REFERENCES


David, R. J., & Sine, W. D. 2006. *Institutional ties as organizational social capital: Linkages to industry & professional associations*. Paper presented at the Academy of Management Annual Meeting, Atlanta, GA.


CURRICULUM VITAE

Wouter Stam (Ede, 25 October, 1979) obtained his M.Sc. in International Business from Maastricht University, the Netherlands. He has been an exchange student at the University of California and a visiting scholar at the Wharton School, University of Pennsylvania. He is currently an assistant professor at the Faculty of Economics and Business Administration, VU University Amsterdam, the Netherlands. His research interests include intra- and interorganizational networks, top management teams, strategic entrepreneurship, and the emergence of new industries and organizational forms. His research has been published in *Academy of Management Journal* and one of his papers received a best paper award at the Academy of Management Annual Meeting. Furthermore, Wouter Stam currently serves as an ad-hoc reviewer for *Academy of Management Journal* and has presented his research at numerous international conferences including the Academy of Management, Strategic Management Society, European Group of Organization Studies, Babson Kaufmann Entrepreneurship Conference, and the Sunbelt Social Network Conference.
### KEY ITEMS SURVEY I (MAY 2005)

<table>
<thead>
<tr>
<th>Construct</th>
<th>Survey Question</th>
<th>Chapter</th>
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<tbody>
<tr>
<td>(Li &amp; Atuahene-Gima, 2001; Wiklund &amp; Sheperd, 2003b)</td>
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<tr>
<td><strong>Sales growth</strong></td>
<td>What was your firm’s annual sales growth over the previous year?</td>
<td>3</td>
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<tr>
<td>(Wiklund &amp; Sheperd, 2005)</td>
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<tr>
<td><strong>New Product Introductions</strong></td>
<td>How many products/services has your firm introduced in the last year that were not only new or significantly improved to your firm, but also to the market and hence not previously introduced by competitors?</td>
<td>6</td>
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<tr>
<td>(Smith et al., 2005)</td>
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<tr>
<td><strong>R&amp;D Intensity</strong></td>
<td>What percentage of your firm’s previous year’s sales was invested in the development of new products and services?</td>
<td>6</td>
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<tr>
<td>(Rothaermel &amp; Thursby, 2005)</td>
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<tr>
<td><strong>Entrepreneurial Orientation</strong></td>
<td>In general, the top managers of my firm favor… 1. A strong emphasis on the marketing of tried and true products/services 2. No new lines of products/services 3. Changes in products/services have been mostly of a minor nature 4. A strong emphasis on R&amp;D, technological leadership, and innovations</td>
<td>2, 3, 5</td>
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<tr>
<td>(Covin &amp; Slevin, 1989; Lumpkin &amp; Dess, 2001)</td>
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<tr>
<td><strong>Innovativeness</strong></td>
<td>How many new lines of products or services has your firm marketed in the past 3 years? 1. Very many new lines of products/services 2. Changes in products/services have usually been quite dramatic 3. Changes in products/services have been mostly of a minor nature</td>
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<tr>
<td>Proactiveness</td>
<td>In dealing with its competitors, my firm…</td>
<td></td>
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<td></td>
<td>4. Typically initiates actions which competitors then respond to</td>
<td>1 to 7</td>
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<td></td>
<td>5. Is very often the first business to introduce new products/services, product technologies, etc.</td>
<td>1 to 7</td>
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<tr>
<td></td>
<td>Typically responds to actions which competitors initiate ®</td>
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<td></td>
<td>Is very seldom the first business to introduce new products/services, product technologies, etc.</td>
<td>®</td>
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<td></td>
<td>In general, the top managers of my firm have…</td>
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<td></td>
<td>6. A strong tendency to be ahead of other competitors in introducing new products/services</td>
<td>1 to 7</td>
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<td></td>
<td>A strong tendency to “follow the leader” in introducing new products/services</td>
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<td></td>
<td>7. A strong proclivity for low-risk projects (with normal and certain rates of return)</td>
<td>1 to 7</td>
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<tr>
<td></td>
<td>A strong proclivity for high-risk projects (with chances of very high returns)</td>
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<td></td>
<td>In general, the top managers of my firm believe that…</td>
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<td></td>
<td>8. Owing to the nature of the environment, it is best to explore it gradually via timid, incremental behavior</td>
<td>1 to 7</td>
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<td></td>
<td>Owing to the nature of the environment, bold, wide-ranging acts are necessary to achieve the firm’s objectives</td>
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<td></td>
<td>When confronted with decision-making situations involving uncertainty, my firm…</td>
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<td></td>
<td>9. Typically adopts a cautious, “wait-and-see” posture in order to minimize the probability of making costly decisions</td>
<td>1 to 7</td>
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<tr>
<td></td>
<td>Typically adopts a bold, aggressive posture in order to maximize the probability of exploiting potential opportunities</td>
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<tr>
<td>Bridging Ties</td>
<td>Please circle the number best describing the extent to which top managers at your firm have maintained personal ties during the previous year with:</td>
<td>3, 5</td>
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<tr>
<td></td>
<td>1. Industry associations</td>
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<td></td>
<td>2. Health institutes</td>
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<td>3. Political parties</td>
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<td></td>
<td>4. Specialized training and education centers</td>
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<td>(Li &amp; Zhang, 2007; Peng &amp; Luo, 2000)</td>
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<tr>
<td><strong>Knowledge Resources</strong>i</td>
<td>Below are several descriptions of knowledge and expertise that your firm may possess. Please indicate for each description the extent to which your firm has a weak or a strong position relative to its key competitors.</td>
<td>4</td>
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<tr>
<td><strong>Market Knowledge</strong></td>
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<td></td>
<td>1. Expertise in marketing</td>
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<td></td>
<td>2. Staff capable of marketing products/services</td>
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<td></td>
<td>3. Expertise in customer service and support</td>
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<td><strong>Technological Knowledge</strong></td>
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<td>4. Technical expertise</td>
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<td></td>
<td>5. Staff with innovative ideas for new products/services</td>
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<td></td>
<td>6. Expertise regarding developing new products/services</td>
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<tr>
<td><strong>IP Knowledge</strong></td>
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<td></td>
<td>7. Expertise in managing intellectual property rights</td>
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<td></td>
<td>8. Possession of licenses, brand names, and other property rights</td>
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<td></td>
<td>9. Expertise in dealing with legislation and regulations</td>
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<tr>
<th><strong>Managerial Human Capital</strong></th>
<th>Below are several areas in which your team members may have work experience. For each area, indicate the total number of years of experience that you and your team members had obtained prior to founding your current venture:</th>
<th>2-5</th>
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</thead>
<tbody>
<tr>
<td><strong>Functional Experience</strong></td>
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<tr>
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<td>1. Technical functions</td>
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<td>2. Marketing functions</td>
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<td></td>
<td>3. Financial functions</td>
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<td></td>
<td>4. Senior management functions</td>
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<tr>
<td><strong>Industry experience</strong></td>
<td>5. The Information Technology (IT) industry</td>
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<tr>
<td>Start-up experience</td>
<td>Please indicate the total number of firms you and your team members had founded prior to founding your current venture.</td>
<td></td>
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<tr>
<td><strong>Managerial Social Capital</strong></td>
<td>Check off the firms where you personally know the CEO or someone else from the board. By “personally” we refer to somebody with whom you could at least start a conversation when meeting each other on the street and who you know on a first-name basis. Check off the firms where you are friends with the CEO or someone else from the board. By “friend” we refer to somebody with whom you spend time after work or undertake social activities with. Check off the firms where you regularly exchanged information with / sought advice from the CEO or someone else from the board regarding important business matters over the last year. (2 items)</td>
<td>2-5</td>
</tr>
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<td>(Bell, 2005; Tsai, 2001)</td>
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<tr>
<td><strong>Organizational Ties</strong></td>
<td>Check off the organizations with which your organization has collaborated during the past year on activities that aimed to promote the use and knowledge of open source software in the Netherlands. Check off the organizations with which your organization has collaborated during the past year on activities that aimed to advocate the interests of the Dutch open source software community in regional, national, and international politics. Check off the organizations that have been sponsored by your organization during the past year, for example by providing financial resources, goods, or unpaid services. Check off the organizations where you or someone else from your board has been a board member during the past year.</td>
<td>5</td>
</tr>
<tr>
<td><strong>Community Participation</strong></td>
<td>Below are several kinds of activities that your firm could perform in open source software communities. Please indicate for each type of activity the extent to which your firm has performed this activity during the previous year.</td>
<td>6</td>
</tr>
</tbody>
</table>
| (Bonaccorsi et al., 2006; Ghosh & Glott, 2005; Von Krogh et al., 2003) | 1. Contributing code, bug fixes, and patches to open source projects  
  2. Writing software documentation for open source projects  
  3. Performing a coordinating function within open source projects (e.g., committer)  
  4. Translating software or documentation for open source projects  
  5. Providing ideas and suggestions for new software features to open source projects  
  6. Participating in discussions on mailing lists and discussion forums  
  7. Organizing workshops, conferences, and other events related to open source software  
  8. Financial sponsoring of events and activities related to open source software  
  9. Undertaking activities to raise public awareness for open source software |         |
<p>| <strong>Technical Participation</strong>     |                                                                                |         |
| <strong>Social Participation</strong>        |                                                                                |         |</p>
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<td></td>
<td>10. Participating in political activities (e.g., against software patents)</td>
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<tr>
<td></td>
<td>11. Participating in workshops, conferences, and other events related to open source software</td>
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</table>
| **New Venture Performance**<sup>1</sup> (Li & Atuahene-Gima, 2001; Wiklund & Sheperd, 2003b) | Relative to your principal competitors, rate your firm’s performance during the previous two years on:  
1. Sales growth  
2. Employment growth  
3. Market share  
4. Gross profits  
5. Net profit margin | 5       |
| **Sales Growth**<sup>2</sup> (Wiklund & Sheperd, 2005) | What was your firm’s average annual sales growth over the previous two years? | 5       |
| **Firm Innovativeness**<sup>3</sup> (Gatignon et al., 2002; Jansen et al., 2006; Subramanian & Youndt, 2005) | How would you rate your firm’s capability to generate the following types of innovations in the products/services you have introduced in the last two years?  
1. Innovations that make your prevailing product/service lines obsolete  
2. Innovations that fundamentally change your prevailing product/service lines  
3. Innovations that make your existing expertise in prevailing products/services obsolete  
4. Innovations that require you to learn from completely new or different knowledge bases  
5. Innovations that require you to develop many new skills | 4       |
| **New Product Introductions**<sup>4</sup> (Smith et al., 2005) | How many products/services has your firm introduced in the last two years that were not only new or significantly improved to your firm, but also to the market and hence not previously introduced by competitors? | 4       |

<sup>1</sup> Items measured on a 7-point scale, ranging from (1) “much weaker than competitors” to (7) “much stronger than competitors”  
<sup>2</sup> Items measured on an 8-point scale, ranging from (0) “no contact” to (7) “very extensive contact”  
<sup>3</sup> Items measured on a 5-point scale, ranging from (1) “never” to (5) “very frequent”  
<sup>4</sup> © = reverse coded


