Australian Centre for Entrepreneurship (ACE) Research Exchange Conference 2019

5 – 8 February, Sydney, Australia



http://www.acereconference.com/



C entre for

Entrepreneurship

Research

Exchange



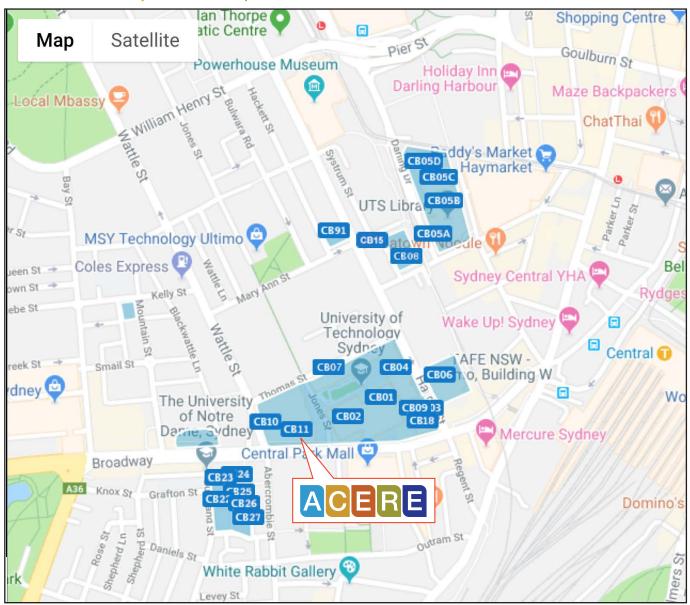








UTS Campus Map



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Welcome

Welcome to ACERE2019! This eight edition of ACERE – the Australian Centre for Entrepreneurship Research Exchange conference – takes the conference to the beautiful city of Sydney, one of the major economic, educational, and cultural hubs in Australia. Continuing the proud tradition of an Australia-based, high quality, highly developmental annual international conference in entrepreneurship, ACERE2019 features Regular Paper Sessions, pitching and roundtable Paper Development Sessions (PDS), a Doctoral Consortium, and pre-conference Entrepreneurship Educators Forum. For the Keynote addresses, PDS chairing, and closing Panel we have – as usual – a line-up of international top scholars, including: Michael Fritsch, Moren Levesque, ACE Adjunct Professor Dean Shepherd, and ACE founding director Per Davidsson.

We thank our co-hosts, the University of Technology Sydney and our award sponsors, La Trobe University, University of Adelaide, University of South Australia, and the Sydney School of Entrepreneurship for their contributions to making this conference possible. We wish you a hearty welcome to a great conference experience at ACERE and trust that you will also enjoy Sydney and its surroundings.



Martin Obschonka (Director of ACE) and Karen Taylor (Centre Coordinator of ACE)

It is once again a pleasure to host ACERE, the Doctoral Consortium, and pre-conference Educators Forum, and to welcome you all to Sydney, to UTS, and to introduce you to its new Faculty of Transdisciplinary Innovation (FTDI). Sydney has the highest rates of startups and venture capital in Australia, and is home to many incubators, accelerators, makerlabs and spaces. Tours of these spaces are also available via next week's University-Industry Engagement Conference at UTS. UTS takes pride in cultivating a highly collaborative and interdisciplinary environment for people to innovate. Our new FTDI is an exemplar of breaking down siloed conversations. Hosting ACERE is an example thereof because of the wonderful discussions that occur as everyone shares and debates their scholarly work towards a more entrepreneurial future. Welcome to UTS!



Martin Bliemel (Director, Diploma in Innovation)

Sponsors

















Conference Information

Conference Venues

This is the link to the interactive maps on the UTS Campus http://maps.uts.edu.au/map.cfm

This link http://wayfinding.uts.edu.au/ helps you find your way if you are lost on the UTS campus.

Doctoral Consortium – Tuesday 5 February 9:00 to 5:00 pm – University of Technology Sydney, City Campus 14-28 Ultimo Road 'Dr Chau Chak Wing Building, UTS Building 8, Level 2, room 006 and 008.

 On Friday the Doctoral Consortium will close with a session at 1:30 to 3:00 pm in the lecture theatre immediately following the final panel session – University of Technology Sydney, 81 Broadway, Ultimo, Sydney. UTS Faculty of Engineering Building 11 City campus

Entrepreneurship Educators Forum – Tuesday 5 February 9:00 – 5:00 pm – Sydney School of Entrepreneurship, 651-731 Harris Street, Ultimo, Sydney.

Main ACERE Academic Program – Wednesday 6 to Friday 8 February – University of Technology Sydney, 81 Broadway (corner of Wattle and Broadway), Ultimo, Sydney. UTS Faculty of Engineering Building 11 City campus Central Station is a short walk to the UTS Building 11.

Registration Desk Location & Times

The registration desk will be open outside the lecture theatre in Building 11, B11.00.401 at 7:30 am on Wednesday morning and at 8:00 am on Thursday and Friday morning. During paper sessions the registration desk on Level 4 will also be open.

Conference Emergency Contact

Karen Taylor - Conference Manager

E: acereconference@qut.edu.au P: 0409 483 144

Social Functions

Welcome Reception

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

Venue: University of Technology Sydney, 81

Broadway, Ultimo, Sydney. UTS Faculty of Engineering Building 11 City campus Level 1.

Central Station is a short walk to the UTS

Building 11.

Social Networking Event

Date: Wednesday 6 February

Time: 6:00 – 8:00pm

Venue: Nick's Seafood Restaurant on Cockle Bay

Promanade, Darling Harbour

Gala Awards Cocktail Evening

Date: Thursday 7 February

Time: 6:30 - 10:30pm

Venue: The Quayside Room, Museum of Contemporary

Art Australia 140 George Street, The Rocks,

Sydney

Mobile Phones

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

WIFI

Network name: ACERE
Password: ACERE2019

Printing

The closest print shop is World of Print at the base of UTS Building 6 on Harris Street.



Conference Organising Committees

Conference Manager

Karen Taylor

QUT Australian Centre for Entrepreneurship Research

Conference Committee

Pia Arenius

RMIT University

Martin Bliemel

University of Technology Sydney

Per Davidsson

QUT Australian Centre for Entrepreneurship Research

Evan Douglas

Griffith University

Scott Gordon (Paper Development Sessions)

The University of Adelaide

Kim Klyver

University of Southern Denmark

Anna Krzeminska (Doctoral Consortium)

Macquarie University

Noel Lindsay

The University of Adelaide

Erik Lundmark (Doctoral Consortium)

Macquarie University

Alex Maritz

La Trobe University

Morgan Miles

Charles Sturt University

Martin Obschonka (Chair)

QUT Australian Centre for Entrepreneurship Research

Allan O'Connor

The University of South Australia

Dean Shepherd

University of Notre Dam

Marilyn Uy

Nanyang Technological University

Martie-Louise Verreynne

The University of Queensland

Frederik von Briel (Paper Development Sessions)

QUT Business School

UTS Room maps

ACERE Doctoral Consortium

Collaborative Classroom - 08.02.006



ACERE Lecture Theatre

Collaborative Theatre - 11.00.401



ACERE Paper Sessions

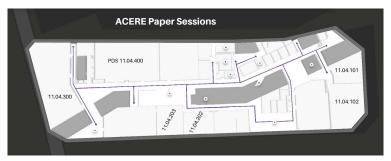
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Keynote Speakers

Dean Shepherd

Dean Shepherd is the Ray and Milann Siegfried Professor of Entrepreneurship at the Mendoza College of Business, Notre Dame University. Dean received his doctorate and MBA from Bond University (Australia). His research and teaching is in the field of entrepreneurship; he investigates both the decision making involved in leveraging cognitive and other resources to act on opportunities and the processes of learning from experimentation (including failure), in ways that ultimately lead to high levels of individual and organizational performance. Dean has published papers primarily in the top entrepreneurship, general management, strategic management, operations management, and psychology journals and has written (or edited) over 20 books.



Michael Fritsch

Michael Fritsch is currently Senior Professor of Economics at the Friedrich Schiller University Jena, Germany, and Research Professor at the Halle Institute for Economic Reseach (IWH). He is also Associate Editor of the academic journals Regional Studies and Small Business Economics. Michael Fritsch has received his degrees in economics (Diplom Volkswirt, Ph.D., Habilitation) from the Technical University of Berlin. From 1992-2006, he was a Professor of Economics and Chair of Economic Policy, at the Technical University Bergakademie Freiberg, and from 2006-2018 he was Chair of Business Dynamics, Innovation, and Economic Change at the Friedrich Schiller University Jena.



His recent research in the field of entrepreneurship is focused on the development of self-employment over time, entrepreneurial careers, and the effects of new businesses on economic development, with a special focus on innovative start-ups. Currently, Prof. Fritsch is working on the effect of formal and informal institutions on entrepreneurship, innovation activity, and growth. His publications comprise several hundred articles in scholarly journals and in edited volumes as well as diverse books.

Moren Levesque

Moren Lévesque is Professor and the CPA Ontario Chair in International Entrepreneurship at York University Schulich School of Business. Moren has been on the faculty at Université Laval, Carnegie Mellon University, Rensselaer Polytechnic Institute, Humboldt Universität, Case Western Reserve University, and the University of Waterloo as a Canada Research Chair in Innovation & Technical Entrepreneurship. Her research applies the methodologies of analytical and quantitative disciplines to the study of decision making in new business formation. Her work appears in Entrepreneurship Theory & Practice, European Journal of Operational Research, IEEE Transactions on Engineering Management, Journal of Business Venturing, Journal of Management Studies, Long Range Planning, Organization Science, Production and Operations Management, Strategic Entrepreneurship Journal and Strategic Management Journal, among other research outlets. Most recently, she has served the Academy of Management's Entrepreneurship Division as Chair of its Membership Committee. She has also served for a 5-year term as an officer for the Institute for Operations Research & Management Science's (INFORMS) Technology, Innovation Management and Entrepreneurship Section. Moren currently serves as Editor for Entrepreneurship Theory & Practice, Senior Editor for Production and Operations Management, and she served from 2013 to 2017 as Department Editor for IEEE Transactions on Engineering Management.





Per Davidsson

Professor Per Davidsson is the Founding Director of the Australian Centre for Entrepreneurship Research (ACE) and is the Talbot Family Foundation Chair in Entrepreneurship at ACE in the QUT Business School (Management). Per is especially known for his extensive research on start-up and growth of firms as well as the societal well-being and job creation effects of those activities. He has published over 70 peer reviewed articles in scholarly journals as well as a large number of books, reports, and book chapters. With over 27,000 citations (Google Scholar, Oct. 2018) he is one of the best cited scholars in entrepreneurship globally. He has led several major research programs including the Comprehensive Australian Study of Entrepreneurial Emergence (CAUSEE), the largest study of business start-ups ever undertaken in Australia. Per was an elected Officer of the Entrepreneurship Division of the Academy of Management for the 2007-12 period and served as its Chair in 2010/11. He has served as Associate Editor for three of the leading scholarly journals in entrepreneurship and currently serves on the editorial boards for several other journals. He is also an award-winning mentor. Several of his disciples have become internationally successful researchers in their own right, and two of them were recently appointed Vice Chancellors (Presidents) of universities in their respective home countries. Professor Davidsson's research interests are: External enablers of entrepreneurship, New venture creation, Firm growth, and Research methods.



Professor Colin Mason

Professor Colin Mason is professor of entrepreneurship at the Adam Smith Business School, University of Glasgow. Main interests are Entrepreneurship and Regional Development. Specialism in entrepreneurial finance - especially business angels and early stage venture capital and entrepreneurial ecosystems. With added interests in entrepreneurship education, Prof Mason is the Founder and Editor of Venture Capital: an international journal of entrepreneurial finance (Taylor and Francis), consulting Editor for International Small Business Journal (Sage), and lead Guest Editor for the forthcoming Special Issue on Entrepreneurial Ecosystem Dynamics for Entrepreneurship and Regional Development.



Doctoral Consortium

The ACERE Doctoral Consortium (DC) provides a rare opportunity for students to meet, learn from and interact with world leading entrepreneurship scholars, such as Michael Fritsch, Moren Levesque and Dean Shepherd. The DC is co-chaired by Anna Krzeminska and Erik Lundmark and offers a mix of presentations and interactive sessions. The DC covers theory building, publishing and tailored session where the students get help with their own specific problems. In addition, the DC offers an opportunity to network with peers from around the world and insights into the job market after the PhD.



Entrepreneurship Educator's Forum

Over the years, several ACERE advisory committee members and participants noted that ACERE provides a great opportunity to bring together some of the best entrepreneurship researchers, but also some of the best educators. Focussing exclusively on research felt like a missed opportunity to take a scholarly approach to sharing pedagogical practices and innovations. Yes, ACERE features many papers on the research of entrepreneurship education. And, some of these find their way into the entrepreneurship journals as well as journals like Education+Training. But, something else was needed to share the practices in a similarly scholarly way. Meanwhile, the US Association of Small Business and Entrepreneurship launched their own journal, Entrepreneurship Education and Pedagogy (EE&P), which is closely aligned with this missed opportunity and intentions. This year felt like the perfect storm to (re-?)launch the pre-ACERE Educator's Forum and to link part of it to a Special Issue in EE&P, guest edited by us, hopefully featuring you.

Our venue host for this event is none other than the new Sydney School of Entrepreneurship (SSE), which is a collaborative 'space' for entrepreneurship education. Having their venue at ACERE's doorstop is also an opportunity that is too good to be missed.

We have curated a program of sessions by which you will share and learn academically rigorous and novel approaches to entrepreneurship education. We are hoping you take advantage of SSE's space to bring you work and our conversations to life; more so than a conventional research talk!

From Martin: Since moving to Australia in 2009 and my first ACERE in 2010, this is the second pre-ACERE Educator's Forum I am aware of. The first one was a largely unstructured gathering of like-minded individuals, based on a larger grant application to the Office of Learning and Teaching (OLT) to develop Threshold Concepts for entrepreneurship. The proposal had unfortunate timing, since the OLT was soon to be shut down, and the project never got off the ground. It feels great to 'bring the band back together' with this forum, while also opening the doors to a broader group in a way that is more structured towards the KPIs were are held accountable to.

From Vibhor and Colin: Globally, Entrepreneurship Education is becoming a policy darling, and university imperative and, for our students, both an opportunity and a challenge. Further, global institutions have reported a widening gap on relevant skills required for current and future jobs, and therefore the phenomenon called skill based education and development of entrepreneurial environment was created for economic and social development of our society. Emphasis was given on practical application than theoretical appreciation. Join us as we share practice from our global friends to better understand what is happening in our domain. Our goal for the Educator's Forum is to share our insights, to develop greater appreciation of new practice and to further develop our domain of practice here in Australia.

Welcome!

Martin Bliemel, Director, Diploma in Innovation, UTS: Faculty of Transdisciplinary Innovation **Vibhor Pandey**, Research Assistant, Australian Centre for Entrepreneurship . QUT Business School **Colin Jones**, Senior Lecturer, QUT Business School



Entrepreneurship Education Forum – Program

5th February 2019 at Sydney School of Entrepreneurship

Start time	Line up / Paper Presentations
10:15	Welcome
10:30	Engaged Learning
	Balan, P., Restall, G., Mackay, M. A new perspective on the student learning contract
	Fiedler, A., Vidal, D. Entrepreneurial Techniques through Action-Learning to Teach Internationalisation
	MacKenzie, K., Halvorson, W., Tsipidis, S. Size matters: Exploring a Quadrant Model Approach for evolving Business Higher Education in the Entrepreneurial Age
	Pokidko, D. Decision-Making Theories and Tools in Entrepreneurship Education: From Rational Business Modeling to Heuristic Pattern Matching
	Synthesis
11:45	Tea
12:00	Beyond Entrepreneurship
	Zaheer, H. Incorporating entrepreneurship education and skills outside of entrepreneurship courses
	Anisimova, T. Swedish Solar Car Innovation – new product and venture development in a higher education and sustainability context
	Ferri, P., Gordon, J. Experiential Learning 2.0: Adding value through practitioner engagement
	Synthesis
13:00	Lunch
14:00	Cool tools
	Marchand, J. 'From [Virtual] Classroom to Boardroom': engaging students with an entrepreneurial approach to coaching and to developing a fully online asynchronous program
	Senyard, J. The use of QR Codes in Summative Review for Experiential Entrepreneurship Education
	Senyard, J. The use of QR Codes in Summative Review for Experiential Entrepreneurship Education Brown, P., Phillips, O., Gilfedder, L., Bliemel, M. Startup Methods Cards for Humanity
15:00	Brown, P., Phillips, O., Gilfedder, L., Bliemel, M. Startup Methods Cards for Humanity
15:00 15:15	Brown, P., Phillips, O., Gilfedder, L., Bliemel, M. Startup Methods Cards for Humanity Synthesis
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Entrepreneurship Education Forum - Abstracts

Abstracts are listed alphabetically by Lead Author.

SWEDISH SOLAR CAR INNOVATION – NEW PRODUCT AND VENTURE DEVELOPMENT IN A HIGHER EDUCATION AND SUSTAINABILITY CONTEXT

Tatiana Anisimova, Linnaeus University

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Student entrepreneurship has become an increasingly important topic for academics and practitioners alike. A major reason for that is the recognition that startups by students and recent university graduates have been found to be much more frequent than spin-offs by their faculty, and not of lower quality (Astebro, Bazzazian & Braguinsky, 2012). According to the "Triple Helix" model (Etzkowitz et al., 2000) universities play a critical role in regional innovation systems and student's entrepreneurial activities are found to be responsible of regional competitiveness (Guerrero et al., 2016). Jönköping University's (JU) Solar Car Project (SCP) is employed as a case study. It aims at fostering student entrepreneurship in an innovative pedagogical context. JU-SCP is a unique real-life and cross-functional collaborative educational project involving instructors and students from various Schools within JU (School of Engineering, International Business School, School of Education and Communication) as well as stakeholders from the wider community (e.g. industry). The project provides the student with in-depth knowledge and skills in automotive engineering, entrepreneurship, marketing and project management as well as sustainability thinking, by combining theory with an innovative activity-based learning approach. Mastering JU-SCP requires the student to run and develop the entrepreneurial venture JU Solar Team (JUST) - the fundamental identity behind the SCP. Its core activity consists of: (i) constructing a competitive solar-powered electric car; (ii) venture marketing and finance; and (iii) planning and participating in the Bridgestone World Solar Challenge 2019. The presentation describes the SCP/JUST and its outputs, with a particular focus on innovative pedagogy.

A NEW PERSPECTIVE ON THE STUDENT LEARNING CONTRACT

Peter Balan, University of South Australia Greg Restall, University of South Australia Mark Mackay, University of South Australia

peter.balan@unisa.edu.au

Anderson, Boud and Sampson (1998) identified learning contracts as one example of negotiated learning, a program of study that is jointly determined by staff and students. In summary, learning contracts are useful to acknowledge a student taking responsibility for their own learning, and are considered as an approach to clarify and codify individual learning and working commitments. A typical learning contract as used in higher education is a formal written agreement between the learner and a supervisor which details what is to be learnt, the resources and strategies available to assist in learning it, what will be produced as evidence of the learning having occurred, how that product will be assessed and within what timeframe the learning will take place (Knowles 1975; 1986). In addition, when teams are used in the classroom, contracts codify relationships between the individual, the team, and the educator (Mahler 2012). However, the traditional learning contract will have limited effectiveness if students do not have a clear understanding of the classroom behaviours required for the particular form of instruction. This presentation describes an innovative "grounded" or abductive approach to develop the student "learning contract" in the modern teaching and learning environment that requires students to take increased responsibility for their learning, and with an emphasis on students working in teams. Data is collected using in the form of qualitative data using minute paper evaluations (Stead 2050) and results are anlayzed using concept mapping (Balan et al, 2015)

STARTUP METHODS CARDS FOR HUMANITY

Paul Brown, University of Technology Sydney Oliver Phillips, University of Technology Sydney Lucy Gilfedder, University of Technology Sydney Martin Bliemel, University of Technology Sydney

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This project introduces methods cards for startups. Methods cards are well-known in service design, and enable re-combining steps to explore problem-solution spaces. The cards include 50 'steps' derived from content analysis of popular 'steps' in the literature. Each card includes a series of Socratic questions to engage with the concept, without first requiring users to learn about it in another form (e.g. a book or article). The cards are publicly available under creative commons, in order to be a catalyst for entrepreneurial thinking in developing economies. The haptic shape of the cards encourages users to challenge a linear sequential model of starting up, and to include configurational or complex systems-based approaches to identifying a viable business model. The cards may be combined with an agile based planning and control methodology (Minimum Viable Planning) to provide a structure for inexperienced entrepreneurs to engage in prioritisation and control routines.

MICRO-CREDENTIALING OF ENTREPRENEURSHIP EDUCATION IN A PRACTICE-BASED UNDERGRADUATE ENGINEERING CONTEXT

Bronwyn Eager, Swinburne University of Technology Emily Cook, Swinburne University of Technology

bronwyneager@gmail.com

This paper reports on the development, delivery, and assessment of entrepreneurship micro-credentials within the Bachelor of Engineering Practice (Honours) offered by The Engineering Practice Academy at Swinburne University of Technology in Melbourne, Australia. The degree was co-designed with industry partners, who heralded 'innovation', 'proactivity', and 'creativity' (i.e. tenets of entrepreneurship) as key competencies required for engineering graduates to navigate the changing nature of the workforce and meet industry demands. At the Academy, entrepreneurship capacity is implicitly infused within curriculum design via practice-based learning approaches which are conducted in industry-based contexts, and explicitly through entrepreneurship micro-credentials (delivered through an online learning management system, and face-to-face sessions).



EXPERIENTIAL LEARNING 2.0: ADDING VALUE THROUGH PRACTITIONER ENGAGEMENT

Paul Ferri, University of Glasgow Jillian Gordon, University of Glasgow

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Our focus on the development of a model of experiential learning, and specifically how to move beyond the traditional experiential learning model which transfers students from the classroom into a rich, dynamic and fluid learning environment by giving them the opportunity to learn by working on a live consultancy project for an entrepreneurial venture. We implant a live practitioner stream into the module by bringing in an experienced, practicing management consultant (into the equation) to run a skills-based workshop prior to the students undertaking their 'live' projects. Thereafter, the consultant comes back later in the course once the students are undertaking their projects, to deliver mini clinics with the project groups in the class. The addition of the professional practitioner perspective has proven hugely beneficial for the students as well as to the academics co-coordinating the course. It enables the students to better understand the complexities of dealing with clients and to manage expectations accordingly. Moreover, the key element of practicing consultancy of speaking of truth to power becomes a focal point for the students when advising the client company representatives.

ENTREPRENEURIAL TECHNIQUES THROUGH ACTION-LEARNING TO TEACH INTERNATIONALISATION

Antje Fiedler, University of Auckland Daniel Vidal, University of Auckland

a.fiedler@auckland.ac.nz

Action-learning was used as the platform to educate MBA students on how entrepreneurial principles can address the challenge of reducing uncertainty and risk when launching a business internationally. MBA students worked in teams of four to explore market opportunities for a New Zealand (NZ) small-and medium sized enterprise (SME). Learning took place during a 10-week course, which included a one-week trip to an international city (e.g. Tokyo, Ho Chi Minh City, Shanghai) allowing MBA students to apply the entrepreneurial approach covered in the classroom to a real life situation. Before and after the trip, students presented their approach and recommendations respectively to a panel of industry experts. The entrepreneurial approach is defined as a combination of customer development and product development processes, from the lean start-up methodology, underpinned by effectuation principles. The learning was framed within the overall construct of lean internationalisation. The approach supported two key outcomes: (1) understanding of the strategic aspects of international market entry with minimal investment and reduced uncertainty, in line with the affordable loss principle and (2) concrete recommendations to NZ SME on how to meet their internationalisation aspirations by applying effectual principles.

SIZE MATTERS: EXPLORING A QUADRANT MODEL APPROACH FOR EVOLVING BUSINESS HIGHER EDUCATION IN THE ENTREPRENEURIAL AGE

Kim MacKenzie, Queensland University of Technology Wade Halvorson, Monash University Sevasti Tsipidis, Southern Cross University

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Undergraduate business courses currently offered in Australian universities are largely reflective of the 'managed economy' era (Audretsch and Thurik, 2001) with a focus on equipping graduates with specialised skills and competencies to work in medium to large-sized organisations. With the rise of the 'entrepreneurial economy' (Kirchhoff, 1989), the evolution of 'dynamic capitalism' (Kirchhoff, 1994), and the growing legitimisation of entrepreneurship as an academic discipline (Kuratko and Morris, 2018), it is time for higher education business providers to evolve their business courses to include professional programs tailored to equip sole entrepreneurs, professional freelancers, and small business operators. Many Australian universities are already developing campus wide modular-style 'entrepreneurship' programs (Collett, 2011), however these are occurring outside the traditional business school boundaries and/or bridging multiple disciplinary fields, leaving little evidence of much needed business school reform. In support of the call for new approaches to teaching entrepreneurship in business schools (Kuratko and Morris, 2018) we propose a 'Quadrant Model Approach (QMA)' as a conceptual framework for retrofitting the current 'one size fits all' approach to delivering the core disciplines constituting business education, into four distinct categories based on firm size: 1. Sole Operator/Micro business, 2. Small Business, 3. Mediumsize Business, 4. Large Business. The various core business disciplines can then be adapted/shaped to the educational needs of each of the four quadrants, encompassing the learning needs of the autonomous sole entrepreneur operator at one end of the spectrum through to the specialist employee of a large multinational corporation at the other extreme.

'FROM [VIRTUAL] CLASSROOM TO BOARDROOM': ENGAGING STUDENTS WITH AN ENTREPRENEURIAL APPROACH TO COACHING AND TO DEVELOPING A FULLY ONLINE ASYNCHRONOUS PROGRAM

Julien Marchand, University of Technology

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The Australian Institute of Business (AIB) exclusively serves the needs of working adults through a curriculum delivered online. A key feature of its MBA is a capstone subject whereby students apply the knowledge acquired during the degree to a business issue in a professional context. However, many students struggled with such a subject. We used an entrepreneurial approach to coaching students and to developing a fully online asynchronous program which generated strong engagement and submission in 7 weeks. We created a series of videos with a discussion style supported by online forums and FAQs for the students but also for the online facilitators.



THE INFLUENCE OF TRUST ON ENTREPRENEURIAL LEARNING DURING A STARTUP ACCELERATOR

Allan O'Connor, University of South Australia

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This paper explores the influence of trust in relation to entrepreneurial learning. Facets of entrepreneurial learning have previously been considered from the perspectives of experiential learning and organisational learning. However, we adopt a holistic approach to the topic by asking in what ways is learning taking place, particularly during an actual early stage startup, where the co-founders, as learning entrepreneurs, are progressing through a government backed new business accelerator. In this way, we offer some foundational work for developing innovative pedagogy.

While there is a lack of broad consensus in defining the topic of entrepreneurial learning, three significant modes of learning have been conceptualized in this study that we argue converge to form an entrepreneurial learning nexus. The nexus is the zone within which the different modes of learning interplay as a learner switches between them. The three modes of learning we identify as each being a continuum whereby learning has oppositional form. The three intersecting continua are: exploratory and exploitative learning; individual and collecting learning; sensing and intuitive learning. Our research suggests that entrepreneurial learning is an integration of these different learning types. It finds that learners who develop trust among their co-learners, mentors, and instructors and in the program of learning itself, are particularly influenced to pivot from intuitive learning to sensing learning and individual learning to collective learning. Meanwhile other facets act to rebalance the bidirectional flow of knowledge among participants in an open way to create an entrepreneurial learning ecosystem.

A CAUTIONARY NOTE ON MICROCREDENTIALING

Steven Phelan, Fayetteville State University Caroline Glackin, Fayetteville State University

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Microcredentialing opportunities are emerging globally, through colleges, universities, secondary schools, governments, and nonprofits without validated reliable measures of learning. The European Union (EU) has partnered with JA Europe asbl to develop the Entrepreneurial Skills Pass (ESP) certification and organizations across the globe have a variety of entrepreneurship certification options. While the entrepreneurial competencies literature posits skilled behaviors can be learned, measurement is inconsistent, and its validity is still in question. Common measurement methods include self-reporting and knowledge tests with little emphasis on behavioral performance. Recently, Morris et al. (2013) demonstrated that nine of 13 entrepreneurial competencies were improved for 40 students after a six-week international consulting project, based upon self-reporting. Prior research has provided scant validation of competency improvement, or where it has been shown, we cannot rule out the Hawthorne effect, self-selection bias, or "p-hacking."

DECISION-MAKING THEORIES AND TOOLS IN ENTREPRENEURSHIP EDUCATION: FROM RATIONAL BUSINESS MODELING TO HEURISTIC PATTERN MATCHING

Daniil Pokidko, Hanken School of Economics

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Understanding the interplay between rational and heuristic decision-making processes within the entrepreneurial newventure-creation experience provides entrepreneurship scholars with an increased opportunity to supply students with the enhanced capabilities needed to handle this delicate balance. While the dominant rational approach to economic theory is well known and practiced in educational settings, the heuristic side of human decision-making behavior remains underexplored. We elaborate on the possible reasons for this underlying problem in the context of entrepreneurship and wider management education and illustrate the identified issue through an example of a popular learning tool in entrepreneurship education: the Business Model Canvas (BMC). We suggest a developed and tested by us "Heuristic Pattern Matching" approach as a way to tackle the identified challenges and provide entrepreneurship scholars with a framework to better incorporate heuristic processes into the entrepreneurial learning experience.

REDEFINING THE HONOURS DEGREE TO CREATE A PAN-UNIVERSITY PATHWAY TO ENTREPRENEURSHIP: INTEGRATING MODULARIZED LEARNING WITH BLENDED AND WORK INTEGRATED APPROACHES

Jochen Schweitzer, University of Technology Sydney Julien Marchand, University of Technology Martin Bliemel, University of Technology Sydney

jochen.schweitzer@uts.edu.au

More than 40 per cent of students at the University of Technology Sydney want to create their own jobs or start their own companies. A greater percentage are interested in developing entrepreneurial capabilities for the future of work. EY's Global Centre for Entrepreneurship and Innovation found similar aspirations globally. With a growing interest in entrepreneurship and a thriving ecosystem in Australia, UTS explored the option of introducing a bespoke degree to help graduates from any discipline fulfil their entrepreneurial potential. Instigated in 2017 and commencing in 2019, UTS will be offering Australia's first one-year full-time university-wide Bachelor of Entrepreneurship (Honours).

The new program complements undergraduate entrepreneurship subjects and extra-curricular activities and also serves as a bridge into more extensive postgraduate qualifications. The primary objective of the degree is to support students towards developing their entrepreneurial venture and learn the skills, knowledge and mindset required to build a successful enterprise. It is open to all students with an undergraduate degree from any discipline and was developed in collaboration with multiple UTS faculties and the wider startup community.

The development of the program is based on focus groups with key members in the Australian startup industry, international online market research of comparable programs, and in consultation with key stakeholders across UTS. The study program and strategy were developed to redefine what an Honours degree is. A key design element of the program is that the learning occurs as a combination of micro credentialing, blended and work integrated learning.



THE USE OF QR CODES IN SUMMATIVE REVIEW FOR EXPERIENTIAL ENTREPRENEURSHIP EDUCATION

Julienne Senyard, Griffith University

j.senyard@griffith.edu.au

Entrepreneurship education research highlights increasing interest in experiential based classes (Mwasalwiba, 2010). Students in experiential classes engage in critical thinking to create and recognise opportunities, assess risk in entrepreneurial contexts (Heidi and Greene, 2011). Experiential classes use action, practice, and experimentation to enable students to build skills and capabilities in tools used in "real world" situations (eg Lean Startup Reis, 2011) through authentic problem solving activities. Experiential classes, from a pedagogical perspective, focus on active learning: a shift from the traditional curriculum passive learning approach (Machemer and Crawford 2007). Despite this shift, very little has changed in summative assessment. Surprisingly, the ways we conduct summative reviews and assessment in active learning pedagogy is seldom addressed in the literature (Drew & Mackie, 2011). Often in traditional classes, the final class is content review in preparation for the final exam. Yet experiential classes that apply active learning focus on the application of content, not content recall. As a result, this approach requires a different ways to evaluate and engage students for summative review and assessment. This research outlines a novel undergraduate summative activity that applies QR (Quick Response) codes to prepare students for in the course final assessment.

INCORPORATING ENTREPRENEURSHIP EDUCATION AND SKILLS OUTSIDE OF ENTREPRENEURSHIP COURSES

Hasnain Zaheer, Macquarie University

hasnain.zaheer@hdr.mq.edu.au

The focus of my presentation is the incorporation of entrepreneurship as a subject in a masters unit which is not focused on entrepreneurship. First, it has been clearly and thoroughly accepted by now that entrepreneurship is not an innate personal quality. Rather, the entrepreneurial process and entrepreneurial behaviours are the significant topic to research and teach (Steyaert, 2007). Indeed, recent research agendas (Shepherd, 2015) as well as practice (Blank, 2013) emphasise the start-up development process. Second, entrepreneurial competencies are holistic and psychologically oriented (Taalila, 2010). Third, a recent student survey found that about 40% of the students expressed a preference for a career trajectory that did not conform to the traditional options and rather lean towards entrepreneurship (Macquarie University, 2018). Therefore, there is a need to broaden the scope of entrepreneurship education beyond the explicitly defined entrepreneurship courses and units and indeed beyond the business and management disciplines, because entrepreneurship is present in all areas, including in humanities and science. This broad strategy is akin to university-wide 'radiant programmes' that supplement the 'magnet programmes' (Streeter et al., 2002). I will demonstrate how I incorporated entrepreneurship, its role and its process in social media management unit offered at Masters level.



Chair Guidelines

The roles of the Session Chair are relatively easy, but nonetheless very important.

Specifically, Chairs are expected to:

- 1. Briefly introduce the speaker/s in your session. Name and affiliation of the presenting author, and paper title, suffices. We should not let lengthy introductions reduce time for presentation and discussion.
- 2. Be responsible for timekeeping:
- START ON TIME and ensure each speaker keeps to their allotted time (20 min presentation, 10 min question time). Try to warn authors when 5 and 1 minutes presentation time remains, respectively.
- Sessions are run concurrently. Participants will want to change between the allotted 30 minute allocations for the
 individual paper presentations. It is essential that all paper presentations across the concurrent sessions start and
 end at the same time.
- Therefore, if there is a 'no show' you cannot move to the next paper until its scheduled time begins, or allow extra time to the remaining papers. Instead, the Chair should encourage participants to join another session during any gap in their session (hopefully to come back for the last paper).
- 3. Facilitate the allocated discussion at the end of the presentation
- 4. Thank the speaker/s.
- 5. Make any announcements requested by the Conference Organising Committee.

Session Chairpersons are to report to the Conference Registration desk no later than 30 minutes prior to the beginning of the day's proceedings on their particular day on duty to confirm their arrival, be made aware of the session room and to collect the program.

If you have any queries, please contact Karen Taylor k3.taylor@qut.edu.au 0409 483 144

Uploading your presentation

PLEASE ENSURE YOU BRING YOUR PRESENTATION ON A USB FOR UPLOAD TO PC DESKTOP. PDS PITCHES, are to be uploaded by 8:30 am on the day that your pitch session is scheduled (i.e., prior to the keynote presentation that will precedes the pitches). **ALL PAPER PRESENTATIONS** are to be uploaded by the presenting author in the break prior to your scheduled presentation session. The registration desk and AV team will be available from 8:00 am each morning to assist with upload of your presentation. If you are unsure of this procedure please ask at the registration desk upon arrival.

ACERE

ACERE 2019 Program

Tuesday 5 February

		8:00 am to 5:00 pm Sydney School of Entrepreneurship Educator's Forum Sydney School of Entrepreneurship Sydney School of Entrepreneurship ACERE Doctoral Consortium UTS, Building 8, Rooms 006 and 008 G:00 pm to 8:00 pm ACERE Welcome Reception UTS, Building 11, Level 1	ship Educate eurship um and 008 on	f Entrepreneral Consortium Rooms 006 and Reception Level 1	School of E Doctoral (School of E Doctoral (Inding 8, Rc Welcome	8:00 am to 5:00 pm Sydney School of Entrepreneurship Edu. Sydney School of Entrepreneurship Sydney School of Entrepreneurship Sydney School of Entrepreneurship Established Sydney School of Entrepreneurship Sydney School of Entrepreneurship Established Sydney School of Entrepreneurship Sydney School of Entrepreneurship Sydney School of Entrepreneurship Type Building 8, Rooms 068 and 008 Sydney School of Entrepreneurship Type Building 11, Level 1
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Nednesday 6 February

Wednesday	Wednesday 6 February			
7:30 am	Registration opens			
	UTS, Building 11, Level 0 B11.00.401 Lecture Theatre	neatre		
8:30 am	Welcome Address			
	UTS, Building 11, Level 0 B11.00.401 Lecture Theatre	neatre		
8:45 am	Keynote Address: Michael Fritsch			
	'Regional Trajectories of Entrepreneurship, Knowledge, and Growth'	ledge, and Growth'		
	UTS, Building 11, Level 0 B11.00.401 Lecture Theatre	neatre		
9:45 am	PDS Pitches (PDS 1 and PDS 2)			
	UTS, Building 11, Level 0 B11.00.401 Lecture Theatre	neatre		
10:30 am	Morning Tea			
	UTS, Building 11, Level 1, Penny Lane Café			
11:00 am		PAPER SESSION 1		PDS Roundtables (PDS 1 and PDS 2)
	Room: 11.04.101	Room: 11.04.202	Room: 11.04.300	UTS, Building 11, Level 4, Room: 11.04.400
	Session: 1A	Session: 1B	Session: 1C	
	Theme: Small Business Management	Theme: Entrepreneurial Cognition	Theme: New Venture Creation	
	Chair: Judy Matthews	Chair: Alyssa Liang	Chair: Anna Jenkins	
	77 - Diverse Paths towards Innovation	95 - A Study on the Effect of Greed on Co-	56 - An interpretive study of what learning	
	in SME Manufacturing Firms through	Founder Selection	means to entrepreneurs	
	Digitization and Servitization	Alyssa Liang, Dean Shepherd	Aimee Walsh, Anna Jenkins, Paul Spee	
	Judy Matthews			
	132 - Appropriation of Intellectual Property:	155 - Triple Helix and Academic	90 - From trailing to pursuing: Exploring	
	A Multiple Cross-case Analysis of SME	Entrepreneurial Intention: Understanding	expatriate spouses' entrepreneurial	
	Practices	Motivating Factors for Academic Spin-off	initiatives	
	Sairah Hussain, Mile' Terziovski	among Young Researchers Altaf Hissain Noor III Hinda	Jemaine Tsoi, Anna Jenkins, Miriam Moeller	
	153 - Demographic characteristics of	158 - Qualitative Methodology:		
	an SME owner/managers in developing	Underrepresented in Nascent		
	economies as antecedents to its	Entrepreneurship Research		
	entrepreneurial orientation and firm-level	Maha Aly, Christian Sturm, Tessa Flatten		
	capabilities			
	Victoria Nakku, Frank Agbola, Amir Mahmood,			
	Morgan Miles			

	11:00 am PDS 1							
	in Forn Negati Negati Entrep Etienne Mawun' Chair/R, Davidss Thomas Resch, Weeras	3 - Hybrid Entrepreneurs in Formal Training: Negative Impact on Entrepreneurial Career Etienne St-Jean, Koamivi Mawunyo Loho Chair/Reviewers: Per Davidsson, Anna Vuorio, Thomas Cyron, Bernhard Resch, Sumedha Weerasakera Arachchige	89 - Cultural-spatial contexts of Māori entrepreneurship: understanding the dynamics of entrepreneurial ecosystems from an Indigenous world view Chris Woods, Billie Lythberg, Kiri Dell Chair/Reviewers: Colin Mason, Allan O'Connor, Steve Johnson, Claudia Shwetzer, Nuzhat Sharmin	and its Relationship with the Speed of Internationalisation Joanne Wright, Antje Fiedler, Richard Starr, Benjamin Fath Chair/Reviewers: Dean Shepherd, Wendy Wu, Cristiano Bellavitis, Erik Lundmark, Hilal Ali	to the mothers narrate their entrepreneurial endeavours? The case of Swedish mumpreneurs Magdalena Markowska, Helene Ahl, Lucia Naldi Chair/Reviewers: Michael Fritsch, Shihang Su, Paul Steffens, Ace Beorchia	irrate of rs of old	167 - Entrepreneurs' resource creation through network bricolage Frances Chang, Cynthia M. Webster Chair/Reviewers: Pia Arenius, Naderra Ranabahu, Forough Zarea Fazlaelahi, Hana Milanov, Sarah Fitz-Koch	gh A Meta-Analysis of Entrepreneurship and Well-being Ute Stephan, Andreas Us, Rauch, Isabella Hatak Gh Chair/Reviewers: Moren Levesque, Zhuyi Li, Qigqing Bi, Binyam Alemayahu, Buddhika Gamage
	41 - A pher Exploration Entreprent Grassroot: Entreprent Rajul Joshi Chair/Revie Morgan Mill Bernal Vale	41 - A phenomenological Exploration and Elucidation of Entrepreneurial Ecosystem of Grassroots Innovators Turned Entrepreneurs of India Rajul Joshi Chair/Reviewers: Allan O'Connor, Morgan Miles, Per Hulthen, Marta Bernal Valencia, Ujal Ibrahim		se and change trajectory of social and change trajectory of social and change trajectory of social financing institutions Wendy Wu, Sarah Cooper Chair/Reviewers: Per Davidsson, Joanne Wright, Cristiano Bellavitis, Erik Lundmark, Leigh Mellish hepherd, s Cyron, uni	e evolution ctory of social ions Cooper er Davidsson, istiano Bellavitis, igh Mellish	A pathway to new venturin A pathway to new venture staup and development? Nadeera Ranabahu, Jamie Colli Chair/Reviewers: Moren Levesqu Frances Chang, Forough Zarea Fazlaelahi, Hana Milanov, Biljanz Rudic	ë t su e m	125 - Destructive Interpersonal Relationships? The Importance of Social Undermining and Sleep Quality in Entrepreneurs' Work Engagement Zhuyi Li, Maw Der Foo, Shuhua Sun Chair/Reviewers: Michael Fritsch, Andreas Rauch, Qigqing Bi, Binyam Alemayahu, Deepa
12:30 pm	Lunch		Jeewandarage					Subhadrammal
- !!	UTS, Building 11, Le	UTS, Building 11, Level 1, Penny Lane Café	ılé					
md os: I	Room: 11.04.101	<u> </u>	Room: 11.04.202	Room: 11.04.300		Room: 11.04.102	Roc	Room: 11.04.203
	Session: 2A	S	Session: 2B	Session: 2C	Ses	Session: 2D	Ses	Session: 2E
	Theme: Entrepreneurial Ecosystems		Theme: Research Methods & Entrepreneurship & Innovation	Theme: Psychology of Entrepreneurship	The Per	Theme: Entrepreneurial Growth & Performance		Theme: Social Entrepreneurship
	Chair: Chad Renando		Chair: Evan Douglas	Chair: Retno Ardianti	Cha	Chair: Anna Jenkins	Cha	Chair: Pi-Shen Seet
	13 - Developing a boundary view of the entrepreneurial ecosystem Allan O'Connor, David Audretsch		27 - Entrepreneurship, Wage Inequality and Creative People In Labour Markets Antonio Sergio Ribeiro, Rui Baptista, Francisco Lima	S2 - The role of social support in Entrepreneurial persistence and happiness a, Safiya Alshibani, Thierry Volery		6 - Getting a Ticket to the Game: Becoming an entrepreneur amidst multiple demands Anna Jenkins,Paul Spee, Sara Ekberg		143 - Moral Disengagement and Unethical Business Practices: Insights from Commercial and Social Entrepreneurs Ari Margiono, Pantri Heriyati
	25 - The emergence of early stage entrepreneurial ecosystems: exploring key factors, actors and drivers Elizabeth Montoya, Sarah Cooper		65 - The Critical Incident Technique in Innovation within a Business model in Social Purpose Organisation Research Buddhika Gamage	being of hybrid entrepreneurs: A being of hybrid entrepreneurs: A longitudinal comparative study between hybrid entrepreneurs, full-time self-employed and the paid-employed Retno Ardianti, Martin Obschonska, Per Davidsson		91 - Generate internally or acquire from externally? Growth mode selection in different locations and firm ages. Pubuduni Jeewandarage, Per Davidsson, Stephen Cox	ire	behaviour link through social entrepreneurship. The case of vegan restauranteurs Carla Riverola, Ozgur Dedehayir, Santiago Velasquez
	98 - The role of the innovation hub in building community resilience Chad Renando		123 - Open Innovation Practices and Sustainable Performance of Manufacturing SMEs in Sri Lanka Deepani Wijetunge	84 - Entrepreneurial mindset: 6 Defining a nascent construct 6a Darsel Keane, Rod McNaughton, 6borah Shepherd	struct ughton,		in II in II and Aus Jan Ack	183 - Reconciling Tensions in Indigenous Social Entrepreneurship: Challenges and Opportunities among Remote Australian Social Enterprises Janice Jones, Pi-Shen Seet, Tim Acker, Michelle Whittle

3:00 pm	Afternoon Tea			
	UTS, Building 11, Level 1, Penny Lane Café			
3:30 pm - 5:00 pm		PAPER SE	PAPER SESSION 3	
	Room: 11.04.101	Room: 11.04.202	Room: 11.04.300	Room: 11.04.102
	Session: 3A	Session: 3B	Session: 3C	Session: 3D
	Theme: Entrepreneurial Ecosystems	Theme: Psychology of Entrepreneurship	Theme: Entrepreneurship Education & Training	Theme: Entrepreneurial Finance
	Chair: Margarietha de Villers Scheepers	Chair: Stephen Zhang	Chair: Caroline Glackin	Chair: Colin Mason
	48 - Contextualising entrepreneurial time across the ecosystem multiverse by scrambling parabolocially towards the entrepreneur's event horizon	7 - Are Mentor' Emotional Intelligence and Personality related to Mentee's Learning? A Dyad Analysis of Entrepreneurs in Mentoring Relationships Soumaya Meddeb, Étienne St-Jean	5 - Using reflection journals: From experience to learning in undergraduate entrepreneurship students Anna Jenkins, Sarel Gronum, Marielle Allan	80 - "What buyers want and how they get it" – A buyer perspective to small firm selection and price formation in acquisitions Andrew Want, Margarietha Johanna de Villiers Scheepers
	to success in ventures and private life: The positive interaction effect of bricolage and experience on entrepreneurial venture innovativeness and founder work-life balance Tobias Kollmann, Simon Hensellek, Philipp Benedikt Jung, Lucas Kleine-Stegemann	34 - Does shame proneness help serial entrepreneurs to rebound from prior failure? Song Lin, Gracy Yang, Stephen Zhang	17 - Building Entrepreneurial Competencies in General Education: Validating Microcredentials Caroline E Glackin, Steven E Phelan	96 - The role of financial intermediaries in pro-social crowdfunding John Berns, Abu Zafar Shahriar, Luisa Unda
	140 - Engaging Actors in Regional Ecosystems for Entrepreneurial Leverage: Exploring Utility and Status in Relational Dynamics Margarietha de Villiers Scheepers, Lisa Daniel	44 - The quest for well-being: Understanding the role of entrepreneurial identity Sarah Fitz-Koch	45 - 'From [Virtual] Classroom to Boardroom': Coaching Students to Use Entrepreneurship Research Approaches to Address Contemporary Issues in their Workplace Julien Marchand, Anthony Kerr, Diane Calendra, Aaron Wijierathe	126 - 'How was it for you?' The Satisfaction of Entrepreneurs with the Non-Financial Contributions from their Business Angel Investors Colin Mason, Tiago Botelho, Martin Holi, Stephan Golla
6:00 pm - 8:30 pm	Networking Social Event			
	Nick's Seafood Restaurant, Cockle Bay Promenade, Darling Harbour	ide, Darling Harbour		



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8:00 am Reg	Registration opens					
UTS	UTS, Building 11, Level 0 B11.00.401 Lecture Theatre	ture Theatre				
8:30 am Key	Keynote Address: Moren Levesque [11's Time We Talk About Time in Entrepreneurshio."	eurshio'				
STU	UTS, Building 11, Level 0 B11.00.401 Lecture Theatre	ture Theatre				
10:15 am Mor	Morning Tea					
STU	UTS, Building 11, Level 1, Penny Lane Café	é				
10:45 am		PAPER S	PAPER SESSION 4		PDS Roundtabl	Roundtables (PDS 3 and PDS 4)
Roc	Room: 11.04.101	Room: 11.04.202	Re	Room: 11.04.300	UTS, Building 11	UTS, Building 11, Level 4, Room: 11.04.400
Ses	Session: 4A	Session: 4B	Se	Session: 4C		
The	Theme: Psychology of Entrepreneurship	ip Theme: Entrepreneurship Education & Training		Theme: High Tech & High Finance	Ð	
Cha	Chair: Stephen Zhang	Chair: Daniil Polidko	O	Chair: Sarah Cooper		
118	118 - The development of nascent		Вu	75 - Digital entrepreneurship: An		
of tide	entrepreneurs psychological ownership of their venture idea from their systematic idea search and exploration of information Pia Arenius, Antii Kauppinen	atic Programs and Starup Benavior: is Program Satisfaction the Missing Link? Wendy Lindsay, Noel Lindsay, Carolin Plewa, Fredric Kropp		Interalsciplinary structured interature review and agenda Hasnain Zaheer, Yvonne Breyer, John Dumay	rure ın Dumay	
152 wel	152 - How resources impact entrepreneurs' well-being and pro-social behaviours Linh Nguyen, Sandra Seno-Alday	eurs' 82 - University-Based Accelerators as a source of Entrepreneurial Self Efficacy: Preliminary evidence from Australia Deepa Subhadrammal, Martin Bliemel		103 - Measuring the Performance of Publically-Funded Incubators in the UK and Canada Geoff Gregson, Sarah Cooper	of the UK and	
CC CC Mai	157 - Too Much of Two Good Things: The Curvilinear Effects of Self-Efficacy and Market Valueatin Behavior of Entrepreneurs Xi Chen, Stephen Zhang	leurs	sl in	109 - 50 Shades of Green – angel investing in green businesses Tiago Botelho, Konstantinos Chalvatzis, Colin Mason	investing Izis, Colin	
10:7	10:45am PDS 3					
	35 - Startup exits and the evolution of entrepreneurial ecosystems: Exploring divergent paths Per Hulthen, Dimo Dimov Chair/Reviewers: Colin Mason, Morgan Miles, Rajul	46 - Building a firm- hosted online community to support new venture development Thomas Cyron, Leona Achtenhagen Chair/Reviewers: Evan Douglas, Etienne St-Jean,	92 - Entrepreneurial intention in general and in near future: the influence of perceived environmental factors and personal factors Qingqing Bl, Nadeera Ranabuhu, Jamie Collins		136 - The Cross-Country Diffusion of Initial Coin Offerings: An Institutional Theory Perspective Cristiano Bellavitis, Tom Vanacker, Douglas Cumming Chair/Reviewers: Michael	159 - How do tensions become salient in family firms? A paradox perspective applied to Chinese family firms Shihang Su, Laura Costanzo, Knut Lange Chair/Reviewers: Moren
	Joshi, Steve Johnson, Aimee Walsh	Anna Buorio, Bernhard Resch	<i>Chair/Reviewers:</i> Per Davidsson, Andreas Rauch, Zhuyi Li, Binyam Alemayahu	Shepherd, Frances Chang, Nadeera Ranabahu, Hana I Milanov	Fritsch, Joanne Wright, Wendy Wu, Erik Lundmark	Levesque, Magdalena Markowska, Shihang Su
	PDS 4					
	40 - First Person Opportunity Confidence Model Binyam Alemayehu Chair/Reviewers: Dean Shepherd, Andreas Rauch, Zhuyi Li, Qingqing Bi, Hasnain Zaheer	67 - Do I really mean it? Social support change and its impact on new venture performance Kim Klyver, Paul Steffens, Benson Honig Chair/Reviewers: Per Davidsson, Magdalena Markowska, Shihang Su, Liza Tyl	104 - The social penalty of poverty: Implications for entrepreneurs' network centrality in microfinance groups in Kenya Hana Milanov, Rachida Justo Chairfleviewers: Michael Fritsch, Frances Chang, Nadeera Ranabahu, Forough Zarea Fazlaelahi	ecosystems: a holistic and dynamic approach Claudia Shwetzer, Alex Maritz, Vanessa Ratten, O Quan Nguyen Chair/Reviewers: Morgan Miles, Allan O'Connor, ih Marta Bernal Valencia, Chris Woods	and its consequences and its consequences Alex Coad, Julian S. Frankish, Erik Lundmark, David J Storey Chair/Reviewers: Martin Obschonka, Joanne Wright, Wendy Wu, Cristanio Bellavitis, Nikosana Mafico	181 - Organizing affects of collective freelancing: An ethico-political struggle for incompleteness Bernhard Resch, Chris Steyaert Chair/Reviewers: Moren Levesque, Etienne St-Jean, Anna Buorio, Thomas Cyron, Mulenga Nkula

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1:15 pm			PAPER SESSION 5				
	Room; 11.04.101	Room; 11.04.202	Room; 11.04.300		Room; 11.04.102		Room; 11.04.203
	Session: 5A	Session: 5B	Session: 5C		Session: 5D		Session: 5E
	Theme: Gender.Minority &	Theme: Entrepreneurial	Theme: New Venture Creation		Theme: Economics & Public	Public	Theme: High Tech & Innovation
	Indigenous Studies	Ecosystems			Policy		,
	Chair: Magdelna Markowska	Chair: Saskia de Klerk	Chair: Paul Steffens		Chair: Magnus Holmen		Chair: Sam Tavassoli
	24 - Indigenous Business Network : Understanding challenges and opportunities from an exploratory research in the forest sector in Canada Luca Gabriel Serban, Delphine Théberge, Jean-Michel Beaudoin, Maribier Temblay, Luc LeBel	18 - Entrepreneurial Ecosystems and the Underappreciated Role of Enterprising Familes	58 - Purposeful business intentions: when being altruistic can be a double-edged sword on the entrepreneurial self-efficacy cognitive map Adele Feakes, Chengli Shu, Edward Palmer, Noel Lindsay	_	36 - The institutions of economic freedom and entrepreneurship 2000-2017 Philippe Rouchy, Viroj Jienwatcharamongkhol	economic	74 - Let a hundred flowers blossom: Toward diverse perspectives and a more holistic understanding of the entrepreneurial process Hasnain Zaheer, Yvonne Breyer, John Dumay
	61 - Female-led family ventures in the Arab world: a path from legitimacy judgement to royal validity. Sumaya Hashim, Lucia Naldi, Magdelena Markowska	33 - Insights from analysing accelerators as entrepreneurial micro-ecosystems Martin Bliemel, Saskia de Klerk, Ricardo Flores	and Entrepreneurial Progress and Bersistence Paul Steffens, Scott Gordon, Carina Lomberg		182 - The Relationship between Workplace Innovation and Organizational Culture in a Victorian Public Sector Organization. Leonie Newnham, Adela McMurray, Nuttawuth Meunjohn	and in or McMurray,	112 - The Role of STEM Migrants on Innovation Outcome of Firms: Evidence from Sweden Sam Tavassoli, Torben Schubert, Viroj Jienwatcharamongkhol
	106 - Entrepreneurs utilizing their assets of foreignness when abroad Stoyan Stoyanov, Veselina Stoyanova	94 - Institutional Voids in the Development of Social Entrepreneurial Ecosystems: What can we learn? Deborah Shepherd, Jamie Newth	149 - A Deductive Configural study of Entrepreneurial Intentions based on a prior fsQCA Inductive Study Evan Douglas, Catherine Prentice	infigural study itentions ICA Inductive			124 - Negotiating the meaning of catastrophic innovation failure Sen Chai, Anil Doshi, Luciana Silvestri
2:45 pm	Afternoon Tea UTS. Building 11. Level 1. Penny Lane Café	Jafé					
3:15 pm			PAPER SESSION 6	SION 6			
-	Room: 11.04.101	Room: 11.04.202	Roor	Room: 11.04.300		Room: 11.04.102	102
	Session: 6A			Session: 6C		Session: 6D	
	Theme: Entrepreneurial Ecosystems			ne: Gender Issue	Theme: Gender Issues in Entrepreneurship	Theme: Allia	Theme: Alliances, Teams and Networks
	Chair: Frederik von Briel	_		Chair: Etienne St-Jean		Chair: Jaehu Shim	Shim
	63 - Creative Producers as Entrepreneurs: Examining Screen Business Innovation Gerard Reed	ion business model design for an established medtech company Magnus Holmen, Henrik Barth, Helene Laurell	70 —	1 - Pride, Prejudice and Patriarchy: Female entrepreneurship experience Queensland's emerging entrepreneu ecosystem Char-lee Moyle, Saskia de Klerk, Vibhor Pandey, Brent Moyle	1 - Pride, Prejudice and Patriarchy: Female entrepreneurship experiences in Queensland's emerging entrepreneurial ecosystem Char-lee Moyle, Saskia de Klerk, Vibhor Pandey, Brent Moyle	102 - Unders exploring th entrepreneu Wejdan Alaka	102 - Understanding the strength of ties: exploring the network connections of female entrepreneurs in emerging technology firms Wejdan Alakaleek, Sarah Cooper
	59 - Disruption and lean entrepreneurs Solomon Habtay	to Entrepreneurial Or Cooperations Explair Service Innovations i Digital Startups Tobias Kollmann, Chriss Simon Hensellek, Kath		4 - Entrepreneurial M Are Female Mentors Stereotypes? Etienne St-Jean, Cécile Meddeb	4 - Entrepreneurial Mentoring Dyads: Are Female Mentors Victims of Gender Stereotypes? Etienne St-Jean, Cécile Fonrouge, Soumaya Meddeb	113 - A simulation apprention of information in the ventuprocess Jaehu Shim, Jiyoung Kim	113 - A simulation approach to the social network configuration for acquiring valuable information in the venture development process Jaehu Shim, Jiyoung Kim
	76 - The world is the playing field: Value creation strategies of digital hardware startups Frederik von Briel			169 - Government Procurement and Contractor Diversity Allan Riding, Barbara Orser	ocurement and Drser	122 - Equity Wellbeing. Magdalena M	122 - Equity Crowdfunding and Entrepreneurial Wellbeing. Magdalena Markowska, Adele Berndt, Anders Melander
6:30 pm - 10:30 pm	Gala Awards Cocktail Evening						



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8:00 am	Registration opens				
	UTS, Building 11, Level 0 B11.00.401 Lecture Theatre	Lecture Theatre			
8:30 am	Keynote Address: Per Davidsson 'Toward a Theory of External Enablement of Entrepreneurship'	lent of Entrepreneurship'			
	UTS, Building 11, Level 0 B11.00.401	B11.00.401 Lecture Theatre			
9:30 am	Keynote: Colin Mason				
	UTS. Building 11. Level 0 B11.00.401 Lecture Theatre	Lecture Theatre			
10:10 am	PDS Pitches (PDS 5 and PDS 6)				
	UTS, Building 11, Level 0 B11.00.401 Lecture Theatre	Lecture Theatre			
10:30 am	Morning Tea				
	UTS, Building 11, Level 1, Penny Lane Café	e Café			
11:00 am			PAPER SESSION 7		PDS Roundtables
	Room: 11.04.101	Room: 11.04.202	Room: 11.04.300	Room: 11.04.102	UTS, Building 11, Level 4, Room: 11.04.400
	Session: 7A	Session: 7B	Session: 7C	Session: 7D	101 - The Socio-emotional
	Theme: Social Entrepreneurship & Ethics	Theme: New Venture Creation	Theme: Institutions, Experience & Social Media	Theme: Entreprenuership in Developing & Emerging	Attributes of Entrepreneurial Ecosystems Marta Bernal Sarah Cooper
	Chair: Carla Biverola	Chair: Ganffray Archar	Chair Laigh Mallish	Countries Chair: Evan Douglas	Chair/Reviewers: Allan O'Connor,
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	166 - Integrating Ethics, Culture And Leadership: A Conceptual Framework For Entrepreneurial Ventures Ali Iftikhar Choudhary, Adela McMurray, Nuttawuth Muenjohn	20 - Examining grit as catalyst in accelerating emerging ventures Scott Gordon, Paul Steffens, Carina Lomberg	52 - Impact of entrepreneurial experience on subsequent wage-employment earnings: A systematic review and synthesis Leigh Mellish, Siran Zhang	22 - What are Home-Based Businesses Made of? A Configurational Approach Using csQCA Marcus Salusse, Tales Andreassi	Rajul Joshi
	176 - How could entrepreneurship theory aid the grand challenge of poverty elimination in western society? Tracey Dodd, Carmen Reaiche	72 - Where's the (Lean) Beef? Seeking Evidence in Support of The Lean Start-Up Geoffrey R. Archer, Ted Baker	81 - Exploring the Use of Social media by Saudi Women Entrepreneurs and its Role in Creating Space and Place Hilal Ali, Pia Arenius, Afreen Huq	49 - Entrepreneurship Support Programs and the Dynamics of Entrepreneurial Ecosystems in Developing Country Context Ashenafi Biru, Pia Arenius, David Gilbert	ecosystems as inhibitors and facilitators of SME internationalization: empirical evidence and policy implications Steve Johnson, John Nicholson,
	179 - Entrepreneurship in Human Trafficking: Women between Good and Evil Klaudia Schmidt	73 - Entrepreneurial process in digital new ventures Hasnain Zaheer, Yvonne Breyer, John Dumay	172 - Institutional voids or institutional avoidance? Impoverished entrepreneurs' lack of engagement with formal institutions. David Gras, Ace Beorchia	57 - "What barriers prevent university students from becoming entrepreneurs in developing countries? A study in Bangladesh" David Rooney, Nuzhat Sharmin	Zaheer Khan, Paul Lassalle Chair/Reviewers: Morgan Miles, Colin Mason, Chris Woods, Per Hulthe
12:30 pm	Closing and Panel moderated by Martin Obschonka	Martin Obschonka			
	UTS, Building 11, Level 0 B11.00.401 Lecture Theatre	Lecture Theatre			
1:30 pm	Lunch				
	UTS, Building 11, Level 1, Penny Lane Café	e Café			
1:30 pm – 3:00 pm	Doctoral Consortium final session				
	UTS, Building 11, Level 0 B11.00.401 Lecture Theatre	Lecture Theatre			



Abstracts

Abstracts are listed alphabetically by Lead Author.

102 - UNDERSTANDING THE STRENGTH OF TIES: EXPLORING THE NETWORK CONNECTIONS OF FEMALE ENTREPRENEURS IN EMERGING TECHNOLOGY FIRMS

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Waed Ensour - Hashemite University, Faculty of Economics and Administrative Sciences, Department of Management

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Literature pertaining to female entrepreneurs' networks reveals some confusion and ambiguity regarding the definition and measurements of the strength of the ties. The literature lacks a clear explanation of what increases the strength of entrepreneurs' ties; a bond which they rely on when building entrepreneurial ventures. This study explores the strength of the network ties among female entrepreneurs by examining the strength of these ties in the early stages of a venture's development. It presents the qualitative research findings of an exploration into the strength of network ties of 14 technology-based firms established in Jordan by female entrepreneurs. Rich data were collected utilising a two-stage interview approach. The name "generator approach" provided the opportunity to generate rich data about the participants' strength of ties (persons, firms, organisations), and was utilised to obtain their required resources. The study indicated that not only did knowledge, familiarity and trust appear to be important attributes of the participants' strength of ties but there was evidence in this research that the role of the quality of business interaction was crucial in defining the strength of ties. Based upon these attributes, the results revealed that these women established strong new ties (apparent among the business ties), which were built up during the early days of starting up.

40 - FIRST-PERSON OPPORTUNITY CONFIDENCE MODEL

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Opportunity confidence (OC) has a special place in entrepreneurship theories. It is identified as a precursor for decision making and venture creation. Despite the promising progress in explicating the nature and its formation, our understanding of OC is lacking in a few important respects. To date, OC is considered as a pure cognitive outcome that ignores the role of affect and conative activities. In this paper, we suggest a more complete first-person opportunity confidence model that demonstrates how cognitive alignment, affective attachment and activated conation play a role in shaping entrepreneur's opportunity confidence. To ensure construct clarity, concepts that are semantically similar to and different from the constructs that form our model are identified and discussed.

81 - EXPLORING THE USE OF SOCIAL MEDIA BY SAUDI WOMEN ENTREPRENEURS AND ITS ROLE IN CREATING SPACE AND PLACE

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Recent years have seen growing scholarly interest globally on women's entrepreneurship field, including in the Arab region (Welsh et al. 2014). Many research has been done in this area with particular focus on exploring women entrepreneurs' experiences, characteristics, business activities and challenges in the unique socio-cultural context of the Arab region (Ahmad 2011; Jamali 2009; Tlaiss 2014; Welsh et al. 2014). Among various factors that have contributed to the way the modern entrepreneurial scene has evolved, technological advances and the high levels of social media usage have brought substantial changes to entrepreneurship in general, and to women's entrepreneurship, in particular (Ajjan et al. 2014). The use of social media by Arab women entrepreneurs is particularly interesting for researchers because of their unique context. Women in developing nations took a step forward and have started entrepreneurial activities even in several conventional societies using social media as a tool to do business (Beninger et al. 2016). However, despite the importance of social media as a tool to enhance entrepreneurship and thereby gain space and place, limited studies have been carried out to explore how women in micro and small businesses use social media as a tool to create space and place for their entrepreneurial activities (McQueen & Yin 2014; Ajjan et al. 2014; Beninger et al. 2016). As access to social media platforms increases on an international level, it is imperative to gain a better understanding of the role social media plays in contributing to economic development and enhancing entrepreneurship (Beninger et al. 2016). Thus, the use of social media and women's entrepreneurship in Arab countries, and in particular Saudi Arabia, is worthy of investigation to explore how these entrepreneurs are using social media platforms and other technology to their advantage as well as overcome the cultural challenges associated with entrepreneurship by Saudi women. Building on 5M, a gender-aware framework drawn from institutional theory (Brush, Bruin and Welter 2009), this paper aims to explore how social media is being used by Saudi women entrepreneurs in micro and small enterprises to create a sense of space and place for their entrepreneurial activities.

32 - THE ROLE OF SOCIAL SUPPORT IN ENTREPRENEURIAL PERSISTENCE AND HAPPINESS

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A considerable amount of literature has been published on entrepreneurial job satisfaction. These studies have shown that entrepreneurs are in general more satisfied with their jobs than paid employees. Scholars attribute this to a markedly higher job



satisfaction. As Stephan(2018) remarked: entrepreneurs "locked in their career". However, recent research has suggested that this higher level of job satisfaction is temporary. Entrepreneurs experience a boost in job satisfaction in the transition phase (from paid employment to self-employment), and over time they go back to the base line (adaption process); furthermore, this boost is at the cost of leisure satisfaction and work-family balance (Georgellis et al, 2016: Zwan et al, 2018). While it is wellknown in the literature that entrepreneurship positively influences job satisfaction, the effects on overall life satisfaction as well as on satisfaction in different life domains remain unclear. A potential resource which can help entrepreneurs maintain goal directness in their endeavours and increase their satisfaction is social support. In previous studies that considered multivariate models, social support has been also identified as a central coping resource to deal with stress (Raikes and Thompson, 2005; ten Brummelhuis et al., 2012). The aim of this study is to examine the effect of entrepreneurial persistence on life satisfaction. We distinguish between entrepreneurs with high and low level of social support.

market did not want. So, he wrote this book in order to lay out a better way to start a company. While many of the concepts he advanced have become part of the lexicon of modern venturing faster than you can say pivot, his basic tenets effectively boil down to reveal the scientific method. In short, an entrepreneur should test their potential product and service offerings robustly and repeatedly. Do not build anything substantial unless customers are paying you for it. This book, the genesis of which is the very definition of an anecdote, really took off. It's been flying off the shelves of airport newsstands for most of a decade. Like Sarasvathy's Effectuation, this logical and appealing story resonates with business people the world over: It is straightforward, empowering, and practically prescriptive. That said, the authors of this paper cannot help but see the irony of so many in our academy accepting and espousing this book's admonition to test every hypothesis in your business without holding this text to that very same standard. We will unpack Ries' main contributions, connect the dots between this book and related scholarly work in our field, and highlight the gaps that call for further research.

158 - QUALITATIVE RESEARCH PARADIGMS - UNDERREPRESENTED IN NASCENT ENTREPRENEURSHIP RESEARCH

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This paper argues that the research community may need to pay more attention to the value of qualitative research paradigms for the identification of behavioral patterns and mental models of nascent entrepreneurs. We present our methodological approach to gain insights that complement significantly the current mainstream quantitative research in Germany. Both Grounded Theory and ethnographic research are used to uncover hidden explanations for entrepreneurial decision-making. Weaved together by methodological triangulation, we show the potential explanatory power of qualitative research in the context of nascent entrepreneurs. It allows for an in-depth view into why and how certain behavioral patterns, ways of thinking and perceptions emerge.

72 - WHERE'S THE (LEAN) BEEF? SEEKING EVIDENCE IN SUPPORT OF THE LEAN START-UP

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The Lean Startup (Ries, 2011) and the associated movement of the same name was begun by a computer software engineer who had previously spent years managing a team of engineers who were designing a website intended to sell avatars - those computer icons that kind of look like you. When the product was eventually launched, nobody cared. Eric Ries was not a founder. He was an employee. In his own words, he was paid very well for his time. Nevertheless, he was furious that he had wasted such a large percentage of his adult life fruitlessly working on something that the

69 - THE PSYCHOLOGICAL WELL-BEING OF HYBRID ENTREPRENEURS; A LONGITUDINAL COMPARATIVE STUDY BETWEEN HYBRID ENTREPRENEURS, FULL-TIME SELF-EMPLOYED AND THE PAID-EMPLOYED

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This study examines the psychological well-being consequences of hybrid entrepreneurs, with a comparison to full-time selfemployed and paid-employed workers and a focus on career transitions. With insight from self-determination theory, we propose that hybrid entrepreneurship is positive to psychological wellbeing as becoming a hybrid entrepreneur provides the individual with an opportunity to balance autonomy, increase competence and to develop relatedness by extending work relationships which may all lead to higher satisfaction of the three innate needs which support psychological well-being. We study two-wave longitudinal datasets with 8.086 workers as the total sample, comprises of 492 hybrid entrepreneurs, 3.501 self-employed and 4.093 paidemployed in Indonesia. We first examine group differences in the well-being indicators and then study changes in well-being as correlated to certain career transitions (e.g., entry/exit with respect to hybrid entrepreneurship) by using matching analysis. Our results reveal a certain psychological well-being pattern which distinguishes hybrid entrepreneurs from full-time self-employed. Our findings also indicate that hybrid entrepreneurs enjoy the highest level of psychological well-being compared to full-time self-employed and paid-employed workers.

118 - PSYCHOLOGICAL OWNERSHIP AND NASCENT ENTREPRENEURSHIP

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A venture idea is a psychologically important construct in creating an emotional bond to one's forthcoming venture. The current research has connected this construct to managers' attempts to improve their organizations (e.g., in terms of



performance). However, the role of psychological ownership is less often associated with nascent entrepreneurship. In this study, we applied the panel study of entrepreneurial dynamics (PSED) method. We tested a number of venture idea related constructs to measure if they would explain the antecedents of the psychological ownership of one's venture idea. We found that creating the idea is a strong predictor of psychological ownership and the perceived uniqueness of the idea is also positively associated with psychological ownership. In addition, ownership of the new venture has a positive relationship with psychological ownership. We also found some evidence that psychological ownership improves to likelihood to start a new venture. We believe that these results contribute to the emerging research discourse on psychological ownership and entrepreneurship by introducing new predictors of psychological ownership. We also believe that knowing these details may be beneficial for those who commit themselves to generate a venture idea to launch and run a forthcoming venture.

136 - THE CROSS-COUNTRY DIFFUSION OF INITIAL COIN OFFERINGS: AN INSTITUTIONAL THEORY PERSPECTIVE

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We investigate the cross-country diffusion of Initial Coin Offerings (ICOs). Drawing on institutional theory, we argue that national governments, the media and academic institutions affect the institutional legitimacy of ICOs, thereby influencing their cross-country diffusion. Using quarterly data on ICO activity from 73 countries between 2013 and 2017 (inclusive), we find that ICO bans by foreign governments hamper the diffusion of ICOs in countries without a ban and further cause less "decentralized" ICOs (i.e., ICOs that cannot be allocated to a specific country). Moreover, the diffusion of ICOs is stronger in countries with more media coverage and academic papers on ICOs. Overall, we offer new insights on the cross-country diffusion of ICOs, a novel entrepreneurial practice, in an increasingly global and decentralized world.

101 - A SOCIO-EMOTIONAL PERSPECTIVE ON CREATIVE ENTREPRENEURIAL ECOSYSTEMS. THE DYNAMIC ATTRIBUTES OF EDINBURGH, CITY OF LITERATURE

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The support networks provide to entrepreneurs is one of the key success factors for the creation and growth of new ventures. Creative industries rely heavily on the accessibility to resources and information provided by these networks to reduce uncertainty in material and emotional terms. However, very few studies put in context how the socio-emotional characteristics of an ecosystem may affect entrepreneurs' perception of the availability and flow of these resources. This article offers an initial qualitative exploration of the attributes of Edinburgh's publishing cluster by looking at one of its most embryonic entrepreneurial processes: the selection of new books and writers. The data suggests how

entrepreneurs' emotions are influenced by the way in which they interact with different context elements, recycling resources and creating new networks. The socio-emotional characteristics of this entrepreneurial network provide a common meaning to their experiences and lead to the construction of a collective cultural identities, which prevail beyond the persuasive market logics.

96 - THE ROLE OF FINANCIAL INTERMEDIARIES IN PRO-SOCIAL CROWDFUNDING

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Crowdfunding platforms emerged as an important source of entrepreneurial finance, where individual investors provide financial capital to an entrepreneur through the Internet (Galak et al., 2011; Lin and Viswanathan, 2016; Mollick, 2014; Mollick and Nanda, 2017; Strausz, 2017; Zhang and Liu, 2012). Crowdfunded projects vary greatly in terms of goal and magnitude, from cottage-based handicrafts in rural India, for example, to large art theatre in downtown Chicago. Some of these projects are based on pure donations, some offer non-financial benefits to the funders, while the others offer monetary compensation, such as an equity share or a debt repayable over time. Being a relatively new phenomenon, the literature on crowdfunding is small but growing. A careful investigation of this literature reveals that the role of financial intermediation has largely been ignored in this new mode of financing. Indeed, many authors have explicitly defined crowdfunding—irrespective of its business model—as financing 'without standard financial intermediaries' (e.g., Mollick, 2014; Strausz, 2017; Zhang and Liu, 2012), although in many lending-based platforms, the task to oversee an investment is delegated to financial intermediaries. We address this gap in the literature by addressing three questions. First, we examine whether and how a financial intermediary's ability to monitor debt contracts affects the funding decision of the crowd in a lending-based platform. Second, we examine whether the impact of delegated monitoring on crowdfunding (if any) is influenced by the level of generalized trust and the strength of legal rights in the loan recipients' country. Finally, we examine whether the reputation gained in the online market through successful delegated monitoring of the borrowersaffects a financial intermediary's cost of funding from traditional sources.

Several theoretical models highlight the unique role of financial intermediaries, such as banks, in debt financing (e.g., Diamond, 1984; Fama, 1985; Ramakrishnan and Thakor, 1984). The basic idea of these models is that banks have a comparative advantage in monitoring loan agreements, which helps reduce moral hazard costs. Diamond (1996) suggests that a necessary step in understanding the role of intermediaries is to describe the features of the lending market, in which the transaction takes place. Why do investors in this market first lend to an intermediary and then lend to borrowers instead of lending directly? What is the financial technology that allows the intermediary to serve as a middleman? We address these issues in the context of 'pass-through microlending'. In 'pass-through microlending', such as Kiva, lenders provide entrepreneurial finance through a partner-microfinance institution (MFI), which acts as a financial intermediary between lenders and borrowers.



92 - THE INFLUENCE OF PERSONAL AND CONTEXTUAL FACTORS ON ENTREPRENEURIAL INTENTIONS IN GENERAL AND IN THE NEAR FUTURE: A CONFIGURATIONAL APPROACH

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Entrepreneurial intention is a critical concept in the "pre-start" stage of new venture creation. In this study, we differentiated between entrepreneurial intentions in general and in the near future and examined the antecedents of these two variables. Following a configurational approach, we proposed three configurational dimensions as the predictors of individuals' entrepreneurial intentions: personal characteristics, access to resources and perceived environmental friendliness. We further developed our research model by integrating the direct and interaction effects between these factors. We employed a largescale, cross-country dataset - Gallup World Poll - to empirically test our research framework. The results indicated that all the three configurational dimensions had direct significant influence both entrepreneurial intentions in general and in near future. Interestingly, only the interactions between access to resources and personal characteristics significantly influenced entrepreneurial intentions in near future. This study enriches our understanding of different types of entrepreneurial intentions and highlights the importance of the interactions between personal and contextual factors in shaping entrepreneurial intentions.

49 - ENTREPRENEURSHIP SUPPORT PROGRAMS AND THE DYNAMICS OF ENTREPRENEURIAL ECOSYSTEMS IN DEVELOPING COUNTRY CONTEXT

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Entrepreneurship support programs are a major component of the entrepreneurial ecosystem. Through these programs, stakeholders, often government-affiliated, aim to facilitate and enhance productive entrepreneurship practice within start-ups and small firms. However. the effectiveness of these support programs is often considered in isolation, ignoring how they impact the dynamics of the ecosystem as a whole. This paper investigates how the structure and governance of entrepreneurship support programs in a developing country context interact with the entrepreneurial behaviors of firms within the ecosystem, extending previous research that has questioned the effectiveness of entrepreneurship support programs in producing productive entrepreneurial ecosystems. Through a qualitative research methodology, consisting of 28 in-depth, semi-structured interviews with firm owners in the manufacturing sector in Ethiopia, we show that support programs that treat all firms equally and do not prioritize innovative and competitive firms when distributing resources, dissuade entrepreneurial firms from pushing forward in the market. In the absence of competition-based resource distribution, firms revert to a survival-focused "lowest common denominator" setting rather than engaging in growth strategies and taking risks to expand their operations. Based on our findings, we offer a more pragmatic role for support programs in creating entrepreneurial ecosystems within developing economies.

33 - INSIGHTS FROM ANALYSING ACCELERATORS AS ENTREPRENEURIAL MICRO-ECOSYSTEMS

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Entrepreneurial ecosystems (EEs) have been characterised by abstract or aggregated elements that interact to produce entrepreneurial outcomes. This aggregation is convenient because studying individual actors, interactions and outcomes for such complex systems is empirically difficult. However, the aggregation simultaneously limits our ability to study how EEs generate entrepreneurial outcomes as a consequence of the actions and interactions of actors who represent these aggregated elements. To work around the empirical challenge of surveying entire ecosystems or even a representative set of actors in an ecosystem, this study focusses on a temporally and spatially limited ecosystem. This study posits that accelerators are EEs, albeit entrepreneurial micro-ecosystems, which are analogous to the petri dish version of EEs. This study then adopts an EE lens and uses a mixed-methods approach to (1) explore the social and temporal boundaries of EEs, (2) illustrate the generative interactions between actors in EEs; thereby (3) revealing how EEs are maintained.

109 - 50 SHADES OF GREEN – ANGEL INVESTING IN GREEN BUSINESSES

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There is considerable evidence that the growth of the green/clean tech sector is attracting the interest of investors. For example, a recent market research report highlighted the increase in institutional investment deals in the energy sector. However, this is still an unexplored topic in angel research. This research explores the interest of the angel community in making green/ clean investments, what types of angels are the most interested in making such investments, whether green/clean investments are seen to offer attractive financial returns, and whether investors are willing to make a trade-off between financial returns and the environmental benefits of the business if it is successful. Previous research has emphasized that business angel investment motivations can be divided in three categories: Hedonism (noneconomic benefits - "psychic income"), Economics (wealth maximization) and Altruistic (transcend one's self-interest). It might be assumed that investing in green/clean will be strongly correlated to Altruistic motivations, but is this true? Do angel investors see investing in green/clean as a socially responsible investment (SRI)? How much do angel investors take into account the potential downside of this type of investments when building their portfolios? This paper follows the trend in other areas of knowledge (e.g. marketing, economics, sociology and so on) that explores the effects the behavioral impacts of economic agents being more aware of environmental problems. Based on interviews with 65 investors we conclude that business angels that invest in green/clean opportunities are more likely to invest for altruistic motivations. However, angels emphasize they expect similar rates of return when investing in green. This has direct implications for policy makers as well for green/clean tech entrepreneurs.



124 - NEGOTIATING THE MEANING OF CATASTROPHIC INNOVATION FAILURE

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We explore how firms in nascent industries and their stakeholders negotiate the meaning of a catastrophic innovation failure. These events constitute a double-edged sword: They may lead stakeholders to either endorse the firm and reassert their support or to doubt the firm's ultimate chances of success and diminish their support. Because it is difficult for stakeholders to determine whether the failure occurred due to the uncertainty inherent to innovation (experimental uncertainty; perhaps unavoidable) or due to managerial or organizational shortcomings (operational uncertainty; mostly avoidable), the meaning they ascribe to the catastrophic failure may be critical to the future of the firm's innovation process and its survival. Through a longitudinal, inductive, qualitative study of Virgin Galactic's 2014 test flight crash, we explore how firms in nascent industries and their stakeholders negotiate the meaning of a catastrophic innovation failure and, in the process, co-create the firm's organizational narrative moving forward. From our data, we identify a tension inherent in the crafting of pre-failure organizational narratives between promising success (which may attract stakeholders) and acknowledging the possibility of failure (which may deter them). Our findings indicate a need for firms to make an "optimal promise" in their narratives, balancing the projection of success with the possibility of failure.

157 - TOO MUCH OF TWO GOOD THINGS: THE CURVILINEAR EFFECTS OF SELF-EFFICACY AND MARKET VALIDATION BEHAVIOR OF ENTREPRENEURS

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Lean startup is a new and highly influential approach in the practice of entrepreneurs and incubators (Blank, 2013). The lean startup approach urges entrepreneurs to validate their assumptions about customer needs to avoid unnecessary waste and increase success chances (Martignoni, Menon, & Siggelkow, 2016). Due to these benefits, lean startup is becoming the dominant approach to new venture creation (Blank, 2013). Despite its popularity, little research has been conducted on this phenomenon. To fill this gap, this study investigates what factors influence the effort of new ventures to engage with customers to validate market and its impact on entrepreneurial progress.

Since entrepreneurs' self-efficacy plays a central role in influencing the behaviors and performance of startup companies (Collins, Hanges, & Locke, 2004; Frese & Gielnik, 2014), we will investigate how entrepreneurs' self-efficacy influences the market validation behavior of their new ventures. Self-efficacy denotes one's belief in one's capabilities to generate a certain level of attainment (Bandura, 1982). Applied to the entrepreneurship field, entrepreneurial self-efficacy denotes entrepreneurs' belief that they are capable of successfully performing entrepreneurial activities, such as marketing, innovation, and management (C. C. Chen, Greene, & Crick, 1998). Self-efficacy is especially relevant for market validation behavior because it represents entrepreneurs' sense of uncertainty regarding their business (Hayward, Shepherd, & Griffin, 2006), and uncertainty reduction is

a central motive driving executives to scan their environment and search for information (May, Stewart Jr, & Sweo, 2000). Building on social cognitive theory (Bandura, 1991) and control theory (Vancouver, 2005), we argue that entrepreneurs' self-efficacy regarding their marketing capability will play a central role in influencing their firms' market validation behavior. According to social cognitive theory, self-efficacy will increase market validation behavior because entrepreneurs' confidence in their market success leads them to regard market validation as valuable. On the contrary, control theory predicts that self-efficacy may generate a negative effect on market validation behavior because individuals' confidence about their chances of success may lead them to regard market validation as unnecessary. In this paper, we integrate these conflicting predictions and suggest that the effect of entrepreneurial self-efficacy on market validation behavior may be curvilinear, rather than linear. Specifically, self-efficacy will initially have a positive effect on market validation up to a point, beyond which its effect will become negative.

Furthermore, we examine how market validation behavior influences new venture progress. Since market validation is essential for reducing uncertainty regarding the new business model of new ventures, we suggest that market validation can facilitate new venture progress. However, too much feedback can also be a bad thing, because it may cause the new venture to lose focus and direction. Thus, market validation will not have a linear effect on overall goal progress. A moderate level of market validation will be the best to sufficient to test the assumptions of entrepreneurs and prevent strategic errors, whereas too much market validation may result in information overload and squander resources for other important tasks. Therefore, market validation will have a curvilinear effect on overall goal progress.

166 - INTEGRATING ETHICS, CULTURE AND LEADERSHIP: A CONCEPTUAL FRAMEWORK FOR ENTREPRENEURIAL VENTURES

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This paper identifies the conceptual integration of the disparate notions of the concepts of work value ethics, organisational culture and design leadership in the contemporary entrepreneurial context. Entrepreneurs are trouble-shooters, creative thinkers, committed and passionate about their ideas. Entrepreneurial ventures require leaders who can anticipate, create and sustain innovative design solutions. Recent recessions, globalisation and intense competition, forced entrepreneurs to sustain and survive in this contemporary business environment by any means. Although leadership and ethics receive significant attention and application in business practices, work value ethics and design leadership have only received limited traction among business practitioners and researchers. There is a dearth of research in the field of work value ethics and design leadership while the link between organisational culture and design leadership has not been previously explored. A review of work value ethics, organisational culture and design leadership, is offered prior to exploring how the synergies of the key concepts are mutually beneficial. This study is informed by literature that explicit work value ethics and organisational culture can shape design leadership as more than a tool of productivity while the participatory processes of design leadership can aid in expanding the circle of work value ethics and organisational culture. Furthermore, design leadership may provide a palatable path for greater acceptance of work value ethics and organisational culture among leaders and researchers.



145 - NEW VENTURE VOLATILITY AND ITS CONSEQUENCES

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Despite the importance of volatility to entrepreneurship, there have been virtually no studies of how volatility in short-term revenue streams influences new venture performance and how such volatility develops over time. This study addresses these research gaps by investigating how short-term revenue volatility, as measured by volatility in monthly revenue streams, affects new venture viability, and how this type of volatility develops over time in a cohort of new ventures. We track the bank accounts of entrepreneurs to construct a state-of-the-art panel of 6578 new ventures over a ten-year period and make several important contributions. First, we contribute to the literature on the liability of newness by outlining theoretical links connecting shortterm revenue volatility and venture discontinuation, and further extend those links to the mechanism underpinning the liability of newness. Second, we contribute to the emerging stream of entrepreneurship research that links financial measures to theorizing on new venture survival by establishing further links between such measures and the theoretical foundations of new venture viability. Third, we contribute to the literature on evolutionary theory in the domain of entrepreneurship and organization studies by showing the effects of selection and adaptation over time.

46 - BUILDING A FIRM-HOSTED ONLINE COMMUNITY

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Online communities are an emerging topic in strategy and organization theory. Yet, little is known about the underlying mechanisms of building a firm-hosted online community. Our in-depth single-case study of how the world's largest miniature model railway exhibition established a vital firm-hosted online community addresses this gap. We identify a process consisting of three key practices – luring, documenting, and moderating – that explains the inherent challenge of building a firm-hosted online community: how to attract and how to keep people engaged with the online community. The longitudinal nature of our data further suggests that the three core practices must adapt to changes in the environment. The findings carry important implications for the management of firm-hosted online communities.

140 - ENGAGING ACTORS IN REGIONAL ECOSYSTEMS FOR ENTREPRENEURIAL LEVERAGE: EXPLORING UTILITY AND STATUS IN RELATIONAL DYNAMICS

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The purpose of this paper is to explore the heterogeneous actors within entrepreneurial ecosystems and determine how their roles and relative positions influence miro-interactions within the system. We develop a conceptual framework, by integrating the findings of two empirical case studies of Australian regional ecosystems. Based on the case findings our framework first proposes how heterogeneous actors' behaviours are motivated by interaction drivers and agendas, and how their relative status and utility within an ecosystem influences micro-interactions. Second, we delve deeper into the status, utility and roles of diverse actors and illustrate how these micro-interactions have implication for system-level outcomes. Our framework provides the opportunity for future researchers to test and refine the framework and ascertain how the contextual nature of the ecosystem influence the manifestation of these microinteractions.

89 - CULTURAL-SPATIAL CONTEXTS: UNDERSTANDING ENTREPRENEURIAL ECOSYSTEMS FROM AN INDIGENOUS WORLD VIEW

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In this paper we explore the cultural-spatial aspects of the entrepreneurial ecosystem of the Indigenous Mãori of Aotearoa New Zealand, with particular focus on the cultural-spatial entity of the community complex or marae. Our focus here is to explore how the Maori entrepreneur and the entrepreneurial ecosystem they engage with might be influenced by their identity as Maori and in turn, what role the marae plays in that identity. We argue that from a Mãori perspective we need to engage in a deeper understanding of interaction between people and their landscape. For Indigenous communities, landscapes traditionally nourished communities economically as well as culturally and spiritually. Connection to land, in the fullest understanding of what land means—mountains, valley, streams, oceans, plant and animal life, earth and sky-lies at the very heart of what it means to be Indigenous. To emphasize this holistic understanding of place and spatial context we thus refer to the cultural-spatial as a bridge to an understanding of an entrepreneurial ecosystem from an Indigenous world view.



176 - HOW COULD ENTREPRENEURSHIP THEORY AID THE GRAND CHALLENGE OF POVERTY ELIMINATION IN WESTERN SOCIETY?

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We contribute to the discussion of how Sustainable Development Goals 1 (No Poverty) could be achieved through new ways of seeing, essentially entrepreneurial theory. We present and explore the current state of poverty in one sub region of Australia (South Australia) to present an ecology systems model. We pave the way for future research and theoretical development by expanding this data for a subset of people experiencing poverty (young people). This model includes four levels: (1) the microsystems (i.e. young people's immediate environment); (2) the mesosystem (i.e. the environment that young people usually frequent and their interrelationships); (3) the exosystem (i.e. those who have influence on the youth); (4) and the macrosystem (i.e. cultural and associated systems that dictates the values and beliefs of the youth).

149 - A DEDUCTIVE CONFIGURAL STUDY OF ENTREPRENEURIAL INTENTIONS BASED ON A PRIOR INDUCTIVE FSQCA STUDY

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Fuzzy-set qualitative comparative analysis (fsQCA) provides additional fine-grained information that symmetrical correlational methods tend to obscure, and is therefore complementary to regression and structural equation modelling. This paper employs fsQCA to identify the combinations of antecedent conditions that enter the holistic decision-making process that culminates in the formation of entrepreneurial intention by individuals. FsQCA inductively reveals multiple configurations of antecedent conditions that represent alternative pathways to the formation of entrepreneurial intention, but does not explain how or why these conditions interact interdependently with each other. In an initial small sample study, we found two configurations that culminate in entrepreneurial intentions. Hypotheses to explain the interdependence of conditions in these configurations were then developed and tested using a second, much larger sample. In the second sample we also found these two configurations, but also found several others. Theoretical propositions were developed to explain the additional configurations found in the second cohort.

58 - SOCIAL PURPOSE BUSINESS INTENTIONS: ALTRUISM AS A DOUBLE EDGED SWORD.

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Drawing on the Theory of Other Orientation (TOO) theory, altruism is proposed as a moderator of entrepreneurial self-

efficacy elements prediction of social purpose business intentions (SPBI). We gathered data about the social purpose business intentions, altruism and entrepreneurial self-efficacy (ESE) of graduands (final year bachelor, honours or masters level students in engineering, entrepreneurship, nursing, veterinary science and sciences programs) at a single large university. We designed a conjoint experiment to provide data that 'revealed' the level of altruism of the respondent, and used a Likert-type self-report measure for validation. Our hypotheses were differentially supported (1) altruism does not moderate the effect of ESE in opportunity evaluation, resource marshalling and planning on SPBI; (2) altruism does moderate the effect of ESE in people management/motivation on SPBI, making this ESE more important to altruistic respondents in determining their social purpose business intentions; and (3) altruism does moderate the effects of ESE in financial implementation, such that it negatively influenced altruistic respondents' SPBI. We discuss implications: what attracts a founding social entrepreneur to social purpose business may also be a contributor to attrition and may help understand the lower emergence of pro-socially motivated ventures from the nascent phase.

44 - THE QUEST FOR WELL-BEING: UNDERSTANDING THE ROLE OF ENTREPRENEURIAL IDENTITY

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This study sets out to examine entrepreneurship and psychological well-being in the agricultural context. I take an identity perspective to answer the questions how and why entrepreneurship and well-being are related to one another by studying agricultural entrepreneurs. The paper explores thereby the nature of farmers' entrepreneurial identities and also the role of farmers' entrepreneurial endeavors for psychological well-being. I argue that identity is a profound driver in this context to engage in entrepreneurship because it allows farmers to defend who they are and to become who they want to be. In this regard, authenticity, being one true self, plays a fundamental factor in the enactment of their salient identities, their successful endeavors in entrepreneurship, and their well-being.

65 - THE CRITICAL INCIDENT TECHNIQUE IN INNOVATION WITHIN A BUSINESS MODEL IN SOCIAL PURPOSE ORGANISATION RESEARCH

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Introduced first in 1954 by Flanagan, the critical incident technique (CIT) method is a "set of procedures for collecting direct observations of human behaviour in such a way as to facilitate their potential usefulness in solving practical problems and developing broad psychological principles" (Flanagan, 1954, p327). CIT has strong positivist roots and explains actions based on quantifiable observations, but its application to interpretive research has also been justified (Chell, 1998; Kain, 2014). It discusses "series of events" or incidents that are significant for the phenomenon being studied, that are connected to each and that provide the basis for an analysis (Eisenhardt, 1989; Weerawardena, Mort &



Liesch, 2017). CIT has been developed as an investigative tool in organisational analysis from within an 'interpretative paradigm' (Chell, 1998; Chell and Pittaway, 1998; Pittaway and Chell, 1999) and has been used as a qualitative interview procedure which facilitates the investigation of significant occurrences (events, incidents, processes or issues) identified by the respondent, the way the occurrences are managed, and the outcomes in terms of perceived effects. It is the argument of this study that this technique allows building a more comprehensive framework to investigate under-studied phenomena, such as Innovation within a Business Model (IBM) in Social Purpose Organisations (SPOs) in Australia. The complication of novelty of innovation within a business model based value creation (Weerawardena & Sullivan-Mort, 2001) leads developing an understanding suited to the SPO domain.

17 - BUILDING ENTREPRENEURIAL COMPETENCIES IN GENERAL EDUCATION: VALIDATING MICRO-CREDENTIALS

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The competency-based approach to entrepreneurship posits that nascent entrepreneurs can be taught competencies and presumably certified through a micro-credential. While it is exciting to think that students can signal formal and informal entrepreneurial learning outside formal degree structures, there continues to be a paucity of evidence between instructional interventions and entrepreneurial outcomes. We collected data from entrepreneurship students in a general education Entrepreneurial Thinking course over two semesters with a quasi-experimental design, using a previously tested instrument, and found that we should proceed with caution before creating credentials.

20 - EXAMINING GRIT AS CATALYST IN ACCELERATING EMERGING VENTURES

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During the earliest stages of development of a new venture there is a clear tension between 'what the venture might be' and 'how will it get there'. Entrepreneurial processes such as venture emergence, are characterized as requiring adaptability (Gersick, 1994; Eisenhardt & Tabrizi, 1995; Haynie & Shepherd, 2009), flexibility or improvisation (Hmieleski & Ensley, 2004). Indeed, in order to derive success in the market, it is fundamental that a new venture adapts itself to meet the market it wishes to serve, or shapes it together with its customers (Sarasvathy, 2001). Yet, regardless of rationale (Lerner, Hunt, & Dimov, 2018), actionoriented (Frese, 2009) entrepreneurs who enact persistent energy and effort, who are able to persevere (Dimov, 2010) in the face of adverse resourcing conditions (Baker & Nelson, 2005) and considerable uncertainty (McMullen & Shepherd, 2006) are those more likely to derive successful entrepreneurial outcomes, such as new venture emergence.

In the face of uncertainty, grit has recently been proposed as a driver of performance in established entrepreneurial firms (Mueller et al., 2017). However, it is not clear if this holds for

emerging ventures. Despite considerable academic attention paid to grit as an important individual determinant of performance in various endeavors [e.g. see Credé, Tynan, and Harms (2017) for a review] only recently has focus been given to the role that grit plays in entrepreneurship (Nambisan & Baron, 2013; Franklin, 2015; Mooradian, Matzler, Uzelac, & Bauer, 2016; Wolfe & Patel, 2016; Mueller, Wolfe, & Syed, 2017). Accordingly, this paper explores the role grit plays in catalyzing the emergence of early stage new ventures.

Grit: defined as 'passion for long term goals' is comprised of two facets, 'perseverance of effort' & 'consistency of interest' (Duckworth, Peterson, Matthews, & Kelly, 2007). Perseverance of effort in pursuit of a new venture is no doubt important to emergence. However, flexibility and adaptation rather than rigid consistency is likely somewhat more important for venture emergence. On the one hand grit ensures adequate effort is applied by the entrepreneur, however, it may restrict adaptation of the venture to the market. Therefore, grit may prove to be of variable benefit for new venture emergence.

172 - INSTITUTIONAL VOIDS OR INSTITUTIONAL AVOIDANCE? IMPOVERISHED ENTREPRENEURS' LACK OF ENGAGEMENT WITH FORMAL INSTITUTIONS.

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Institutional research in entrepreneurship is predominantly conducted in, and/or theorizes on, one of two types of settings. The first and more established of the two within academia, concerns those contexts ripe with advanced market-based institutions (e.g., consulting firms; credit card systems; developed infrastructure). Research in this context tends to explore questions of the nature: "How do formal institutions facilitate entrepreneurship?" (e.g., Lee, Peng, & Barney, 2007); and "How were institutions formed?" (e.g., Macguire, Hardy, & Lawrence, 2004) – commonly referring to institutional entrepreneurship.

The second, more recent and rapidly growing of the two, concerns those contexts with a relative or total absence of formal market institutions (e.g., banks; venture capitalists)—often studied in rural areas of emerging nations (Khanna & Palepu, 1997). Research in this area tends to explore questions of the nature: "How do entrepreneurs overcome a lack of access to formal institutions?" (e.g., Mair & Marti, 2009); and "Why do voids encourage social entrepreneurship?" (e.g., Stephan, Uhlaner, & Stride, 2015). These research questions tend be revolve around "institutional voids" (Khanna & Palepu, 1997). and the effect of these voids on entrepreneurs (e.g., Kistruck, Webb, Stutter, and Bailey, 2015).

While these two foci are fairly disparate, they are also two anchors on a continuum of development; ranging from full access to formal institutions to none (Mair & Marti, 2009). Neglected in these literatures, and orthogonal to this continuum, is a related concept we term "institutional avoidance." Institutional avoidance pertains to contexts wherein advanced market-based institutions are present and accessible (even to the historically excluded), known to potential beneficiaries, and valuable to potential beneficiaries; yet these individuals choose not to engage with the institutions. For example, a US-based NGO may decide to start a microfinance organization in rural Ethiopia, specifically to help impoverished entrepreneurs. Yet, having never interacted with US organizations or citizens, and being risk averse, the Ethiopian entrepreneurs



stick to what they know and what they currently use – loan sharks. Thus, while institutions are available, entrepreneurs within certain communities operate as if within an institutional void.

Our study encompasses two research questions. The first is: Why do entrepreneurs avoid formal institutions? We have observed several rationales for such behavior, including in our previous work. These include, but are not limited to, distrust, low self-esteem, social conformity, and perceived power distance. Our second research questions is: How can institutions improve upon potential beneficiary engagement? Answering these questions will conjointly advance understanding in the institutional sphere of academia and give practical guidance to institutions seeking to help entrepreneurs.

103 - MEASURING THE PERFORMANCE OF PUBLICALLY-FUNDED INCUBATORS IN THE UK AND CANADA

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In the past few decades, policy makers globally have invested public money into incubators, in the belief that they support local competitive advantages. While incubators remain a popular policy tool for promoting entrepreneurship, enterprise development and technology transfer, debate continues over their value and impact. A key methodological challenge for scholars and policy leaders is assessing incubator `additionality', or outcomes that would not have otherwise occurred. Input-output measures of incubator performance remain popular; often quantitatively biased, generic and prescriptive, i.e. in assuming universal application of a prescribed set of support services to a homogeneous recipient. Literature suggests that a generally accepted methodology for measuring business incubator performance has yet to be developed.

This paper seeks to make a scholarly contribution to the topic of publically-funded incubator performance and evaluation. Two central questions are addressed: first, what kinds of mechanisms are deployed by publically-funded incubators that lead to successful outcomes? Second, what kind of measures are most suitable for publically-funded incubators and how do the cases in our study 'measure up' when applying these measures?

59 - LEAN START-UP ENTREPRENEURSHIP, PROCESS, CONTEXT AND OUTCOME IN DISCONTINUOUS INNOVATIONS

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This study attempts to examine the relationship between lean start-up entrepreneurship and discontinuous innovation. Specifically, it seeks to investigate if this association is more significant in radical innovation relative to disruptive innovation, and whether the relationship is leaner in closed or open innovation model. Using longitudinal multiple case study method in the Intraocular lens (IOL) industry over a period of 10 - 30 years and retrospectively reviewing the industry innovation trajectory over the last 70 years, preliminary findings of this study seem to suggest a relationship between lean start-up and radical innovation in an open innovation model, where the open innovation process is underpinned by lead-user's intuition.

Conversely, the patterns observed in disruptive business model innovation in the industry seem to suggest a leaning towards a closed model through backward integration. However, the evolutionary process of disruptive innovation does not seem to corroborate a link between the lean start-up and disruption. Preliminary findings and implications for future research are discussed at the end.

61 - "I WISH YOU WERE A MAN!" LEGITIMACY AND FEMALE-LED FAMILY VENTURES IN THE GULF STATES

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The Gulf States - characterized as patriarchal societies and ones in which decisions are male-dominated - have witnessed an increase of female-led family ventures, that is new firms founded by a woman and involving other family members. Our study focuses on how these ventures build legitimacy, which is an essential element of their survival and growth. Drawing on the literature on legitimacy as a perception, we analyzed longitudinal data gathered from the life-stories, social media feeds and conversations and media archives of three female-led ventures in Bahrain. Our emerging model describes legitimacy formation of female-led family ventures as multi-level social process which starts at the individual level and involves interactions with other actors including family members - to gain what we have identified as market and royal validity.

107 - EXPLORE AND EXPLOIT: THE PROCESS OF BUSINESS MODEL DESIGN FOR AN ESTABLISHED MEDTECH COMPANY

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Two main challenges for established firms are how to exploit the existing capabilities without being constrained by their existing resources, mental models and routines, and how to explore new possibilities with reasonable efficiency. These two aspects become especially hard for established firms when they are to start a new business, which may require a new business model in terms of both activity systems and managerial mental models, but also new products and services. For medtech companies these issues are further complicated by the fact that they may need different business models per market (geographical, customer segment) because of nation or region specific institutions. In an early stage, much of the literature claims it is vital to frame a minimum viable product to address needs across different markets.

This paper analyzes an established medtech firm's process of designing a business model innovation prior to market implementation. Currently the literature on business model innovation processes is relatively scarce but early work investigates different stages of the business model innovation process emphasizing how changes in managerial cognition direct decision-making related to business model changes, and



explaining business model innovation as trial-and-error, change, and learning process. Unfortunately, our understanding of how established firms innovate their business models is poor and needs more research.

The paper will analyze how a firm designs a new business model from a problem-perspective, i.e. how the firm formulates and solves problems. The theoretical concept of problems to explain the process of business model innovation in established firms is characterized as perception in an empirical reality of a deviation from a set of desired conditions. Problems are understood as deviations from a set of desired conditions, which need to be addressed by the firm to restore or improve its performance by innovating its business model. Investigation of business model innovation focuses on problem formulation and problem solving and evaluation of solutions. Problem formulation refers to transforming a vague idea or hypothesis about a discrepancy into a perceived root of the discrepancy while problem solving refers to mitigation or removal of the problems. Problem formulation and solving may be backward or forward. Backward looking is history-dependent and founded on experiential wisdom so that the search for novelty is rooted in the firm's routines and organizational capabilities. Forward looking search is based on cognitive perception of the linkage between the actions chosen and their impact (Gavetti and Levinthal, 2000). This perception is not built on routines, and prior experience is downplayed.

35 - STARTUP EXITS AND THE EVOLUTION OF ENTREPRENEURIAL ECOSYSTEMS: EXPLORING DIVERGENT PATHS

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This study conceptualizes entrepreneurial ecosystems (EEs) as a circular three layer system with startup exits driving the evolution. Using interviews with EE veterans, we map expected post-exit behavior of the four participatory agents in an EE entrepreneurs, business angels, venture capitalists and key employees. Findings support the circular three layer EE concept and provide insights into the mechanics of role transitions dependent on financial exit success.

Policy implications are significant; growing entrepreneurial ecosystems requires successful exits. Without successful exits, it is only a matter of time until ecosystems stagnate and depopulate. Furthermore, the binary post-exit continuation of VCs imply that policies aimed at bridging early stage funding gaps with early stage VCs may only be temporary solutions.

Recommended future empirical research is to compare expected and actual post-exit behavior, ascertain generalizability across EEs, study connection between startup exits and EE inflow, non-nascent agent role transitions and correlations between agent transitions and investments. Finally, we propose utilizing agent-based modeling and simulation (ABMS) to understand the critical conditions of the evolutionary process of entrepreneurial ecosystems.

155 - IMPACT OF TRIPLE HELIX ON ACADEMIC ENTREPRENEURIAL INTENTION OF YOUNG RESEARCHERS

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Entrepreneurship is an essential ingredient for economic competitiveness, sustainability and growth while responding the challenges of globalization. The role of triple helix is key among many factors that derive young researchers to establish new venture as an outcome of their research. The study is based on triple helix factors influencing entrepreneurial intention for creating new venture among young researchers in Pakistan. This study used sample of 310 young academic researchers from different universities of Pakistan. The finding of this study suggest that academic and government helice and have significantly positive impact for enhancing the academic entrepreneurial intentions of young researchers while role is insignificant relationship, The government also incorporates these findings to fortify current policies and formulate new ones in order to support young entrepreneur researchers for enhancing interaction with industry, while universities and academic institutions should provide highquality entrepreneurial programs to young Pakistanis to foster an inclination toward entrepreneurship.

Keywords: Academic Entrepreneurial Intention (AEI), Theory of Planned Behavior (TPB) and Triple Helix Model (THM).

132 - APPROPRIATION OF INTELLECTUAL PROPERTY: A MULTIPLE CROSS-CASE ANALYSIS OF SME PRACTICES

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Intellectual property (IP) is critical to competitive advantage, and the protection and management of IP have become key concerns for organizations. Anecdotal evidence and the literature suggest that an IP appropriation strategy should take into consideration, for example, organizational resources, IP protection practices and IP utilization strategies to gain value for the firm. We conduct a qualitative analysis of case study data from five firms in technology-intensive firms in the biotechnology and ICT industries, to identify 'best' IP appropriation practices. We apply the Resource-based View (RBV) of the firm to the IP value chain to examines the relationships between the factors that facilitate IP appropriation at each stage of this IP value chain, and IP appropriation.

The analysis reveals that SMEs rely primarily on their organizational resources to facilitate IP generation. However, there are some differences between the IP protection practices of SMEs in the biotechnology companies and those in the ICT sector. Biotechnology SMEs tend to rely on external IP acquisition and Intellectual Property Rights (IPRs) for the protection of their IP, while SMEs in the ICT choose not to implement IPRs and rely heavily on their continuous innovation to differentiate their innovations. The implication of our research is that SMEs in innovation-intensive sectors should consider an integrated strategy of the IP value chain, i.e., IP generation, IP protection and IP utilization, to ensure successful IP appropriation.



91 - GENERATE INTERNALLY OR ACQUIRE FROM EXTERNALLY? GROWTH MODE SELECTION IN DIFFERENT LOCATIONS AND FIRM AGES.

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Although previous research suggests that growth mode contributes to firm growth, few studies link firm growth to the type of growth mode. Consequently, research that explains how firms grow has limited progress. Notably, no one growth method is works among all firms and it is an important problem for entrepreneurs and policymakers to unveil. This paper addresses this problem by drawing from the theory of the growth of the firm to reveal how firms grow by choosing appropriate growth mode in different geographical locations and firm ages. We distinguish between two types of growth modes: organic and acquisition. Using a panel data set consisting of 7,456 private sector growing firms in Sweden, we find that organic growth mode outperforms acquisition growth mode in younger firms and in rural locations.

6 - GETTING A TICKET TO THE GAME: BECOMING AN ENTREPRENEUR AMIDST MULTIPLE DEMANDS

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The process of creating a new venture places many competing demands on an entrepreneur. Yet, little is known about how entrepreneurs balance these demands as they navigate the new venture creation process. To address this conundrum, we draw on institutional theory to highlight different demands that entrepreneurs encounter when launching a new venture. Based on a 2.5 year, qualitative case study of ten entrepreneurs, this study adopts a process perspective and advances the scholarly work on entrepreneurship and institutional theory. First, this study extends the entrepreneurship literature by demonstrating patterns of activities explaining how entrepreneurs progress, stagnate and abandon a new venture. Furthermore, having identified six micro processes, creating synergies, buffering, dispending, ramping-up, bleeding in and switching-off, this paper extends the literature on the new venture creation process. These micro processes explicate how entrepreneurs balance competing demands of the new venture whilst dealing with their existing commitments. Second, this study extends literature on institutional complexity providing a multi-level study which adds to the limited research that demonstrates individuals' responses to manage competing demands from multiple logics. In addition, this study explicates individuals' increasing embeddedness evident in the growing legitimacy from two distinct constituents: customers and investors.

5 - USING REFLECTION JOURNALS: FROM EXPERIENCE TO LEARNING IN UNDERGRADUATE ENTREPRENEURSHIP STUDENTS

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Using reflection journals: From experience to learning in undergraduate entrepreneurship students

36 - THE INSTITUTIONS OF ECONOMIC FREEDOM AND ENTREPRENEURSHIP IN THE OECD COUNTRIES

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The paper provides new evidences on institutional characteristics determining entrepreneurship across 36 countries of the OECD. The paper investigates the relationship between institutional settings defined by the economic freedom index and entrepreneurship defined as "self-employment". The measure of economic freedom covers the following aspects: rule of law, size of government, regulatory efficiency and market openness. Entrepreneurship is measured by self-employment in a time series data during the period of 1995-2016. The empirical findings show that the size of government, notably tax burden and government spending tend to increase entrepreneurship. Further, the finding shows that regulatory efficiency of business procedure, labor market regulation and inflation policy decrease entrepreneurship. Other institutional measurements such as the rule of law and market openness shows no causal relation to engaging in self-employment. Consequently, this research provides the ground for a re-thinking of the direction and the role that institutions play in the incentives for engaging in opportunity seeking activities.

137 - NON-CORE ENTREPRENEURIAL ECOSYSTEMS AS INHIBITORS AND FACILITATORS OF SME INTERNATIONALIZATION: EMPIRICAL EVIDENCE AND POLICY IMPLICATIONS

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We bring together the literature on SME internationalization and entrepreneurial ecosystems to investigate how SMEs within 'non-core' entrepreneurial ecosystems (NCEE) are able to enter international markets. We investigate factors constraining and facilitating SME internationalization in such environments and suggest policy approaches to promote entrepreneurship in the absence of many of the characteristics of 'core' entrepreneurial ecosystems. We analyse qualitative data derived from around



90 organizations - including recently internationalized SMEs - collected over ten years through in-depth interviews in the Hull and Humber sub-region of the UK.

NCEE environments inhibit SME internationalization in several ways, notably in relation to perceived peripherality and the parochial nature of local networks. However, we observe that SME internationalization does occur successfully in such environments, including as a result of the introduction of 'known strangers' into local networks and the repatriation of entrepreneurs or business managers who had previously left the region.

Our approach provides avenues for the reconsideration of local policy in NCEEs. Rather than attempting to mimic the attributes of core ecosystems, we argue that identifying and supporting the types of SME internationalization processes identified through our research will help agencies operating within NCEEs to overcome the disadvantages associated with their location.

183 - RECONCILING TENSIONS IN INDIGENOUS SOCIAL ENTREPRENEURSHIP: CHALLENGES AND OPPORTUNITIES AMONG REMOTE AUSTRALIAN SOCIAL ENTERPRISES

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This research investigates the social, commercial and cultural logics that contribute to an ongoing social-commercial-cultural trilemma that managers of grassroots social enterprises in remote Australia experience, and the challenges and opportunities encountered in reconciling these tensions. Based on a qualitative study of 22 non-Indigenous art centre managers in remote Australia, the results indicate that although art centres have dual social and commercial missions, cultural differences between Indigenous arts workers and communities, and non-Indigenous managers, contribute to the social-commercial tensions, which are exacerbated by geographic factors (very remote, isolated locations). Thus, the study contributes to research by extending paradox theory beyond its traditional dilemmas foci, to include social-commercial-cultural trilemma in the context of grassroots social enterprises. The results also show how paradoxes provide opportunities for arts workers with latent managerial capacity to transition to management and evolve the traditional Indigenous art centre model to Indigenous managed art centres. In so doing, Indigenous entrepreneurship, as a special form of grassroots and inclusive innovation, offers a viable, grassroots micro business development pathway for socioeconomic improvements in remote Indigenous communities in Australia.

Keywords: paradox theory; remote Indigenous art centres; grassroots social enterprises; culture; Indigenous entrepreneurship

183 - RECONCILING TENSIONS IN INDIGENOUS SOCIAL ENTREPRENEURSHIP: CHALLENGES AND OPPORTUNITIES AMONG REMOTE AUSTRALIAN SOCIAL ENTERPRISES

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This research investigates the social, commercial and cultural logics that contribute to an ongoing social-commercial-cultural trilemma that managers of grassroots social enterprises in remote Australia experience, and the challenges and opportunities encountered in reconciling these tensions. Based on a qualitative study of 22 non-Indigenous art centre managers in remote Australia, the results indicate that although art centres have dual social and commercial missions, cultural differences between Indigenous arts workers and communities, and non-Indigenous managers, contribute to the social-commercial tensions, which are exacerbated by geographic factors (very remote, isolated locations). Thus, the study contributes to research by extending paradox theory beyond its traditional dilemmas foci, to include social-commercial-cultural trilemma in the context of grassroots social enterprises. The results also show how paradoxes provide opportunities for arts workers with latent managerial capacity to transition to management and evolve the traditional Indigenous art centre model to Indigenous managed art centres. In so doing, Indigenous entrepreneurship, as a special form of grassroots and inclusive innovation, offers a viable, grassroots micro business development pathway for socioeconomic improvements in remote Indigenous communities in Australia.

Keywords: paradox theory; remote Indigenous art centres; grassroots social enterprises; culture; Indigenous entrepreneurship

41 - A PHENOMENOLOGICAL EXPLORATION AND ELUCIDATION OF ENTREPRENEURIAL ECOSYSTEM OF GRASSROOTS INNOVATORS TURNED ENTREPRENEURS OF INDIA

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the discourse around emerging economies On technological growth, economist Fritz Schumacher wrote that these economies should select such technologies that would free people from poverty and drudgery and provide meaningful work (Schumacher 1973). Innovation and entrepreneurship phenomenon at the grassroots should be considered as vital in the discourse on socio-economic development of emerging economies. Phenomenological approach, is used to study the entrepreneurial ecosystem at the grassroots. Furthermore, interpretative phenomenological Analysis (IPA), helped to make sense of meanings and structure embedded in lived experiences. Drawing on the lived experiences of the Seven grassroots innovators of the Gujarat region in India, this paper elucidates the endogenous aspects of the innovation and entrepreneurial system at the grassroots and proposes entrepreneurial ecosystem from system and development economic lens. The social, moral and market economy aspects of grassroots



environment is discerned. The findings and propositions, from this study can be valuable to the policy makers, development organisations, potential grassroots entrepreneurs and researchers. This study opens avenue for research especially, integrating Isenberg's model of entrepreneurship ecosystem strategy for understanding the process of interaction, enhancing learning capability at the grassroots and economic development.

84 - ENTREPRENEURIAL MINDSET: DEFINING A NASCENT CONSTRUCT

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In the face of increasing uncertainty and unprecedented change the term entrepreneurial mindset has grown in popularity and interest across a variety of stakeholder groups including government, researchers, educators, and the media. There is increasing pressure for tertiary institutes to equip students for this uncertain future, to cope with change, and to encourage creativity innovation – in short to instil an entrepreneurial mindset in students. Globally, universities have responded to this growing interest by offering a variety of educational interventions.

Despite this prevalence, there is little agreement on the meaning of the underlying construct. Definitions, when provided, lack the precision needed to distinguish between mindset and possibly related constructs such as entrepreneurial behaviours, traits, skills, capabilities, attitudes and / or self-efficacy. The lack of a clear and commonly accepted definition of the construct inhibits our ability to theorize about the role of mindset, measure it, and test hypotheses about its role in the entrepreneurial process.

In this paper we adopt French's (2016) characterisation of the differences between cognitive psychology, social psychology and organizational leadership, and positive psychology approaches to studying mindset, and show how the various definitions implicitly reflect one or more of these theoretic lenses, which shapes the how the construct is understood.

To progress understanding of entrepreneurial mindset, and its importance to entrepreneurial process and outcomes, researchers need to be explicit about the theoretic lens through which they view the construct. This will guide formation of a clear definition of the construct within a particular paradigm for which a valid and reliable measure can be developed.

105 - ENTREPRENEURIAL BEHAVIOR AS THE KEAY TO SUCCESS IN VENTURE AND PRIVATE LIFE: THE POSITIVE INTERACTION EFFECT OF BRICOLAGE AND EXPERIENCE ON ENTREPRENEURIAL VENTURE INNOVATIVENESS AND ENTREPRENEURS' WORK-LIFE BALANCE

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Due to their newness and smallness, founders and their ventures are often confronted with resource constraints.

However, entrepreneurial ventures have to be highly innovative in order to survive in volatile environments. At the same time, their founders have to balance their working and private life in order to achieve life satisfaction and health. By considering the resourceful behavior of entrepreneurial bricolage and the moderating role of entrepreneurial and employee experience, this paper discovers a promising way to meet these challenges in order to be successful on organizational as well as on personal level. In an empirical study with 653 entrepreneurial ventures, we identified a positive effect of entrepreneurial bricolage on both entrepreneurial venture innovativeness and entrepreneurs' worklife balance. In alignment with our predictions, we found that entrepreneurs' employee experience moderates the relationship between bricolage and innovativeness, while entrepreneurial experience moderates the link between bricolage and work-life balance. Theoretical and practical implications are discussed.

135 - A CONFIGURATIONAL APPROACH TO ENTREPRENEURIAL ORIENTATION AND COOPERATIONS EXPLAINING PRODUCT AND SERVICE INNOVATIONS IN DIGITAL VS. NON-DIGITAL STARTUPS

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This study analyzes the effects of startups' entrepreneurial orientation (EO) and cooperations with other startups and established firms on product and service innovations. Through a fuzzy-set qualitative comparative analysis (fsQCA) we identify previously unknown combinations of antecedents of product and service innovation in 690 digital vs. non-digital startups. Our study reveals that different combinations of EO dimensions and types of cooperation may lead to product and service innovation, disclosing the valuable manifoldness of combined EO and cooperation profiles in different contexts.

125 - DESTRUCTIVE INTERPERSONAL RELATIONSHIPS? THE IMPORTANCE OF SOCIAL UNDERMINING AND SLEEP QUALITY IN ENTREPRENEURS' WORK ENGAGEMENT

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In the world of entrepreneurs, destructive interpersonal relationships such as perceived social undermining are inevitable and influential. How the unavoidable implicit destructive relationships influence entrepreneurs' daily work engagement becomes an intriguing research question. The authors thus examine the impact of daily entrepreneurs' perceived social undermining from different sources (coworkers and business partners, as well as significant others) on their daily work engagement through the mediating role of one important recovery resource – sleep quality. In addition to the main effect, resilience is tested with its moderating roles. The authors test the hypotheses using experience sampling method based on



691 daily surveys from 77 entrepreneurs in different cities from China. Except resilience as a moderator in the relationship between sleep quality and work engagement, all of proposed hypotheses have been supported. That is, entrepreneurs' daily work engagement is significantly impaired by perceived social undermining through worsening sleep quality, but with high resilience, they may experience weaker relationship between perceived social undermining and sleep quality. This study fills the research gap of entrepreneurs' destructive interpersonal stressors and work engagement literature by testing and highlighting the recovery mechanism behind the relationship. The authors also underscore the need of resilience in entrepreneur's daily life.

95 - A STUDY ON THE EFFECT OF GREED ON CO-FOUNDER SELECTION

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Contrary to the popular myth of a lone heroic entrepreneur, many entrepreneurs pursue opportunities in teams. Given the prevalence of this phenomenon, researchers have set out to investigate the implication of entrepreneurial teams, such as the effect of entrepreneurial teams (vs. lone entrepreneurs) on venture performance and the influence of entrepreneurial team composition. However, a review of the literature reveals an important but understudied question—how do entrepreneurial teams form in the first place? In the current study, we aim to address this gap by investigating why some entrepreneurs pursue an opportunity in teams while others do not and how lead entrepreneurs select their co-founders through the lens of lead entrepreneurs' greed. Using a metric conjoint analysis approach, we tested our hypotheses with a sample of 122 entrepreneurs in Singapore. We found that a lead entrepreneur's greed is positively associated with the tendency to take on a co-founder. Our results also show that a lead entrepreneur's greed is negatively associated with the emphasis placed on the sexual orientation of a potential co-founder and positively associated with the emphasis placed on the competence of a potential co-founder. Contrary to our hypothesis, we found a negative relationship between a lead entrepreneur's greed and the emphasis placed on the proactivity of a potential co-founder.

34 - DOES SHAME PRONENESS HELP SERIAL ENTREPRENEURS TO REBOUND FROM PRIOR FAILURE?

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Emotion, especially negative emotion, is of particular interest to entrepreneurship scholars. It may shut down entrepreneurs' attempts and kill their aspirations (Byrne & Shepherd, 2015; Shepherd, 2011; Shepherd & Cardon, 2009; Wolfe & Shepherd, 2015), and thus has important implications on entrepreneurs' decision-making and venture strategies (Shepherd 2015; Shepherd & Haynie, 2011). Negative emotion can be triggered by entrepreneurs' failure. Considering that many serial entrepreneurs have failed before, it is surprising that little research has examined the negative emotion of serial entrepreneurs. This

paper aims to address this void and understand how serial entrepreneurs' negative emotions after their failure in previous ventures may affect their strategic actions in the subsequent ventures.

Among the negative emotions, some (such as anger and fear) are activating and can motivate people to estimate risk differently, and then stimulate them to undertake risk-seeking actions (Lerner & Keltner, 2001); while others (such as sadness and regret) are deactivating, because they often cause people to avoid thinking about or engaging with the events which caused the negative emotion; and also people tend to believe that the incidents are out of their control and caused by external factors (Smith & Ellsworth, 1985; Porath & Pearson, 2012). Entrepreneurship scholars have followed this burgeoning literature in psychology and examined various discreet emotions of entrepreneurs as one of the new frontiers of entrepreneurship research (Cardon et.al., 2012 Shepherd & Patzelt, 2017; Tata et.al., 2017). Our paper follows suit.

Among the various negative emotions, shame stands out as an interesting one for studying serial entrepreneurs. The existing literature on shame is inconclusive about whether the shame proneness of serial entrepreneurs who have failed before can activate or deactivate their efforts in subsequent ventures. The classical psychology literature suggests that shame, an intense and long-lasting state of self-criticism for one's failure (Lewis, 1971; Tangney et.al., 1996; Tangney & Dearing, 2004), deactivates people to take actions so that they can avoid future failure and its consequences. However, recent studies provide some evidence for the constructive nature of shame (e.g., Brown et al., 2008; Gausel, Vignoles & Leach, 2015; Lickel et al., 2014). For instance, a recent study by Leach and Cidam (2015) shows that shame stimulates entrepreneurs to employ constructive approaches when their prior failure is perceived reparable; while if their failure is deemed unrepairable, shame is unlikely to result in a constructive approach. The inconclusive findings on shame provide us opportunities to build on and further develop the theory. Also serial entrepreneurs provide a new and appropriate context to test the effects of shame.

51 - ENTREPRENEURIAL EDUCATION AND TRAINING (EET) PROGRAMS AND STARTUP BEHAVIOR: IS PROGRAM SATISFACTION THE MISSING LINK?

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Entrepreneurial education and training (EET) programs play an important role in developing new entrepreneurs. Outcomes of EET programs can include building entrepreneurial capabilities, enhancing an individual's entrepreneurial mindset, motivating entrepreneurial activities, and improving performance. Research has shown, however, that participation in an EET program does not guarantee business startup. Indeed, literature reporting the effect of such programs lacks consensus: Although some studies identify positive results from EET, others show limited or mixed results. This research thus seeks to advance our understanding of the effectiveness of EET programs in helping intending entrepreneurs start ventures by drawing on satisfaction as a critical yet overlooked mechanism.

Specifically, we examine the effectiveness of EET and entry into nascent entrepreneurship through the lens of the job satisfaction-



job performance literature. First introduced into organizational psychology in the mid-1930s, job satisfaction is foundational in explaining job performance and is one of the most researched areas in management and organizational psychology. Job satisfaction is an evaluative judgement associated with work or work related activities. We draw parallels between work and program satisfaction noting that improved work behaviour is associated with improved job satisfaction. For the purpose of this research, program satisfaction comprises overall EET program satisfaction, quality and relevance of program topics, and the perceptions of EET program benefits.

Many possible outcomes of EET programs exist including the development of skills and knowledge, enhanced entrepreneurial attitudes and intention, and enhanced entrepreneurial selfefficacy and entrepreneurial behaviours. Particular attention in the wider entrepreneurship literature has been given to the role of entrepreneurial self-efficacy (ESE) and entrepreneur intentions (EI) in the startup process. ESE embodies a belief of a person that he or she could perform the tasks associated with the ability to launch a venture. El reflects perceptions of the desirability, feasibility, and a propensity to act upon opportunities. Although ESE and EI have drawn significant scholarly interest, these two constructs, of themselves, do not satisfactorily explain startup behaviour. Drawing upon job satisfaction/program satisfaction parallels prompts the following research questions: What is the role of EET program satisfaction as it relates to startup behavior? Does satisfaction mediate the EI-ESE-startup relationships?

This research contributes to the literature in three primary ways. First, it is the first study to introduce the job satisfaction-job performance paradigm into an EET context, offering critical insight into the role of satisfaction. Second, the longitudinal approach to examining the complex interrelationships amongst ESE, EI, EET program satisfaction, and startup behavior offer an important contribution to theory, demonstrating the role of program satisfaction in explaining startup behavior. Third, the context for this study of lower socio-economic, chronically unemployed participants in a developing economy generates important insights. Indeed, this study has important implications for public policy as well as practitioners who craft and deliver EET programs. Developing economies, in particular, have a need for effective EET programs to stimulate job market and economic growth and this research identifies a key variable that contributes toward effective EET programs that result in startup behavior.

45 - FROM [VIRTUAL] CLASSROOM TO BOARDROOM': COACHING STUDENTS TO USE ENTREPRENEURSHIP RESEARCH APPROACHES TO ADDRESS CONTEMPORARY ISSUES IN THEIR WORKPLACE

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The Australian Institute of Business (AIB) exclusively serves the needs of working adults and seeks to deliver life-changing experiences for students through a contemporary and practical curriculum delivered online. A key feature of its MBA is a final entrepreneurial capstone subject whereby students apply the knowledge acquired during the degree to a business issue in a professional context. Adult learning has been found to be most

effective when knowledge is constructed based on workplace problems. However, as industry practitioners, many students find this challenging and have historically struggled with the research-based nature of the entrepreneurial capstone subject.

This paper reflects on how the MBA Project was reconceptualised to help students navigate the challenging waters of a final research project. Guided by an entrepreneurial coaching mind-set, we experimented with a range of online tools within an andragogical framework to create effective learning activities and engage students to address contemporary issues in their workplace. Not only did this revised capstone achieve the highest completion rate of all the MBA subjects offered, it had a positive influence on student engagement, learning and their overall educational experience as more than 90 percent of students 'safely reached port' and completed their MBA.

143 - MORAL DISENGAGEMENT AND UNETHICAL BUSINESS PRACTICES: INSIGHTS FROM COMMERCIAL AND SOCIAL ENTREPRENEURS

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Moral disengagement and ethics have recently been receiving attention from various scholars in the management, non-profit, and public sectors. However, there has been limited research on moral disengagement and unethical business practices in the entrepreneurship domain, especially in social entrepreneurship – a domain where people tend to assume that the social entrepreneurs are inherently ethical individuals. Using a qualitative method and a critical incident technique, this research investigated moral disengagement and unethical business practices in social and commercial entrepreneurs in three periods: during start-up, when they have received revenues, and in the last three months.. Our study finds different patterns of moral disengagement in social and commercial entrepreneurship. Implications and limitations of this research are discussed.

121 - HOW MOTHERS NARRATE THEIR ENTREPRENEURIAL ENDEAVOURS? THE CASE OF SWEDISH MUMPRENEURS

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Mumpreneurship understood as an entrepreneurial activity by women who are mothers is a growing phenomenon worldwide, yet its rise in Sweden is counterintuitive. To understand the circumstances of the participation of mothers in entrepreneurial activities, we use Career Kaleidoscope Model and adopt the narrative perspective and analyze 15 life-stories of Swedish mumpreneurs. Our data show that Swedish mumpreneurs frame their decision to enter entrepreneurship as a choice. The narratives portray them as agents – entrepreneurship results from a reevaluation of one's own preferences, rather than an adaptation to the role of a mother. Because of the Swedish social



welfare system mothers are not pushed into entrepreneurship, yet its design is consequential for their choice to enter into entrepreneurship.

122 - EQUITY CROWDFUNDING AND ENTREPRENEURIAL WELLBEING.

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The importance of wellbeing in entrepreneurship is well established. Improved wellbeing can stimulate entrepreneurial activity, with an expectation of achieving better economic and personal standing (Volery & Pullich, 2010). Wellbeing is understood as happiness and satisfaction in various dimensions of life, stems from an individuals' affective and cognitive perception of their current situation and their aspirations. Although research asserts that entrepreneurship and wellbeing are closely linked (Shir, 2015), the nature of this relationship needs further examination (Wiklund et al., 2016).

Engaging in entrepreneurship requires decisions about various important issues (Johannisson, 2011). Venture financing decisions may be one of the most critical decisions for a venture as they impact both the entrepreneurial process, firm performance and the entrepreneur's wellbeing. While growth can be financed in various ways, crowdfunding has become one of the most popular today (Mollick, 2014a).

Extant research into crowdfunding focused on the positive aspects of crowdfunding (for example, providing capital to grow the venture in return for equity (Berndt, 2016; Paschen, 2017) or exclusion of typical financial intermediaries (Mollick, 2014b)). However, crowdfunding is likely to also possess a dark side. Crowdfunding requires public announcement of aspirations and goals, the involvement of the crowd who contribute small amounts to support the growth of an entrepreneurial venture making it simultaneously a public operation often including a substantial group of investors (Berndt, 2016; Mollick, 2014a; 2014b; Paschen, 2017). Yet, the outcome of campaigns is uncertain and entrepreneurs may not receive the necessary funding due to an "all-or-nothing" financing model (Schwienbacher & Larralde, 2010). Therefore, crowdfunding is likely to impact the entrepreneur's wellbeing and cause emotional, psychological and physical outcomes (Harburg, Hui, Greenberg, & Gerber, 2015). Understanding the impact of crowdfunding and its nature on entrepreneurial wellbeing is hence necessary.

So far, research on crowdfunding has focused on the characteristics of successful campaigns and the investment of the crowd (Bretschneider, Knaub, & Wieck, 2014; Mollick, 2014a; Schwienbacher & Larralde, 2010) but the outcomes of crowdfunding on entrepreneurs and their wellbeing over time is unknown. Hence, the purpose of this paper is to theorize how crowdfunding campaigns impact an entrepreneur's wellbeing.

126 - 'HOW WAS IT FOR YOU?' THE SATISFACTION OF ENTREPRENEURS WITH THE NON-FINANCIAL CONTRIBUTIONS FROM THEIR BUSINESS ANGEL INVESTORS

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Business angels are described as providing 'smart' money. They are 'hands-on' investors whose contribution to their investee businesses goes beyond finance to include various non-financial inputs. However, there is a lack of evidence on what types of non-financial contributions entrepreneurs want from their business angel investors and whether their expectations are fulfilled. This paper measures the satisfaction levels of entrepreneurs to assess what are the most important value added contributions provided by angel investors. Twenty potential value-added contributions were identified and responses were clustered into seven factors and classified as dissatisfied, satisfied or hybrid. Overall, the entrepreneurs were satisfied with the value-added contributions from their investors. However, the financial contributions is evaluated much more highly than non-financial contributions.

77 - DIVERSE PATHS OF INNOVATION THROUGH DIGITIZATION AND SERVITIZATION IN SME MANUFACTURING FIRMS

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Many manufacturing firms have adapted to changing possibilities through extending their offerings and increasing use of services. These firms explore new combinations of products and services to capture external sources of knowledge and internal capabilities to innovate in collaborative ways, often using digital technologies. Specifically, we examine digitization in product service systems and the use of digital tools and their influence on the innovation process. We illustrate these changes using two case studies and their journeys with digitization and servitization. We identify variations in service developments, opportunities for extending existing frameworks of the application of digital tools to innovative approaches to management, and flag important questions for research.

7 - ARE MENTOR' EMOTIONAL INTELLIGENCE AND PERSONALITY RELATED TO MENTEE'S LEARNING? A DYAD ANALYSIS OF ENTREPRENEURS IN MENTORING RELATIONSHIPS

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This study examines the effect of two psychological concepts, emotional intelligence (EI) and personality measured by the Big Five Inventory in the context of entrepreneurial mentoring.



We collected data of already paired novice entrepreneurs in a formal mentoring program in Quebec (called Réseau M). Our results confirm the impact of mentor' personality profile on the mentoring relationship and outcomes. Emotional intelligence and agreeableness have both a positive impact on learning. When having an extraverted mentor, mentees have more trust in their mentor. In the same way, a significant and positive relationship between neuroticism and perceived functions on the part of the mentee is also observed. However, there are no relationship between emotional intelligence and Trust toward mentor. As emotional intelligence can be developed throughout exercises and training, there is a possible path for support organizations that manage mentoring program in order to develop their mentor to become more intelligent emotionally.

52 - CAREER OUTCOMES POST-ENTREPRENEURSHIP

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To understand the consequences of undertaking an entrepreneurship experimentation on subsequent wage-employment we conducted a systematic review in EBSCO Business Source Premier database and narrowed 1423 search results down to 22 relevant papers. Most findings showed an earnings penalty post-experimentation. However, a handful studies found an earnings premium post-experimentation. Our in-depth review identified the following factors as influencing the results: if the study considered business incorporation, firm performance, the type of job and in what sector, if the individual switched jobs or sectors, the underlying human capital, and the timing in which measurement occurred. These intricate influences and their implications for research and practice are discussed.

104 - THE SOCIAL PENALTY OF POVERTY: IMPLICATIONS FOR ENTREPRENEURS' NETWORK CENTRALITY IN MICROFINANCE GROUPS IN KENYA

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Social ties are important for a range of entrepreneurial outcomes – microfinance entrepreneurs are no exception. While we know the positive outcomes of social connectedness, the antecedents of such central positions remain less understood. We theorize about an entrepreneur's poverty level prior to entering the microfinance group as an important element shaping both their social activity to connect to the group, and group members' willingness to engage with them. Building on Status Expectations States Theory and testing our hypotheses on a sample of 161 microfinance entrepreneurs in Kenya, we find that poverty is an important antecedent of social dynamics in microfinance groups, and the poverty-centrality relationship depends on the entrepreneur's gender.

25 - THE EMERGENCE OF EARLY STAGE ENTREPRENEURIAL ECOSYSTEMS: EXPLORING KEY FACTORS, ACTORS AND DRIVERS

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Study of the creation of new technology-based firms has largely taken place within the context of technology-clusters and entrepreneurial ecosystems which have already developed structures and networks well suited to support entrepreneurs are engaging with the process of identifying and commercialising opportunities. The networks which exist within entrepreneurial ecosystems are key source of critical resource such as knowledge, accessed through connections developed with individuals and organisation, providing the lifeblood to help support the emergence of innovative ventures. Where such networks are non-existent or underdeveloped entrepreneurs may struggle and develop strategies and work-arounds to enable them still to bring their ventures to the market. This raises the question how ecosystems emerge, particularly in emerging economies where governmental systems and institutions may not be highly developed and engaged in championing new economic initiatives. With the aim of contributing informing the ecosystems literature this paper explores how entrepreneurial ecosystems might evolve in their early stages of development, considering earlier as well as more recent perspectives. We present evidence from Colombia, exploring dimensions of both national and regional entrepreneurial ecosystems which have developed varied structures depending on differing foci and levels of government support, examining the key actors and principal drivers in ecosystem development.

1 - PRIDE, PREJUDICE AND PATRIARCHY: FEMALE ENTREPRENEURSHIP EXPERIENCES IN QUEENSLAND'S EMERGING ENTREPRENEURIAL ECOSYSTEM

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While there is substantial literature on gender differences in organisations and the impact this has on business success, there is relatively fewer studies that consider gender differences in entrepreneurship. Indeed, the masculine bias of entrepreneurial studies has limited the feminist perspective, restricting our understanding of women's unique entrepreneurial experiences and contributions (Hodges et al., 2015; Ratten, 2018). The result has been women entrepreneurs downplaying their gender, and policies that do not sufficiently support female entrepreneurs (Lewis, 2006; Tlaiss & Kauser, 2018).

However, there is an emerging body of critical literature that considers gender theory in the context of entrepreneurship (Bamiatzi et al., 2015; Galloway et al., 2015; Harrison et al., 2015). This literature suggests that a gender diverse entrepreneurial ecosystem can deliver higher quality entrepreneurship (Berger & Kuckertz, 2016). Moreover, the research suggests that women participate in and seek to change the structures that impede



and facilitate their entrepreneurship and status as leaders. Indeed, women are often drawn to entrepreneurship due to the increased social status, as well as the ability to have financial and professional independence (Petridou & Glaveli, 2008) and control their career development (Pettersson et al., 2017). More recent research also mentions the motivation to become an entrepreneur to achieve work-life balance (Bhardwaj, & Mittal, 2017). Importantly, these studies highlight the impact of social, cultural and political institutions on women's entrepreneurial experience and argue the importance of context (Harrison et al., 2015).

Despite emerging studies, the literature continues to call for more feminist theory in entrepreneurship studies to close gaps relating to the complexities of entrepreneurship and entrepreneurial leadership (Galloway et al., 2015). Consequently, this paper seeks to explore entrepreneurship through a feminist lens within the emerging entrepreneurial ecosystem in Queensland, Australia.

153 - DEMOGRAPHIC CHARACTERISTICS OF AN SME OWNER/MANAGERS IN DEVELOPING ECONOMIES AS ANTECEDENTS TO ITS ENTREPRENEURIAL ORIENTATION AND FIRM-LEVEL CAPABILITIES

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What explains the differences between small medium enterprises (SMEs) in firm capabilities and entrepreneurial orientation (EO)? This study investigates the impact of various owner-managers demographic characteristics on firm capabilities (marketing, networking, financial and technological) and EO. This study posits that demographic characteristics reflected the ownermanager's cognitive may influence a firm's EO and capabilities. Drawing on the Upper echelon (UE) theoretical framework hypotheses are developed and tested using a stratified random sample of 300 agro-based SMEs located in Uganda. The findings reveal that the variations in EO dimensions are due to the owner-manager's level of education, international and role experience. This study advances research that examines whether demographic characteristics - level of education, work experience, foreign market experience and age - are useful predictors by investigating their association to dimensions of EO and selected firm capabilities. Implications for policy and areas for future are discussed.

182 - THE IMPACT OF ORGANIZATIONAL CULTURE ON WORKPLACE INNOVATION WITHIN A VICTORIAN PUBLIC SECTOR ORGANIZATION.

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To improve public sector innovation more understanding is needed about the impact of organizational culture on workplace innovation. This has been neglected in literature despite the public sector representing up to 30 per cent of local economies and Workplace Innovation contributing well over 30 per cent of Sector innovation.

This work investigated the relationship between Workplace Innovation and Organizational Culture within the context of a large Victorian Public Sector Organization. Culture in this study is treated at three levels; public sector culture, organizational culture, and group (department) level culture. The research utilized a case study approach within a Victorian State Government Department and an explanatory sequential mixed methods approach was undertaken. A survey of 479 employees was analyzed using correlation, ANOVA, T-Tests, regression and structural equation modelling. Public Sector Culture was shown as a significant antecedent of Workplace Innovation predicting 24.6 per cent of variation and identifying significant variation in Individual Innovation, Organizational Innovation, Team Innovation and Workplace Innovation Climate. Group level culture was particularly influential in the relationships identified. Triangulation with qualitative data corroborated the findings, and a final mixed methods integration including a second triangulation of findings identified additional factors explaining the relationships including sustained organizational change that reinforced the strength of subcultures.

This research accessed as its subject organization a Department of State, an entity which is rarely available for research. For the first time to date the results empirically identified a significant relationship between Public Sector Culture and Workplace Innovation. As an unusual and critical case the findings could be generalized to public sector theory.

The findings identified significant correlations where culture was an antecedent to workplace innovation which impacted on employee's capacity to innovate. The research extended the theory of public sector innovation by proving a relationship between Public Sector Culture and Workplace Innovation. In addition, the research extended the theory of Public Sector Culture highlighting its importance to Workplace Innovation and the negative impact on innovation of constant organizational change. The research built on the theory of public sector management identifying culture as important when managing public sector innovation. The research has implications for management of innovative public sector workplaces and cultures

147 - ENTREPRENEURSHIP AS A STRATEGIC IMPERATIVE IN AUSTRALIAN UNIVERSITIES

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The aim of this paper is to examine Australian universities strategic plans and relevant strategic documents to assess their strategic intent toward adopting transformational change through entrepreneurship imperatives. Towards the development of an integrative framework on entrepreneurial university transformation, a systematic review of the literature on the entrepreneurial university was performed. A relatively new method of automated content analysis with complex algorithms was subsequently used to analyse the strategic documents. Our findings reveal that Australian universities, as articulated in their strategic plans, demonstrate an overall moderate level of strategic intent to adopting entrepreneurship transformation when compared to the exemplar universities. Results, however, varied between Australian university groupings. More specifically, the findings suggest that entrepreneurship, among other critical domains of interests, have not received significant attention in the examined Australian universities, and entrepreneurship



has not yet been positioned among the top strategic intents of these academic institutions. Our study provides guidance for Australian universities wishing to engage entrepreneurship as a strategic imperative. Outcomes of the research also suggest avenues for policy makers, communities and industry to enhance effective entrepreneurship initiatives to facilitate local, regional and national economic development.

152 - HOW RESOURCES IMPACT ENTREPRENEURS' WELL-BEING

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The conservation of resource (COR) theory argues that ownership of resources is positively associated with human well-being. This paper explores the relationship between entrepreneurial resources and entrepreneurial well-being within the context of Vietnam, a rapidly growing emerging market. Based on interviews with 20 entrepreneurs, we examine entrepreneurial narratives to understand how ownership and access to material resources relate to entrepreneurial well-being. The findings show that poor resource circumstances are not necessarily associated with low levels of entrepreneurial well-being. The main driver of entrepreneurial well-being is the perceived positive social impact of the enterprise, rather than material or financial resource ownership or robust financial performance (which leads to increased levels of material resources). The study concludes that COR theory is a poor framework for predicting entrepreneurial well-being in emerging economies characterized by significant resource constraints. The findings point to a significant opportunity to revisit the drivers of entrepreneurial well-being in a range of business contexts.

13 - DEVELOPING A BOUNDARY VIEW OF THE ENTREPRENEURIAL ECOSYSTEM: SEEING THE FOREST NOT JUST THE TREES

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The concept of an ecosystem has been applied to entrepreneurship only relatively recently and despite the emerging body of literature, to date little is been done to establish the theoretical parameters of the context. In this article, we approach the topic of entrepreneurial ecosystems (EE) by addressing the problem of tautology whereby the presence and activity of entrepreneurs has become the defining factor of EEs. Instead, we explicitly examine the context and suggest that EEs are inherently place based and is explicitly a change mechanism that explains the emergence, resilience, and transformation dynamics of context specific dominant socioeconomic activity. In this article, we examine two ideas for boundary specification and derive three specific propositions to facilitate the analysis of context that locates the ecosystem boundaries. We conclude that the entrepreneur and their activities are an essential part of the dynamics of a socioeconomic ecosystem and in an EE analysis neither the entrepreneur nor their firm are the unit of analysis. Rather, it is the dominant socioeconomic ecosystem that is focal, and within that broader system the entrepreneurial elements drive various change dynamics.

162 - DECISION-MAKING THEORIES AND TOOLS IN ENTREPRENEURSHIP EDUCATION: FROM RATIONAL BUSINESS MODELING TO HEURISTIC PATTERN MATCHING

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Understanding the interplay between rational and heuristic decision-making processes within the new-venture-creation experience provides entrepreneurship educators with a unique opportunity to supply students with the enhanced capabilities needed to achieve a delicate balance. While the dominant rational approach to economic theory is well known and widely practiced in educational settings, the heuristic side of human decisionmaking behavior remains underexplored. In the first part of this paper, we elaborate on the possible reasons for this underlying problem in entrepreneurship, as well as wider management, education. We dedicate the second part to an illustration of the identified problem in educational settings through the example of a popular learning tool in entrepreneurship education: the Business Model Canvas (BMC). We then suggest a developedby-us approach named "Heuristic Pattern Matching" (HPM) as a way to tackle the challenges associated with the BMC, thus providing entrepreneurship educators with a framework to better incorporate heuristic processes into the entrepreneurial learning experience. We suggest it as a logical and important contribution that goes beyond prior work.

119 - INTERSUBJECTIVE VENTURING: A PATHWAY TO NEW VENTURE START-UP AND DEVELOPMENT?

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This paper reports on a study of intersubjective venturing among microfinance-funded (MFI) entrepreneurs. We use relational exchange theory to explore how deliberate actions result from past, current, and anticipated future relational exchanges with multiple stakeholders shape entrepreneurs' businesses. Using in-depth interviews of 24 MFI-funded entrepreneurs, we found that complex relational exchanges such as co-creation, comanagement, and cooperation occur mainly among family members. With people external to the family, such as suppliers, customers, and institutions, long term commitments happen slowly and these exchanges rarely result in any complex intersubjective venturing tasks beyond formal or informal agreements. Even forming agreements require conducting discrete events repeatedly to build trust and understanding. These differences were observed due to the limited areas of coherence between the entrepreneur and external stakeholders, unlike with family members who had innate understanding of each other. Hence, discrete events lead to repeated exchanges or formal/informal agreements and increase the 'breadth' and 'depth' of coherence between the entrepreneur and external stakeholders. Therefore, our findings provide insights into intersubjective venturing by offering alternative explanations of venture creation and development.



48 - CONTEXTUALISING ENTREPRENEURIAL TIME ACROSS THE ECOSYSTEM MULTIVERSE BY SCRAMBLING PARABOLOCIALLY TOWARDS THE ENTREPRENEUR'S EVENT HORIZON

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This paper establishes and develops the concept of the importance of entrepreneurial time for the entrepreneur, entrepreneurial organisation, or enterprise in what is termed an ecosystem multiverse as extension to the entrepreneurial ecosystem. Utilising the parabolic scramble framework, as a visual tool or device, an entrepreneurial multiverse is described, and extended, towards practical real-world applications.

The discussion of entrepreneurial time is central to the use of the parabolic scramble framework as it is by the inclusion of this fourth dimensional element that the framework, or tool, is made practicable for usage by entrepreneurs, or those wishing to perform flexibly and adapt to their environment in real-time.

63 - CREATIVE PRODUCERS AS ENTREPRENEURS: EXAMINING SCREEN BUSINESS INNOVATION

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This paper establishes and develops the importance of creative producers as entrepreneurs innovating in the screen sector and across the entrepreneurial ecosystem multiverse as extension to the entrepreneurial ecosystem. Through an examination of screen business innovation, by screen practitioners as entrepreneurs, entrepreneurial endeavour in an ecosystem is described, and extended, towards practical real-world applications

Building upon a research examination of screen business innovation by creative producers, in the context of course offerings for industry practitioners, linkages are determined and reviewed with measurable outcomes. Theoretically the research builds upon the pioneering work conducted by Edith Penrose in terms of recognising intangible assets, this is contextualised for the entrepreneur whom is initiating screen business innovation, and in relation to the venture or enterprise in the entrepreneurial ecosystem extending to multiple ecosystems, or what is termed the ecosystem multiverse.

98 - THE ROLE OF THE INNOVATION HUB IN BUILDING COMMUNITY RESILIENCE

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The contribution of innovation ecosystems towards local economic development is becoming increasingly recognised. Beyond the field of economic development, innovation ecosystems also impact aspects of community resilience.

Even as research collectively moves towards a greater understanding of innovation ecosystems, research into the contribution and role of individual actors within the innovation ecosystem is emerging. This research expands on previous research to focus on the individual actor of the innovation hub and the value of the relationship of the hub with other actors with an emphasis on a contribution towards community resilience.

Innovation hubs go beyond the traditional coworking model through dedicated resources to provide access to connections and networks, a space and community of like-minded individuals, and skills development all related to entrepreneurial activity. This definition can be expanded to include hubs not simply as physical spaces, but "human spaces' which facilitate collaboration between individuals and organisations".

The common value from the different expressions of the innovation hub is a localised impact from place-based context, the influence of the innovation hub host or facilitator, and the emphasis on startups or firms with high-growth potential over traditional SMEs and self-employment as the type of entrepreneurial outcomes. To provide these services, innovation hubs receive financial supported from stakeholders including corporations, universities, government, philanthropic groups, venture capital, and private individuals. While each stakeholder will expect different outcomes for their investment, an impact on the local community is inevitable.

This investment is increasing across Australia, although metrics specific to innovation hubs are difficult to find. The number of coworking spaces in Australia grew by 297% between 2013 – 2017 to 307. The reported increase in coworking spaces provides an indication of the rapid increase in interest and investment in spaces targeted at early-stage companies requiring flexible working conditions. Other indicators of interest include local, state, and federal government investment.

This investment is necessary, as financial stability and sustainability for innovation hubs can be a challenge. Additional investment is required to sustain an innovation hub to ensure enough resources are available to provide a reliable service.

This research aims to contribute towards expanding literature on the impact of innovation hubs on local community outcomes, with an emphasis on community resilience. The research is timely, capitalising on recent increase in awareness and investment into innovation hubs. Within a narrow focus on the innovation hub as a specific actor, the research applies a broad perspective on the contributing factors of the hub's impact. Attributes about the hub such as business and financial model, size, history, and leadership will be examined. As the emphasis is on place-based impacts, other local actors will be included to understand the broader context in which the hub operates and the influence on the hub outcomes. The impact of the hub will be examined from economic and social perspectives, with an emphasis on non-metro regions.

181 - ORGANIZING AFFECTS OF COLLECTIVE FREELANCING: AN ETHICO-POLITICAL STRUGGLE FOR INCOMPLETENESS

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Over the past years, freelancers and founders have increasingly come together in cooperatives, ethical entrepreneurial coalitions, and so-called 'neo-tribes' through the practice of 'collective freelancing.' Exploring the amalgamation of this practice and its



affects, this paper inquires how these 'post-capitalist' and radicallydemocratic organizations struggle with intrinsic ethico-political effects. Based on a praxiographic approach to study a social entrepreneurial network that is building distributed value chains in a community of 'pods' or work-families, we notice how a diverse set of actors is conflating collaborative ethics with organizational democratization to address critical issues of social innovation. By acknowledging the inextricable entanglement of the sociomaterial and posthuman studies of practice and affect (Gherardi, 2017), the article traces how the affirmative intent of radically-democratic organizing is continuously turned around by ambiguous desires. The analysis reveals an affectivity between the yearning to belong and the guilt of not contributing enough that is fueling the powerladen interplay between the relational practices of 'weaving,' 'sharing,' and 'caring.' Simultaneously, the organization is able to keep up the struggle by embracing 'sensible knowledge' (Strati, 2007) and therewith vulnerabilities, emotions, hospitality, difference, and Otherness. The paper's contribution thus highlights a precarious 'ethico-politics of incompleteness,' struggling for infusions of transgression and disorder to counter affectively and normatively induced hierarchies, gender inequalities, and burnout.

57 - "WHAT BARRIERS PREVENT UNIVERSITY STUDENTS FROM BECOMING ENTREPRENEURS IN DEVELOPING COUNTRIES? A STUDY IN BANGLADESH"

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Entrepreneurs enhance economic growth. However, the youth of Bangladesh are reluctant to become entrepreneurs because of environmental constraints including social risks. The purpose of this study is to create knowledge about barriers that affect university students' entrepreneurial intentions in Bangladesh. In this study, data was collected through semistructured interviews with thirty university students from three different universities in Bangladesh. Students' perspectives on barriers to entrepreneurship were analysed, and significant themes emerged such as family, education, infrastructure, and institutions. The findings suggested that students' entrepreneurial intentions are not only shaped by institutional factors but are linked to perceptions of social risks that they associate with entrepreneurial careers when seen from the perspective of their collectivist culture. This study suggests rethinking of entrepreneurial ecosystems and entrepreneurial development models in developing economies by better accounting for the social risks that emerge in collectivist culture.

22 - WHAT ARE HOME-BASED BUSINESSES MADE OF? A CONFIGURATIONAL APPROACH USING CSQCA

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How can entrepreneurs running home-based businesses (HBBs) successfully achieve high levels of revenue? This is a challenging question. Home-based businesses are most businesses in many

countries and a growing trend worldwide. If an entrepreneur decides to engage in a home-based enterprise with mislead perceptions about entrepreneurship (Arenius & Minniti, 2005; Beynon, Jones, & Pickernell, 2016) and does not gather certain individual and firm characteristics (Davidsson & Honig, 2003; De Clercq, Lim, & Oh, 2013), chances of emergence and growth are reduced.

Prior research addressing the challenge of understanding HBBs suggests that the phenomenon is complex and can range from very low to high levels of value generating activities. It is also known that perceptual variables, such as the entrepreneur ness to opportunities (Kirzner, 1979; Tang et a, 2012), self-efficacy (Bandura, 1997; Newman et al, 2018), fear of failure (Morgan & Sisak, 2016) and knowing other entrepreneurs play fundamental roles on predicting entrepreneurial behavior. Clouding matters further, how different individual and firm-level characteristics and resources are gathered in successful HBBs remains unclear. This means that the path to high revenue generating HBBs likely demonstrates equifinality.

We analyze HBB entrepreneurs' perceptions, as well as individual and firm-level characteristics to identify configurations of high revenue generating home-based business. We consider how the entrepreneur's gender, level of education, income and perceptions regarding entrepreneurship, combined with the firm's formal registration and use of internet, relates to a high revenue threshold, defined as two times the national minimum wage. Rather than assuming a singular combination of conditions that lead to the revenue threshold outcome, we explore how different combinations of multi-level conditions lead to successful HBBs.

179 - ENTREPRENEURSHIP IN HUMAN TRAFFICKING: WOMEN BETWEEN GOOD AND EVIL

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Human trafficking is one of the biggest crime industries in the world today. Women play a central and complex role in this area of human activity. Some female social entrepreneurs are fighting against human trafficking, while others are supporters of this horrific industry. What factors decide which career path they choose? The focus of this paper is to find possible answers to this question. It will be a challenge to gain deep knowledge in this context. The necessary information and data for this paper will be organized by an intensive literature review. Data from international organizations such as the ILO and the UN will be considered as well. A comparison regarding background and motivation could be interesting and give further conclusions on similarities and differences regarding female entrepreneurs and their career developments connected to the field of the human trafficking industry.



24 - INDIGENOUS BUSINESS NETWORK : UNDERSTANDING CHALLENGES AND OPPORTUNITIES FROM AN EXPLORATORY RESEARCH IN THE FOREST SECTOR IN CANADA

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Indigenous entrepreneurship has received growing attention for its potential to reduce poverty and social marginalization. An Indigenous business network seeks to generate knowledge and opportunities on the market, as well as bring mutual benefits at the business level and socioeconomic benefits at the community level. While business network benefits have been documented in the literature few empirical research explore this concept in the context of indigenous communities.

The purpose of this research is to better understand needs. challenges and opportunities related to business network in an Indigenous context. Semi-structured interviews were conducted with Indigenous forest company representatives. This research shows that the needs expressed for a network of Indigenous business corresponds to several elements identified in the literature. These include easier access to information, sharing of expertise, contributions to collective well-being, greater political influence, and opportunities to develop new markets. Additionally, our results highlight several challenges to the establishment of an indigenous business network: funding, trust, distance between members, and political support at the national and local level. . At present, the development of an entrepreneurial culture takes place in a context where the primary needs of community members are not all met. This research contribute to a better understanding of the conditions that enhance the success of indigenous entrepreneurs. For political leaders, it can guide the development of more effective solutions to meet the needs of Indigenous economic development and the creation of wealth at the local level.

27 - ENTREPRENEURSHIP, WAGE INEQUALITY AND CREATIVE PEOPLE IN LABOUR MARKETS

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We examine the relationship between wage inequality, entrepreneurship, and the proliferation of creative people in Portuguese regional labor markets. Entrepreneurship is seen today as an important incentive to competitiveness and economic growth. However, the entry of new, small firms, created mostly out of necessity can lead to an increase in the number of jobs with low wages, increasing inequality in labor incomes.

We explore data on entry and exit of firms, worker mobility, and wage inequality in Portugal from 1985 to 2012, by industry sectors and inter-municipal entities, used as units corresponding to metropolitan labor markets.

We aplly a variety of methods to look for causal relationships between entrepreneurship and wage inequality, being aware that causality between these two variables is ambiguous and most likely bi-directional. We employ dynamic models and examine wages paid by new companies vs. and existing ones. Additionally, we consider how industry diversity and the number of people in creative professions affects wage inequality in metropolital labor markets

We observe increasing wage inequality and polarization in Portuguese metropolitan labor markets, positively correlated with population density, industry diversity, and the proportion of people in creative professions. Increasing wage inequality and polarization arise simultaneously with the growth of entrepreneurial activity and a decrease in the average size of companies. Our results suggest a positive relationship between entrepreneurship and wage inequality associated with an increasing proportion of employees at the bottom of the wage distribution working in new, small firms.

94 - INSTITUTIONAL VOIDS IN THE DEVELOPMENT OF SOCIAL ENTREPRENEURIAL ECOSYSTEMS: WHAT CAN WE LEARN?

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Emerging social innovation ecosystems within developed economies present an interesting research context for understanding the dynamics at play in the development of such ecosystems. New Zealand represents a curious 'experiment' in that, having observed the development of public policy and institutional responses to social innovation trends and changes internationally, the government and other institutional agents are presently considering their options and responsibilities in creating an environment in which social innovation can thrive (cf. Department of Internal Affairs, 2016).

This presents a rich research opportunity to investigate the interplay of existing institutional logics with the development of the social innovation ecosystem (Marquis & Lounsbury, 2007; Nicholls & Murdock, 2012). There are a number of areas and specific activities which hold promise in their ability to contribute to a more sustainable and inclusive economy such as the launching and growth of social enterprises and social businesses, impact investment, indigenous (Maori) enterprise, and other innovative sector blurring forms of entrepreneurship.

However, the current ecosystem and institutional landscape is considered by some stakeholders in the social innovation field to be inhibiting potential opportunity (for example, the legislative alternatives for organisational status, lack of access to impact investment and capital, and under developed advisory services to support social innovation). Adopting the lens of 'institutional voids' (Mair & Marti, 2009; Ute, Uhlaner & Stride, 2015) we use an emergent social innovation context of New Zealand to explore a potential paradox. That is, institutional voids present both potential opportunities for entrepreneurial activity (at the edge of dominant institutional logics) as well as possible threats of such entrepreneurial activity to the development of a functioning ecosystem.



113 - A SIMULATION APPROACH TO THE SOCIAL NETWORK CONFIGURATION FOR ACQUIRING VALUABLE INFORMATION IN THE VENTURE DEVELOPMENT PROCESS

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Reflecting distinctive features of information flow, this study aims to clarify the mechanism of information flow on entrepreneurial social networks based on Burt's (2018) network theory of competitive advantage using agent-based simulation modeling simulation (ABMS). To conduct a rigorous simulation, this study employs an analytical model of entrepreneurs' social network behavior (Ozdemir et al., 2016) and a time-varying model of social network generation (Karsai et al., 2014). With this approach, we compare acquired value of information dependent on varying social network structures of entrepreneurs in crosssectional perspective and effectiveness of networking strategies in time-varying perspective. Our simulation model reproduces the continuous levels of link strength and thus enables us to use the relational and structural embeddedness as determinants of the possibility of the information flow. Through the simulation approach with more realistic inferences, this study successfully articulates the information flow mechanism in the venture development process and suggests entrepreneurs' effective networking strategy to acquire valuable information in the venture development process by entrepreneurial contexts.

133 - ENTREPRENEURIAL ECOSYSTEMS: A HOLISTIC AND DYNAMIC APPROACH

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Entrepreneurial ecosystems involve interrelated components which foster new firm formation and associated entrepreneurial activities. The recent concept contributes to the efforts of advancing entrepreneurship research and encourages a more holistic and dynamic approach to entrepreneurship and entrepreneurial activity. Although an intriguing concept, the entrepreneurial ecosystem approach still poses significant conceptual, theoretical and empirical challenges. The aim of this study is to provide a synthesis comprising the development and advancements of the concept of entrepreneurial ecosystems, theoretical underpinnings and characteristics influencing entrepreneurial ecosystem dynamics.

This study undertakes a systematic literature review on entrepreneurial ecosystems and related concepts unfolding aspects of its antecedents, theoretical limitations, distinctive features, elements and measurement approaches.

Findings portray a focus on possible constructs for theorisation, relevance of interactions, measurement approaches, framework conditions and the crucial role of universities and an entrepreneurial culture. Contextual approaches complemented with network and institutional views could aid towards further understanding and conceptualisation.

The study provides a synthesis on entrepreneurial ecosystems research and related concepts, proposes a framework for the study of the composition and interactions of entrepreneurial

ecosystems, provides clarification and distinction from other related concepts (e.g. clusters, regional innovation systems, national systems of entrepreneurship), and outlines pathways for further research.

116 - JUST DO IT: ACTION ORIENTATION AND ENTREPRENEURIAL PROGRESS AND PERSISTENCE

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Action-orientation is often portrayed as key for entrepreneurship. To understand the conditions under which action-orientation is indeed favorable for entrepreneurs, we introduce Personality-System-Interaction-Theory (PSI) to entrepreneurship research. PSI-theory distinguishes action-versus state-orientation and explains how both dispositions influence an entrepreneur's cognition (including goals), emotional reactions, and resulting behavior. It provides a novel basis for understanding individual differences in persistence and progression through the venture creation process. Based on the tenets of PSI-theory, we develop theoretical predictions to explain how action-oriented versus state-oriented individuals respond differently to the demands of the entrepreneurial process. We test our ideas with a sample of 215 weekly obervations of 51 nascent entrepreneurs undertaking an entrepreneurship accelerator program. We find that while action-orientation increases progress in response to situational demands, state-orientation increases adaptation of venture idea under situational threat.

67 - SOCIAL SUPPORT CHANGE AND ITS IMPACT ON NEW VENTURE GROWTH

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We investigate how the impact of instrumental and emotional support on new venture growth depends on whether this support is decreasing or increasing over time. We build on theoretical ideas of the dynamics of helping behavior (focused on the helper that provides support) to explain how changes in level of support also have consequences for the receiver, in our case the entrepreneur and their new venture performance. We test our ideas on a two-wave survey of a representative sample of Danish nascent entrepreneurs, surveyed 12 months apart (n=448).

18 - ENTREPRENEURSHIP ECOSYSTEMS AND THE UNDERAPPRECIATED ROLE OF ENTERPRISING FAMILIES

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Nurturing innovation and entrepreneurship is a central preoccupation of scholars and economic development agencies throughout the world. The development of "entrepreneurial



ecosystems" has recently emerged as the dominant metaphor for describing how economic growth and societal wellbeing might be achieved (Isenberg, 2014). Research, and subsequently public policies, aimed at the development of these systems devotes an inordinate amount of attention to certain contextual variables whilst largely ignoring others. Given that the vast preponderance of the world's firms have a family dimension, understanding the role of family in firm creation and growth presents a challenge of great practical and theoretical significance. This conceptual paper highlights the important role of familial resources and enterprising families in economic systems throughout much of the world. It reviews dimensions of entrepreneurial activity and highlights key resources that families are able to assemble in bundle in the process of venture creation and growth. It further suggests ways in which family is manifest within various spheres of economic activity. The aim is to draw attention the important role of familial based organizing activity in entrepreneurial ecosystems and further stimulate related research and policy development regarding this organizational form.

175 - STRESSED BUT HAPPY? A META-ANALYSIS OF ENTREPRENEURSHIP AND WELL-BEING

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It is uncertain whether entrepreneurship is a career choice that results in higher well-being than paid employment with existing research reporting conflicting findings. We suggest the entrepreneurship-wellbeing relationship is contingent on how well-being is conceptualized. Building on arguments from dissonance theory, we propose self-justification processes lead to reappraising of life and work situations. As a consequence, we expect entrepreneurs to report higher well-being than non-entrepreneurs even though they have more stressful work conditions and more mental health issues. We conduct a meta-analysis to test these proposition.

3 - HYBRID ENTREPRENEURS IN FORMAL TRAINING: NEGATIVE IMPACT ON ENTREPRENEURIAL CAREER

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Hybrid entrepreneurship, defined as keeping a salaried work while starting or operating a new business, is an important phenomenon. If recent researches looked at the factors encouraging people to become hybrid entrepreneur, very few if any looked at the consequences of being hybrid on the entrepreneurial process, despite it could negatively impact persistence, entrepreneurial career engagement, or performance. In a formal training program, where 330 hours of course need to be performed within 22 weeks or less, being an hybrid nascent entrepreneur could reduce entrepreneurial self-efficacy, career engagement, and passion. We investigated one of the biggest training program for nascent entrepreneurs in Quebec, with a longitudinal follow-up after six months. In our

sample of 120 nascent entrepreneurs that answered our online questionnaire before and after the training, we found that being an hybrid entrepreneur reduce affective entrepreneurial career engagement, entrepreneurial self-efficacy, and entrepreneurial passion for founding. We contribute in showing that hybrid entrepreneurship has important impact on entrepreneurial process that could reduce, in certain context, the capacity to make the business operational and, at least, many important cognitive indicators of persistence in entrepreneurship. This has important implication for the training or support offered to nascent entrepreneurs.

4 - ENTREPRENEURIAL MENTORING DYADS: ARE FEMALE MENTORS VICTIMS OF GENDER STEREOTYPES?

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Mentoring for entrepreneurs is a practice that support learning development for mentees. Gender mix in the dyad could influence these learnings, as gender stereotypes associated to business women could be at play. We posit the hypothesis that male mentees will indicate less learning when paired with a female than with another male. To answer that, we used a sampling of 412 mentees from Réseau M (Quebec) and tested impact of gender mix in dyads on learning. In line with our hypothesis, we observed lesser learning mentioned by male paired with a female mentor. This suggests gender stereotypes from male mentees and invites to awareness at this level.

106 - ENTREPRENEURS UTILIZING THEIR ASSETS OF FOREIGNNESS WHEN ABROAD

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We examine how Bulgarian entrepreneurs in London capitalize on ethnic identity to gain capabilities that enable their business operations abroad. We find that gaining access to a diaspora network enables entrepreneurs to operationalize the network's transactive memory and develop essential capabilities, such as home-host country knowledge integration.

Additionally, cultural identity and networks provide members with bridging capabilities and allows for linking to host country partners and thus embedding themselves abroad. Thus, this paper adds to the growing body of work showing how foreignness can serve as an asset in addition to its better-known role as a liability, especially within the context of anti-globalization sentiments.



159 - 'HOW DO TENSIONS BECOME SALIENT IN FAMILY FIRMS? A PARADOX PERSPECTIVE APPLIED TO CHINESE FAMILY FIRMS

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Paradox theory has been increasingly adopted in both organisational studies and in family business research. Current Western paradox studies offer great insights on how to manage persistent tensions through a 'both/and' perspective, scholars argue that specific environmental conditions or individual cognitive framing may influence on how leaders perceive and manage paradoxical tensions. Furthermore, it is also found that culture has a direct impact on how individual frame contradictions. However, to date, the role of such institutional factors has been rarely addressed. This paper examines how family firm leaders manage tensions under the specific Chinese institutional context that offers unique cultural aspects and rapid institutional changes. Findings indicate that the specific institutional context facilitates leaders' perception of tensions in family firms from a paradoxical perspective rather than a dilemma, and enables leaders to manage tensions in effective strategies. However, as institutions change, such perception and management strategies may change as well.

82 - UNIVERSITY-BASED ACCELERATORS AS A SOURCE OF ENTREPRENEURIAL SELF EFFICACY: PRELIMINARY EVIDENCE FROM AUSTRALIA

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According to GEM (2014), the volume and quality of entrepreneurial activity in a country is dependent on the quality of education and the environment that promotes innovation. Universities play a central role in providing such education supported by other co-curricular offerings targeted at increasing entrepreneurial activity. Globally, universities have shifted from only teaching students and creating research-based start-ups, to assisting with the development of student-based start-ups that are largely independent of coursework or research (Morris, 2017; Wright et al., 2017). Within Australia, virtually every of the 40-some universities has at least one incubator, accelerator, hub or similar program in support of student start-ups (Universities Australia, 2017), with over 100 offerings in total. Recent estimates of the accelerator industry include 57 university-operated programs, 14 university-affiliated programs, and 76 corporate programs; up from 12, 7 and 22 respectively, only 5 years ago (Authors, 2018).

The impact of these programs remains largely unknown and under-researched. Earlier studies indicate that the immediate impact of entrepreneurial support programs provided by universities can foster ESE of students (Kraaijenbrink et al. 2009; Saeed et al. 2013). This is consistent with findings from accelerator studies that reveal short-term capability development and learning, with limited evidence for longer-term economic impact (Bliemel et al 2016). Meanwhile, evidence is emerging that accelerator programs can have re-calibrating effects on first-time founders, to lower their self-perceived capabilities (Miles et al., 2017).

This paper aims to contribute a deeper understanding of how accelerators and authentic learning experiences influence the ESE of aspiring student entrepreneurs. To do so, this paper develops a conceptual foundation to understand how the design of accelerator programs can create and nurture potential entrepreneurs by influencing their self-efficacy. More specifically, this model disaggregates ESE into specific measures of learning that can act as a source of ESE beliefs in the learning context of a university based accelerator program. The conceptual model is supported by a literature review and by anecdotal findings from publicly available reports of Australian university-based accelerator programs and from participation in such programs.

112 - THE ROLE OF STEM IMMIGRANTS ON INNOVATION OUTCOME OF FIRMS

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We analyse the role of immigrant employees with Science, Technology, Engineering, and Mathematics (STEM) background on innovation outcome of firms. Using the Swedish Community Innovation Survey (CIS) data matched with employees' characteristics from 2004 to 2014, we find that the higher share of STEM immigrant employees in a given firm, the higher will be the innovation outcome of firms, measures as the portion of sales exclusively due to innovative products. Such Immigrant STEM are coming from outside EU, rather than inside EU. This is an important and policy-relevant finding in the context of Sweden and most of the EU countries, because (unlike Canada, Australia, and US), most EU countries do not have a clear pathway for high-skilled (e.g. STEM) immigrations coming from outside the EU into their job market. Particularly, if non-EU immigrants have positive effect on firms' performance, then there is a reason to rethink the current immigration policies in most EU countries.

90 - FROM TRAILING TO PURSUING: EXPLORING EXPATRIATE SPOUSES' ENTREPRENEURIAL INITIATIVES

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The eclecticism of the entrepreneurship field has resulted in cross-disciplinary collaborations; with the purpose of creating novel knowledge for the field's advancement, this paper contributes by exploring a phenomenon of expatriate spouses engaging in entrepreneurial initiatives during the expatriation process. A qualitative inductive study of expatriate spouses' entrepreneurs was conducted. The context for the study is Singapore; ranked top out of 189 economies on the ease of doing business (World Bank, 2016) and world's best expatriate destination since 2015 (HSBC, 2018). Findings revealed three forms of expat-preneurial initiative that the expatriate spouses engage in (1) Decontextualisation as a form of expat-preneurial initiative, (2) Contextulisation as a form of expat-preneurial initiative, and (3) Problematisation as a form of expat-preneurial initiative. The three forms were further substantiated with three attributes pertaining to variations in the way that they engage in the expat-preneurial initiative (1) expat-preneurial trigger,



(2) expat-preneurial offering, (3) mobility of expat-preneurial initiative; particularly the degree of its 'transferability' nature of the expat-preneurial initiative. The study contributes to the literature on entrepreneurial initiatives and global mobility; findings have significant implications for expatriate dual career couples as the number of expatriates with an equally skilled spouse has been on the rise.

76 - THE WORLD IS THE PLAYING FIELD: VALUE CREATION STRATEGIES OF DIGITAL HARDWARE STARTUPS

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Two central questions of strategic entrepreneurship research that have a high theoretical and practical relevance are (1) where do important resources come from and (2) how are they coordinated? Researchers argue that answering these questions is particularly important in the context of digital entrepreneurship because digital technologies bear the potential to shift boundaries and distribute agency of entrepreneurship processes and outcomes. Conducting an inductive multi-case study of 16 digital hardware startups that have at the core of their market offerings a digitized physical device we investigate strategies of these emerging firms to access and leverage resources that are required to create their value propositions and to exploit entrepreneurial opportunities.

Digital hardware startups provide a revelatory context to theorize the influence of digital technologies on entrepreneurship processes and outcomes because they are particularly resource intensive and need to develop both physical and digital product components (von Briel, Davidsson, and Recker, 2018; Marion et al., 2015). For example, digital hardware startups need to engage in electrical and mechanical engineering, physical product design, component sourcing and manufacturing, firmware and software programming, and order fulfillment. To be able to pursue all these activities, digital hardware startups need access to specific knowledge and expertise, to sophisticated facilities and machinery that is required for prototyping and production, and to capital that is required for purchasing components, tooling, and so forth. As a result, the creation of digital hardware devices is usually based on distributed processes involving multiple actors from different domains (von Briel et al., 2018), which increases the intensity of digital hardware start-ups' resource coordination activities (Singh, 1997).

Digital hardware startups are not only theoretically relevant but also an important phenomenon in the global economy that deserves its own empirical investigation. Case in point is that venture capital investment in electronics and computer hardware ventures arrived at an all-time high of US\$ 2.6 billion in 2014 (Billings, 2015), which prompted the Economist to liken the current wave of digital device start-ups to a "Cambrian moment" (The Economist, 2014). The number of digital hardware devices that are connected to the Internet, which increased from US\$3.8 billion in 2014 to US\$4.9 billion in 2015 (van der Meulen, 2015), and Google's recent acquisition of Nest Labs (a home automation startup) for US\$ 3.2 billion are further cases in point.

79 - EXPERIMENTAL VERSUS THEORETICAL: DO ENTREPRENEURSHIP PROGRAMS SHAPE PERCEPTIONS OF ENTREPRENEURSHIP?

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The main effect of entrepreneurship education on individual characteristics associated with successful entrepreneurial ventures is well supported in the literature. Many have called for educational experiences that expose would-be entrepreneurs to realventure problems, thus entrepreneurs hipeducation has shifted from more programmed instruction to metacognitive approaches like experiential learning or "learning by doing". In line with this shift, we evaluate experiential entrepreneurial programs in which learners acquire entrepreneurial competencies by developing and running entrepreneurial ventures during the academic year. In this study, we examine the impact of the programs on the entrepreneurial intentions, perceived entrepreneurial desirability, entrepreneurial self-efficacy, creative self-efficacy, and risk propensity of the program participants. Data are from Finland, and the U.S. utilizing a pre-, post-test design with a control group of students in lecture-based entrepreneurship courses. The results show mixed results for entrepreneurial intentions, perceived entrepreneurial desirability and entrepreneurial selfefficacy overtime in the study and control groups. Second, the average creative self-efficacy increased in the study groups, while there was a decrease in creative self-efficacy among the control group. Third, the average risk-propensity in the Finnish treatment group decreased, while there was an increase in the average risk-propensity in the U.S. treatment and control group. These results seem to indicate that individuals participating in experimental entrepreneurship programs rather than theoretical entrepreneurship courses exhibit a greater confidence in their creative abilities. The contribution of the paper is threefold. First, the paper provides insights about the differences in the effects that experimental and theoretical entrepreneurship programs have on different outcomes. Second, the paper suggests that entrepreneurship educators and policymakers need to include an experiential component in entrepreneurship programs to provide students and nascent entrepreneurs the opportunity to experience what it is like to actually be an entrepreneur and learn what it will take to become one. Third, the paper shows the complexity of shaping entrepreneurial intentions, perceived entrepreneurial desirability, and entrepreneurial self-efficacy and suggests that the differences in these three cognitive factors may be due to other factors than merely the type of entrepreneurship program.

56 - AN INTERPRETIVE STUDY OF WHAT LEARNING MEANS TO ENTREPRENEURS

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A vital element of new venture creation is for entrepreneurs to engage in learning. There are limited studies to date which

capture what learning means to entrepreneurs during the stage of new venture creation. The purpose of this paper is to apply an interpretive theoretical framework to capture the lived experience



of entrepreneurs during new venture creation and unpack what the phenomena of learning means to them. A total of 7 in-depth interviews have been conducted to date with entrepreneurs in early stages of venture development. Preliminary analysis of the interview data shows that how entrepreneurs understand and experience learning during new venture creation can be conceptualised through three types of learning practice; reflection, reflexivity and phronesis.

Open innovations is still an emerging concept and less discussed in terms of SMEs. Therefore, this study attempts to examne the role of intellectual capital and the netreprenerial networking in the adoption of open innovation practices. This study adopts mixed method in addressing the research questions. Finally this study intends to provide insights to SMEs to be more innovative and encourage to be open to get the maximum benefits through innovations.

80 - "WHAT BUYERS WANT AND HOW THEY GET IT" - A BUYER PERSPECTIVE TO SMALL FIRM SELECTION AND PRICE FORMATION IN ACQUISITIONS

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Over the past 11 years, a decline in small firm transaction prices has accompanied an eight-fold increase in the number of small firms listed for sale in Australia. In the US, fewer than 1-in-3 small firms listed for sale are sold. Both researchers and industry experts share these concerns noting that many retiring baby-boomer owners depend on the proceeds from the sale of their small firm to fund their retirement. To inform "everyday entrepreneurs" on how to attract and maintain interest from acquirers, this systematic literature review integrates the selection criteria and transaction structuring activities used by acquirers of small firms. From a sample of 822 studies from the top six high-impact entrepreneurship journals, 43 articles are reviewed. Selection criteria are identified by buyer profile as product and business model, market, financial, team, other and ownership character considerations. Transaction structuring activities are categorised as risk management, return management, and behaviours. We confirm the need for future research to study "everyday entrepreneurs" exits, noting a bias in literature on business angel, venture capital and IPO transactions, with little literature focusing on the outright acquisition of small firms. Directions for future research are proposed.

123 - OPEN INNOVATION PRACTICES AND SUSTAINABLE PERFORMANCE OF MANUFACTURING SMES IN SRI LANKA: A CONCEPTUAL INSIGHT

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This study aims to explore the extent and the adoption of open innovation practices and their contribution towards sustainable performance of SMEs of manufacturing sector in Sri Lanka. Innovations are widely discussed concept under corporate entrepreneurship. Even though, the SMEs are crucial for the development of the economy, their sustainability remains question. Many of the previous studies have pointed out that innovations are the key to success in terms of reputation, sales, survival, firm growth, customers, market, staff motivation and retention. Thus, Innovations can be identified as a major driver in value creation for businesses. Open innovations are more specific form of innovations as it links internal sources and external markets through information and knowledge sharing.

93 - FINANCE AND ITS RELATIONSHIP WITH THE SPEED OF INTERNATIONALISATION

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This study focuses on the relationship between internal and external equity finance and the speed of SME internationalisation. Taking our lead from the internationalisation theory proposed by Johanson and Vahlne (1977; 2009) we place knowledge at the centre of determining how rapidly the SME can internationalise. Accessing and absorbing market and non-market specific knowledge from equity investors can develop internationalisation capability resulting in faster international growth. We observe the change in speed, measured by export intensity across our sample, over the period from 2010 to 2014. We found significant and positive relationships between the younger firms in our sample between both shareholder and external equity funding, noting a change from internal equity funding to external equity funding the more geographically distant the markets are from the host country, New Zealand.

99 - EXPLORING THE EVOLUTION AND CHANGE TRAJECTORY OF SOCIAL FINANCING INSTITUTIONS

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Originating from Silicon Valley, entrepreneurs-turned-investors have applied business models drawing on venture capital principals to finance social ventures. Social financing institutions have played significant intermediary roles using capital and other resources to support and build social venture capacity. Extant research provides limited understanding on both the theoretical underpinning and practice of social financing. This paper presents findings of research exploring the investment process trajectory through the lens of four types of investment model to cast light on social financing institutions and their evolution. In-depth case studies are employed relating to four intermediary organisations, built using multiple sources of data, including from more than 160 informants. Findings suggest a pattern of resource heterogeneity is emerging in the four investing models in response to isomorphic forces. Hero-entrepreneurs have become evident in the four models, their behaviour associated with goal setting, shaping funding schemes, marshalling resources and aligning with partners to demonstrate value-adding activities. Realisation of social objectives may be achieved through reflective isomorphic processes, adjusting funding structures to fit social contexts. Evidence suggests development of a country-level convergent



model, potentially driving the multiple actors to a central zone, creating shared values and shaping a shared strategy and mechanism to implement change.

73 - ENTREPRENEURIAL PROCESS IN **DIGITAL NEW VENTURES**

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The purpose of this study is to explore and describe the entrepreneurial process enacted by digital venture founders. We respond to calls to recognise the unique features in the digital entrepreneurial process due to the nature of the digital technology context. We draw insights from 11 case studies in proposing a Digital Venturing framework. We find that the founder is the significant unit of analysis and the entirety of their entrepreneurial career journey spanning multiple ventures is the main story. We also propose an embedded staged sub-process for each venture journey. The emerging interdisciplinary literature is enfolded into the insights. Founders of digital technologyenabled start-ups are bringing disruptive transformation, but thousands fail to achieve any 'traction'. So, this practice-relevant study contributes to better understand digital venturing to provide better advice and guidance to practitioners and in teaching entrepreneurship. We also advance the field by identifying future research opportunities.

75 - DIGITAL ENTREPRENEURSHIP: AN INTERDISCIPLINARY STRUCTURED LITERATURE REVIEW AND RESEARCH **AGENDA**

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This paper provides a structured literature review of the existing research on digital entrepreneurship to generate insights into recent developments in the field, critique the research to date, and identify opportunities for future research. We have applied the three aspects of critical management research insight, critique, and transformative redefinition - to analyse and synthesise the single-, multi- and interdisciplinary literature on digital entrepreneurship published from its inception to October 2018. Our analysis reveals three broad phases of research development. We also distilled a set of definitions for the concepts inherent to digital entrepreneurship. We were also able to bound the scope of the extant research into disciplinary, temporal, methodological, geographical, thematic, and theoretical categories. We propose the contours of a fourth phase of research that builds on the relatively well-conceived, but largely theoretical, ideas in the current literature. More interdisciplinary research is required; more integrative studies are required, particularly those that generate design science and action research output. Collaborations with practitioners are required to yield practice-driven insights. This paper facilitates inter-disciplinary dialogue in a crucial stage of development and is the first to use a structured literature review with a multi- and interdisciplinary scope.

74 - LET A HUNDRED FLOWERS BLOSSOM: **TOWARD DIVERSE PERSPECTIVES AND A** MORE HOLISTIC UNDERSTANDING OF THE **ENTREPRENEURIAL PROCESS**

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This paper reviews the recent progress in entrepreneurial process research. We analyse the field from the perspectives of: 1) the traditional teleological view based on economic prediction: 2) the emergent contingency decision-making view based on entrepreneurial behaviour; and 3) the practice view consisting of recent prescriptive startup development methods which have brought about a Lean revolution in the start-up development process. We review 103 articles published between 2012 and 2018 using a structured literature review methodology (SLR) to develop insights into how the research is progressing, critique the contemporary literature and identify a future research trajectory. We find a transition of entrepreneurial process from a fragmented field to one in which diverse views from other disciplines and theoretical bases are increasingly accepted and merged. Effectuation and entrepreneurial bricolage are now well-developed constructs with wider acceptance. The Lean startup and its key principles such as experimentation, customer feedback and iterative development are beginning to face academic rigour. The traditionally dominant Opportunity framework has attracted criticism and lost some of its credibility as a leading framework to understand entrepreneurship. There is a persistent call for shift in emphasis from context-free, generalised theory to studies that include contexts and aspects of the entrepreneurial agency such as prior entrepreneurial exposure, learning and network. More widespread acceptance of process and narrative approaches help qualitative methods gain greater acceptance. Finally, we discuss trends for the future of the field, and the implications to policy and practice.

117 - PARENTAL NETWORK IMPRINTING INFLUENCE ON NEW VENTURE ALLIANCE **NETWORK GROWTH: A STUDY OF MINING SPINOFFS**

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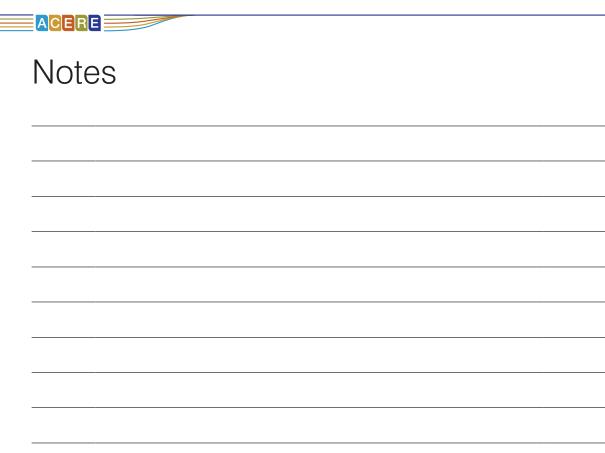
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In this paper, we examine the how the parent network centrality related to the changes in the spinoff firm network growth. We explore a multiple mediation model where spinoff network status and absorptive capacity mediate the relationship between parent network centrality and spinoff network growth. Further, we examine the boundary condition of these relationships by investigating the moderating role of knowledge relatedness between parent firm and spinoff. Data from 237 spinoff firms in the Australian mining industry over a ten-year period is annually collected and used for analysis. Our findings suggest that spinoff network status and spinoff's absorptive capacity (in terms of ability to apply knowledge) mediates the relationship between parental network centrality and spinoff network growth. We also find significant results for the moderated mediation effect of market knowledge relatedness between spinoff and its parent on the obtained significant mediated effects.



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