

■ Discussant's Comment

Exploring the Relationships Between Tangible and Intangible Resources in a Learning Alliance Dynamics: Comment on the Paper by Kapmeier

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INTRODUCTION

Kapmeier (2008) focuses his research on common learning and firms' opportunistic behaviour in learning alliances. A strategic alliance, as clearly stated by Gulati (1998, p. 293) is a voluntary arrangement between firms to exchange and share knowledge as well as resources with the intent of developing processes, products or services. This is a relevant topic not only for those firms that operate in industries characterized typically by high R&D investments, but also for those scholars who are interested in exploring the real causes of success and failure of an alliance.

From a firm perspective, alliances are perceived as a strategic means to foster business growth in a highly competitive and globalized environment. To successfully integrate and apply the knowledge shared in an alliance, firms are strongly interested in learning how to manage such an alliance (Kale *et al.*, 2002), to assess alliance performance and to appropriately select

future alliance partners (Hoang and Rothaermel, 2005).

From a researcher perspective, while studies on learning alliances are substantial in the strategic literature, the question of how opportunistic partner behaviour may affect common learning is still unexplored. In fact, most of the literature (Khanna *et al.*, 1998) focuses on private benefits 'a firm can earn unilaterally by picking up skills from its partner and applying them to its own operations in areas unrelated to the alliance activities' or on firm behaviours oriented to outlearn the partner as fast as possible to reduce the dependency on the other part (Hamel, 1991; Larsson *et al.*, 1998).

Furthermore, this literature essentially takes a static view and it often neglects the post-formation dynamics of alliances (Koza and Lewin, 2000; Das and Teng, 2001). Some key questions not yet profoundly investigated are: how can alliances best be managed or adapted? What does generate the achievement or the anticipate dissolution of an alliance? What are the future implications for a firm that adopts an opportunistic behaviour?

To investigate learning alliances and to outline its characteristics, Kapmeier (2008) mainly

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reverts to two well-known approaches in organizational economics: the transaction cost (Williamson, 1975) and the agency theory (Jensen and Meckling, 1976). Such views allow him to identify four different circumstances that may generate an alliance failure due to opportunistic behaviour:

- *hidden characteristics* refer to partner behaviour oriented to disguise some of its attributes;
- *hidden actions* and *hidden information* refer to a free-riding behaviour oriented to pursue a self-interest or to omit some relevant information;
- *hidden intentions* refer to a partner's decision to not communicate its real targets (hidden agenda).

Based on such a theoretical analysis, the author focuses his attention on how an opportunistic behaviour, in terms of hidden actions (free-riding) or hidden intentions (hidden agenda), leads to a learning alliance's success or failure. To investigate the dynamics of such relationships, results from literature and outcomes from a real case-study have been taken into consideration to build a System Dynamics (SD) model. The SD model covers a period of two years and it replicates a 'generic' structure of a learning alliance with two partners that offers valuable insights in understanding how alternative opportunistic behaviours may produce a successful or unsuccessful learning alliance.

The group model building approach (Vennix, 1996) used by the author and the discussion of the main feedback loops and related equations provide a transparent basis (Machuca, 2000) for the understanding of the system under investigation and its reproduction.

Less emphasis has instead been placed on the test of the model and on the simulation time horizon. In my opinion this last issue can play a critical role in the reproduction of the study.¹ However, it is worth remarking that even though the author does not follow a formal model

validation procedure (Forrester and Senge, 1980; Barlas, 1996), the direct contact with managers involved in the case-study allows him to verify the relationships among identified variables, and to make explicit non-linearities and intangibles (such as, alliance knowledge base, alliance learning, scientists' commitment, scientists' openness, manager trust).

IMPLICATIONS FROM AN ANALYSIS OF A LEARNING ALLIANCE IN A SYSTEM DYNAMICS PERSPECTIVE

By focusing on the feedback relationships between tangibles and intangibles key variables affecting learning alliance dynamics, Kapmeier's (2008) study addresses a gap in the field of strategic alliances too often characterized by a linear approach and oriented towards the endowment of strategic resources.

As remarked by Amit and Schoemaker (1993), opportunities and threats interpreted through frames based on current resource endowments, rather than a dynamic analysis of resource accumulation and depletion processes, can lead to wrong decisions. This behaviour indeed can also be due to a lack of methods which would enable decision makers to investigate strategic resources acquisition, decline and feedback processes that drive their evolution over time, thereby influencing firm performance (Morecroft, 2002; Warren, 2004, 2005).

The SD model built by the author can effectively support decision makers in exploring alternative policies and assessing their impact over time on a learning alliance.

In particular, the model makes it possible to test how a firm's excessive or moderate opportunistic behaviour—in terms of *free-riding*—may give rise to, respectively, a failure of a learning alliance and its early dissolution or a delayed goal attainment. It also replicates two other scenarios based on a firm's behaviour characterized by excessively or moderately *hidden goals*. In the first scenario, the model shows an immediate loss of partners' manager trust and scientists' openness and, as a consequence, an alliance failure. In the second scenario, a more gradual

¹An analysis conducted (Hoang and Rothaermel, 2005) on a sample of 292 projects in which 30 distinct pharmaceutical companies cooperated with 145 different independent biotechnology partners during 1980–2000 shows an average duration of 10 years for these alliances. The case-study investigated by the author covers indeed a period of three years.

change in the partners' manager trust, and scientists' openness, allows the partner with hidden intentions to reach its goals, while the other part achieves only partially the expected alliance results.

This last scenario provides evidence of a counterintuitive phenomenon often neglected in the alliance literature. In other words, even though a moderately opportunistic partner behaviour characterized by hidden intentions generates a loss of manager trust, it may induce—*ceteris paribus*—a partial attainment of partners' common goals. This phenomenon raises at least two questions: how can it be explained that a moderately opportunistic partner behaviour characterized by hidden goals gives rise, to some extent, to an alliance success?

Are there any further implications, of the moderately opportunistic behaviour, on firm performance?

The above unexpected result can be better understood on the light of the feedbacks underlying a learning alliance (Kapmeier, 2008) and, in particular, on the basis of the nonlinear and delayed relationships between partners' manager trust and scientists' open-

ness. Such variables stem from the number of scientists allocated in a learning alliance and constitute the main drivers of the alliance knowledge base and, therefore, of the alliance outcome (patents).

The positive results produced by the moderately opportunistic partner behaviour (characterized by hidden goals) could be indeed ephemeral. In fact, although the alliance dissolution happens when a partner reaches its hidden goals and the other attains only partially its intents, by enlarging the boundaries of the system under investigation and the time horizon, it is possible to demonstrate that in the medium-long term the company with a hidden agenda will not be able to fuel a sustainable growth. As Figure 1 shows, the lack of managers' trust in the industry not only prevents the firm from entering new alliances, but also damages its image. This leads to a decrease in firm performance and in the resources invested in R&D. As a consequence, company knowledge and patents get obsolete and company performance declines. This phenomenon is particularly true in industries characterized by significant R&D investments.

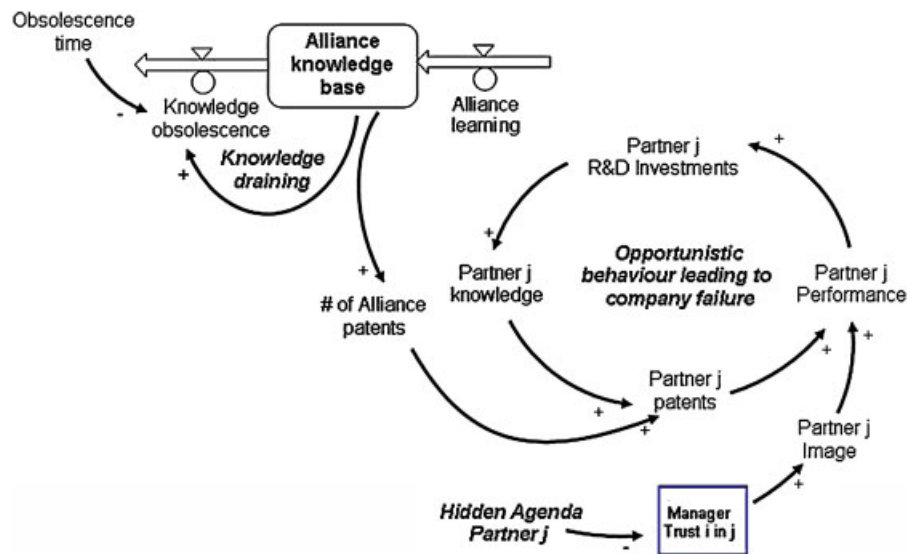


Figure 1. Long-term consequences of a moderately opportunist behaviour on company performance (re-drawn from Kapmeier, 2008)

Another issue that has to be taken into account is linked to the dynamics of the alliance knowledge base, which constitutes one of the main drivers to generate new patents. In fact, if a company is not able to positively influence the acquisition mechanism of new alliance knowledge base (i.e. through new alliances), the draining process (i.e. knowledge obsolescence) prevails on knowledge base dynamics, thereby affecting the number of patents and in turn company performance (see upper left in Figure 1).

CONCLUDING REMARKS

Lane (2006) recently remarked that the SD field has to bring the social dimension further in the modelling process and encouraged us to be more 'reflective practitioners'. In other words, 'take your experiences and think about them in a theoretical way'. This can be verified through the following question: *it works in practice but does it work in theory?* In my opinion, the analysis conducted by Kapmeier (2008) allows us to positively answer the above question.

The study provides an example of modelling process moving from a case-study to the theories outlining a learning alliance. In addition, results derived from the scenarios analysis suggest to review the hypotheses underlying the investigated phenomenon. In particular, in exploring the relationships between tangible and intangibles resources and their dynamics over time, the SD model developed by the author helps us to better understand the impact of managers' decisions on short and long term alliance results and firm performance.

Finally, this study is also of interest to other areas of research oriented to investigate more broadly how the relationships among firms can become a source of a competitive advantage in the long term. I primarily refer to knowledge management and, in particular, to Social Capital or Relational Capital very often characterized by causal ambiguity and contrasting frameworks to disclose their different dimensions (Hoffman *et al.*, 2005).

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