ENTREPRENEURIAL BRICOLAGE AND YOUNG FIRM PERFORMANCE: THE MODERATING EFFECT OF TEAM COMPOSITION.

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Abstract

Many young firms face significant resource constraints during attempts to develop and grow. One promising theory that explicitly links to resource constraints is bricolage: a construct developed by Levi Strauss (1967). Bricolage aligns with notions of resourcefulness: using what's on hand, through making do, and recombining resources for new or novel purposes. In this paper we further theorize and test the moderating effects of ownership team composition on bricolage and firm performance. Our findings suggest that team size, strong network ties, and functionality enhance the effects of bricolage in young firm performance.

Keywords: Bricolage, Venture Performance, Team Composition, Team size, Network ties.

Introduction

Many new firms experience resource challenges in attempts to grow and develop. Unlike established firms, young firms often lack legitimacy, and face financial, social, temporal and other resource constraints (Wiklund, Baker, & Shepherd, 2010). As a consequence they attempt to make do by applying existing resources to challenges and opportunities (Baker & Nelson, 2005). Often considered a theory of resourcefulness, bricolage is defined as 'making do by applying combinations of the resources at hand to new problems and opportunities' (Baker & Nelson, 2005).

Bricolage has been shown to be one way that firms can innovate and grow in the face of constraints (Senyard, Baker, Steffens, & Davidsson, 2013), often leading to "brilliant unforeseen" results (Levi-Strauss, 1967). However, other research suggests it can also lead to poor performance and stagnation (Hatton, 1989). Teams may enhance the better performance of young firms using bricolage (Banerjee & Campbell, 2009). Delmar and Shane (2006) found approximately 50% of start-ups are attempted by entrepreneurial teams, making founding teams and their compositions an important context to study bricolage. But to the best of our knowledge, the impact of teams using bricolage and its impact on performance has not been specified or tested in prior research.

In this paper, we draw on the mostly inductive theorizing prevalent in the bricolage literature to hypothesize that team structural characteristics influence the relationship between bricolage and firm performance, using data from the Comprehensive Australian Study of Entrepreneurial Emergence (CAUSEE) project (Davidsson, et al., 2011). Our work contributes to the behavioral theory of bricolage by beginning to identify the conditions under which team structural characteristics may enhance or negatively influence performance in recently established young firms using bricolage.

Theory and Hypothesis

Young firms face many challenges in attempts to grow (Shepherd, Douglas, & Shanley, 2000), especially making resource decisions. Some firms attempt to reduce the constraints they face through bricolage (Baker & Nelson, 2005). More generally, the literature suggests bricolage has a positive relationship with firm performance through, a. enabling action rather than resource seeking or inactivity (Baker & Nelson, 2005); b. instigating the potential for fast response to challenges and opportunities (namely through improvisation) (Bechky & Olsen, 2011); c. taking advantage of more opportunities in comparison to doing nothing by going where "others fear to tread" (Baker & Nelson, 2005); and d. more novel idiosyncratic solutions, given the reliance on the means on hand, or through multiple inputs (Garud & Karnoe, 2003) and resources scavenged "cheaply or for free" (Baker & Nelson, 2005). Bricolage outcomes are often celebrated for their ingenious reworkings of existing resources on hand to get the job done. For example, bricolage was used to generate a solution for the Apollo 13 space shuttle crisis, saving the astronauts (Rerup, 2001).

Other literature however, suggests that bricolage solutions may be "just good enough" (Berchetti & Hulsink, 2006) and has been associated with "second best solutions, maladaption, imperfection, and inefficiency" Lanzara (1999: 347), or at best, a temporary coping mechanism (Powell, 2011) to the challenges these firms face. Given that the relationship between bricolage and performance is unclear, it is worthwhile exploring the mechanisms at play that may influence this relationship. In this research we take an exploratory approach by evaluating the use of bricolage in teams and its potential influence on firm performance.

The few extant studies on bricolage and teams do not examine team structural composition. As bricolage tends to be considered a solo activity there has been a focus on the individual "tinkerer". Levi-Strauss (1967) describes the bricoleur in these terms: "Consider him at work and excited by his project. He has to turn back to an already existent set made up of tools and materials, to consider or reconsider what it contains and… to engage in a sort of dialogue with it and, choosing between them, to index the possible answers … to his problem." Others have provided evidence of bricolage in small teams and suggest the use of teams provide valuable access to resources that enable "momentum" in bricolage (Garud & Karnoe, 2003:278). Alternate arguments exist that the use of bricolage in teams may more generally create confusion, delays and conflict, and that too many individuals within a team attempting bricolage may well be akin to "too many cooks spoiling the broth" via resource behaviours, creating difficulties in both managing resource troves, and confusion within bricolage recombination and resource deployment activities. A lack of consensus within teams and the use of bricolage at its most extreme, as seen in the case of Mann Gulch disaster, produced dire consequences (Weick, 1993). In entrepreneurship literature, Ruef, Aldrich and Carter (2003) found empirical evidence of the importance of team structure including mechanisms of network ties and functionality but these team structural mechanisms have not been applied to bricolage literatures. We begin to explore such themes in this paper.

Team Structural Composition

The relationship between teams and firm performance in entrepreneurship is the focus of much interest and research (e.g. Steffens, Terjesen, & Davidsson, 2012) and studies have examined structural team composition including team size (Heavey & Simsek, 2013), network relationships ties, (Phillips, Tracey, & Karra, 2013), and team functionality (Ruef et al., 2009). These studies show that team mechanisms can often be a double edged sword (Loane, Bell, & Cunningham, 2013), with mixed effects on team performance.

Team Size

Resource availability and resource combinations are critical in bricolage as they shape the solution deployed in response to opportunities and challenges, influencing firm performance. Several studies highlight the benefit of large teams. As Hambrick and D'Aveni assert, "the resources available on a team result from how many people are on it" (1992: 1440). Large teams may offer more resources for bricolage in both scope and scale (Wiersema & Bantel, 1992) and enable quicker collection of resources (Amason, Shrader, & Tompson, 2006), enabling concurrent resource actions, creating more time in evaluating resources, and time to tinker and experiment with existing resources and their combinations.

This may assist in generating different ways to combine and recombine elements, or develop several alternate bricolage choices for resource deployment. Having a suite of solutions on hand to choose from may lead to stronger firm performance.

H1a: Team size will positively moderate the relationship between bricolage and firm performance, strengthening firm performance.

Others however, suggest difficulties with large teams. Larger teams face problems in their ability to communicate, coordinate and recombine resources as the team size increases (Hambrick, 1994) which may be critical for young firms attempting to initiate bricolage (Weick, 1993). Further, attempts to improvise in bricolage resource combinations becomes problematic owing to pockets of knowledge asymmetries and potential group conflicts with resource deployment (Amason & Sapienza, 1997). As such, we propose an alternate, competing hypothesis:

H1b: Team size will negatively moderate the relationship between bricolage and firm performance, weakening firm performance.

Network ties

Research on teams in entrepreneurship studies which tests the influence of network ties show divergent findings. Similarly, we find divergent findings of the use network ties composition in bricolage. In the two papers we found in using bricolage/improvisation and team compositions, one argued the importance strong ties to achieve better performance (Berliner, 1994), the other proposed diverse inputs (Garud & Karnoe, 2003), including weak ties (Granovetter, 1973) for better firm performance.

We hypothesize here that strong ties have a positive influence on the relationship between bricolage and performance in four important ways. First, agency theory arguments suggest strong ties create and confirm trusting relationships, reducing monitoring costs and opportunistic behaviour (Ouchi, 1980). These team members often allow unfettered access to resources used in bricolage; it enables fast recombination and resource deployment owing to trust (Tsai & Ghoshal, 1998) and improved communication flows (Beckman, 2006). Second, team members with strong ties tend to be family or friends who are often willing to assist for free, enabling the young firm to retain the limited resources they do possess, for use on other critical tasks. Third, close ties with customers that have become team members enable both a. highly relevant solutions via specialised co-creation behaviours, and b. tolerance for the "good enough" bricolage solution produced. Finally, strong network ties enable greater use and familiarity of team member's skills, abilities, resources. This familiarity is critical during resource recombination and experimentation through improvisation activities in bricolage (Miner et al., 2001).

H2a: Young firms that apply bricolage with strong network ties will attain stronger firm performance.

On the other hand, an alternate argument exists that teams composed of strong ties may instigate group think (Janis, 1972) owing to the stress owing to the challenges they face. As a consequence of group think they may instigate less robust evaluation of resources often going with the most acceptable known solution within resource decisions: with incomplete assessment of all resource alternatives, or selective experimentation of resource processes.

Strong tie teams using bricolage may provide access to very similar types of resources, reducing resource scope, limiting resource combinations, and novelty, impacting firm performance. As such, an alternate hypothesis suggests:

H2b: Young firms that apply bricolage with strong network ties will attain weaker firm performance.

Functionality

We could find no literature on functionality of teams in bricolage. Entrepreneurship research provides contradictory findings regarding effects of functionality on teams (Chowdry, 2005). Teams composed of individuals with functional breadth are often promoted as one way entrepreneurs can fill the "gaps" in resource and capability deficiencies leading to broader perspectives and team effectiveness (Knouse & Chretien, 1996).

H3a: Young firms that apply bricolage in teams with high levels of functionality will attain higher firm performance.

Others however, argue that it is unclear whether functionally broad teams always improve outcomes. Functionality in teams using bricolage may initially have a negative influence on the relationship between bricolage and firm performance for a number of reasons. First, when facing resource constraints, bricolage behaviours in teams which have functional breadth may instigate untenable resource decision conflicts between members. Conflicts may exist in resource use, and recombinations, effectively trapping the team in repetitive cycles of improvisation or "going back to the drawing board" until some standoff or team consensus is reached. This wastes valuable financial and human capital resources (Ciborra, 2002; March, 1991). Second, there is the potential for generating too many possible solutions owing to functional breadth, which exacerbates problems of bounded rationality (March, 1978).We therefore suggest an alternate hypothesize that:

H3b: Young firms that apply bricolage in teams with high levels of functionality will attain lower firm performance.

Data, Measures and Analytic Strategy

Sample and Data

The data for this research was drawn from the CAUSEE project, a 4-year longitudinal study studying firm emergence (Davidsson, et al., 2011) administered through telephone surveys. This study builds on the general empirical approach, and some contents from the Panel Study of Entrepreneurial Dynamics (PSED) studies in the US (Reynolds & Curtin, 2008). This analysis uses the randomly selected young firm sample (514 YF cases), the criteria for inclusion was that the respondents had to confirm that they were owners, or part owners of the young firm and that they started "trading in the market doing the type of business you are currently doing" in 2004 or later. The final sample used evaluates young firm teams (n= 259 cases). As CAUSEE is a 4 year longitudinal survey it enables us to study firm development over time. We time separate our independent variable wave 1 (W1) and dependent variable wave 3 (W3). Wave 2 tests (not provided here) show similar results. Additional tests for a curvilinear direct relationship between bricolage and performance (not shown) did not yield any significant changes in the results.

Measures

Bricolage

We use a recently developed bricolage instrument and scale to measure bricolage (Senyard et al., 2013). The questions were designed using Baker and Nelson's (2005: 333) definition of the bricolage: "making do by applying combinations of the resources at hand to new problems and opportunities." The items use a 5-point response scale from 1 "never" to 5 "always", rather than levels of agreement, in order to reflect the behavioural nature of the phenomenon. Reliability testing using the team sample indicates the reliability of the scale is good (.84). Refer to Senyard et al. (2013) for further discussion of the bricolage measure.

Moderator Variables

Team Size

Team size is calculated as the number of team members including respondent on the team. The range of this variable in this sample is 2 to 6 person teams.

Network Ties

We use a scale which is an elaboration of the scale developed for the PSED and PSED II (Ruef et al., 2009) to measure the relational composition of the ties by studying the relationships between the owners of the young firm. We ask respondents if any two owners are related as spouses or partners sharing a household, relatives by blood, friends or acquaintances from current or previous work, friends or acquaintances who have not worked together, strangers to each other before joining the new business team. This scale identifies three categories of the network ties (Ruef, Aldrich, & Carter, 2003) Strong network ties (spouses or partners sharing a household, relatives by blood) weak network ties (friends or acquaintances) and two of the owners strangers to each other before joining the new business team. A continuous variable was computed for these responses and summated to develop the overall network tie measure used in this research.

Functionality

To measure the functionality, we considered the team members education and experience and whether the team could contribute to the firm in a range of functional business areas. For example, the experience question asked "Based on the work experience you or any other owner had prior to starting this business, can any of you help the business with knowledge in any of the following areas?

- Sales, marketing or customer service
- Administration or Human Resource management
- Knowledge needed for producing products in your industry
- Finance or accounting
- Knowledge needed for developing products/services in your industry

The variables were coded as yes (1) or no (0) and summed up to generate a 5 item scale.

Controls

We use four categories of control variables. The first category aims to capture the overall level of resources available for the firm. Specific variable include age of the firm product or service firm (dummy), and running a concurrent or parallel firm. A firms' past performance may have a strong influence in following years and will also influence resource availability (Bradley et al., 2011). Therefore, we control for past performance using sales from the year immediately preceding the measurement of firm sales (W1) for Wave 2 sales, (W2) for Wave 3 sales. The second group of control variable aims to capture some of the heterogeneity concerning the ability the firm has to develop resources including human capital of the start-up team: education (number of owners with a university degree), prior entrepreneurial experience (number of previous start-up attempts) (Davidsson & Honing, 2003), and management experience (number of years). We control for financial investments (amount of money invested in firm (log)) available to the venture. The third group of control variable aims to capture some of the heterogeneity within the teams including spousal teams (Davies et al., 2009) and team size (Steffens et al., 2012). The fourth group of control variables relate to other influences including preference for business size "I/We want this new business to be as large as possible" (dummy) as this influences resource behaviours, service (versus product dummy) and industry controls.

Analysis Technique

We used hierarchical moderated regression analysis to test our hypotheses. The independent variables were mean-centered prior to the formation of interaction terms (Aiken & West, 1991). Table 1 provides descriptive statistics and correlations among the variables used in the regression analyses.

Results

Table 1 reports the results of the regression analysis that models bricolage in relationship to firm performance. The first hypothesis proposed that team size may positively (H1a) or negatively (H1b) moderate the relationship between bricolage and firm performance. Table 2 provides the results for the moderated regression. Our results indicate there was a significant positive moderation effect of team size on the relationship between bricolage and venture performance (sales) (β=0.267, $p<0.05$) in young firm teams. Thus the effect of bricolage on venture performance (sales) becomes significantly stronger if the team size is larger. Our results for Hypothesis 2a suggests strong network ties positively moderates the bricolage- sales relationship, 2b suggests strong network ties negatively moderates the bricolage sales relationship. Our results were positive and significant (β=0.249, $p<0.05$), finding support for hypothesis 2a. Results of the moderated regression are shown in Table 3. Finally, Hypothesis 3a and 3b proposed that higher levels of functionality would have a positive (H3a) and negative (H3b) influence on the relationship between bricolage and sales, and we find it has a positive significant moderation effect (β=0.156, $p<0.10$) finding support for H4a (Table 4).

DISCUSSION

In this paper, we developed some early theorizing based on prior descriptive and inductive research on bricolage and considered the influence of structural composition of teams on the bricolage sales relationship. The team structural elements of team size, strong network ties, and functional breadth all had a significant positive moderating effect on the relationship between bricolage and sales in young firms.

Our findings open up additional important theoretical questions about bricolage and young firm team composition. The positive effects we find for team composition on bricolage and sales, suggests that young firms flush from first sales success and when engaged in bricolage, attempt to focus on gathering relevant resources. These results are in line with Baker and Nelson's (2005) notion of developing "diverse resource troves" to take advantage of new opportunities and find solutions to challenges. We believe that even though young firm teams should focus on resource scavenging and developing resource troves, teams also need to be concurrently developing strong resource recombinative capabilities for bricolage so that solutions developed via bricolage behaviours may extend beyond just "good enough", enabling stronger firm performance.

We note here that the firms in our sample were young (6 years or younger with the modal firm being 4 years), and the maximum size of the team was 6 individuals, with over 90% of the teams being 2-3 person teams. As a consequence, our results are not indicative of what we believe may occur in larger, more established teams. Curvilinear relationships may exist in team compositions, leading to significant negative effects of bricolage on firm performance.

Conclusion

We believe that ours are the first systematic empirical tests evaluating team composition and its influence on bricolage and firm performance. The results underline the importance of team structural compositions and bricolage on young firm growth. Although our results have important implications for the further development of bricolage theory, we stress that these results represent only tentative first steps in providing a greater understanding of bricolage and its influence on firm performance. Further waves of data exist in our longitudinal survey, which we expect to examine in the near future.

Table 1 Sample Description and Correlation Matrix

Sample Description

	Mean	*Std. Deviation*	*N*
Bricolage	.1205	4.99841	143
Ownership Team Size	2.2238	.66523	143
Strong Ties	3.3566	1.65472	143
Functionality	3.1818	1.58619	143
Retail-Wholesale	.1119	.31634	143
Hospitality	.0350	.18434	143
Consumer Services	.1049	.30750	143
Health Education	.0559	.23062	143
Manufacturing Mining Utility	.0420	.20120	143
Agriculture	.0769	.26741	143
Communication Transport	.0350	.18434	143
Construction Real Estate	.1608	.36867	143
Business Services Financial Insurance	.2168	.41350	143
Other	.1608	.36867	143
Services (Dummy)	.6713	.47138	143
Prior Sales (W2) Log	5.1113	1.20993	143
Young Firm Age	4.2098	1.08025	143
Growth Expectation	.1818	.38705	143
Education (Degree)	13.2168	14.94598	143
Business Experience	12.2727	13.27827	143
Management Experience	20.9790	12.22239	143
Concurrent Business	.3217	.46876	143
W1_Log_Invest	4.4151	1.16751	143
Spousal Team	.6853	.46602	143

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	25.
1.Wave 1 Bricolage	1																								
2. Team Funct. Div.	.364**	1																							
3. Team Relationship Div.	-.097	-.245**	1																						
4. Team Demographic Uni.	.033	-.039	-.163*	1																					
5. Ownership Team Size	-.083	-.013	-.045	.231**	1																				
6. Retail-Wholesale	-.079	-.063	.020	-.013	-.093	1																			
7. Hospitality	-.017	-.035	.226**	.023	.063	-.076	1																		
8.Consumer/Services	.052	.066	-.110	.002	.032	-.123	-.074	1																	
9. Health/Edu//Social Serv.	-.084	-.051	-.079	.084	.065	-.092	-.055	-.089	1																
10. Mining/Manuf/Utilit.	.019	-.035	.021	-.008	-.074	-.076	-.046	-.074	-.055	1															
11. Agriculture	.002	-.009	.116	-.045	-.111	-.115	-.069	-.111	-.083	-.069	1														
12. Commun./Transport	-.048	.024	-.034	.001	-.074	-.076	-.046	-.074	-.055	-.046	-.069	1													
13. Construct. Real Estate	-.007	-.086	.141	-.017	.142	-.150	-.090	-.145	-.108	-.090	-.135	-.090	1												
14. Financial Insurance	.019	.183*	-.238**	.028	.084	-.178*	-.107	-.172*	-.129	-.107	-.161*	-.107	-.210**	1											
15. Other Industry	.095	-.052	.040	-.034	-.088	-.146	-.088	-.141	-.106	-.088	-.132	-.088	-.172*	-.205**	1										
16. Services (dummy)	.008	.060	-.061	.007	.053	-.450**	-.167*	.121	-.031	-.167*	-.128	.090	.193*	.263**	.071	1									
17. Prior Sales_W2	-.041	.076	.029	.063	.137	.054	-.004	-.089	.006	-.015	-.069	-.014	.223**	-.033	-.093	.030	1								
18. Age of Firm	-.118	-.008	.121	-.191*	.004	-.022	-.104	.020	-.056	.097	-.070	.068	.040	.009	.011	.058	.168*	1							
19. Growth Expectation	.000	.027	-.041	.001	.120	.133	.054	-.062	-.058	-.103	-.045	.054	.022	.000	-.014	-.091	.034	-.059	1						
20. Education (Degree)	-.108	.090	-.184*	.087	.188*	-.110	-.186*	-.014	.192*	-.063	-.107	.184*	-.048	.196*	-.069	.019	.030	-.047	.067	1					
21. Business Exp.	.234**	.102	-.129	.085	.193*	.036	.048	.055	0.000	-.055	-.073	-.021	-.024	.007	.012	-.208**	.110	-.229**	.199*	.040	1				
22. Management Exp.	.186*	.220**	-.108	-.066	.167*	.001	.048	.110	-.059	-.064	-.153	-.064	-.049	.050	.111	-.092	.103	-.074	-.032	.051	.316**	1			
23.Concurrent Ent.	.137	.002	-.120	.052	.283**	-.031	.050	-.062	-.066	.050	.148	-.015	-.024	-.040	.026	-.267**	.036	-.048	.152	.054	.427**	.185*	1		
24. Money Invested (Log)	-.054	.056	.003	-.102	.048	.048	.108	.024	.016	.032	-.004	.028	.074	-.234**	.024	-.210**	.085	.058	.040	.074	-.006	.120	.037	1	
25. Spousal Team	-.011	.014	.363**	-.531**	-.510**	.112	-.119	.057	-.104	.012	.124	-.054	-.019	-.135	.084	-.005	-.082	.108	-.160*	-.148	-.244**	-.126	-.262**	-.034	1

Table Two Team Size n=143

Dependent Variable	*Model 1*		*Model 2*		*Model 3*		*Model 4*	
Level of Resources Controls								
Years Active	-.082	(.097)	-.067	(.097)	-.066	(.098)	-.026	(.097)
Spousal Team	-.167†	(.239)	-.179*	(.237)	-.182†	(.262)	-.144	(.258)
Financial Investment (Log)	.059	(.090)	.060	(.089)	.060	(.090)	.067	(.088)
Growth Expectation	-.069	(.273)	-.076	(.270)	-.076	(.272)	-.099	(.267)
Services/Products Dummy	-.009	(.286)	-.010	(.283)	-.009	(.287)	-.004	(.280)
Prior Sales (W2)	.372***	(.000)	.379***	(.000)	.379***	(.000)	.361***	(.000)
Resource Heterogeneity								
Single/Parallel Entrep.	.047	(.250)	.037	(.248)	.038	(.253)	.041	(.247)
Education Level	.021	(.007)	.053	(.007)	.054	(.008)	.078	(.007)
Industry Exp	-.068	(.009)	-.098	(.009)	-.097	(.009)	-.066	(.009)
General Manage.Exp	-.069	(.009)	-.089	(.009)	-.089	(.009)	-.101	(.009)
Industry Controls								
Retail-Wholesale	-.001	(.452)	.021	(.449)	.021	(.452)	.017	(.441)
Hospitality	.034	(.618)	.033	(.611)	.034	(.615)	.024	(.601)
Consumer_Services	-.133	(.384)	-.135	(.380)	-.135	(.381)	-.131	(.372)
Health, Education Social	-.048	(.479)	-.040	(.474)	-.040	(.477)	-.019	(.468)
Manufacturing Mining	-.028	(.583)	-.024	(.577)	-.024	(.580)	-.022	(.566)
Agriculture	-.159	(.473)	-.143	(.469)	-.143	(.471)	-.140	(.460)
Communication Transport	.002	(.575)	.004	(.569)	.003	(.578)	.004	(.564)
Construction Real Estate	-.072	(.342)	-.068	(.338)	-.067	(.343)	-.066	(.334)
Other	-.074	(.341)	-.075	(.338)	-.075	(.339)	-.094	(.332)
Direct Effect								
Bricolage			.163†	(.021)	.162†	(.022)	.198*	(.021)
Team Size					-.006	(.188)	.164	(.218)
Moderating Effect								
Bricolage x Team Size							.267**	(.036)
F	1.902**		2.029**		1.916**		2.244***	
Change F			.127		-.113		.328	
R2	.227		.250		.250		.291	
Change R2			.023		.000		.041	

Control entries represent standardized regression coefficients.* P<0.05, **P<0.01, ***P<0.001, †P0.10 (two-tailed).

Table 3 Network Ties n=143

Dependent Variable	*Model 1*		*Model 2*		*Model 3*		*Model 4*	
Level of Resources								
Years Active	-.095	(.099)	-.083	(.098)	-.060	(.096)	-.063	(.093)
Team size	.036	(.170)	.071	(.172)	.087	(.169)	.070	(.163)
Financial Investment (Log)	.067	(.091)	.068	(.090)	.048	(.089)	.044	(.086)
Growth Expectation	-.055	(.276)	-.065	(.274)	-.072	(.267)	-.046	(.260)
Services/Products Dummy	-.011	(.293)	-.017	(.290)	-.023	(.283)	-.018	(.274)
Prior Sales (W2)	.378***	(.000)	.384***	(.000)	.384***	(.000)	.387***	(.000)
Resource Heterogeneity								
Single/Parallel Entrep.	.079	(.255)	.062	(.254)	.020	(.251)	.037	(.243)
Education Level	.025	(.008)	.053	(.008)	.050	(.007)	.077	(.007)
Industry Exp	-.054	(.009)	-.084	(.009)	-.080	(.009)	-.082	(.009)
General Manage.Exp	-.067	(.009)	-.091	(.009)	-.099	(.009)	-.078	(.009)
Industry Controls								
Retail-Wholesale	-.033	(.453)	-.014	(.450)	.028	(.444)	.080	(.434)
Hospitality	.045	(.627)	.042	(.621)	.106	(.627)	.111	(.606)
Consumer_Services	-.151	(.387)	-.153	(.383)	-.130	(.375)	-.097	(.365)
Health, Education Social	-.045	(.487)	-.040	(.482)	-.034	(.471)	-.026	(.455)
Manufacturing Mining	-.031	(.591)	-.026	(.586)	.007	(.577)	.009	(.558)
Agriculture	-.184†	(.475)	-.167	(.472)	-.099	(.476)	-.063	(.463)
Communication Transport	.018	(.584)	.024	(.579)	.027	(.565)	.013	(.547)
Construction Real Estate	-.087	(.348)	-.087	(.344)	-.013	(.349)	-.002	(.337)
Other	-.097	(.344)	-.097	(.340)	-.038	(.340)	-.016	(.330)
Direct Effect								
Bricolage			.164**	(.022)	.156†	(.021)	.157†	(.021)
Strong Network Ties					-.231**	(.065)	-.289***	(.064)
Moderating Effect								
Bricolage x Strong ties							.249***	(.012)
F	1.682*		1.805*		2.142**		2.616***	
Change F			.123		.337		.474	
R2	.206		.228		.271		.324	
Change R2			.022		.043		.053	

Control entries represent standardized regression coefficients.* P<0.05, **P<0.01, ***P<0.001, †P0.10 (two-tailed).

Table 4 Functionality n=143

Dependent Variable	*Model 1*		*Model 2*		*Model 3*		*Model 4*	
Level of Resources Controls								
YearsActive	-.078	(.098)	-.066	(.098)	-.062	(.097)	-.065	(.096)
Spousal Team	-.185†	(.264)	-.182†	(.262)	-.173†	(.237)	-.188**	(.235)
Financial Investment (Log)	.059	(.091)	.060	(.090)	.073	(.090)	.064	(.089)
Growth Expectation	-.067	(.274)	-.076	(.272)	-.068	(.270)	-.074	(.268)
Services/Products Dummy	-.003	(.290)	-.009	(.287)	-.003	(.283)	-.022	(.281)
Prior Sales (W2)	.373***	(. 000)	.379***	(.000)	.387***	(.000)	.389***	(.000)
Resource Heterogeneity								
Single/Parallel Entrep.	.054	(.255)	.038	(.253)	.028	(.248)	.036	(.246)
Education Level	.027	(.008)	.054	(.008)	.063	(.007)	.041	(.007)
Industry Exp	-.068	(.009)	-.097	(.009)	-.092	(.009)	-.080	(.009)
General Manage.Exp	-.065	(.009)	-.089	(.009)	-.073	(.009)	-.071	(.009)
Industry Controls								
Retail-Wholesale	.003	(.455)	.021	(.452)	.009	(.450)	-.031	(.453)
Hospitality	.037	(.621)	.034	(.615)	.030	(.610)	.024	(.604)
Consumer_Services	-.133	(.385)	-.135	(.381)	-.142	(.380)	-.160†	(.378)
Health, Education Social	-.045	(.482)	-.040	(.477)	-.051	(.475)	-.058	(.471)
Manufacturing Mining	-.029	(.586)	-.024	(.580)	-.030	(.577)	-.046	(.573)
Agriculture	-.159	(.474)	-.143	(.471)	-.148	(.469)	-.160	(.465)
Communication Transport	-.004	(.584)	.003	(.578)	-.001	(.568)	.008	(.563)
Construction Real Estate	-.066	(.346)	-.067	(.343)	-.091	(.343)	-.088	(.340)
Other	-.075	(.343)	-.075	(.339)	-.099	(.343)	-.094	(.340)
Direct Effect								
Bricolage			.162**	(.022)	.198**	(.023)	.204*	(.022)
Functional Heterogeneity					-.111	(.070)	-.103	(.069)
Moderating Effect								
Bricolage x Functional							.155*	(.013)
F	1.902		2.029		2.015		2.123	
Change F			.127		-0.014		0.108	
R2	.227		.250		.259		.280	
Change R2			.023		.009		.021	

Control entries represent standardized regression coefficients.* P<0.05, **P<0.01, ***P<0.001, †P0.10 (two-tailed), with directional hypothesis entries (one tailed).

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