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## **The importance of gestation process dynamics**

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### **Abstract**

#### Principal Topic

In this paper we seek to highlight the important intermediate role that the gestation process plays in entrepreneurship by examining its key antecedents and its consequences for new venture emergence. In doing so we take a behavioural perspective and argue that it is not only what a nascent venture is, but what it does (Katz & Gartner, 1988; Shane & Delmar, 2004; Reynolds, 2007) and when it does it during start-up (Reynolds & Miller, 1992; Lichtenstein, Carter, Dooley & Gartner, 2007) that is important. To extend an analogy from biological development, what we suggest is that the way a new venture is nurtured is just as fundamental as its nature.

Much prior research has focused on the nature of new ventures and attempted to attribute variations in outcomes directly to the impact resource endowments and investments have. While there is little doubt that venture resource attributes such as human capital, and specifically prior entrepreneurial experience (Alsos & Kolvereid, 1998), access to social (Davidsson & Honig, 2003) and financial capital have an influence. Resource attributes themselves are distal from successful start-up endeavours and remain inanimate if not for the actions of the nascent venture. The key contribution we make is to shift focus from whether or not actions are taken, but when these actions happen and how that is situated in the overall gestation process. Thus, we suggest that it is gestation process dynamics, or when gestation actions occur, that is more proximal to venture outcomes and we focus on this.

Recently scholars have highlighted the complexity that exists in the start-up or gestation process, be it temporal or contextual (Liao, Welsch & Tan, 2005; Lichtenstein et al. 2007). There is great variation in how long a start-up process might take (Reynolds & Miller, 1992), some processes require less action than others (Carter, Gartner & Reynolds, 1996), and the overall intensity of the start-up effort is also deemed important (Reynolds, 2007). And, despite some evidence that particular activities are more influential than others (Delmar & Shane, 2003), the order in which events may happen is, until now, largely indeterminate as regard its influence on success (Liao & Welsch, 2008). We suggest that it is this complexity of the intervening gestation process that attenuates the effect of resource endowment and has resulted in mixed findings in previous research. Thus, in order to reduce complexity we shall take a holistic view of the gestation process and argue that it is its' dynamic properties that determine nascent venture attempt outcomes.

Importantly, we acknowledge that particular gestation processes of themselves would not guarantee successful start-up, but it is more correctly the fit between the process dynamics and the ventures attributes (Davidsson, 2005) that is influential. So we aim to examine process dynamics by comparing sub-groups of venture types by resource attributes.

Thus, as an initial step toward unpacking the complexity of the gestation process,

this paper aims to establish the importance of its role as an intermediary between attributes of the nascent venture and the emergence of that venture. Here, we make a contribution by empirically examining gestation process dynamics and their fit with venture attributes. We do this by firstly, examining that nature of the influence that venture attributes such as human and social capital have on the dynamics of the gestation process, and secondly by investigating the effect that gestation process dynamics have on venture creation outcomes.

### Methodology and Propositions

In order to explore the importance that gestation processes dynamics have in nascent entrepreneurship we conduct an empirical study of ventures start-ups. Data is drawn from a screened random sample of 625 Australian nascent business ventures prior to them achieving consistent outcomes in the market. This data was collected during 2007/8 and 2008/9 as part of the Comprehensive Australian Study of Entrepreneurial Emergence (CAUSEE) project (Davidsson et al., 2008). CAUSEE is a longitudinal panel study conducted over four years, sourcing information from annually administered telephone surveys. Importantly for our study, this methodology allows for the capture and tracking of active nascent venture creation as it happens, thus reducing hindsight and selection biases. In addition, improved tests of causality may be made given that outcome measures are temporally removed from preceding events. The data analysed in this paper represents the first two of these four years, and for the first time has access to follow-up outcome measures for these venture attempts: where 260 were successful, 126 were abandoned, and 191 are still in progress.

With regards to venture attributes as gestation process antecedents, we examine specific human capital measured as successful prior experience in entrepreneurship, and direct social capital of the venture as 'team start-ups'. In assessing gestation process dynamics we follow Lichtenstein et al. (2007) to suggest that the rate, concentration and timing of gestation activities may be used to summarise the complexity dynamics of that process. In addition, we extend this set of measures to include the interaction of discovery and exploitation by way of changes made to the venture idea.

Those ventures with successful prior experience or those who conduct symbiotic parallel start-up attempts may be able to, or be forced to, leave their gestation action until later and still derive a successful outcome. In addition access to direct social capital may provide the support upon which the venture may draw in order to persevere in the face of adversity, turning a seemingly futile start-up attempt into a success. On the other hand prior experience may engender the foresight to terminate a venture attempt early should it be seen to be going nowhere. The temporal nature of these conjectures highlight the importance that process dynamics play and will be examined in this research.

Statistical models are developed to examine gestation process dynamics. We use multivariate general linear modelling to analyse how human and social capital factors

influence gestation process dynamics. In turn, we use event history models and stratified Cox regression to assess the influence that gestation process dynamics have on venture outcomes.

### Results and Implications

What entrepreneurs do is of interest to both scholars and practitioners' alike. Thus the results of this research are important since they focus on nascent behaviour and its outcomes. While venture attributes themselves may be influential this is of little actionable assistance to practitioners. For example it is unhelpful to say to the prospective first time entrepreneur "you'll be more successful if you have lots of prior experience in firm start-ups". This research attempts to close this relevance gap by addressing what gestation behaviours might be appropriate, when actions best be focused, and most importantly in what circumstances. Further, we make a contribution to the entrepreneurship literature, examining the role that gestation process dynamics play in outcomes, by specifically attributing these to the nature of the venture itself. This extension is to the best of our knowledge new to the research field.