



**Queensland University of Technology**  
Brisbane Australia

This may be the author's version of a work that was submitted/accepted for publication in the following source:

[Burgers, Henri & Stuetzer, Michael](#)  
(2012)

Resource acquisition and utilisation strategies of intrapreneurs and entrepreneurs. In

*2012 Australian Centre for Entrepreneurship Research and DIANA Conference (ACERE DIANA)*, 2012-02-03 - 2012-02-05.

This file was downloaded from: <https://eprints.qut.edu.au/48712/>

**© Copyright 2012 [please consult the author]**

This work is covered by copyright. Unless the document is being made available under a Creative Commons Licence, you must assume that re-use is limited to personal use and that permission from the copyright owner must be obtained for all other uses. If the document is available under a Creative Commons License (or other specified license) then refer to the Licence for details of permitted re-use. It is a condition of access that users recognise and abide by the legal requirements associated with these rights. If you believe that this work infringes copyright please provide details by email to [qut.copyright@qut.edu.au](mailto:qut.copyright@qut.edu.au)

**Notice:** *Please note that this document may not be the Version of Record (i.e. published version) of the work. Author manuscript versions (as Submitted for peer review or as Accepted for publication after peer review) can be identified by an absence of publisher branding and/or typeset appearance. If there is any doubt, please refer to the published source.*

<http://www.aceredianaconference.com.au/>

# **RESOURCE ACQUISITION AND UTILISATION STRATEGIES OF INTRAPRENEURS AND ENTREPRENEURS**

**Burgers H<sup>1</sup>**, Stuetzer M<sup>1</sup>

<sup>1</sup> QUT Business School

## **Submitting Author Contact Information:**

Henri Burgers  
Queensland University of Technology  
[henri.burgers@qut.edu.au](mailto:henri.burgers@qut.edu.au)

## **RESOURCE ACQUISITION AND UTILISATION STRATEGIES OF INTRAPRENEURS AND ENTREPRENEURS**

### **Abstract**

This paper sets out to investigate differences between intrapreneurs and entrepreneurs with regards to their resource utilisation behaviours through social capital and bricolage. In particular we were interested in those entrepreneurs who start their business while still being employed, as it allows us to compare how intrapreneurs and entrepreneurs make use of social capital within their employer. Our findings challenge some existing wisdoms in that it seems intrapreneurs make more use of social capital external to their employer than entrepreneurs, while the use of social capital internal to the company is similar to the use by entrepreneurs. Yet, internal organizational social capital seems to have a positive effect on performance for intrapreneurial efforts only, while external social capital is not related to performance. This suggests both intrapreneurs and entrepreneurs may benefit from reconsidering the focus they place on respectively external and internal organizational social capital. Bricolage behaviours were extremely prevalent amongst both intrapreneurs and entrepreneurs as well as being the strongest predictor of performance. This strong effect on performance for intrapreneurial ventures may suggest that bricolage behaviours need to be rethought when it comes to intrapreneurs.

## INTRODUCTION

Entrepreneurship is a highly contextual phenomenon whereby firm outcomes are influenced by the availability of resources (Hoegl, Gibbert, and Mazursky 2008). Contextualising entrepreneurship provides rich opportunities to gain deeper insights into the boundaries of theories and the phenomenon of entrepreneurship (Welter, 2011; Zahra, 2007). The somewhat disparate fields of intrapreneurship (opportunities that are created inside and for their current employer) and independent entrepreneurship (opportunities created independently of an existing organisation) are testament to the vital role that context plays in shaping the entrepreneurial process. Studies indicate intrapreneurs and entrepreneurs emphasize different resources (Chesbrough, 2000; Shrader and Simon, 1997), make different use of their human capital and emphasize different social ties (Parker, 2011), and utilize different learning strategies (Honig, 2001).

Research has strived to explain differences between opportunities of intrapreneurs and entrepreneurs from a resource dependence perspective in which the differences in resources determine the differences in processes and opportunities (Shane, 2000). Intrapreneurs, for example, draw strongly on resources available within their employer (Shrader and Simon, 1997), whilst entrepreneurs have been shown to rely on family and friends (Davidsson and Honig, 2003). In this paper we aim to recontextualise these differences by investigating how entrepreneurs and intrapreneurs have different resource acquisition strategies *despite* operating in a similar context (i.e. being fulltime employed while starting their business). Research shows over 80% of the entrepreneurs in the process of starting new businesses are still employed whilst in startup (Reynolds et al., 2004) and a significant percentage of the entrepreneurs got their business idea through their employer (Bhide, 1994). This suggests there is considerable promise in understanding differences and similarities in the resource acquisition and utilization processes of intrapreneurs and entrepreneurs who are employed while developing their venture idea (Martiarena, 2011).

We address the question of whether intrapreneurs and entrepreneurs use different resource acquisition and utilization strategies. We draw on data collected through the Global Entrepreneurship Monitor 2011 in Australia to test for differences and similarities in use and performance outcomes. The results presented here are based on our first analyses of the data. With the full paper we envisage making the following contributions.

First, we aim to extend our understanding of resource acquisition strategies and intra-/entrepreneurship by focusing on similar resource contexts rather than dissimilar contexts. This allows us to move beyond traditional resource dependence type arguments (Pfeffer and Salancik, 1978) when addressing social capital and resources for new ventures. We will show that resource acquisition and utilization behaviors and outcomes will differ between entrepreneurs and intrapreneurs despite similar resource contexts. To that end, we introduce measures for social capital inside and outside employer of the entrepreneur and intrapreneur. Social capital has often looked at use of networks in general (Davidsson and Honig 2003) or strength and number of ties (Granovetter 1973), but the explicit distinction between social capital within and outside the current employer may be a useful lens in understanding the emergence and development of new ventures.

Second, whilst entrepreneurship literature has addressed the use of social capital (Arenius and De Clercq, 2005; Davidsson and Honig, 2003), and the use of resources under constraints (Baker and Nelson, 2005), only recent literature has begun to explore the relationships between them (Senyard et al., 2010). In particular, we extend bricolage to

the intrapreneurial context by arguing intrapreneurs and entrepreneurs may both significantly benefit from bricolage, but the underlying mechanisms may be different. Bricolage is often associated with entrepreneurs as they are perceived to be more resource-constrained than their intrapreneurial counterparts. However, we argue intrapreneurs face a myriad of different resource constraints. They have less flexibility, as they are often required to make significant use of existing company resources, limits on time to create the firm, stringent performance measures of success and directives to work with specific teams within the firm, irrespective of appropriateness of resources. They face more competition for available resources from other business units that may hoard resources. As Aldrich (1999:41) noted, most ventures ... “can’t always get what they want, and certainly don’t always get what they need.”

The paper proceeds as follows. We will first introduce our theoretical ideas and hypotheses, followed by a discussion of our sample and methods. Then we will present our results concluded by implications for theory and practice.

## **LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT**

Stevenson and Jarillo defined entrepreneurship as “a process by which individuals- either on their own or inside organizations- pursue opportunities without regard to the resources they currently control” (1990: 23). They explicitly acknowledge that both entrepreneurship and intrapreneurship can take place inside an organization. A successful entrepreneur will at some point leave the organization to run their start-up, but in the earliest phases of venture development entrepreneurs often keep their current employment whilst working on their venture (Reynolds et al., 2004). Prior research on entrepreneurs has often addressed this employment as human capital in the form of industry and management experience (cf. Astebro and Bernhardt, 2005; Bosma et al., 2004). Yet, we argue the current employer may not only be valuable in terms of experience, but also in terms of resources. Entrepreneurs may gather insights, relations, poach employees, or may make (unauthorized) use of their employer’s facilities. Entrepreneurs evaluate opportunities based on how the combination of what resources they have, what resource they can get hold of, or purchase and how these resources would be deployed to generate value (Haynie et al., 2009).

Two mechanisms in particular have been identified as ways of accessing and utilizing resources: bricolage and social capital. Bricolage refers to making do with the resources at hand, and includes redefining the use of existing resources and combining them for a new purpose (Baker and Nelson, 2005). Bricolage has in particular been linked to the exploitation of entrepreneurial opportunities in resource-constrained environments (Baker and Nelson, 2005). We will extend this research to intrapreneurs.

Social capital is useful to gain information that may lead to the discovery of new opportunities (Arenius and DeClercq, 2005) as well as assist in the exploitation of opportunities (Davidsson and Honig 2003). The literature is littered with operationalisations of social capital (Payne et al., 2010), ranging from bonding to bridging social capital (Davidsson and Honig, 2003), to individual (De Carolis and Saporito, 2006), organizational (Bosma et al., 2004) and even industry-level social capital (Stam and Elfring, 2008). Drawing on Leana and Pil (2006) we distinguish between social capital available within and outside the employer.

*Bricolage and intra-/ entrepreneurship*

Bricolage behavior is usually considered as a way that entrepreneurs utilize resources at hand to deal with to new challenges (Baker & Nelson 2005). Bricoleurs have a disdain for what a resource *should* do and rather focus on what a resource *can* do. The utilization of resources at hand may lead to making do, an ingenious form of bootstrapping in which entrepreneurs redefine existing resources to execute tasks at hand. An alternative path to making do is that bricolage generates novel solutions by recombining and redefining existing resources (Baker and Nelson, 2005). We argue that these processes of bricolage and the use of resources at hand may differ for intrapreneurs and entrepreneurs.

The decision to deal with resources at hand rather than acquire new resources may be partially externally driven, as valuable resources may be in the hands of powerful actors outside the new venture (Villanueva et al., 2012). Resources may be at hand because others perceive them of little use or value (Garud and Karnoe, 2003). Entrepreneurs who are still employed next to developing the new venture may have to rely extensively on resources at hand, as their venture is most likely incapable of supporting itself or the entrepreneur. Thus they will rely extensively on making do as a form of bootstrapping rather than optimizing the opportunity. Entrepreneurs who are employed may also engage in the creative recombination of resources to generate novel outcomes. Their position allows them to both tap into the independent and corporate domain. The connection of those different thought worlds may stimulate creative solutions (Fiol, 1995). Bricolage behavior assists in the development of innovations (Senyard et al. 2010), helps to improvise and to adjust products to market needs (Baker, Miner, & Eesley, 2003). In other words, bricolage can have a positive impact in various stages of the development of the business concept and the product – both important milestones in the entrepreneurial process. We thus expect that bricolage has a positive effect on the performance of entrepreneurial ventures.

*H1: Bricolage is positively related to performance of entrepreneurial ventures.*

The intrapreneurial context is often perceived to be less resource-constrained than its entrepreneurial counterpart. However, we argue this is too simplistic a view on intrapreneurs. Intrapreneurs often engage in bootlegging until it has become an officially sanctioned venture by top management (Burgelman, 1983). Until then intrapreneurs would have to make do with whatever is at hand and may want to try to create novel solutions to attract top management attention. After the project becomes an official project, resources may be available in greater abundance. Yet, intrapreneurs may still need to focus on the resources at hand, as the parent company would prefer to leverage its resources rather than using resources available outside the venture and company. In that situation bricolage may become less a matter of making do in the sense of bootstrapping, but more a case of using these resources to create novel solutions. Thus from this perspective we would not expect a difference in terms of the extent in which intrapreneurs and entrepreneurs engage in bricolage. However, given that intrapreneurs may be forced to use company resources despite it not always fitting the need of the intrapreneurial venture, we expect the performance effects to be less positive for intrapreneurs.

*H2: Bricolage is positively related to performance of intrapreneurial ventures*

*H3: Bricolage is stronger related to the performance of entrepreneurial than intrapreneurial ventures.*

### *Social capital and intra-/entrepreneurs*

Besides utilizing resources at hand, entrepreneurs and intrapreneurs may also acquire resources and knowledge through social capital (Arenius and De Clercq, 2005; Davidsson and Honig, 2003). Following Nahapiet and Ghoshal (1998:243) we define social capital as "the sum of the actual and potential resources embedded within, available through, and derived from the network of relationships possessed by an individual or social unit." This has been further delineated into external, bridging and internal, bonding social capital (Adler and Kwon, 2002; Leana and Pil, 2006). The former consisting of weaker ties in which access to novel resources is central and the latter of stronger ties in which the preservation of a social identity is a central concept. Initially the concepts of bridging and bonding social capital were defined along the organisational boundary (Leana and Pil, 2006; Leana and Van Buren, 1999; Adler and Kwon, 2002). Yet, these studies looked at the organisational level. Davidsson and Honig (2003) argued that with regards to entrepreneurship research a delineation of bridging and bonding social capital according to the organisational boundary (being the venture) is not meaningful. The venture is too new and small to speak of internal social capital, so all social capital is external. We argue however, that the delineation of organisational social capital and external social capital is important with regards to intrapreneurs and entrepreneurs who are employed by a company.

Organisational social capital refers to social capital present within their employer (Leana and Van Buren, 1999; Arregle et al., 2007). Organisational social capital may be an important resources for new ventures that seek access to knowledge and resources. This is in particular vital for intrapreneurs seeking to leverage organisational resources and garner support (Burgelman, 1983; Day, 1994). Intrapreneurs need knowledge from a variety of functional backgrounds such as R&D, manufacturing and marketing. Instead of relying on formal networks and communication channels in the organization, informal access to resources may be much more effective for intrapreneurial ventures (Burgers et al., 2009). These same networks could also benefit entrepreneurs in terms of idea generation (Bhide, 1994) and help from employees. In particular when there is a stronger connectedness and social bonding amongst employees, they are more likely to assist an employee with its new venture. Yet, entrepreneurs may in certain cases be less likely to engage with their employer, in particular when the venture is infringing on the company's turf. They may want to refrain from involving co-workers, the new venture may have negative implications for their current employment. Anton and Yao (1995) showed that even when entrepreneurs knew it would be in the venture's best interest to collaborate with their employer, entrepreneurs would decide to go at it alone. Entrepreneurs may fear to become dependent on their employer who would then appropriate most of the value of the new venture (Villanueva et al., 2012).

*H4: Intrapreneurs make more use of organizational social capital than entrepreneurs.*

*H5: Utilising organizational social capital will have a stronger positive effect on the the performance of intrapreneurial ventures than entrepreneurial ventures.*

External social capital refers to social capital external to the entre- and intrapreneurs' current employer (Adler and Kwon, 2002). Given the lack of resources and difficulties with accessing and utilizing their employer's social capital, entrepreneurs are driven towards using external social capital. Social capital appears to be conducive for nascent entrepreneurs in providing access to novel information and trusted feedback concerning business strategies (Uzzi 1997), in product development (Lechner and Dowling 2003) and in getting into contact with potential investors (Shane and Cable 2002). Thereby, friends,

family, and acquaintances are often asked for help and advice (Cantner & Stuetzer, 2010). Yet, friends and family may not possess the resources and knowledge a new venture needs. It would benefit much stronger from external social capital from prospective customers, suppliers and all kinds of other organizations. Yet, these organizations would be hesitant to engage with a new venture due to its lack of legitimacy. Organizations tend to make more rational decisions when it comes to business decisions than friends and family. Intrapreneurs on the other hand can benefit from the reputation of the parent company and may be able to secure resources from customers, suppliers etc. with more ease than entrepreneurs. Intrapreneurs increasingly look at external parties and what they have to offer rather than solely focusing on what is present within their company (Chesbrough et al., 2006; Van de Vrande et al., 2009).

*H6: Intrapreneurs make more use of external social capital than entrepreneurs.*

With regards to the performance effects of external social capital, we argue the relation may be reversed. Entrepreneurial ventures would rely rather strongly on external social capital for their successful development, as the resources gathered via other sources may not be sufficient. Intrapreneurial ventures on the other hand would rely more organizational social capital. External social capital may be important, but a lack of external social capital may be offset by abundance of (financial) resources within their parent organization.

*H7: External social capital has a stronger positive effect on the performance of entrepreneurial ventures than intrapreneurial ventures.*

## METHODS

We investigate the resource utilisation behaviours of entrepreneurs and intrapreneurs through random sampling of 2,212 responding households. We used data we collected in 2011 as part of the Global Entrepreneurship Monitor (GEM) in Australia. The data was collected through computer-assisted telephone interviewing (CATI). This has been shown to improve response rates as well as provide scripted clarifications in case a respondent struggles with a question. The Global Entrepreneurship Monitor is a standardised and validated method across the world (Reynolds et al., 2005).

The respondents are stratified in several ways and reached by several communication tools (mobile phone as well as landline), to ensure the sample is representative of the Australian adult population. The sample contained 196 (8.9%) intrapreneurs, 166 (7.5%) entrepreneurs and 27 (1.2%) who classified both as entrepreneurs and intrapreneurs. Of the total sample of 2212 respondents, the mean age was 46.4 years and 54.5% is female. The entrepreneurs had a mean age of 42.8 and intrapreneurs 41.1, indicating they are slightly younger than the average population. Of both the entrepreneurs (40.4%) and intrapreneurs (40.8%) women are less represented than in the general population. Intrapreneurs tend to be more often educated at university (46.4%) than entrepreneurs (36.7%) and the general population (30.9%).

To assist in the analysis, we selected only those nascent entrepreneurs who are currently working fulltime as an employee, as an entrepreneur who has a small part-time job to generate some extra cash is not the same as the fulltime working employee that is embedded in the organization. Moreover, the concept of organizational social capital



refers directly to the role of their employer in the new venture. This reduced the sample to 74 entrepreneurs and 195 intrapreneurs for the remainder of our analyses.

### **Measures**

We employed existing scales to measure our main constructs of social capital, bricolage and intrapreneurs and entrepreneurs. The items for all our constructs can be found in the Appendix. The scales all showed good construct validity and reliability. Our models have been analysed using STATA and SPSS.

**Dependent variables.** We used two dependent variables in this study. The first is whether a respondent is an *entrepreneur or intrapreneur*. This was defined according to the GEM methodology (cf Martiarena, 2011).

Our second dependent variable is *venture performance*. Because we focus on very early stage ventures, there may not be any meaningful financial or market performance data. Moreover, Block and MacMillan (1993) question whether traditional financial performance measures used for entrepreneurial ventures would be useful for intrapreneurial ventures in the first place. As an alternative, we relied on a performance measure from Bonner et al. (2002), which is useful for assessing performance of more early stage venture projects. The four items ( $\alpha = .64$ ) tap into how well the venture is on schedule regarding costs and timeline.

### **Independent variables.**

*Bricolage* is a scale derived from the CAUSEE-dataset (Senyard et al., 2010). The scale has eight items that tap into the extent to which people utilise and redefine existing resources at hand. The items tap into both making do as well as creative recombination of existing resources. Factor analyses showed the eight items loaded on one dimension ( $\alpha = .80$ ).

*Organizational social capital* is a five item scale ( $\alpha = .67$ ) based on Jaworski and Kohli (1993). It measures to what extent the entre- and intrapreneurs are connected with other people in their organisation. A more traditional way of assessing social capital in the firm is to make a structural map of the network in terms of who connects to whom. Yet, Leana and Pil (2006) argued that this is not preferable within an organisation as it may be undoable as well as demonstrated employees were reluctant to discuss such matter. Moreover, we focus not on the organization, but on the intra- and entrepreneur. Thus rather than mapping the whole social capital network in the company, we focus on the intra-/ and entrepreneurs' perception of the organizational social capital. As it is that perception that will drive entrepreneurial action rather than the objective network.

*External social capital* is based on a scale validated by Alexiev (2010). The six items tap into the extent of external partner use in the new business venture ( $\alpha = .88$ ).

## **RESULTS**

The findings reported here are the result of a first iteration with the data and should thus be interpreted with caution. First we ran a series of simple T-tests of differences in means of our variables of interest between intrapreneurs and entrepreneurs. The results indicated there were no statistically significant differences in results of bricolage behaviours and internal social capital between entrepreneurs and intrapreneur. It seems intrapreneurs

make significantly more use of external social capital than intrapreneurs ( $t=-4.6$ ,  $P<0.001$ ).

To further test these differences, we ran a logistic regression with these three variables as independent variables and a dummy indicating entrepreneurship – intrapreneurship as a DV (the group of respondents classifying as both were excluded). In line with the T-tests, only external social capital ( $\beta = .573$ ,  $p<0.001$ , odds ratio 1.774) seems to enhance the chance of being an intrapreneur. These findings suggest to support hypothesis 6 and reject hypothesis 4 Surprisingly there is no difference in the use of organisational social capital..

Second, we ran a series of regression analyses to examine whether internal organizational and external social capital and bricolage had different effects on venture performance for both groups. The overall regression analyses showed that both bricolage ( $\beta = .243$ ,  $p<0.001$ ) and internal social capital ( $\beta = .113$ ,  $p<0.05$ ) have a positive effect on performance, while the effect of external social capital is insignificant. When analysing the sub groups, it shows that bricolage ( $\beta = .263$ ,  $p<0.01$ ) and internal social capital ( $\beta = .176$ ,  $p<0.05$ ) have a positive effect on performance for intrapreneurs, while only bricolage ( $\beta = .263$ ,  $p<0.01$ ) has a positive effect on performance for entrepreneurs. This provides support for hypotheses 1 and 2 about bricolage positively affecting performance. Hypothesis 5 is supported in that internal organizational social capital had a positive effect on the performance of intrapreneurs and no effect on entrepreneurial performance. Hypothesis 7 is rejected as external social capital has no effect on performance of entrepreneurial and intrapreneurial ventures.

Taken together, these results raise some interesting points. Even though intrapreneurs and entrepreneurs differ the most on external social capital, drawing on external social capital seems to have no effect on performance. On the other hand, intrapreneurs and entrepreneurs seem to make equal use of social capital within the company, but it seems to help only the performance of intrapreneurial ventures.

## DISCUSSION

We set out to contribute to the emerging literature that compares and tries to bridge the fields of intrapreneurship and entrepreneurship. Prior studies have focused on ventures (Shrader and Simon, 1997), or had a limited view of intrapreneurship by focusing on intrapreneurs with an equity stake (cf. Honig, 2001; Parker, 2011), leaving a gap to study a wider variety of intrapreneurs (Martiarena, 2011; Burgers and Van de Vrande, 2011). We extended these studies by explicitly focusing on the utilization of resources by intrapreneurs and entrepreneurs. We ran initial analyses to test some of our initial ideas regarding differences between both groups.

Our initial results show significant differences between entrepreneurs and intrapreneurs. The findings indicated that intrapreneurs make more use of external social capital than entrepreneurs. This may at first sight be surprising, as one would expect entrepreneurs to not being able to find what they need inside the organization and thus make stronger use of external social capital. However, lack of legitimacy may adversely affect the ability to attract external partners for entrepreneurial ventures, whereas intrapreneurial ventures can draw on the reputation of the parent company. Our initial findings may to some extent be influenced by our measure that focuses on partnerships with other organizations. Prior studies have suggested that in particular nascent entrepreneurs make more use of family and friends rather than other organisations (Davidsson and Honig, 2003). We will check this assertion in following iterations of our paper, as our dataset does contain measures on the use of networks of family, friends, business etc. Nonetheless, the difference in use of

external social capital was very pronounced. Even more interesting is that despite these differences, there seems to be no effect on the performance of both entrepreneurial and intrapreneurial ventures.

Surprisingly there is no difference between the groups in terms of their use of organizational social capital from their employer. This is contrary to established beliefs that intrapreneurs should focus on leveraging existing corporate resources (Burgelman, 1985; Chesbrough, 2000; Shrader and Simon, 1997). Given both entrepreneurs and intrapreneurs use organizational social capital to the same extent, the results indicate at first pass the prior view that intrapreneurs and entrepreneurs pursue different opportunities due to different resource endowments (Chesbrough, 2000; Shane and Eckhardt, 2003) may require further research and theorising. In consideration of this we acknowledge there may be several mechanisms at play here. First, Christensen (1997) pointed out many entrepreneurs are actually intrapreneurs who got frustrated with the lack of corporate bureaucracy not willing to take up their idea. Findings from Bhidé (1994) provide some support for this notion: his results indicate that most entrepreneurs conceive their ideas through work for their employer, making corporate resources all the more relevant. Alternatively, entrepreneurs may make use of different corporate resources, or recognising they have nothing to lose, may ask for more resources. Intrapreneurs may make use of capital, technologies, facilities provided by the company to grow the venture, whereas entrepreneurs may use the corporation for knowledge to identify potential opportunities or advice on their business idea from colleagues. In following versions of this paper we intend to investigate differences in the actual resources they use from their employer, such as advice, poaching employees, using technologies etc. Even though intrapreneurs and entrepreneurs both make use of organizational social capital by their employer, it seems to only positively affect performance for intrapreneurs. This does provide support for notions that the main advantage intrapreneurs have of entrepreneurs is the corporate resources (Chesbrough, 2000). Yet, our findings show it is not about *access* to these resources, but about the *use* of these resources for developing the venture, because entrepreneurs and intrapreneurs seem to access this social capital to the same extent. Future studies may want to focus less on different resource configurations that entrepreneurs and intrapreneurs supposedly have, but more on how firms build capabilities in resource combinations and the development of novel outcomes in both bricolage and resource acquisition behaviours. This calls for longitudinal process studies rather than the dominant focus on cross-sectional survey designs.

Our findings also indicate that there is no difference to the extent intrapreneurs and entrepreneurs make use of bricolage. Bricolage behaviours are often assumed to be most prevalent in situations of resource constraints (Baker and Nelson, 2005). Prior studies have argued that entrepreneurs are far more resource constrained than intrapreneurs. From that perspective, our findings are surprising. Given that we were the first study to investigate bricolage behaviours amongst intrapreneurs, further research is necessary to understand “intrapreneurial” bricolage and how it compares to “entrepreneurial” bricolage. One explanation may be that the very purpose of intrapreneurship is to leverage company resources and find new uses for it (Chesbrough, 2000). From that perspective, “intrapreneurial” bricolage is not an innovative way to deal with resource constraints, but rather a forced choice to utilize and redefine company resources. An alternative explanation could be that intrapreneurs have less flexibility to acquire resources they need, as there is a strong pressure to use company resources and a company bureaucracy to jump into opportunities to acquire resources. However, our findings regarding the more

frequent use of external social capital by intrapreneurs prevent us from adopting this latter explanation. Further research is necessary to explore the meaning and use of bricolage for intrapreneurs and how this differs from entrepreneurs. In particular since our findings show it has strong positive performance effects for intrapreneurs as well as entrepreneurs.

#### *Implications for practice*

From a corporate perspective, our findings point to rethinking how companies can place residual claims on IP that is used within those entrepreneurial ventures (Anton and Yao, 1995). Entrepreneurs seem to make significant use of social capital of the company. It is a shady area what knowledge belongs to the company and what doesn't (Grant, 1996), but companies may want to rethink their value appropriation regimes to ways that would be beneficial to both the company as well as the entrepreneur. Anton and Yao's (1995) findings indicated that entrepreneurs often choose to go solo, even though it would have been in the best interest of both to collaborate. The emerging concept of open innovation in which firms may license etc their technologies to start-ups (Lichtenthaler, 2007) suggests that companies are already moving in that direction.

Our findings on organizational and external social capital raise an interesting question about betting on the wrong horse. Our results indicate intrapreneurs spend significantly more attention to external social capital than entrepreneurs, even though the performance of their venture benefits more from focusing on organizational social capital. Entrepreneurs spend a disproportionate amount of their attention to organizational social capital of their employer, but it has no effect on the performance of their venture. They may benefit more from trying to differentiate, rather than emulate practices of intrapreneurs.

#### *Future research*

These findings are very preliminary and leave room for many further inquiries into the data to further our understanding of the phenomena of intrapreneurship and entrepreneurship. One such way may be to include innovativeness/newness in our model. Prior research indicates more novel ventures may require more complex resource requirements and specialist skills (Rothaermel & Deeds 2006) and this may influence which types of social capital are used in venture development. Random studies on entrepreneurship have been criticised for a high percentage of mom-and-pop stores (Reynolds and White, 1997) that may not compare very well to intrapreneurial efforts. The weak tie/ bridging social capital arguments suggest that external social capital may lead to more innovative ventures (Davidsson and Honig, 2003; Burt, 2000).

Another avenue for future research might be to investigate the moderating effects of internal and external social capital on the bricolage –performance relationship. Networks have been shown to influence these bricolage behaviours (Garud and Karnoe, 2003), whereas others have argued networks may be the means to which entrepreneurs make do with resources at hand (Baker et al., 2003).

#### *Conclusion*

We believe this study will have a positive impact on our understanding of resource utilization by intrapreneurs and entrepreneurs. We do not envisage this may contribute to a unified theory of entrepreneurship that incorporates both intrapreneurship and entrepreneurship (Shane and Venkataraman, 2000; Stevenson and Jarillo, 1990). Rather, we hope the explicit comparison of intrapreneurs and entrepreneurs in a similar context (fulltime employment) may lead to a better understanding of the similarities and differences of both entrepreneurs and intrapreneurs in venture creation. Moreover, our

findings extend and challenge some existing wisdoms in regards to resource utilisation by intrapreneurs and entrepreneurs.

## REFERENCES

- Adler, P. and Kwon, S., 2002. Social capital: Prospects for a new concept. *Academy of Management Review* 27(1):17-40.
- Aldrich, H. E. (1999). *Organizations Evolving*. Newbury Park, CA: Sage Publications.
- Alexiev, A.S. 2010. *Exploratory innovation: the role of organizational and top management team social capital*. ERIM PhD Series in Research in Management
- Anton, J.J., & Yao, D. 1995. Start-ups, Spin-offs, and Internal Projects. *Journal of Law Economics & Organization*, 11: 362-378.
- Arenius, P., & de Clercq, D. 2005. A network-based approach on opportunity recognition. *Small Business Economics*, 24(3): 249-265.
- Arregle, J-L., Hitt, M.A., Sirmon, D.G., Very, P. 2007. The development of organizational social capital: attributes of family firms, *Journal of Management Studies*, 44: 73-95.
- Astebro, T., & Bernhardt, I. 2005. The winner's curse of human capital. *Small Business Economics*, 24(1): 63-78.
- Baker, T., Miner, A., & Eesley, D. 2003. Improvising firms: Bricolage, retrospective interpretation and improvisational competencies in the founding process. *Research Policy*, 32: 255-276.
- Baker, T., Miner, A., & Eesley, D. 2003. Improvising firms: Bricolage, account giving and improvisational competencies in the founding process. *Research Policy*, 32: 255-276.
- Baker, T., & Nelson, R. 2005. Creating something from nothing: resource construction through entrepreneurial bricolage. *Administrative Science Quarterly*, 50: 329-366
- Block, Z., MacMillan, I.C. 1993. *Corporate venturing*. Boston: Harvard Business School Press.
- Bonner, J.M., Ruekert, R.W., Walker, O.C. 2002. Upper management control of new product development projects and project performance. *Journal of Product Innovation Management* 19: 233-245.
- Bosma, N., M. van Praag, et al. (2004). The Value of Human and Social Capital Investments for the Business Performance of Startups. *Small Business Economics* 23(3): 227-236.
- Burgelman, R.A., 1983. A process model of internal corporate venturing in the diversified major firm. *Administrative Science Quarterly* 28: 223-244.
- Burgelman, R. A. 1985. Managing the new venture division: research findings and implications for strategic management. *Strategic Management Journal* 6: 39-54.
- Burgers, J.H., J.J.P. Jansen, F.A.J. Van den Bosch & H.W. Volberda. (2009) "Structural differentiation and corporate venturing: The moderating role of formal and informal integration mechanisms." *Journal of Business Venturing*, 24(3): 206-220.

- Burgers, J.H., Van de Vrande, V. 2011. Who is the Corporate Entrepreneur? Insights from Opportunity Discovery and Creation Theory *In: Zahra, S.A. (ed), Handbook for Corporate Entrepreneurship Research*, Edgar Elgar (forthcoming).
- Burt, R.S., 2000. The network structure of social capital. In: Sutton, R., Staw, B. (Eds.), *Research in Organizational Behavior*. JAI Press, Greenwich, CT, pp. 345–423.
- Bhide, A. (1994). How entrepreneurs craft strategies that work. *Harvard Business Review*, 72(2), 150–161.
- Cantner, U. Stützer, M. 2010. The use and effect of social capital in new venture creation: Solo entrepreneurs vs. new venture teams. *Jena Econ. Res. Pap.*, 12.
- Chesbrough, H. 2000. Designing corporate ventures in the shadow of private venture capital. *California Management Review*, 42(3): 31-49.
- Chesbrough, H., Vanhaverbeke, W., West, J. (Eds.), 2006. *Open innovation: Researching a new paradigm*. Oxford University Press, London
- Christensen, C.M. 1997. *The innovator's dilemma*. Boston: Harvard Business School Press.
- Davidsson, P., & Honig, B. 2003. The role of social and human capital among nascent entrepreneurs. *Journal of Business Venturing*, 18(3), 301-331.
- Day, D.L. 1994. Raising radicals: different processes for championing innovative corporate ventures. *Organization Science* 5(2): 148-172.
- De Carolis, D. M. and Saporito, P. (2006), Social Capital, Cognition, and Entrepreneurial Opportunities: A Theoretical Framework. *Entrepreneurship Theory and Practice*, 30: 41–56.
- Fiol, C.M. 1995. Thought worlds colliding: the role of contradiction in corporate innovation processes. *Entrepreneurship Theory and Practice* 19: 71-90.
- Garud, R., & Karnoe, P. 2003. Bricolage versus breakthrough: distributed and embedded agency in technology entrepreneurship. *Research Policy* 32(2): 277–300.
- Granovetter M., 1973, 'The Strength of Weak Ties', *American Journal of Sociology* 78, 1360–1380.
- Grant, R.M. (1996a), 'Prospering in Dynamically-Competitive Environments: Organizational Capability as Knowledge Integration', *Organization Science*, Vol. 7, No. 4, pp. 375-387.
- Haynie, J.M., Shepherd, D.A., & McMullen, J.S. 2009. An opportunity for me? The role of resources in opportunity evaluation decisions. *Journal of Management Studies*, 46,337-389.
- Hoegl,M., Gibbert, M. & Mazursky,D. 2008. Financial constraints in innovation projects when is less more? *Research Policy*, 37, 1382–139.
- Honig, B. 2001. Learning strategies and resources for nascent entrepreneurs and intrapreneurs. *Entrepreneurship: Theory & Practice*, 26(1): 21-35.
- Jaworski, B. J. & Kohli, A. K. 1993. Market orientation: antecedents and consequences. *Journal of Marketing* 57: 53-70.
- Leana, C. R., & Van Buren, H. J., III. 1999. Organizational social capital and employment practices. *Academy of Management Review*, 24: 538-555.

- Leana, C.R., & Pil, F.K. 2006. Social capital and organizational performance: evidence from urban public schools. *Organization Science*, 17(3): 353-366.
- Lechner, C. & Dowling, M. (2003). Firm networks: External relationships as sources for the growth and competitiveness of entrepreneurial firms. *Entrepreneurship and Regional Development*, 1, 1–26.
- Lichtenthaler, U. 2007. ‘The drivers of technology licensing: an industry comparison. *California Management Review*, 49, 67–89.
- Martiarena, A. 2011. What’s so entrepreneurial about intrapreneurs? *Small Business Economics*, (forthcoming).
- Nahapiet, J. & Ghoshal, S. 1998. Social capital, intellectual capital and the organizational advantage. *Academy of Management Review* 23: 242-266.
- Parker, S.C. 2011. Intrapreneurship or entrepreneurship? *Journal of Business Venturing*, 26(1): 19-34.
- Payne, G. T., Moore, C. B., Griffis, S. E., & Autry, C. W. 2011. Multilevel challenges and opportunities in social capital research. *Journal of Management*, 37: 491-520.
- Pfeffer, J., & Salancik, G. 1978. *The external control of organizations: A resource dependence perspective*. New York: Harper and Row.
- Reynolds, P. D., & White, S. B. (1997). *The Entrepreneurial Process: Economic Growth, Men, Women, and Minorities*. Westport: CT: Quorum Books.
- Reynolds, P.D., Carter, N.M., Gartner, W.B., & Greene, P.G. 2004. The Prevalence of Nascent Entrepreneurs in the United States: Evidence from the Panel Study of Entrepreneurial Dynamics. *Small Business Economics*, 23: 263–284.
- Reynolds, P. D., N. S. Bosma and E. Autio et al., 2005, ‘Global Entrepreneurship Monitor: Data Collection Design and Implementation 1998–2003’ *Small Business Economics*, 24(3), 233–247
- Rothaermel, F.T. and Deeds, D.L. 2006. Alliance type, alliance experience and alliance management capability in high-technology ventures. *Journal of Business Venturing*, 21(4) 429-460
- Senyard, J., Davidsson, P., & Steffens, P. 2010 The role of bricolage and resource constraints in high potential sustainability ventures. In *Frontiers of Entrepreneurship Research 2010*, Babson College, Lausanne, Switzerland.
- Shane, S. 2000. Prior knowledge and the discovery of entrepreneurial opportunities. *Organization Science*, 11(4), 448-469.
- Shane, S., D. Cable. 2002. Network ties, reputation, and the financing of new ventures. *Management Science*. 48(3) 364–381.
- Shane, S., & Eckhardt, J. 2003. The individual-opportunity nexus. In Z. J. Acs & D. B. Audretsch (Eds.), *Handbook of Entrepreneurship Research* (pp. 161-194). Dordrecht, NL: Kluwer.
- Shane, S., & Venkataraman, S. 2000. The promise of entrepreneurship as a field of research. *Academy of Management Review*, 25: 217-226.
- Shrader, R.C., & Simon, M. 1997. Corporate versus independent new ventures: resource, strategy, and performance differences. *Journal of Business Venturing*, 12: 47-66.

- Sirmon, D.G., Hitt, M.A., & Ireland, D.A. 2007. Managing firm resources in dynamic environments to create value: looking inside the black box. *Academy of Management Review*, 32(1): 273-292.
- Stam, W., Elfring, T., 2008. Entrepreneurial orientation and new venture performance: the moderating role of intra- and extraindustry social capital. *Academy of Management Journal* 51, 97–111.
- Stevenson, H.H., & Jarillo, J.C. 1990. A paradigm of entrepreneurship: entrepreneurial management. *Strategic Management Journal*, 11(Summer special issue): 17-27.
- Uzzi, B. 1997. Social structure and competition in interfirm networks: The paradox of embeddedness. *Administrative Science Quarterly*, 42: 35-67.
- Van de Vrande, V., de Jong, J.P.J., Vanhaverbeke, W., de Rochemont, M., 2009. Open innovation in SMEs: trends, motives and management challenges. *Technovation* 29, 423–437.
- Welter, F., (2011) "Contextualizing entrepreneurship-conceptual challenges and ways forward", *Entrepreneurship Theory and Practice*, 35, 1, pp. 165-184.
- Zahra, S. A. (2007). Contextualizing theory building in entrepreneurship research. *Journal of Business Venturing*, 22(3), 443-452.



## **APPENDIX I Items and Scales used in our research**

### **Internal social capital (Jaworski and Kohli, 1993)**

- a. It is easy to talk with virtually anyone you need to, regardless of rank or position
- b. There is little opportunity for informal "hall talk" among employees
- c. Employees from different departments feel comfortable calling each other when the need arises
- d. People around here are quite accessible to each other
- e. Our organisation is characterised by close, personal relations between employees

### **External social capital (Alexiev, 2010)**

- a. Worked together with other organisations on product or service innovations
- b. Worked together with other organisations in order to put new products or services to market
- c. Allied with other organisations in order to introduce new products or services
- d. Implemented joint promotional activities for new products or services with other organisations
- e. Maintained joint distribution or service agreements for new products or services with other organisations
- f. Signed contracts with other companies or institutions for product or service development

### **Bricolage (Senyard et al., 2010)**

- a. We are confident of our ability to find workable solutions to new challenges by using our existing resources
- b. We gladly take on a broader range of challenges than others with our resources would be able to
- c. We use any existing resource that seems useful to responding to a new problem or opportunity
- d. We deal with new challenges by applying a combination of our existing resources and other resources inexpensively available to us
- e. When dealing with new problems or opportunities we take action by assuming that we will find a workable solution
- f. By combining our existing resources, we take on a surprising variety of new challenges
- g. When we face new challenges we put together workable solutions from our existing resources
- h. We combine resources to accomplish new challenges that the resources weren't originally intended to accomplish

### **Venture performance (Bonner et al., 2002)**

- a. Adherence to budget and cost for development
- b. Meeting intended schedule
- c. Product/service performance
- d. Overall, how would you rate the performance of your new activity