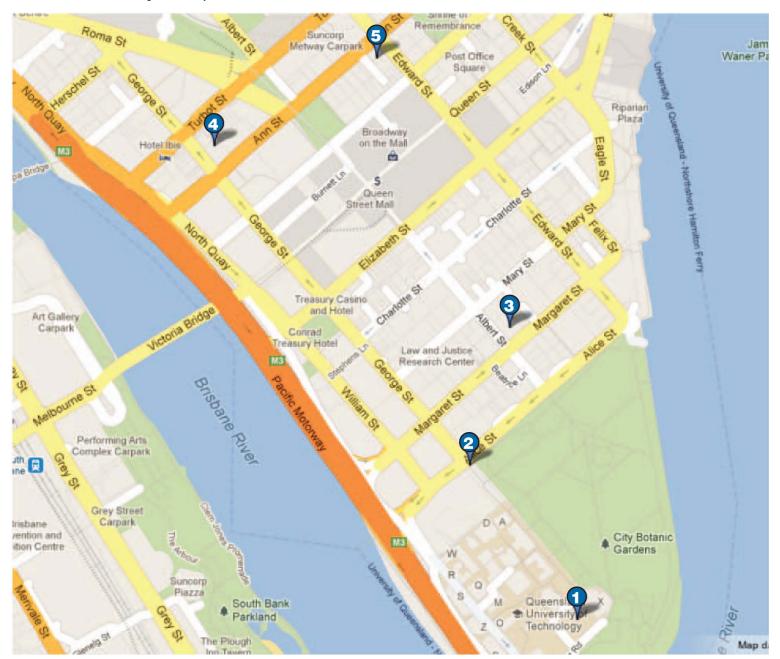
Australian Centre for Entrepreneurship (ACE) Research Exchange Conference 2013 5 – 8 February Brisbane, Australia



http://www.acereconference.com/



# Brisbane City Map



- 1 Venue SEC Building P Block QUT
- 2 Entrance to QUT
- 3 OAKS 212 Margaret St
- 4 Hotel George Williams
- Base Backpackers



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## Welcome Letter

In its second iteration, ACERE—the Australian Centre for Entrepreneurship Research Exchange — returns to its home turf, the Australian Centre for Entrepreneurship Research (ACE) at Queensland University of Technology (QUT).

The ACERE conference continues the proud tradition of an Australian-based, high quality, annual conference in entrepreneurship, previously known as "AGSE-IERE". Apart from regular paper presentation sessions, the conference features a keynote address by Professor Saras Sarasvathy; a "Meet the Editors" session featuring professors Dean Shepherd and Richard Harrison (and myself); a Policy Forum, a Doctoral Consortium, and a Paper Development Session.

We wish you a hearty welcome to a great conference experience at ACERE and trust that you will also enjoy Brisbane and its surroundings.

### Per Davidsson

On behalf of the ACERE Committee

# Sponsors Information

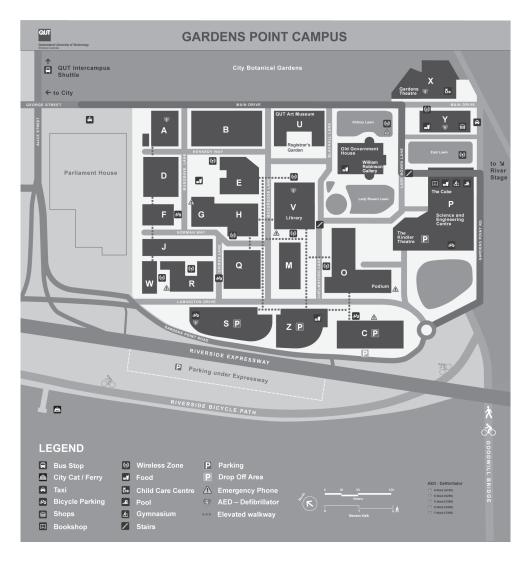












## Conference Information

### REGISTRATION DESK LOCATION AND TIMES

The conference registration desk will be located in the foyer at the following times:

 Tuesday February 5
 8:00am - 5:00pm

 Wednesday February 6
 8:00am - 5:00pm

 Thursday February 7
 8.00am - 4:00pm

 Friday February 8
 8.30am - 4:00pm

#### **SOCIAL FUNCTIONS**

### **Welcome Reception**

**Date:** Tuesday February 5 **Time:** 6:00pm – 8:00pm

Venue: The Cube level 5, SEC Building, P Block, QUT Gardens Point Campus.

### **Social Evening**

**Date:** Wednesday February 6 **Time:** 7:00pm – 10:30pm

Venue: The Deck level 6, SEC Building P Block, QUT Gardens Point Campus.

#### **Awards Dinner**

**Date:** Thursday February 7 **Time:** 6:30pm – 10:30pm

Venue: Room 360, SEC Building P Block, QUT Gardens Point Campus.

### **MOBILE PHONES**

As a courtesy to fellow delegates and speakers, please ensure your phone is switched off or is on silent during all conference sessions.

### **INTERNET ACCESS**

You will be provided with a unique username and password when you register. This will give you access to the QUT wireless network and QUT computers.

## **LOST PROPERTY**

All lost property can be handed in/collected from the registration desk.



### **VISITORS TO BRISBANE**

Brisbane is a modern, dynamic destination with a youthful spirit, great convention and meeting facilities and an appealing range of leisure activities. In one neat package Brisbane embodies the great Australian destination. From the world-class infrastructure to the excellent transport systems to the global reputation for innovative and emerging industries to the immense options for pre and post touring and partner programs, Brisbane is a destination built for business events. Friendly, engaging, clean and safe, Brisbane is also a destination where people are a priority. This is a city where government and industry work together to support conventions, conferences and exhibitions. That means that across the city, from hotel lobbies to restaurants to retail outlets, your delegates will be welcomed and embraced into the community.

#### **BRISBANE DINING PRECINCTS**

**Brisbane City** – There are many exciting eating establishments, which are scattered across the CBD. For easy reference the two main areas are:

**Queen Street Mall** – Offers numerous food courts for quick, casual meals, open air cafes for those who prefer to take their time or a number of different restaurant & bars spread from one end of the mall to the other

**Riverside/Eagle Street Pier** – Is the heartland of the city's dining precinct. In this prime riverfront location, there are literally dozens of places to eat with many of the restaurants making the most of the stunning river views for alfresco, relaxed dining.

**Fortitude Valley** - 'the Valley', as it is known by the locals, is full of an energy and individualism that makes it one of the most exciting dining areas in Brisbane. This vibrant dining locale offers everything from quality Asian to distinctive European and Middle Eastern cuisine. The main dining precincts are the Brunswick Street precinct (Brunswick Street, the Brunswick Street Mall, Central Brunswick and Chinatown), the James Street precinct and the Emporium precinct.

**South Bank -** Eating out at Brisbane's South Bank gives diners so many options. There are restaurants and cafes in South Bank Parklands but the precinct also extends to nearby Little Stanley Street and Grey Street. This is a heartland of Brisbane's dining scene, offering cuisines from around the world and for all budgets. It's also a dynamic place, with new places opening regularly.

**West End** - West End has so many eating options on Boundary Street from Vulture Street to Melbourne Street. You'll also find other dining areas on Hardgrave Road and a small selection further down Vulture Street or on Melbourne Street, towards South Brisbane.

West End is known as the place to cruise the cafes, rather than dine in formal restaurants. There are always footpaths overflowing with patrons. There are all-night places to buy pizza or kebabs and early morning joints for strong coffee interspersed amongst the real and living village.

#### TRANSPORT

#### **City Centre Free Loop Buses**

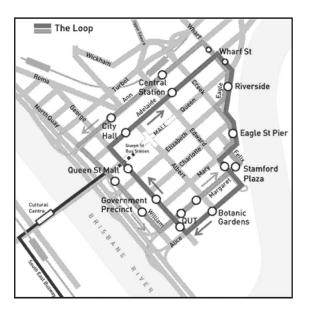
#### Schedule

Clockwise Loop – service departs QUT every 15 minutes between 7:00am and 6:00pm

Anticlockwise Loop - service departs QUT every 15 minutes between 7:05am and 6:05pm

#### Taxis

Black and White Taxis 13 19 24 Yellow Cabs 13 32 22



# Conference Organising Committee

## **CONFERENCE ORANISERS**

#### Per Davidsson

Director

Australian Centre for Entrepreneurship Research QUT Business School

### Karen Taylor

Centre Coordinator Australian Centre for Entrepreneurship Research QUT Business School

### **CONFERENCE SECRETARIAT**

#### **Gabrielle Hunter**

Event Manager QUT Events



# Keynote Speaker

### **Associate Professor Saras D. Sarasvathy**

University of Virginia, Darden School of Business

Associate Professor Saras D. Sarasvathy is a member of the Strategy, Entrepreneurship and Ethics area and teaches courses in entrepreneurship and ethics in Darden's MBA program. In addition, she teaches in doctoral programs not only at Darden, but also in Denmark, India, Croatia and South Africa. In 2007, Sarasvathy was named one of the top 18 entrepreneurship professors by Fortune Small Business magazine. A leading scholar on the cognitive basis for high-performance entrepreneurship, Sarasvathy serves on the editorial boards of the Journal of Business Venturing and Strategic Entrepreneurship Journal and is advisor to entrepreneurship education programs in Europe and Asia. Her scholarly work has won several awards, including the 2001 William H. Newman Award from the Academy of Management and the 2009 Gerald E. Hills Best Paper Award from the American Marketing Association. Her book Effectuation: Elements of Entrepreneurial Expertise (book overview) was nominated for the 2009 Terry Book Award by the Academy of Management.



Effectuation is widely acclaimed as a rigorous framework for understanding the creation and growth of new organizations and markets. The research program based on effectuation involves over a dozen scholars from around the world whose published and working papers can be found at www.effectuation.org. Sarasvathy has also developed several cases and other instructional materials to teach effectuation. A new textbook, along with an open source instructor website, is currently in the works.

In addition to a master's degree in industrial administration, Saras received her PhD in information systems from Carnegie Mellon University. Her thesis on entrepreneurial expertise was supervised by Herbert Simon, 1978 Nobel Laureate in Economics. Before joining Darden, she was on the faculty of University of Washington and University of Maryland. And before that, she was part of the founding team in five entrepreneurial ventures.

## Meet the Editors

Professor Dean Shepherd is the Randall L. Tobias Chair in Leadership and Professor of Management and Entrepreneurship at the Kelley School of Business, Indiana University. Dean received his doctorate and MBA from Bond University (Australia). In 2010 Dean was appointed Adjunct Professor to the Australian Centre



for Entrepreneurship Research, at the Queensland University of Technology. His research is in the field of entrepreneurial leadership; he investigates both the decision making involved in leveraging cognitive and other resources to act on opportunities and the processes of learning from experimentation, in ways that ultimately lead to high levels of individual and organizational performance. Dean has published, or has accepted for publication, approximately 90 papers primarily in the top entrepreneurship journals (Journal of Business Venturing and Entrepreneurship Theory & Practice), the top general management journals (Academy of Management Review, Journal of Management, Management Science, Organization Science and the Strategic Management Journal), top general operations journals (European Journal of Operational Research) and top psychology journals (Journal of Applied Psychology). He is also the editor in-chief of the Journal of Business Venturing (the leading journal on entrepreneurship) and on the review board for numerous management and entrepreneurship journals.

Professor Richard T Harrison is the founding co-editor of the research journal Venture Capital: An International Journal of Entrepreneurial Finance, the leading publisher of academic research on risk capital. He is immediate past Dean of Queen's University Management School, where he holds



a Chair in Management and chairs the China Management Research Institute. Previously he was Dixons Professor of Entrepreneurship and Innovation at the University of Edinburgh. Richard is a leading authority on business angel and early stage venture finance (having published over 50 academic papers and policy reports) and has advised governments, development agencies and business groups internationally on risk capital and venture finance issues. His current research interests include the analysis of entrepreneurial learning and leadership processes, studies of the role of entrepreneurship and innovation in emerging economies (notably China), examination of the nature of peace entrepreneurship in conflict societies, and investigations of the generation, protection and exploitation of intellectual capital, including studies of academic entrepreneurship and technology transfer."

**Per Davidsson** is Professor in Entrepreneurship and Director for the Australian Centre for Entrepreneurship Research (ACE) at the Queensland University of Technology, Australia. He is a Field Editor of Journal of Business Venturing and former associate editor of Small Business Economics and Entrepreneurship Theory & Practice.



He has additional affiliations with the Jönköping International Business School, Sweden and University of Louisville. In 2011/12 he served as Chair of the Entrepreneurship Division of the Academy of Management. Per has led and/or participated in multiple international-collaborative research projects addressing a broad array of entrepreneurship issues on the individual, team, organizational, regional and national levels. His primary areas of expertise being new venture creation, small firm growth and research methods he has authored more than 100 published works on entrepreneurship topics including some of the best cited works in the leading journals in this field.



Notes	



# Tuesday – 5 February 2013

<b>Doctoral Cons</b>	sortium
P Block 504 & 505	
9:15am - 9:30am	Welcome; overview; housekeeping
9:30am - 11:00am	Presentation (15 min) and Discussion (30 min) of Students' #1 and #2 projects.
11:00am - 11:30am	Morning Tea
11:30am - 1:00pm	Presentation (15 min) and Discussion (30 min) of Students' #3 and #4 projects.
1:00pm - 1:45pm	Lunch
1:45pm - 2:30pm	Presentation (15 min) and Discussion (30 min) of Students' #5 and #6 projects.
P Block 504	
2:30pm - 3:30pm	"Ask the Experts" – Q&A about "anything related to entrepreneurship research" with the expert panel.
3:30pm - 4:00pm	Afternoon Tea
6:00pm - 8:00pm	Welcome Reception The Cube at the Science and Engineering Centre, QUT

SME and Entre	oreneurship: Research, Policy and Forum
12:00 Noon – 1:00pm	
1:00pm - 3:15pm	Forum starts (6 presenters 20 minutes plus question time)
3:15pm - 3:30pm	Afternoon Tea
3:30pm - 5:00pm	Forum continues (open forum discussion)
5:00pm	Concludes

# Wednesday – 6 February 2013

8am	Registration The Cube level 5			
9:00am - 10:30am	Keynote - Associate Professor Saras D Sarasvathy P Block 512			
10:30am - 11:00am	Morning Tea The Cube level 5			
11:00am - 12:30pm	Paper Session 1			
	P Block 504	P Block 505	P Block 506A	P Block 506
	New Venture Creation 1	Entrepreneurship in & around the University	Entrepreneurial Strategy 2	Public Policy for Entrepreneurship & Innovation 1
Chair	Morgan Miles	Peter Balan	Sylie Chetty	Allan O'Connor
	Identifying early adopters to reduce new venture risk*  Evan Douglas	Engaging with Industry: Entrepreneurial Orientation at the Australian Universities* Manijeh Reyhani	Effectual and Causal Principles in Corporate Strategy Formation: Understanding Prediction and Control* Philipp Tillmanns	Sleeping gazelles: High profits, but no growth! Sven-Olov Daunfeldt
	The Fast the Better? Start-up Rate and New Ventures' Initial Performance: Evidence from China* Li Tian	Beyond the Ivory Towers - Exploring Knowledge Transfer Pathways Between Universities and Innovative Small-to- Medium-Size Enterprises Pi-Shen Seet	On the Resource Foundations and Triggers of Lucky Events* Martin Bliemel	Effect of Innovation, Markets, Infrastructure and Education on Entrepreneurship* Sul Kassicieh
	The emergence of organisational properties: Evidence from preoperational businesses Scott Gordon	The role of supporting mechanisms on entrepreneurship within HEIs - using the result from the largest European study into HEI-Business Cooperation*  Todd Davey	Emergent and Deliberate Entrepreneurial Strategies in SME's Judy Matthews	How can research influence entrepreneurship and SME policies in an age of austerity?*  Steve Johnson



# Wednesday continued

12:30pm - 1:30pm	<b>Lunch</b> The Cube level 5				
1:30pm - 3:00pm	Paper Session 2				
	P Block 504	P Block 505	P Block 506A	P Block 506	
	Unemployment, Self-Employment & Gender	Research Philosophy and Methodology	Entrepreneurial Growth & Performance 1	Psychology & Cognition	
Chair	Manijeh Reyhani	Paul Steffens	Scott Gordon	Henri Burgers	
	Unemployment and Entrepreneurship in South Africa: Challenges of the Increasing Joblessness*  Darma Mahadea	Applying Philosophical Perspectives to Entrepreneurship Inquiry: Implications for future research*  Geoff Gregson	The First Principles Development and Use of Mentoring Frameworks for the Growth and Sustainability of Novice Entrepreneurs*  Carol McGowan		
	Collaborative self-employment: A dream, or a participatory mode of social entrepreneurship for sole mothers? Heather Douglas	Using phenomenology in entrepreneurship research*  Gary Hancock	Firm innovation, industry innovativeness and performance: A study of new manufacturing ventures in Australia Alex Tan		
	The Changing Landscape of Female Self-employment Julie Logan	Exploring Entrepreneurship in Images of Organisation* Erik Lundmark	Are high-growth firms one-hit wonders?*  Daniel Halvarsson		
3:00pm - 3:30pm	<b>Afternoon Tea</b> The Cube level 5				
3:30pm - 5:00pm	Paper Session 3				
	P Block 504	P Block 505	P Block 506A	P Block 506	
	Developments in Entrepreneurship Theory	Business Models	International Entrepreneurship	Entrepreneurship Education & Training	
Chair	Noel Lindsay	Christophe Garonne	Scott Gordon	Roxanne Zolin	
	Theorising about the role of HR Innovation in the Competitive Advantage of Firms* Upamali Amarakoon	Pathways to sustainable enterprise: The emergence of social business models* Erin Castellas	International Entrepreneurship: The nexus of opportunity and value innovation* Indujeeva Peiris	Student engagement with Team- Based Learning in undergraduate entrepreneurship courses: an exploratory study* Peter Balan	
	Stakeholder Place in Entrepreneurship Theory Sanjay Bhowmick	AASB138: Catalyst to changes in managerial decisions and reduced R&D spending?*  Natasja Steenkamp	Effectual networking during the internationalization process of SMEs* Sylvie Chetty	The impact of entrepreneurship education on human capital at upper-secondary level Thierry Volery	
	Rethinking social psychology of entrepreneurship: an agency theoretical perspective Kari Mikko Vesala	Business model innovation and organizational inertia: costly signals, capabilities and users*  Magnus Holman			
7:00pm – 10:30pm	Social Network Evening On the Deck level 6 at the Science and Er	ngineering Centre, QUT			



# Thursday – 7 February 2013

9:00am - 10:30am	Paper Session 4				
	P Block 504	P Block 505	P Block 506A	P Block 506	
	Sociology of Entrepreneurship	Gender Issues in Entrepreneurship 1	Entrepreneurial Bricolage	Corporate Entrepreneurship 1	
Chair	Martie-Louise Verreynne	Sanjay Bhowmick	Evan Douglas	Rene Bakker	
	Perceived Business performance: Not the Same for Everyone* Saskia de Klerk	New Economy: What does it mean for Women Entrepreneurs in Montenegro?*  Manijeh Reyhani	Beyond identification: understanding the nature of bricolage amongst diverse social enterprises*  Jo Barraket		
	Social capital in entrepreneurship research: Restoring the fortunes of an impoverished construct Craig Furneaux	Exploring academic women's engagement in entrepreneurship: an institutional perspective*  Sarah Cooper	Intrapreneurial bricolage: a contradiction in terms or a useful construct?  Henri Burgers		
	Culture as a driver of Entrepreneurship: Contrasting Independent Entrepreneurship versus Employee Entrepreneurship Paul Steffens	Can they really have it all? Women and the Myth of Female Entrepreneurship*  Caroline O'Kane	Born unfnished: Boundaries of Bricolage Effectiveness Julienne Senyard		
0:30am - 11:00am	Morning Tea The Cube level 5				
11:00am - 12:30pm	Paper Session 5				
	P Block 504	P Block 505	P Block 506A	P Block 506	
	Various Themes 1	Family Business	Resource Acquisition	Corporate Entrepreneurship 2	
Chair	Natashja Steenkamp	Pia-Shou Nielsen	Julienne Senyard	Henri Burgers	
	How the environment affects opportunity recognition by entrepreneurs at the bottom of the pyramid*  Roxanne Zolin	Successful intergenerational ownership succession- Measuring satisfaction or business performance or preparing the event*  Lars-Goran Sund	A "resource mapping tool" for start-ups in the for-profit and not-for-profit sectors: an exploratory study*  Peter Balan	The interplay of self-efficacy, a firms effectual orientation and firm performance*  Dorothea Werhahn	
	Clustering: A uniquely Australian experience Timothy Hall	Financing, Firm Size and Scale Efficiency: A Study of Family and Non- Family SMEs* Francesco Barbera	Explaining Environmental Heterogeneity* Colin Jones	Alternative Modes of Entrepreneurial Opportunity Exploitation: The Case of Inter-Organizational Projects Rene Bakker	
	Killing Our Darling: Why We Need to Let Go of the "Entrepreneurial Opportunity" Construct8 Per Davidsson	Influencing innovation in SME's: from designer to transitional engineer*  Erica Pozzey	Social Network, Market Information and Strategic Flexibility: Differences Comparative Study based on product Market Type and Firm Type Yuli Zhang	Does absorbing more knowledge alway enhance corporate entrepreneurship in SME's? Investigating the moderating role of strategic orientations and networ capabilities*  Kamal Sakhdari	
12:30pm - 1:30pm	<b>Lunch</b> The Cube level 5			Kamal Sakhdari	



# Thursday continued

1:30pm - 3:00pm	Paper Session 6				
	P Block 504	P Block 505	P Block 506A	P Block 506	
	Psychology of Entrepreneurship	Small Business Management	Various Themes 2	Social Entrepreneurship 2	
Chair	Martin Bliemel	Manjula Dissanayake	Colin Jones	Craig Furneaux	
	What Motivates Nascent Entrepreneurs to Establish Tourism Ventures?*  Noel Lindsay	The Development of a Multi Variant Model for Market Intelligence Data Gathering for Australian Micro Businesses and SMEs Pauline Ross	Growth process of medium-sized manufacturing: a study of women-owned firms in Bangladesh*  Mosfeka Jomaraty	Investigating the manifestation of decision-making approaches in nonprofits: Implications for governance*  Aastha Malhotra	
	Decision-making logic in small firms: Informing the entrepreneurship as method debate Retha de Villiers Scheepers	Owner-managers' perception of business regulation – empirical study Helena Sjogren	Social Business Models in Developing Countries - The relationship between type of value creation and levels of vertical integration Anna Krzeminska	Governance as an Additional Dimension of Entrepreneurial Orientation: A Social Entrepreneurship Perspective* Lois Hazelton	
		The networking behaviours of women in small businesses*  Jalleh Sharafizad		Serial Social Start Ups: Entrepreneurial idealists addicted to doing good or social pragmatists with pure intentions?  Selena Griffith	
3:00pm - 3:30pm	Afternoon Tea The Cube level 5				
3:30pm - 4:30pm	Meet the Editors P Block 512				
6:30pm – 10:30pm	Conference Dinner and Awards Room Three-Sixty, QUT				



# Friday – 8 February 2013

9:00am - 10:30am	Paper Session 7				
	P Block 504	P Block 505	P Block 506A	P Block 506	
	New Venture Creation 2	Social Entrepreneurship 1	Human Resource Management & Entrepreneurship	Entrepreneurial Finance	
Chair	Erin Castellas	Aastha Malhotra	Peter Balan	Rene Bakker	
	The Bottleneck in the Entrepreneurial Process: An Agent-Based Modeling and Simulation Approach Jaehu Shim	From entrepreneur to philanthropist: the "second half of the game"* Alexandra Williamson	The Role of Finance in the Development of Technology-based SMEs: Evidence from New Zealand*  David Deakins		
	Business Planning, Innovation and Performance in Nascent Firms Christophe Garonne	National context and prevalence of social entrepreneurship – a global perspective Pasi Syrja	Amassing and Configuring Human Capital in Nascent Ventures: Dynamic human resource capabilities* Marcus Ho		
	Network evolution and the changing nature of business angel investing in the UK: evidence from Scotland Richard Harrison	Social Entrepreneurship and Islamic Philanthropy*  John Meewella	HRM Practices and Corporate entrepreneurship in Family Firms: The mediating role of knowledge exchange Hazel Melanie Ramos		
10:30am - 11:00am	Morning Tea The Cube level 5				
11:00am - 12:30pm	Paper Session 8				
	P Block 504	P Block 505	P Block 506A	P Block 506	
	Public Policy for Entrepreneurship & Innovation 2	Capabilities & Resources	Entrepreneurial Growth and Performance 2	High Technology Entrepreneurship	
Chair	Steve Johnson	Scott Gordon	Christophe Garonne	Roxanne Zolin	
	Local Entrepreneurship Policy – Organizing According to Context* Pia Schou Nielsen	How do capabilities of the entrepreneurs vary across the different stages of the firm? Evidence from the literature Manjula Dissanayake	Implications of Competence and Governance Strategies for Entrepreneurial Growth*  Daniel Prior	Are we there yet? Problem formulation and business model innovation for ICT-based startups  Magnus Holman	
	Institutional entrepreneurship and the embedded role of leaders and state: Historical case study of Abu Dhabi*  John Meewella	The antecedents of innovation in small Australian firms: the role of capabilities Martie-Louise Verreynne	Converting Technical Knowledge: Reconciling Internal and External Views of Firm Growth* Sven-Olov Daunfeldt	Network Development Process: Do Regional Innovation Network and their Tenants Really Talk About the Same Thing? Mahamadou Biga-Diambeidou	
	The race is not to the swift: breakthrough technology commercialization and implications for public policy* Samantha Sharpe	Entrepreneurial alertness and digital commerce adoption in small firms Retha de Villiers Scheepers	Interaction of processes and Open Innovation performance Bert Verhoeven		
12:30pm - 1:30pm	<b>Lunch</b> The Cube level 5				



# Friday continued

1:20pm - 4:30pm	Paper Development Session
	P Block 506 & 506A
1:20pm - 1:30pm	Welcome (back); overview; housekeeping
1:30pm - 2:50pm	Paper development workshop. 2 papers per session; 5 parallels. 40-minutes feedback and discussion with active participation of 2 experienced scholars plus fellow PDS authors and PhD students from the DC. (Participants are invited to read papers in advance – no presentation).
2:50pm - 3:10pm	Afternoon Tea
3:10pm - 4:30pm	Paper development workshop. 2 papers per session; 5 parallels. 40-minutes feedback and discussion with active participation of 2 experienced scholars plus fellow PDS authors and PhD students from the DC. (Participants are invited to read papers in advance – no presentation).
4:30pm - 4:45pm	Brief wrap-up



# Sessions

## Wednesday, 6th February 2013 Session 1: 11:00am - 12:30pm

**Session 1A:** New Venture Creation

Room: P Block 504

Session Chair: Morgan Miles

#### Identifying early adopters to reduce new venture risk

Evan Douglas

#### **Principal Topic**

Timely adoption of the new venture's product or service by customers is critical to the survival of the new venture. This conceptual paper addresses the entrepreneur's problem of identifying the innovative customers who will adopt the new product quickly and thereby reduce the risk of new venture mortality. The diffusion curve phenomenon from the marketing literature is explained in terms of six discrete steps in the new product adoption process that are suggested by the entrepreneurship literature. Whereas marketers explain speed to adoption by the unobserved higher-order construct "innovativeness" this paper proposes that potential customers follow a logical temporal sequence of six steps. It is proposed that the innovativeness trait contributes to the probability of early adoption by influencing several of these steps, but that adoption of the product also requires certain economic pre-conditions. Identifying those target customers who have both the propensity and the ability to adopt early allows the entrepreneur to reduce the new firm's mortality risk by focusing marketing efforts towards those customers who are ready to purchase.

The marketing literature argues that potential adopters can be classified as innovators, early adopters, early majority, late majority and laggards according to their innovativeness trait. But entrepreneurs typically cannot afford the time or the cost of surveying the population of prospective customers and classifying them on the basis of their innovativeness. Instead they need to quickly identify the probable innovators and early adopters, and focus their attention and scarce resources on these quick-to-adopt customers to ensure timely receipt of revenues and avoidance of a cash crisis that could prove fatal to the new venture.

This paper responds to the recent call by Tellis, Yin & Bell (2009) who state "Thus the field could benefit from a new parsimonious measure of consumer innovativeness that can predict consumers' adoption of new products... (and identify the) antecedents of innovativeness, including personal and demographic characteristics" (2009, p.2). Tellis, et al. (2009) identified ten dimensions of consumer innovativeness. These are reconciled with the six steps approach taken in this paper but they do not provide the complete story, since the innovativeness approach does not include important economic variables such as the potential customer's ability to pay and access to the vendor.

#### **Key Propositions**

It is proposed that the prospective customer's adoption decision can be presented as a series of six lexicographic stages, i.e. the prospective customer must attain each stage before moving to the next stage. These stages relate to initial awareness, attractiveness of the product in terms of benefits perceived, quality-risk aversion, considerations of alternatives and switching costs; the affordability of the new product, and the accessibility of the new product. The location of customers in each of these stages is observable, predictable, or relatively simple to measure, as compared with surveying potential customers to ascertain their innovativeness. The following research propositions are suggested:

- P1: The initial awareness of the new product will be negatively associated with the time to adoption;
- P2: The initial attraction of the new product will be negatively associated with the time to adoption;
- P3: The initial quality-risk aversion to the new product will be positively associated with the time to adoption;

P4: The initial alternatives owned and/or switching costs related to the new product will be positively associated with the time to adoption;

P5: The initial affordability of the new product will be negatively associated with the time to adoption; and

P6: The initial accessibility to the new product will be negatively associated with the time to adoption.

#### **Results and Implications**

In this paper we examine the underlying reasons for the S-shape of the diffusion curve of new product adoption in the entrepreneurial new venture context. Following the diffusion curve literature we categorize adopters according to how soon they adopt, and from the entrepreneurship literature we characterize them in terms of six main impediments to their progress through the adoption-decision process. We identify six antecedent factors that constitute steps in the adoption-decision process through which the potential customer must progress before adopting the new product.

Four main contributions follow from this combination of elements from the marketing and entrepreneurship literatures. First, we provide a method for entrepreneurs to more-accurately and more-efficiently identify their initially-most-important target customers (i.e. the innovators and early adopters). Second, we bring to the attention of entrepreneurship educators and advisors the diffusion curve phenomenon and its application to new venture sales forecasting. Third, we contribute to the literature on new venture risk recognition and mitigation. Fourth, we contribute to the diffusion curve literature by viewing the adoption decision as a six-step process where each step is a potential impediment to adoption, rather than by characterizing potential customers in terms of a single unobservable "innovativeness" dimension. The practical outcome of these contributions is a better understanding of the customer's adoption-decision process leading to reduced mortality risk for new business ventures.

# The fast the better? Temporal pattern of start-up activities and new ventures' initial performance: Evidence from China

Li Tian

#### **Principal Topic**

The strategy literatures on speed demonstrated that fast actions can be beneficial to firm performance (Brown & Eisenhardt, 1998). To make it more convincible, entrepreneurship scholars emphasized the importance of fast action that underlies entrepreneurial orientation (Lumpkin & Dess, 1986). High speed on start-up activities help new ventures learn faster than its competitors, make adaptive changes to successfully exploit the value of entrepreneurial opportunities, which would improve initial performance. The "time compression diseconomies" argument (Dierickx & Cool, 1989), however, stated that organizations are subject to diminishing returns when faced with time pressure, which sheds light on detrimental effects associated with fast expansions. Hence, an incremental pattern may enable new ventures to win by surmounting the liability of newness and reducing the hazard of failure in founding period. As such, intriguing questions trigger our reflection, does it all about speed to build a new venture with sound performance? It is necessary to evaluate the trade-offs when considering the speed strategy of start-up activities and under what kinds of conditions that benefits outweigh the detrimental effects, so that a fast paced strategy would increases new ventures' initial performance?

Based on organizational learning theory, we develop hypotheses predicting that certain temporal patterns between start-up activities and initial performance. A contingent model was developed further to identify conditions under which fast speed would increase venture performance.

#### Method

This study will use the data from Chinese Panel Study of Entrepreneurial Dynamics (CPSED) project to test our hypotheses, which is part of an international research project championed by the Babson College (Reynolds & Miller, 1992).



#### **Results and Implications**

Empirical analysis of 321 Chinese nascent ventures from the data base of Chinese Panel Study of Entrepreneurial Dynamic (CPSED) showed that a higher rate of start-up activities will have an inverted-U relationship with new ventures' initial performance. We argued that the benefits deriving from fast action tend to overtake the detrimental effects when a nascent venture competes in volatile and competitive environment, and when the venture was found to develop more innovative opportunities.

This research contributes to new venture creation literatures by enhancing our understanding of the process of venture creation and its initial performance implications. Due to data limitation, prior entrepreneurship management research has mainly focused on post of founding questions and their link to new venture growth. Little is known about the process-based feature of new venture creation and its initial performance outcomes. Facilitated by CPSED dataset, our research advances our understanding on this regard by moving beyond post-entry strategic management issue but in entrepreneurship label and focus on truly and unique entrepreneurial phenomenon. More importantly, the paradox idea concerning to speed-performance relationship calls more attentions on this debatable issue. To be specific, the idea of entrepreneurial orientation and spirit in the entrepreneurship management literature suggest a preference for fast expansion, while the strategy research seems to have a general bias toward fast speed (Kessler & Chakrabarti, 1996). This research made an effort to reconcile different predictions by predicting a curvilinear relationship and developing a contingency argument. Our investigation demonstrates that low and medium fast pacing contribute to sound performance, however, above the cutting point, the negative effects of fast actions overrun its contributions. Not always is fast action desirable.

In addition, this research contributes to the strategic management research on speed. Given that speed reflects an important time-related strategy during new venture creation process, the results of the study shed light on how the relationship between speed strategy and performance is shaped, to a great extent, by entrepreneurial opportunity and environmental contexts. It highlighted the importance of contextual factors, both internally and externally, and the potential mutual influence between strategic actions and the contexts in which they are carried out (Cyert & March, 1992).

Last but not the least, the focal interest in this paper, the speed-performance relationship, was extremely applicable to China economic transition context, where slogans such as "the fast the better" and the "Time is efficiency" prevail in the past 30 years economic development. The empirical findings drawn from current study were expected to provide important managerial implication on entrepreneurial management and general social practices.

### The emergence of organisational properties: Evidence from pre-operational businesses

Scott Gordon

#### **Principal Topic**

Developing an understanding of how new firms organise themselves is a fundamental focus for entrepreneurship research. Yet, theories which describe the characteristics, processes and performance of established organisations may not necessarily apply in the case of emerging organisations. Further, approaches that compare emerging and existing firms often define the former by their deficiencies, rather than describing nascent firms by what constitutes them and how they organise. Compared with existing firms, emerging firms suffer a liability of newness and smallness (Stinchcombe, 1965; Freeman, Carroll, & Hannan, 1983; Brüderl & Schüssler, 1990), they often have scant resources (Penrose, 1959; Stevenson & Jarillo, 1990; Baker & Nelson, 2005), have few established routines (Nelson & Winter, 1982; Pentland & Rueter, 1994), and struggle to establish legitimacy (Meyer & Rowan, 1977; DiMaggio & Powell, 1983).

Alternately, Katz and Gartner's (1988) theoretical framework describes four properties that emerging organisations exhibit, without referencing existing organisations. The emerging organisation must have a purpose (intention); it must distinguish itself from the surrounding environment (boundary); it must have some substance of physical, financial and other components (resources); and it must engage in markets (exchange). All four properties are deemed necessary for an organisation to viably exist. Further, extant empirical research confirms that the presence and completeness of each property is a determinant of

nascent firm development (Brush, Manolova, & Edelman, 2008; Manolova, Edelman, Brush, & Rotefoss, 2011). Yet, an emergence view of new firms suggests that they do not come into existence fully formed. Thus, even the properties of an emerging organisation must develop somehow.

However, little is known about how organisational properties themselves emerge, and whether this matters. Although theory suggests that the development of intention precedes other organisational properties, it is silent about how the remaining properties are established. Further, empirical research which tests whether intention is the first property to be developed during nascent firm emergence is equivocal (Brush et al., 2008). This suggests there may be limits to planned behaviour as a theoretical explanation of emergence (Krueger, 2009), or that new organisations may come into existence via other pathways of development (Bhave, 1994). Therefore, this paper aims to enhance our understanding of emerging organisations by establishing evidence of how they organise. This is achieved by focusing on the pattern by which different organisational properties develop during emergence. The Katz and Gartner (1988) organisational emergence framework is extended to include time as an integral component (Langley, 1999). Further contribution is made by establishing whether the order by which organisational properties emerge encodes the eventual viability of new firms.

#### Method

Data collected as part of the Comprehensive Australian Study of Entrepreneurial Emergence (CAUSEE) (Davidsson, Steffens, & Gordon, 2011) were used to explore organisational emergence. CAUSEE is a panel-study of venture creation attempts as they unfold. Participants were drawn from a random sample of preoperational firms, and tracked over three years through annual interviews with the founders. Information on a series of typical venture creation actions were used to operationalise organisational properties of boundary, exchange, intention, and resources. Month-of-completion information was used to establish the timing of these actions. The resulting timeline consists of the sequence of actions which capture how organisational properties develop as firm emergence proceeds. Optimal matching analysis (Abbott, 1995) was used to generate metrics of sequence similarity across cases. Further, sequence analytic, and multivariate modelling, explored associations between the timing and order in which organisational properties developed, venture characteristics, and the ultimate state of emergence achieved.

#### **Results and Implications**

Initial modelling reveals that intentionality precedes the development of other organisational properties. This confirms organisational emergence theory as originally proposed, and aligns with the notion of entrepreneurial action being directed. Further, emerging firms increasingly exhibit exchange properties as they progress. These findings suggest a descriptively valid order by which organisational properties emerge, where intentionality and exchange develop as bookends to the process of firm emergence. Further, it follows that the boundary and resource properties which characterise emerging organisations are most commonly developed after they exhibit intentionality and before they engage in exchange.

Beyond these observations, the sequence by which organisational properties develop is not immediately clear. The modal organising sequence suggests emerging firms establish boundaries early on during emergence prior to developing resources, which often persists throughout later stages of emergence. Overall, new firm emergence may be described as an interactive process driven by securing firm resources and establishing firm boundaries. However, those firms that develop the exchange property earlier during emergence, intermingled with boundary and resource development, appear more likely to transition from the pre-operational nascent status to viable new organisations. Further analysis is required to confirm the exact temporal nature of these interactions, and if different sequences promote or retard emergence: Whether establishing firm boundaries assists with resource gathering, or developing firm resources helps clarify firm boundaries, and how exchange enhances these other properties.

In sum, these findings provide empirical support for the organisational emergence framework. In addition, this study enhances that theory to incorporate descriptions of the order by which organisational properties emerge. Establishing what properties are best developed at what stage of firm emergence, or whether this matters at all, is useful for practitioners contemplating business creation. Ultimately, this research shifts from descriptions of the properties necessary for firm establishment towards preliminary prescriptions for the process of organisational emergence that have thus far proved elusive.



### Session 1B: Entrepreneurship in & around the University

Room: P Block 505

Session Chair: Peter Balan

#### **Engaging with Industry: Entrepreneurial Orientation at the Australian Universities**

Manijeh Reyhani

#### **Principal Topic**

Despite its relatively small population, Australia has a strong higher education sector, which has been very effective in scientific research, thus creating knowledge in all areas. However, their endeavours in transferring this knowledge in the production of industries, which can serve the nation, have been limited. Often opportunities for commercialisation of scientific discoveries have been available for the scientists but the conventional approach does not permit them to go beyond the research and blur the boundaries between science and industry. There is still a wide gab between them.

Top universities in the world are more and more orienting themselves turning into a center of entrepreneurship and a source of entrepreneurial culture to their region. They attempt to find mechanisms to develop entrepreneurial environment, affecting their staffs and students creating internal motivation.

Research shows that multidisciplinary and multi-sectoral networks can play important roles in members' competitiveness, provided they exhibit diversity, coherence and complementarities (Alves 2007). Networks play an increasing role in the generation of economic growth. Firms and organizations more and more actively engage in networks as a means to survive in a volatile international market and in a situation of rapid technological change. Engagement in networks has several well-documented advantages. Networks are particularly important regarding entrepreneurship and innovation. Strong international competition and rapid technological development urges firms to produce new products or services, develop new processes and access new markets (Berg 2001). The workforce, suppliers, customers, universities and research industries, government bodies, and of course completing companies share the burden of costs and innovation becomes a collaborative social endeavour.

#### Methodology / Key propositions

For the field procedure seven Australian universities are selected as the case studies. They are all are engaged in Nanotechnology research and carry out research in collaboration with industry. Interviews have been conducted with over 40 directors of research, managers, academics, students, commercial units' directors and managers at the universities and companies that turn university knowledge into commercial products and are engaged in entrepreneurial activities for the university. The principles of case study design and method were followed (Yin 2003). Data collection involved both macro and micro level analysis of interviews and direct observation.

A conceptual framework relating to the commercialisation pathway defined by Techno-Economic Network Theory (Lare'do and Mustar 1996) was used to guide the analysis.

S (ST) T (TM) M,

where:

S = Scientific activity (e.g. research fundamental & applied)

T = Technological outcome (e.g. patents, prototypes, software, models)

M = Market diffusion of products.

(ST)&(TM) = Transfer points.

#### **Results and Implications**

The basic framework (TEN) for commercialization implemented as a theoretical foundation for this investigation, proved to be very helpful in identifying the needs for building strength in the process. As expected, the transfer points of (ST) and (TM) are in need of strengthening and most comments during the interviews and the researchers' observations show the need for two major focal points; more funding, and better networking in the engagement with the industry and government organizations. This is no surprise. However, why don't universities demonstrate better industry engagement than they currently do? Also within an ever-tightening funding environment, how can universities access more funding?

The success of the university technology transfer relies on two important concepts: first the quality of the support that is given to the researchers and second, the innovation environment, which is created at the institutions for them to act. All the interviews confirm the ARC discovery and ARC linkage grants to be the best support from the government. It is clear that cash flow for university research comes mostly from these funds creating an excellent support for fundamental and applied research. However, when it comes to the intellectual property management and technology transfer, the challenges starts, resources are scarce and the long torturous road begins. It is important that intellectual property arising from investments in science and technology is well managed. The University-Industry and linkages as well as Technology Transfer Offices are reviewed and various models are discussed.

# Beyond the Ivory Towers - Exploring Knowledge Transfer Pathways Between Universities and Innovative Small-to-Medium-Size Enterprises

Pi-Shen Seet

#### **Principal Topic**

The ability to effectively transfer knowledge across organisational boundaries is important, with research suggesting firms increasingly use external sources of knowledge for innovation (Chesbrough 2003). Yet, with few exceptions, there is a paucity of empirical studies on knowledge transfer in the small-to-medium-sized enterprises (SME) context (Hughs, O'Regan and Sims 2009; Huggins and Johnston 2009).

Recent research on innovation suggests that firms increasingly rely on external sources of knowledge for innovation, via inter-organisational network relationships rather than 'arms-length', transactional market links (Chesbrough 2003; Cooke, Heidenreich, and Braczyk 2004; Seely-Brown and Duguid 2001). This is because firms that innovate using external knowledge and resources rely on collaboration and other relationship-intensive arrangements to underpin and enable knowledge transfer.

However, it is unclear whether this proposition — that actual relationships between universities and industry are a more important source of innovation than generic university-industry links (Perkmann and Walsh, 2007) — might also be expected to hold for SMEs. The few studies that have been conducted have been inconclusive. In a qualitative study of innovative SMEs in New Zealand (NZ), Davenport (2005) found that SMEs in the early stages (only) of product development accessed expertise located in NZ public research institutions, with technology underpinning products developed in a local research institute, and researchers with complementary skills recruited from these institutes in order to internalise and augment SMEs' internal knowledge base. In contrast, Hughes et al. (2009) observed that universities are among the least used sources of advice for a sample of SMEs in the UK, with just seven per cent of respondents seeking their advice. Suppliers, employees and customers were the most frequent sources of advice for SMEs, consistent with the results of other UK research (Huggins and Johnston 2009; Thorpe, Holt, Macpherson et al. 2005).

Hence, this study attempts to clarify the issue of university to SME knowledge transfer in two ways. Firstly we examine the extent and nature of inter-organisational links between SMEs and universities. Specifically, we investigate the importance of knowledge transfer using university-industry relational pathways vis-à-vis generic university-to-industry knowledge transfer pathways. We compare the importance of university-industry knowledge transfer with other sources of knowledge for a sample of innovative SMEs. Secondly, we examine whether inter-organisational knowledge transfers are spatially driven, and specifically, the extent to which knowledge is acquired domestically (locally and/or nationally) or internationally. The extent to which knowledge generation and innovative firms and activities tend to agglomerate geographically provides insight into the ongoing debate about whether and when spatially driven knowledge collaboration is important.



#### Method

The study used data from a self-administered internet questionnaire to owner/managers of SMEs in the Adelaide Metropolitan area of South Australia. The content of the questionnaire was based upon the Australian Bureau of Statistics' Innovation Survey 2003 (ABS, 2003) which is based on the guidelines of the OECD's Oslo Manual, which is the standard reference for innovation surveys among OECD countries (OECD, 1997). The survey included questions subdivided into a number of areas including business demographics, sources and methods of knowledge/transfer and innovation activities.

A total of 1,226 questionnaires were received, with only 846 usable responses fiving an active response rate was 13.03%, which compares favourably with an expected rate for internet surveys of 11% (Saunders, 2007).

Variables used in this research are either categorical in nature or, if metric, have irregular distributional properties (that is, they are non-normally distributed). Thus, non-parametric/distribution free techniques of statistical analysis are employed exclusively i.e. Kruskall-Wallis one-way analysis of variance, Mann-Witney tests and Cranmer's V tests.

#### **Results and Implications**

The results show SMEs are most likely to use research results published by universities (12%) and employ new graduates (9%). However, the actual proportion of SMEs acquiring knowledge using these transfer pathways is modest: 4%, 17% and 27% of micro-, small- and medium-sized SMEs respectively employed new graduates; and 12%, 11% and 14% of micro-, small- and medium-sized SMEs used universities' published research. SMEs are least likely to use patents, designs, or other intellectual property (IP) rights from universities or employ academic or research staff (3% each).

While there are significant differences between the three size enterprises, the evidence suggests SMEs rely on generic university-industry knowledge transfer pathways rather than university-industry links with high relational involvement. However, we also find that SMEs that acquire knowledge using generic university-industry links also acquire knowledge via relationships.

Moreover, the results indicate SMEs are significantly more likely to rely on organisations other than universities and related R&D enterprises for knowledge acquisition: 10% or less of SMEs collaborate with universities, 6% or less partner with commercial laboratories/R&D enterprises, and 5% or less collaborate with private not-for-profit research institutions, while almost 50% or more SMEs collaborate with clients/customers or suppliers. While collaboration is most likely to occur within the same state/territory, or Australia, 25% of SMEs also collaborate internationally, usually as part of normal supplier-customer relationships, underlining the importance of knowledge acquisition from organisationally proximate partners.

While the ability to effectively transfer valuable knowledge across organisational boundaries is important for innovation, the research finds that SMEs rely on 'generic' university-to-industry knowledge transfer pathways, and, moreover, partners other than universities. Specific policy recommendations that may help facilitate university-SME knowledge transfer and knowledge transfer from other organisations are also identified.

# The presence and role of supporting mechanisms on university entrepreneurship Todd Davey

#### **Principal Topic**

Entrepreneurship has been increasingly recognised for its role in creating jobs and growth within an economy as well as a means of increasing the competitiveness of a region, state or country (Maes, 2003; European Commission, 2006; Zahra, 1991). Centrally important to the increasing prominence of entrepreneurship has been the importance of the role of HEIs in stimulating entrepreneurship (Etzkowitz, 1998). At the same time, the perceived role of HEIs, has taken a dramatic shift over the last few decades. HEIs have had their roles focussed to a greater extent on the need to contribute to society in a more meaningful way through knowledge and technology creation and transfer / exchange (see proceedings from UNISO 2002- 2004). These movements have given rise to new models of HEI engagement in entrepreneurship including the concept of the entrepreneurial university and academic entrepreneurship.

HEIs are seen especially as having a crucial role in fostering entrepreneurship, as they can encourage entrepreneurship in three different ways. First, HEIs as institutions of higher education can encourage students by providing entrepreneurial training and support structures (Lüthje and Franke, 2002). Second, HEIs as institutions of research can transfer knowledge and technologies to industry. Literature refers to this commercialisation of research competencies, capacities and results as the university's 'third mission' (Etzkowitz et al, 2000). Third, universities can bring people together through structures and activities in order to create new business either through networks or project interaction. All of this entrepreneurial activity within the HEI is supported through HEI strategies and framework conditions.

Whilst these models and theories provide a general theoretical construct for understanding entrepreneurship within HEIs, there are few studies that measure the extent of entrepreneurial undertakings by HEIs together with the development of mechanisms that support entrepreneurial activity within the HEI including strategies, structures and approaches, activities and framework conditions. Using data from the largest European study into university-business cooperation, the paper aims to fill this gap by determining the extent of development of the supporting mechanisms that are in place for entrepreneurship in European HEIs. A further analysis will review the supporting mechanisms that are in place for the best performing HEIs in entrepreneurship against those performing at a low level.

#### Methodology

The paper analyses quantitative results from an extensive study completed by the Münster University of Applied Sciences during 2010-11 into the nature of European university-business cooperation (UBC). The study was executed as a survey that was translated into 23 languages and sent to all HEIs in 33 countries that are existing, or candidate members, of the European Union or are partly committed to the EU economy and regulations as member of the European Economic Area. A total of 6,280 full responses were received from academics and HEI managers after data cleansing. A weighting system was used to adjust the importance of the different countries to their academic population.

#### **Results and Implications**

The main results show that all the strategies, structures and approaches and operational activities considered have a significant impact in the extent of entrepreneurship, since the data shows that those HEIs with a higher development of those mechanisms are those carrying out a significantly higher extent of entrepreneurship, and vice versa. Further, there are specific entrepreneurship-related supporting mechanisms (contact person, programme or initiative, agency) that also have a direct impact on the extent of entrepreneurship of HEIs.

The study provides insights into the types of supporting mechanisms that are in place within HEIs supporting different degrees of entrepreneurship. Further the results of this paper will provide HEI managers and practitioners with a more detailed understanding of how entrepreneurship can be fostered within or in cooperation with a HEI.



### Session 1C: Entrepreneurial Strategy

Room: P Block 506A Session Chair: Sylie Chetty

# Effectual and Causal Principles in Corporate Strategy Formation: Understanding Prediction and Control

Philipp Tillmanns

#### **Principal Topic**

Entrepreneurial and corporate success is driven by strategies that create unique competitive advantages. The process of strategy formation will have a deep impact on strategy content, actions and performance (Mintzberg, 1994; Gavetti et al., 2005). But increasing uncertainty regarding a firm's suppliers, resources, buyers and the overall environment raises new challenges for the optimal approach to strategy formation (Chmielewski and Paladino, 2007; Tallon, 2008).

Studies on strategy formation have been developed around the dimension of prediction (Rudd et al., 2008). The planning school intends to implement 'anticipative flexibility': firms precisely predict the future, anticipate risks and opportunities and position the firm accordingly (Ansoff, 1979; Porter, 1980). The adaptive school instead fosters 'adaptive flexibility': firms focus on presently known facts, develop dynamic capabilities and react fast to capture emerging opportunities (Mintzberg, 1994; Teece et al., 1997).

But planning and adaptive approaches still imply the environment to be exogenously given and competitive grounds to be stable. When breaking with these assumptions, "firms might employ comparatively superior strategies to exploit its industry environment, even if it is highly dynamic or disrupted" (Selsky et al., 2007). By introducing the dimension of pro-actively controlling the environment, Wiltbank et al. (2006) opened up a new landscape for strategy formation. However, in order to examine and implement the orthogonal dimensions of prediction and control, a deeper understanding of their respective antecedents is needed.

Sarasvathy (2001) developed the concept of effectuation and causation by studying entrepreneurs making strategic decisions in highly uncertain environments. Successful entrepreneurs do not stress flexibility towards an exogenously given environment, but instead aim to influence an endogenous environment. Sarasvathy (2001) and Brettel et al. (2011) developed detailed principles for effectuation – means preference, uncertainty leveraging, partnerships and affordable loss preference – and its counterpart causation – goals preference, uncertainty avoidance, competitive analysis and return preference.

Indeed, positive performance effects of effectual principles under uncertainty have been found for new venture creation (Read et al., 2009), venture investing (Wiltbank et al., 2009) and corporate R&D projects (Brettel et al., 2011). We extend the application and analysis of effectual and causal principles into corporate strategy formation to examine their application in the strategy formation processes of established corporations. We develop a clear understanding of the orthogonal concepts of prediction and control and their respective antecedents. By closing these gaps from entrepreneurship research to strategy formation and within the strategy literature, we are able to further develop this promising concept for decision makers under uncertainty.

#### Method

We employ a multi-method approach, consisting of initial interviews with strategists and strategy experts and a pre-tested questionnaire sent out in 2012. In order to gain valid insights on corporate strategy formation, we surveyed Chief Executive Officers (CEOs) and Chief Strategy Officers (CSOs). Leveraging the unique established relationships of a major global strategy consulting firm, The Boston Consulting Group, we were able to conduct 124 surveys among companies in the Forbes Global 2,000 index, covering 10 industry sectors and 28 countries. Our analysis is based on hierarchical OLS regression models and comprises established scales for the eight independent principles of effectuation and causation (Brettel et al., 2011) and the main dimensions of strategic emphasis on prediction and control (Wiltbank et al., 2009).

#### **Results & Implications**

We are able to identify a firm's approach towards uncertainty as the key differentiator between processes emphasizing prediction or control. Our significant, bi-nominal findings identify two distinct strategy formation processes. On the one hand, strategy formation is built around minimizing uncertainty and avoiding its possible impact. On the other hand, we find processes embracing uncertainty and leveraging disruptive change. We thus develop a clear understanding of causal principles within strategy formation of established corporations. In more detail, we find that goals preference, return preference and uncertainty avoidance significantly explain processes that emphasize prediction. Contrarily, principles of effectuation are less clearly implemented in strategy formation of established corporations. While processes with high emphasis on control try to leverage uncertainty and change of the environment, means preference, partnerships and affordable loss preference are not systematically applied in large corporations. We explain this finding by the under-development of this dimension in strategy formation. While to systematic control-approach towards the environment has been developed, individual firms single out and embed principles of effectuation in a variety of more classical approaches.

Our research extends the debate about effectuation and its application in established corporations, as suggested by Sarasvathy (2001) and Wiltbank et al. (2006). By identifying effectuation and causation based principles as antecedents of strategy formation, we create the fundament for further research into the systematic examination of prediction and control and its performance effects under uncertainty. Managers will be able to get a better understanding of alternative strategy formation processes and how to implement fundamental characteristics and abilities. "Understanding the differential use of these strategic approaches may be relevant [...] to managers making decisions in very uncertain situation" (Wiltbank et al., 2009).

#### On the Resource Foundations and Triggers of Lucky Events

Martin Bliemel

#### **Principal Topic**

This study takes an inductive approach to different contingencies that create lucky events for entrepreneurs. By comparing the resource base (internal versus external) and trigger (exogenous versus endogenous) of 39 lucky events, I reveal a 2x2 categorization scheme. Each category is described by a different ethos and related to a different type of activity. This study expands the scope of serendipity research (Dew, 2009), contributes to research regarding the ability to anticipate events and outcomes (Isabella, 1990), research on opportunity recognition (Kaish & Gilad, 1991; Baron, 2006; Ozgen & Baron, 2007), effectuation theory (Sarasvathy, 2001) and exaptation (Dew, Sasarvathy & Venkataraman, 2004, Chandra & Yang, 2011).

#### Method

This is an inductive study, in the spirit of grounded theory development (Glaser & Strauss, 1967), in which themes emerge from interviews while comparing them to the extant literature. Data were collected in the form of interviews using a Life History approach (McAdams, 1993). The interviews elicited stories about significant events in the life history of the venture as perceived by the entrepreneur. Of the over 200 significant events in the evolution of 27 ventures, I focus on 39 stories in which the entrepreneurs describe the event in terms of luck. Building on a working definition of luck – a contingent event with better than expected outcomes – I contrast and compare these 39 stories using case study methods (Eisenhardt, 1989; Yin, 1994) to reveal two dominant types of contingencies: the trigger and the foundation. Triggers are categorized whether the event has endogenous or exogenous origins, and the foundation is categorized whether the event was contingent on prior internal resources (including knowledge) or one or more external resources. The latter foundation includes coincidences of multiple (interrelated) external resources unexpectedly becoming available to the entrepreneur.

The 39 stories are categorized according to the trigger and foundation to reveal four archetypes of lucky events (NAME THEM). The categorization shows that most lucky events are based on resources and related opportunities that unexpectedly become available through the entrepreneur's network; i.e., fewer events are based on experiments or other forms of knowledge generation done by the entrepreneur in isolation. Roughly half the events have exogenous (or endogenous) triggers. Interestingly, four stories are



combinations of two of the four archetypes of lucky events, and can thus be interpreted as exceptionally lucky events. Analysis of the words chosen by the entrepreneurs to describe their luck shows inconsistent use of the words luck, serendipity, chance, circumstance, fortune, coincidence, happenstance, and 'out of the blue'. Perhaps mirroring the lack of an agreed upon definition of luck in the literature. Entrepreneurs use these words and descriptions interchangeably.

#### **Results and Implications**

The implications of the findings in this study and the literature indicate that there are significant benefits to increasing exposure to opportunities by networking in general, as well as by 'shooting for the moon' in targeted pitches. While one cannot predict what the outcome will be, one can at least expect that there will be an outcome. However, such implications must also be taken in light of the opportunity costs involved in over-exploring opportunities, and not developing internal resources. This research synthesizes recent developments in effectuation theory, exaptation and opportunity recognition and expands these areas by being more explicit about the unpredictable nature of many entrepreneurial events.

#### **Emergent and Deliberate Entrepreneurial Strategies in SME's**

Judy Matthews

#### **Principal Topic**

Firms recognise opportunities to extend or grow their business through both opportunity discovery and opportunity creation (Alvarez & Barney 2005, 2007) and the entrepreneurial strategies they develop may be more emergent or deliberate (Mintzberg & Waters 1985). Firms seeking to remain competitive often develop entrepreneurial strategies to increase their options for performance.

The importance of entrepreneurial strategies has been the subject of much debate generating a range of definitions. The entrepreneurial activities that firms undertake to generate new economic activity to ensure the success of their business are sometimes characterised as innovation strategies, as firms seek to try new ways to create value and capture value in the marketplace.

Entrepreneurship strategies in large firms have been analysed in terms of antecedent conditions, elements and outcomes (Ireland, Covin & Kuratko, 2009), but to date less attention has been given to the strategies used by small and medium enterprises to remain competitive. The purpose of this paper is to increase our knowledge and understanding of the types of strategies and activities that existing small and medium enterprises (SMEs) are using to generate new economic activity to ensure the success of their business.

This paper explores findings from a qualitative study of SMEs and identifies entrepreneurial management (Stevenson & Jarillo 1995) in different forms in different sized firms.

#### Method/ Key Propositions

The paper reports analysis of the data collection from an investigation of entrepreneurial activities of small and medium sized firms in the spatial information industry. A guided non-representative sample was created from the a list of organisations in the spatial industry business association (SIBA) members list, including surveying and other spatial firms with different sizes on both the east and west coast of Australia. Sampling included four firms Queensland, four in New South Wales, five in Western Australia, six in Victoria and one in the Australian Capital Territory.

An interview protocol developed from in-depth discussion of the different dimensions of the research questions was trialled during the first few interviews and further developed throughout the project. Exploratory semi-structured interviews were employed to explore the activities and orientation. 20 firms were interviewed face to face in semi-structured interviews that on average lasted approximately 1 to 1.5 hours. Using thematic analysis, the recorded transcribed interview data were analysed for patterns and variations.

#### Results/ Implications

Findings indicate that small and medium sized enterprises seeking to remain competitive, engage in proactive entrepreneurial strategies that develop and exploit capabilities. Two distinct patterns of entrepreneurial strategies were found from data collected and analysed in this study. One strategy largely used by small firms for developing new value added services to existing customers, appeared to emerge from longstanding close relationships with customers who were seeking novel solutions to new problems. The second strategy largely used by medium sized firms, was more focused on the exploitation of existing competencies and the broader application of these competencies within existing and new markets. Further research is continuing with a quantitative study of a larger sample of firms in this industry.

This research has implications for the importance and form of networks of relationships that firms have with their existing customers and their application of new ways of working with new customers. Further research is continuing with a quantitative study of a larger sample of firms in this industry to gain more detailed information about nature of entrepreneurial strategies and the context and conditions in which they arise.



### Session 1D: Public Policy for Entrepreneurship & Innovation

Room: P Block 506

Session Chair: Allan O'Connor

Sleeping gazelles: High profits, but no growth!

Sven-Olov Daunfeldt

#### Principal topic

Previous studies have shown that most firms do not grow or grow slowly (Rogers et al., 2010; Hodges and Østbye, 2010), while a few firms, so-called high-growth firms (HGFs), are crucial for job creation (Birch and Medoff, 1994; Davidsson and Henrekson, 2002; Delmar et al., 2003; Acs et al., 2008). HGFs have therefore received increasing attention from policymakers in recent years. The Europe 2020 strategy, for example, explicitly mentions more HGFs as a political objective (European Commission, 2010).

An increasing number of studies have been focused on explaining what characterizes HGFs, i.e., whether they are small (Delmar 1997; Delmar and Davidsson 1998; Weinzimmer et al. 1998; Delmar et al. 2003; Shepherd and Wiklund 2009), young (Delmar et al., 2003; Haltiwanger et al. 2010), family-owned (Bjuggren et al., 2010), belonging to an enterprise group (Delmar et al., 2003), a certain industry (Delmar et al., 2003; Davidsson and Delmar, 2003, 2006; Halabisky, 2006; Acs et al., 2008), region (Stam, 2005; Acs and Mueller, 2008), or country (Schreyer, 2000; Biosca, 2010), and so on.

The often implicit assumption behind these studies is that we might learn something from investigating HGFs; knowledge that can be used to increase the number of fast-growing firms in the economy. However, the focus towards HGFs might be problematic for at least two reasons.

First, HGFs might experience high growth despite the existence of growth barriers. Removal of growth barriers might thus have no influence on the growth rates of HGFs, but instead promote growth of other firms. Second, as shown by Hölzl (2011) and Daunfeldt and Halvarsson (2012), HGFs are likely to be 'one-hit wonders'; implying that it is unlikely that they will repeat their high growth rates in coming periods. This seriously questions whether policymakers can target high-growth firms in order to design policies to promote firm growth.

Thus, the characteristics and strategy of HGFs might not be useful for determining what need to be improved in order to create a business environment more favorable for firm growth. In fact, the focus towards HGFs might be directly misleading if we want to increase the number of job opportunities in the economy. We argue that a more relevant question to ask is: what kinds of firms are most likely to benefit from the removal of growth barriers? Davidsson et al. (2009), for example, showed that firms with high profits, but low growth, are more likely to reach a state of high profitability and high growth in the future than firms that are growing before having high profits. Thus, profitability seems to be a preferable strategy for achieving sustainable high growth in the future. Our analysis is therefore focused on what we call "sleeping gazelles", i.e., firms that have experienced high profitability, but no employment growth. The purpose is to analyze investigate the firm dynamics of sleeping gazelles, and what characterizes these firms at a given point in time.

#### Method

Our analysis is based on a comprehensive data-set covering all Swedish limited liability firms during 1997-2010. In order to analyze the job dynamics of sleeping gazelles, we divide firms into six different categories: (i) Firms with a declining number of employees, but high profitability; (ii) Firms with declining number of employees, and low profitability; (iii) Firms with low or no employment growth, but high profitability; (iv) Firms with high employment growth and low profitability; (vi) Firms with low or no employment growth and low profitability; (vi) Firms with high employment growth, but low profitability. Sleeping gazelles are defined as group (iii).

We first estimate transition probabilities to analyze the firm dynamics of sleeping gazelles, making it possible to analyze whether a firm located in a growth category in period t is located in different growth categories in period t+3. The use of this method implies that we, for example, can analyze the probability that sleeping gazelles continue having high profitability but low growth, and how likely it is that they are characterized by both high profitability and high growth in coming periods.

In every period a number of firms will choose not hire more employees despite high profitability. In order to analyze what characterizes these firms, we next estimate a Probit model. Our dependent variable takes the value one if the firm can be characterized as a sleeping gazelles during the three-year period t, and zero otherwise. We include firm-specific, industry-specific, and region-specific determinants of firm growth as independent variables in the analysis, as well as industry, region and time-specific fixed effects.

#### Results and implications

Our results indicate that almost 2/3 of the firms that do not grow during a three-year period will not grow during the next period, and many of these firms are characterized by high profitability. Sleeping gazelles thus constitute a much larger share of the firm population than HGFs. The results also reveal that sleeping gazelles are not randomly distributed among the firm population. On basis of our results, we argue that previous studies too much have been focused on analyzing HGFs, so-called gazelles, which are firms that constitute a small fraction of the firm population and are extremely unlikely to repeat their rapid growth in coming periods. Our results instead suggest that policymakers should focus more towards sleeping gazelles, i.e., firms that experience no growth even though they have the financial resources to grow.

#### Effect of Innovation, Markets, Infrastructure and Education on Entrepreneurship

Sul Kassicieh

#### Abstract

Do changes in a country's innovative capacity, markets, infrastructure, and/or education affect the incidence of entrepreneurship? This paper attempts to analyze data from 62 countries to link incidence of entrepreneurship such as nascent entrepreneurs and new business creation. The main theme of the paper is to prove that a higher level of innovation, better infrastructure, larger markets and better educational achievement lead to higher incidence of entrepreneurship and new business creation in these countries. Reasons for supporting or not supporting these hypotheses will be discussed.

#### **Principal Topic**

The creation of new business has been an important economic activity for countries and regions as they strive for job and wealth creation. Entrepreneurs are at the heart of this process and many authors have examined the motivations, environments and personalities of entrepreneurs (Dottore and Kassicieh, 2012). The environments in which entrepreneurs build their new companies are affected by factors such as innovation, markets, education and infrastructure. In order to study the effect that these factors have on the incidence of entrepreneurship, we analyze the relationship among the creation of new business, its success and the existence of these factors in the 62 countries covered by the Global Entrepreneurship Monitor data. This topic is essential for policy makers as they attempt to create situations that can improve their countries to affect more entrepreneurial activities but they are interested in figuring the areas of investment which lead to job and wealth creation.

#### Methodology / Key propositions

This paper examines the data available from the Global Entrepreneurship Monitor on the number of small and nascent businesses in the countries covered by the surveys. The data on business creation is linked to measures of innovative behavior, educational achievement, infrastructure creation and education attainment in these countries to establish a relationship between the data. Several hypotheses will be constructed and tested.

#### **Results and Implications**

By employing hypothesis testing, we can establish the existence (or lack thereof) of a relationship between these variables. Explanations using the literature on entrepreneurship and theories of economic development factors will be utilized to explain these relationships with clear recommendations to policy makers on agendas to pursue to enhance entrepreneurial activities in countries.

The important contribution of this research is the in understanding the effect of investment decisions on the enhancement of economic factors that lead to higher levels of activities in entrepreneurship.



#### How can research influence entrepreneurship and SME policies in an age of austerity?

Steve Johnson

#### Principal topic

The objective of this paper is to re-frame the debate about the effectiveness of entrepreneurship and SME policies by addressing a bold challenge made by a leading skeptic who suggests that such policies are ineffective and a waste of resources. In so doing, SME researchers and policy makers are exhorted to re-think their approach and make their case more persuasively in the face of current economic and policy challenges. Austerity policies that have been pursued by governments across the world have prompted reassessments of the case for public expenditure on a whole range of policies, including politically sensitive areas such as social security, health and defence. Policies to support entrepreneurship and SMEs are not immune from the spotlight and nor should they be. We cannot automatically assume that entrepreneurship and/or SME policies are a worthwhile investment of scarce public funding; the case needs to be made in the same way as for any other policy programme.

This paper takes as its starting point a challenge made by Graham Bannock to those who appear to believe that the rationale for state intervention to promote entrepreneurship and SME development is self-evident:

There is no reason to suppose that if most subsidy and assistance programmes were abolished altogether, it would make a significant difference to the shape and prosperity of the SME sector anywhere (Bannock, 2005; 133)

In the light of the global economic slowdown and the austerity response of many governments, it is important to take Bannock's challenge seriously. Is there a strong theoretical rationale for SME policy or is it a 'nice to have' that cannot be justified during difficult economic times? To what extent does the evidence base genuinely support the prevailing wisdom that state support for SMEs is vital to stimulate economic recovery?

#### Method and key propositions

This paper assesses critically the arguments for the provision of government support for SMEs, with a primary focus upon the dominant 'market failure' approach, building on previous work by the author and others on the justifications for SME policy and the evaluation of policy interventions to support SMEs. It also looks at the influence of research evidence on some recent policy developments.

This is a synthesis paper which reviews the relevant economics and public policy literature, government policy statements from the UK and elsewhere and evidence on the impact of SME policies. A major evaluation of the impact of the enterprise policies pursued by the Regional Development Agencies in England is used to demonstrate the justifications that are put forward for SME support, and the contentious nature of evaluation findings. Similarly, evaluations of Business Link in England appear to contradict the stated political and economic rationale for SME support.

Particular attention is paid to unpicking the implications of austerity policies for the debate about the rationale for, objectives of and nature of entrepreneurship and SME policies. Ongoing debates about the role of new and small firms in job creation, innovation and economic growth are re-considered, as are alternative approaches such as public choice models and considerations of social cohesion, and their implications for the role of the researcher in the policy-making process.

#### Results and implications

Market failure alone does not justify or explain the existence of SME policy in most countries of the world. This paper demonstrates that – pre and post crisis - concerns about equity, self-interested behaviour by politicians and government bureaucrats, power structures, the political lobbying process and ideological considerations all play a role in determining the existence, shape and direction of SME policies. In turn this prompts us to re-assess how researcher evidence can most effectively influence the policy-making process.

It is clear that we cannot automatically assume that there exists a general case for policies to support SMEs, particularly given the economic crisis and consequent austerity policies. It is incumbent on those of us who are involved in the SME policy process to review continually the case for support and to draw on a range of approaches to assess the desirability, operation and impact of SME policies.

While austerity poses a threat to some enterprise support policies, it also presents an opportunity to highlight the potential contribution to economic recovery of entrepreneurship and small businesses. Having said this, the review presented in this paper questions whether 'market failure' is in fact the predominant rationale for enterprise policies in many countries. Moreover, policies that are ostensibly designed to address market failures do not always have the desired effect; in some cases 'state failure' might outweigh market failure.

More fundamentally, the paper identifies a range of other factors that influence the existence of, nature of, targeting of, delivery of and ultimately the impact of enterprise and SME policies. This highlights the importance of rigorous evaluation but also suggests the need for closer questioning of the underpinning rationale for policies, with researchers playing a key role.

The paper provides a challenge to those working in the enterprise field to take seriously the views of the minority of skeptics who question the value of government intervention to promote enterprise and to support SMEs. We need to draw on a range of theoretical traditions and empirical approaches, including a more grounded understanding of the policy-making process and 'realist' approaches to policy evaluation, in order to ensure that our research and practice has a tangible impact on public policy.



### Wednesday, 6th February 2013

Session 2: 1:30pm - 3:00pm

Session 2A: Unemployment, Self-Employment & Gender

Room: P Block 504

Session Chair: Manijeh Reyhani

Unemployment and Entrepreneurship in South Africa: Challenges of the Increasing Joblessness

Darma Mahadea

#### Abstract of Paper for the ACERE Conference in Brisbane, February 2013

Although South Africa consistently registered positive real economic growth rates, as high as 5% in certain years since the demise of apartheid in 1994, this has not been accompanied by a significant increase in employment. In South Africa, poverty, inequality and rising unemployment are worrying concerns to policymakers, firms and individuals. South Africa spends about a fifth of its national budget on education and the pass rate at matric level is rising, while the number of students attending institutions of higher learning is also increasing over the years. One would expect that if individuals in a society are educated, there is a greater probability for them to get employment and thus their employability prospects should be high in a growing economy. However, the South African economy is unable to generate sufficient job opportunities to a rising population that has a greater access to education now than before. A large proportion of the population in South Africa, especially among the youth, is unemployed. Youth unemployment (15-24 age group) stands at 48% (Stats SA, 2010). The labour force participation rate in South Africa is 54.7% (Stats SA, 2012). The total number of unemployed people increased from 4.3m in (January -March) 2011 to 4.5m in (January – March) 2012. The country's current (March 2012) unemployment rate is 25.2% (Stats SA, 2012), and if one takes into account the discouraged worker effect, the unemployment rate is well above 30%. The discouraged worker group, individuals who give up search for employment, reflects a deep structural nature of unemployment in South Africa.

Government has put in place various measures and strategies to boost economic growth and employment creation. These include the growth, employment and redistribution policy (GEAR), Black Economic Empowerment (BEE) and the National Empowerment Fund (NEF), SMME support institutions, Small Enterprise Development Agency (SEDA), National Youth Development Agency (NYDA), the expanded public works program (EPWP), the New Growth Path (NGP) strategy and National Development Plan (NDP). Despite all these policy interventions, the problem of employment is apparently not getting any better.

Stimulating entrepreneurship through the creation and expansion of small ventures is critical to narrow income inequalities, and generate employment and output expansion in the country. Against this background, this paper examines whether entrepreneurship within a positive economic growth scenario can make a difference to the challenge of job creation in South Africa. The paper initially examines the link between economic growth and employment growth in South Africa post 1994, with a view to establish the employment growth elasticity for the period 1994-2010. It then examines the association between entrepreneurship, as reflected by the Global Entrepreneurship Monitor's reports on early stage entrepreneurship activity rate and economic growth over the period 2001-2010. The third section examines the SMME entrepreneurial environment in South Africa. More jobs can be created, especially in the private sector, when there is a favourable environment that encourages entrepreneurs to enter or expand the business arena and grow the demand for labour. The last section presents some policy recommendations towards enhancing employment creation and small business entrepreneurship in South Africa. Preliminary results indicate that the employment elasticity of economic growth is positive but rather low, while there is a positive association between entrepreneurial activity and employment. Linking real GDP growth to employment, the regression analysis indicates that the marginal employment effect is positive. But when other exogenous factors are taken into account, employment falls, contributing to increasing joblessness.

# Collaborative self employment: A participatory mode of social entrepreneurship for sole mothers to generate a living income?

Heather Douglas

#### **Principal Topic**

Australian sole mothers can reduce their economic and social disadvantage and generate a living income through participatory social entrepreneurship in small, collaborative, home based businesses.

#### Key propositions

This paper examines the efficacy of a participatory social entrepreneurship approach to address entrenched economic disadvantage. We examine the feasibility of sole mothers in Australia generating a living income through self employment in collaborative, home based businesses.

Social entrepreneurship is recognised as a way to generate social and economic benefits through business actions to address entrenched disadvantage (Mair, 2006, Nicholls, 2006). In general, scholars anticipate social entrepreneurship is organised by an entrepreneur, for example by enabling homeless people to sell the Big Issue. An alternative perspective is to consider social entrepreneurship as a participatory activity in which those who will gain benefit will design and implement actions. Participation is a central tenant of social change practice that emphasises mutuality, civic virtue, trust, moral obligation and the logic of mobilisation (Kenny, 2001). Kenny notes change is facilitated "where citizens become skilled in participating in articulating concerns, identifying needs and resolving conflicts, and in so doing, become active agents in their own destiny." Participation is central in debates on social inclusion and disadvantage, yet it is not examined in social entrepreneurship.

Many studies identify sole parent families as one of the most disadvantaged groups in contemporary Australian society (Butterworth, 2003; Mariskind, 2005; Saunders, Naidoo, & Griffiths, 2007; Vinson, 2007; Weston & Smyth, 2000). Sole parent families experience social, psychological, health, educational and financial disadvantage in comparison to partnered families. Such families live in resource constrained conditions without the social and economic benefits and improved improve quality of life offered by paid employment that provides a support network and increases housing and credit options. This is a gendered issue as 93% of jobless, one parent families in Australia are headed by the mother (ABS, 2009).

There is ample evidence that sole mothers are motivated to work, but they have limited options to gain suitable paid employment that meets their particular family requirements. Employment options for sole mothers are constrained by the costs associated with child care, and their need for flexibility to be available for school breaks or attend to illness for any of the family members. Without paid employment, sole mother families have reduced opportunities to develop friendships and support networks which further undermines their capacity to stay in employment. Despite the plethora of evidence on the disadvantages sole mothers face, little is known about alternative solutions to provide income for these families.

Acknowledging that entrepreneurship is a vital engine for economic activity and a foundation for change, we argue that an entrepreneurial approach could be pursued as an alternative to traditional employment or welfare policies for Australian sole mother families. The social economy is a natural field in which to implement collective entrepreneurship as an innovative social tool to develop social and economic interests (De Clerca & Honia, 2011), In a different context, self employment has been successful with 91% of people with disabilities enjoying operating a business, 56% describing their business as successful, and 30% gaining more than half of their total household income from their business (Holub, 2001). It is reasonable to expect that with suitable training and support over 12-18 months, sole mothers could start a small, home based business in collaboration with one or more sole mothers. A home based business would provide income to support their families and at the same time would offer the flexibility that is vital for their particular circumstances. Compared with the traditional model of employment, creating income through self employment in a small, home based business maximises flexibility, with work proceeding at a time and pace to suit family needs. These are vital considerations for sole mothers. Rather than working alone, collaborative entrepreneurial action with others in similar circumstances is anticipated to improve the business outcome by contributing to flexible family arrangements when necessary (Torri, 2012). Preliminary preparation in a small group offering training and informal learning would prepare the sole mothers before launching their



business. Informal learning improves self-concept, self-efficacy, confidence, and communication skills and assists civic engagement and a sense of belonging. Crucially, these attributes facilitate long term change that is more likely may engender successful entrepreneurial action (Hanson, 2009).

Drawing from two studies with sole mothers that documented their lived experience, work/life balance and well being, and that explored their perceptions of managing small, collaborative home based businesses, we examine how the disadvantage faced by sole mother families could be addressed with this innovative, participatory approach to social entrepreneurship.

#### Conclusion

By improving the capacity of sole mothers to generate a living income and provide for their families, supporting them to establish collaborative home based businesses would reduce their social exclusion and allow them to participate fully and actively in society. The paper contributes extends the dynamic field of social entrepreneurship and contributes to public policy by considering collaborative, participatory entrepreneurship an alternative way to facilitate social change and improve quality of life for a population that is acknowledged as being economically disadvantaged.

#### The Changing Landscape of Female Self-employment

Julie Logan

#### **Principal Topic**

Two factors have influenced the entrepreneurship agenda in the UK during the past ten years; the government focus on entrepreneurship and innovation as a tool for wealth creation and more recently the economic recession. In response to these changes this study was carried out in order to gain a better understanding of the current attitudes and motivations of women who are self-employed in the UK. We examine their experience of self-employment and entrepreneurship and discuss the challenges they encounter. We particularly explore whether there are any differences in the experiences of respondents related to their age.

#### Method

One thousand self-employed women were surveyed to find out their views on self-employment and entrepreneurship. Some of these women were working alone, some worked in partnership and some employed other people. Participants were sent a semi-structured questionnaire which asked about their motivations for pursuing this career option, how they started their venture and their experiences. The final part of the questionnaire asked the respondents about their challenges and any help they require. The questionnaire reflected current research on female entrepreneurship.

The questionnaire was administered by email; data was collected using a convenience sampling method. The data base was provided by Ipsos Mori. The respondents all run their own ventures, they come from all over the UK; from all backgrounds and range in age from sixteen to sixty four. Our sample comprised: 22% who were under thirty-five; 25% who were thirty five to forty-four; 31% between forty-five and fifty-four and 22% over fifty-four.

#### **Results and Implications**

Family entrepreneurial role models influenced 61% of the women in this study were twenty-four or under whilst only 24% of those who were fifty-one or over had role models. Fathers were more likely to be entrepreneurial role models than mothers for all age groups.

Over one third of the respondents had started a business to improve their flexibility or work life balance. However of those who said they started a venture to make more money 35% were under thirty-five. Given that the under thirty-fives make up 22% of our sample population it is interesting to note that this same group account for 35% of those starting a venture to make money.

Another interesting finding is that those who were forty or under are more likely to consider themselves as entrepreneurs than those who were older. Furthermore nearly a half of those under thirty five said they had known they always would have their own business, this reduced to just over 21% for those who were fifty-five

or over. Both of these findings may be a result of the successful portrayal of entrepreneurs in the media and the government thrust to encourage people to consider entrepreneurship as a viable career option.

Furthermore of those who had started a business to fulfil a dream or a passion 52% were under thirty-five. We have already noted that the under thirty-fives make up 22% of our sample population so this group is over represented. This could be linked to the rise in awareness and popularity of social and community enterprises and the benefits they can bring to others.

A significant number of respondents intended to grow their business. Whilst 38% overall said they will grow their venture, those who were younger were more optimistic with 52% of those under thirty-five believing they would, reducing to 21% of those fifty-five and over.

The over fifty-fives cited two reasons for their desire for growth: having less family responsibility they are keen to create something new and see it flourish. Others suggested self employment is a way to fund or supplement their retirement.

The current economic climate has resulted in job losses for men and women. This might lead us to the hypothesis that more women have started ventures in the last two years than in the years proceeding the down turn. However this study suggests the number of start ups per year has remained constant over a five year period.

Our respondents believe there is still a need for more mentors; more business start up courses and more access to finance. Young women struggled to finance their ventures. Women over forty suggested there should be more examples of older women running businesses.

This study suggests younger women are more likely to choose entrepreneurship as a career option. They are also much more likely to be interested in starting a business to make money or to help others (the social enterprise). Our results also suggest this group is most interested in growing their businesses. They are much more likely to have access to role models but still require mentoring and training. However whilst older females reported no difficulty funding their ventures younger women struggled; this may be because they already have student loans or do not have any collateral but barriers such as these must be removed if we are to continue to see young women creating new ventures.

The small trend in older women embracing self employment as a way to boast their retirement income should also be encouraged. They have as much as fifteen years of productive working life after official retirement and many want to do something useful with that time as well as needing to earn money. They may require help to get started but in terms of ensuring they remain economically active and contributing to UK PLC it will be worth it.



### Session 2B: Research Philosophy and Methodology

Room: P Block 505

Session Chair: Paul Steffens

#### Applying Philosophical Perspectives to Entrepreneurship Inquiry: Implications for Future Research

Geoff Gregson

#### Abstract

We apply philosophical perspectives to five representative dimensions of entrepreneurship research suggested by Shane (2012) and Shane and Venkataraman (2000) to assess the distinctiveness of entrepreneurship as a field of academic inquiry and to consider implications for future research. We observe the dominance of an objectivist perspective across the five dimensions, whereby particular variables associated with the object, i.e. entrepreneur or firm, are studied. However, we suggest that the phenomenology perspective, whereby perceptions and interpretations derive meaning from their social context, is more appropriate in dimensions such as entrepreneurial opportunity identification or entrepreneurial choice. Our analysis suggests that the field should continue to aspire to a unity of agreement over distinctive dimensions of entrepreneurship research, as the challenge remains to present a scholarly field with an externally acknowledged tradition of inquiry.

#### Using phenomenology in entrepreneurship research

Gary Hancock

#### **Principal Topic**

What does it mean to be entrepreneurial? How do we investigate meaning within the social construct of the world of an entrepreneur? Many would argue that such questions are best answered by qualitative enquiry. The use of qualitative research methods in the entrepreneurship field has been increasing over the past few years. A number of researchers have called for such a focus in order to broaden our understanding of the phenomenon we call entrepreneurship. However, there has been minimal discussion about the philosophical basis for such requests. It is not uncommon to find research in entrepreneurship avoiding the question of its philosophical basis. This paper addresses this issue by a discussion on the current dominant philosophical stance in entrepreneurship and argues for a more explicit declaration of the philosophical basis in entrepreneurship research papers. This is important for the advancement of the field in terms of theory and practice.

This paper further proposes that much 'qualitative' research is still not addressing the narrow philosophical perspective that entrepreneurship research experiences because much qualitative work is still underpinned by positivist epistemology. This paper argues that such a narrow philosophical stance fails to provide the rich understanding that is evident is other disciplines such as sociology. This paper presents the process and practice of phenomenology within an entrepreneurial research project.

#### Method

An example of a current research project that uses phenomenology is presented. The development of phenomenology by of Edmund Husserl and further developed by Martin Heidegger is discussed and its relevance to entrepreneurship research established. This paper argues that phenomenology, in particular, is an underutilised approach. The paper uses an example of a phenomenological enquiry that examines early stage financing of new ventures to illustrate how research can focus on the lived experience of people involved in entrepreneurship. The example illustrates how people take meaning out of their experiences, and how this socially constructed knowledge is valuable for entrepreneurial theory and practice. The paper presents the robust and clearly articulated methods used to present empirical data and subsequent analysis within a phenomenological study.

The empirical study is a series of interviews with 16 people who have direct experience of family finance in early venture start ups. This paper presents the means by which philosophy was used to investigate this behaviour, from framing the question, choosing the appropriate methods of enquiry, data collection, and analysis.

#### **Results and Implications**

This paper concludes that while there is no one philosophical stance that is appropriate to entrepreneurship research, more diversity in philosophical approaches is needed. It also concludes that all research that is presented should clearly articulate the philosophical stance taken and that phenomenology, as one example of a qualitative approach firmly embedded in a clearly established philosophical framework, has a valuable role to play in a deeper understanding of what it means to be entrepreneurial.

The implications of undertaking phenomenology are that researchers must engage in a set of research skills that are not commonly used in the field. The questions asked, the design of the research project, the analysis techniques, and reporting schemas specific to phenomenology do, however, provide insights that are difficult to ascertain through other methodologies.

The findings are important for scholars in that diverse investigation from different philosophical perspectives will tend to provide richer and interesting findings. To engage in this diversity scholars must, however, be prepared to develop new research skills. The effort required is, possibly, greater than more traditional methods used in the field and reporting such research is hindered by the amount of text that is typically required to justify the research findings. Establishing quality in this approach is particularly difficult when word limits are imposed. From a practitioner's perspective, a deeper understanding about what it means to be entrepreneurial will enable advisors and entrepreneurs to be better prepared for entrepreneurial behaviour. Finally, policy makers and advisors would be better placed to develop and implement public policy with a wider concept of what "the lived experience" is of entrepreneurs.

#### **Exploring Entrepreneurship in Images of Organisation**

Erik Lundmark

#### **Principal Topic**

Metaphors are powerful tools for sensemaking, sensegiving and theory development (Cornelissen, 2006; Hill & Levenhagen, 1995; Weick, 1989, Morgan, 1986/2006). Metaphors are often integrated in models and basic assumptions; nevertheless, they are almost invisible in academic writing (Boxenbaum & Rouleau, 2011). Still, metaphors profoundly influence researchers' perceptions and how researchers' make sense of those perceptions (Lakoff & Johnson, 1980). Making the metaphors used implicitly in research explicit, therefore, facilitates the identification of underlying assumptions and biases in past, present and future research. Furthermore, uncovering the metaphorical assemblage of research facilitates dialogue, theory development, and creative combinations of multiple perspectives (Boxenbaum & Rouleau, 2011).

Although research focusing on and using metaphors is established within the entrepreneurship field, such research has mostly focused on metaphors applied outside of academia, for example among entrepreneurs and in media (Hill & Levenhagen, 1995; Koiranen, 1995; Hyrsky, 1999; Dodd, 2002; Nicholson & Anderson, 2005). While the field of organisation studies has made its metaphorical assemblage explicit (Morgan, 1986/2006), entrepreneurship scholars have, with a few exceptions (e.g. Cardon, Zietsma, Saparito, Matherne, & Davis, 2005; Authors withheld, forthcoming), not explored the use of metaphors within academia. This paper explores how metaphors for entrepreneurs and entrepreneurship can be found in reflexions of metaphors for organisations.



#### Method

As entrepreneurs are involved in the creation of organisations (Gartner, 1989), the way organisations are perceived reflects images of entrepreneurs and entrepreneurship. For example, if organisations are seen as living organisms (Morgan, 1986/2006), entrepreneurs can be seen as their parents raising them (Cardon, et al., 2005) or as mutagens changing their blueprints (Authors withheld, forthcoming). Therefore, this conceptual paper uses the metaphors for organisations identified in the literature and explores the space for entrepreneurs and entrepreneurship in these metaphors. The paper identifies metaphors and explores them through disciplined imagination (Weick, 1989). In doing so it draws on the growing strand of research on metaphors as research tools (e.g. Morgan, 1986/2006; Weick, 1989; Palmer & Dunford, 1996; Czarniawska & Sköldberg, 1998; Cornelissen, 2006; Boxenbaum & Rouleau, 2011).

#### **Results and Implications**

As society has evolved and faced new challenges and new technologies, the ways organisations are perceived and portrayed have likewise changed (Morgan, 1986/2006). In parallel, the views of entrepreneurship have also changed (Audretsch, 2009). This paper explores how metaphors for organisations such as machines, organisms, networks, brains, psychic prisons, political arenas and instruments of domination (Morgan, 1986/2006) reflect images of entrepreneurs and entrepreneurship. Furthermore, it explores the extent to which these reflexions correspond to and diverge from metaphors identified within the entrepreneurship field. Understanding the links between images of organisations and images of entrepreneurs and entrepreneurship facilitates dialogue between the two fields – entrepreneurship and organisation studies. Furthermore, exploring these links can potentially improve our understanding of entrepreneurship and its role in society and organisations.



### Session 2C: Entrepreneurial Growth & Performance

Room: P Block 506A

Session Chair:

# The First Principles Development and Use of Mentoring Frameworks for the Growth and Sustainability of Novice Entrepreneurs

Carol McGowan

#### **Principal Topic**

Post the Global Financial Crisis there appears to be a renaissance in innovation and entrepreneurship. From a positive point of view, society seems to be more embracing of the ideas and, sympathetic to the reality that failure within one entrepreneurial endeavour is not necessarily a reflection of a failure of the entrepreneur. To reduce the risk of failure, many entrepreneurs are typically looking more broadly at support mechanisms. Independent personal mentoring outside of the corporate structure is potentially one of these support mechanisms, that in many cases appears to be delivering positive results.

Novice entrepreneurs are defined by St. Jean & Audet (2009) as "someone who has recently started their own business and approach the development of their idea or opportunity with great enthusiasm and gusto". Wilson (1998) states that "mentoring helps entrepreneurs solve their own problems and grow to new levels of performance and maturity." Importantly mentoring helps maintain motivation and connectedness for the entrepreneur. Typically, entrepreneurs may not be sufficiently capable to complete all the tasks necessary to convert their idea or opportunity into a profitable reality and this is where the mentor should bring ultimate and tangible value to the entrepreneur. However, the entrepreneur must choose wisely their mentor, or a detrimental effect may occur.

Novice entrepreneurs run the risk of becoming isolated. This isolation can lead to the entrepreneur becoming ostracised, which can adversely impact on future success. However, the novice status of early stage entrepreneurs may result in a lack of discipline, structure or adherence to any formalised business practices. This is often not a reflection of capability of the novice entrepreneur, but rather more about the approach and style they typically utilise. In the case of novice entrepreneurs their personal and professional development is often occurring in tandem to the development of their opportunity rather than discrete, potentially sequential activities, as would be the case in more traditional business structures.

Much of the literature reviewed as an output of this research highlights the value of mentoring to enable entrepreneurs to realise their personal capabilities simultaneously with developing enhanced business competencies. It is claimed that mentors are especially valuable for entrepreneurs to help maintain focus, given the critical need for individual success and the requirement to be able to access valuable, unbiased and informed business expertise. However, there is a gap between recognised protocols and what needs to be achieved in the case of the novice entrepreneur. This paper highlights how by having a mentoring framework in place, there is a greater chance of positively increasing the success of the novice entrepreneur.

#### Methodology/Key Proposition

Despite the common belief set that entrepreneurs are typically young, work conducted by Ernst & Young (2012) demonstrates that the majority of entrepreneurs are over 40 years old. In recent times there have been attempts to provide a structured framework for mentoring to facilitate personal and professional development. The most comprehensive of these being 'Elements of Effective Practice for Mentoring.' This document "provides six evidence-based standards for practice that incorporate the latest research and best-available practice wisdom" (Federal Mentoring Council, 2009). However, there is a tendency to select a limited number of the components that are perceived to be best suited to a specific organisational context without obtaining benefit of the full framework. Typically, those who are using the framework tend towards a youth segment of entrepreneurs, but there is little focus on more mature entrepreneurs who make up a significant segment of this group. Although it might be said that society favours the young, and with it the myth that entrepreneurs are themselves young and lack experience, it has been found that many entrepreneurs are likely to have experience and maturity but are still 'novice entrepreneurs'.

This paper provides insights from a recent case study within a technology-enabled incubator ecosystem. The paper discusses the benefits of having a formalised mentoring framework and introduces a new concept illustrating the pivotal role of the mentor. Such a new framework is introduced to support and structure the development of the novice entrepreneur.

This study was conducted in a technology enabled incubator ecosystem within the Innovation and Commercial Research section of an Australian University. The framework has been developed based on a comprehensive review of the extant literature and then field research with novice entrepreneurs to develop a best practice model that draws from a diverse range of contexts that ultimately delivers the most suitable factors for this specific environment.

#### Results/Implications

Evidence to date has shown that having formalised guidelines in place ensures a number of key factors are achieved, these include:

- Expectations are clearly stated up front reducing ambiguity and the risk of conflict occurring in the relationship
- The definition of mentoring in this specific context is clearly articulated and commonly understood
- All participants and interested stakeholders are aware of their roles and responsibilities
- Ensures all participants are selected based on a consistent set of criteria
- A comprehensive management framework is defined to ensure effective monitoring and management of the mentoring partnership

The contribution to entrepreneurship research as a result of this work is that the role of formalising mentoring partnerships with novice entrepreneurs is analysed and evaluated employing a framework based on best practice. Another important contribution from this work is highlighting the key considerations to maximise benefits to participants and interested stakeholders within an operational framework.

## Firm innovation, industry innovativeness and performance: A study of new manufacturing ventures in Australia

Alex Tan

#### **Abstract**

The causal relation between innovations developed by a focal firm and its performance has for some time been inconclusive. In this paper, we focus on the Australian manufacturing industries of the 1990s as a relatively efficient context and functional institutional environment, to hypothesize potentially confounding effects of the state of innovation in an industry sub-sector, as well as an innovating new venture embedded within that sub-sector. Our results show that in general, new ventures commercializing an innovation enjoy higher sales growth and returns on assets. In addition, while an average new venture enjoys significant positive growth in sales in an industry sub-sector where innovativeness is high—capturing a 'rising-tide-raises-all-boats' effect, however, for new ventures themselves developing innovations, high industry innovativeness also presents as a high barrier to overcome, limiting sales growth and returns on assets. In particular, the interaction effect can be so large in magnitude so as to overwhelm the main effect of innovation on performance.



#### Are high-growth firms one-hit wonders?

Daniel Halvarsson

#### Principal topic

A number of empirical studies (Brüderl and Preisendörfer, 2000; Davidsson and Henrekson, 2002; Acs et al., 2008) have shown that most new jobs originates from a small number of high-growth firms (HGFs). Coad et al. (2012) have also presented evidence that HGFs create employment opportunities for young individuals, immigrants, and long-term unemployed; groups that often are characterized by high unemployment rates and have problems to enter the labor market.

HGFs might thus carry important policy implications, and they have therefore received an increasing amount of attention among policymakers in recent years. The Europe 2020 strategy, for example, explicitly mentions support of high-growth SMEs as a political objective (European Commision, 2010). An increasing number of studies (Schreyer 2000; Bravo-Biosca, 2010) have therefore tried to investigate what characterizes these firms, and whether the share of HGFs differ among countries.

The purpose of this paper is to study the persistence of firm growth in Sweden during the period 1998-2008. We are in particular interested in whether high growth rates among Swedish firms tend to persist, i.e., does 'winners' in one period have a higher probability to outperform also in the next period? This question is of importance since HGFs most often are analyzed using static analysis. We argue that policy implications from these studies are of little relevance if firm growth is random, i.e., if HGFs in period t in general is not HGFs in period t+1. Thus, the importance of studying HGFs at a specific point in time depends on whether rapid firm growth tends to persist.

Previous studies on the persistence of growth rates tend to estimate growth persistence among the average firm; which typically is a firm that experience marginal growth or no growth at all (Bottazzi et al., 2011). Coad (2007), Coad and Hölzl (2009) and Capasso et al. (2009) have tried to untangle the role played by firm size and growth using quantile regression techniques, but Hölzl (2011) is the only previous study (as far as we know) that explicitly has investigated the growth persistence of HGFs.

Hölzl (2011) used the Eurostat-OECD definition to identify HGFs, which means that a firm was defined as a HGF if it had at least ten employees in the start year and an annualized employment growth rate that exceeded 20% during a 3-year period. The results indicated that the growth rates of HGFs were not persistent over time. However, the Eurostat-OECD definition excludes almost all firms, and a very large share of all created jobs from the analysis. Daunfeldt et al. (2012), for example, showed that it excluded around 95% of all surviving firms from the analysis; firms that generated about 40% of all new jobs in Sweden during 2005-2008.

#### Method

We use the IFDB database, constructed by The Swedish Agency for Growth Policy Analysis, to test the growth persistence of HGFs. Our study covers all Swedish firms active at some point in time during 1997-2008. Following previous studies, we choose to define HGFs as the one percent fastest growing firms in terms of the number of employees over a 3-year period.

We first estimate transition probabilities to analyze the firm dynamics of HGFs. This method makes it possible to analyze how likely it is that a firm located in a growth category in period t is located in different growth categories in period t+3. The use of this method implies that we, for example, can analyze whether HGFs have a higher probability to outperform other firms also in the next coming periods.

Finally, we also estimate the growth autocorrelation of firms with different growth rates. To account for firm-specific heterogeneity and the dynamic bias, we use the first difference least squares (FDLS) estimator. To examine how autocorrelation varies across different size categories we also perform separate estimations for micro firms, small firms, and medium to large firms. As we know that a lot of firm growth is non-organic, we also control for business group membership.

#### Results and implications

Our results indicate that rapid firm growth is not persistent over time. On the contrary, we find that firms with high growth rates in period t are characterized by high negative autocorrelation, and therefore decreasing growth rates in period t-3. The transition probability analysis also show that HGFs are extremely unlikely to repeat their high growth rates in coming periods, suggesting that most HGFs can be characterized as one-hit wonders. Policies to promote HGFs that are based on their growth rates in previous periods are thus not likely to be successful.

The transition probabilities also show that HGFs are more likely to have declining growth rates, but also positive growth (although more moderate) in coming periods compared to other firms. Firms having the highest negative growth rates in period t are found to have the highest probability of becoming HGFs in the next period. These results emphasize the extreme dynamics that occurs with respect to intra-distributional movements of firms from the left and right tail of the growth rate distribution.

As the number of persistent HGFs seem to be remarkably few, we believe that future studies would benefit from surveys and interview studies rather than longitudinal studies using secondary data. Another fruitful area of research is to focus more on potential HGFs. Our results indicate that most firms do not grow at all, which is consistent with results from several other studies (Bottazzi et al., 2011).



### Session 2D: Psychology & Cognition

Room: P Block 506

Session Chair: Henri Burgers

#### Research on the Relationship between Entrepreneurial

Guifeng Ding

#### **Principal Topic**

The quality of entrepreneurial team mood plays important impacts on entrepreneurial performance and good entrepreneurial team mood gives the new ventures a competitive edge over other ones without it. From the perspective of entrepreneurial team mood, this paper first makes an introduction about the content of entrepreneurial team mood, entrepreneurial team learning and entrepreneurial performance, followed by a discussion about the influences of entrepreneurial team mood and entrepreneurial team learning on entrepreneurial performance together with the exploration about the role of entrepreneurial team learning between entrepreneurial team mood and entrepreneurial performance.

#### Method

More than 505 employees in 125 different kinds of Chinese enterprises from more than 8 cities are surveyed with the research methods such as exploratory factor analysis, confirmatory factor analysis and regression analysis. Research tools consist of entrepreneurial team mood questionnaire, entrepreneurial team learning questionnaire and entrepreneurial performance questionnaire, which all enjoy high reliability and validity.

#### **Results and Implications**

Entrepreneurial team mood consists of four factors listed as identity, effectiveness, pleasant feeling as well as security feeling; entrepreneurial team learning is the partially mediate variable in the relationship between entrepreneurial team mood and entrepreneurial performance; entrepreneurial team mood shows no significant differences in the development stages of new ventures.

Finally, the study points out the existence of deficiencies and problems to be solved.

#### Role of social networks in entrepreneurial learning

**Nobin Thomas** 

Organizational Learning occurs as a result of two firm-level processes:

- External acquisition of knowledge based resources that preexist outside the firm's boundaries and/or
- Internal integration and exploitation of these knowledge based resources in a manner that creates new knowledge within the firm (Agarwa, Echambadi, Fraco & Sarkar, 2004; Kogut & Zander, 1996; Sinkula. 1994).

Wilken (1979) was one among the first to identify the different phases in setting up any enterprise – motivation, planning and establishment. During the motivation phase, the entrepreneur scouts for new opportunities or find ways to improve upon an existing product. Whatever be the choice, he first discusses it with his close friends and family members. The reason they don't discuss it with others could be that they don't want to commit publicly to any choice and in the event of a failure for the venture to take off, it will not paint them in black.

The use of social networks in entrepreneurship literature is quite useful. The strength of a tie is defined in terms of the intensity of the relationship between the actors in the network. Higher intensity would lead to strong ties and less would be termed weak tie. Strong tie contacts are often friends or family, who have access to entrepreneur's personal space and attention (Nohria, 1992). However, because family and friends tend to move in the same circles as the entrepreneur, these resources may not offer much beyond the

entrepreneur's own scope; that is, they may not be adequately diverse in nature. Here comes the issue with acquisitive learning. The entrepreneur starts limiting his exploration to strong ties within the firm, which limits his learning. Jack (2005) talk about the danger of strong social bonds in entrepreneurship. The strong bond was found to limit the entrepreneur's ability to look for business opportunities away from their familiar territory and social context. The strong bonds may also retard the flow of communication and decision making process (Hansen, 1998). Portes (1998) opinioned that strong ties within a network can impede new information flows from outside the network. Edelman et al. (2004) shares a similar viewpoint that network boundary in case of strong ties may exclude the flow of information from outside the network. Hence, we argue that strong ties would have a negative impact on exploratory learning in family firms. This brings us to the first hypothesis.

# Proposition 1a: The strong ties within the firm would have a negative relationship with acquisitive learning and a positive relationship with experimental learning during the motivation phase.

Studies have found that networks were being consistently used by entrepreneurs for searching out ideas and gathering information in the process of finding entrepreneurial opportunities (Birley, 1985; Smeltzer et al., 1991; Singh et al., 1999; Hoang & Young, 2000). The benefits of family as part of the entrepreneur's network are that they not only include those employed within the firm as strong ties but also those who have followed an independent career and are outside the firm. These contacts emerge as strong ties which often provide as much informational heterogeneity as weak ties but with more congruence and commitment to the goals of the entrepreneur (Aldrich and Cliff, 2003). Entrepreneurs in family firms have the obvious advantage of depending on family members outside their firm when in need of getting feedback and input about a business idea. Thus, in experimental learning, it is possible that strong ties outside the firm would lead to acquisitive learning.

# Proposition 1b: The strong ties outside the firm would have a positive relationship with acquisitive learning and a negative relationship with experimental learning during the motivation phase.

The diversity of the network exemplified in weak ties was found most essential for gaining non-redundant information in Granovetter (1974) study. The weak ties display a benefit in that they act as a bridging agent providing access to information which is often more heterogeneous than that derived from more homogeneous strong ties (Burt, 1992). Singh et al. (1999) in their study of information technology entrepreneurs found that those of them with weak ties were successful in identifying higher number of opportunities than those with fewer weak ties in a time frame of twelve months. McEvily and Zaheer (1999) in their study of the metalworking segment in the automotive industry reported that greater acquisition of capabilities was found in networks with weak ties. Thus, it can be argued that weak ties tend to be most useful in gaining accessing to information, which leads us to the next hypothesis.

# Proposition 2: The weak ties would have a positive relationship with acquisition learning and positive relationship with experimental learning during the motivation phase.

There has been little research on how social status affects opportunity recognition. Stuart and Sorenson (2007) note that despite of the scarcity of research, causal observations and sociological theory would suggest that entrepreneurs scouting for new opportunities give much attention to the actions and attitudes of connected high social actors. But, it is widely acknowledged that firms with high status founders, employees and affiliates always have an edge over its competitors, be it financing, quality human resources or lead customers. It is also seen as a means of gaining legitimacy for family firms to associate with well-regarded individuals or organizations to reduce the risk of incoherence. This in turn can lead to positive perceptions about the firm among the network linkages and can contribute to acquisitive learning for the firm.

Hence, we can argue that the firm aspires and tries for linkages with high status members in their network for enhancing their exploratory learning.

#### Proposition 3: The social status of members positively affects acquisitive learning.

In conclusion, this study empirically tested in small and medium enterprises would have far reaching consequences for the firm in the implementation phase of entrepreneurial ventures.



#### **Problem Solving Processes in Entrepreneurial Teams**

Carina Lomberg

#### Principal topic

Rapidly changing and highly competitive environments accelerate the need for creativity, and innovations among all companies. Indeed, there is growing evidence that these capabilities offer competitive advantages, and improve organizational performance and subsequent long-term survival (Lopez-Cabrales, Perez-Luno & Cabrera, 2009). For new ventures it is particularly crucial to handle problems as wrong decisions in early stages might cause the failure of the whole venture project (West, 2007). Classical romantic views of entrepreneurs hide the fact that most attempts to become independent and act autonomously fail and less than half of new start-ups survive the first five years (Shane, 2008). Not enough, crucial strategic decisions are often made under extreme time pressure (Baron, 2008) and (financial) resources are usually scant. Being successful under such conditions requires creative ideas for innovative solutions such as identifying tools, ideas and opportunities to create new or improved products and services (Subramaniam & Youndt, 2005).

In early ventures, usually the entire team often is involved in implementation decisions. Team composition based on personality has been found to have important effects on team outcomes (e.g., Eisenhardt & Schoonhoven, 1990; Ucbasaran, Lockett, Wright, & Westhead, 2003). However, little is still known about how team composition relates to team creativity (e.g. Kearney & Gebert, 2009; Shin & Zhou, 2007). Moreover, while we know a fair amount about what influences individual creativity (Davis, 2009; Ilies, De Pater, & Judge, 2007), there has been only relatively little research about (social) processes of creative problem solution in teams (cf. Chen, 2006). However, whether a creative idea is valuable and potentially implemented is a social process. In addition to social interactions, it is not eligible to assume that team composition has the same effect on individual creativity as is has on team-level creativity as individuals may react differently to the same context (Shin, Kim, Lee, & Bian, 2012).

In this study, I examine how team diversity influence individual and team creativity. In particular, I try to answer the following research questions:

How does team diversity relate to individual & team creativity?

How do social processes influence team decision-making?

#### Methods

Building on prior research concerning individual and team creativity I develop a model of individual and team (creative) performance that includes individual factors, team diversity, and hierarchy and conflict as potential moderators. To test this model I conduct a study examining the creative problem solving in entrepreneurial teams in response to different budget challenges. I employ a hybrid structure, e.g., each team member is asked to generate ideas first individually and then together with the team members. The chronology allows controlling for several situational effects arising out of the order of tasks, and/or social effects related to interactions between the tasks. I define the performance of a group as the quality of the best ideas identified. The quality is evaluated by external venture capitalist. All participating teams are technology-based start-up companies financed by a large venture capital company.

#### **Results and Implications**

Data collection is still ongoing and will be finished in September 2012. Results will add to the literature in several ways.

First, by splitting the tasks in situations where financial resources are once available and once scant, I am able to highlight differences in the process of creative problem solving. Hence my results provide meaningful new insights on how creativity might differ in necessity.

Second, I focus not only on the idea generation process but also on the processes of evaluation and selection of generated ideas. Existing literature to date almost entirely considers the ideation process ignoring evaluation and selection processes (Runco & Chand, 1995). Yet, these are equally important parts in determining performance as teams may have unique approaches to solve a problem, without actually solving it. This happens when they fail to choose the most promising idea for further exploration (Davis, 2009). With emphasizing on the ability of a group to discern idea quality, I contribute to the existing literature by taking a process perspective.

Third, a vast majority of research either analyzes the quality of the generated ideas on average or the quantity (Girotra et al., 2010). However, when faced with a problem that needs an innovative solution, one outstanding idea is considerably more beneficial than a huge amount of average ideas. Hence, in contrast to the vast body of existing literature I focus on the one single best idea generated by each team.

From a methodological point of view, I provide a dynamic research design that is able to capture the entire process of creative problem solving across different situation including social processes. Since problem solving within a team might produce more but not necessarily better ideas, team processes are—despite their frequent usage in practice—widely criticized as relatively ineffective in creative problem solving. I take up the criticism by analyzing the problem solving process in a hybrid structure. Most notably, our design allows us to control for the substantial differences in individual abilities but also for group composition, and social dynamics within the process of enforcing ideas.

Hence, beside academic implications our findings display significant practical implications with regard to optimizing the ways of creative problem solving within structural constraints and limited resources and team composition. Thus, our finding might be not only interesting for entrepreneurial teams but also for team composition and creative problem solving in larger corporations that face the same constraints and hence, can learn from successful new venture teams.



### Wenesday, 6th February 2013

Session 3: 3:30pm - 5:00pm

**Session 3A:** Developments in Entrepreneurship Theory

Room: P Block 504

Session Chair: Noel Lindsay

#### Theorising about the role of HR Innovation in the Competitive Advantage of Firms

Upamali Amarakoon

#### **Abstract**

Despite growing interest in innovation, the role of HR innovation in creating competitive advantage remains an area of ambiguity. This paper presents a conceptual framework of the HR innovation-based competitive advantage process. Drawing from previous studies in innovation, strategic human resource management, entrepreneurship and competitive strategy literature, the framework conjectures that a firm's competitive strategy orientation and entrepreneurial HR management enable it to achieve greater HR innovation, which then underpins competitive advantage. The relationship between entrepreneurial HR management and HR innovation is stronger in the presence of greater top management support. In addition to providing testable theoretical hypotheses, the framework presents a feasible path for practitioners to undertake HR innovation in their firms. It also provides valuable insights to policy planning aimed at improving firm competitiveness through HR initiatives.

#### Stakeholder Place in Entrepreneurship Theory

Sanjay Bhowmick

#### Principal topic examined

Since setting up a venture is an inherently social act (<u>Fauchart & Gruber, 2011</u>), entrepreneurial action should be expected to relate to stakeholders and to wider society, and entrepreneurship theory to relate to stakeholder theory. However, while stakeholder theory has become a major area of discourse in the wider management and strategy literature, it has not yet established a place in nascent theoretical field of entrepreneurship. This paper examines why; and argues that concepts from stakeholder theory interweave well with entrepreneurship discourse.

Early entrepreneurship literature mentioned the purpose of entrepreneurship as earning entrepreneurial profit, "for the maintenance of his family" (Cantillon, 1755), distinguishing it from interest on capital as "a premium for risk" (Schumpeter, 1934 [1911]: 128), or of reaping gains as "pure profit potential" from discoveries "of something obtainable through nothing at all" (Kirzner, 1979: 48, 215). Later theorizing focused on the process of opportunity pursuit and the characteristics of the entrepreneur in that pursuit (Kirzner, 1969; Klein, 2008; Sarasvathy, Venkataraman, Dew, & Velamuri, 2003; Shane, 2003; Stevenson & Jarillo, 1990; Venkataraman, 1997). Expectedly, various opinions about the innovation, risk taking or tolerance of ambiguity, and pro-activeness in entrepreneurial action (Kihlstrom & Laffont, 1979; Sarasvathy, 2008; Schere, 1982; Stevenson & Jarillo, 1990) examined the process involved in that pursuit, and not its objective, in theorizing entrepreneurship. This narrowing of the theoretical field has increasingly de-coupled pursuit from purpose underlying entrepreneurial action, and has instead pegged identifying and exploiting entrepreneurial opportunity to the objective of maximization of entrepreneurial gain for appropriation. Entrepreneurship theory has largely discussed various ways of starting up ventures for maximizing appropriable sponsor wealth creation. Through examining two case studies, one indigenous and one "normal" we highlight the theoretical and applied opportunities to admit stakeholder participation in entrepreneurial action. We argue for a shift away from secular and individualistic belief systems underpinning much entrepreneurship theorizing to an inclusive system where the decision making in an enterprise is a function of the wellbeing created in the community and environment.

Strategy and management literature, on the other hand, has debated the socio-political question: gain or advantage for whom? The separation of management and ownership has helped the understanding that actions of these two primary stakeholders may aim at maximizing firm level advantage, but their aspirations may not be in tandem at the level of appropriation. This raised questions about wider stakeholder bodies thus leading to concepts in the Stakeholder Theory (<u>Dodd, 1932; Freeman, 1984; Freeman, Harrison, Wicks, Parmar, & Colle, 2010; Friedman & Miles, 2006</u>).

In entrepreneurship, with small and start-up firms, ownership is synonymous with management, and the ownership-management agency problem hardly exists. The virtual absence of the agency problem helped to keep any discourse of the wider stakeholder concerns out of the theorizing in entrepreneurship.

Recent theorizing, however, has picked up the latent threads of purpose and highlights that entrepreneur-like action may have other motives, as explored by Fauchart and Gruber (2011) in the Darwinians, Communitarians and Missionaries taxonomy describing social identity of firm founders. We bring threads of stakeholder theory and entrepreneurship discourse together and reunite pursuit with purpose. In doing so we also argue that cognitive and evaluative dimensions of organization legitimacy (Suchman, 1995) must be seeded in firms when young. It is therefore pertinent to examine how Stakeholder Theory can be incorporated in the theoretical discourse in entrepreneurship relating to start-up and growth phases of entrepreneurial businesses before they become large.

#### Methodology

In order to explore the place of stakeholder concepts in entrepreneurship theory, this paper examines a traditional entrepreneurial firm that is focused on pursuing lucrative opportunities to maximize appropriable profit, and a firm that is set up by a wider sponsor group than the individual and with wider societal ties, with an inclusive way of doing business where community and cultural sustainability is of fundamental importance to the sponsor community. Thus the paper considers two cases with differing external stakeholder engagement in the action of the entrepreneurs and uses a case study method with secondary data as well as interview protocol.

The first case is a whale watching business (WWK) that is run by an Indigenous Maori communityin New Zealand. Unrestricted expansion of the activity with increased pressure from visitor numbers and financial returns would potentially harm the environment and have a negative impact on the whales, thus robbing the business of its very revenue stream. This poses a significant tension between growth and the sustainability of operations in that the immediate environmental impact of the growth effort directly threatens to contract the activity itself. However, in being guided by Maori values and philosophy the operations of WWK resolves many of these conflicts. A deep belief in reciprocity that permeates the organization means that all acts of taking must be balanced by acts of giving. For example, the boats for watching whales are smaller than the length of a whale and visitor numbers restricted accordingly; many families in the community are engaged with the activity either directly or indirectly, and the enterprise is guided by the wisdom of the ancestors, whereupon cultural values guide relationships across spiritual, cultural, social, environmental and economic dimensions to enable the venture to move forward with sustainability and participation as the essence of progress. Thus, there are many "stakes" in the business that are recognized in measurable and important ways and these "stakes" are perpetual and not monetized for divestment and gains appropriation. (see Spiller and Erakovic, 2005 for the full case study).

The approach of WWK is juxtaposed with the growth aspirations of a "normal" entrepreneurial venture: a software development and consulting firm. The entrepreneur running this firm does not invoke his ancestors but searches deliberately for an opportunity; he does not need to put a limit to his product except to meet price expectations of buyers, sometimes spending more resources to limit product functionality to create a differentiation between product versions; he does not engage the community where he lives or works but with a community of practice globally to exchange information and advances in the field that will help identify further lucrative opportunities; he gives only value that he can take the best price for it; he is always on the lookout for a large business with deep pockets he can sell the business to. This entrepreneur is driven by opportunity identification, evaluation and exploitation, that will direct the benefits of entrepreneurial action to him.



Data for both cases were gathered from published and archival sources, and relevant internet sites. The Chairman of WWK and a key Environmental Development Officer from the Kaikoura community assisted with fact-checking and providing useful insights for the final version of the case study.

In the second case the data gathered from the neighbors in close physical proximity, the industry association officials and some members, and a client. The verbal protocol was coded and combined with the other data to isolate any indication of concern for wider stakeholders, i.e., the physical community and also concern for sponsors' own advantage.

#### **Implications**

The two cases are illustrative where the second may represent any entrepreneurial business, driven by exploiting lucrative opportunity, described as the essence of entrepreneurship in entrepreneurship theory. The first not only represents a business that agrees to trade economic growth for longer term sustenance. Thus, they forgo "self-interest" in favour of a deeper relational purpose guided by an ethos of reciprocity that builds stakeholder inclusiveness. WKK's approach is fundamentally different from the concentration of maximum possible gains to the entrepreneur or even to the collaborating entrepreneurs group or industry (e.g., see <u>Lawrence, Phillips, & Hardy, 1999</u>).

This reciprocity ethos is the crux of stakeholder theory in management and, as seen in practice in the entrepreneurial firm of WWK, and reflects the relevance of stakeholder theory in entrepreneurship. In a wider sense, we theorize that since the practices of the small firm are the seeds of systems which become the dominant logic in the large business as it expands, it further reinforces the relevance of stakeholder theory in entrepreneurship.

The implication drawn is that in order to incorporate stakeholder concepts, entrepreneurship theory that has so far largely been built on the individual's entrepreneurial actions, needs to be enhanced to include collective, inclusive action by a community that sustains its ecology and social fabric, i.e., to admit stakeholder participation in entrepreneurial action. In order to do that it needs to enhance its focus on entrepreneurial action and appropriation based on a secular and individualistic belief systems which are reflected in the second case, to that of an inclusive system where the decision making in an enterprise is a function of the wellbeing of the community, as reflected in the first.

#### Rethinking social psychology of entrepreneurship; an agency theoretical perspective

Kari Mikko Vesala

#### **Principal Topic**

Social psychology of entrepreneurship has had apparent difficulties in developing into a notified field. It has remained largely invisible somewhere in the obscure borderland between psychological and sociological discussions. However, at least two outlines have been presented of social psychology of entrepreneurship. The one by Shaver (1995) names social cognition, attitudes and self as key issues in the field. The other one by Carsrud and Johnson (1989) puts emphasis on social influence, networks, interaction and communication. In both, social psychology is differentiated from personality approaches, while the social context of behaviour and the relation between individual and social situation are considered to be the key characteristics of a social psychological perspective. However, the former outline represents psychological social psychology stressing individual cognition; the latter acknowledges some of the contributions from sociological social psychology (e.g. Goffman). The difference in approach reflects the disperse nature of social psychology as a discipline, which may also have contribute to its modest coverage in entrepreneurship research.

Many recent discussions give reason to pay special attention to how the relation between individual and her social context is conceptualized in the study of entrepreneurship, and thus how to conceive the role of social psychology. On the one hand, for example, the discourses of entrepreneurship promotion in public policy have stimulated critical theories contesting the cultural ideal of entrepreneurs as independent actors, by pointing out the problematic nature of the aim to develop 'enterprising selves' with policy measures. The relevance of this issue to social psychology is obvious, although the discussion is mostly framed as (macro) sociological. On the other hand, several authors have started to apply social constructionist and

constructivist approaches in the study of entrepreneurship, analyzing the social construction of business opportunities (Chiasson & Saunders 2005; Jack & Anderson 2002; Fletcher 2006); entrepreneurial personality (Chell 2008); entrepreneur identity (Watson 2008, Down & Warren 2008, Downing 2005); and entrepreneurial learning (Rae & Carswell 2000). These studies draw in part from the discipline of social psychology, yet they address questions that deviate essentially from the ones suggested by Shaver, for instance.

#### **Key Propositions**

The aim of this paper is to contribute to the discussion about social psychology as a subfield in the study of small business and entrepreneurship. A perspective of agency theories is proposed as a means to outline social psychology of entrepreneurship as field that applies both psychological and sociological trends in social psychology.

Individual agency is, more or less explicitly, a pervasive and central idea in most theories of entrepreneurship, yet the above mentioned outlines of social psychology fail to articulate or elaborate on it. However, in social psychology, agency has been theorized in social cognitive (Bandura), symbolic interaction (Mead), dramaturgical (Goffman) and (micro) social construction (Burr, Harre, Billig, Gergen) tradition. The initial causative understanding of agency as 'making things happen', central in the first mentioned theory, is reframed and reconstructed in each of the latter three.

I will read these theories to uncover how agency is conceptualized in each and how they could be connected to the analysis of entrepreneurship. A distinction between substantialist and transactional views (Emirbayer 1997) as well as the theory of cultural construction of agency through principals (Meyer and Jepperson 2000) will be used as a meta-theoretical framework in the reading.

#### **Results and Implications**

Social cognitive theory focuses on self-reliance in entrepreneur's causative agency (e.g. self-efficacy and control beliefs). Entrepreneur is seen as an actor who uses other actors as agents for oneself (proxy agency) and acts as one's own principal. The focus in symbolic interaction theory is on socially embedded causative agency as entrepreneur's ability to reflect upon and compare one's own perspective and that of other actors (e.g. stakeholders). Entrepreneur views herself and other actors as principals that can be served or resisted as well. The focus in dramaturgical theory is on socially embedded causative agency as self-presentation and framing in interaction with other actors. The entrepreneur is able to use various principals to frame his own agency. Finally, in social constructionist social psychology the emphasis is on discursively and socially embedded causative agency as entrepreneur's ability to use available discourses as rhetorical resources for claiming, defending and legitimating her own position as an actor with agency.

By putting these theories side by side I will argue that social psychological view to agency is highly relevant in the study of entrepreneurship and it helps to portray and enrich the social psychology of entrepreneurship. It builds a conceptual and theoretical bridge between actor/individual centered approaches and relational/ situational approaches which stress the embedded nature and social preconditions of the individual agency. Further, it helps to widen the scope of inquiry conceived under the label of social psychology of entrepreneurship so that in addition to questions of the causal contribution of individual agency also questions concerning the construction and social/situational preconditions of such agency can be addressed, and in addition to quantitative methods also qualitative ones can be seen legitimate in social psychology of entrepreneurship.



#### Session 3B: Business Models

Room: P Block 505

Session Chair: Christophe Garonne

#### Pathways to sustainable enterprise: The emergence of social business models

Erin Castellas

#### **Principle Topic**

The Global Financial Crisis of 2008 has exposed some flaws in company valuations, gaps between market value and underlying asset value, as well as some of the irrationality of the incentives and behaviour of some market participants (Robins and Krosinsky 2009). In response to declining market valuations and economic recessions across the world, there has been heightened interest in understanding corporate models, compensation, and valuations. This has led to questions of conventional business teachings and silo-ed theories that may no longer be adequate for addressing the complex nature of problem solving and business activities at today's pace of development (Robinson 2004).

The current corporate model seeks to maximize economic returns to shareholders, while failing to explicitly value social and environmental capital and the stakeholders that hold claim to this capital, often placing social and environmental values in opposition to business aims and objectives (Saul 2011). The concept that social and environmental value are inextricably linked with economic value (Emerson 2003) has led to critiques of the current corporate model. As the international business environment is forecast to include greater volatility, greater competition, and rapid innovation, businesses are driven to adopt next generation business models to integrate the key tenets of sustainability and social responsibility to remain competitive and viable (Morgan, Ryu et al. 2009).

Businesses that aspire to co-generate social and economic value are seen as an innovative approach to addressing social issues that existing institutions, the government, and traditional private sector are not capable of or willing to address (Bornstein 2004; Cornelius, Todres et al. 2008). The attempts to drive the evolution or innovation of business models that blend social (including environmental) and financial return objectives, is leading to the emergence of hybrid business activities and new models, including: socially responsible businesses, social enterprises, social entrepreneurship, social intrapreneurship, sustainable intra/entrepreneurship, sustainable enterprises and other movements that aim to integrate principles of sustainability into the business model (Bartlett, 2004; Choi, 2008; Conaty, 2001; Diochon, 2009; Dixon, 2007; Emerson, 2003).

New organizational models are said to emerge to co-evolve with changes in their environment, including technological, institutional, socio-political, and competitive dynamics (Lewin, Long et al. 1999). Rao, et al (2000) notes the importance of social movements and the resultant cultural innovation as a key driver in organizational evolution, in particular in institutional entrepreneurship or intrapreneurship. Linking these concepts with environmental dynamics, as reflected in the social enterprise and corporate social responsibility (CSR) literature, reveals that these types drivers, such as sustainable development challenges, technological innovations, societal expectations, and institutional shortcomings, are present for the emergence of more sustainable integrated business models (Heerema, 1991; Holbrook, 2010; Kelly 2007). Schaltegger (2011) notes that the conditions for the spontaneous emergence of sustainable entrepreneurs that pursue sustainability innovation in a market system include: existence of a business case, interplay of regimes and stakeholder demands, industry life-cycles, and timing between unfolding industry dynamics and sustainability challenges.

This paper discusses the context for the emergence of sustainable business models and puts forward a framework to evaluate how social businesses are translating sustainability and blended value aspirations into practice, across the business model. This framework will be followed up with further empirical studies to advance research in defining enabling conditions and case studies of these blended value hybrid business models.

#### Method

This paper presents a summary of literature from scholars in: social entrepreneurship, intrapreneurship, social enterprise, sustainable entrepreneurship, corporate social responsibility, and other related disciplines to define the context to investigate the enabling conditions of emerging sustainable enterprises. Based on the current literature, this paper synthesizes and puts forward a framework for further empirical study to assess how well social businesses are translating their multiple-bottom-line aspirations into practice.

Future data will be collected utilizing a survey and case studies to assess the enabling conditions of social enterprises. The survey is scheduled to take place in 2013, engaging leading global social and sustainable entrepreneurs, with a focus on key founding executives in emerging B corporations (<a href="http://www.bcorporation.net/">http://www.bcorporation.net/</a>).

#### **Results and Implications**

Rao et al (2000) notes that for new and emerging organizational forms to gain legitimacy, they must obtain socio-political legitimacy, conforming to legal standards and gaining the support of powerful actors, as well as constitutive legitimacy, where organizational standards and forms become taken-for-granted and part of social norms. However, observations in the literature point to gaps in understanding the frameworks that enable new blended value organizations to emerge from a relatively unsympathetic environment, where capitalism and singular motives remain the dominant paradigm (Eisler, 2007; Hawken, 1993; Kelly, 2007). Standard economic theory holds that pioneers and new entrants in an industry incur the costs of legitimizing the new organizational form (Rao, Morrill et al. 2000). If this is the case, then the question remains as to what conditions are supporting the growth of a new sector of the economy, which bears the burden of investing additional resources to legitimize seemingly distinct new organizational forms.

This review of scholarly and practitioner literature on social and sustainable enterprise reveals the continuing evolution of the language and definition across related disciplines that heralds back to the emergence of social businesses, an emerging practitioner typology of social enterprise, and distinct scholarly frameworks that can be synthesized and observed in practice in attempting to define these hybrid models and provide examples of the translation of these social and financial aspirations into practice.

### AASB138: Catalyst to changes in managerial decisions and reduced R&D spending?

Natasia Steenkamp

# Did AASB138 cause short-termism and consequently reduced R&D spending? Principal topic

Australia adopted the International Accounting Standards from 1 January 2005. Consequently, the accounting treatment for research and development (R&D) has changed significantly. The new accounting standard (AASB138) contains more conservative requirements regarding the capitalisation of R&D spending as opposed to the relatively liberal requirements of the previous accounting standard (Deegan 2007). It is possible that the more stringent requirements could have discouraged managers to invest in R&D activities with long-term returns and that they invested in business opportunities with short-term returns instead.

Sacrificing long-term, often superior, returns in pursuit of short-term returns is referred to as short-termism (Irving 2009). In a study of 312 financial executives, 78% of respondents indicated that they sacrificed long-term returns for the benefit of short-term alternatives (Graham, Harvey & Rajgopal 2005). This short-term focus is often exacerbated when the forgone long-term returns are perceived to be risky opportunities. R&D can be classified as a risky investment due to uncertainty surrounding the future outcomes of R&D activities, which are often long-term outcomes. If firms reduced their R&D spending due to the stricter requirements of AASB 138, then it is possible that AASB138 may have caused short-termism.

It is argued that investment in R&D is critical in maintaining competitive advantage and increases a firm's probability of survival (Seraina & Mario 2008; Wernerfelt 1984). At June 2011 the survival rate for Australian firms that already existed in June 2007 was 60.4% and 48.6% for businesses that commenced business in the 2007/08 financial year (ABS 2011). If the stricter accounting requirements of AASB138 for capitalising



R&D spending caused short-termism, then it is possible that AASB138 may contribute to the low survival rate of Australian firms. On the long term, this may be detrimental to the competitive advantage of Australian firms and their survival and ultimately to the Australian economy. This study investigates if AASB138 did indeed lead to short-termism and consequently in a reduction of R&D spending.

#### Method

Financial data of 31 Australian listed firms for financial years from 2001 to 2010 was collected. The firms were divided into two groups: capitalisers (i.e. firms that capitalised R&D spending before 2005) and non-capitalisers (i.e. firms that expensed R&D spending before 2005). Firms were classified into these two groups based on their R&D practices reported in their annual reports prior to 2005. The non-capitaliser group was used as a control group to account for any other economic events that may have affected R&D spending during the study period. A regression model developed by Latham and Braun (2010) was used to quantify the impact of short-termism on R&D spending. The significance of movements in market value was used as a proxy for short-termism in explaining R&D spending adjustments. The sampled firms' research intensity ratios for each year were also calculated as a means to determine the actual changes in a firm's R&D spending as a percentage of its turnover. Horwitz and Kolodny (1980) argue that companies that have limited resources to dedicate to R&D activities tend to be more efficient per R&D dollar spent, than their more resource rich counterparts. Therefore, companies with limited resources produce greater research output for each R&D dollar spent, than companies with a greater supply of resources.

#### Results and implications

The regression analysis indicates a marked increase in the significance of short-termism. The P value decreased from a pre-2005 value of 0.084 to a post-2005 value of 0.000. The t-statistic for market value also increased from 1.848 pre-2005 to 9.891 post-2005. These statistics suggest an increase in short-termism amongst the capitalising group. This suggests that the stricter requirements for capitalising R&D spending discouraged firms to invest in risky long-term R&D investments.

The median turnover of capitalising firms was 85% less than that of non-capitalising firms. This suggests that capitalising firms have fewer economic resources to allocate to R&D activities. Hence, based on prior research it could be argued that capitalising firms are moe efficient with their R&D spending. Furthermore, the study found the median research intensity of the capitalising group fell 33% compared to a decline of 10% for the non-capitalising group after 2005. If these results are representative of all Australian firms, then it can be concluded that the accounting requirements of AASB 138 caused a significant downward shift in the R&D investments of Australian firms.

The study's findings suggest that AASB138 could have caused short-termism and consequently a reduction in R&D activities. The implications of this could be significant. Sacrificing investments in long-term R&D activities in pursuit of short-term returns could result in uncertain future longevity and a higher failure rate for Australian businesses.

# Business model innovation and organizational inertia: costly signals, capabilities and users Magnus Holman

# Why can firms innovate their business models? Costly signals, customers, capabilities and relational contracts

#### Introduction

Business model innovation can include novelties for how the firm approach customers, how its goods are distributed, how the revenue model is designed and so on (Amit & Zott, 2001; Chesbrough & Rosenbloom, 2002; Magretta, 2002; Markides & Charitou, 2004; Morris, Schindehutte & Allen, 2005). Recently business model innovation studies has begun to explore the relation to opportunities, entrepreneurial action and competitive advantage but very little is known why firms at times can change their business models (Morris, Schindehutte & Allen, 2005) and the sequence and the logic underlying such changes. This is strange as organizational scholars by drawing on concepts such as incentives, inertia, routines, lock-in, culture, capabilities, network structure or framing, has advanced greatly in explaining why changing organizations

are difficult and time-consuming - and at times even impossible. Kaplan and Henderson (2005) argue that a reason for why organizational, and presumably business model innovation, is difficult is that incentives and cognition coevolve so that organizational capabilities or routines are as much about building knowledge of "what should be rewarded" as they are about "what should be done" requiring both to be 'unfrozen' and transformed to alter a firm in a non-trivial manner (Lewin 1951). So if Lewin's unfreeze – transition – freeze model holds true for business model innovation, what allows this process to unfold in the first place? Exogenous explanations such as external shocks or internal explanations such as crises may provide partial answers but fails to deal with the interaction among the different parts of the firm and their varying expectations together with the opinions and actions of factual and potential users and customers.

A way to explain business model innovation is to draw on signal theory (Stiglitz 2002) in terms of how different actors convince receivers. Signals have been studied in the contexts of information economics, evolutionary biology and psychology, and marketing (Spence, 1973; Stiglitz, 1975; Zahavi, 1975; Gerstner, 1985; Herbig and Milewicz, 1994; 1996; Maynard Smith and Harper, 1995; Saad, 2007; Miller, 2009). In a market, an innovation and subsequent transactions are characterized by information asymmetry. When a customer lacks the information of the supplier, they infer the quality of the firm's goods based on the firm's signals consisting of overt resources or activities. As most signals can be imitated by firms of lower quality, the signals that are reliable for receiving customers or users are the ones that are costly and thus difficult to send (e.g. Spence, 1973, Kirmani and Rao, 2000).

The purpose of the paper is to show that a modified version of the signaling literature can explain why business model innovation if it is combined with the capability and lead user literature. The paper analyzes a multinational corporation active in mature products and markets. To differentiate its offers from competitors, the firm has added services and new product packages that complement the original product offers. As a consequence, the business model of the firm changes dramatically.

#### Method

The paper includes a longitudinal case studies of the implementation of a new business model at Svenska Cellulosa Aktiebolaget (SCA), a Swedish multinational corporation. This process begun in 2004. The data collection consists of a triangulation of methods, including setting up and participating in workshops aimed at the service logic to staff across the European market over a period of three years, around twenty semi-structured retrospective interviews and ongoing conversation with three managers in the company. Five two-day workshops, covering more than twenty European countries, were held over a period of two years. The studies of the authors were complemented by three reports by master thesis students. The study was inductive – deductive in the sense that at first a preliminary model of the signal-business model co-evolution was outlined by the authors together with one senior SCA manager. This model was portrayed as consisting of a sequence of different types of innovation. This initial logic was theorized by drawing on the signal, lead user and capability literature leading to a new explanation of why one change enabled another. This explanation was tested by creating a specific set of semi-structured and structured follow-up questions to verify the logic and to remove the most plausible rival explanation concerning the explanation.

The case is relevant for the present context because the firm radically change the market positioning and the business model of TENA from selling products to selling bundles of products and services which required new activities, capabilities and resources that would be convincing for customers and staff. The radical nature of the cases does not limit the transferability of the study findings since capabilities and resources in principle can be created in any business model innovation.

#### **Results and Implication**

The case shows how the firm changed its business model consisting of a sequence of four major types of innovations; product – market position – paradigm and process innovations. Each of these steps can be explained by a costly signaling perspective where each of the steps led to the creation of new resources and capabilities which in terms enabled new paths of opportunity exploitation that could not have been done previously. The basic argument of Kaplan and Henderson (2005) is thus confirmed.

One important aspect of the paper is that it is combines the signal, capability and lead user literatures to explain business model innovation.



### Session 3C: International Entrepreneurship

Room: P Block 506A

Session Chair: Scott Gordon

#### International Entrepreneurship: The nexus of opportunity and value innovation

Indujeeva Peiris

Internationalization is a complex and a dynamic process. Literature on the development of the internationalization process of the firm and IE in particular has grown rapidly in the last two decades. Despite this rapid development, integration of the entrepreneurial aspect into international business studies is still an emerging phenomenon (<u>Jones and Coviello 2005</u>). This paper intends to extend the IE theory by developing a framework of entrepreneurial internationalization by focusing on two critical concepts: Opportunity identification and value innovation.

Internationalization process is initiated by entrepreneurial opportunity (<u>Oviatt and McDougall 2005</u>). As such, international opportunity identification plays a central role in explaining the underlying mechanism of internationalization process (<u>Mathews and Zander 2007</u>). The ability of the entrepreneur/entrepreneurial team to exploit such opportunity makes the firm entrepreneurial, and leads to the development of competitive advantage.

The paper is guided by two research questions:

- a) What factors act as the antecedents to international opportunity identification?
- b) How do entrepreneurs/entrepreneurial teams exploit these opportunities and create value innovation?

The framework draws from multiple theoretical perspectives and focuses on the entrepreneurial actions rather than firm per se, since, opportunities are identified by individuals and not by firms. Furthermore, we see firm as a bundle of resources (tangible and intangible) that is static in nature without human intervention and the whole process is embedded in the wider environment that consists of industry, institutional, regulatory competitor, cultural and economic forces that is related to domestic and international markets.

First, drawing on the entrepreneurship theory, Social Capital (SC) and Resource Based theories (RBT), we identify three key antecedents to opportunity identification: Firm resources (financial, physical, human and organizational), entrepreneurial resources (prior knowledge and experience, creativity, and self-efficacy), and Social capital (resources embedded in social networks). This leads us to the first set of propositions:

#### **Entrepreneurial resources**

P1a: Entrepreneur's prior knowledge and experience affects their existing knowledge and capability base, leading to new opportunity identification

P1b: Entrepreneur's creativity affects their existing knowledge and capabilities leading to new opportunity development by creatively recombining existing resources

**P1c:** Entrepreneur's self-efficacy affects their existing knowledge and capabilities leading to new opportunity development by being acutely aware about their capabilities and overcoming any deficiencies in them.

#### Social capital

**P2**: Entrepreneur's social capital affects their learning, knowledge and capabilities leading to opportunity development by providing, advice, information, resources and resource mobilization.

#### Firm resources

P3: Entrepreneur's access to tangible and intangible resources through the firm, affects their learning, knowledge and capability base leading to opportunity development

These resources are inherently idiosyncratic to the entrepreneurial firm, but firms do not have superior performance because they have superior resources. Therefore, the capabilities of the entrepreneurs to combine and re-combine these resources to create value above and beyond of what these resource could do on their own needs to be considered. This leads us the to the second stage of the process of opportunity identification.

Drawing on the Knowledge based view and dynamic capabilities perspective; we propose three types of coevolving entrepreneurial capabilities as the necessary conditions for the creation of 'entrepreneurial insight', leading to opportunity identification. They are, entrepreneurial learning (the ability to acquire, assimilate resources and organize newly formed knowledge); entrepreneurial knowledge (technical, conceptual, and social knowledge); and entrepreneurial capabilities (the ability to adapt, synthesise and integrate the technical, conceptual and social knowledge).

#### Entrepreneurial learning, knowledge and capabilities

**P4a:** Entrepreneurs acquire and assimilate resources and organize newly formed knowledge through experiential and observational learning.

**P4b**: Entrepreneur's explicit (theoretical) and implicit (practical) newly formed knowledge about the technical, conceptual and social elements affect his/her capabilities leading to international opportunity identification and exploitation.

**P4c**: Entrepreneur's ability to adapt, synthesize and integrate his/her technical, conceptual and social knowledge affects international opportunity identification and exploitation leading to value innovation.

Entrepreneurs with access to resources and are endowed with the necessary capabilities then need to exploit the identified opportunities to create customer value through implementing value-creating strategies. This leads us to the third and final set of propositions.

#### Value innovation

**P5**: Internationalization path and its sustainability are affected by the level of value creation and innovation made in international markets and firm's stakeholders.

The opportunity exploitation involves a decision to act on value creating activities of the firm. This final stage focuses on strategic entrepreneurial actions. Borrowing from Kim and Mauborgne (2005), we use four strategic action drivers: Eliminate (eliminating factors that companies and industry have taken for granted even though they no longer add value); Reduce (reducing the cost structure as against competitors); Raise (raising the current standards well above the industry standard) and Create (offer entirely new sources of value for buyers by creating new demand and shifting the strategic pricing of the industry). In essence, firms achieve superior value creation by simultaneously implementing cost-leadership and differentiation strategies. Therefore, entrepreneurial opportunities must be identified in relation to any one or more of these action drivers in order to create value for its customers.

This paper highlights the importance of critical factors leading to opportunity identification and strategic actions leading to value innovation. These two factors not only provide insight in to why firms internationalize (identification of opportunity and value capture) but also strengthen our understanding about the behaviour of traditional firms and how Born Global firms come into existence, their growth and survival (sustainable value innovation).



#### Effectual networking during the internationalization process of SMEs

Sylvie Chetty

#### **Abstract**

We explore previously discarded phenomena in the internationalization process literature, namely non-predictive logic of foreign market entry. We use effectuation theory as a new lens to examine how small and medium size enterprises (SMEs) network during their international expansion. We develop a conceptual framework by showing similarities and differences of how the network concept is used in the revisited Uppsala model from the International Business literature and in effectuation theory from the entrepreneurship literature. This comparison shows that the underlying assumptions of the network concept relating to trust, risk, uncertainty and coordination are essentially different in these two research streams. Consequently, we identify how effectuation theory can capture the unintentional aspect of networking by internationalizing SMEs. Our research design is a multiple-case study approach. We found that entrepreneurs network with all interested partners instead of carefully selecting international partners according to pre-defined network goals. Entrepreneurs who network effectually enter markets wherever an opportunity emerges to commit to a network relation which will increase their means. Hence, the network relations determine which foreign markets the firm enters rather than vice versa. An implication for entrepreneurs in internationalizing firms is that their networks need not necessarily be planned, structured and coordinated.

# Power asymmetries and the formation of international new ventures (INVs) within global production networks

Saeed Mohammadi

#### **Principal Topic**

Networks are the key factor in the theory of international new ventures (INVs) (Oviatt & McDougall, 1994) to provide social capital (Autio, 2005) and to "identify international business opportunities" (Oviatt & McDougall, 2005). INVs seek benefits from the global markets which the values from those markets are determined by the position of actors within the networks. This position represents the degree of power to influence the international interactions. However, less attention has been paid to the power relations within the networks which affect on the value capturing by INVs. "Networks encompass hierarchies of power or they wouldn't be networks. There would be no incentive for the more powerful members to remain in the network if they didn't disproportionately gain the benefits of network participation" (Christopherson & Clark, 2007). Unevenness of the power dissemination in the global markets is investigated by the global production networks (GPNs) and the global value chains (GVCs) literature. The GVC/GPN approach provides a framework for exploring the network participation via four strands: (1) input/output structure, (2) Governance theory, (3) global dispersion, and (4) upgrading.

In addition, with the theory of INVs, four crucial elements are proposed for the existence of INVs in the global markets: "(1) internalization of some transactions, (2) use of variety transaction governance structures, (3) use of the advantages from foreign locations, and (4) control over specific resources" (Oviatt & McDougall, 1994, 2005). Even though, these elements are examined in the INVs literature as the firm-level efforts, but here has been little discussion about the role of other actors to influence the INVs maneuver in global networks. The present paper will evaluate the INVs' formation and position in regard with the GVCs/GPNs strands along with the asymmetries power within the networks.

In the GPN/GVC structure, multinational corporations (MNCs) and large global buyers are lead enterprises for directing and controlling the major interactions (e.g. quality control of productions, designing, branding, marketing, distribution and etc.) (Gereffi et al., 2005). As a result of the imbalance in power dissemination within the networks, the structure of global economies is determined by big buyers and MNCs. The role of lead firms is to set the parameters for value chain participation, which organizing these participations with the intention to obtaining a particular "functional division of labour" within the chains/networks known as 'governance' (Ponte, 2008). Five types of global value chain based on the various governance types are: market, modular, relational, hierarchical, and captive. These types of the GVCs are determined by three variables from the nature of power relations within the networks including: complexity of global transactions,

needed knowledge which is codified, and the capability of firms. It will be argued that INVs could maneuver in global markets based on these variables and the formation and value capturing of INVs are determined by the power relations within global networks. INVs could increase individually their capabilities along with the industrial help to increase the ability to understand the complexity of transactions and codified knowledge to moving up to the high position within the networks which knows as upgrading.

#### Method

This research investigates the formation of INVs in the GVCs. It will be argued that imbalance power in networks affect on the INVs' power and consequently influence the value capturing and their survival. The asymmetries power within the networks are determined by three variables (complexity, codification, and capability) which it is difficult to identify the indicators of the complexity and codification but it easier to identify the indicators of firms' capability. However, we could evaluate the complexity and codification within clusters as a network node. Therefore, we collect our data from leather industry clusters in Iran via a database from Iran Textile Exporters and Manufacturer Association (ITEMA). We explore the INVs which increase their power itself (improve the capability) along with participation in clusters to increase the ability to understand the complex transactions and codified knowledge. The consequence of INVs' effort would depict the greater values which they captured.

#### **Results and Implications**

The GVC approach indicates the three determinant variables (complexity, codification, capability) to examine the possibility of gaining more benefits which are related to the degree of power relations within the networks. The present research will use the same way to investigate the role of internal improvement in capabilities along with clusters' affiliation to increase the power of INVs in global markets. Clusters have power to influence the local suppliers and provide essential knowledge for them which brings further competencies for upgrading. Their power could increase the level of INVs' achievement by defining the transactions or decoding the knowledge. In addition, they have more forward power to influence the MNCs than individual INVs. The contribution of this study is to reveal the notion of the power for INVs which the role of other actors are illustrated and INVs would able to depict a clear target in global networks.



### Session 3D: Entrepreneurship Education & Training

Room: P Block 506

Session Chair: Roxanne Zolin

# Student engagement with Team-Based Learning in undergraduate entrepreneurship courses: an exploratory study

Peter Balan

#### **Principal Topic**

Student engagement, described as the time and energy that students devote to their learning (Kuh, Cruce & Shoup 2008) is becoming increasingly important, as higher levels of student engagement has been demonstrated to be related to positive learning outcomes, the development of higher-level thinking, and student retention (Kuh, Cruce & Shoup 2008, Coates 2009). Student engagement is even more important for entrepreneurship education (Balan & Metcalfe 2012), because entrepreneurship students need to develop a wide range of practical and conceptual skills to prepare them to deal with the complexities and entrepreneurial process (Gibb 2002). Teaching methods in this field therefore need to engage students actively so that they are best able to develop the capability to assess complex situations characterised by high levels of ambiguity to arrive at appropriate decisions (Kailer 2009, Timmons et al. 2011), and to learn how to address the complexities of new enterprise creation (Biggs 2003). Although a wide range of methods is used to teach entrepreneurship (Solomon 2008), there is general agreement that methods that are learner-centred are the most effective in engaging students and in helping them to understand the key aspects of entrepreneurial activity (Zahra & Welter 2008, Jones, B & Iredale 2010).

Team-Based learning (TBL) was developed in the late 1970s (Michaelsen, Knight & Fink 2004; Michaelsen & Sweet 2008) by Professor Larry Michaelsen, as a learner-centred method for engaging students in their learning, and fostering effective and productive teamwork, and has been implemented in his entrepreneurship course. Although this method has been considered for entrepreneurship education (Rushworth 2011), it has not been widely used in this field. The second implementation internationally in entrepreneurship education was by the lead author in April 2010 at the University of South Australia, and this method has been used systematically in ten undergraduate course deliveries. TBL relies on students working independently to learn course content before a class, being tested on that course content at the start of the class using a multiple-choice test, and then completing the same test as a team. Teams obtain immediate feedback by scoring their responses using a "scratch and win" card that indicates if they have the correct answer. The remainder of the teaching session is then used to discuss application of course content to practical situations. The individual and team multiple-choice test results are combined as part of course assessment. This process also includes a mechanism for providing feedback on team contribution, and a priori engages students in the learning process.

One of the challenges in implementing such a method is to identify how TBL engages students so that its impact can be enhanced. Well-established tools (AUSSE, NSSE) for measuring student engagement with their institutions (Coates 2009), can be used in a top-down approach at the course level to form a subjective assessment of engagement with specific teaching methods including TBL (Balan 2011, Balan & Metcalfe 2012), but this does not explain how these methods achieve engagement. Course-level survey instruments are available (Ouimet & Smallwood 2005, Handelsman et al 2005), but these require large numbers for validity, and measure only overall student engagement with the course. There do not appear to have been attempts to explore engagement from the student point of view with TBL as a teaching method at the classroom level. The research questions in this study are: (1) what are the dimensions of student engagement with TBL as a specific teaching method, and (2) are the dimensions of engagement consistent for different deliveries of the same course?

#### Method

An undergraduate entrepreneurship foundation course was re-designed around the principles of Team-Based Learning. This is an elective course that is taken by students from across the University. Students in three separate deliveries of this course were asked to describe their engagement with TBL as a teaching method. Data for this grounded research was collected in the form of anonymous, voluntary and unprompted qualitative comments, using a "minute paper" method (Angelo & Cross 1993). Comments for each class were analysed separately in an inductive approach, using the concept mapping method (Borgatti, Everetta & Freeman 2002). This is a rigorous mixed-method approach that combines qualitative and quantitative research methods, and its implementation provides an audit trail so that analyses can be replicated. It produces maps showing links between the comments analysed, and clusters of similar comments. In this case, the clusters reveal the underlying structure of engagement by students in TBL.

#### Results/Implications

Analysis of data for three classes with 36 to 54 students produced separate maps with an optimal number of 10 clusters or themes explaining their engagement in TBL. These clusters can be described as dimensions of engagement with descriptors such as "competition between teams", "improves marks/grades", "good preparation for the workplace", "fun and enjoyable", "sharing ideas with others", "makes me learn course content", "helps me to get know other people". Comparing the three sets of results revealed commonalities and the to the underlying dimensions of engagement in TBL as a teaching method. The results clarify our understanding of student engagement for this particular teaching method. This research contributes to the engagement literature by describing a novel and practical method for exploring engagement at the level of an individual teaching activity. The results can be used to develop quantitative survey tools for further research. Results already have demonstrated practical value in revealing ways for educators to increase student engagement with particular class activities, and hence improve learning outcomes.

## The impact of entrepreneurship education on human capital at upper-secondary level

Thierry Volery

#### Abstract

In this study we evaluate the impact of entrepreneurship education on human capital at the upper-secondary level using a quasi-experimental design. Data were collected from 494 students attending entrepreneurship education programs and 238 in a control group. Our results indicate that some personality traits such as need for autonomy and risk propensity, as well as beliefs, can have a significant positive influence on entrepreneurial intention. Entrepreneurship education has a positive, albeit limited impact on human-capital assets. The programs we assessed had a statistically significant impact on beliefs, on the capacity to exploit an opportunity, and on entrepreneurial knowledge. However, we did not observe any significant impact on entrepreneurial intention.



## Thursday, 7th February 2013

Session 4: 9:00am - 10:30am

Session 4A: Sociology of Entrepreneurship

Room: P Block 504

Session Chair: Martie-Louise Verreynne

## Perceived Business performance: Not the Same for Everyone

Saskia de Klerk

## **Principal Topic**

This paper investigates if start-up motives influence how entrepreneurs form network ties. Entrepreneurs are described as people who recognize an opportunity (Allen, 2012), take calculated risk (Scarborough, 2011), satisfy customers and create value (Schumpeter, 1975). Entrepreneurs are characterised by the motives of their decision to start a business (Block and Sandner, 2009). Opportunity entrepreneurs identify an opportunity and develop it by starting their own business. The motivation to be self-employed and make a profit drives them (Reynolds, 2004). Necessity entrepreneurs turn to business because of a lack of or limited employment options (Hechavarria and Reynolds, 2009). As a result, they differ in how they manage their new ventures (Block and Sandner, 2009). For example, opportunity entrepreneurs are more likely to plan how they would start the business; including taking time to establish networking relationships (Burt, 2002).

Evidence has shown that networks are important to entrepreneurs (Ceci and lubatti, 2012) and is seen as one of the key elements contributing to venture success (Allen, 2009). Networks represent a nexus of relationships in a complex mix of friends, family, government, educational and professional connections (Jones and Tilley, 2003) in an informal and formal situation (Koniordos, 2005). Lindsay (2005) emphasises the importance of networks in identifying opportunities, access to resources, information, emotional support and other advantages (Halinen and Törnroos, 2005).

While the relationship between networks and entrepreneurship has been established in the literature, less is known about differences in networking behaviours of opportunity and necessity entrepreneurs. Literature on opportunity and necessity entrepreneurs concentrate on issues such as the start-up motive (Davidson and Wiklund, 2001; Reynolds, Bygrave, Autio, Cox and Hay, 2002); levels of satisfaction (Kautonon and Palmroos, 2010) or perceived success (Block and Sandner, 2009). By understanding the needs of necessity and opportunity entrepreneurs in building networks, policy and training programs can cater more successfully to different needs or even provide clues to increase the success rate of start-ups and small firms. This is particularly important in the developing economy context of this study, which has high proportions of necessity entrepreneurship (Acs, 2006).

Three main hypotheses are presented. First, it is aroued that both opportunity and necessity entrepreneurs will have high levels of perceived performance, even though profit levels for the former may be higher. Because opportunity entrepreneurs have a higher success orientation (Block and Sandner. 2009: Hechavarria and Reynolds, 2009), they may be not easily be satisfied. These expectations are often based on previous experience, training, and a dedication to innovative (Schumpeter, 1934). Second, drawing from literature by Krackhardt, (1992), De Man, (2004) and Petrusewicz, (2005) it hypothesizes that weak network ties will have a stronger relationship with the performance of necessity entrepreneurs than strong ties. Weak ties offer novel information (Granovetter, 1973) and efficiency as well as brokerage and flexibility (Burt, 1992). Necessity entrepreneurs may have more access to weak ties initially than to strong ties since strong ties are built over time and through previously shared experience. While stronger relationships offer more opportunity for business exchanges (Moberg and Speh, 2003), they are built on elements of trust (Kadushin, 2002), track record and reciprocity (Cross, Liedtka and Weiss, 2005) which allows for more complex resource exchanges. So while they may be more flexible (Hadjikhani and Thilenius, 2005:27), they take time to develop. Third, the paper posits that opportunity entrepreneurs are likely to derive greater value from established, strong ties since they are more attuned to the benefits derived from these relationships than others. This is based on the argument that opportunity entrepreneurs are early market entrants who take active steps to identify network opportunities that may support their efforts (Hindle and Rushworth, 2003).

#### Method

These hypotheses were tested in an empirical study of 404 small South African firms with fewer than 50 employees. The questionnaire consisted of five sections including; characteristics of the entrepreneurs and questions from existing scales about entrepreneurial motivation (Mazzarol, 2010; Longenecker, Moore and Petty, 2003), business relationships (Krackhardt, 1992, 1999) and perceived firm performance (Morris and Sexton, 1996). Data were analysed using SPSS 19; conducting descriptive statistics, factor analysis and linear and logistic regression analysis.

## **Results and Implications**

The analysis confirms the hypotheses set out earlier in that necessity and opportunity entrepreneurship as well as strong and weak ties was related to perceptions of performance. However, only a weak relationship between necessity entrepreneurship and performance was reported. Further, opportunity entrepreneurs were more likely to form both strong and weak ties than necessity entrepreneurs. Explanations for the findings are offered in the full paper. Theoretically this paper contributes a more nuanced understanding of how opportunity and necessity entrepreneurs differ in terms of their motivations and drive towards starting a business. This will provide valuable insights into the different cognitive processes of different entrepreneurs and how different levels of analysis might be needed to investigate networking behaviour, steps can be taken to enhance the social networking efforts for business owners/managers. Educational institutions, business support organisations and government might use this information by offering relevant training to necessity entrepreneurs on how to form ties and use these ties to their advantage. Networking offers business opportunities where wealth can be co-created, and knowledge and relational support can be communicated and exchanged to add value and link the different role players successfully (Breiger, Carley and Pattison, 2003).

# Social capital in entrepreneurship research: Restoring the fortunes of an impoverished construct Craig Furneaux

#### **Principal Topic**

Sociology of Entrepreneurship; New Venture Funding (via social networks)

### **Key Propositions**

In entrepreneurship research, a prominent view of social capital is that it is a valuable source of funds and information, and is seen to be derived from close social networks of kin and friends. This rather instrumental perspective has an implicit underlying assumption of a one way flow of resources from social networks to entrepreneurs. Unfortunately, this view is informed by a relatively impoverished view of social capital as a construct.

Drawing on broader understanding of 'social capital' from the anthropology, economics and sociology literatures, this paper shows that for some entrepreneurs, dense social networks can, in fact, result in the loss of financial capital, inhibit innovation, and restrict entrepreneurial activity. Additionally, the importance of reciprocity in social networks is currently under acknowledged in entrepreneurial research. By drawing attention to the 'weakness of strong ties' (Grabher, 1993), the 'dark side' of social networks, and the role of reciprocity in the social contexts of entrepreneurs (Furneaux & Brown, 2008), a more complete and robust understanding of 'social capital' as a construct in entrepreneurial research is articulated.

## **Results and Implications**

A new theoretical model is advanced in this paper, which demonstrates the potential for multi-directional flow of resources in the social networks of entrepreneurs. Once a multi-directional flow of financial, technical, and intellectual resources is allowed for theoretically, a number of promising research trajectories become evident. Specifically a more robust understanding of social capital has direct implications for the way the construct is operationalised in research, particularly for new venture resourcing, and the ongoing relationship between an entrepreneur and his social networks. More practically, the paper offers insights into some specific challenges which might face a budding entrepreneur, particularly in the start up phase of a new venture than is often allowed for.



# Culture as a driver of Entrepreneurship: Contrasting Independent Entrepreneurship versus Employee Entrepreneurship

Paul Steffens

## **Principal Topic**

Counties in Northern Europe, such as Sweden, Finland and Denmark, have comparatively low per capita rates of entrepreneurship as measured by independent new venture start-up rates – as for example measured by the Global Entrepreneurship Monitor (GEM) Total entrepreneurial activity (TEA) rate. However, the latest 2011 GEM data reveals that these same countries have comparatively very high Employee Entrepreneurship Activity (EEA) rates – that is a high rate per capita of employees involved in new product development or new enterprise activities.

This observation has prompted us to investigate the role of national culture in driving independent versus employee entrepreneurial activities. Prior research has established that national (and regional) culture plays an important role in forming an "entrepreneurial culture" that encourages (or discourages) independent business start-ups and TEA (e.g. Davidsson, 1995; Beugelsdijk, 2007). However, the relationship of culture and EEA has not received research attention.

Moreover, empirical relationships between elements of national culture and independent entrepreneurship have revealed some surprising results. For example, Wildeman et al. (1999) report an unexpected higher share of individual business ownership in countries that have higher uncertainty avoidance, higher power distance and lower individualism according to Hofstede's dimensions of culture. They speculate that dissatisfaction can be a source of entrepreneurship: in countries with a high power distance, a high uncertainty avoidance and low individualism, there may be relatively more business owners since enterprising individuals cannot satisfy their needs within existing organizations. Yet it remains a rather open question whether entrepreneurial behaviour in existing organisations provides a satisfactory explanation for these empirical findings.

#### Methods

We will conduct a cross sectional study of the influence of national culture according to the five / six dimensions of Hofstede (1980; 2001) on both TEA and EEA for the 54 countries that participated in GEM 2011. Since it is well established that the opportunities for entrepreneurship vary substantially with a country's level of economic development, we intend to conduct separate analyses for the three categories of development – innovation driven economies, efficient driven economies and factor driven economies. We also intend to restrict our assessment of TEA to opportunity driven entrepreneurship, as necessity driven entrepreneurship has a different relationship to the "entrepreneurial culture" that is the focus of our study. We will control for a range of factors such as GDP growth, ease of doing business index and unemployment.

#### **Results and Implications**

Descriptive analyses of the GEM TEA and EEA data reveal clusters of countries that appear to be have similar national culture. We are yet to conduct regression analyses.



## Session 4B: Gender Issues in Entrepreneurship

Room: P Block 505

Session Chair: Sanjay Bhowmick

## New Economy: What does it mean for Women Entrepreneurs in Montenegro?

Manijeh Reyhani

#### **Principal Topic**

Entrepreneurship may have several meanings when is used in the context of a new economy. Montenegro started a new economy in recent years. The economy is highly dependent on aluminum exports and tourism. However, Montenegro's economy similar to many other places in the world, suffers from a high unemployment rate. Real GDP growth slowed from 10.7 percent in 2007 to 6.9 percent in 2008 and turned to a large negative rate of about 6.5 percent in 2009, as a result of the global economic crisis. It contracted again in 2010 - by an estimated 1.8 percent. Inflation surged from 4.2 percent in 2007 to 8.5 percent in 2008 driven by continued strong domestic demand and rising world food and oil prices. With weakening domestic demand and falling world commodity prices, inflation dropped sharply to about 3.5 percent in 2009 and further to an estimated 1.4 percent. Meanwhile, the fiscal balance turned from a surplus of 6.7 percent of GDP in 2007 to a deficit of 0.3 percent of GDP in 2008 due to cuts to social contribution rates and surging public sector wages. The fiscal deficit increased substantially to over 3 percent of GDP in 2009, reflecting falling revenue owing to economic contraction (Montenegro Review 2012). Entrepreneurship in this context refers to owning and managing a business. Entrepreneurship may also refer to entrepreneurial behavior in the sense of seizing an economic opportunity. The entrepreneur is considered to be someone who specializes in making judgmental decisions about the coordination of scarce resources (Casson 2003).

Analysis of the population (15+) of Montenegro in 2010 survey (Ipsos, 2011) shows 48.8% male and 51.2% female. From this number 57.3% of male are employed and 42.7% of female are employed. The survey also shows that 54.5% male are unemployed and if employed persons are observed, it is noticeable that women have higher level of education than male population: 31.4% of the employed women have tertiary (college or university) education, while just 21% of male population have the same level of education. However, the percentage of male citizens who, after primary school, gained appropriate professional education is double that of the female. The male Self-employed is 21.3% almost double of female at 8.9%. This is indicative of much less opportunity for the female entrepreneurs. Nevertheless, this fast and emerging economy shows promising opportunities for women entrepreneurs.

## Methodology / Key propositions

Montenegro needs effective entrepreneurial activities particularly by women. Following the entrepreneurial process of women based on their individual perceptions an exploratory research has been carried out. The policy and program directions of the government to encourage more creative and more productive enterprises in the area of health, environment and agriculture with the help of education and investment in knowledge, with strong R&D performance and funding, in Montenegrin businesses are explored here.

A series of in-depth case studies were undertaken of Montenegrin women entrepreneurs within different industries in the country. All of them owned their business and some had also employees. The principles of case study design and method were followed (Yin 2003). Data collection involved analysis of interviews and direct observation with research.

#### **Results and Implications**

This paper reports the findings of an exploratory study that aims to examine primarily entrepreneurial performance in new ventures founded by women entrepreneurs in Montenegro. The research has focused on opportunities in new economy especially for women entrepreneurs using networking as a tool and the challenges of finding resources to start a business. The study's main research propositions are the examination of the motivation, strategy and vision of the Montenegrin women. The initial results reinforces that network competence has an especially strong relationship with the successful outcome seizing new

opportunities. The paper concludes by recommending women in Montenegro are capable, motivated and visionary. However, they are challenged by finding internal and external resources to start new ventures using networking as a tool.

## Exploring academic women's engagement in entrepreneurship: an institutional perspective

Sarah Cooper

## **Principal topic**

While increasing research focuses on women entrepreneurs our understanding of female entrepreneurship remains limited in specific environments such as universities. Studies have shown that although numbers of women academics have grown significantly in recent decades, their involvement in the formation of spin-offs remains limited. Moreover, positive progress by academic women with respect to their institutional status, individual rank or scientific productivity is not reflected in their involvement with the commercialisation of scientific knowledge through spin-off creation.

Previous studies of the representation of women in the commercialisation of science through disclosures and patents, as well as research into factors which influence the formation of university start-ups, highlight three main types of inhibiting factors. First, structural factors such as a lower presence of women academics in scientific areas closer to applied research or apparent barriers to the advancement of women into senior positions. Second, factors related to accessing resources, whether financial, human or social capital. Thirdly, factors related to the social construction of gender and stereotypes which surround it: traditional gender roles which assign women more household chores, the conflict between family life/work, gender profiles which present women as having greater risk aversion, a lower level of interest in money and financial gain, or different attitudes to competition.

Although these studies shed light on the participation of academic women in spin-off creation, results are sometimes contradictory and do not offer a systematic understanding of specific factors which favour or inhibit their involvement. Furthermore, impressions provided by literature regarding female entrepreneurs' access to limited human and financial resources, are challenged within the academic environment: we are dealing with highly trained women, who follow high impact publication patterns, the quality and impact of their commercial studies are the same as or better than those of male scientists and they have equal access to formal university support. So, which factors explain involvement of academic women in the creation of spin-offs is a question that still seeks an answer.

#### Method

The study adopts an institutional theory approach in attempting to develop a more holistic understanding of the participation of academic women in the commercialisation of science through spin-off creation. Based on previous studies from the fields of institutional theory and women's entrepreneurship, three institutional levels which can affect academic women's decisions to create spin-offs are identified: the macro level, related mainly to gender roles and responsibilities which society assigns to women and which affect all women entrepreneurs equally; the meso level, includes the formal and informal institutional factors related to universities in which entrepreneurial activities are carried out; and, finally, the individual level which captures aspects which can configure individual agency, such as motivation, human, social and financial capital.

The need to explore these factors in-depth and their interactions resulted in use of inductive empirical research in the Universities of Edinburgh (Scotland) and Granada (Spain). Multiple-case design, including information rich, in-depth interviews with female academic entrepreneurs and those responsible for Technology Transfer Offices (TTOs) and incubators in both universities, was used to develop a multi-perspective account. Avoiding comparisons with male counterparts and focusing on the specific context of academic women is important to comprehend the phenomenon.

#### Results and implications

The results suggest that, together with analysis of the different levels, their cumulative effect and the interactions between them represent important explanatory factors in the decision to create a spin-off. The main factors identified at both macro and meso levels affect academic women's decision to create a spin-off.



Generally, macro factors concerning social norms and gender socialisation appear negatively to condition the entrepreneurial activity of academic women, while meso factors have a positive influence only in the case of a certain group of female academics: those who do not have a stable, secure, contractual relationship with the university. Current university policies related to spin-off creation appears to support mainly researchers who have to end their contractual university employment. They offer material, financial and consultancy support which appears adequate for these researchers who often want to continue undertaking similar work and exploit their research results once their university contract has ended. Nevertheless, interviews with TTO staff in both universities showed no specific activities geared towards inculcating an entrepreneurial spirit and awareness among this particular group of researchers. The support programmes in both universities are the same for all academics. When female academics have a stable position within the university, current policies appear to act as inhibitors to their entrepreneurial interests. Thus, macro and meso factors exert pressure at the individual level and it is this pressure which explains why many academic women lack interest in entrepreneurial activities within the university context. Only when negative factors were minimised at the individual level, did women become entrepreneurs. The interplay between positive and negative influences on entrepreneurship at the macro-, meso- and individual levels is considered through exploration of specific cases from within each institution.

The main contributions of this research are threefold. First, it focuses on academic women's specific contexts, which provides a deeper understanding of unique factors which determine their participation in spin-off creation. Second, it adopts a multilevel approach and identifies factors which are included in each category, offering a more complete view of commercialisation activities of female academics. Last, it analyses how interactions between levels lead to circumstances favourable to the decision to become an entrepreneur, and considers implication for university policies and would-be academic entrepreneurs.

## Can they really have it all? Women and the Myth of Female Entrepreneurship

Caroline O'Kane

#### Principal topic

There are a number of myths associated with entrepreneurship, with an initial review of literature suggesting that female entrepreneurs are themselves perhaps one of the greatest myths. As entrepreneurship has historically been perceived as occurring within a male-dominated arena (DeMartino et al 2006; Walker and Webster 2006; Mattis 2004), the under-representation of women within academic literature and new venturing may substantiate this myth and reduce the likelihood of greater future engagement by women in entrepreneurship. As many in society do not view myths as tales, fiction or invention, but instead consider them to possess true and real qualities and believe the myth without question (Zahra and Schulte 1994), such blind devotion may help disseminate and perpetuate these myths in the entrepreneurial context, potentially creating difficulties for those falling outside the realms of the mythical 'typical entrepreneur'.

Literature suggests that entrepreneurship is particularly challenging for women, who are believed to possess less financial, human and social capital resources important for new venturing (Carter and Shaw, 2006) and to hold negative perceptions of their own capabilities (Harding et al, 2004), thus making it more difficult for them to consider start-up than men, and once trading, for them to develop and grow their business. Women may also encounter disadvantage arising from attitudinal, informational, resource and operational barriers (Westhead, 2003) and frequently need to battle stereotypes and discriminatory attitudes regarding genderappropriate careers and traditional views that a woman's place is in the home/as primary caregiver. These are views which themselves have been informed and shaped by discriminatory attitudes, stereotypical fashioning and anecdotal myths (Carter and Allen 2007) and reinforced by a male-dominated society and the media's tendency to portray primarily male entrepreneurs and business tycoons as role models.

Literature demonstrates that women are attracted to entrepreneurship as it is perceived to offer flexibility in balancing multiple responsibilities. In examining whether the reality of entrepreneurship matched their initial hopes and expectations, this paper, therefore, focuses on a myth prevalent in modern society: that women undertake new venturing in order to 'have it all', and in so doing examines other areas that may also have been informed by myth and supposition, including motives, family support and cultural attitudes towards entrepreneurs. In outlining these myths, this paper seeks to shed light upon the low level of participation

within entrepreneurship by women in Northern Ireland, and hopes to offer a more accurate appreciation of their potential contribution within new venturing.

#### Method

A qualitative methodology was used to gain insights into the reality of entrepreneurial life for 32 female entrepreneurs, who collectively had created 30 businesses across Northern Ireland. Semi-structured, indepth interviews were conducted over a two-stage process, with first stage interviews focusing on initial expectations at start-up. Key issues emerging were used to facilitate deeper investigation in stage two, which built upon earlier insights and examined the longitudinal impact of challenges for women entrepreneurs in terms of achieving the anticipated 'perfect' work/life balance and the nature of difficulties arising from their entrepreneurial environment. Interviews were recorded and transcribed verbatim, and analysed using Nvivo.

#### Results

In an ideal world, the reality of entrepreneurship, in terms of achieving a perfect work/life balance, would match the expectations of women embarking on such a career. Empirical research sought to determine whether the flexibility interviewees perceived entrepreneurship as offering helped them counteract constraints arising from family responsibilities, ascertaining whether 'having it all' was a myth or an achievable reality.

For interviewees, the reality of entrepreneurship lay far from their initial expectations. Although mostly drawn to entrepreneurship seeking flexibility, interviewees (with and without caring responsibilities) faced enormous difficulties reconciling their business with their personal life, with all but one achieving a satisfactory work/family balance. In many cases, lack of support from family and friends exacerbated difficulties, increasing isolation and frustration.

A number of interviewees wanted to start a family: whilst one believed being self-employment would fit better with family life, the remainder believed their work/life balance would suffer if they had children. One was particularly torn between her business and her biological clock, stating: "... either I don't have a family or I don't have a business. What a way to strike a balance". Many interviewees had also assumed the burden of childcare/domestic responsibilities, despite spending more time at work than their spouse/partner. For the majority, 'having it all' remained a myth, with something – most frequently their personal relationships – having to give.

#### **Implications**

The research makes important contributions to academic theory by providing valuable insights into the experiences of a sample of women entrepreneurs within one of the lowest performing parts of the UK, economically speaking.

The research also has practical implications. Empirical findings demonstrate that work/life balance was particularly problematic for interviewees with or anticipating having children, with interviewees believing the situation would deteriorate as their personal situation changed over time. There are, therefore, implications for policymakers around work/life balance issues, tax credit systems and government subsidies for childcare.

By profiling the experiences of these entrepreneurs, and identifying the barriers they encountered, it is hoped that future generations of women will engage in new venturing, that the longevity of their start-ups will improve and that advanced knowledge of barriers will assist them overcome obstacles that may otherwise overwhelm them. In this way too, some of the myths surrounding female entrepreneurship in practice might finally be laid to rest.



## Session 4C: Gender Issues in Entrepreneurship

Room: P Block 506A

Session Chair: Evan Douglas

## Beyond identification: understanding the nature of bricolage amongst diverse social enterprises

Jo Barraket

## **Principal Topic**

In this paper, we consider the nature of bricolage within eight social enterprises informed by different governance cultures (board-led and collectivist models) and at different stages of the business cycle (start up, consolidation and expansion). The aftershocks of the Global Financial Crisis continue to impact world economies (Papaemos 2009), with market uncertainty, coupled with constant shifts of government economic policy creating a myriad of opportunities for entrepreneurial ventures. Social enterprises are often created to respond to the unmet social needs attributed to changing markets and contracting public resources. Whilst recognising that there is continued definitional ambiguity about the concept, we define social enterprises for the purposes of this paper as organisations that exist for a public or community benefit, trade to fulfil their mission and reinvest a substantial proportion of their income in the fulfilment of their mission (Barraket et al 2010).

As mission-driven businesses, one of the most critical challenges social enterprises face is resource constraints. Social enterprises often utilise hybrid business structures, rely on a diversity of resource inputs and are accountable to a wide range of stakeholders in meeting both social mission and business performance imperatives (Gardin, 2006; Ridley-Duff and Bull, 2011). Access to and provision of resources from multiple sources affect pivotal strategic decisions and resource development, enterprise continuance and further growth. Prior research provides few clues regarding how social enterprises deal with these challenges and how they might overcome these and prosper.

One promising theory that evaluates behavioural responses to constraints is bricolage (Levi Strauss, 1967). Often considered a theory of resourcefulness, bricolage is defined as 'making do by applying combinations of the resources at hand to new problems and opportunities' (Baker and Nelson 2005: 333). Limited literature, however, currently studies bricolage and social enterprises (for exceptions, see Sunley & Pinch 2012; Di Domenico et al 2010; Desa 2010). this literature has identified that bricolage is utilised by social enterpreneurs as a legitimising process which enables them access to institutional support (Desa 2010) and that bricolage amongst social enterprises is consistent with traditional bricolage frameworks but also introduces new constructs of 'social bricolage' consistent with their hybrid business purpose and structure (Di Domenico et al 2010).

While this limited research on bricolage amongst social enterprises provides a useful starting point for conceptualizing resource behaviours in the field, it provides scant explanation on ways bricolage usage may be instigated within different types of social enterprise and at different stages of a venture's development. Legitimacy, for example, may be critical for ventures suffering from liabilities of newness and smallness (Stinchcombe 1965), but this may be less relevant for established enterprises with some prior success. Firm age, size and perceived stage in the business cycle (start up, growth, mature stage) (Van de Ven and Poole 1995; Covin and Slevin 1997) shape resource sets and capabilities, resource management, and decisions to instigate bricolage behaviours (Sirmon et al 2010).

Given that social enterprises rely upon multiple actors for resource inputs they are often accountable to multiple stakeholders about when and for what purposes these resources are used, and the requirements of specific structures, strategies and processes for enterprise development (Aldrich 1979). One mechanism previously unexplored in the literature is governance: the social enterprise's ability to manage both its relationships and resources. We consider governance as 'the relationships among various participants in determining the direction and performance of corporations' (Monks and Minow 1995; 1). To the best of our knowledge, no prior research has evaluated governance processes in bricolage and resource management processes more generally. Our study will examine the impact of governance and the stage of firm development in bricolage outcomes for social enterprises.

#### Method

Our research context is social enterprises in two settings – Victoria, Australia and Queensland, Australia. These states were selected because of the relatively high level of institutional support for social enterprise development and the consequent growth in social enterprise in these jurisdictions. The purposive selection of participating social enterprises sought to create points of comparison and difference based on industry orientation, stage of business life cycle, legal forms of incorporation and decision-making approaches.

Our approach involves desktop analysis of organisational documents and thematic analysis of semistructured interviews of 11 managers and directors of eight social enterprises informed by different governance cultures (board-led and collectivistic models and different stages of the lifecycle (start up growth and maturity). We employ theoretical sampling to conduct in-depth comparative case studies (Eisenhardt, 1989; Yin, 2009) of social enterprises. Since social bricolage is an emergent theme in the literature, we will inductively develop theory (Glaser & Strauss, 1967).

### **Results and Implications**

We expect to make three contributions with this study. First, we will identify different patterns of bricolage under resource constraints within social enterprises, at different stages of the firms' lifecycle. Second, we will explore how governance may affect resource access, subsequent resource combinations and deployment to enable firm fulfilment of their missions and/ or enhance firm continuance and growth. Finally, we will extend Di Domenico et al's (2010) research by articulating a revised framework for social bricolage. These initial results begin to highlight patterns and the interplay of resources and bricolage behaviours, and how governance processes may influence this relationship. A greater understanding of these relationships may assist with developing strategies for social enterprise development and sustainability.

## Intrapreneurial bricolage: a contradiction in terms or a useful construct?

Henri Burgers

## **Principal topic**

Bricolage is gaining prominence as a useful lens through which to understand entrepreneurial behaviours under resource constraints (Baker and Nelson, 2005; Senyard et al., 2012). At first glance, this concept would appear less relevant to intrapreneurs as they often have a wider variety of resources at their disposal than entrepreneurs due to the possibility of tapping into the vast array of corporate resources and contacts (Chesbrough, 2000; Shrader and Simon, 1997).

However, intrapreneurs face potential resource constraints of a different nature. Political infighting may exist between divisions and intrapreneurial projects over who gets access to corporate resources (Knight, 1987). Moreover, there may be strong dominant logics within the organisation that shape how resources are defined and used, constraining new combinations (Burgelman, 2002; Tripsas and Gavetti, 2000). Top management often decides what resources will be allocated, and may even withdraw or reallocate your resources to more attractive opportunities (Menzel et al., 2007; Corbett et al., 2007). Thus an important task for any intrapreneur is finding ways to escape or deal with those constraints (Burgelman, 1985). The works of Burgelman (1983) and Day (1994) also suggest there may be a temporal dimension in how intrapreneurs deal with constraints from the organizational context. In the earlier stages of developing an intrapreneurial idea, intrapreneurs may deliberately attempt to "fly under the radar" to avoid top management scrutiny (Burgelman, 1983). This restricts access to resources, whereas in later phases full corporate support may provide unfettered access to company resources (Day, 1994). Moreover, the intrapreneur may be involved in a project for a limited time, after which a different type of manager takes over to guide the project successfully through the next phase. We argue that the more temporary an intrapreneur's role or the project is, the more likely it is that they will make do using bricolage instead of developing a state—of-the-art solution (Garud and Karnoe, 2005).

Thus bricolage may be a useful concept for intrapeneurs, yet with the exception of Helme (forthcoming), there has been no research in this area. We attempt to address this gap by investigating if bricolage enhances performance of intrapreneurial projects, and look at the role of time and networks in this relationship.



#### Method

To deal with those aforementioned constraints on resources, networks inside and outside the firm might play a crucial role in gaining or redefining resources by gaining legitimacy or gain access to new resources (Leana and Van Pil, 2006; Arregle et al., 2007). This extends current work on network bricolage (Baker et al 2003; Baker 2007). We test the use of networks inside and outside of the firm as these may shape resource sets, resource salience and have important influences on performance (Sirmon et al., 2007). If a project or the role of the intrapreneur is temporary in nature, bricolage may be employed as a inexpensive forward looking probe (Brown & Eisenhardt, 1997) to assist with getting the job done, rather than an, advanced complex solution (Garud and Karnoe 2005). When considering the project lifecycle, we predict that concealed bricolage (Baker 2007) at the early stages of the project may assist in developing internal legitimacy and top management acceptance through demonstrating creativity and efficiency with existing resources at hand. We argue that as the project matures there is greater resource availability and further development of capabilities, and owing to this, resource orchestration processes (Sirmon et al., 2010) may instead be instigated, with less reliance on bricolage behaviours.

We test this on a random sample of over 2,000 households in Australia as part of the Global Entrepreneurship Monitor. Intrapreneurs were identified through a series of screening questions, as outlined by Martiarena (2011). This resulted in a sample of 195 intrapreneurs, who participated in a one-hour telephone interview. We used previously validated scales for our main constructs to improve validity. Factor and reliability analysis showed that the constructs were all unidimensional and had desirable Cronbach Alphas.

## **Results and Implications**

Our initial results indicate bricolage has a positive impact on performance of intrapreneurial projects. This is an important extension of bricolage theory by moving beyond the traditional focus of externally resource constrained entrepreneurs, and to begin considering internally resource constrained intrapreneurs. This may also have important ramifications for entrepreneurs facing internal constraints due to rapid growth of their new ventures. Second, we explore the role of temporality in bricolage behaviours. This begins to explore bricolage beyond its initial improvisational focus and evaluates and extends the notion of planned bricolage behaviours (Baker and Nelson, 2005). Third, our findings suggest intrapreneurs seem to make extensive use of external networks, yet intrapreneurial project performance is enhanced via internal networks. This provides support for the concept of network bricolage, in that intrapreneurs should make do with existing internal networks rather than resource seeking through utilising external networks. In short, we illustrate how intrapreneurs can use bricolage to enhance project performance and provide fruitful avenues for further research by extending bricolage theory to the intrapreneurial context.

## Born unfnished: Boundaries of Bricolage Effectiveness

Julienne Senyard

#### **Principle Topic**

In recent years the resource based view of the firm has been established as one of the most dominant theories in both strategy and entrepreneurship literatures for explaining firm competitive advantages. The theory suggests resources need to be valuable, rare/scarce, inimitable/costly-to-copy/non-substitutable, and organised for value creation in order to achieve a competitive advantage for the firm (Barney 1991). It however, remains strangely silent about initial resources and their combinations (Mosakowski 1993). Kraaijenbrink, Spender and Groen (2010) argue that further clarification is needed on the process of resource set creation in RBV and how resources are transformed to create a competitive advantage (Priem and Butler 2001). More recent theories are beginning to attempt to extend RBV processes through the resource orchestration framework (Sirmon et al. 2010) which considers the role of managers' actions to build competitive advantage. The existing resource orchestration framework begins to illuminate some of the critical processes within resource decisions. Yet is this framework suitable for nascent firms during firm creation?

The resource orchestration framework evaluates five distinct processes for resources including search/selection, structuring, bundling, and leveraging firm capabilities, and configuration/deployment of resources to build competitive advantage. Upon closer examination of the literature and case responses

we noted some discrepancies between the resource orchestration framework and nascent processes and questioned the suitability of some these processes for nascent firms. For example, following RBV literature, this model assumes of a pre-existing bundle of heterogeneous resources and describes a structuring sub processes of acquisition/making investments and the ability to develop co-specialised assets in house (Sirmon et al. 2010:4). This is problematic for the majority of nascent and young firms, who often experience challenges in resource development and deployment owing to resource constraints (Aldrich et al 1999; Shepherd et al 2000; Baker and Nelson 2005). It further describes extensions of managerial and dynamic capabilities for change enabling competitive advantage. Implicit in the definitions of capabilities used in the model are concepts of routinisation and co-ordination (Teece et al. 1997; Eisenhardt and Martin 2000; Helfat and Peteraf, 2003). Prior research indicates not all nascent firms are developed in a logical linear fashion and often a firm develops and changes as a result of unexpected opportunities, surprises and as a consequence of some unplanned events or action (Brush, Manolova and Edelman 2007; Easley 2004), making routinisation of salient capabilities (if available) difficult if but almost impossible.

In alternate theorizing Winter (2003:992) argues it is possible to instigate firm change without capabilities in response to unpredictable critical events. He describes these behaviours as ad hoc problem solving that are not highly patterned or repetitious. Current theories including bricolage and effectuation also highlight similar non linear responses to uncertain critical events in firm creation. These alternate behaviours and resource decisions occur in response to critical events (Van de Ven and Poole 2001) and are what we consider in this paper. Our initial results illustrate and extend additional resource processes previously not articulated in the current theorising of resource orchestration.

#### Method

Sirmon et al.'s (2010) resource orchestration work is built around work in Sirmon et al.'s (2007) resource management framework. Processes outlined in this framework suggest that resource management include structuring the portfolio of resources, bundling resources to build capabilities and leveraging managerial capabilities in the marketplace to create competitive advantage. A further extension of this framework combined the complementary work of Helfat et al.'s (2007) asset orchestration framework which consists of two primary processes—search/selection and configuration/ deployment, the use of dynamic capabilities to create value.

We used case study methodology (Eisenhardt, 1989; Yin, 2003) to conduct our research. We developed seven case studies of firms currently participating in the CAUSEE project: a large scale longitudinal study of venture start-ups in Australia. We chose firms in two industries -- renewable energy (solar) and the construction industry (sustainability consulting) -- to minimize heterogeneity issues (Davidsson 2006). To formulate a systematic approach towards resource orchestration we developed semi structured interview questions. A two step approach was employed in this research. First, 9 scoping interviews with key industry stakeholders occurred prior to case studies. Second, using a process short question approach modified from Lichtenstein and Brush (2001), we conducted multiple semi-structured interviews (49 in total) for each case. We triangulated our data to overcome potential biases by relying on a single source and compared that with CAUSEE survey data, onsite visits and secondary documentation (website analysis, and business plans where available).

#### Results and implications

Our initial results highlight additional subprocesses including a range of resource access, recovery, conservation and additional divestment behaviours including the reuse of previously discarded/retired resource sets still on hand. Using process models as a useful lens through which to understand resources we also take into account resource set changes through operations which is not articulated in the current model. We argue that these new additional processes may occur before the outlined resource orchestration processes in Sirmon et al (2010): for example, our results indicate nascent firms placing greater attention on resource versus capability deployment in the early stages of venture creation. As resource sets evolve, we found that firms may then transition to resource orchestration behaviours. This extension on the resource orchestration begins to provide some boundary conditions on resource behaviours under constraint and assist in a more generalisable framework to suit a broader range of firms and their resource decisions.



## Session 4D: Corporate Entrepreneurship

Room: P Block 506

Session Chair: Rene Bakker

## The role of entrepreneurial orientation on corporate performance: A moderated mediation model

Mojtaba Hosseini

## Principle topic

Entrepreneurial orientation (EO) becomes the most popular topic in the field of entrepreneurship since the work of Miller (1983) who defined the entrepreneurial orientation as a unidimentional reflective measurement, which includes innovativeness, proactiveness and risk taking. EO is a tendency-based measurement and indeed, it indicates the tendency of companies toward being innovative, acting proactively and taking risks.

To date, the most important concern of the EO studies has been investigation of the effect of EO on corporate performance. In spite of, many studies that have been done on this subject including several Meta analysis studies, steel there are some ambiguities in the area. First, most EO studies have been conducted in the united states ((Dess, Pinkham, and Yang 2011) and it remains unexamined in some important countries like Brazil, India, Middle East countries, Latin America, and Sub-Saharan(Wales, Gupta, and Mousa 2011). Therefore, future studies should concentrate on countries that were been overlooked previously (Wales et al. 2011). Second, however several empirical studies have showed the positive relationship between EO and performance, but there are plenty of debates regarding this relationship (Smart and Conant, 1994). Researchers have tried to justify this confusion by problem of performance definition (Bamford et al., 2000), contingency effects of moderators like environmental factors (Miller, 1983) and mediators like organizational learning (Wales et al. 2011).

In this paper, to answer the first gap, we have tried to conduct our study in Iran as a Middle East country. To reply the second one, we have applied moderator factors (environmental dynamism (ED) and environmental hostility (EH)) and mediator factor (corporate entrepreneurship (CE)) simultaneously in a moderated mediation model. In our suggesting model, CE mediates the relationship between EO and Performance. Performance can be measured in three ways: perceived financial, perceived non-financial and archival financial (Rauch et al. 2009). To gain a better insight of corporate performance and to avoid the performance measurements problem, we applied a measurement that includes perceived financial and non-financial aspects.

In contrast with EO that is a tendency-based (input-based), Corporate entrepreneurship is an activity-based (output-based) measurement, which involves engaging in intrapreneurial activities such as corporate venturing and self-renewal (Antoncic and Hisrich, 2001) and innovation (Zahra, 1993). Our model underpins a simple logic; inputs must convert to proper output before it can affect other strategic variables. In other word, tendency toward being entrepreneurial should translate to entrepreneurial activities to affect the corporate performance. Therefore, the corporate entrepreneurship that involves behavioral aspects of firmlevel entrepreneurship can be a mediator that transforms the impact of EO - which shows the dispositional facets of firm-level entrepreneurship - on corporate performance.

One of the most important factors for defining a mediator effect is the correlation between independent and mediator variables (Wu and Zumbo 2007). Several studies show the intense correlations between EO and CE (for instance, Simsek, Veiga, & Lubatkin, 2007). Hence, CE can be a proper mediator in the EO-Performance relationship.

Based on previous studies, these relationship can be affected by contingency environmental factors includes environmental hostility and dynamism (Miller & Friesen, 1982). We will examine the moderator affect of these variables on both EO-CE and CE-Performance relationships.

#### Methodology

We used of existing validate measurements to gauge all variables. We used of Covin and Slevin (1989,1991), Zahra (1993) and Simsek et al (2007), Miller & Friesen (1982), and Reinartz et al. (2004) measurements to measure EO, CE, environmental dynamism, Environmental hostility and corporate performance in turn.

Our sample includes Small and Medium size Enterprises (SMEs) from food industry in Iran. 215 questionnaires were distributed. About 138 of them were filled out and returned.

Our suggesting model is a moderated mediation (James and Brett, 1984) model. We have used of Baron and Kenny (1986) and Muller, Judd and Yzerbyt (2005) methods to confirm and test the model. To additional testing and examine the significance of the moderated mediation links we have applied the Preacher, Rucker, and Hayes (2007) technique and their special SPSS macro who developed to analyze these kinds of relationships.

## **Results and Implications**

Data gathering and elementary testing for this paper are completed but final analysis and comparison of the conclusions with previous empirical studies have been remained uncompleted yet. Preliminary data analysis shows the initial confirmation for mediating role of CE to transform the EO to corporate performance. However, additional testing reveals the statistical significance of this indirect effect but further analysis will be needed to finalize these conclusions. Initial analysis has also shown a partial role of environmental factors to moderate the relationship between EO-CE and CE-Performance.

## Does High performance HR practices promote middle managers entrepreneurial behaviour: The mediating role of knowledge collecting and donating actions

Michael Mustafa

## **Principal Topic**

Middle managers' entrepreneurial behaviour has been conceptualised as core aspect of and antecedent for effective corporate entrepreneurship (Hornsby et al., 2002; Kuratko, Ireland et al., 2005). In this respect, King, Fowler, and Zeithaml (2001) and others have argued that middle managers reconcile top managers' perspectives with implementation issues that appear at lower management levels (Kuratko, 2010). Therefore, middle managers entrepreneurial behaviours can make a valuable contribution to the process of strategic change and organisational renewal and to fostering entrepreneurial activities.

Despite their critical importance, middle managers' entrepreneurial behaviour, there is still a lack of understanding of how it actually comes into being. Scholars agree that middle managers' entrepreneurial behaviour is fostered by a combination of individual and organisational factors (Kuratko, 2010; Kuratko, Ireland et al., 2005; Naffziger et al., 1994). Existing research on corresponding individual-level antecedents has mainly focused on individual characteristics such as personality traits (Holt et al., 2007; Rauch & Frese, 2007). On the organisational level, research has identified five main organisational antecedents of entrepreneurial behaviour (Hornsby et al., 2002; Kuratko, Ireland et al., 2005). These factors affect the internal organisational context, thus determining interest and support of entrepreneurial initiatives (Burgelman, 1983; Hornsby et al., 2002).

Goldsby et al., (2006) stated that people are certainly "influenced but not dominated by their environments", and "still have to make behavioral choices" (p. 24). This suggests that middle managers specific actions and context in which they are made, may determine their interest in entrepreneurial activities (Burgelman, 1983; Hornsby et al., 2002). However, hardly any studies have explicitly investigated the specific actions of middle managers in regards to their entrepreneurial behaviours. Similarly, while studies have tended to focus on the organisational antecedents to entrepreneurial actions (Horsnby et al., 2002), little empirical consideration has been given to HRM practices influence on middle managers entrepreneurial behaviours (Hayton, 2005). In this study we focus on middle managers knowledge sharing in the form of their: donating and collecting actions (Hornsby et al., 2009, Nonaka & Takeuchi, 1995). Consequently, few studies have investigated what facilitates middle managers knowledge sharing behaviours nor their influence on their entrepreneurial behaviour.



Schuler (1986) argue that entrepreneurial behaviours may be fostered through sets of HRM practices. Accordingly, the HRM literature has sought to pinpoint characteristics of optimal HRM systems. As a result, a high-performance approach to HR management has emerged. High-performance HR practices work most immediately through employee attitudes and behaviours (Sun, Aryee, & Law, 2007). However, such relationships may be oversimplified (Bowen & Ostroff, 2004; Nishii & Wright, 2008). In particular we suggest that High-performance HR practices creates an organisational climate that encourages informal and discretionary behaviours such as knowledge collecting and donating. In summary we propose that middle managers perceptions of high performance HR practice foster their entrepreneurial behaviour. In addition we propose that this relationship is mediated by middle managers knowledge collecting and donating actions.

#### Method

We addressed our research objective, by collecting data from middle managers attending continuing education/training programs a public and private universities throughout Malaysia. The authors distributed 600 questionnaires over a three-month period in 2011. Of the 323 returned questionnaires, 31 were incomplete leaving 292 valid and complete questionnaires are for quantitative analysis. It represented a response rate of 48.7%. Of the 292 respondents, 49.0% were male and 51.0% were female.

Besides the control variables, middle managers entrepreneurial behaviour (the dependent variable), high performance HR practices (the independent variable) and middle managers knowledge collecting and donating behaviour (the mediator variables) were measured using a five point Likert scale (1= strongly disagree to 5= strongly agree). All measure and items were taken from established measures in the existing literature. We tested the mediational model of middle managers knowledge collecting and donating as mediators of the relationship between high performance HR practices and middle managers entrepreneurial behaviour, using the principals outlined by Baron and Kenny (1986) and Preacher and Hayes (2008).

## **Results and Implications**

We found that high performance HR practices relates positively to the middle managers to both their knowledge collecting and donating actions and their entrepreneurial behaviours. However, it appears that only middle managers knowledge donating actions is a partial mediator to attenuate this positive relationship.

Several theoretical contributions emerge from the findings of this study. First, the study contributes to entrepreneurial behaviour literature. Middle managers knowledge collecting and donating actions were introduced as critical factors that trigger their entrepreneurial behaviour. Our results showed that only middle managers knowledge donating actions matters. This supports prior arguments that individuals' decisions matter with regard to entrepreneurial behaviour (Goldsby et al., 2006; Kuratko, Ireland et al., 2005).

Secondly, we add to the field by investigating HR practices in the context of middle managers' entrepreneurial behaviour. The current entrepreneurial behaviour research has not specifically addressed how HR practices can facilitate individual, as opposed to organisaitonal level, entrepreneurial behaviours. Results show that high performance HR practices have direct effect on middle managers' entrepreneurial behaviour. Furthermore, by investigating the mediating effects of middle manager knowledge collecting and donating actions, we extend the existing literature by opening up the "black box" which constitutes relationship between HR practices and entrepreneurial behaviour.

Thirdly our study contributes to the literature on the HRM-CE relationship in general. Majority of such studies have remained conceptual in nature with few empirical studies investigating the proposed relationships. Our quantitative approach address such issues and provides further insights into the underlying mechanism through which HR practice facilitate entrepreneurship.



## Thursday, 7th February 2013

Session 5: 11:00am - 12:30pm

**Session 5A:** Various Themes

Room: P Block 504

Session Chair: Natashja Steenkamp

How the environment affects opportunity recognition by entrepreneurs at the bottom of the pyramid

Roxanne Zolin

Opportunity recognition at the bottom of the pyramid: Case Study of Asset Based Community Development

## **Principal Topic**

While some large corporations are identifying and exploiting business opportunities at the 'bottom of the pyramid' (BOP) (Prahalad, 2007), there is an army of BOP entrepreneurs who have the potential to transform developing economies, if they can identify and exploit business opportunities. With the reported success of microfinance, increasingly we are looking towards entrepreneurship to help lift developing countries out of poverty (Alverez, 2012).

BOP entrepreneurs could have unidentified resources that could lead to the recognition of radical new opportunities. This study asks what affects Opportunity Recognition by BOP entrepreneur s in developing economies. To investigate this research question we conduct a case study of a new micro-finance and enterprise development program in Mbuji-Mayi, in the Democratic Republic of the Congo, the poorest city in the largest and arguably the poorest country in Africa. This program used an Asset Based Community Development Approach, which increases empowerment of the community. In this paper we review the literature of BOP and describe the case study in DRC. We describe the initial results of the program and discuss the effects on opportunity recognition and implementation. We provide propositions for further research.

#### Literature review

Shane and Venkataraman define entrepreneurship as the scholarly examination of the way opportunities to create goods and services are discovered, evaluated and exploited (2000). Opportunity Recognition is proposed to have five basic elements (Csikszentmihalyi, 1996): preparation, incubation and insight relate to discovery of the opportunity, and elaboration and evaluation relate to the formation of the opportunity. Identification of assets is part of preparation, the first stage of opportunity recognition. Failure to identify available assets could mean failure to identify attractive opportunities.

#### Asset Based Community Development

Asset Based Community Development (ABCD) is a "strengths-based" approach to community development (Healy, 2005), which is designed to bring a community together through a process of asset identification to develop community relationships and instill trust, hope and self-efficacy and to develop shared objectives (Kretzmann & McKnight, 1993). Healy (2006) proposes that ABCD has four key principles:

Change must come from within the community;

Development must build upon the capacities and assets which exist within the community;

Change should be relationship driven, and

Change should be oriented towards sustainable community growth.

Kretzmann and McKnight (1993) described five steps to ABDC:

Asset-mapping: Mapping completely the capacities and assets of individuals, citizens' associations and local institutions

Building internal relationships among local assets for mutually beneficial problem-solving within the community

Asset-mobilization: Mobilizing the community's assets fully for economic development and information-sharing purposes

Building a vision: Convening as broadly representative a bgroup as possible for the purposes of building a community vision and plan

Establishing external connections: Leveraging activities, investments and resources from outside the community to support asset-based, ocally-defined development (p 345).

The key technique of ABCD is asset mapping, a process of identifying primary, secondary and potential building community blocks. Primary building blocks are assets within the community, like its members and their skills, secondary are located within the community but owned outside, like a railway station and potential are wholly outside but may be acquired for use.

#### Methods

Our research goal is to investigate the effects of ABDC on opportunity recognition at the BOP. To investigate this research question we started by conducting a case study of a micro-enterprise and enterprise development in the Democratic Republic of the Congo (DRC). This illustrates the ABCD. Finally we describe the results of the ABDC approach in terms of opportunities identified and implemented and generate propositions.

#### Results

The AusCongo Network, Inc started a community and business centre in Mbuji-Mayi in April, 2011. They rented a building and hired a Centre Manager. ACN started their Asset Based Community Development program in September, 2011. Initial meetings were held, which attracted up to 800 participants. Materials were distributed and the community implemented the program, which included Kretzman and McKnight's five steps of asset-mapping, building internal relationships, asset-mobilization and building a vision and establishing external connections.

The outcome of this was the formation of six large groups primarily representing interest in a particular industry. As you can see in Table 1, the self-forming industry groups have identified and implemented numerous business opportunities. These were initiated within a period of 6 months. During this time no external funding was provided to the groups or individual businesses for micro-finance.

Based upon this we propose connections between the social networking and empowerment principals of Asset-based Community Development process and opportunity recognition and implementation.

Proposition 1: Asset mapping increases self-efficacy and empowerment

Proposition 2: Building internal relationships increases trust and empowerment.

Proposition 3: Asset mobilisation increases empowerment.

Proposition 4: Vision building increases opportunity recognition.

Proposition 5: Establishing external connections builds empowerment

Proposition 6: Empowerment increases Opportunity Recognition

The implications from this study, should our findings be confirmed through empirical analysis, is that aiding development in under-developed countries may not be solely a matter of financial contributions. This approach challenges any top-down, external approach in favour of facilitating empowerment. Of course more research is needed to test our propositions. Theoretical implications may include contributions to entrepreneurship theory in developed countries, where attention is focussed on human and social capital of nascent entrepreneurs, but little has been done with empowerment theory or asset based community development.



## Clustering: A uniquely Australian experience

Timothy Hall

#### **Abstract**

Cluster examples are shown to exist across the developed and developing worlds with many governments seeing clusters as a way in which to promote growth. This in turn has resulted in a number of cluster case studies and subsequent cluster theories and models which have informed cluster practioners and policy makers. Many of these cluster examples come from Europe and the United States of America which have markedly different contexts to the Australia. This paper considers if the uniqueness of the Australian cluster context is substantially different to that of the cluster examples reported in the cluster literature and if as a result the application of theory and examples in Australia is limited.

# Social Business Models in Developing Countries - The relationship between type of value creation and levels of vertical integration

Anna Krzeminska

#### Motivation

Although the market economy has brought wealth and prosperity to many countries, still, many people live in poverty, especially in developing countries (CIA, 2012). Among the various approaches to alleviate poverty, the concept of social business (SB) has just recently started to attract academic attention. Social businesses combine the social value generation of charity with financial self-sustainability of traditional profit-oriented businesses (Yunus, 2008). While social businesses have to sell goods or services to cover their costs, their financial and ownership structure undermines possibilities to appropriate returns from the business (Yunus & Jolis, 2007; Yunus, 2008; Yunus & Weber 2010). This combination of profit generation with the suppression of profit extraction from the business is a unique characteristic of social business. The suppression of profit extraction delineates SBs from for-profit businesses and most bottom-of-the-pyramid ventures (Prahalad, 2005), while the need to operate a viable business model delineates SBs from NPOs and governmental or non-governmental organizations.

The duality of objectives confronts SBs with the challenge of creating two types of value: social and financial value. A major contribution to social value creation in developing countries is the inclusion of local stakeholder groups as partners into the value creating activities of the business as a means of livelihood for the poor (Yunus, Moingeon & Lehmann-Ortega, 2010). At the same time, financial value has to be created by a high cost efficiency as the poor are extremely price sensitive and have a very low ability to pay (Karamchandani, Kubzansky & Frandano, 2009; Kubzansky, Cooper, & Barbary, 2011; Prahalad, 2005). However, local value chain partners are often inefficient or even lack completely and a weak institutional environment may lead to unreliable services from local value chain partners (Parmigiani & Rivera-Santos, 2011). While efficiency considerations may suggest lower levels of vertical integration, the inclusion of stakeholders and the lack of efficient external partners suggest or may even enforce higher levels of vertical integration (Parmigiani & Rivera-Santos, 2011). Thus, the decision to integrate versus externalize value creation is critical for social business models (Yunus et al., 2010). The aim of this study is to explore the relationship and potential trade-offs between the type of value created (social, financial, and blended) and the level of vertical integration (integration, network, transaction) in social business models in developing countries.

Recent literature has mainly proposed different classifications and typologies of business models in social enterprises in general (Alter, 2008, Sommerrock, 2010) and social businesses in particular (Karamchandani, et al., 2009; Kubzansky et al., 2011; Yunus et al., 2010). While typologies are useful as a first step that helps designing social business models, they are limited in their capacity to provide specific recommendations how to design the interplay and solve potential trade-offs between the type of value creation and the level of vertical integration.

The results of our study will produce valuable insights for the strategic design of existing and future social business ventures and can be developed towards business models that serve as role models for existing and prospective SBs (Baden-Fuller & Morgan, 2010).

## Research Design

To identify emerging theories in new research areas we perform a meta-synthesis of 10 qualitative case studies from developing countries (Hoon, 2012; Le & Schmid, 2012; Eisenhardt, 1989; Eisenhardt & Graebner, 2007). To account for a variety of potential SB model patterns our theoretical sampling allows us to create different subsamples based on, e.g., SB typologies (Alter, 2008), product versus services offerings, and Grameen versus non-Grameen cases.

For each case we code the relationship between the type of value created (i.e., social, blended, financial) and level of vertical integration (i.e., integration, network, transaction). We do so by analyzing 8 elements of the social business models in detail. We use the business model concept of Osterwalder (2004) that consists of (1) resources, (2) activities, (3) value proposition, (4) offerings, (5) customer relationship management, (6), channels, (7) customer segments, and (8) revenue. We chose this model because it is comprehensive, is proven and tested by many practitioners (Osterwalder, Pigneur & Clark, 2010) and was already used to describe social business ventures (Humberg, 2011).

While the financial value is identified through indicators of efficiency, the social value is identified through the integration of stakeholders in the value creation and the creation of social benefits for them (Hamel, 2002). The level of integration indicates whether value creation is performed by the SB itself (integration), through network partners (network), or externally by suppliers (transaction) (Amit & Zott, 2001). Coding and analysis are done simultaneously (Eisenhardt, 1989; Glaser & Strauss, 2008). After analyzing each case separately, we use a cross case analysis to identify patterns within the business model designs. Based on the patterns in our data we will propose testable hypotheses on the relationship between the type of value created and the level of vertical integration in social business models in developing countries.

This study is work in progress. We are currently in the process of coding and will finish it by 01/09/2012. Subsequently we will analyze the data to interpret the results and generate testable hypotheses until the 30/10/2012. Therefore we will be able to present our research results in a full paper by 30/11/2012.



Session 5B: Family Business

Room: P Block 505

Session Chair: Pia-Shou Nielsen

#### Successful ownership succession in family-owned businesses

Lars-Goran Sund

#### **Principal Topic**

Any definition of family-owned businesses (FOBs) seems to lead to the same conclusion, i.e. they are of major importance for the economy of each country. Despite the importance of FOBs, only about 30 per cent are transferred to the descendants of a founder. It should be mentioned, though, that some late research results indicate that the survival rate of FOBs may be higher (Stamm & Lubinski, 2011). Nevertheless, a low rate of intergenerational ownership successions highlights the importance of research on measuring the outcome of such events. However, we have no established method for evaluating successful succession. The objective of if this paper is to further explore what is meant by a successful succession. Previous definitions have dealt with intergenerational leadership transfers and success is, after the event, measured either subjectively or objectively. The former approach refers to whether some close stakeholders are satisfied with the process and/or outcome (Sharma et al 2001, 2003a). The alternative viewpoint, an objective success, is decided in relation to the impact on business performance (Pitcher et al, 2000).

## Methodology/Key propositions

This paper is mainly conceptual and based on a literature review. However, the results are supported by descriptive results from an empirical study. We suggest that an alternative to measuring the outcome is to establish efficiency requirements that should be reached before a succession takes place. As tactical goals these can, ones achieved, function as tools to reach the strategic goals, namely to:

Avoid a negligently performed ownership succession which can alert potentially powerful close stakeholders, such as co-owners supported by transfer restrictions, and distant non-close stakeholders, for example tax authorities relying on mandatory legislation (Sund & Melin, 2012; Bjuggren & Sund 2012).

Decisively enhance the possibility of an intergenerational ownership succession and running the business afterwards.

Contribute to achieving satisfaction among close stakeholders, in order to enhance future cooperation in the interest of the business.

Contribute in promoting business performance. In this sense, also the opinion of non-close stakeholders, such as suppliers and customers, can make a difference.

In our opinion possible tactical tools, or efficiency requirements, are the following:

- Achieving a propensity of the incumbent owner to step aside and a willingness of the successor to take over.
- Providing adequate compensation, when necessary, to the older generation in order to uphold their standard of living, as well as to siblings that do not become new owners.
- The total cost of the succession do not impede risk willingness among the owners and the capacity of the firm to make investments.
- 4. Assuring that the new owner(s) receive a majority ownership. This power base is necessary if s/he or they wish to function as active owner(s).

All close stakeholders should – at least – accept the potential outcome of the ownership succession.

Our reasoning is supported by illustrations from an empirical study of the opinion of 143 majority shareholders in Swedish FOBs. The survey was sent to 425 companies which had made a succession of ownership. The response rate was 34 per cent. Respondents were the majority shareholder, with approximately one third (30.8%) from the older generation and two thirds (69.2%) from the younger generation. The succession took place within the family during the lifetime of the older generation on 127 instances (88,8%); remaining cases were either through inheritance or sale to an outsider. All successions were carried out between 1979-2009, with 76% occurring after 1998.

## Results and implications

We conclude, dealing with intergenerational ownership succession, that the two mentioned post-succession measurements are not adequate. Due to the heterogeneous scenario of influencing factors it may even be futile with such measurements. Instead we emphasize a pre-ownership transfer approach, i.e. a set of efficiency requirements molded in a way that will decisively enhance the realization of an intergenerational ownership succession and running the business afterwards. However, despite our critique, we are content if the proposed requirements eventually can contribute to stakeholder satisfaction and business performance.

Further, postulating pre-succession efficiency requirements will contribute to focus the efforts of the close stakeholders and thus enhance the preparations for the succession. Post succession estimates, i.e. satisfaction with the process or outcome and the impact on business performance, are too vague as goals in an environment where each stakeholder can be expected to be mainly occupied with promoting a self-interest. Also the impact of many other influential circumstances, such as business opportunities, will blur the results. To conclude, pre-succession requirements would contribute to reaching also favorable post-succession estimates.

## Financing, Firm Size and Scale Efficiency: A Study of Family and Non-Family SMEs

Francesco Barbera

#### Principle topic

It is well known that small to medium sized enterprises (SMEs) in general have difficulties accessing finance, but the literature which examines how family ownership may mitigate or enhance these difficulties remains largely dispersed and anecdotal in nature. Furthermore, the studies that do draw upon theory do so in an ad hoc manner and do not consider a holistic view of the family firm's financing decisions. By examining recent advances in the family business literature regarding the overarching paradigm of socioemotional wealth (Gomez-Mejia et al. 2007; 2011) and the various behaviours by family owners which result from the preservation of such wealth, this study develops and tests an argument on how these relatively unique tendencies may manifest themselves in the financing decisions of family owners and ultimately the performance outcomes of family firms.

Specifically, this study argues that the tendency of family owners to pursue non-economic objectives will influence their composition of financing, their scale of production, and ultimately their efficiency. Recently, Gomez-Mejia et al. (2007; 2011) have comprehensively referred to these non-economic objectives as the preservation of Socio-Emotional Wealth (SEW). SEW, as defined by the authors, refers to the non-financial aspects of the firm that meet the family's affective needs, such as identity, the ability to exercise family influence, and the perpetuation of the family dynasty. Fundamental to this approach is the notion that firm make choices depending on the reference point of the firm's dominant principles; hence family owners evaluate problems in terms of assessing how actions will affect their socio-emotional endowment, or more broadly speaking, their stock of affect-related value that is ultimately derived from their control over the firm.

For example, using a socio-emotional reference point, family SMEs, relative to their non-family counterparts, are likely to have a more pronounced priority on maintaining family control. As extracting SEW benefits from the firm necessitates a high level of owner sovereignty, a fundamental condition to the maintenance of SEW is for family owners to retain control of the firm. Thus, in family firms, owners are expected to have a much stronger control motive than those in non-family firms. Considering that the expansion of firm size brings about some loss of control, family firms may grow at a slower pace, and thus have a tendency to be smaller in size relative to their non-family counterparts.



Although recent publications in top tiered journals clearly demonstrate that the concept of SEW has gained considerable momentum in the last few years, noticeably missing in the literature is how the pursuit of various SEW objectives might in turn influence the financing decisions of family owners. These challenges pertain to both family and non-family owned SMEs alike; however, as the theoretical basis for an SME financing gap relates to issues of asymmetric information, agency and transaction costs, as well as risk and control aversion, we expect that the behaviours associated with the maintenance of SEW might affect these financing challenges, particularly for family firms. Such a framework highlights an important, but fundamentally unexplored, channel through which the socio-emotional wealth considerations of family owners may affect their conduct, which in turn will affect firm efficiency.

#### Method

Using the Australian Bureau of Statistics' Business Longitudinal Survey (BLS), which consists of over 9000 family and non-family SMEs across multiple industries, this study employs Data Envelopment Analysis (DEA) techniques to measure both the technical as well as the scale efficiency of all firms. Such an approach is founded in well-established economic theory and offers a unique method of separating the potential effects of firm size from performance. The DEA approach allows this separation while at the same time avoiding the common endogeneity problems associated with the task.

Econometric methods such as panel data multi-regression and reduced form systems equations analysis are then used to compare family and non-family firms, as well as to establish the statistical links between composition of debt and equity finance, the scale of the firm, and technical efficiency.

## Results and Implications

Preliminary results show that, with regards to composition of finance, family SMEs prefer internal, rather than external, sources of both debt and equity finance. Controlling for various factors such as industry, age, capital structure, and other covariates, such preferences translate to a significantly lower quantum of finance raised by family firms as compared to their non-family counterparts. A lower quantum of finance held by a firm is highly correlated with a smaller firm size. These results are robust to multiple measures of size.

The notion that family firms are smaller is not new; however, despite the well-established links between owners' financing preferences and firm size, as well as the descriptive links between family ownership and a smaller firm size, surprisingly very little research has investigated how firm size may be a direct outcome, rather than an antecedent or moderator of family owners' ability and willingness to maintain SEW. One of the reasons for this is that most comparisons between family and non-family firms focus on performance, rather than size, differentials.

With regards to performance, the DEA efficiency computations reveal that family firms on average are less technically efficient than their non-family peers. When we decompose this inefficiency into two components, 'pure' technical inefficiency and scale inefficiency, we find the largest component of family firm inefficiency is due to scale. In other words, family firms are not reaching the most productive scale size, and as a result are paying an efficiency penalty.

## Influencing innovation in SME's: from designer to transitional engineer

Erica Pozzev

#### **Principal Topic**

The need for firms to stay afloat in an increasingly competitive global market requires consistent re-evaluation of existing strategies as well as the creation of new visions and alternative scenarios (Lockwood, 2010; Matthews and Bucolo, 2011). More importantly, firms need to have the flexibility and knowledge to continually adapt to changing customer value propositions and needs. Emerging as a very valuable asset to the growth and management of these issues is the role of the designer. Traditionally seen as a departmental role, the designer can transform customer insight into unique and sustainable value propositions, which are simultaneously mapped to all parts of the business model. Understanding and managing the changing relationship between designer and industry is integral to successful innovation and change management within business. While some practical applications of design entrepreneurship have evidenced its success

within business enterprise, there is still much to be learnt about how firms instil a culture of innovation (Matthews and Bucolo, 2011; Bolton, 2009, Bucolo and Matthews, 2011).

This paper presents a case study within one family-owned SME investigating the challenges and barriers to becoming an entrepreneurial, innovative company through design. It outlines a practice-led methodology with the aim to develop key insights into how small to medium enterprises can learn, optimise and capitalise on the process of becoming leading innovators. The role a designer or entrepreneur plays in striving for innovative change within business enterprise should recognise the unique organizational characteristics that could make the path to becoming an entrepreneurial company challenging. In this case study, the family owned affect on organisational learning, leadership and culture are important aspects influencing how the designer navigates the industry engagement.

#### Method

The project duration is one year with the external entrepreneur and researcher being embedded (4 days per week) within the firm. The longitudinal immersive process challenges the mentor to continually reflect on the effectiveness of techniques and approaches and allows the scope to test more than one method of data collection (Costello, 2011). This is particularly important, as a key objective of the research is to see how different approaches elicit barriers or open doors to innovate.

Fixed techniques will include workshops and qualitative interviews. Of focus to this paper however is a series of qualitative interviews with inter-departmental teams at the 3rd and 9th month mark within the 12-month context. These first round interviews sought insight into how the company operates, the goals and priorities as well as the brand attributes. The 9-month stage interviews will seek to understand employee's perceptions after exposure to various entrepreneurial collaborative methods and how they effectively or ineffectively aided the company in becoming innovatively 'tuned'.

### **Results and Implications**

Some indicative insights have emerged from the first phase research (3 month) of qualitative interviews with inter-departmental employees of the case firm. The major themes include: the firm's vision for growth, moving from reactive to proactive design, overcoming silos and the framing of innovative possibilities.

The initial analysis shows the firm's vision for growth as a key barrier to enabling entrepreneurial growth. If the people of a firm cannot envision the firm itself as growing beyond the current activities, innovative strategies will not be driven in the long term. Moving from proactive to reactive design was also seen as a key factor in allowing the firm to move beyond a dominant product focus to one that is shaped by closer contact with the market, driven by knowledge value and not product value alone. Overcoming silos is problematic in many firms seeking growth; the interviews revealed a need to establish stronger policy and audited training structures. The greatest benefit of this is to align internal employee's expectations and create a level platform of knowledge – ultimately leading to a fundamentally different customer experience. The framing of innovative possibilities was seen as a key turning point in enabling entrepreneurial growth. The preliminary analysis showed that a renewed vision of what the firm 'could be' is really the start of the entrepreneurial journey as it signals the transition beyond the daily activities that provide financial stability. Meaning that for the firm to get to a point where they can step away from the core business activities to explore new opportunities, the challenges previously mentioned including a firm's vision for growth, moving from reactive to proactive design and overcoming silos need to be addressed first. Subsequent interviews will explore how these themes have changed as well as shaped the firm's receptiveness to entrepreneurial growth and innovative opportunities.

Empowering firms to find profitable and innovative opportunities and then drive those autonomously will become a fundamental skill of future entrepreneurs. What remains to be understood however is how that transformation takes place, meaning what strategies are best in navigating typical challenges like organisational learning, leadership and firm culture. Also critical to the engagement, is understanding who is the best person with the appropriate skills to lead that journey.



## **Session 5C:** Resource Acquisition

Room: P Block 506A

Session Chair: Julienne Senyard

# A "resource mapping tool" for start-ups in the for-profit and not-for-profit sectors: an exploratory study

Peter Balan

#### **Principal Topic**

There has been a great deal of interest in identifying the resources that are needed for start-up enterprises to be sustainable and successful. Categories of resources have been proposed in the resource based literature (Barney 1991), as well as the field of entrepreneurship (Dollinger 1995, 2007). In particular, Greene, Brush and Brown (1997) drew on the literature to propose a framework comprising human, social, organisational, technological, financial, and physical resources to map the resource requirements of enterprises on their "pathways of development" (Brush, Greene & Hart 2001, p. 69). This framework was further developed in the context of business growth and innovation to assess the resource requirements of businesses depending on their position in relation to these two dimensions (Greene & Brown 1997). It was used as the basis for empirical studies such as the relationship between resources and firm performance (Brush & Chaganti 1998), and resources and firm strategy (Edelman, Brush & Manalova 2002). Further studies have examined the ways that enterprises reconfigure and recombine resources to create value and competitive advantage (Newbert, Gopalakrishnan & Kirchhoff 2008), and how enterprises make the most of the resources that are available to them through "bricolage" (Baker & Nelson 2005).

These approaches and analyses have been applied in the field of for-profit entrepreneurship. Gaps still exist, however, in relation to social enterprises, an emerging sector that is attracting increased interest from practitioners and academic researchers. "Resource mapping" or "asset mapping" in this sector is a term that is generally applied to a method for identifying resources in the external environment of the social enterprise, such as the skills and capabilities of individuals in a community, community organisations, and businesses and human service organisations in that locality (Griffin & Farris 2010), rather than to the internal resources and assets of the enterprise. The concept of "social bricolage" has been developed specifically for social enterprises (Di Domenico, Haugh & Tracey 2010), and the importance of identifying and mobilizing the appropriate resources at the stage of social enterprise creation has been investigated (Haugh 2007). The full spectrum, however, of the resources required by start-up social enterprises remains unclear. Internal resources of the venture appear to have been so far addressed in the context of "social capital" (Evers, 2001), and the generation of earned revenue from a range of sources. It is, nonetheless, just as important for the social entrepreneur, as it is for the for-profit entrepreneur, to be able to critically assess the resources of the venture, and to identify which resources are needed to launch and develop the venture in order to ensure viability and sustainability.

This research uses a "resource mapping tool" developed to assess the resource needs of for-profit startups, and tests this tool in the social enterprise context. It is applied in a comparative exploratory study to investigate the difference in the ways that resource analysis is approached by for-profit entrepreneurs, and by not-for-profit entrepreneurs. The research questions are:

is a resource mapping/assessment tool that has been developed for the for-profit sector appropriate for the not-for-profit sector?

do for-profit and not-for-profit entrepreneurs approach the evaluation of the internal venture resources in the same manner?

Do entrepreneurs in these two types of enterprises engage in bricolage, and what impact has this on the "resource mapping tool"?

## Methods/Key Propositions

An innovative "resource mapping tool" for appraising new-venture resources using the framework of human, social, organisational, technological, financial, and physical resources (Brush, Greene & Hart 2001), was developed by the lead author in 2007. It has been used since then in teaching undergraduate and postgraduate entrepreneurship foundation courses in the University of South Australia. Using a case study approach, this tool was applied to three entrepreneurs in the early stages of setting up their forprofit ventures, and to two social entrepreneurs setting up not-for-profit enterprises that had the objective of generating revenue to become sustainable. Each participant was given a worksheet that detailed the elements that made up each of these resource categories, as a guide to help them assess the level of resources that they currently had, using a subjective scale of the level of resources that they "need to survive", "need to compete", and the level that their venture would "need to win" and that they might rely on as the basis for competitive advantage.

#### Results/Implications

The "resource mapping tool" was found to be a good starting point for assessing the resources of both types of organisations, but requires changes to be more useful, particularly for social enterprise start-ups. Social entrepreneurs considered that "community" should be included as a social resource and that it was important to take into account the influence and importance of external political elements that might compromise their ability to gain legitimacy, and possibly to survive. There were differences in the ways that for-profit and not-for-profit entrepreneurs approached the evaluation of the internal resources of their start-ups. Although all entrepreneurs considered that human/organisational resources were the most relevant at their early stage of development, there was a qualitative difference between the two groups, and the social enterprises focused more strongly on the human/people aspect of their enterprise. In addition, the answers I surely the scale and how to links at the methods of good in the United Kingdom at the allotments will listen to you and you interested in the Battle of

the humidity of the world and one thing to list the music is additional orders is in the idea is good good on you and your smiling at social entrepreneurs considered access to grants and sponsorship to be critical. Both types of entrepreneurs were found to engage in resource bricolage. This suggests that this evaluation tool should be modified to encourage consideration of bricolage, to prompt the entrepreneur to find ways to extract the greatest value from available resources. These findings increase our understanding of the resourcing of new start-ups, and enable improvements to a useful tool for exploring this important aspect of new ventures.

## **Explaining Environmental Heterogeneity**

Colin Jones

## **Principle Topic**

Accounting for the nature of environmental heterogeneity is of great importance to entrepreneurship researchers concerned with the acquisition and exploitation of valuable resources by firms. Accurately defining all aspects of the environment firms operate within ensures the processes directly and indirectly related to resource acquisition and exploitation are explainable. This paper, in adopting an ecological approach, aims to highlight an alternative process to identify, quantify, and explain environmental heterogeneity. Fundamental to this discussion is devising a method to accurately describe the dimensions of any specific firm's environment and to account for energy flows between the environment and firms.

There has been much discussion in the literature related to the study of firms as to what constitutes an environment (Chein, 1943; Hawley, 1950; Penrose, 1959; Emery and Trist, 1965; Hannan and Freeman, 1977; Aldrich, 1979; Weick, 1979; Aldrich and Whetten, 1981; McKelvey, 1982; Meyer and Scott, 1983; Scott, 1987; Aldrich, 1999), with little agreement emerging from the frequent scholarly turf fighting (Baum and Rowley, 2002) that has been typical of such discussion. Rather than takes sides with any specific position in this ongoing debate, this research advances an alternative position from outside the traditions of organizational studies. With specific reference to the processes of resource acquisition and exploitation, it is critically important that the environment is understood equally as a source of constraints and/or energy.



Drafting in the work of biologist Robert Brandon (1990) offers access to a succinct and seemingly obvious way to define what an environment and to also operationalize its presence vis-à-vis firm activity. Brandon suggests three specific environmental dimensions, those being the external, ecological and selective environments. This research contributes to the field of entrepreneurship research by demonstrating 1) the relevance of Brandon's approach to our field, and 2) the value to researchers in being able to develop more fine-grained accounts of the environment that better inform our understanding of resource acquisition and exploitation. Several propositions arise naturally from this discussion.

Proposition 1: Identifying the external, ecological and selective environments would enable researchers to gain a more precise understanding of resource acquisition between firms and/or the environment they operate within.

Proposition 2: The external environment experienced by a firm is an identifiable feature that can be reconciled to their activity.

Proposition 3: The ecological environment experienced by a firm is an identifiable feature that can be reconciled to their activity.

Proposition 4: The selective environment experienced by a firm is an identifiable feature that can be reconciled to their activity.

Collectively, these propositions postulate that the environment is more than merely a space within which several firms exist. The argument being advanced is that to understand the acquisition and exploitation of resources by firms, we must account for the nature of any environmental heterogeneity that is derived from each individual firm's existence across time and space.

#### Method

The epistemological foundations of this research are guided by the principles of a critical realist approach, specifically transcendental realism (Bhaskar, 1975). A mixed method approach (Cresswell, 2003) enabled data from 2,440 firms (for the period 1975 to 2004) to be combined with researcher's observations, qualitative interviews (Denzin, 1970) and local archival data directly related to assumed environmental factors. 24 separate sub-populations occurring in 23 discrete towns are examined. Using a range of analytical tools from the broader field of ecology (Pianka, 1969; Wiens, 1989), access to new ways of identifying and explaining environmental heterogeneity was gained.

#### **Results and Implications**

It is argued that once we can determine the nature of the environment experienced by individual firms, we are able to better understand the acquisition and exploitation of resources by firms; a claim evidenced by the findings presented here. Several interesting implications arise from this research. First, it has been demonstrated that unobserved heterogeneity can be observed if we operate at the correct level of scale (Wiens, 1989) and collect specific data expected to relate to the resource transfer processes of interest. Second, accepting the potential invisibility of resource flows encourages the use of alternative research methodologies. Methods designed to discover unseen phenomena via mixed methods using various forms triangulation to develop a greater consensus of the reality we investigate. Finally, the findings of this research highlight the potential value of employing an interdisciplinary approach to access possible solutions to areas of long-standing disagreement (see Young, 1988; Zucker, 1988).

# Social Network, Market Information and Strategic Flexibility: Differences Comparative Study based on product Market Type and Firm Type

Yuli Zhang

## **Principal Topic**

Strategic Flexibility is the adjustability and variability of internal structure, process and capacity of firms (Shimizu and Hitt, 2004). Discontinuity of market and competition brings challenges to firm development: Increasing frequency of technology renovation, Greater desire to obtain personal demand and total solution to value-added service, Constant reduction of product life cycle, Economic globalization and Competition internationalization especially enhance complexity and turbulence of firm operation environment. As a useful tool for penetrating the core rigid bound, overcoming path dependence, responding to environmental dynamism, strategic flexibility has become the important means of creating competitive advantage in uncertain environment (Sanchez and Mahoney, 1996).

Generally, theoretical analysis and empirical study has proved strategic flexibility's positive effect to firm performance and the conclusions had obtained consistency. Then a question comes: Now that strategic flexibility is so important for firms to obtain competitive advantage, what factors can improve strategic flexibility? What is the driving mechanism? However, it is a pity that after comprehensively and carefully categorize and summarize the related documents, the author found the scarcity of systematic solution to these questions above. Most of the existed studies are conceptual and speculative, lacking scientific and deep empirical exploration. Considering strategic flexibility's significance on maintaining firm growth and earning profits, revealing the formation mechanism in strategic flexibility has great theoretical contribution and realistic value.

Based on the interviews and literature analysis, this paper construct a strategy flexibility driven process model, which explore the social network and market information processing and their matching relationship to the strategy flexibility improvement, and analyzed the contingency effects of product market and firm types in this model.

#### Method

We test our theoretical model using survey data from 227 Chinese firms: 108 entrepreneurial firms (less than six years old) and 119 mature firms, and in the 227 valid questionnaires, there are 125 firms whose product was oriented to mature market, while there are 102 firms oriented to emerging market. Our method avoids retrospective bias, and cumulates over time in a way that enables to control for biases of individual firms. Control variables address industry and economic context, as well as differences among the firms. We perform confirmatory factor analysis followed by full structural equation modeling.

### **Results and Implications**

The results show that business network enhanced strategic flexibility, and compared with the entrepreneurial firms and emerging markets, this effect is more significant in mature companies and mature product market context, and the political network has a negative impact on strategic flexibility. When the firm's leading products is for mature markets, the driven effects of market information acquisition for strategic flexibility is more pronounced; however, when the firm's leading products is for emerging markets, place more resources for information digestion and absorption will have a greater role to enhance strategic flexibility. For entrepreneurial firms, configure scarce resource to market information acquisition activities will be more desirable, while for mature businesses, there will bring more value for configure scarce resource to market information utilization activities to improve strategic flexibility. In addition, the role of business network in promoting information utilization is only significant in mature markets and new venture contexts, and whatever to increase market information acquisition or market information utilization, political network will play a greater role than business network. Overall, the findings of this paper enriches the strategic flexibility theory development, also has an important management practice value for firms on how to rational build strategic flexibility enhancement mechanism based on the different types of product market and corporate situation.



## Session 5D: Corporate Entrepreneurship

Room: P Block 506

Session Chair: Henri Burgers

#### The interplay of CEO Self-Efficacy, a Firm's Effectual Orientation and Performance

Dorothea Werhahn

## **Principal Topic**

During the past decades many scholars have examined the role of dispositions in management research. Whereas some have criticized the usefulness of studying CEO characteristics as predictor of organizational outcomes (cf. Davis-Blake et al., 1989), others have presented theoretical and empirical evidence claiming that dispositions may predict firm outcomes (cf. House et al., 1996). However, the organizational mechanisms that enable psychological characteristics to impact organizational outcomes are still not clear. In particular, there is no evidence of how perceived self-efficacy of CEOs may affect performance.

We know that perceived self-efficacy may influence firm outcomes through its affect on analytic strategies (Bandura & Wood, 1989). Additionally we know that entrepreneurial strategies are "necessary for firms of all sizes to prosper and flourish" (Morris et al., 2001). Therefore, we study effectual orientation – an entrepreneurial business strategy which is reflected in the effectual behaviors and action of firms – as possible meditating variable between the self-efficacy–performance relationship. We argue that CEOs with high levels of self-efficacy are more likely to successfully implement and develop an effectual orientation, which in turn has a positive impact on firm performance. We base this hypothesis on the upper echelon theory, which is rooted in Child's (1972) work on the impact of top management's decisions and choices on firm performance. Moreover, we refer to Hambrick and Finkelstein (1987) who state that top level executives substantially influence the development and implementation of a firm's strategy.

Belonging to the field of entrepreneurship, the concept of effectuation was introduced as decision process of expert entrepreneurs by Sarasvathy in 2001 and has since then gained growing academic importance. According to Sarasvathy effectuation can be understood as entrepreneurial heuristics, which expert entrepreneurs have applied in the uncertain contexts of creating new products, new companies or new markets. With our latest research on effectuation we transferred the concept from the individual level to a firm-level representing an overarching orientation. On this level, effectuation can be understood as business philosophy, which is reflected in the effectual activities and behaviors of a firm. An effectual orientation encompasses the following dimensions: the exploitation of means available, the focus on co-creating the future together with partners, the consideration of affordable loss as central decision-criterion, the focus on exploitation of contingencies and the general perception that the environment is controllable.

Whereas Goel and Karri (2006) claim that effectuation interacts with entrepreneurial traits, Sarasvathy and Dew (2008) state that effectuation can be learned and used by everyone as it is based on behavioral assumptions. According to them the only psychological measure that cannot be ruled out to have an effect on effectuation is self-efficacy (Sarasvahty and Dew, 2008). Thus, with our research we want to add to this debate by exploring the direct effects of self-efficacy on effectual orientation. Moreover, we examine effectual orientation as possible mediating variable through which self-efficacy may affect firm performance.

### Method

This study has employed an online survey sent out to small and medium-sized companies in Germany in February and March 2012, resulting in n=421 usable responses. Questionnaires were filled by the managing directors or leading managers; companies were drawn from the membership data of the German Chamber for Industry and Commerce. In order to assess the degree of self-efficacy of the CEOs we used the general self-efficacy scale as it was published by Schwartzer and Jerusalem (1995). The perceptual measures of firm performance are based on Vorhies and Morgan (2005) and effectual orientation was measured with a recently developed scale (currently in journal submission process). For our analysis we used structural equation modeling, which is conducted with AMOS 20. All of the applied constructs were tested for reliability as well as validity concerns. Further, the significance of the mediation effect was calculated using the Sobel test (Sobel 1982).

## **Results & Implications**

Our study examines the relationship among CEO self-efficacy, effectual orientation and firm performance. We test the direct and indirect effects of general self-efficacy on perceptual measures of firm performance. In order to understand which mechanisms underlie this relationship, we develop a framework integrating effectual orientation as mediator between the self-efficacy-performance relationship. We find that high levels of perceived self-efficacy are positively related to effectual orientation. Moreover, we find a mediation effect, implying that the relationship between the independent variable (self-efficacy) and the dependent variable (firm performance) is diminished when the mediating variable (effectual orientation) is added to the model.

With our research we add threefold. Firstly, we add to the debate on the role of dispositional research in management and entrepreneurship research. We show that perceived self-efficacy is a useful predictor of organizational behavior. Second, we may also contribute to the understanding of the "mechanisms and processes by which TMT characteristics shape firm outcomes" (Carpenter, M.A., Geletkanycz, M.A., & Sanders 2004: 763). In particular, our research helps to gain a more profound understanding of entrepreneurial processes on a corporate level. Third, we add insights to the current debate on the interplay of effectuation and dispositions as initiated by Goel and Karri (2006).

# Alternative Modes of Entrepreneurial Opportunity Exploitation: The Case of Inter-Organizational Projects

Rene Bakker

While we have come to tentatively accept the position that entrepreneurship involves the identification, evaluation, and exploitation of opportunities (Aldrich & Cliff, 2003; Shane & Venkatamaran, 2000), research to date has taken firm formation to be the predominant mode by which such opportunities are exploited (Shane, 2012). In reality, however, firms can use a broad range of organizational arrangements to exploit opportunities (Davidsson, 2005), of which firm formation, either by individuals or organizations, is but one (Shane, 2012).

This article explores one important alternative mode of opportunity exploitation, namely the formation of inter-organizational projects (IOPs). IOPs are temporary organizational entities that combine independent organizations to jointly complete a pre-defined project task within a pre-defined time frame (Jones & Lichtenstein, 2008). After project completion, the IOP disbands (Sydow, Lindkvist & DeFillippi, 2004). The use of and research on such IOPs has increased dramatically in recent years (Bakker, 2010), and has suggested a number of characteristics that can make IOPs prominent modes of opportunity exploitation. These include the fact that the temporary nature of IOPs does not commit resources for extended periods into the future (Eisenhardt & Tabrizi, 1995) and that IOPs can often be launched quickly to provide access to resources, information, and technology to pursue opportunities (Alvarez & Barney, 2001; Ireland, Hitt & Webb, 2006). To illustrate, Das (2006) mentions the inter-organizational project between the German pharmaceutical firm Bayer and U.S.A. based Scios to produce and market the congestive heart-failure treatment Natrecor. This project was a means to quickly exploit the opportunity that came from innovations in biotechnology products for the short-term treatment of congestive heart failure, where the short-term time horizon of just 3 years "reflected Bayer's eagerness for quick results" (Das, 2006: 8).

Prior research on IOPs and other partnerships by entrepreneurial firms suggests that the formation of joint projects and collaborations can be been linked to entrepreneurial behaviour (Simsek, Lubatkin & Floyd, 2003), new product development (Deeds & Hill, 1996), foreign sales (Leiblein & Reuer, 2004), shareholder returns (Mouri, Sarkar & Frye, 2012), and innovative performance (George, Zahra & Wood, 2002). This clearly indicates the relevance of IOPs. However, in the context of SMEs, this focus on the outcomes of strategic partnering (where IOPs, alliances or networks are the independent variable), has taken precedence over studies of their antecedents (where IOPs, alliances or networks are the dependent variable) (see the review by Hoang & Antoncic, 2003). A thorough understanding of antecedents is also important, however, as partnerships are not distributed randomly across firms (Gulati, 1998). In fact, when SMEs form IOPs as a response to entrepreneurial opportunities, then identifying the antecedents of IOP formation becomes an important step toward a more comprehensive understanding of the opportunity exploitation process by SMEs.



What factors make opportunity exploitation through IOPs more likely? Previous works that have studied the antecedents of IOPs and network formation by entrepreneurial firms have often drawn on the resource-based view (Bruton, Ahlstrom & Li, 2010), which emphasizes a firm level perspective. However, it has been suggested that both firm-level factors and industry-level factors can play a role in the decision by managers of entrepreneurial firms to form partnerships to exploit entrepreneurial opportunities (Patzelt, Shepherd, Deeds & Bradley, 2008). These considerations suggest a broader theoretical contingency perspective seems appropriate, which incorporates not only firm-level factors, but also industry-level factors that may enable or constrain SMEs' to form IOPs.

This article reports on a study of a sample of 1725 SMEs across several industries that seeks to introduce a multi-level contingency model that outlines the key firm and industry-level processes and factors that influence the formation of IOPs. Our results will indicate that both the firm-level factor innovative scope, as well as the industry factors dynamism, concentration and munificence affect the formation of IOPs by SMEs. Firm level uncertainty was interestingly found to not be related to IOP formation, whereas effect size analyses reveal considerable effects of dimensions of industry uncertainty.

The main implications of these findings lie in the domain of opportunity exploitation and collective strategies by SMEs. First, our framework starts to address Shane's (2012) recent call for researchers to consider alternative organizational arrangements that may be employed to exploit opportunities, and to advance our limited understanding of the drivers that determine the choice between firm, market, or "something else" to exploit an entrepreneurial opportunity. Our framework implies that a general consideration of uncertainty falls short of explaining more specific choices in the range of organizational arrangements that are available to exploit opportunities, and that a distinction between firm-level and industry-level uncertainty is needed to provide a more fine-grained insight into the choices surrounding alternative forms of opportunity exploitation.

A second implication of our findings relates to the pertinent question that Alvarez, Ireland & Reuer (2006) recently raised: what are the collective strategies of SMEs and entrepreneurial firms like, and whether and how are they different from "traditional" alliances? Our finding that firm-level uncertainty is not related to IOP formation, but industry-level uncertainty measures are, implies that the antecedents of IOP formation by SMEs are different from the antecedents of strategic alliance formation by large firms. The further theoretical implications of these findings will be discussed.

# Does absorbing more knowledge always enhance corporate entrepreneurship in SME's? Investigating the moderating role of strategic orientations and network capabilities

Kamal Sakhdari

#### Principal topic

Why are some SMEs better in corporate entrepreneurship than others? Recently scholars have pointed to the importance of a firm's capability to recognize, assimilate and exploit new external knowledge (Laursen and Salter, 2006; Lichtenthaler, 2009; Cohen and Levinthal, 1990). But will the mere capability to absorb more and more external knowledge enhance corporate entrepreneurship? Information processing theories suggest that the amount of knowledge that is acquired should be dependent on the requirements of the task at hand, as otherwise inefficiencies due to information overloads will occur (Van De Ven et al., 1976; Tushman and Nadler, 1978; Siggelkow and Rivkin, 2006). This is even more of a concern for SME's, who are more constrained in their ability to process large amounts of information than larger firms. But limiting the amount of knowledge absorption is not the answer. It should be about the capability to channel the organizational knowledge absorption mechanisms to the "right" type of knowledge given the task at hand. Or in the words of Zhou and Li (2012: 1099), "given that some firms are better at acquiring external knowledge than others, what capabilities would enable firms to benefit more from external knowledge acquisition?"

This paper aims to address this gap in the literature by investigating moderating influences on the effects of absorptive capacity on corporate entrepreneurship in SME's. We examine two mechanisms that have been suggested to channel the absorptive capacity of an organization, an organization's strategic orientation (Lane et al., 2006) and networking capabilities (Zhou and Li, 2012). By doing so, we provide more understanding about why and how some companies are better able to enhance their corporate entrepreneurial activities through acquiring and exploiting external knowledge than others.

#### Method

Entrepreneurial Management (EM) has recently emerged as a useful conceptualization of an organization's strategic orientation with regards to stimulating entrepreneurial activities (Brown et al., 2001; Bradley et al., 2011; Bruining et al., 2012); Harms and Ehrmann, 2009). However, the mechanism through which EM influences corporate entrepreneurship in companies has been overlooked in the literature. We argue it may channel the absorptive capabilities of the organization in a way commensurate with the firm's overall strategic orientation, be it administrative or entrepreneurial (Stevenson and Jarillo, 1990). A networking capability is the capability of a firm "to initiate, maintain, and utilize relationships with various external partners" (Walter et al., 2006: 546). It helps a firm to better link available knowledge to the needs of the firm (Walter et al., 2006) and as such we expect it to be able to channel the absorptive capacity of an organization towards entrepreneurial outcomes. Smaller and newer companies may have more difficulty in understanding and gaining relevant knowledge, making such networking capabilities even more important in the context of SMEs.

We test our model utilizing a survey amongst Iranian mining equipment, technology and services providers. We expect about 200 responding firms. We chose the Iranian context as mining industries in developing countries such as Iran are relatively closed but gaining increasing attention from and competition of foreign firms. This increases the pressure to become more entrepreneurial (Etemad and Salmasi, 2001). This makes it an excellent context to study corporate entrepreneurship, absorptive capacity, networking capabilities and FM

To address increasing concerns about common method bias in surveys we followed recommendations of prior studies by collecting independent and dependent variables from different respondents, using different response formats and employing a marker variable (Podsakoff et al., 2003; Williams et al., 2010; Lindell and Whitney, 2001).

#### **Results and Implications**

We are currently finalizing the data collection and are confident that we will be able to analyze the data and produce a full paper by the deadline. We expect to make the following contributions. We provide more insights about the conditions under which companies can better utilize their absorptive capacity by showing how EM and networking capabilities can shape the outcomes of absorptive capacity. This contributes to literatures on capabilities that suggests our understanding of organizational capabilities such as acap can be enhanced by investigating the role of strategic orientations and networking capabilities in creating, developing, and deploying organizational capabilities (Helfat et al., 2007; Lane et al., 2006; Ambrosini & Bowman, 2009; Zhou and Li, 2012). We also explore the boundary conditions of these constructs by investigating how firms operating in relatively closed industries in developing countries can enhance their corporate entrepreneurial activities by utilizing absorptive capacity, EM and networking capabilities.



## Thursday, 7th February 2013

Session 6: 1:30pm - 3:00pm

Session 6A: Psychology of Entrepreneurship

Room: P Block 504

Session Chair: Martin Bliemel

## What Motivates Nascent Entrepreneurs to Establish Tourism Ventures?

Noel Lindsay

## **Principal Topic**

Tourism is a major global driver of economic activity generating billions of dollars annually with most businesses in the industry being small and medium tourism enterprises (SMTEs). The recognition of SMTEs as being important generators of employment and economic wealth has led to an increasing research interest into tourism firms and tourism entrepreneurs with a number of dedicated quality scholarly tourism journals being established over the years.

There is no universal definition of tourism since tourism enterprises are diverse but tourism can be thought of as the activity that occurs when individuals travel. This can include the planning of the travel, the actual travel, and the activities and interactions undertaken during the travel (to and from a destination), and when at a destination(s).

Whereas most prior SMTE studies have focused on the SMTE firm as the unit of analysis, this exploratory research focuses on the SMTE entrepreneur. It looks at nascent tourism entrepreneurs and their motivations for wanting to establish tourism-related enterprises. There is evidence to suggest that many tourism entrepreneurs involve their families in their businesses. Family businesses are regarded as the most complex form of business because both business and family issues need to be considered when developing the vision and related strategies. This research examines whether family collectiveness reasons (including employment of family members, creating something for future generations, helping the family get ahead, and the provision of family support) are motivating factors for nascent tourism entrepreneurs. Alternatively, do more individualistic motivations underpin attracting nascent entrepreneurs to the tourism sector such as wanting do set up a tourism business to become wealthy, to achieve a personal vision, to prove that you can do "it", and/or for personal satisfaction reasons.

To answer these questions, we examine the responses from two groups of nascent entrepreneurs: those who want to establish tourism businesses and those who want to establish non-tourism businesses. Based on the conceptual model that underpins this research, we generate the following hypotheses:

H1: Nascent tourism entrepreneurs will demonstrate higher family collectiveness motivations than nascent non-tourism entrepreneurs.

H2: Nascent non-tourism entrepreneurs will demonstrate higher individualistic motivations than nascent tourism entrepreneurs.

We further argue that nascent tourism entrepreneurs, who (we hypothesise) will be more motivated by family reasons, will exhibit greater confidence in establishing their ventures (compared to nascent non-tourism entrepreneurs). This is because of the collective family support structure available to assist in their SMTE development and because there are "big family stakes" riding on their successfully setting up their businesses (family member employment, helping the family get ahead, etc.). Thus, we believe that they will exhibit strong beliefs in their entrepreneurial abilities. As such,

H3: Nascent tourism entrepreneurs will demonstrate higher entrepreneurial self-efficacy levels than nascent non-tourism entrepreneurs.

Finally, if nascent tourism entrepreneurs demonstrate greater entrepreneurial self-efficacy, we argue that their stronger efficacy will translate into stronger entrepreneurial intentions than nascent non-entrepreneurs:

H4: Nascent tourism entrepreneurs will demonstrate higher entrepreneurial intentions levels than nascent non-tourism entrepreneurs.

Collectively, the conceptual model and the related hypotheses support the over-arching question addressed in this research: What attracts nascent entrepreneurs to establish tourism businesses? Since tourism is such an important economic activity globally, developing a better appreciation of the motivations of those attracted to the tourism industry may assist industry and government bodies to develop initiatives that can target those who are more likely to establish sustainable SMTEs. In answering this question, we adopt Shane and Venkataraman's (2000) description of entrepreneurship as the process by which "opportunities to create future goods and services are discovered, evaluated, and exploited." (p. 218).

#### Method

The sample comprised 148 nascent tourism entrepreneurs and 139 nascent non-tourism entrepreneurs selected from a pool of 1,000 individuals who responded to a comprehensive project media campaign (radio, newspaper advertisements, community organisation announcements, posters, etc.). Each construct was measured on a likert-scale ranging from five to seven items. Scales had been validated in previous studies

#### **Results and Implications**

Using structural equation modeling (AMOS), the results demonstrated that the data supported the structural model: All model fit indices were within the relevant acceptable ranges. The results provided general support for H1 and H2 but not for H3 or H4.

For H1 and H2, it appeared that the nascent tourism entrepreneurs in this study were more interested in establishing businesses more for family-related than for individualistic reasons. They were less motivated by self and more motivated by intrinsic family reasons. Family business studies have shown that many family businesses do not proceed past the first generation. To develop a more sustainable tourism industry, the challenge for government will be to implement policy and programs that support family SMTEs – particularly those that are first generation.

In terms of H3 and H4, surprisingly, nascent tourism entrepreneurs had a lesser belief in their entrepreneurial capabilities to produce designated levels of performance than nascent non-tourism entrepreneurs. Moreover, this translated into lower entrepreneurial intentions for the nascent tourism versus nascent non-tourism entrepreneur group. This suggests that appropriate entrepreneurial training may be required to support nascent tourism entrepreneurs to enhance belief in their entrepreneurial capabilities. Aspects of this training should also focus on balancing business and family issues and what is involved in developing a professional sustainable family business (that moves beyond the first generation).

It is acknowledged that this research is exploratory. Additional research is required to examine the stability of nascent tourism entrepreneur motivations over time as they transition to becoming established entrepreneurs.

## Decision-making logic in small firms: Informing the entrepreneurship as method debate

Retha de Villiers Scheepers

## **Principal Topic**

Worldwide the role of the small firms are vital in economies for job creation, innovation and the creation of social value. Small firm owners and managers use specific methods to exploit opportunities and create value. Sarasvathy and Venkataraman (2011) provocatively argue that similar to the scientific method taught widely at secondary school level, an entrepreneurial method exists. They view entrepreneurship as a type of human problem-solving that acts as a transformative social force that can be empirically evidenced, has teachable principles that can be transferred and can be applied in practice to a wide variety of issues



central to human well-being and social improvement. As such it warrants investigating entrepreneurship as a method. They recommend studying decisions and behaviour of entrepreneurs to distil the principles behind this entrepreneurial method. While the academic debate of whether small firm owners/managers can be seen as entrepreneurs rages on, the fact is that small firms are prevalent around the world, in developed as well as developing countries. In Australia for example small firms with less than 20 employees make up 89% of firms in Australia (ABS, 2011). Small firm owners/managers are a heterogeneous group and their decision-making logic shape many of the monetary and social value created within communities, therefore they are a significant and interesting group to study. The purpose of this paper is to determine how decisions of small firm owners and managers are shaped by rational, scientific driven methods as well as emergent, entrepreneurial decision-making approaches when faced with making new venture creation decisions.

## Methodology

We used an exploratory research design and interviewed fifteen small business owner/managers in the information and communication technology, tourism and retail sectors. These sectors are severely influenced by changing technologies and shifts in consumer tastes and preferences, therefore small firm owners/managers in these sectors are constantly exposed to entrepreneurial opportunities where they need to make decisions under uncertain conditions. During the interviews participants were presented with a new venture creation scenario and had to indicate the choices they would make in the presented scenario. Interviews were recorded and transcribed. Transcriptions were analysed using content and protocol analysis. The extraction of common cognitive processes, during decision-making has been the central goal of numerous protocol analysis studies in the last half century, where think aloud protocols are most commonly used in entrepreneurship research (Dew et al, 2009). Selective coding was used to extract relevant themes from the protocols.

## **Results and Implications**

The findings indicate that small firm owners/managers use a combination of decision-making logics to solve entrepreneurial problems. In firms characterised by growth intentions and an opportunity focus small firm owners/managers tended to use more elements of effectual logic such as experimentation and affordable loss. Only those firms where participants had created multiple ventures before considered obtaining precommitments from stakeholders. All the small firm owners/managers however used the effectual principle of remaining flexible amid unforeseen environmental changes. A prevalent theme from the interviews was that more than three quarters of participants used referents, in the form of previous experience, cases and entrepreneurial role models, as a guideline in their decision-making which is supported by the literature on improvisation. Only a few of the small firm owners/managers tended to use structured or goal-based logical approaches to guide their decision-making. These owners/managers had tertiary management qualifications.

To summarise small firm owners/managers used a combination of decision-making logics to solve entrepreneurial problems. Overall they were more likely to use improvisational cognitive strategies in their entrepreneurial reasoning to create new means-ends relationships during the venture start-up process. Furthermore the decision-making processes used reflected elements from rational, improvisational and effectual logic. Due to its exploratory nature, this study has methodological limitations and the findings presented here should be treated with caution, yet these findings provide an interesting starting point to examine principles of an entrepreneurial method.

This paper contributes to the literature informing the debate of an entrepreneurial method. Findings confirm that most small business owners use improvisational decision-making styles, where they draw from experiential reference points under uncertain conditions. The entrepreneurial method not only incorporates emergent, effectual logic, but also draws on rational, scientific reasoning. Small firm owners/managers should take note that both predictive, linear decision-making as well as non-predictive, nonlinear processes is the norm in this sector. Drawing from both these types of reasoning enables entrepreneurs to exploit opportunities, create new ventures and additional value in society. Educators should take note of these findings and incorporate the entrepreneurial method into their teaching.



## Session 6B: Small Business Management

Room: P Block 505

Session Chair: Manjula Dissanayake

# The Development of a Multi Variant Model for Market Intelligence Data Gathering for Australian Micro Businesses and SMEs

Pauline Ross

#### **Principle Topic**

Micro businesses and SMEs have typically been encouraged to develop and implement "professional" business processes that enable them to understand the macro market and business environments. The driver of this trend has typically come from external "expert" sources, and this has led an evolution in contemporary thinking and literature, that micro businesses and SMEs operate in a similar way and with a similar structure as larger organisations.

Recent research has indicated that this contemporary thinking regarding the operating structure of micro businesses and SMEs (MB/SME) is typically inappropriate and often damaging to the MB/SME, because too much attention can be diverted from value customer interaction that happens at a scale that the smaller business can manage. The practice of big picture thinking by small market players, has often developed a nebulous picture of the actual market the MB/SME operates in, and as such, has created a gap between the MB/SME and their real customer, because the MB/SME market intelligence is now often overpowered by copious misinformation from other sources.

Research conducted by Bose (2008) and expanded upon by Xinping (2011) indicated that a further burden has been placed on the MB/SME with the introduction of Web 2.0 (i.e. social media). Web 2.0 has provided an opportunity to collect more data, from more sources, at a greater volume, however, it often overloads the MB/SME with too much information.

In the case of the MB/SME, a paradox exists, that in many cases electronic media has increased the workload and decreased the opportunity for customer interaction (i.e. the opposite of the intent and common wisdom associated with IT and Web 2.0). Furthermore, once value and knowledge rich MB/SMEs are now forced to follow a price driven business model, because technology has made price comparison by the customer simple. However, the volume compensator for a price sensitive strategy available to larger organisations does not exist for resource poor MB/SMEs, and as such, their ability to sustain or grow their market is eroded.

There is no suggestion that MB/SMEs should return to a pre-modernist paper driven management system, however, there is evidence to suggest that the cumulative insatiable desire to "connect to the max" has increased workload and risk (and perhaps reduced a sense of worth) within many Australian MB/SMEs.

Whilst providing an opportunity for many businesses to access a potentially wider market, Web 2.0 also requires dedicated time to feed its continually connected mode. Typically, MB/SMEs have not been provided with enough information to judge whether the data from online sources should replace, work alongside, or be ignored in a comparison with traditional data collection modes for their business.

This paper focuses on some of the findings from recently funded government research undertaken on market intelligence gathering techniques by MB/SMEs within Australia. The paper also discusses the rock and hard place a MB/SME finds itself between when attempting to generate robust market intelligence in a rapid, economic and value manner. Furthermore, this paper provides insight into the choices available for market intelligence collection for Australian MB/SMEs and a suggestion of a best fit framework for the collection of data.

#### Method

The research was based around a mixed method approach consisting of literature research, face to face interviews and focus groups. The face to face and focus group components of the research was conducted

under quasi experimental conditions and performed onsite in an environment that was conducive of producing highly contextual outcomes. The interviews and focus groups centred on Australian MB/SME owners. The results from the face to face research were benchmarked against the results of a primary literature research on contemporary practices commonly accepted within business.

## **Results and Implications**

Over the last decade MB/SMEs have been provided with a continual stream of seemingly better, and additional ways to collect data and connect with their customers. There is very little data on how to select the right mix of processes for a specific business environment or culture, however, this is especially important with a view to how MB/SMEs actually operate. Instead the literature and common wisdom suggests that the MB/SME should do it all, often to the detriment of the MB/SME.

As a result of this work, a model for planning market intelligence gathering for MB/SMEs has been developed and from it a discussion is offered concerning how the right balance of market intelligence gathering can be obtained. Recommendations for overcoming the paradox of big picture thinking in a small market environment are also offered.

## Entrepreneurs' attitudes towards business regulation - an empirical study

Helena Sjogren

#### **Principal Topic**

There has been growing recognition amongst policy-maker of the importance of the competitiveness in small businesses. By improving and simplifying the business regulation governments try to boost business environments and the competitiveness of small firms. Prevailing legislation is a significant factor in the operating environment for the small firms (Harris 2000), but regulation is not a homogenous phenomenon and does not have a uniform effect on all small businesses. Some regulations are either targeted at particular types of businesses or can be expected to vary in their impact across businesses. (Small Business Research Centre of the Kingston University 2003). The complexity of legislation may cause that owner-manager awareness of specific regulations has found to be limited (Kitching 2006, Atkinson & Curtis 2004, Harris 2002).

As Edwards (2004) and Vickers et al. (2005) noted, many respondents reported negative effects of regulation, but they were not able to identify specific subjects of legislation that related to their business. The results of previous literature seem to indicate that there could be gap between presumed effect and the real effect of regulation among owner-managers. The real effect of regulation appears how owner-managers adapt their behaviour to the regulatory framework. Owner managers vary in their capacities to discover, interpret and adapt to regulation and pursue different strategic priorities. This may also have consequences for business performance. According to Small Business Research Centre of the Kingston University 2008 owner-managers who were conscious of regulations affecting their businesses tended to adapt more dynamically the best business practices. Regulations not directly cause business performance outcomes but how owner-managers adapt to regulations is the major influence on performance. There is still only little evidence that explore how regulation can enable or motivate owner-managers to act with the aim of improving business performance.

In our paper we will create a framework for understanding owner-manager attitudes and decision-making policy towards legislation which emphasises owner-managers varying characteristics and motivational bases. We are going to demonstrate that there are different typologies by which owner manager of small firms can be differentiated in terms of attitudes towards regulation.

#### Method

The empirical data were drawn from a mail survey conducted in spring 2012 by means of a structured questionnaire. We selected the most essential areas of regulation (labour law, tax law, company law) which have an effect on small businesses in multiple industry settings. In the mail survey also owner-managers'/ firms' characteristics (type of firm founder, number of owned firms, family firm / non-family firm etc.) were identified.



The initial population consisted of small firms in southern and eastern Finland with a sales turnover between 1 and 10 million Euros. The mean was around 3 million Euros. About 62 % of the firms identified themselves as a family firm. The fifth of the firms had only one owner and 70 % of the firms had from 2 to 5 owners. In our sample the most of the firms (75 %) were stabilized their business and 25 % were at early or growing stage. A total of about 15,000 firms were identified from the financial statement database Voitto+, and a systematic random sample of 1,020 firms was drawn. The pre-tested survey questionnaire and an introductory cover letter were mailed to the respondents, who were assured of confidentiality and promised a summary of the results. A reminder was sent to those who had not responded within two weeks. The final response rate was about 16 %. We were able to combine the questionnaires and the financial statement information. The financial information was collected from the financial statement database Voitto+. Although we used firms' financial information, anonymity was ensured because the data were analysed and reported in a format preventing the identification of individual respondents or their businesses.

#### Results and implications

A principal component factor analysis was conducted to verify whether the dimensions of small firms' owner-managers' attitudes towards business regulation. After the rotation, the preliminary factor analysis suggested the existence of two factors with eigenvalues greater than one. This factor solution explains about 60 % of the variance. Factor 1 consists of the items all clearly linked to how business regulation has boost the business and decision making in the firms. They think that regulation has been beneficial for their business and also opened new business opportunities. This factor was named proactive learner. Factor 2 was named law-abiding. They think that all firms are mainly equal and overall regulation is quite clear. After the preliminary factor analyses we will investigate how these attitudes towards business regulation are related to for example firms' performance and/or owner-managers' entrepreneurial orientations.

The results of our study contribute previous literature several ways and have also some implications for policy makers. The main finding of our study is that overall entrepreneurs feel that business regulation more boosts than burdens their businesses. Our micro level result is in line with findings of previous macro level studies (e.g. World Bank database). In these studies business environment (including regulation) in Finland (and overall in other EU countries) were found to encourage to entrepreneurship strongly.

#### The networking behaviours of women in small businesses

Jalleh Sharafizad

#### Principal topic

This paper offers a theoretical perspective regarding the networking behaviours of women in small businesses. The paper argues that that there is a relationship between networking behaviour and various business motivational factors, educational background, industry experience, industry sector and family responsibilities. These are some of the most common factors affecting women's entrepreneurship as identified by the literature.

#### Methods

Based on a review of relevant literature, this paper provides a theoretical perspective on the impact which various factors have on the networking behaviour of small businesswomen owners. The literature draws together five key areas of study – namely: the motivation for starting the business; industry sector; industry experience; education; family responsibilities; and the impact of these dependent factors on the networking behaviour of women small business owners (SBOs).

Overall, there are numerous factors that influence and shape an individual's intention to start a business (Kirkwood, 2009). Given that business growth is often cited as one of the main benefits of networking for SBOs (Wiklund et al., 2009), the affect of social networks on economic outcomes (Granovetter, 1973, 1985, 1992, 2005), and the strong link between SBOs' ambition towards growth and firm growth (Hakkert & Kemp, 2006), it is reasonable to conclude that the SBOs' ambition and motivational factors plays a main role in their networking behaviour. Although the literature highlights the impact of various motivational factors such as financial gain, quality of life, and family responsibilities with business success and the business activities of

businesswomen, it does not specifically explain the influence of these factors on the networking behaviour of these women. However, given that networking is a key business activity, it seems likely that there is a link between these factors and the networking behaviour of businesswomen.

Second, many studies have identified a direct link between gender, the industry itself and business operations including networking. For example, Sappleton (2009) found women who operate in traditionally female sectors have the highest levels of social capital, whereas those working in traditionally male sectors have lower levels of social capital.

Third, Kwong, Thompson, Evans, and Brooksbank, (2009) identify the influence of industry experience on the networking behaviour of business owners and the reasons why women are more likely to be disadvantaged by a lack of relevant industry experience.

Controversially, education is deemed to be less important to business success than experience, but can help business owners in terms of encouragement and networking (Stanger et al., 2002). Many researchers have examined the potential links between the owners' educational background and business operations including networking. Although some of the literature suggests that there is no direct link between formal education and business success (Stanger et al., 2002), others, for example Brereton and Jones, (2002) argue that formal education does contribute to the networking ability of the entrepreneurs. Given that there is conflicting findings on the impact of educational levels and networking behaviour of business owners, one cannot confidently conclude that formal educational does have an impact on the networking behaviour of small business owned women managers.

Both Australian and overseas studies have shown that regardless of culture or the level of involvement in business activities, women are more likely than men to perform domestic duties, and have child care and family responsibilities. This often leads to women having to combine their work duties and home responsibilities, limiting the scope of the business and the time available to engage in business activities (Dhaliwal et al., 2009). So for women SBOs, family responsibilities and domestic duties may have a negative impact on their business operation, including their networking activities, thus reducing the chances of business growth and the ability of the business owner to achieve their financial goals.

### Results and implications

Whereas much previous research has looked at the start-up motivation of women, and gender differences in the networking behaviours of men and women business owners, few studies have considered motivational factors, educational background, industry experience, family responsibilities and industry sector, as possible factors impacting and influencing the networking behaviours of women SBOs.

The paper serves as a first step in understanding how and why business women network and what factors influence their networking behaviour. The intensity of the behaviour and the variables that may affect it will be tested via six propositions. Even though there are some inconsistencies within the existing research about the networking behaviour of women business owners (Aldrich et al., 1989; Moult, 2000) this paper suggests that there is a relationship between business activities, including: networking and various business motivational factors, educational background, industry experience, the industry itself and family responsibilities.

One thing that is clear is that as the rate of women's participation in small business ownership increases, more women will gain business experience, build their own networks and establish credibility with the other members within the networks such as suppliers, customers and financial institutions. The importance of this research is that if small business is to continue as the engine room of the economy, then women, who enter business ownership, need to be given as many opportunities, whether organically or contrived, as their male counterparts. This is because women are in fact 'better bets' in terms of survival and so they are then more likely to develop and grow their business. If this happens, over time women owned businesses will start to employ more people and will therefore become significant economic contributors.



**Session 6C:** Various Themes

Room: P Block 506A Session Chair: Colin Jones

# Growth process of medium-sized manufacturing: a study of women-owned firms in Bangladesh

Mosfeka Jomaraty

## **Principal Topic**

Business growth is a major topic in the fields of entrepreneurship, small business economics and industrial organisation. Though firm growth has been a central issue in entrepreneurial study, the growth of womenowned firms to medium size has received little attention. The number of ventures created by women is increasing worldwide and growth in entrepreneurship plays a significant part in economic development. A reasonable amount of literature is available on women entrepreneurship with special focus on influential start-up factors. However inquiries about growth to medium size are few and more specifically there are no studies on growth aspects of women-owned firms in the context of Bangladesh.

In Bangladesh, SME is a sector that has potential for women. While women entrepreneurship still remains at a preliminary stage and does not play a dominant role in mainstream economic activities of the country, a special emphasis has been given by the Government of Bangladesh to the growth of women-owned firms. Therefore there is an increasing need for better insights into the growth aspects of women-owned businesses especially in the context of a developing country like Bangladesh.

## Methodology/ Key propositions

This paper outlines an investigation on the growth experiences of women-owned SMEs in order to understand women entrepreneurship in Bangladesh. The paper reports the preliminary stages of a case-study based investigation on the growth aspects of women entrepreneurs in medium-sized manufacturing firms of Bangladesh. Adopting the epistemological stance of pragmatism, the study sees 'belief', 'habit' and 'doubt' as critical for researching this gender related entrepreneurship project.

This paper reports on one aspect of a larger study that adapts a multiple-case design which covers sixteen SMEs, four from each context of small, medium, service and manufacturing enterprises. Growth oriented firms have been selected and the owners are interviewed on the basis of their being very successful women entrepreneurs who have been rewarded with an award from recognised authorities of Bangladesh. The recipients of 'National SME Women Entrepreneurship Award', 'BWCCI-EBL Progressive Award' and 'Outstanding Women of the Year in Business' of 2008-10 are identified and then classified according to their size (small or medium) and sector (manufacturing or service). Interview data is supported by organisational documents such as annual financial reports, internal management reports, existing secondary data analysis, organisation website and published news from media.

Analysis of the data is guided by the proposed conceptual framework. The focus of this paper is medium sized manufacturing enterprises. This paper reports the growth aspects of four women-owned medium-sized manufacturing firms of Bangladesh. Data from in-depth interviews and supporting documents are used for case-studies and integrated with the theoretical framework. Themes are categorised and compared against the framework proposed. Each of the four cases of medium-sized manufacturing firms consists of identifying the factors assisting growth and the growth process of the firm. Patterns are identified and matched with the proposed framework for recognising the influential growth factors and growth processes undertaken by them.

## Results and implications

This paper offers two main contributions to the literature. First, it will enhance the existing body of literature on firm growth providing answers to the question 'how firms grow?' It also aims to contribute to understanding business growth by women entrepreneurs in Bangladesh. It investigates the growth experiences of women owners of medium-sized manufacturing firms and expects to provide better understanding to promote

women entrepreneurship in Bangladesh. Using the research framework for identifying the influential factors for growth of women-owned enterprises and their growth processes; it can also be useful for other countries with similar economic and social contexts.

## Killing Our Darling: Why We Need to Let Go of the "Entrepreneurial Opportunity" Construct

Per Davidsson

## **Principal Topic and Method**

Following the criteria used by Short et al. (ORM, 2010) we review well over 100 articles published in the last decade in prestigious journals, which use "entrepreneurial opportunity" (in an entrepreneurship context) in title, keyword, or abstract. We perform this review in order to assess the progress, and lack thereof, in this field. We pay particular attention to progress and issues related to the realisation of Shane and Venkataraman's (2000) idea of entrepreneurship as the micro-level, process study of entrepreneurship as the nexus of individuals and opportunities.

## **Results and Implications**

Although progress has no doubt been made in some areas, we find it notable that a majority of the articles are conceptual or use only illustrative (rather than systematic) case-based data. Very little progress has been made on such core question as: 1) How can statistically and/or theoretically representative samples of "opportunities" be obtained? What are the salient attributes of "opportunities"? How can these attributes be measured? What effects do these attributes have on entrepreneurial action and outcomes? How do these attributes of "opportunities" interact with the characteristics of the actors in influencing action and outcomes?

We argue that the relative lack of conceptual and empirical progress on these core questions is rooted in problems with the "opportunity construct" itself. Using Suddaby's (AMR, 2010) criteria for "construct clarity" we find that when authors write about "opportunities" they are not quite sure (or explicit) about what they have in mind, and/or different authors have different things in mind when they use this label (e.g., external conditions; an "imagined, future venture", or a action path towards realizing such an imagined venture), and/or they are internally inconsistent in their stated view of "opportunities", and/or they define the construct in such a way, that no testable theory of the effects of opportunities, and the interaction of actors and opportunities, can be developed. This is because "entrepreneurial opportunity" is defined in such ways that they cannot be sampled or measured, or their effect on performance cannot be meaningfully assessed because performance is part of the definition.

Our conclusion is that many of the questions researchers try to pursue under the label "opportunities" can be effectively researched under the much less contentious label "venture ideas". We propose the label "venture idea" rather than "business idea" to make it more inclusive, e.g., of ideas that guide the creation of not-for-profit activities that are nonetheless economic in nature. Venture ideas are the evolving, changing and usually implicit and incomplete "imagined ventures" that give direction to action – including the decision not to act – in processes of attempted creation of new economic activities. They can be perceived as good or bad – often the entrepreneur and prospective investors have different views on that issue. Barring self-destructive endeavors, to trigger action venture ideas require the actor to perceive a "1st person opportunity" (McMullen & Shepherd, AMR 2006) at some level of specificity at some point in time. For success, they need not to clash with non-changeable external conditions.

Being evolving, changeable and existing only in actors minds, venture ideas are certainly challenging entities for theorists and empirical researchers to handle. However, we argue that the notion of "venture idea" has considerable research potential. Importantly, they have characteristics that we can theorize about and assess empirically. For example, venture ideas vary in terms of the level and type of novelty or innovation they represent. Further, a practical way of dealing with the issue of "discovery" vs. "creation" is to say that venture ideas vary in their degree of preparedness for immediate implementation. Aspects of the distinction between 3rd person and 1st person "entrepreneurial opportunities" can be meaningfully addressed in terms of the venture idea's degree of relatedness to its founders' knowledge and resource endowments. Finally, venture ideas vary in the extent to which they evolve and change in the process, which may have implications for their success.



In short, venture ideas have characteristics that call for theoretical and empirical examination of their antecedents and effects. Unlike some perspectives on "entrepreneurial opportunity" the notion allows for uncertainty, failure, agency, process and change. The mentioned characteristics are not intended to be an exhaustive list, and they may be overlapping or causally interdependent, which is an issue for further theoretical and empirical investigation. The way we have portrayed the characteristics of venture ideas goes beyond the dichotomies (incremental vs. radical; discovered vs. created; 1st vs. 3rd person; opportunity vs. non-opportunity) that may be theoretically useful but poorly representative of empirical variability.

Shane (AMR 2012:18) worries that short of objective status, the "second element" of the nexus becomes a function of the individual and therefore there is no nexus. Admittedly, in observational data the existence of particular venture ideas is not independent of the actors who pursue them. However, as the same individuals can evidently come up with different venture ideas with variable success, we argue that venture ideas are not simply functions of individuals and that they can be much more meaningfully applied to investigation of "entrepreneurship nexus" issues than can the elusive and complex notion of "entrepreneurial opportunity". Similar to the theory of "phlogiston" in chemistry, the notion of "entrepreneurial opportunity" has been a useful approximation over the last decade, but now that we know more we need to replace it in order to make further progress.

### The Dark Side of Entrepreneurial Orientation: Corruption

Tobias Karmann

## **Principal Topic**

This article empirically researches on potential negative effects of entrepreneurial orientation, namely corruption in top management. Positive effects of entrepreneurial orientation for the enterprise are commonly acknowledged in the literature. In contrary, negative effects of entrepreneurial orientation may lead to unwanted or illegal actions of top managers. This area is clearly underresearched and especially empirical studies are very scarcely available. Our study tries to shed light on these questions.

We define entrepreneurship along Schumpeter's (1934) classic approach by focusing on the economic outcomes of entrepreneurial activity. In particular, we research Entrepreneurial Orientation (EO) along three dimensions including innovativeness, proactiveness, and risk taking based on the work of Covin and Slevin (1989). We define organizational corruption as "the illicit use of one's position of power for perceived personal or collective gain" (Ashforth, Gioia, Robinson, and Treviño, 2008). Our hypotheses are derived and our results are explained along the well-established Principal Agent Theory (e.g. Rose-Ackerman, 1975; Tirole 1996).

#### Method

Our empirical research is based on a sample of more than 400 responses of CEOs of small and medium sized German companies across all industry sectors. An online survey was conducted in 2012 and in this questionnaire CEOs were asked for detailed information about the company, including their EO and if any corruption cases occurred in the top management team in the last 3 years. Around 11 percent of the companies indicated a case of corruption in the top management team during the last 3 years. All answers given were externally validated with press research in order to check the quality of responses in such a sensible topic like corruption.

We developed a logistic regression model with corruption as the dependent variable and EO as independent variable. All Cronbach Alphas were above 0.7 and other statistical tests indicate reliability of constructs and measurement. A (pseudo-) R square of 0,0827 results for the overall model.

#### Results and implication

While the overall EO construct does not show any significant effect on the occurrence of corruption in companies, the three dimensions of EO show diverging significant effects on corruption. Risk orientation increases the likelihood of corruptive behavior in companies significantly (0.0719\*\*\*) whereas innovation orientation reduces the likelihood of corruptive behavior (-0.0495\*). We can not show any significant effects of proactiveness on corruptive behavior (0.0505). The results were controlled against firm size, company age, and industry.

We recognize our approach has some limitations, e.g. the sample is based on a single country and hence different results could be achieved in different countries. A sample across several countries could show different results and could reveal potential cultural differences. In addition, the potential risk of relying on a single respondent of a firm is acknowledged. However, we validated the data externally with extensive press research on corruption cases and could not find any response bias.

Besides these limitations we see implications for future research. Our results could further nurture the discussion around the relationship of the EO dimensions within the EO framework and their interactions. It could also help the discussion weather the EO dimensions of Covin and Slevin (1989) should be kept together as a construct in future research (see e.g. George and Marino, 2001). Our results suggest managers of entrepreneurial oriented companies should ensure to balance out the different dimensions of EO in order to avoid unwanted negative effects. In particular a high risk taking orientation could be balanced with innovation orientation and hence minimizes the risk of corruptive behavior of top management members.



Session 6D: Social Entrepreneurship

Room: P Block 506

Session Chair: Craig Furneaux

Investigating the manifestation of decision-making approaches in nonprofits: Implications for governance

Aastha Malhotra

#### **Principal Topic**

Nonprofit organisations face many challenges, such as decreasing resources, growing competition for funds and rising community demands for services. They have responded by using a variety of approaches to pursue their social aims. These include business tools such as strategic planning, capacity building initiatives and entrepreneurial practices. Some however, argue that nonprofits cannot be managed in the same way as for-profits due to contextual differences. They stress the importance of community engagement and volunteerism. A consequence of this diversity is the development of competing and contrasting perspectives on nonprofit management. These perspectives are clear when tracing the evolutionary development of nonprofit management. Termed 'traditional', 'contemporary' and 'hybrid', each perspective has appeared at different stages in the evolution of management practice and more importantly, continue to have a considerable influence on the nonprofit management literature and practices.

The ideologies underpinning each of these perspectives correspond closely with professional (Brint and Karabel, 1991; Scott, 1995), rational (Ansoff, 1965) and entrepreneurial or effectual (Sarasvathy & Dew, 2005) logics identified in the broader management literature. For example, the traditional perspective priortises training programs that focus on skill development for service delivery as well as adoption of ethical codes that underline the 'responsibility to care'; reflecting professional logics. In contrast, the contemporary perspective embraces the view that management knowledge and skills applied to any organisation results in improvement in economy and efficiency. Its acceptance of for-profit managerial practices such as strategic planning reflects the rational decision-making logics. The third and most recent is the hybrid perspective, which responds to the uncertainty in the nonprofit operating environment by focusing on the need to maintain a balance between mission and sustainability. Supporters of the hybrid school adopt entreprenurial behaviour, such as actively seeking opportunities that are not only innovative, but are also aimed at long-term growth of the organisation. These views resonate strongly with the effectuation models.

We argue that these logics have important implications for the decision-making practices of nonprofits. Literature on decision-making (Hart, 1992; Lumpkin & Dess, 2006), for example identify different practices used by for-profit firms. Some of these practices are dominated by similar logics as those identified above, such as ideological practices with professional logics, rational practices with scientific logics and entrepreneurial practices with effectual logics. The purpose of this paper is to examine how each of these models/logics manifests within nonprofits and explores what their presence means for decision-making and governance. This focus stems from the realisation that the literature on nonprofit governance is mostly prescriptive and lacks empirical attention (Harrison and Murray, 2012; Widmer, 1993). The full paper will begin with a brief overview of the nonprofit domain, the three perspectives and their associated characteristics while explaining their fit with the decision-making logics. It will then provide empirical evidence to compare and contrast the governance practices in the light of logics.

#### Method

A case study approach was used to understand the relationship between the afore-mentioned logics and decision-making practices of nonprofits. This not only allows investigation of 'how' and 'why' questions (Yin, 2003:2), but also incorporates multiple sources of data, integrates diverse perspectives, and allows adjustment to unexpected findings (Eisenhardt, 1989; Yin, 2003). Theoretical sampling (Strauss, 1990:176) was used to ensure distribution of cases across schools of thought. The final sample consisted of seven social-service nonprofit organisation based in Australia. Data were gathered from archival records and organisational documents; interviews with principle decision-makers and interviews with board members and non-managerial employees. A total of twenty-five organisational representatives were interviewed.

A semi-structured approach was used in order to delve into aspects specific to the research questions (Grinnell, 2001) while allowing the participants to add additional views (Alvesson, 2003) about participants' roles and responsibilities, challenges experienced, how they responded, the prevalent practices as well as the reasons behind them. The interviews lasted 45-90 minutes.

The data analysis process was inductive "in figuring out what is important" and focussed on recognition of underlying themes and issues (Edmondson, 2007:1163). First, manual analysis was used to identify statements that illustrated the decision-making practices as well as characteristics that reflected the attributes of each perspective within interview transcripts. Second, and to improve inter-rater reliability, data were also analysed using NVivo and Leximancer (Smith and Humphreys, 2006) text analytics software.

### **Results and Implications**

The primary aim of this paper was to examine how the professional, rational and effectuation logics manifest within nonprofits and use them to explain the decision-making and governance practices of nonprofits. Our key contribution therefore lies in bringing the three logics together and comparing their prevalence within the nonprofit context. Using the three perspectives as a reference, the findings suggest that decision-making and governance practices are guided by the differing logics prevalent in an organisation. In doing so, we not only provide early empirical evidence of the varying logics, but also offer a framework that explains the contrasting nature of decision-making and governance processes within nonprofits. In particular, we draw attention to the view that effectual logics may be more relevant within uncertain conditions (for example startups or very unpredictable environmental conditions); and keeping in mind the volatility within the nonprofit landscape, we raise the need for future research that explores effectual logics and the Hybrid perspective of nonprofit management.

## Governance as an Additional Dimension of Entrepreneurial Orientation

Lois Hazelton

## **Principal Topic**

The growth and importance of social enterprises globally is staggering. Social enterprises generate billions of dollars in revenue and employ millions of people. Social enterprises are those whose missions centre on generating value associated with some social purpose.

A growing imperative for social enterprises is that they can no longer rely on government "handouts" because of the competing demands placed on government funds. To be sustainable, therefore, social enterprises must interpret and apply the strategies and behaviour of successful entrepreneurial ventures operating in the for-profit business sector. However, business entrepreneurship is not the same as social entrepreneurship. Social entrepreneurship involves pursuing opportunities for enhancing social good where unique resource combinations are used to produce significant social innovations.

In this exploratory research, we focus on one form of social enterprise, aged care organisations. With the increasing aging population trend in many western countries, aged care organisations are growing in number and importance. As social enterprises, aged care organisations are under immense pressures to not only perform but to demonstrate sustainability and continuity for their residents. Yet, government health and aged care budgets are shrinking. This provides an impetus for aged care organisations to be more entrepreneurial. While the drivers of sustainability can take many forms, good corporate governance is essential.

Entrepreneurial orientation (EO) has been a successful construct in measuring just how entrepreneurial organisations are. The roots of EO lie in the for-profit sector but, a new direction in EO research is now emerging that focuses on EO within a social entrepreneurship context where EO is applied to the social entrepreneurial process that leads to social outcomes through social value creation. Importantly, it seems that the role and presence of entrepreneurial antecedents and outcomes within a social context may differ from commercial entrepreneurship. Within an aged care organisational context, it would seem that EO provides an effective tool for capturing evidence of entrepreneurial decision processes across a wide variety of organizational contexts with specific consideration of board governance that includes



both process and culture attributions. This research therefore examines EO in an aged care context while considering the strategic governance and stewardship exercised by the (not-for-profit - NFP) boards of aged care organisations. It seeks to assess the NFP board's governance and culture underlying behavioural orientations, and which contribute to an overall EO theory that best describes effective entrepreneurship and innovation within the social venture.

## Methodology

The board of an aged care organisation comprises a number of individuals jointly charged by a government regulator with being the designated "provider" of aged care services (with consequential multiple liabilities and responsibilities). The board is charged with overseeing the organisation, to develop and implement strategies that will ensure the organisation's viability, and to guarantee resident welfare. Thus, the board plays an important role in encouraging and facilitating entrepreneurial behaviour in an organisation and examining entrepreneurial behaviour at this level provides an holistic perspective. For this reason, our level of interest is at the board level. Because the research is exploratory, we adopt a case methodology approach to investigate how aged care organisation boards influence social entrepreneurship in aged care organisations.

Using a purposeful approach, six innovative exemplar aged care residential organisations were selected. Each identified organisation had a recognised history of innovation practice, high levels of performance delivery, and was a winner of "awards for excellence". This focused sample is designed to highlight case success in entrepreneurship/innovation practice and to facilitate the potential for identifying important EO dimensions in developing a model for sustainable resident care services.

Data collection for each case comprised using validated survey instruments, semi-structured interviews with chairs of the boards, chief executive officers and directors of nursing of each of the aged care organisations using standard interview protocols and resident satisfaction surveys. The primary data sets were supplemented by organisation publications and publicly available analyses.

#### **Results and Implications**

With both for-profit and not-for-profit organisations, the board has responsibility for the governance and management of the affairs of an organization. A primary concern of aged care boards is developing and approving organisational strategies to deliver the outcomes of social value creation and sustainable solutions while satisfying multiple stakeholders.

By collecting triangulated data associated with the conditions, characteristics, and motivations for each aged care organisation, we were able to identify a board's mission/governance in achieving social purpose driven outcomes as to "enhance organisational reputation", "drive the vision of service", "enhance overall service performance", and "encourage challenge". We also found that they embraced values such as trust, philanthropy, volunteerism, and their independence to act as advocates and providers of services for their residents.

In examining the "identified" five EO dimensions to represent configurations of policies, practices, and processes across many types of organizations, we make some interesting observations in an aged care social enterprise context.

Innovativeness, proactiveness, and risk taking are strongly recognised whereas competitive agressiveness has only a minimal impact. Importantly, autonomy has a greater value in aged care than reported in for-profit organisations. It appears that aged care boards strongly encourage independent contributions to providing care services. In every case, it was observed that trust and cooperation are at the heart of aged care social entrepreneurship. Thus, including governance within the EO construct provides an improved understanding of the role of an aged care board's social motivation/mission which is to serve a social purpose coupled with the need to remain financially viable and sustainable.

## Social Start Ups: Entrepreneurial idealists addicted to doing good or social pragmatists with pure intentions?

Selena Griffith

#### **Principal Topic**

Social Entrepreneurship

#### Method

Qualitative case study, interview.

## **Results and Implications**

The intent of this paper is to provide insights into how and why Social Entrepreneurs engage in start up activity and often have multiple ventures. It is hoped this will provide some guidance to Social Innovators seeking to start up their own Social Entrepreneurships.

#### **Abstract**

Social Start ups are most often founded by Entrepreneurs who have developed innovative approaches to identified social problems. What motivates these Social Entrepreneurs can vary widely as can the approaches they take. Some find Social Entrepreneurship so engaging that they will juggle a number of social ventures at one time. This paper will case study three Australian based social entrepreneurs, each of whom has involvement with multiple social start ups. It will explore their motivations for founding the start ups, their intent for them as they evolve into sustainable social businesses and the strategies the will use for achieving this. Comparison will be made between the structure used and approaches taken in founding the various start ups and the strategies used to develop them into Social Entrepreneurships. The paper will also discus why these Social Entrepreneurs have decided to work on multiple projects and what this means for them and their ventures.



## Friday, 8th February 2013

Session 7: 9:00am - 10:30am

**Session 7A:** New Venture Creation

Room: P Block 504

Session Chair: Erin Castellas

# The Bottleneck in the Entrepreneurial Process: An Agent-Based Modeling and Simulation Approach

Jaehu Shim

#### **Abstract**

The emergence of new economic activity is at the heart of entrepreneurship. Agent-based modelling and simulation (ABMS), unveils the process of emergence, has been recommended as a third research methodology in entrepreneurship for the purpose of supplementing quantitative and qualitative methodologies. However, application of ABMS in this field remains scarce due to the lack of researcher's awareness and modelling methods. This study suggests a new agent-based modelling method that uses bibliometric analysis, and applies this method to explain the business venturing process. As results, we find that ABMS is viable to entrepreneurship research, and the lack of investment is the bottleneck in the entrepreneurial process in some nations.

#### Business Planning, Innovation and Performance in Nascent Firms

Christophe Garonne

## Principal topic

Debate about the relationships between business planning and performance has been active for decades (Bhidé, 2000; Mintzberg, 1994). While results have been inconclusive, this topic still strongly divides the research community (Brinckmann et al., 2010; Chwolka & Raith, 2011; Delmar & Shane, 2004; Frese, 2009; Gruber, 2007; Honig & Karlsson, 2004).

Previous research explored the relationships between innovation and the venture creation process (Amason et al., 2006, Dewar & Dutton, 1986; Jennings et al., 2009). However, the relationships between business planning and innovation have mostly been invoked indirectly in the strategy and entrepreneurship literatures through the notion of uncertainty surrounding the development of innovation. Some posited that planning may be irrelevant due to the iterative process, the numerous changes innovation development entails and the need to be flexible (Brews & Hunt, 1999). Others suggested that planning may facilitate the achievement of goals and overcoming of obstacles (Locke and Latham, 2000), guide the venture in its allocation of resources (Delmar and Shane, 2003) and help to foster the communication about the innovation being developed (Liao & Welsh, 2008). However, the nature and extents of the relationships between business planning, innovation and performance are still largely unknown.

Moreover, if the reasons why ventures should engage (Frese, 2009) –or not- (Honig, 2004) in business planning have been investigated quite extensively (Brinckmann et al., 2010), the specific value of business planning for nascent firms developing innovation is still unclear.

The objective of this paper is to shed some light on these important aspects by investigating the two following questions on a large sample of random nascent firms: 1) how is business planning use over time by new ventures developing different types and degrees of innovation? 2) how do business planning and innovation impact the performance of the nascent firms?

### Methods & Key propositions

This PSED-type study draws its data from the first three waves of the CAUSEE project where 30,105 Australian households were randomly contacted by phone using a methodology to capture emerging firms (Davidsson, Steffens, Gordon, Reynolds, 2008). This screening led to the identification of 594 nascent ventures (i.e., firms that were not operating yet at the time of the identification) that were willing to participate in the study. Comprehensive phone interviews were conducted with these 594 ventures. Likewise, two comprehensive follow-ups were organised 12 months and 24 months later where 80% of the eligible cases of the previous wave completed the interview.

The questionnaire contains specific sections investigating business plans such as: presence or absence, degree of formality and updates of the plan. Four types of innovation are measured along three degrees of intensity to produce a comprehensive continuous measure ranging from 0 to 12 (Dahlqvist & Wiklund, 2011). Other sections informing on the gestation activities, industry and different types of experiences will be used as controls to measure the relationships and the impacts of business planning and innovation on the performance of nascent firms overtime. Results from two rounds of pre-testing informed the design of the instrument included in the main survey.

The three waves of data are used to first test and compare the use of planning amongst nascent firms by their degrees of innovation and then to examine their impact on performance overtime through regression analyses.

## **Results and Implications**

Three waves of data collection have been completed. Preliminary results show that on average, innovative firms are more likely to have a business plans than their low innovative counterpart. They are also most likely to update their plan suggesting a more continuous use of the plan over time than previously thought. Further analyses regarding the relationships between business planning, innovation and performance are undergoing.

This paper is expected to contribute to the literature on business planning and innovation by measuring quantitatively their impact on nascent firms activities and performance at different stages of their development. In addition, this study will shed a new light on the business planning-performance relationship by disentangling plans, types of nascent firms regarding their innovation degrees and their performance over time. Finally, we expect to increase the understanding of the venture creation process by analysing those questions on nascent firms from a large longitudinal sample of randomly selected ventures.

We acknowledge the results from this study will be preliminary and will have to be interpreted with caution as the business planning-performance is not a straightforward relationship (Brinckmann et al., 2010). Meanwhile, we believe that this study is important to the field of entrepreneurship as it provides some much needed insights on the processes used by nascent firms during their creation and early operating stages.



## Session 7B: Social Entrepreneurship

Room: P Block 505

Session Chair: Aastha Malhotra

## Philanthropy and Entrepreneurship in Australia - Exploring the Common Ground

Alexandra Williamson

## **Principal Topic**

Philanthropy and entrepreneurship have much in common. Both sectors share a belief in their own ability to bring about change, a vision for improvement, a focus on excellence and innovation, and a willingness to invest where outcomes are uncertain

Entrepreneurial philanthropists have been increasingly recognised since Andrew Carnegie articulated his beliefs about entrepreneurial philanthropy and implemented them on an international scale (Harvey, Maclean et al 2011). The link between philanthropy and entrepreneurship has been explored in increasing detail over the past fifteen years, and entrepreneurial philanthropy has become a significant and growing part of the international philanthropic sector.

The adoption and adaption of entrepreneurial principles by philanthropy occurs not only when existing philanthropists and philanthropic structures incorporate new ways of working, but also when successful entrepreneurs engage in philanthropy in 'the second half' of their working lives.

In Australia the philanthropic landscape is only beginning to be explored by researchers with a scant handful of academic articles published around philanthropy entrepreneurship (Gilding 1999; Scaife 2008). In this absence, heavy reliance is placed on overseas studies, particularly those from the U.S. which has the largest and most studied philanthropic sector globally. This research seeks to address this gap by examining entrepreneurial philanthropy in an Australian context.

#### Method

Over the past three years, he Australian Centre for Philanthropy and Nonprofit Studies (ACPNS) has undertaken several research projects looking at giving in Australia, focusing on foundations as a form of structured giving and ultra-high net worth individuals.

In total, 47 semi-structured interviews were conducted. Of these, 40 included founders, trustees and family members of traditional family foundations; private ancillary funds; community foundation sub-funds; and corporate foundations. The other 7 interviews were with extremely wealthy individuals whose personal financial resources set them apart from most Australian philanthropists.

Data analysis began with an intensive, iterative search for concepts that suggested themselves from the transcribed interviews. These concepts were progressively refined and redefined. The second stage of analysis identified a set of categories into which these concepts could plausibly be collected. The third stage of analysis linked these various categories into broader themes, and some clear patterns emerged linking philanthropy and entrepreneurship.

#### Results

Philanthropic entrepreneurs can be identified not just by their drive to accumulate personal wealth, but also by their choice to use that wealth to support philanthropic goals over which they can exercise control (Harvey, Maclean et al 2011, p.425).

Three key themes that emerged from the empirical data relevant to entrepreneurship in philanthropy were: tipping points for philanthropy, motivations for giving, and giving other than money.

Tipping points: A windfall gain in their business or the sale of a business were two key triggers for individuals to consider planning and structuring their giving. Other themes were reaching a critical mass of dollars or a wealth accumulation target.

Motivations for giving: Philanthropy was seen as a means of dealing with financial success, a pathway into a new sphere of endeavour, or resulting from a need to work towards something of broader significance. These motivations were linked to reaching a life turning point, and a sense of having enough. Taxation incentives for giving were a significant initial motivator to engage in philanthropy, but became less important over time.

Giving other than money: Many interviewees felt that giving of time, expertise, and voice was a natural extension of their financial support. They spoke of bringing the skills developed in their business careers to nonprofit organisations that could never otherwise afford them. Interviewees also drew links between their philanthropy and their creative and leadership skills. They highlighted the importance of targeting particular causes and organisations where impact could be achieved, and then leveraging off their existing knowledge.

The data provides also provides interesting insights into the collective perceptions of Australian philanthropists around risk, innovation, and change.

## **Implications**

There is renewed international interest in encouraging philanthropy in times of economic austerity. Philanthropy is seen as playing a key role in 'post-recession' western societies, particularly in the U.K. with the concept of 'big society' rather than 'big government'. In Australia, significant reforms for the nonprofit sector (including philanthropy) are underway, with the establishment of the Australian Charities and Not-for-profits Commission (ACNC) which from late 2012 will have responsibility for registration and reporting of nonprofits. Further regulatory changes are proposed by the Not-for-profit Sector Reform Council, including changes to tax concessions for the not-for-profit sector.

The Australian philanthropic sector is also growing strongly. The introduction of the Prescribed Private Fund (PPF) in 2001 allowed for the streamlined establishment of a foundation. There is no requirement for gifts to a PPF to be sought from the public, and a PPF can therefore be controlled by an individual, family or corporate group. Renamed in 2009 as Private Ancillary Funds (PAFs), this new modern foundation structure has attracted many new participants to the philanthropic sector. As at June 2012, there are over 1,000 PAFs in Australia.

In these times of rapid change, exploring the qualitative link between entrepreneurship and philanthropy in an Australian context provides a valuable base for future research. The skills and characteristics of entrepreneurship can diversify and strengthen Australian philanthropy, with an exchange of ideas and mutual learning.

## National context and prevalence of social entrepreneurship – a global perspective

Pasi Syrja

#### **Principal Topic**

Several researchers (e.g. Short et al. 2009; Zahra et al. 2009; Zahra et al. 2008; Mair and Martí 2006) have pointed out that social entrepreneurship has led to an emerging research stream of interest to academic researchers and scholars in management and entrepreneurship. According to Nicholls (2009) also business press has become increasingly interested in social entrepreneurship. In many developed and developing countries social entrepreneurship is recognized as important in boosting the economic, environmental and cultural wealth and also social change (Danko et al. 2011).

However, despite the emerging importance of social entrepreneurship and social ventures, scholarly interest in this subject has been limited (Danko et. al. 2011; Nicholls 2009; Short 2009 et al.). Moss et al. (2011) stated that social entrepreneurship studies have primarily often utilized small samples and case study methodologies to understand social enterprises. They emphasized that the generalizability of findings may be in question, and called for more theory driven empirical studies that explore the distinctiveness of social entrepreneurship or that explain the motivations behind these distinctions.



The emergence and prevalence of any type of entrepreneurship is context-dependent, driven by the socioeconomic and cultural environment as well as the individuals (Hayton et al. 2002). The distinct nature of social entrepreneurship (which by definition deals with social pains not adequately solved by the state, civil society or market) implies the assumption, that contextual drivers of social entrepreneurship are partly different from those of entrepreneurial activity in general (Lepoutre et al. 2011). Yet there are only a handful of studies examining the link between contextual characteristics and social entrepreneurship. Some cross country comparative studies exist (Kerlin 2010), but the number of countries in those studies is typically so low that only qualitative tentative conclusions about the effects of country characteristics can be made. A notable exception is the study by Lepoutre et al. (2011), who developed a measure for the prevalence of social entrepreneurship and collected data from 49 countries using the GEM methodology. To our knowledge, quantitative analysis of the determinants is still lacking and our study is attempting to fill this gap by using country level socioeconomic and cultural indicators as predictors of social entrepreneurship. The effects of contextual determinants on social entrepreneurship will be compared with the contextual effects on entrepreneurial activity in general.

#### Method

Our country level analysis is built upon the results reported in Lepoutre et al (2011). Their study reports the prevalence of social entrepreneurship in 49 countries from all continents. Their results were based on the 2009 GEM (Global Entrepreneurship Monitor) data collection. The measures for country level prevalence of social entrepreneurship applied in our study were early-stage (SEA) and established (SE\_EST) social entrepreneurship activity as % of population. The general level of entrepreneurial activity was measured by total early-stage entrepreneurial activity (TEA) and established business ownership rate (TE\_EST) in 2009, taken from GEM website.

The cultural context was measured by Hofstede's (1980) dimensions: power distance (PDI), individualism vs. collectivism (IDV), masculinity vs. femininity (MAS), and uncertainty avoidance (UAI). The socioeconomic indicators for 2009 were taken from United Nations and World Bank databases, and included e.g. GNI per capita, ease of doing business, unemployment, corruption index, human development index (HDI), and public health expenditures.

The analysis begins by profiling the 49 countries based on the levels of early-stage and established social entrepreneurship, and total entrepreneurial activity. The profiling is done by hierarchical cluster analysis. Secondly, we apply multiple linear regression analysis and PLS modeling to explain the levels of various types of entrepreneurial activity with cultural and socioeconomic indicators. In addition we will test competing models where socio-economic context acts as either a mediator between culture and entrepreneurship (Hayton et al. 2002), or a moderator of the culture-entrepreneurship relationship (Pinillos & Reyes 2011).

### **Results and Implications**

The preliminary analyses reveal that the prevalence of social entrepreneurship has a positive but not very strong correlation with overall entrepreneurial activity. 22 countries (e.g. Hong Kong, Russia, Belgium, Malaysia) have low levels on both social and overall entrepreneurship while six countries have a high prevalence of all entrepreneurial activities (e.g. China, Jamaica, Uganda). There are seven countries where overall entrepreneurial activity is high, but the social entrepreneurship scores are low (e.g. Brazil, Korea, Morocco) and 14 opposite cases, where the level of social entrepreneurship ranks better in a global comparison than overall entrepreneurial activity (e.g. Croatia, Finland, Israel, UK and USA).

The level of socioeconomic development (indicated by HDI, GNI per capita, ease of doing business or lack of corruption) has a strong negative association with overall entrepreneurship prevalence like in numerous previous studies (Wennekers et al. 2007), but such association does not apply in the context of social entrepreneurship. Of the cultural dimensions, our preliminary analyses reveal that PDI is negatively associated with social entrepreneurship while overall entrepreneurial activity is negatively linked with IDV. UAI is negatively related with both types of established entrepreneurship, but surprisingly not with early-stage entrepreneurship.

The results of our study contribute to previous literature several ways and have also some implications for policy-makers. According to our results it can be said that the contextual effects on social entrepreneurship are partly different from the effects on entrepreneurship in general. Furthermore, this study will shed some light on the interactions of the economic, social and cultural drivers of entrepreneurship.

## Social Entrepreneurship and Islamic Philanthropy

John Meewella

### **Principal Topic**

Social entrepreneurship is an emerging area of research that examines businesses that are significantly influenced by entrepreneur's or social motives instead of being purely economically driven. As business values are in general moving towards greater attention to social concerns, the area is worth further study. Present study explores social entrepreneurship in the context of Islamic philanthropy whose value is estimated even as USD 1 trillion in annual funds amongst the 20 per cent Muslims globally. Such a magnitude of Islamic Philanthropy and wealth of investments are likely to have profound influences on various entrepreneurial and innovation domains.

Islamic philanthropy provides a study context that can be expected to be especially revealing in terms of the features of social entrepreneurship and provides a basis for examining also national innovation policy drivers. This study, therefore, explores how social entrepreneurship permeates within Islamic philanthropic context and focuses on the concept of Zakat and aims to holistically analyse its influence on social entrepreneurship in the Islamic and in the Gulf Cooperative Council Context, in particular. Study aims to contribute both to our understanding of social entrepreneurship, in general, and its determinants and drivers in the Islamic contexts.

The debate of philanthropy in general – western & eastern – and of charities and its efficient and effective distribution of funds has been a heated topic in the western philanthropy for quite some time. The present study examines traditional Islamic tool of poverty alleviation called Zakat and its links and policy implications to entrepreneurship, innovation within the Gulf Cooperative Council (GCC) context.

## Method

This research was conducted in a qualitative manner, using a field study/ case study approach in collecting primary data as well as analysing several secondary data sets. Within this study we explored the concepts of Islamic philanthropy within a lens of social entrepreneurship and we found that the literature within this domain is still being developed and considered to be in its infant stages. This 'fragmented' and 'infant' stage of the literature is best researched through qualitative means – based upon exploratory means – is most likely to shed new insights and discover various untapped and unexplored entrepreneurial findings.

As pointed out by McNamara & Carter (2007): case studies, observations and interviews are 'time consuming to study'. This study extended from 2009 through 2012 where authors were exploring global prior attempts in presenting social entrepreneurship within Islamic philanthropic settings. It was a constant struggle to seek out academic papers written in this particular domain and also the interpretations of various Islamic countries in their adaptation of zakat and waqf further complicated the situation.

Due to the nature of the subject matter being highly embedded within the Islamic context, prior studies had to a large degree isolated in-depth studies in Islamic philanthropy using social entrepreneurial tools. In addition most scholars in the area of Zakat and Waqf research typically originate from Islamic religious context and therefore the studies are non-academic in nature. In this study having one of the authors as an expert of Islamic philanthropy from a religious perspective, yet at the same time the three authors utilizing and objective and critical view on the subject matter; there was an attempt made to acquire an insider's point of view, due care was taken to maintain the analytical perspective or distance of an outsider.

The interviews conducted differ from typical survey research interviews. For example, the interview questions were in-depth, non-directive and unstructured. It was in fact a joint production of the researcher and the participants. The questions used were tailored to fit within Islamic paradigms, yet at the same time fit into academic context. Interviews were conducted at various locations including Finland, United Arab Emirates, Oatar and Bahrain.



## **Results and Implications**

As compared to Venture Capital (VC) in the western and entrepreneurial context, Venture Philanthropy (VP) is at the heart of Islamic giving and Islamic investments whereby it serves the purpose of generating both financial and social returns for Muslim communities. As opposed to VC which provides returns on investments to original investors, returns from VP are reinvested back into the fund for further expansion in line with Shariah based guidelines (Alam 2005). So the contribution of this paper is an attempt to connect and show how social entrepreneurship links with each concept of zakat and waqf within a scope of a meta-analysis of zakat and waqf literate to date; clarifications and literature gap identification and identifying of next research needs for future research; evaluation of two empirical contexts: i) in Kuwait where zakat is thriving; and ii) in Qatar where waqf is thriving.

Social entrepreneurial discussion of Islamic philanthropy was extended in exploring economic impact of zakat from seven elements: Consumption; Investment; Employment; Economic growth; Income distribution; Business cycles and inflation; and Economic, social, and political stability. Using Dees widely accepted definition of social entrepreneurship, we further explored social entrepreneurial applications and its limitations within the Islamic context in the areas of: i) change agents in the social sector; ii) adopting a mission to create and sustain social value (not just private value); iii) recognizing and relentlessly pursuing new opportunities to serve that mission; iv) engaging in a process of continuous innovation, adaptation and learning; v) acting boldly without being limited to resources currently in hand; and vi) exhibiting a heightened sense of accountability to the constituencies served and for the outcomes created".



## Session 7C: Human Resource Management & Entrepreneurship

Room: P Block 506A

Session Chair: Sandeep Salunke

## Identity and identity work in Entrepreneurship: Constructing the entrepreneurial leader

Richard Harrison

#### **Principal Topic**

Even though the construct of identity has gained common currency in contemporary social science it is only relatively recently that it has come to the attention of scholars working in entrepreneurship. In particular, there do not appear to be any recent studies which have explored in what ways an entrepreneurial leader constructs their identity, nor is entrepreneurial identity investigated within the context of the wider discussion of identity in management or social sciences. In this paper we explicitly focus on the challenge of understanding how entrepreneurial leadership identity is constructed in an early-stage, owner-led, entrepreneurial company.

Specifically, we review the existing limited literature on identity and entrepreneurship. Drawing on current discussions of identity in management and organization studies under conditions of modernity, postmodernity and (latterly) liquid modernity, and in particular on the relationship between identity and identity work, we develop a conceptual framework for the analysis of entrepreneurial identity. In so doing, we extend and develop in the entrepreneurial domain the "new mobilities' paradigm" within the social sciences. It is the metaphor of 'liquid modernity' which seeks to capture and represent contemporary social trends, specifically a more transient and porous world characterised by flexibility, fluidity and unpredictability. What distinguishes liquid modernity from early modernity is the lack of stable institutions and the replacement of states (conditions) by process. The idea of liquid modernity stresses the flexibility and mutability of all relationships, questions institutional stability, displaces concepts of linearity and order by concepts of social fluids and social melting and recognizes that fixed categories are unable to reflect rapidly changing circumstances.

The search for identity is a central symptom of individualism in liquid modernity (Ybema et al, 2009: 299). This identity is not something which we can objectify as an observable entity but that which we can construct or articulate in an on-going interaction with our social environment. In discussions of identity there is a tension between the image of harmony, logic and consistency, which modernist conceptions of identity are centered on, and the day-to-day flow of our experience. In liquid modernity the quest for identity is represented as a perpetual struggle to arrest or slow down the flow, to solidify the fluid, to give form to the formless. Identity, as a negotiation between self and society, between what is within us and what lies outside, is at the same time both what is perceived by others and what is projected by ourselves. However, as Bauman (2000) points out this appears to be fixed and solid only when seen from outside. From the perspective of one's own biographical, lived experience identity remains fragile, fluid and vulnerable.

## Method/Approach

Unlike the representation of identity in entrepreneurship research to date, which is for the most part predicated on the assumption that it is in some sense fixed and accessible for analysis, this new emphasis on the fluidity of identity challenges existing conceptions and provides new opportunities for research which are grounded in a more comprehensive meta-theoretical framework of analysis. Most contemporary research on identity in entrepreneurship, whether from identity theory, social identity theory or structural identity theory, sees it as real, objective and measurable. The emphasis, therefore, is primarily on identity as an external representation and the analytical frameworks employed concentrate on establishing the co-variance between it and other phenomena of entrepreneurial interest. This is very much a research programme grounded in the principles and practices of modernity.

We pursue an emerging research agenda established on exploring identity formation as a fluid, complex and multi-faceted process in which both the external (representation of self) and internal (biographical, lived experience) perspectives are important. In this, a concern with the role of context in shaping identity formation and of discourse and narrative analysis in exploring this process becomes central. We adopt an

ethnographic approach in an 18 month study of entrepreneurial leadership identity formation in a single case-study organisation. The paper draws on interviews with five business and family members, and on observations and interviews with the CEO as a participant on a leadership development programme.

#### Results/Implications

If identity is indeed friable, fluid, ephemeral and fragile then the research focus, in entrepreneurship as in contemporary organization and management theory, needs to shift from identity per se to the processes of identity formation. Through a focus on the experiences, perceptions, roles and expectations of being a leader, and the demonstrated purposiveness and intentionality in shaping one's identity this reveals, we conclude the paper with a discussion of identity work, as the way in which an individual responds to the dynamic of the "who am !?' question amidst social 'this is who we are' messages". In so doing, we make four contributions to the entrepreneurship literature. First, we argue that discussion of identity and identity work in entrepreneurship needs to be cognizant of wider debates in the social sciences. Second and specifically, we focus much more on process (by which things come into being) instead of an analysis of states (things as they are), drawing on the emerging mobilities paradigm in social science. Third, we move the study of identity and entrepreneurship, hitherto characterised by a modernist agenda (in which identity is viewed as objective, measurable and real), into analysis of identity formation as a process undertaken through identity work. Fourth, we make a methodological contribution by demonstating the applicability of ethnographic techniques based on data collection and analysis within the interpretive tradition.

# Amassing and Configuring Human Capital in Nascent Ventures: Dynamic human resource capabilities

Marcus Ho

Dynamic human resource capabilities: A longitudinal study of dynamic capability development in university spin-off ventures

## **Principal Topic**

The dynamic capability approach is an increasingly important conceptual framework for understanding organizational adaptation and performance in changing environments (Teece, 2009). From its theoretical origins in strategic management as an anodyne to the limits of resource-based perspectives, dynamic capabilities has progressed into a full-fledged research stream that has started to promulgate through other organizational areas such as entrepreneurship. Thus far, there is considerable theoretical and empirical research that has attempted to distinguish the scope and boundaries of dynamic capabilities (Barreto, 2010). Such conceptualizations, while not without controversy, have demarcated the nature and role of dynamic capabilities as either an overarching organizational capability that attempts to capture established organizations' abilities to configure or reconfigure their capabilities in response to challenges in the environment (e.g., Teece, Pisano, & Shuen, 1997), or a more granular and functional approach that specifies the specific boundaries of operational capabilities (Adner & Helfat, 2003; Bruni & Verona, 2009;). Scholars explore this interplay of perspectives in recent research that examines perspectives the emergence and development of dynamic capabilities as a fertile context for explicating dynamic capabilities (Corner & Wu, 2012). Unfortunately, dynamic capability development is an often implied but not a well-researched process in the dynamic capabilities literature (Zahra, Sapienza, & Davidsson, 2006). In particular, one area of dynamic capability development not yet explored in detail is the human resource processes in organization building. While discussions linking the human element to the dynamic capabilities of firms have surfaced (Thompson, 2007; Wang, Jaw, & Tsai, 2012), dynamic capability development and the human resource processes underlying these capability development in firms remain unexplored. By explicating the development and strategic outcomes of human resources in emergent organizations, the contribution of these resource and the capabilities that emerge can be understood in the context of strategic action and performance outcomes (Huselid & Becker, 2011). Management scholars are beginning to examine the micro-processes or actions, behaviors, and decisions carried out by individuals in the context of dynamic capability development (Teece, 2007). In this study, we describe a granular conceptualization of dynamic capability development: dynamic human resource (HR) capabilities and explore the research question of 'How do nascent organizations amass and configure their human resources?' Specifically, we implement a



longitudinal empirical study examining the development of dynamic human resource capabilities in multiple case studies of biotechnology ventures. We induce micro-processes that contributed to the building of this capability consistent with the call to consider micro-processes in this context.

#### Methodology/Key propositions

This paper utilized an inductive, longitudinal multiple case study approach in examining the development of dynamic capabilities and the HR micro-processes involved in its development in the process of new venture formation and development. The objective of the research was to induce theory with respect to the research question. There is considerable evidence to suggest that the need to amass and configure human resources is as central as technological and financial concerns in new ventures (Ho, Wilson, & Chen, 2011; Moray & Clarysse, 2005). Case studies were restricted to a single biotechnology niche, human therapeutics, and geographical region to control for environmental variance. Data collection on the cases utilized included structured interviews, observation, participant observation, written documents (such as annual reports, confidential business reports, human resource management reports and formal documentation and private memos and reports), archival data, and informal discussions over a period of seven years (2003-2010). Data analysis involved iterative processes of data reduction, data display and conclusion/verification.

### **Results and Implications**

We report on three cases: Alpha. Beta and Gamma and their dynamic capability development by explicating the processes integral through each cases' development from start-up to subsequent organizational challenges. Our results suggest the ways in which the companies amassed, configured and re-configured their human resources in their emerging ventures were integral to the responses to competitive and environmental pressures. Our findings highlight two important micro-processes: hunting and gathering and potentiating. The first, hunting and gathering, were processes that specified organization building activities aimed at identifying and securing resources already at hand, and pursuing additional resources needed. Hunting reflected actions that were aimed at identifying their organizational needs in terms of human resources and amassing the human resource base for the newly started ventures. These decisions and actions reflect processes of bricolage and effectuation. Gathering reflected processes aimed at pursuing additional resources needed. These actions reflect the organizations' HR requirements such as commercialization and scientific expertise to pursue organizational goals. The second micro-process: potentiating, were processes aimed at configuring the organizations' human resources and organizing work towards organizational goals and challenges. Three mechanisms were identified as critical to potentiating: configuring and organizing work - configuring/structuring people and tasks; mentoring/coaching-processes for socialization, knowledge sharing and skill building; and tracking/controlling- creating feedback loops and adjusting towards commercializing opportunities. The findings suggest a model for dynamic HR capabilities for new venture formation in high technology. Implications from the findings suggest that dynamic HR capabilities in new ventures enable new ventures to amass and respond to the strategic and human resource requirements in organizational challenges.

# HRM Practices and Corporate entrepreneurship in Family Firms: The mediating role of knowledge exchange

Hazel Melanie Ramos

### **Principal Topic**

There is a growing consensus that established companies must nurture entrepreneurial activity throughout their operations to continue to compete successfully (Sathe, 2003). As a result, corporate entrepreneurship (CE) has gained increased attention in the literature related to strategic management (Morris & Kuratko, 2002). Underlying an entrepreneurial orientation is a tendency to pursue the creation and acquisition of new knowledge and the integration of new knowledge and capabilities with existing resources in the form of new combinations (Quinn, 1979; Schumpeter, 1934). Therefore, CE is dependent upon a firm's ability to continuously learn and unlearn (e.g., Floyd & Wooldridge, 1999; McGrath, 2001), by creating and exploiting new combinations of knowledge.

Management of CE is therefore distinct from traditional management because of the conditions of greater uncertainty and knowledge-intensity (Kanter, 1985). Accordingly, CE implies that employees must act and think in ways not normally associated with bureaucratic—and therefore often non-entrepreneurial—organisations (Kanter & Richardson, 1991). In this respect, Hayton (2005) and others have argued that entrepreneurial behaviors could be fostered through HRM practices.

Research has shown CE to be an important element in the survival of family firms as it increase the distinctiveness of their products, therefore enhancing their profitability and growth (Kellermans et al, 2006; Zahra, Hayton, & Salvato, 2004; Zelweger & Seiger, 2010). Typical studies have examined family firms organisational culture, family unity, stewardship-behaviours, long-term orientations, conservatism and family involvement as family firms characteristics that either enhances or impedes entrepreneurial activities.

Accordingly, little is known about HR practices in family-owned firms and their outcome effects (Reid et al. 2002). Anecdotal evidence suggest that the conservative cultures and resource constraints of family firms may mean that HR activities are often less formal and may be limited in scope and sophistication (Gersick et al. 1997). However, there persists a belief that HR practice in family firms could be a significant competitive advantage (Habbershon, Williams, and Kaye 1999). However, we still do not fully understand which specific HR practices, as well as the underlying mechanisms by, enable CE in family firms

Consistent Schmelter et al. (2010), and Carlson et al. (2006) we consider three generic HR functions in family firms that cam directly influence employee behaviours: staff selection, training and development, and rewards. In line with Hayton (2005), we propose that family firms HR practices can influence CE by creating conditions for the development of informal cooperative relationships. From an organisaitonal learning perspective, such relationships encourage the exchange and re-combination of new and existing information and knowledge (Hayton, 2005; Zahra & George, 2002; Zahra & Nielsen, 2002). In this particular study, we seek to address the question of whether employee knowledge exchange and re-combination activities will mediate the relationship between HR practices and CE in family firms

#### Method

In order to address our research objectives, data was drawn from a sample of 500 family firms in the high-tech/precision manufacturing industry throughout Malaysia. We included firms based on four criteria: (1) age: at least 10 years old; (2) size: at least 100 and fewer than 1,000 employees; (3) industry: high-tech/precision manufacturing and (4) extent of family ownership.

Survey packets were distributed to the owners/founders of the 500 family firms. We asked owners/founders or senior majors/directors to fill in the survey because they are thought to be the most knowledgeable about their respective firms systems and process. Ultimately, 143 family firms participated in the survey (a response rate of 28.6%) and could be included in the analysis. Throughout our survey we used items and measures that had been previously established in the literature. Mediation analysis, as prescribed by Baron and Kenny (2005), was used to examine our proposed research hypothesis.

## **Results and Implications**

Results of the mediation analysis revealed that the relationship between HRM practices (selection, training and rewards) and corporate entrepreneurship was partially mediated by knowledge exchange. Selection, training and rewards were positively related to knowledge exchange and CE and that knowledge exchange attenuated the positive relationships between the HRM practices and CE. More specifically we found that HRM practices promoted the exchange of knowledge within the firm which in turn promotes a firm's CE behaviour.

Extending the work of earlier studies on a conceptual and an empirical level, we provided and tested a comprehensive model for the impact of HR practices on the established construct of CE in high-tech/ precision manufacturing family firms. Our study offers two contributions to existing family firm and CE literature. Firstly, we contribute to existing literature by showing the importance of HR practices in the family firm context. The current literature on both HRM and entrepreneurship has largely overlooked the issue of how family firms can enable CE using HR practices. Our findings reveal that through specific HR practices, family firms can create conducive internal environments which encourage knowledge exchange and recombination, thus fostering CE. Secondly, our quantitative results underpin the existing conceptual work and overcome the lack of comprehensive empirical analysis of the relationship between HRM and CE (Cardon, 2008; Hayton & Kelley, 2006).



Session 7D: Entrepreneurial Finance

Room: P Block 506

Session Chair: Rene Bakker

The Role of Finance in the Development of Technology-based SMEs: Evidence from New Zealand

**David Deakins** 

## **Principal Topic**

This paper represents an exploratory study to investigate the role of finance in the development of technology-based small firms (TBSFs) in New Zealand. Although a limited number of studies have taken place elsewhere, none have been undertaken specifically on this topic in New Zealand. The study extends the work of colleagues who have undertaken a more systematic study on the funding of TBSFs in the UK (Baldock, North and Ullah, 2011). A number of official reports have investigated what appears to be a symptomatic failure in New Zealand; to develop, fund and retain the development of R&D intensive, high value, TBSFs. This under-development has often been seen as one of the factors behind New Zealand's relatively low rate of productivity per capita by international comparisons, for example, being some 25% lower than that of Australia's (Mai, et al. 2010). Research questions included:

How do NZ TBSFs acquire resources including finance?

What are their main challenges in the NZ environment?

#### Method

An exploratory study has involved a programme of 20 in-depth, face to face qualitative interviews with the founders and chief executives of TBSFs drawn from three contrasting locations in New Zealand and from across different technology-based sectors. A further seven interviews have been conducted with key informants drawn from the three locations. The coverage of different stages in TBSFs development, or staged life cycle model (Berger and Udell, 1998), was ensured by including respondents from start-up, early stage, developing and mature firms. A range of industry sectors was represented including bio-tech, IT and creative/media sectors.

#### Results

As might be expected from theory, there was a heavy reliance on internal funding and bootstrapping methods, although a number of TBSFs had in addition managed to raise additional private capital through their own contacts and networks. All the sample had relied upon internal funding to some extent. However, a total of 13 (65 per cent) either relied totally on internal funding (from the initial start-up) or relied upon a combination of internal funding, bootstrapping and private investors. Six companies (30 per cent) were totally reliant on internal funding without any external capital injection from private sources.

There was a distinct reluctance to raise external equity or debt finance. Only a small number of TBSFs had sought and raised finance from the commercial banks. There was a view that banks are not willing to value intellectual property (IP) that may have been held by the company for the purposes of security.

There were positive findings on the role of government grant funding, it speeded up the technological development, which was critical for some companies, especially software and IT companies which would have 'first mover' advantages if they could be the first to the market with a new application or programme. Recent changes to threshold levels for grants had made them more flexible.

Context was important with New Zealand being a small open and relatively remote economy when compared to the UK; where the EU provides a significant market for TBSF development. In contrast, NZ TBSFs, of necessity were heavily involved in distant overseas markets. However, there were a number of constraints in NZ faced by TBSFs. Among these were:

A failure of NZ HTFs to retain IP ownership in New Zealand and a failure to harness potential growth development.

- A difficult environment for start-up TBSFs caused by access to funding; funding gaps especially at the early stage and limited and fragmented capital markets.
- A lack of experience and associated learning in dealing with early stage TBSFs and their investment needs.
- Narrow capital markets with private sector investors suffering from fatigue

#### **Implications**

There was evidence of a distinct finance gap in the external equity market in New Zealand. For amounts below NZ\$1m, these could be sought from networks of business angels, even though such sources were limited and restricted. If the funding sought was in the range NZ\$1m -\$5m; this was likely to fall between the informal and formal venture markets. Associated with this was a distinct preference for relying on internal funding by NZ TBSFs.

As well as the preference to rely upon internal funding, there was preference to remain in New Zealand rather than seek to move offshore or, again with a few exceptions, to raise funding overseas in known venture capital centres such as the US or Europe. There was some evidence that these attitudes were restricting growth and development; confirming our hypothesis that the funding environment in New Zealand currently restricts the development of some TBSFs. In addition, those that sought external funding were caught in an early stage funding gap, this funding gap was confirmed by the views of key informants. We estimate very broadly that this early stage funding gap in the external equity market is in the range NZ\$1m -\\$5m; TBSFs seeking such amounts were likely to fall between the informal and formal venture markets.

# Managing the exit: perspectives on the investment exit process from business angels in the UK Richard Harrison

Principal Topics

It is now accepted that business angels play a critical role in financing the early stages of growing businesses. They have become even more significant in recent years with the decline in venture capital investing and reduction in bank lending. With the shift in the approach of governments to the 'equity gap', from establishing funds making direct investments to co-investment, business angels have also become important partners with government. Accordingly, it is essential for an entrepreneur-led economic recovery that the business angel market operates as efficiently as possible. However, this is not the case: angels are reportedly frustrated with the lack of successful exits or liquidity events, resulting in them not receiving the return on their investments they hoped for. The overall objective of this paper is therefore to provide greater understanding of how business angels can create and realise value in their investee businesses.

Exits are the most critical part of the investment process. First, they reward entrepreneurs for the risks they have taken and facilitate repeat entrepreneurship. Second, a lack of exits constrains the re-investment process which is the biggest barrier to the growth of angel investing. Third, with the growing number of coinvestment funds investing alongside business angels the lack of exits is now also an issue for the public sector. Fourth, exits enable angel groups to demonstrate their ability to make a financial return to attract new members and retain existing ones. Previous research indicates that the exit is rarely considered in the investment decision. The UK angel community has typically operated on the basis that good investments will always find exits. However, this approach to investing is no longer effective – if it ever was – and is likely to be responsible for at least some of the more than 50% of angel investments which fail. By no means all failed investments were bad companies. Some will have failed because they have not developed strategic options other than to get more funding, and as a result have gone beyond the point where a sensible return can be made.

However, the body of academic research on business angels developed over the past 20-30 years is unable to inform the investment community on best practices. Although studies have been undertaken of deal flow, investment decision making, deal structuring and post-investment relationships, and there are a few studies of investment returns, the literature has virtually nothing to say on exit strategies.



## Approach/Method

Our methodological approach is to interview, using verbal protocol analysis, up to 50 business angels across the UK to discern the extent to which exit considerations have been factored into their investment approach. Interviews focus on the following issues:

- (i) To what extent is the exit considered in the investment decision?
- (ii) How is the investment valued? What methods do angels claim to use and what ones are actually used. To what extent does under- or over-valuation affect future funding rounds? To what extent does over-valuation result in investee companies that are unable to raise further funding because of dilution issues?
- (iii) To what extent is the growth strategy of the business driven by the investor's exit strategy?
- (iv) What evidence can be found which indicates that investment outcome is linked to the investor's approach to the investment?
- (v) What information and what format of presentation would be of value to business angels in informing them about the exit process?

## Results/Findings

While this project is still in the data collection phase, early indications are that it is important not just to look at "exit" as some form of cash bonanza for the entrepreneur and the investor, although that is important. Exit is also about the under-researched and discussed topic of managing the negative exits – "having a good failure" (in the words of one respondent) or "failing upwards" (to adopt the phrasing of recent literature on a real options approach to the analysis of failure). This is about minimizing the number of companies that fail because they have not developed any other options than to try to get more funding, regardless of the underlying value they have created. Indeed, preliminary results suggest that there are a number of companies that have secured too much funding, and are now behind the point where a sensible return can be made by exiting investors, who are effectively locked in to these investments.

#### **Implications**

The research has considerable implications for business angel investors and the entrepreneurs that they back. First, angels have to consider the exit at the very start of the investment process. Second, valuation is critical – if angels invest at too high a valuation this will hamper the ability of the company to raise further rounds of investment. Third, IPOs and other financial transactions are unlikely to provide exits, and investors and entrepreneurs are much more likely to exit through the acquisition of the venture. Investors must therefore be proactive in identifying strategic buyers for their investee companies. This will have implications for how investee businesses manage growth, with a focus more on the creation and exploitation of distinctive assets and capabilities that on growth measured simply in financial terms. In other words, investors cannot adopt a "build it and they will come" attitude.

# Networking evolution and the changing nature of business angle investing in the UK: Evidence from Scotland

Richard Harrison

#### **Principal Topic**

The financing of growing businesses has typically been conceptualised as a funding escalator, with each stage in company growth associated with a particular source of finance, a pattern typical of the predictions of the pecking order hypothesis: entrepreneurs will be driven by information asymmetries and transaction costs to use internally generated capital before turning to more expensive sources of financing. Once these internal sources are used, firms will turn to debt finance (where the information asymmetry problem is less severe) and then to external equity. In other words, businesses initially get started on the basis of the funding of the founder/founding team and their family and friends (the "3Fs") and then access business angels, venture capital and public markets in order to finance their growth.

However, this funding escalator does not function equally effectively over all geographies, and there has been a marked geographical centralisation in the location of both the supply of and the investment of institutional venture capital and private equity. In this paper we argue that a key section of the market – business angel finance – is changing, from a market characterised by individual investors and largely informal and invisible investment groups to one increasingly defined by formalised groups, syndicates and networks which channel and consolidate investment finance from individual investors to entrepreneurial ventures. This evolution is patchy geographically: at the macro scale it is much more evident in the USA than in Europe; at the regional scale, within Europe the process has proceeded furthest in Scotland, which, if it was a US state, would be the 11th largest in terms of angel group investment activity.

## Method/Approach

We review the reasons for the emergence of angel groups, in terms of the information economics of increasing potential investment deal flow, the credibility signalling benefits of increased visibility of a group vis a vis individual investors, and the opportunity for investors to reduce investment risk and adverse selection issues through knowledge sharing and co-investing. Scotland provides a valuable case study to examine this evolution in the market: first, the number of identifiable networks and syndicates has grown from 2 to over 20 between 2001 and 2012, the most radical shift in market organisation of any region in Europe; second, the original business angel network, LINC Scotland, has evolved from a traditional information sharing introduction service to a network catalyst and development role (partly in response to a progressive reduction in public funding for its original role), supporting the emergence of most of the new networks to be formed over the decade; and third, Scotland has been the locus of a number of policy evolutions designed to stimulate the evolution of the risk capital market, notably a business-angel oriented co-investment fund that would not have been possible without this network evolution.

We present detailed data on the impact of these investor groups on the supply of risk capital at two levels. First, using data from LINC Scotland and the annual surveys of business angel investing in the UK commissioned by the Department of Business Innovation and Skills we will profile the key features of the market in terms of the volume of investment (number and size of deals, including relevant VC comparisons), deal size and co-investment patterns (with other angel investors and with VC investors), the profile of investee companies (stage of development, size, sector, sub-regional distribution in Scotland, where there are longstanding concerns that there is a distinct west-east imbalance in the flows of risk capital that mirrors the wider north-south split in the UK as a whole). Second, we provide data from a 2 year study of the investment practices and outcomes of one specific business angel syndicate, which has over 100 investor members, over 30 active investments and a 10 year plus record of investment, to illuminate the ay in which the angel market has changed and become more formalised in Scotland.

## Results/Implications

We conclude the paper by arguing that in terms of the escalator model, angel funding was traditionally the second step after friends and family and before VC. Largely because of changes in the VC market the angel role has enlarged, covering more steps on the escalator. They have only been able to do this by coming together as angel groups, providing deeper pockets, facilitating bigger deals and more funding rounds, and increasingly taking firms to exit themselves. The Scottish case demonstrates that angel groups are a vital partner of government which favours co-investment as the most appropriate means of intervention, From a supply side, angels play a critical role. Without them many companies would not have got started, or run out of money and failed, or simply not grown. However, the Scottish evidence also suggests that they still have a limited economic impact: there have been few exits, either by M&A or IPO. This may be because of a lack of sufficiently good investments, which are too small and needed more capital, or it might reflect poor investor deal selection. In short, despite the significant evolution of the angel market in Scotland in terms of scale, formalization and visibility, the experience of Scotland suggests the limitations of (enforced) reliance on angel investors in stimulating entrepreneur-led economic development. The paper will conclude by drawing out some of the implications for a regional entrepreneurial risk capital investment policy.



## Friday, 8th February 2013

-Session 8: 11:00am - 12:30am

Session 8A: Public Policy for Entrepreneurship & Innovation

Room: P Block 504

Session Chair: Steve Johnson

## Local Entrepreneurship Policy - Organizing According to Context

Pia Schou Nielsen

The Changing Landscape of Female Self-employment

## **Principal Topic**

Two factors have influenced the entrepreneurship agenda in the UK during the past ten years; the government focus on entrepreneurship and innovation as a tool for wealth creation and more recently the economic recession. In response to these changes this study was carried out in order to gain a better understanding of the current attitudes and motivations of women who are self-employed in the UK. We examine their experience of self-employment and entrepreneurship and discuss the challenges they encounter. We particularly explore whether there are any differences in the experiences of respondents related to their age.

#### Method

One thousand self-employed women were surveyed to find out their views on self-employment and entrepreneurship. Some of these women were working alone, some worked in partnership and some employed other people. Participants were sent a semi-structured questionnaire which asked about their motivations for pursuing this career option, how they started their venture and their experiences. The final part of the questionnaire asked the respondents about their challenges and any help they require. The questionnaire reflected current research on female entrepreneurship.

The questionnaire was administered by email; data was collected using a convenience sampling method. The data base was provided by Ipsos Mori. The respondents all run their own ventures, they come from all over the UK; from all backgrounds and range in age from sixteen to sixty four. Our sample comprised: 22% who were under thirty-five; 25% who were thirty five to forty-four; 31% between forty-five and fifty-four and 22% over fifty-four.

#### **Results and Implications**

Family entrepreneurial role models influenced 61% of the women in this study were twenty-four or under whilst only 24% of those who were fifty-one or over had role models. Fathers were more likely to be entrepreneurial role models than mothers for all age groups.

Over one third of the respondents had started a business to improve their flexibility or work life balance. However of those who said they started a venture to make more money 35% were under thirty-five. Given that the under thirty-fives make up 22% of our sample population it is interesting to note that this same group account for 35% of those starting a venture to make money.

Another interesting finding is that those who were forty or under are more likely to consider themselves as entrepreneurs than those who were older. Furthermore nearly a half of those under thirty five said they had known they always would have their own business, this reduced to just over 21% for those who were fifty-five or over. Both of these findings may be a result of the successful portrayal of entrepreneurs in the media and the government thrust to encourage people to consider entrepreneurship as a viable career option.

Furthermore of those who had started a business to fulfil a dream or a passion 52% were under thirty-five. We have already noted that the under thirty-fives make up 22% of our sample population so this group is over represented. This could be linked to the rise in awareness and popularity of social and community enterprises and the benefits they can bring to others.

A significant number of respondents intended to grow their business. Whilst 38% overall said they will grow their venture, those who were younger were more optimistic with 52% of those under thirty-five believing they would, reducing to 21% of those fifty-five and over.

The over fifty-fives cited two reasons for their desire for growth: having less family responsibility they are keen to create something new and see it flourish. Others suggested self employment is a way to fund or supplement their retirement.

The current economic climate has resulted in job losses for men and women. This might lead us to the hypothesis that more women have started ventures in the last two years than in the years proceeding the down turn. However this study suggests the number of start ups per year has remained constant over a five year period.

Our respondents believe there is still a need for more mentors; more business start up courses and more access to finance. Young women struggled to finance their ventures. Women over forty suggested there should be more examples of older women running businesses.

This study suggests younger women are more likely to choose entrepreneurship as a career option. They are also much more likely to be interested in starting a business to make money or to help others (the social enterprise). Our results also suggest this group is most interested in growing their businesses. They are much more likely to have access to role models but still require mentoring and training. However whilst older females reported no difficulty funding their ventures younger women struggled; this may be because they already have student loans or do not have any collateral but barriers such as these must be removed if we are to continue to see young women creating new ventures.

The small trend in older women embracing self employment as a way to boast their retirement income should also be encouraged. They have as much as fifteen years of productive working life after official retirement and many want to do something useful with that time as well as needing to earn money. They may require help to get started but in terms of ensuring they remain economically active and contributing to UK PLC it will be worth it.

# Embedded co-existence of individual and state level institutional entrepreneurship: The case of Abu Dhabi

John Meewella

## **Principal Topic**

In considering Public Policy for Entrepreneurship and Innovation: the roots of institutional entrepreneurship lie in the theories of institutions and entrepreneurship (Battilana et al. 2009; Bruton et al 2010; DiMaggio & Powell 1983, 1991; Garud et al 2007; Leca et al. 2008; Scott 2005, 2007;). Historically, one of the central theories in entrepreneurship is resource-based theory, RBT (Barney 1991) which however does not take into consideration wider environmental and cultural issues that shape the framework in which entrepreneurs operate. Thus, institutional theory fills this void by completing the institutional settings and conditions of entrepreneurship (Bruton et al. 2010) bound by regulatory issues and a number of social and cultural influences that make the foundation for legitimacy of the change actors instead on focusing solely on profit or efficiency-seeking behaviour (Bruton et al. 2010; Dacin et al. 2002).

Abu Dhabi, the capital of the United Arab Emirates and the richest city in the world, has gone through a remarkable shift from a remote desert sheikdom to a glitzing metropol in a couple of decades. Oil is not the only possible explanation for the development process of Abu Dhabi. In order to understand and explain the development process of Abu Dhabi, we turn to institutional theory in attempting to explain the change process by which structures, including schemas, rules, norms, and routines become as firm guidelines for social behavior (Scott, 2004). Institutional entrepreneurship, on the other hand, explains the roles of institutions as powerful actors which can shape and even turn upside down entire economies.



Instead of focusing on single case and single change actor, our research analyzes and explains the embedded role of two change actors, individual and state, which provides deeper insight to address the change process in a multi-level and multiple-field levels, which has remained marginal research area in the last decades (Battilana et al. 2009; Leca et al. 2008; Levy et al. 2008). This is especially crucial in Abu Dhabi's case, where the ruler has a powerful position in the country and the boundaries between ruler and government are not firm.

#### Method

Since this research discusses a time span of more than 40 years, longitudinal historical research is applied because the studied phenomenon is in the past and the nature of the evidence of the phenomenon is retrospective (Halinen & Törnroos 1995). This approach is seen as being especially appropriate when researching topics that are relatively inadequately understood (Glaser & Strauss 1967). In this research a multilevel analysis with historical perspective facilitates the interpretation of complex causal relationships (cf. Pettigrew 1990; Kieser 1994) between actions of individuals (rulers) and state in the historical socioeconomic development of Abu Dhabi.

The development of Abu Dhabi explained through individual and state change actors can only be explained through the interaction with a variety of events and decisions that have taken place also in different political, economic and social contexts throughout the history. The role of an individual in a historical analysis type of research is seen by Morgan and Smircich (1980) as an adaptive agent that exists in an interactive relationship with the world: individuals both influence and are influenced by their contexts of environments.

A multilevel analysis such as ours facilitates theorizing through a careful examination of relevant data collected from multiple sources (Eisenhardt 1989). During the last 20 years, the main research methods that have been applied to the study of institutional entrepreneurship are discourse analysis (e.g. critical discourse analysis, narrative analysis, framing analysis) and rhetoric (Leca et al. 2008). Our research which combines several methods, such as case study and historical longitudinal analysis, is thus a fresh angle in institutional entrepreneurship research.

Primary data was collected through a combination of in-depth interviews, semi-structured questions, openended questions, probing, follow-ups and validation through post-follow-up notes with interviewees arising from held the senior governmental offices. Secondary data sources included several historical researches (e.g. Al-Fahim 2007; Abdullah 2007; Krane 2010), government statistics and publications, press releases and media reports.

#### Results and implications

The rulers of Abu Dhabi have initiated a need for change for the economy to shift from oil economy towards building knowledge-based economy. The development of Abu Dhabi can be claimed to resemble a risk-averse diversified portfolio investment strategy. In general, this kind of long-range planning has remained somewhat scarce in the region, which clearly distinctions Abu Dhabi's institutional entrepreneurship outcomes.

While it is widely acknowledged that the oil wealth has contributed greatly in the modernization of the UAE, there is also criticism related to the oil money which has slowed the diversification of the nation (e.g. Hvidt 2011; Krane 2010). Some critics hint that the possession of natural resources typically establishes a rentier economy (cf. Krane 2010; Nasra and Dacin 2010), and in some cases end up even in the Dutch disease (cf. Corden 1984).

Thus, oil wealth can be both a blessing and a curse for a nation (IKED 2010). However, in the case of Abu Dhabi, several long-term development plans have been established in both nation and emirate levels, which is one sign of the role of institutional entrepreneurship. We argue that the acts of institutional entrepreneurs have clearly taken a strong role in the transformation of Abu Dhabi, which separates it from the rest of the countries with vast natural resources breaking down the traditional pattern of resource-curse.

## Commercialising breakthrough technology and the role for public policy

Samantha Sharpe

#### Abstract

This paper investigates the commercialisation of breakthrough technologies from science base to viable commercial applications. Breakthrough technologies emerge from novel and discontinuous innovations that result in significant and irreversible changes. These innovations are based on new, under-or unexploited physical, chemical and biological phenomena, which allow order of magnitude improvements in the performance of existing products and/ or the creation of entirely new ones. These novel innovations may entail the development of 'new technology platforms' with applications across a range of products and markets. Many of the resultant applications are not envisaged at the time of the initial innovation.

This paper draws on the results from seven historical case studies of breakthrough technology development. The case study technologies are Liquid Crystal Displays (LCD), Light Emitting Diodes (LEDs), Optical Fibres, Photovoltaics, Inkjet Printing, Giant Magnetoresistance (GMR) and Microelectronic Mechanical Systems (MEMS).

The case studies illustrate the dramatic changes breakthrough technologies can make on the industrial landscape and the context surrounding discovery and commercialisation of these technologies. The potential for extensive industrial development; enhanced national competitiveness; and employment and export growth are the key motivators for government activity in breakthrough technology development. These upside gains can outweigh the downside risks of commercialising these technologies and the knowledge that most of these attempts at breakthrough technologies will come to nothing.

Public policy in recent decades has attempted to encourage the discovery of breakthrough technologies and accelerate the commercialisation of these technologies. Public money is also playing an increasing role in the external financing of technology, through subsidies and grants, tax concessions and the increasing prevalence of government-backed venture capital (including the Innovation Investment Fund and the Renewable Energy Venture Fund both of which are backed by Australian Government funding) and finance corporations (for example the forthcoming Clean Energy Finance Corporation in Australia, the Green Bank in the UK).

This paper identifies two transition periods in the commercialisation of science-based technology; the transition from science-base to pre-commercial environment, and the transition from pre-commercial to commercial environment. Factors that drive technology from the science base to the pre-commercial environment include interdisciplinary interaction, time (often decades), a background of 'blue skies' or curiosity-driven research activity that is sheltered from the business cycle, technology champions that spread the word of the potential applications and luck. Luck that the right people will meet at the right time and that certain research will be supported at the right time (although there are many examples of firms making their own luck as well).

Factors that see a breakthrough technology transfer from the pre-commercial environment into the commercial environment include the development of niche applications for/ and the existence of non-price sensitive customers. These early applications build the reputation of the new technology and non-price sensitive customers allow engineering and manufacturing techniques to be developed in an environment where unit cost is not the primary consideration. Another key factor in transferring breakthrough technology from the pre-commercial environment is corporate strategy.

Firms (mainly large firms) make numerous strategic decisions in the provision of resources to new technologies in the pre-commercial phase. Strategic areas include decision and position of market entry; creating internal capability in technology or cultivating external links; decision to cannibalise existing products with new technology; vehicle of commercialisation (start-up, spin-out or corporate unit); and mechanisms for funding technology development through pursuit of R&D contracts, participation in R&D programs (usually cooperative), internal revenue or external sources such as 'money clubs' and risk capital.

Three implications for public policy are drawn from the case study analysis. Firstly, the context of national programs of research in breakthrough technologies has a strong influence on the eventual commercial



outcomes of the research. The role government policy in areas such as space, energy and defence is critical in funding the innovation activity that develops technology in a pre-commercial environment and these policy areas needs to have links into a wider view of innovation policy. A current example is the Australian Government's investment in the Square Kilometre Array (SKA) telescope.

Secondly, the type and resources of organizations hosting pre-commercial development impact on the ability of the technology to transfer successfully to the commercial environment. Organizations' need both pre-commercial and commercial technology development ability and resources, or the ability to transfer the technology from one organization to another in order to provide this ability and resources.

Thirdly, breakthrough technology, because of its long timelines of development and potentially revolutionary industrial effects, will be influenced by macroeconomic, social and political factors in expected and unexpected ways. This means that policy activity aimed at accelerating technology commercialisation will have to be long term but, be pro-active in some circumstances and responsive in others. Such a need for flexibility in policy will require ongoing two-way communication between the policy, industrial and scientific communities.



Session 8B: Capabilities & Resources

Room: P Block 505

Session Chair: Scott Gordon

## How do capabilities of the entrepreneurs vary across the different stages of the firm? Evidence from the literature

Manjula Dissanayake

#### Abstract

Governments are challenged by the need to create programs that support the high quality and high growth firms (Shane 2009) and provide a framework of conditions that will encourage firms toward success. Further governments need to monitor the overall state of a region with respect to its readiness to start, nurture and grow firms to prosperity (Bosma & Levie 2010). However, Lichtenstein (2008) has argued that the stage of development of a firm is independent of the capability level of entrepreneurs although transitioning through stages depends upon entrepreneurs with higher capability levels. Therefore, the purpose of this study was to determine the various entrepreneurial capabilities that are associated with different entrepreneurial stages of a firm. This will aid government policy-makers and educators to provide training and education programs that better match the dominant need within a region or the objectives of an education intervention.

This research classified firm stages into nascent (firm gestation), survival (firm start up) and growth (growth of established firms). Based on previous studies, it is apparent that different entrepreneurial capabilities are deemed necessary during firm gestation, survival and growth that accelerate success of the firm moving through these stages.

#### The antecedents of innovation in small Australian firms: the role of capabilities

Martie-Louise Verreynne

#### **Principal Topic**

Innovation is widely accepted as one mechanism that firms adopt in the purist of competitive advantage (Covin and Miles 1999). There has been much attention on how firms can enhance innovation effectiveness through a better understanding of the process of innovation. For example, researchers have identified drivers of innovation to include: (1) uncertain environments (McKelvie, Haynie and Gustavsson, 2011); (2) enabling organizational structures (Cosh, Fu and Hughes, 2012); (3) investment in research and development (R&D) capabilities (Hadjimanolis, 2000); and (4) environmental opportunities (Groen, Wakkee and De Weerd-Nederhof, 2008). In this paper we draw on theories of capability development (Helfat, 1997; Schreyogg and Kliesch-Eberl, 2007) to argue that the capacity to allocate, combine and change resources to innovate depends on a firm's ability to develop a set of coordinated capabilities that support this task. The purpose of this paper is to investigate the role of potential antecedents of innovation such as training, research and development, formal planning and growth aspirations have on the innovation outcomes of Australian firms.

#### Method

The present study adopts the Community Innovation Survey (CIS) methodology (OECD, 2006) on a sample of Australian firms. It draws on two sets of data, collected during 2010/1 and 2012. During 2010/1 questionnaires were mailed to 28,300 Australian firms, followed by two reminders. A stratified sampling strategy was used to ensure representativeness across firm sizes, industries and states. The response rate was 7.5 per cent with a total of 2,107 responses, following a number of natural disasters that occurred during data collection. In 2012 a detailed survey was distributed to 14,102 firms by survey and with the option of completing it online. A total of 1,710 firms completed the survey, for an overall response rate of 12 per cent for Australian firms. 414 firms responded to both surveys (hereafter panel data).

The survey instrument included items and scales purporting to measure organisational demographics, coemptive and technological environments, capabilities, resources, innovation practices, growth aspirations and performance. Psychometric tests for reliability and validity were conducted. Data were further analysed using chi-square tests of differences, Spearman's correlations, multiple and logistic regression.

## **Results and Implications**

To understand why firms innovate, the antecedents of innovation were examined with a focus on growth intentions of the firm and its competitive environment. The present study examines a longitudinal sample of Australian firms to better understand the impact of formalisation (the extent to which work roles are structured in an organisation) on performance. The findings suggest that Australian firms active in innovation were more likely to use formal planning mechanisms, including written business and human resources plans and formal innovation strategies. Analysis of panel data confirmed these trends, with firms innovating in 2012 more likely to have engaged in R&D, have a business plan and managed their accounts on a monthly basis during 2011, which provides support to Cosh, Fu and Hughes (2012) proposition that formalisation, moderated by technology turbulence, is support innovation more effectively than less formal structures, and tends to result in higher levels of growth and financial performance. Firms with growth aspirations operating in the similar environments as satisfied firms perceived more barriers to growth but tended to be significantly innovative. In addition, the present study found that these innovative firms were more likely to exist in a highly competitive market environment. This suggests that an innovative entrepreneurial firm in a competitive environment with growth ambitions may adopt more formal innovation processes in the purist of competitive advantage.

From the analysis it is also clear that the resources and capabilities of firms active in innovation differed significantly from those who were not. Firms active in innovation employed a higher proportion of managerial and technology staff to general staff than non-innovating firms. They were also were more likely to provide formal training to staff. This finding supports previous research results that identified an emphasis on managerial and technological staff as crucial resources to support innovation (e.g. Souitaris, 2002). Firms that were active in innovation were also linked to future growth aspirations. Firms that were satisfied with their current overall performance were less likely to innovate.

# Entrepreneurial alertness and digital commerce adoption in small firms Change to? Decision-making logic in small firms: ...

Retha de Villiers Scheepers



**Session 8C:** Entrepreneurial Growth and Performance

Room: P Block 506A

Session Chair: Christophe Garonne

## Implications of Competence and Governance Strategies for Entrepreneurial Growth

**Daniel Prior** 

#### **Abstract**

In this study, we examine the implications of the pursuit of two of strategic management's major theories, governance and competence, by small businesses, for entrepreneurial growth. While the performance implications for large enterprises, of these two theory areas, are well documented in the strategy literature, far less is known about their applicability and effectiveness in the small business context, or their implications for growth versus performance. Our results indicate that while both governance and competence strategies are positively associated with growth, attempting to be flexible and doing both, is not. We conclude with a discussion of our results and their implications for future research.

## Converting Technical Knowledge: Reconciling Internal and External Views of Firm Growth

Sven-Olov Daunfeldt

## **Principal Topic**

Industrial Organization Economics suggests that firm's ability to grow and prosper is dependent on them positioning themselves in industries that are fast-growing or where competition in relatively benign (Porter, 1990). Research using knowledge based theory suggests that firms' ability to build and maintain a unique knowledge base is imperative for growth (Wiklund & Shepherd, 2003), but has seldom considered in what type of environments knowledge is more or less important. This paper investigates under what conditions the technical knowledge of employees lead to firm growth. Specifically, we take an interest in how technological knowledge of employees is more or less important under different industrial conditions.

#### Method

To address our research questions we draw upon a detailed archival dataset of new Swedish technology ventures from 1995 to 2002. Our dependent variable is the natural log of employment, defined as  $\ln(Et+1)$  -  $\ln(Et)$ . We also conduct robustness tests where employment is replaced by the log of firm turnover. Our key predictor variable pertaining to ventures' position in an industry are: Industry Dynamism, Industry Concentration, Industry Growth and Industry Munificence – the extent to which the environment can support sustained growth (Eisenhardt & Schonhoven, 1991). Our key predictor variables pertaining to venture's knowledge base are: Engineers employed in the venture (Delmar et al., 2011; Hvide, 2009), employees' education (Cooper et al., 1994) and Slack resources (George, 2005). To investigate how technological knowledge of employees is more or less important under different industrial conditions we use a series of hierarchial interaction effects. We control for region and period effects using a set of dummy variables. To estimate our models we used fixed effects panel data regression with Heckman selection to account for survival bias and firm specific heterogeneity.

#### **Results and Implications**

The results from preliminary analysis show that while both external industry conditions and internal knowledge resources exhibit significant effects on firm growth, the industrial contingencies under which knowledge resources facilitate firm growth are distinct and economically important. Specifically, we find that while both employees' education and slack resources are more important in dynamic industries with high munificence, engineers employed in the venture are the most important factor for new venture growth, especially in dynamic industries characterized by a high level of competition. Our research seeks to reconcile two views –internal and external – of firm growth by showing where technical knowledge generates growth most effectively. Our paper contributes to the literature on entrepreneurship by substantiates the role of technological knowledge for firm growth, and furthermore contextualizes this by showing that whether or not

this link will lead to realized growth depends on the technological regime of industries (Nelson and Winter, 1982). Second, our paper contributes to theories of strategic entrepreneurship, focusing on the role of changes and differences in knowledge structures that may enhance the competitive advantage and growth of new ventures (Aldrich and Ruef, 2006; Bradley, Aldrich, Shepherd and Wiklund, 2010).

#### Interaction of processes and Open Innovation performance

Bert Verhoeven

Open Innovation management is widely considered to be like a black box; where the inputs and the outputs/ outcomes are measured with limited attempts to understand how the black box operates. Specifically network processes are not well understood. The trend towards Open Innovation (innovation processes in which firms interact extensively with their environment, leading to a significant amount of external knowledge exploration and exploitation, Chesbrough 2003) has brought with it major managerial challenges because of its complexity (Lichtenthaler 2011). We propose that an in-depth analysis of innovation network processes and the role/skills/capabilities of the network manager (orchestrator) will fundamentally help improve Innovation and Open Innovation performance.

#### **Orchestration processes**

Our paper includes a literature review of four constructs: Open Innovation and performance, Innovation processes and networks, Orchestration and network management. A range of empiric research has indicated seven network processes: Dhanaraj and Parkhe (2006) found that orchestration comprises management of three processes: knowledge mobility, innovation appropriability, and network stability. Batterink et al (2010) further proposed innovation initiation/network design/composition and innovation process (project) management. Nambisan and Sawhney (2011) put forward two further network management processes: innovation leverage and innovation coherence. Ritala et al (2009) explored orchestration capability as a concept defining the firm's ability to purposefully build and manage innovation networks. The authors identified and illustrated distinct capabilities and skills for three innovation network processes: Knowledge Mobility; Innovation Appropriability; Network Stability.

#### Goals

A guiding research question is: what are the core innovation network processes and what model describes their conceptual relationship with Open Innovation performance?

#### Research design

Our research methodology started with a literature review on the topic followed by 24 semi structured interviews with innovators in a network. The qualitative data process started with transcription of the interviews followed by summarising, categorising and structuring/coding. For the data analysis we used a deductive approach with pattern matching, explanation building and cross-case synthesis using a logical 4 tier structure: Integrate related data drawn from different transcripts/notes; Identify key themes of patterns for further exploration; develop/test conceptual basis; draw and verify conclusions. Integrating the literature review with the interview data analysis resulted in conclusions and recommendations.

## **Findings**

The interviews led to two more network process: network marketing and entrepreneurial processes. The nine processes form a conceptual model in relation to Innovation and Open Innovation performance.

#### Practical implications

Defining key network processes improves the visibility of the activities that are essential in managing open innovation processes. It will enable managers to set key performance indicators based on network-processes and will provide insight into the skills and capabilities needed to manage the innovation process efficiently, possibly leading to: improved performance; a better way to measure management performance (not just based on inputs and outputs/outcomes); and ultimately more efficient markets for technology transfer. We recommend incorporating the entrepreneurship process (Morris & Kuratko, 2006) to technology transfer mechanism.



Session 8D: High Technology Entrepreneurship

Room: P Block 506

Session Chair: Roxanne Zolin

#### Are we there yet? Problem formulation and business model innovation for ICT-based startups

Magnus Holman

#### Introduction

How should entrepreneurs formulate their businesses to create and capture value? To answer this, the business model concept has recently become popular (Osterwalder et al., 2005).

While there are many business model frameworks in the literature, there is still not any consensus concerning what a 'proper' framework consists of. Nonetheless, the business model canvas is popular within the industry (Osterwalder and Pigneur 2010); its nine business model elements can serve as a template of proposed business models for entrepreneurial firms.

A problem with their model is that it at heart an ontology where the relationships among the elements are poorly elaborated. In addition the canvas does not include a process of how to figure out whether a proposed business model will be effective. The latter is unfortunate as entrepreneurial firms are not born with a fully developed business model. Instead, from an evolutionary perspective business models can be seen as an emergent phenomenon following ongoing experimental or trial and error processes. Indeed, entrepreneurial firms do tend to change their business model subsequent to launch (Brink and Holmén 2009). To speed up the process of generating a successful business model, some authors recommend using hypothesis testing (Murray and Tripsas 2004).

Presently the way to figure out how to test the set of hypotheses underlying the canvas specified business model is by 'getting out of the door' by talking to potential users and customers (Blank and Dorf 2012). Their approach is customer centric approach in the sense that the firm specifies a business model and test it by interacting with potential users or customers. If some business model hypotheses or assumptions are flawed the entire canvas or specific elements are rewritten. However, this practically-oriented approach can entail a couple of problems. One is that the focus on certain hypotheses and the prioritization may be poorly specified or communicated within the firm. Indeed, user or customer feedback may be sloppy and ad hoc meaning the rational for redesigning the business model may be flawed. Thus, there is a need to address how to more rigorously formulate and evaluate various problems forcing team communication and insights. We suggest that this can be done by drawing on the problem-solving perspective (Nickerson and Zenger), as this approach shows how the complexity of a valuable problem informs how to set up the organization of problem-solving.

However, presently the problem-solving perspective has not been applied to the business model literature. Thus, this paper will apply the problem-solving perspective to the canvas as a way to formulate and delineate critical problems with entrepreneurial firms' business model designs. Empirically the paper describes ten newly started entrepreneurial ICT companies' problem maps and analyses the similarity and differences among the problem maps.

#### Method

The paper formulates, evaluates and compares business model innovation-problems in ten Swedish preventure capital ICT-based entrepreneurial firms with a turnover of 500'-1000' USD. The companies were selected from a population of 80 companies recommended by serial entrepreneurs, venture capitalists and innovation managers. Data is collected in four ways. Informal discussions during a get-together week in Silicon Valley are combined with semi-structured interviews with two or more people per firm. The companies derive their business models under the auspices of the authors and present for each other and for leading Swedish venture capitalists and serial entrepreneurs. Finally, to explicitly formulate and evaluate problems with the proposed business model from the perspective of the entire firms a structured workshop of 4-7 participants (the authors act as moderators) translates an initial problem symptom or web of symptoms into formulations

of the problem that are sufficiently well-defined to enable subsequent search for or generation of solutions. The key question is formulated as "What is the main problem the new business model X?" The moderator communicates the problem statement which is discussed and reformulated by the workshop participants. Following this the participants write down 3-5 one sentence answer on individual post-it notes, which are scrutinized by the entire team. The formulations are reformulated until all the notes can be falsified and are understood by all (but not necessarily agreed upon). The problems are grouped into problem clusters followed by relating the different problem clusters in terms of their dependencies. Finally the problem clusters in terms of importance (impact) and difficulty of resolution by voting. From a theoretical perspective, this provides a way to identify and relate the (most) valuable problems (see e.g. Nickerson and Zenger, 2004).

Finally, the paper systematically compares the problem clusters of the ten firms.

#### Results and implication

The paper describes problems and analyses differences and similarities among problem formulations and problem clusters for entrepreneurial ICT-based startups. Our preliminary analysis indicates that 'forcing' the entrepreneur and staff to formulate main business model problems during a workshop leads to cascades of new identified problems. We suggest that this improves the ability of a firm to get customer feedback in order to reorient their business model.

As far as we are aware the paper is the first that relates the business model generation, the canvas and the problem-solving perspective. Thus, the problem-solving perspective is extended to the entrepreneurship and business model innovation literature. We suggest that a focus on formulating and outlining the complexity of valuable problems may be a fruitful way of making business model innovation studies theoretically grounded.

# Network Development Process: Do Regional Innovation Network and their Tenants Really Talk About the Same Thing?

Mahamadou Biga-Diambeidou

## **Principle Topic**

Building on insights provided by the literature on knowledge economy (Griliches 1979; Jaffe 1989), economic clusters (Marshall 1890; Porter 1998) and National/Regional Innovation Systems (Lundvall 1992; Nelson 1993; Cooke et al. 1998; Asheim 2003), policy makers now consider local innovation networks as a key component of economic growth. Whatever the label used – Knowledge Clusters (Spain), Technology Advanced Metropolitan Area (Japan), Technopoles (France) or Competitiveness Clusters (France and Belgium), those networks are designed to help startup technology-based companies to bring innovation to the market. In so doing, they provide their tenants/members with a range of business network services.

Furthermore, at firms level, prior research shows that new ventures that develop structures of network connections more effective at knowledge exchange are more likely to contribute to sustainable levels of growth within their regions (Neergaard, 2005; Elfring and Hulsink, 2003; Hite and Hesterly, 2001). Hence the value of networks is a key factor in the entrepreneurial success (Johannisson, 2000; Hite and Hesterly, 2001; Rawley et al., 2000). The ability of regional innovation networks (RIN) to design policies that favor the development of their members' networks is therefore a fundamental element in regional economic development and represents as such an important issue for researchers as well for policy makers.

Despite the importance of RINs and the fact that the value of network is a key factor of the entrepreneurial process, studies about the actual impact of innovation networks on the region considered as well as their members are still in their infancy (Fromhold-Eisebith and Eisebith 2008). Policy makers facing failed experiences now feel the need for a deeper understanding of the mechanisms at hand. Beside potential political pressure to keep some results under the radar (Fromhold-Eisebith and Eisebith 2008), strong technical obstacles are associated with the evaluation of promoted cluster such as the variety of network' structures implemented by local authorities, the difficulty to isolate the impact of a specific policy from other economic factors as well as the difficulty to assess "soft" goals such as the development of intangible capital (Van Haeperen et al. 2009; Venkataraman, 2004). As a result, a qualitative bottom-up approach has been advocated (see Diez 2001) to explore the impact of the promoted regional innovation network on their tenants.



In line with recent entrepreneurship research on networks (Slotte-Kock and Coviello, 2009; Hoang and Antoncic, 2003) focusing on the processes associated with network development, this study explore the relationship between RIN policies and their tenant network development process. Specifically, drawing upon social network theory and empirical evidence, we investigate two primary questions yet unanswered or insufficiently addressed: (i) how far companies benefit from their regional innovation network in setting their own network? (ii) Which policies set by regional innovation networks suit best to support the companies' effort to develop/enhance their own network pertaining to bringing successfully innovation to the market? Exploring these questions will bring insight on a better understanding of the structural and relational network characteristics through the examination of the relationship between RINs policies and the performance of their startups.

#### Method

Using a framework developed from the literature, we adopted a multisite case research and conducted a multilevel analysis based on RINs and their respective startups. At the RINs level, we contrast two European regional innovation networks, namely the Competitiveness Clusters' policies in Wallonia (the French speaking part of Belgium) and the Technopole de l'Aube in France. Then, we pulled a set of companies related to each of these RINs in order to explore the process of network formation and the performance of startups. Data were collected through (i) semi-structured interviews of entrepreneurs as well as local research and industrial actors involved in the promoted regional innovation networks, and (ii) documentation from the relevant public authorities. Next, descriptive comparative and multivariate data analysis are used to address the research questions.

## **Results and Implications**

At the theoretical standpoint, this paper provides a workable framework – in terms of structures and relations - that may help regional innovation networks in their task of assisting/training their tenants in developing the necessary networks required for the success of their innovations in the market. The preliminary results of this research also convey interesting implications. Among others, the paper suggests the existence of inflexion points in the process of developing networks. Failure to recognize them and to manage them efficiently may threaten the growth of startups. Entrepreneurs are aware of the importance of networks but are not trained on how and when to take advantage on them. Networks are no longer an end, but a departure point regarding entrepreneurial process. As far as RINs are concern, the management of networks comprises two aspects: the design of the appropriate structure and the nature of relations to set among members.

While Regional Innovation Networks (RINs) claim to bring innovation to market by helping their tenants experience high growth, great products die before their age just because they fail to capitalize the market and customer potential. Hence, why only a few achieve this goal? The paper suggests that the answer may lie on the level of professionalization of relations between RINs and their startups. Our preliminary results point the existence of a gap between the network development processes perceived at new venture level and the RINs policies in terms of networking toward their tenants. Thus, the paper provides insights to RINs managers and policy makers on how they can meaningfully support economic development. We hope that our study will contribute to the enhanced understanding of network development process, and provide insights to entrepreneurs and network providers on how to maximize their relationship and to take advantage on them.

# David Storey's OC Theory in the Light of Empirical Evidence: Results from the German 'EXIST Program'

Sean Patrick Sassmannshausen

#### **Principal Topic**

This paper is concerned with a notion that was recently made by David Storey (2011), who assumes that successful entrepreneurship is a matter of optimism and chance, not of planed outcomes.

In support of his argument, Storey cites Coad (2009) and Landström (2007) who empirically found that only a small number of risk capital backed ventures achieve high growth and success. Coad (2009) finds that

only roughly 15% of all VC portfolio companies achieve high growth and success. Based on Bridge (2010) and Davidsson (2008) Storey argues that governmental programs will be even less successful in "predicting winners". This puts governmental support programs in question that provide direct aid to individual ventures, as it might be assumed likely – according to Storey's sources – that only less than 15% of resources (tax payers' money and/or governmental debt) in those programs are spend on companies that will achieve growth and success.

We test Storey's assumption on the limitations of governmental support programs by assessing the outcomes of a program that supports knowledge- or technology-based spin-offs from German universities. The Program "EXIST" is – according to its webpage – "a support program of the Federal Ministry of Economics and Technology (BMWi) aimed at improving the entrepreneurial environment at universities and research institutions and at increasing the number of technology and knowledge based business start-ups."

Besides fostering an entrepreneurial culture and establishing an entrepreneurial ecosystem for / at universities, the program also provides direct support for ventures in a very early, seed stage (pre start-up). "The EXIST Business Start-Up Grant supports the preparation of innovative business start-up projects at universities and research institutions. The grant aims to help scientists, university graduates and students developing their business ideas into business plans and to advance their ideas for products and services." (taken from http://www.exist.de/ englische version/index.php).

### Method

As the program is in place since the year 2000 (only with minor modifications) we were able to generate longitudinal data that allows to assess whether the EXIST program is doing better in picking potential winners than VC funds did according to Coad (2009). After a number of interviews with experts and some cases we conducted short telephone surveys with the (former nascent) entrepreneurs, asking for success measures (i.e. number of employees and open positions), if any setbacks in growth occurred (now or previously), annual turnover (i.e. sales in Euro) and its growth over previous years, and whether there is a positive cash flow and earnings before / after taxes. We furthermore asked about the support from the EXIST program and how important the EXIST program was to the development of the company.

### **Results and Implications**

Results indicate that the success rate is far above 15%, indicating that a governmental program investing in a very early (pre business-plan, pre patent, pre prototype) stage is doing better than the VC management did in those funds that Coad (2009) included in his survey. The full paper will outline what characteristics of the EXIST program may have allowed for this success rate that is in conflict with Storey's (2011) assumptions.

At this stage (research in progress) we can point at some findings from our case studies:

- Entrepreneurs used maximum of the resources provided by the program,
- Strong hindsight bias: either program's role totally denied or over-enthusiastically praised,
- Second stage investment by business angles or VCs, average three rounds of finance,
- Good VC deals, entrepreneurs faced a choice of several VCs that were willing to invest,
- Participation in EXIST program seen as a quality investment label by the BAVC market,
- Entrepreneurial teams more successful than solo entrepreneurs.
- Entrepreneurs aim at medium growth goals, aiming at turning the "S" in SME into a "M",
- Overall very successful and stable developments in terms of growth,
- Optimism played its role especially during the Seed Stage before market entry but not after, as founders rationality replaces emotions,
- Chance played almost no role according to the interviews with the founders and with the experts in incubators; "chance" was "planed", so to speak the entrepreneurs "made their own luck" (see Shapiro & Stevenson 2005).



Preliminary findings from analysing secondary data also revealed that EXIST Start-up Grant seems to be a very successful programme:

- Much less new venture abandonment than average;
- Higher outcome in innovation, measured by IP;
- Average size in the first year: 4 fulltime => above average;
- More international activities than average;
- More VC deals than average;
- Considerable sustainable growth;

Empirical data supports that the EXIST programme is very successful in picking winners in terms of survival and steady growth. The EXIST programme provides support at a very early (pre-seed) stage, even before a proper business plan is written. But how can this governmental programme achieve results that exceed the findings by Coad (2009) and Landström (2007) in contrast to assumptions made by Bridge (2010) and Davidsson (2008)? The paper concludes in pointing at characteristics of the EXIST programme and how these results are challenging Storey's OC theory in a practical way and from the viewpoint of entrepreneurship theory.

