Transitory alliances: an instrument for surviving turbulent industries?

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Over the past decades, firms have constantly struggled to deal effectively with their rapidly changing environment. Especially in high tech industries, costs of R&D have rocketed, whereas steep learning curves and ever shortening product and technology life cycles have reduced the time to recoup these costs. Under such conditions of turbulence, a new form of alliances becomes an important part of the innovator’s toolkit: transitory alliances. Transitory alliances can be defined as short-lived alliances that focus on completing narrowly defined tasks in a very short time frame. Companies can no longer rely exclusively on their traditional alliance and M&A practices to survive industry turbulence. Furthermore, transitory alliances can be a wellspring of innovation and provide companies with access to a portfolio of new ideas. They can help companies to acquire knowledge in a swift manner, thereby strengthening their ability to survive the high speed of change. The specific characteristics of this alliance type are discussed in this paper. Typical examples are taken from Internet related sectors.

Introduction

In the past years, technological changes have been sweeping through the economy. In vein with Schumpeter’s notion of ‘creative destruction’ technological changes are continuously destroying existing industry structures and creating new ones. Firms better equipped than others to meet these environmental changes may grow, while other less successful firms decline. However, unlike in orthodox theories, competitive forces do not establish a static equilibrium in which successful firms achieve their optimal size, and unsuccessful firms disappear. Instead, the industry is in a constant disequilibrium moving from one state to the other. The most conspicuous recent example of course, is the Internet sector, but other sectors have had their share of turbulence as well.

An increasing number of organisations has tried to deal with these forces of creative destruction by engaging in new hybrid organisational forms such as strategic alliances. In this paper we will argue that:

- Strategic alliances are no longer a second best option to stand-alone alternatives or mergers and acquisitions. Alliances can provide flexible and efficient solutions for the acquisition of technologies.
Firms can no longer rely exclusively on their traditional alliance and mergers and acquisitions (M&A) practices. To survive turbulence, firms should increasingly engage in a new breed of alliances, transitory alliances. These are defined as short-lived alliances that focus on completing narrowly defined tasks in a very short time frame.

Turbulent business environments

A business environment is turbulent when several components of that environment are subject to rapid, frequent or unpredictable change. In a turbulent environment, it is not possible, nor desirable, to commit resources on a long-term basis to only one technology. Instead, under conditions of turbulence a company needs access to a variety of technological options, each of which can be exercised or abandoned at short notice.

The most recent example of turbulence is the Internet boom and bust. Although many critics have recently downplayed the importance of the Internet, the Internet has contributed to increased turbulence. For example, new technologies may form a threat to established industry leaders. Most notably, the music industry is under threat of MP3 technology and is missing substantial revenues because of people downloading music from the Internet.

Also, the Internet is a powerful driving force for innovation. New technologies emerge regularly that may trigger off new technological paths. These radical technological innovations often drastically alter the price/performance ratio of high-technology products and often act as driving forces of ‘creative destruction’, which threatens incumbent industry leaders and opens up opportunities for new firms. Under these circumstances it might be sensible for any organisation to shift its attention towards the new technological paradigms. However, most incumbent firms are characterised by a strong inertia, which prevents them from transforming their current products and technologies. Their position as reliable and accountable organisations, as well as their sunk costs in equipment and personnel prevents them from redirecting their focus to the new (often more promising) paradigm. It is found that under these conditions incumbents even tend to increase investments in the old technologies rather than to switch to the new technological regime. Firms with a relatively successful background are often even more resistant to change than other firms. This so-called ‘success breeds failure syndrome’ (Starbuck et al. 1978) is often observed by established industry leaders. However, the likelihood of successfully switching to a new technology is not only a function of willingness to change but can also be seen as a result of the competence to change. Such a competence is based on the ability to move into new opportunities quickly. Continued reliance on existing internally developed core competences makes firms extremely vulnerable under conditions of radical change.

Many authors have argued that, under conditions of turbulence, firms will therefore show a growing preference for more flexible forms of organisation such as alliances (see Figure 1).

M&As are generally considered to be less equipped to deal with such a turbulent environment and would be increasingly geared towards low-tech sectors in which learning and flexibility are less important. The Internet boom supports this view. Figure 2 shows that almost 40% of all alliances are Internet related whereas Internet related mergers and acquisitions account for only 13%. Hence, there appears to be a preference for flexible forms. In the face of recent developments in the world-economy that thrive on flexibility, experimentation and speed, M&As are often compared to oil tankers in a rafting river. Under such conditions, in which control through hierarchy is less important than learning and experimentation, alliances seem to be the mode of choice. This is in line with early organisation theory from the 1960s (e.g. Lawrence and Lorsch, 1967), which predicts that loose organisational structures are better suited to deal with environmental turbulence than integrated organisational structures. Strategic alliances seem to provide flexible, fast-to-build knowledge acquisition solutions at very low costs. In spite of the marked advantages of alliances over other knowledge appropriation modes, alliances are still conceived by many companies as second-best options compared to internal accumulation of knowledge and to M&As. Even in turbulent times firms still often resort to their existing practices of internal development and M&As. In the past years, however, we are witnessing the emergence of a
new breed of alliances that may challenge the domination of the more traditional knowledge acquisition modes. These so-called transitory alliances have distinct features that are specifically geared towards the demands of a turbulent business environment. Although this alternative form of organization shares many of the features of traditional strategic alliances we will show that

Figure 1. Number of newly established strategic alliances (worldwide), 1985–2000 (Thomson Financial).

Figure 2. Internet related M&As and strategic alliances as a percentage of the total number of alliances and M&As, 1994–2000. Source: based on Thomson Financial.
they can be considered as a separate form that can be used as a successful alternative to other external knowledge appropriation modes. This makes them an interesting tool for R&D managers.

Transitory alliances: a new breed of alliances

Transitory alliances can be defined as particularly short-lived non-equity alliances that focus on completing narrowly defined tasks in a very short time frame. Recently, this specific kind of non-equity alliances has by far replaced equity joint venture type of alliances as the most dominant form of alliance in dynamic high-tech sectors (see Figure 3).

However, transitory alliances are not limited to Internet environments. In biotechnology this alliance type also occurs. In low-tech industries transitory alliances are useful as well. For example, after the 9/11 attacks airlines faced a high level of turbulence, with a drop in demand, new safety measures being taken and an uncertain outlook for the future. Many airlines entered into short-term alliance agreements, lasting for less than 6 months, to drive down costs and share airline routes. Hence: turbulence is the key to transitory alliances. In the case of airlines, learning may not be a specific objective of the transitory alliances, but they do share many of the characteristics with other such alliances. Although transitory alliances are related to their predecessors, they have a number of distinct features that clearly separates them from traditional alliances (see Table 1).

Motives: market access versus technology access

Traditionally, most alliances were undertaken between large companies in order to gain access to foreign markets or to improve scale of operations. Even in dynamic high technology sectors, alliances were rarely used for innovative purposes. External acquisition of technology by alliances was considered to be difficult and rarely a necessity. The vast economic and technological developments in the last decade have, however, overthrown traditional thinking about alliances. Today, knowledge acquisition has become the predominant motive to engage in alliances.
Because of their particular fast-to-build and flexible nature, transitory alliances are better equipped to deal with some forms of knowledge acquisition in turbulent environments than more traditional alliances. An example is Hewlett-Packard's cooperation with Intel on the Concept PC 2001. The partners collaborate on a project to clarify the future possibilities of the PC. There is no commercial objective, as the developed product will not be marketed. The only aim is to learn and build up knowledge about what may be technologically possible.

**Speed: careful planning versus fast-to-build, short-lived alliances**

Because in high-tech sectors time-to-market is an essential competitive factor transitory alliances are often established without careful preparation and clear long-term goals. Especially in the Internet sector, the existence of network externalities urged firms to cooperate in order to reduce lead times for their innovative products. The discussion about network externalities has become a common theme in economics. It suggests that the value of a connection increases exponentially as the number of connections increases arithmetically. Although network externalities exist in many ‘old economy’ contexts such as railroads and telephone networks, the economics literature has often quoted the Internet and related services and products as typical examples (Shapiro and Varian, 1998). One of the basic laws of Internet seems to refer to a cycle in which the total value of a product or service increases exponentially with the number of clients, while this value increase attracts even more clients and creates lock-in effects. It is well known from the economics literature that the existence of strong network externalities can lead to ‘natural monopolies’ in which the market is dominated by a single firm. Microsoft and online auction house eBay are examples of this phenomenon. Firms pursuing such a position have moved very aggressively in order to become the dominant player in specific market segments. Because windows of opportunity in turbulent economies are closing fast, a reduction in lead times also allows firms to pre-empt the market and enables them to move faster down the learning curve. Because speed is the most prominent factor influencing performance under turbulent conditions, firms cannot afford to engage in long and extensive planning and negotiation processes. Instead of careful strategic planning and extensive partner selection processes firms tend to enter into short-lived alliances on a trial and error basis. The typical time-horizon of transitory alliances is therefore generally measured in months instead of years. In the Netherlands the bank ABN-AMRO collaborated with Internet provider Planet Internet to offer online banking services. The entire venture only just lived for a year. By then it was clear that the ideas the partners had originally, could not be realised. Nonetheless, valuable lessons about Internet banking had been learned, preparing the firms for other ventures.

**Partner fit: network versus dyadic fit**

Because of the lack of time to get to know each other well, and because past-experience is often lacking, reputation effects have become the most essential means of evaluating a partner. Because firms are increasingly embedded in networks they often short-cut the partner selection process by using their network partners as main sources of

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Table 1. Traditional alliances versus transitory alliances.

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<tr>
<th>Traditional alliances</th>
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<tr>
<td>Market access, efficiency</td>
<td>Motives</td>
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<tr>
<td>Slow, long</td>
<td>Speed and planning horizon</td>
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<td>Individual fit</td>
<td>Partner fit</td>
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<tr>
<td>Familiar sectors</td>
<td>Partner type I</td>
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<tr>
<td>Established</td>
<td>Partner type II</td>
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<tr>
<td>Trust</td>
<td>Commitment</td>
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<td>Many tasks</td>
<td>Focus</td>
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<td></td>
<td>Learning</td>
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<td></td>
<td>e-Speed, short</td>
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<td></td>
<td>Network fit</td>
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<td></td>
<td>Unfamiliar quarters</td>
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<td></td>
<td>Entrepreneurial</td>
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<td>Aligned objectives</td>
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<td>Few, specific tasks</td>
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information about potential partners. This embeddedness in networks is clearly shown in Figure 4, which is based on data about the technology alliances of Texas Instruments since 1996. A complex set of interrelationships has emerged around this company over the last five years. Other high-tech companies are embedded in similar or even larger networks. As indicated by Gulati (1998) the embeddedness of firms in networks increases the propensity of firms to engage in new alliances by means of providing information on the credibility and competencies of potential partners. Whereas traditional partner selection focused solely on researching the fit between two parties, firms engaged in multiple transitory alliances now start to focus on network fit.

In a network environment characterized by a mix of co-operation and competition, it is not sufficient to manage alliances at a dyadic level. The position of an organisation in its network has become an important variable in determining the firm’s ability to compete. The nature of the network surrounding a company, determines its ability to control information flows, knowledge flows and financial flows. Building the right relationships with the right partners, thus becomes a key managerial challenge. In today’s economy bilateral fit is not sufficient anymore: the fit in the overall alliance portfolio should be looked into as well. A relevant question in this respect is whether a prospected partner improves the mix of the network. Partner selection from a network perspective involves finding key strategic partners (traditional alliances) and browsing for short-term partnerships focused on narrow scope objectives (transitory alliances). In this way, access to different kinds of resources can be gained. To make sure the optimal set of partners is assembled, it needs to be investigated what a new partner can contribute to the network. The most successful companies establish a ‘radar function’ which ensures that new developments are identified and innovative companies are approached. Partner selection therefore, should not only include an analysis of bilateral fit, but
should also inquire into the prospected partner's contribution to a healthy mix of the network (Duysters et al., 1999). Several companies have developed management concepts to guide this type of network development. Siebel's ideas about ecosystems (2000) fit with this idea of looking at the network level. The ecosystem concept defines the desired network and the way to fill in the gaps in the network by means of a variety of alliance types. Cisco has a similar approach in managing its partnerships: it defines different levels of partnerships and next determines how many and what type of partners there should be in each level. In this way the fit of a new partner in the network can be judged easily and rapidly.

Partner types: familiarity versus complementarity

A complicating factor in the partner selection process is that transitory alliance partners typically come from unfamiliar quarters. For a very long time technological developments in high tech sectors have followed very distinct trajectories. Today, the basic design parameters, which form the core of technological regimes, have become increasingly similar. Digitalisation of telecommunications and computer equipment has broadened the existing technology base and facilitated the emergence of large-scale communication networks that carry voice, data and images. As computers are increasingly accommodated within those telecommunications networks, previous existing technological and market boundaries have become vague. Many authors envision that all the different IT markets will eventually melt into one giant ‘information and entertainment industry’ and that firms will react to the new opportunities by lateral entry into each other’s markets. A relatively stable environment that characterised many industries in the past induced firms to develop a stable set of routines to deal with their environment. Today such routinised behavior does not seem sufficient to deal with the technological convergence process. Unexpected combinations of companies have therefore emerged. Notable examples in this respect are Lego and Microsoft who decided to team up in order to develop internet-based computer games and Deutshe Bank and Nokia who joined forces to develop new services for the mobile Internet (de Man and van der Zee, 2001). Also Philips and Nike have teamed up to develop portable MP3-players and MP3-CD Players, which can be used for sports. Philips contributes its knowledge about wearable electronics and Nike contributes knowledge about sports and material technology. In a similar vein, we see unexpected combinations in which small companies have become important partners for large incumbent organisations in their role as incubators of new technologies.

Commitment: trust versus aligned objectives

Because of the short-lived character of transitory alliances, partners generally lack the time to build commitment and trust in their relationship. Cooperation between partners is therefore increasingly based upon well-aligned objectives and mutual goals (Spekman and Isabella, 2000). Goal complementarity seems to have replaced partner fit as the key success factor of alliances. Misalignment of objectives or goals immediately leads to the discontinuation of alliances. In contrast to previous alliances in which the degree of success is often measured by the duration of the alliance, today’s transitory alliances are successful when specific tasks are accomplished. Because of the lack of contracts it is quite common in Silicon Valley to consider alliances terminated at the moment that e-mails are not promptly returned anymore (Spekman and Isabella, 2000).

Focus: many tasks versus few, specific tasks

Setting up a complex alliance takes time. In turbulent economies time may be absent to set up long-term relationships. As most of the examples given above have shown, companies therefore focus on just one, specific innovative task: HP and Intel on their study of future PC’s; Philips and Nike focus only on MP3 technology etc. The fact that this focus takes place is also supported by large-scale research: of 150 Internet partnerships studied by de Man and van der Zee (2001), two thirds had a narrow scope, focusing on a limited number of products or activities.

Why transitory alliances are useful for innovation

Under conditions of turbulence fast learning and experimentation is required. Building up
knowledge internally to develop new products is too slow to innovate timely. Moreover, as it is uncertain which technology will be successful, firms need to invest in a variety of technologies. Few firms are able to do that by themselves. Furthermore, to get access to really new ideas, external partners are more helpful than increasing internal R&D. Internal R&D has its limits because groupthink exists even among the most inquisitive minds. M&As on the other hand may seem a fast way to get access to new knowledge. Experience however shows that the time elapsed before mergers get really on the ground is very long, if they get realized at all. Post merger integration is such a complex process that the failure rate of mergers and acquisitions is very high (Economist, 22 July 2000). Neither are traditional alliances a means of experimentation. Alliance agreements do not allow for fast changes within the alliance and rapid knowledge buildup. Rather they require stability to work on the projects at hand. This is especially true for equity alliances. For a long time, equity joint ventures have been the most preferred mode of alliances. Because equity participation creates mutual dependence among the participating companies, the chances of cheating on the other partner are reduced significantly. If one of the partners does not behave responsibly, then the whole venture suffers and equity value diminishes for all participants (Buckley and Casson, 1988). However, in spite of the advantages associated with these higher levels of commitments those ventures seem to present greater risk in turbulent changing environmental conditions (Duysters and Hagedoorn, 2000; Spekman and Isabella, 2000). Under these conditions, the flexibility and speed associated with non-equity transitory alliances far outweighs the benefits associated with improved commitment.

Transitory alliances are specifically designed to enable rapid experimentation. It is agreed from the outset that knowledge is exchanged during a brief period of collaboration, which can be ended by any of the partners at will. The incentive to collaborate is purely external: turbulence demands the firms to exchange knowledge. Likewise both companies understand that turbulence will lead them to end the collaboration soon. Because these two points are implicit in transitory alliances, companies are able to work together effectively in the absence of elaborate contracts.

Of course such transitory alliances only make sense when the partners are able to absorb knowledge and information from its partner in a brief amount of time (Cohen and Levinthal, 1990). In order to get truly into the details of a new technology, the time frame of a transitory alliance will usually be too short. However, it often is sufficiently long to assess the technology and to find out whether it is promising or not. If it is, the transitory alliance may be intensified and become a more traditional alliance. If it is not the alliance can be abandoned at next to no cost. Although traditional collaborative R&D projects have some of the characteristics of a transitory alliance the latter have more of a radar function: they scan the technology field for interesting new technologies. This process deals with the rapidity, frequency and unpredictability of turbulence in an effective way: companies can move swiftly from one technological opportunity to the other.

In brief: the function of transitory alliances is not to replace other sources of innovation like internal R&D, M&A and traditional R&D alliances. Their role is complementary in scanning the business environment for new technologies, testing them and incorporating the knowledge into the technology strategy.

Key lessons for surviving turbulence

From the above, it is clear that firms are forced to redirect their attention from traditional knowledge acquisition modes towards new forms of alliances. There are three steps in the management process of transitory alliances.

Step 1: preparing the internal organization. This requires building a strong and coherent internal knowledge base. It is often noted that a firm’s capability to absorb externally generated knowledge is to a large degree dependent on the degree of knowledge in a specific field. If the core of a company’s technology base is not sufficiently developed or adapted to a new technology, then the absorption of newly acquired external technological knowledge within the technological core of a company is very difficult. The cumulative and path dependent character of technological knowledge seems to favor a strong and coherent technology base. Although path dependency, at first sight, seems to be a handicap for rapid technological progress because it limits the
options open to companies, it often turns out to be an essential condition for the effective development of a certain technology. Due to this particular character, technological change can rapidly expand technological frontiers while it is concentrated on a continuous process of relatively small changes in separate component parts with individual research projects focusing on improvements in small elements of the technology.

A second aspect is the implementation of alliance knowledge management techniques. To learn rapidly from transitory alliances, knowledge needs to be captured. Debriefing of people working in the alliance and making the new knowledge accessible via the Intranet are helpful in this regard.

**Step 2: build an optimal portfolio of transitory alliances, traditional alliances and M&As.** Whereas M&As can be used effectively to strengthen existing core technologies, strategic alliances can be used to learn in detail about new technological directions. Transitory alliances enable companies to monitor several technological developments in less detail. If certain technologies turn out to be less successful, then transitory alliances can be terminated with only a relatively small loss. The optimal composition of the portfolio will differ from firm to firm.

**Step 3: Management.** There are some specific elements in this step:

- **Increase your partnering options by building a reputation of credibility.** As described above, (network) reputation has become the prime partner selection criterion. A reputation of being a responsible and cooperative partner opens up numerous new partnering opportunities for companies. This allows companies to build a portfolio of preferred partners.
- **Include learning as an explicit goal for your alliances.** In a recent Accenture Survey (2000) learning was cited as a critical goal in 41% of alliances, a percentage that is expected to exceed 50% by 2003. The same survey showed that successful alliance firms are almost five times more likely than non-winners to include learning as an explicit goal for their alliances. Companies that have formulated explicit learning objectives generate twice the market value compared to those of non-learning-oriented alliances. Transitory alliances are designed for learning and should be evaluated on the new knowledge they bring in. They should not be judged on their contribution to gain lower cost or increase market share as this contradicts this learning perspective.
- **Focus on a few specific tasks for the transitory alliance.** This keeps the alliance structure uncomplicated and allows companies to make use of the specific know-how and competencies of various individual partners rather than engaging in a few broad ranging partnerships with one specific partner. Moreover, it keeps the alliance formation process brief. Choose a partner whose abilities in one specific field are perfectly geared towards your needs and try to develop an optimal portfolio of partners with distinct competencies.

**Conclusion**

New organisational forms increasingly challenge the pivotal role played by M&As as the main vehicle to access new technologies or markets. Whereas M&As can provide scale economies to organisations they hamper flexibility, efficient knowledge transfer and speed, the capabilities needed most in turbulent environments. Firms should broaden their knowledge acquisition strategy to include alliances. More specifically, in turbulent business environments, transitory alliances are especially valuable. They allow for fast scanning of the business environment for new technologies and learning about new technologies. With increased dynamics in technological development, transitory alliances become a very valuable part of R&D management as well, because they enable a firm to keep track of numerous, possibly interesting, fast changing technologies.

**References**

