

Development of practitioner guidelines for partnerships between start-ups and large firms

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Abstract

Purpose

This paper illustrates the development of the final outputs of a research project looking at partnerships between technology-based start-ups and large firms ('asymmetric' partnerships). It presents the stage of the research aimed at understanding how to best design outputs to assist firms in managing such partnerships.

Approach

A combination of company case studies, company workshops, an end-user survey and pilot dissemination programme were used to identify an appropriate form for the packaging and delivery of the research findings (i.e. what problems can be encountered in such partnerships, and what approaches companies have implemented to overcome these problems).

Findings

A range of approaches for overcoming the problems of managing partnerships between firms whose age and size is markedly different were catalogued. The research presented in this paper revealed that companies felt best able to learn from the experiences of others through a combination of direct support, multi-company workshops, and on-line access to selected materials.

Research limitations

The generalisability of the findings may be limited by the fact that the majority of the organisations collaborating in this research were either located in the high technology business cluster in and around the city of Cambridge, UK or had formed partnerships with companies in this geographic region.

Practical implications

Partnerships between technology-based start-ups and technology intensive large firms can provide an effective means to access and integrate the complementary assets required to bring a novel technology to market. This research will help firms overcome the numerous challenges involved in setting up and managing such partnerships by providing stakeholders with easier access to academic research findings. It will assist researchers who are considering how to disseminate research outputs to industry.

Originality / value

There is a strong body of work on improving the performance of partnerships in general, but less on overcoming the practical challenges of managing partnerships between firms of markedly different age and scale. In addition, the selection of the optimum process for ensuring that the findings of such research are used to support implementation remains a topic of debate. This work helps to address both gaps.

Keywords

Partnerships, start-ups, large firms, management guide, knowledge transfer.

Paper type

Research paper.

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Introduction

The focus of this paper is to describe how the outputs of academic research on partnerships between large companies and high-tech small firms, typically start-ups, (asymmetric partnerships (Fraser, 2004)) have been converted into practitioner guidelines.

Technology-based start-ups are typically resource constrained and often struggle to access the complementary assets they need to get their ideas to market and to generate value (Barney, 1991; Garnsey, 1998; Brush *et al.*, 2001). At the same time, shortening product life cycles, intensification of competition and increased product complexity has been driving change in the way large firms operating in technology-based industries innovate. A trend has been noted whereby firms in many sectors are moving away from a predominantly 'closed' approach to a more 'open' model of innovation (Chesbrough, 2003; Chesbrough *et al.*, 2006; IBM, 2006). Within an open innovation environment, start-ups can be an important source of technology for larger firms.

Bringing together the needs of technology-based start-ups and large firms seeking to apply an open innovation strategy points to the logic of partnering, i.e. the formation of mutually beneficial, non-trivial organisational links. However, research and anecdotal evidence show that making such partnerships work can be extremely problematic and not completely understood (Doz, 1988; Alvarez and Barney, 2001). To address this gap, research was undertaken to understand better why such partnerships are problematic, and to investigate what approaches have been used by firms to overcome the challenges. This background work has been reported in Minshall (2005) and Minshall *et al.* (2005). Consideration was then focused upon how best to transfer these results back to practitioners as evidence suggests that the outputs of research projects are not always presented to practitioners in a manner to support implementation (Pfeffer and Sutton, 1999; Van De Ven, 2007).

This paper is organised as follows:

1. A brief review is presented of the academic literature relating to partnerships between start-ups and large firms, and the challenges of converting the outputs of management research into a format that supports implementation.
2. The paper summarises the content to be transferred to practitioners: approaches and solutions to help those involved in asymmetric partnerships.

3. The research conducted for capturing the needs of potential users of the findings is then described.
4. The paper then presents examples of how the research results relating to dissemination have been implemented before presenting key conclusions.

Literature review

We start by reviewing research on the challenges of managing partnerships between start-ups and large firms. We then review research on the translation of management research into application.

For the purposes of this research, we are taking the term 'partnership' to specify a range of inter-organisational relationships:

"[...] in which the parties [...] maintain autonomy but are bilaterally dependent to a non-trivial degree." (Williams, 1991: 271).

There are a number of theoretical approaches that attempt to explain the function of partnerships. See de Rond (2003) for a review of these approaches. For the purposes of this research, we see partnerships as a means used by firms to access complementary assets along a continuum from the specific (e.g. to share a distribution channel) to the broadly defined (e.g. to explore areas for cooperation). The partnership may have an intentionally short term life (Duysters and de Man, 2003) or may be a long term strategic alliance (Lorange and Roos, 1992), and its function may change over time (Bidault and Salgado, 2001).

In terms of governance modes, partnership agreements can be split into three broad categories: equity, contractual and informal. These modes can be represented along a spectrum as shown in Figure 1.

Insert Figure 1

Figure 1 **Spectrum of partnership forms. Adapted from Lorange and Roos (1992) and van de Vrande *et al.* (2006)**

Each firm in the partnership may have different approaches to managing partnerships, from formal to informal, and from planned to emergent (Doz, 1988). Firms' prior experiences at managing partnerships and the way in which they link strategy and operations in relation to the partnership all contribute to the 'collaborative maturity' of the partners (Fraser *et al.*, 2003).

There are specific challenges facing a start-up firm in managing a partnership with a larger, mature firm, as reviewed in Alvarez and Barney (2001) and de Rond (2003). One of the key challenges relates to the difference between the rate at which a large firm is able to learn about the details of a start-up's core technology, and the rate at which the start-up firm is able to imitate the organisational resources of the large firm (Alvarez and Barney, 2001).

While issues relating to firm-level collaborative product development have been researched (e.g. Farrukh *et al.*, 2003; Emden *et al.*, 2006), there is comparatively little work on the challenges encountered when one of the partners is a very young company with limited commercial track record seeking to exploit a technology at a very low readiness level (i.e. still at the proof of concept stage, or which has only been shown to operate in a laboratory environment (Mankins, 1995)).

For the purposes of this research, we have labelled such partnerships 'asymmetric', to emphasise the difference in resources, capabilities and experience between the two firms involved.

We now briefly review the literature on the conversion of management research into application. There is already a well established body of literature examining the wide range of activities that have been variously labelled technology transfer, knowledge transfer and knowledge exchange. See, for example, reviews from Bozeman (2000), Amesse and Cohendet (2001), and D'Este and Patel (2007). Much of the research focuses on the transfer of packaged or codified knowledge from the physical and life sciences, but there are particular issues that relate to the transfer – and implementation – of outputs of management research (Pfeffer and Sutton, 1999; Van de Ven, 2007).

Three broad issues have been identified by Van de Ven (2007) in relation to what he describes as the theory-practice gap. Firstly, is the lack of use of the outputs of management research a result of inappropriate communication methods? Research shows that both managers and consultants who advise them are unlikely to have read the academic literature regularly (Rynes, *et al.*, 2002; Rousseau, 2006). An approach to overcoming this gap between knowledge generation and implementation is to change the way in which the knowledge is packaged, and the way in which it is transferred. Workbooks can provide a more accessible route to knowledge and one which is more closely linked to application. Examples of research outputs that have been converted into workbooks can be seen in Neely *et al.*, (1996), Gardiner

et al., (1998), Pongpanich (2000), Moultrie and Fraser (2004) and Mortara *et al.* (2007). However, Pfeffer and Sutton (1999) argue that even when outputs are packaged into user-accessible formats, there may still be a poor rate of implementation of the results.

Secondly, the problem may relate to the differences in the type of knowledge. Van de Ven (2007) argues that science and practice knowledge are two distinct kinds of knowing. Scientific knowledge is focused upon building generalisations and theories, whereas practical knowledge in the professional domain is connected to the structure and dynamics of particular situations. Consequently, "*Exhortations for academics to put their theories into practice and for managers to put their practices into theory may be misdirected because they assume that the relationship between knowledge of theory and knowledge of practice entails a literal transfer or translation of one into the other*" (Van de Ven, 2007:4).

The third problem identified by Van de Ven (2007) relates to the actual production of the knowledge. In relation to the development of management knowledge, a process of enquiry that is unengaged with the stakeholders beyond the academic environment may face problems in transfer and implementation. Approaches with the common theme of "involvement with members of an organization over a matter which is of genuine concern to them" (Eden and Huxham, 1996:75), i.e. action research, are a potential solution. The process approach to research (Platts, 1993) provides another route to ensuring relevance of the production of new knowledge by engaging with the target organisations at three stages (i.e. creating the process, testing and refining through application, investigating the wider applicability).

For the purposes of the research presented in this paper, we are focusing our attention onto the different communication methods used to ensure knowledge is transferred in a format most likely to support implementation, and on the on-going engagement of stakeholders throughout the research and dissemination process.

Methodology

Research outputs for transfer to practitioners

In the period 2004-2006, research was undertaken to examine the motives for start-ups and large firms wishing to collaborate, the management problems such partnerships present, and the approaches used to overcome these problems. The research drew upon concepts from the

resource-based view of the firm to provide a structure for capturing issues and approaches using a case study method. Data was captured from a range of companies using a combination of single-company interviews and multi-company workshops. The results of this research have been reported in Minshall (2005) and Minshall *et al.* (2005) but the main findings relevant to this paper are summarised in the following sections.

The case study data was structured around the viewpoints of four key stakeholder groups: the start-up, the large firm, the start-up's investors, and the legal counsel for both parties. A summary of issues identified by each of these stakeholder groups is given in Table I.

Insert Table I

Table I Example issues from different stakeholder perspectives

Re-examination of the cases with reference to the literature on partnering revealed that the factors can be broadly grouped around: (a) generic partnership issues (i.e. issues that are likely to emerge in a partnership between any two firms) and (b) specific issues related to asymmetric partnerships (i.e. where there are significant differences in scale and commercial experience between the two firms).

Attention was then turned to re-examining the cases to see what approaches had been used to address the specific challenges of asymmetric partnerships. Examples of approaches observed from the case studies are given below in Table II.

Insert Table II

Table II Examples of approaches used by start-ups and large firms

Development of practitioner guidelines

The guidelines were developed in four steps:

1. A draft workbook was written.
2. The workbook was presented for comment at multi-company workshops.
3. Interviews and an on-line survey were used to gather feedback from potential users.
4. A pilot programme of activities was implemented.

The workbook drew upon the lessons learned from the production of similar publications for other research projects by the authors and incorporated the issues and approaches summarised in Table I and Table II. The structure of the workbook combined briefing notes, checklists and guidelines as shown in Figure 2.

Insert Fig. 2

Figure 2 Structure of the prototype workbook

The checklists that formed the core of the workbook were designed to help users from both established firms and start-ups highlight areas of possible concern when assessing a possible partnership, or in reviewing an existing partnership. An example of a checklist item is given in Figure 3.

Insert Figure 3

Figure 3: Example checklist from prototype workbook

This prototype workbook was then presented for comment at multi-company workshops. Feedback from the workshops revealed that, although the content of the workbook did raise important issues, there were concerns at the utility of the workbook for helping address the specific issue of setting up and managing asymmetric partnerships. In response to these concerns, increased effort was focused upon building better understanding of how users would wish to have the outputs of the research converted into something that could support their partnering activities.

To help identify an effective mechanism for transferring the results of this research, a review of the needs of potential users of this research was undertaken. A series of face-to-face

interviews were carried out with managers within 20 of our case study organisations. The aims of these interviews were to identify what possible type of support these managers would value in overcoming the challenges of asymmetric partnerships. Based on the issues raised in these interviews, coupled with issues raised in the earlier part of the project, an on-line survey was designed and deployed to triangulate these issues against those of a wider group. Key aims of the survey were to:

1. Assess the need for a support method by both start-up and established firms.
2. Explore the requirements of a support mechanism from both parties.

112 organisations were approached to provide data for this survey. 38 full responses were received (16 from large firms and 18 from start-ups) giving a return rate of 34%.

Results

91% of the survey respondents indicated that they either 'strongly agreed' or 'agreed' that a structured support method for setting up and managing partnerships between start-ups and large firms would be useful. The responses to the questions relating to two aspects of the requirements of a support mechanism are given in Figures 4 and 5.

Insert Figure 4

Figure 4 Summary scores for questions relating to the ranking of functions required to support partnership setup and management

Note: Respondents were asked to indicate their ranking by giving a score from 1 to 7, with 7 being 'Very important'.

The survey results presented in Figure 4 revealed firstly that both start-up and large firms put greater emphasis on having issues highlighted and prioritised than in having prescriptive solutions delivered. Secondly, there were few differences between the functions required by the start-ups and the large firms.

Insert Figure 5

Figure 5 Summary scores for questions relating to how potential users would rank support options

Note: Respondents were asked to indicate their ranking by giving a score from 1 to 7, with 7 being 'Most useful'.

The survey results presented in Figure 5 revealed the preferences for the format of the knowledge transfer activities:

- Direct contact with a neutral party (e.g., a facilitator or mentor) with who issues could be discussed.
- Multi-company events where issues could be raised and shared, and different practices and experiences could be discussed.
- Access to materials on-line (for the start-ups in particular).

Based upon the results of this market analysis, an integrated set of activities was developed and piloted. These activities were:

- Multi-company **workshops** held at local technology business incubators.
- The development of a **community of practice** of those interested in the setup and management of asymmetric partnerships. This community was drawn from those that have attended the workshops and related events. The community was connected via attendance at events and through a secure intranet. The intranet provided access to documents and presentations that members of the community wish to share with each other.
- A public **website** (www.managingpartnerships.net) providing introductory information on this topic, i.e. case studies, short briefing papers, sources of further information, etc.
- Access to **direct support** from experienced mentors and advisors drawn from the community of industrial partners and university associates. These mentors and advisors are able to use the lessons shared and captured by the community of practice to inform the support they provide.

Discussion

The research showed that while asymmetric partnerships did present numerous management problems for all the organizations involved, some had found ways to overcome these challenges. However, it was not clear how such experience could best be disseminated to help other organizations.

The research revealed a number of issues in relation to the transfer of knowledge into a format appropriate to support implementation of the lessons learned. To avoid problems identified by

Platts (1993), Eden and Huxham (1996) and Van de Ven (2007), the project had a high level of stakeholder engagement throughout the research process. The research originated in a need identified from initial interviews with stakeholders, and the dataset relating to the formation and management of asymmetric partnerships was built up iteratively through case study interviews and multi-company workshops. This level of engagement enabled early recognition that the initial plan for the dissemination of research outputs was inappropriate. Rapid feedback of the views of potential end-users indicated that workbooks are a dissemination method which would not have the highest impact. The close contact with stakeholders enabled the gathering of a wide range of viewpoints on preferred dissemination and engagement routes.

Following this input from end-users, two dissemination workshops (one fee-based, one free) were held attracting forty company managers involved in, or planning, asymmetric partnerships. Fourteen of these managers were from outside the Cambridge sub-region, and two from overseas. A simple example of how the workshop approach could be a valid way for disseminating these research outputs is given by the fact that over 80% of companies attending indicated that the information presented would be of direct benefit to their company. An additional positive note was the endorsement received from a government-funded independent company organization which, after participating in one workshop, agreed to fund four further workshops to be delivered around the UK to support start-ups in forming and managing asymmetric partnerships in one specific sector. This in turn has led to interest in running such workshops from one UK-based industry association and one UK regional government agency. Although these follow-on activities are not a validation of the workshop approach, they are a demonstration that presenting the results in form of a workshop gives visibility to the research work and may generate further opportunities for dissemination and engagement. From the researcher perspective, the workshop format allows discussion and direct sharing of results, and enables managers to engage with the findings of the research more readily than might be the case if the same information were presented only in a workbook format. The multi-company workshop provides a mechanism by which the research team can continue to engage with a community actively involved in the formation and management of asymmetric partnerships. However, this method of dissemination requires a continuous investment of time and effort by the research team.

As part of the workshop offering, attendees could request to become members of the 'community of practice' and gain access to the related intranet. The intranet provided a secure

environment for sharing resources, requesting assistance, and discussion. Almost all attendees indicated a desire to have access to this resource. Usage of the intranet peaked in the period immediately following each workshop but declined to almost zero unless specific prompts were sent by a member of the research team. Discussions with members of this community and similar ones indicated that the main perceived value of the community was in hearing examples of the experience of others (i.e. many-to-many interactions), and in knowing who to call to discuss particular issues (i.e. one-to-one direct queries). There have been very few examples of members of the community posting queries on-line or via email to which the wider group can respond. However, there seems to be an emergent role for the network facilitator (currently the research project principle investigator), i.e. someone that members of the community can contact to seek advice such as "Who might know about X?" or "Do you anyone that has tried Y?"

The public website set up to provide an introduction to the topic of starting and managing asymmetric partnerships had around 100 downloads per month of the briefing materials provided on-line.

In terms of the provision of direct support through one-to-one consultations, there has been very limited observed uptake. Less than 10 queries for such assistance have been recorded during the pilot period. However, it is not clear whether or not those seeking support are finding the assistance they need through direct contact with members of the community.

In summary, the results of the pilot period of knowledge transfer activities reflect the findings of the user survey in some areas but not in others. For example, the survey showed a clear desire for one-to-one consultations to support their partnering activities, yet there has been little evidence of this service being used. The survey also showed that large firms gave the lowest priority to multi-company workshops, yet large firms have been the most significant group of attendees at these events.

Conclusions

Four conclusions emerge from the research presented in this paper.

1. Asymmetric partnerships present many management challenges but organizations have found ways to overcome many of these.
2. Engagement with stakeholders throughout the research and dissemination process is very important as it allows emergent issues to be addressed. Stakeholder engagement

avoids the need for researchers to be committed from the outset to a single path for both research and dissemination.

3. The use of a workbook-based approach for addressing a complex multi-stakeholder problem such as the setup and management of asymmetric partnerships may alone not be the most effective means of transferring research outputs to practice. Both start-ups and large firms want to participate in a range of activities and be members of networks which allow experiences and issues to be shared and discussed with other firms.
4. The development of any approach such as that outlined in this paper is never likely to reach a point of completion. There is a need for on-going iteration of both content and activities to deliver effective support back to companies. This presents both a challenge and opportunity. The challenge is that research projects are typically funded to deliver results at a clear endpoint. On-going iterations and improvements to outputs do not typically form part of research funding proposals. Yet facilitation of, and engagement with, a community practice allows the researcher to be engaged with the knowledge transfer activities and this in turn may support the identification of new research areas.

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Tables and figures

Table I Example issues from different stakeholder perspectives

Start-up perspective	Large firm perspective	Investor perspective	Legal perspective
How to get in? For large companies, the complexity and scale of operations may mean that even their own staff may not be able to help a start-up contact the right people.	Paranoia over IP and NDAs: Start-ups are often reluctant to reveal details of their technology without a non-disclosure agreement (NDA). What they may fail to see is that somewhere within the large company IP may already be owned in this area.	Increased credibility: Having visible links with a well-known brand can raise the credibility of a start-up in the eyes of investors and potential customers. However, start-up may invest a disproportionate amount of time making ineffective links with many firms.	Capability (or absence) of start-up legal team: A start-up, being resource constrained, may be reluctant to spend money on legal counsel at all, or only when negotiations are at an advanced stage.
Who to talk to? What the start-up really wants to know is: Who is the decision maker? Who influences them? Who will be working on implementing the partnership?	Brand abuse: Start-ups are often very keen to promote relationships with established players as it may be seen to confer credibility. They may use the partner's brand in inappropriate ways in pursuit of this.	Access to complementary resources. Partners can provide start-up with channels to market, production capability and additional know-how that may de-risk the start-up. However, there are many challenges in actually getting what is needed from a partner.	Excessively restrictive contracts. Counsel representing large firms will be understandably focused on minimising risk for their client and this may result in restrictions placed on who else the start-up is able to work with once the partnership deal has been agreed.
Transfer of responsibility. The transfer of responsibility from the large firm's R&D to their legal and procurement departments can change and disrupt the flow of the negotiations.	Technology, product or solution? The gap between technology demonstrator to fully-supported product can often be quite significant and start-ups may not appreciate the time and cost involved in moving between the two.	Funding: Partners may also become investors, through corporate venturing, if they regard the start-up as strategically important. This can result in conflict between the venturing activities and other business activities of the same firm.	Negotiation process management: If the move from general to specific discussions are left too late, this may result in one party feeling 'ambushed' with what it feels are demands not in keeping with the spirit of the discussions to date. If these are brought in too early, they may stifle the broader discussions.
Slow decision cycles. It is often very hard for large firms to make decisions at 'start-up speed', due to their complexity, size, and multiple layers of management.	Different functions: Even when there is enthusiasm from R&D within the large firm, the transfer to operations (and 'collision' with procurement systems) can be problematic.	Differing timeframes: Investors will be interested in maximising the value of the start-up within the relatively short timeframe of their investment. The start-up management team may be planning for a slower growth trajectory.	Transactional legal issues: Lawyers will be ill-placed to provide best advice if not fully informed of the commercial drivers and the competitive arena, the business plans of both parties and the value proposition around which the partnership is based.
Power imbalance. The large firm may abuse its position by drawing-out negotiations and to attempt to prevent discussions with competitors.	Resource constraint & financial stability: Start-ups need to be prepared to be subject to due-diligence checks to give potential partners confidence in their viability.	Distraction for management team: Making partnerships work can consume significant amounts of management time, something which is in scarce supply in a start-up. Investors may be more interested in management focusing on generating revenue from customers than building speculative partnerships.	
Not understanding start-ups. Demands made of start-ups by large firms sometimes show a lack of awareness of how a start-up operates.	Culture: Start-ups may be run by individuals impatient for progress but unwilling to be governed by schedule and discipline dictated by the larger firm.	Complexity: If the start-up team has established a number of partnerships, potential investors may be nervous about the complexity of managing (and potentially disengaging from) multiple commitments.	

Table II: Examples of approaches used by start-ups and large firms

	Examples of approaches used by start-ups	Examples of approaches used by established firms
1. The strategy and business model	<ul style="list-style-type: none"> Business strategy: Draw information from the business plan to map possible business models for addressing different opportunity areas. Capture non-confidential aspects as a roadmap for communication with potential partners. Identify factors (e.g., funding) that may change the business model. Partnering strategy: Map out internal competences (tacit and explicit) and identify complementary assets needed to address differing opportunity areas. Use non-execs, investors etc. to help identify potential routes to accessing these assets. Be aware of 3 impacts of partnership – helping intended business model; providing new opportunities; restricting future opportunities. 	<ul style="list-style-type: none"> Innovation strategy: Within broader strategy of company, develop a roadmap or portfolio map that can be shared with start-ups that positions the technology capabilities and needs of the firm (including criticality), and links these to opportunity areas. Technology acquisition: Map all sources and mechanisms for internalising technologies (e.g., internal R&D, co-development, licensing, investment, acquisition). Ensure early engagement with key stakeholders in technology acquisition process (R&D, procurement, legal/IP, production, venturing, etc.) Consider de-risking through multiple internalising routes.
2. The technology	<ul style="list-style-type: none"> Technology readiness level: Make a realistic assessment of the readiness level of the technology and draw on stakeholder's experiences to identify tasks (e.g., compliance) and costs associated with manufacturability. Technology ecosystem: Map system requirements for the technology (i.e., what are the other elements of the system that will deliver value to the end-user?). Who owns these other elements, and what are the relationships between these different organisations? 	<ul style="list-style-type: none"> Communicate need: Use shareable roadmap to position start-up's technology and complementary resources needed, and likely routes for development. If partnerships have been formed with other start-ups, use these as examples. Technology readiness level: Assess readiness levels for the start-up's technology and how much of it is tacit vs. explicit. Assess tasks for raising readiness level, their associated costs, and who has the capability to do so. Assess start-up's commercial maturity. Balance with consideration of criticality from within innovation strategy.
3. The organisations	<ul style="list-style-type: none"> Understanding large firms: If start-up management team do not have large company experience, get non-exec directors, mentors, investors who have worked in large firm to brief management team. Understanding partners: Develop simple checklist to cover issues such as 'Has this company ever worked with a start-up before?' Talk to their suppliers to get a feel of partner's 'clockspeed'. Educate partners: Get large firm to engage other than through formal meetings with the start-up to get a better sense of 'start-up culture'. 	<ul style="list-style-type: none"> Explain: Spend as much time as is feasible to help start-up understand needs, internal processes and culture of large firm. Use process maps to show start-up how engagement could work and how decisions are made. Shield: Use dedicated team or individual champion to act as first point of contact and to shield start-up from unnecessary bureaucracy and to smooth communications in both directions. Use of intermediaries: Links with consultants and universities can provide a platform from which relationships with start-ups can be built.
4a. The deal - Setup	<ul style="list-style-type: none"> Who makes the deal? Find out who are the influencers, decisions makers, etc within the large firm. Get their names; map their roles and their relationships. What is the deal? Have a clear sense of what is really wanted from the partnership, what can be realistically delivered, how this may change over time, and what the possible direct and indirect benefits are. Use experience from investors, non-execs, etc from the outset. Role of lawyers: Legal counsel should be sought at the outset of plan to partner. Though costs will be incurred, they are likely to be less than if lawyers are brought in later to fix problems. It's not about meetings: Decisions are unlikely to be made in meetings with start-up. Large company partnership manager should be given the ammunition to support start-up's case. Set-up partnership management process: Aside from what may be in the contract, put in place regular review meetings, updates, etc. Draw upon experience of previous partnerships. 	<ul style="list-style-type: none"> Setting the right tone: Agree overarching principles early on and use intermediate step of term sheet to allow discussion around specific issues. Be as open as possible with the start-up about concerns. Cash flow: Be aware of start-up's cash flow position – and see if a deal can be based around short-term revenue generation. Working with start-up on specific cash generating project will allow assessment of possible future development (or termination) of partnership. Consult widely and prepare ground: Drawing in views from internal stakeholders (R&D, legal/IP, procurement, corporate venture capital, production, commercial, etc) in the early stages of the partnership will smooth deal setup.
4b. The deal - On-going management	<ul style="list-style-type: none"> Communication: Keep in regular and open contact with partner, and do not only contact when there is a problem. Assign members of management team to 'mark' key contacts at large firm. Keep board and investors informed of developments. Document: Ensure that all interactions are documented. In case of any disagreements, this may prove critical information. Review: Staff who are key to the partnership may change roles. Strategies and business models are not fixed. Regular reviews of the partnership, by management team, with board, and with the partner will help ensure the partnership continues on the best footing, or is adapted / terminated. 	<ul style="list-style-type: none"> Transitions: Those who set-up the deal and those who are involved in its management may not be the same people. Ensure efforts are made to manage this transition. Communication: Keep the start-up informed of developments through engagement in, for example, internal conferences. Devote time to keeping up to date with partner. Monitoring: Keep start-up informed of up-coming milestones and their criticality. Ensure that if under-performance is noted, the start-up knows early, and is given assistance to deal with this. Review: Partnership manager should ensure that the relationship with the start-up is fed into business and technology strategy review processes.

Figures

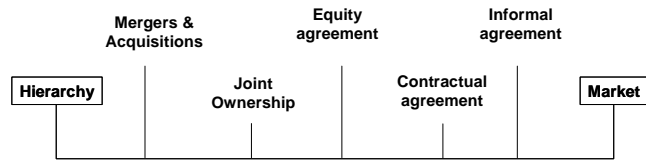


Figure 1

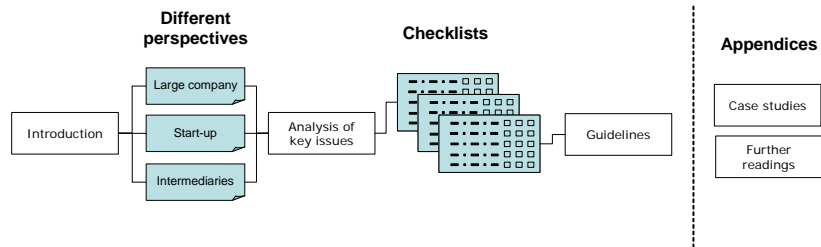


Figure 2

Specific start-up issues

	unsure	disagree	agree	not relevant
Strategy and Business model				
The project is of significant strategic importance to the larger firm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It is clearly understood whether the larger firm expects a technology, product or solution	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The start-up understands whether larger firm are partners or customers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Larger firm has a strategy for access to new technologies created by start-ups	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Start-up has 'soft-start-up' option to develop revenue stream through R&D contracts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Start-up is flexible enough to consider change of business model if necessary	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The implications of failure have been considered	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The larger firm respects the independence of the start-up	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Working with larger firm will enhance / has enhanced start-up's credibility in the eyes of investors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Having completed the initial project / deal, further (and better) opportunities are presented	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Technology readiness				
The start-up's technology is ready for volume production	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The technology can be exploited using existing production processes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Responsibility for production has been allocated	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Responsibility for any remaining technology / product / process development has been allocated	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The technology is packaged in a way which will facilitate its incorporation by a customer / licensee	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The technology is standalone and does not need creation of new infrastructure or adaptation of existing technology	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Successful adoption of the technology does not depend on multiple partners	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

zone for potential concern

Figure 3

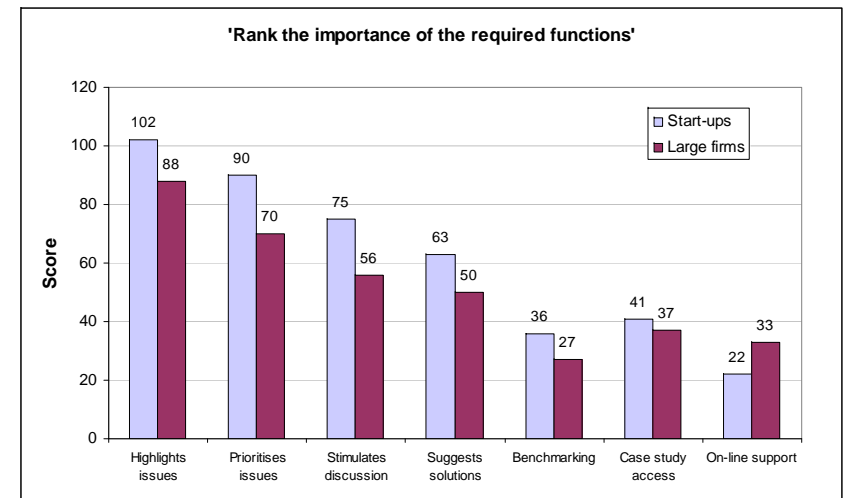


Figure 4

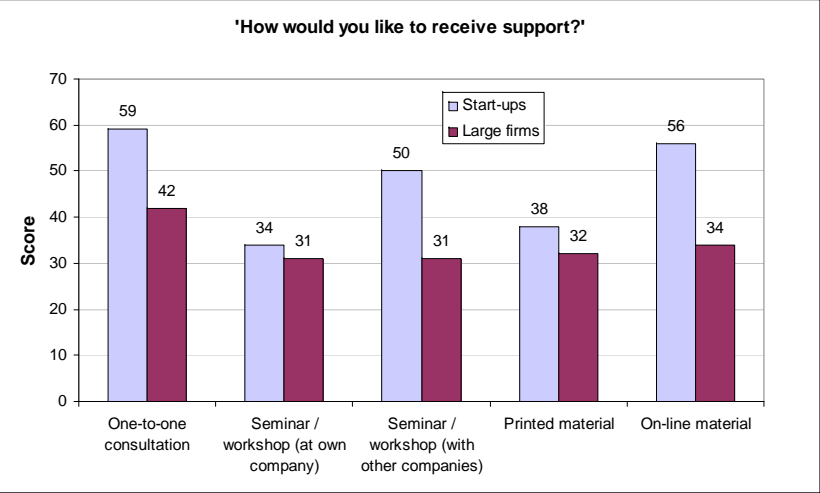


Figure 5