

Understanding the dynamics of academic spin-offs teams: Homogeneity, Conflict and Overcoming Constraints

Introduction

In today economy, starting a business is becoming a product of collective action. Developing a new product from the development of technology is rarely a result of a lonely entrepreneur operating in isolation. Rather, entrepreneur often depend on other people, including co-founding team member. More than half of all nascent entrepreneurs work in a team (Aldrich et al. 2004; Davidsson and Honig 2003). Among high performers, team-founded venture tend to be higher than single-founded venture (Cooper and Gimeno-Gascon, 1992). The reason behind an establishment of new venture with a team is because with team can access more resources and reflects a willingness to expand the entrepreneurial effort (Timmons, 1990). In the literature on entrepreneurial team, previous research indicates a high prevalence of homogeneous team especially in terms of age, sex and ethnicity (Ruef, 2002; Ruef et al., 2003). In sociology, homophily describes individuals' tendency to interact with others of shared personal characteristics, such as age, gender, ethnicity (Lazarsfeld and Merton, 1954; McPherson et al., 2001). Similar individuals tend to provide positive feedback on abilities and ideas, thus enhancing self-esteem and enforcing personal goals. With this work as background, entrepreneurship research as explored and confirmed the tendency of individuals to form team with people of similar backgrounds, values and other identifiable characteristics (Ruef et al., 2003). However, evidence on the impact of homogeneity on new venture performance is mixed. One perspective suggests that team member homogeneity improves communication and reduces team conflict (Watson et al., 1993). In contrast, other show evidence suggesting that diverse team are more effective (Meakin and Snaith, 1997). Moreover, diversity in team founder brings complementary skills and develop creativity. For academic spin-offs, the nature and characteristics of team may have an important role due to limited resources experienced by the spin-offs. Based on the limited understanding and the presence debate on the impact of homogeneity of team founder on new venture performance, in this study will interested to answers the following questions

- (1) To what extents are new venture teams are homogeneous?
- (2) What impact does venture team homogeneity have on reducing early-year conflict and constraints?
- (3) What impact does venture team homogeneity have on reducing long-term conflict and constraints?
- (4) Do environmental factors (uncertainty, novelty) moderate the relationship between venture team homogeneity and their capability to reduce conflict and overcome constraints?

Research method

Using data from 100 academic spin-ffs located at the Netherlands and Norway, we conducted a qualitative and quantitative approach. In the qualitative approach, we did interviews to 10 entrepreneurs with an objective to understand the nature of conflict, constraints and several environmental factors. For quantitative approach, we collected data for the respondent and up to five team members. For each member, we use two measures of demographics, age and sex and two measures of human capital, business experience and educational background. Homogeneity is calculated differently for metric and non-metric variables. For metric variables (age and human capital variables), homogeneity is calculated as the natural logarithm of the man while for sex, homogeneity is a binary classification (Ruef, 2002). In addition to some measurements that was developed from our inductive study, conflict was measured with six items adapted from Jehn (1994) interpersonal Conflict Scale (ICS). The measurement has been employed in a variety of settings including work group and top management teams and has been shown to effectively measure affective and cognitive conflict. In this study, each respondent was asked to think of the most recent major strategic decision on their firms had made and then answer questions about the level of

conflict experienced during the making of that decision. Moreover, to measure obstacles as “problematic situations in gaining resources”, we used self-evaluation reported by the entrepreneurs. Obstacles could relate to the market, finance and management, accommodation, regulatory issues, etc. To enable a comparative analysis of frequencies of obstacles we introduced two indicators, i.e. the obstacle incidence rate (OIR) and the obstacle reduction rate (ORR). OIR measures the frequency of obstacles per age (class) and corrects for the different numbers of spin-offs in age classes (Soetanto and Van Geenhuizen, 2007). We used both cross-sectional data and longitudinal data. Cross-sectional data cover obstacles at a point in time (time of the survey) for different ages in the sample of firms. Longitudinal data cover obstacles in each year in the life of spin-offs thereby providing the advantage that developments over time can be identified and understood at the individual level of the firms.

Expected outcomes

This study extends our understanding of teams’ configuration by moving from description of the team composition to the implication for performance. We investigate the overall homogeneity of new venture team where in overall we support the evidences from previous studies suggested that venture teams tend to be homogeneous rather than diverse. We found that homogeneity support the performance of venture in the early years but not in long term. Interestingly, we found that heterogeneity positively influences new venture performance in the long term. However, in our analysis, we found that venture team homogeneity has different impacts on reducing conflicts and overcoming constraints. We also found that these relationships are dynamics and influenced by environmental factors.

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