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Interpartner Learning in Strategic Alliances

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This paper provides a short summary review of interpartner learning. It first reviews the conditions under which partnerships and alliances provide a superior approach to accessing and integrating new skills and capabilities. We then analyze the use of interpartner learning from facilitating and improving the collaboration, to leverage learning in new areas outside the scope of collaboration, or to undermine the need for collaboration, and mutual dependence by internalizing the partner's skills and capabilities. Thirdly, we review the various determinants of interpartner learning: intent, agenda, knowledge type, and learning processes. The paper concludes with a brief discussion of the strategic consequences of interpartner learning.

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Corporations have practiced business alliances and cooperation for a long time, at least since the early 1900s in the chemical industry for example. They have taken various forms, and served many purposes. They have also been extensively researched, at least for the past 50 years. Attention to strategic alliances as a growing phenomenon has spawned subfields of applied research and theory development, from knowledge sharing and integration, to models of trust development. While this provides a context for this chapter, we need to focus our attention specifically to inter-partner learning in the context of this wider phenomenon.

We will follow a simple approach in this chapter. A first section analyses the motives for inter-partner learning in alliances, from just learning enough about each other to be able to effectively collaborate, to learning all what is needed, and more, to fully appropriate, internalize and integrate the partner's substantive knowledge and unique skills. In that case, a partner can progressively turn the relationship to its own advantage vis-à-vis its partner or merely terminate the collaboration once the learning goals have been accomplished. We will then turn to determinants (enablers and barriers) of inter-partner learning, and distinguish whether such learning is visible and deliberate, mutually agreed upon by the partners or surreptitious and invisible, and possibly one-sided. In considering the determinants of inter-partner learning, we will consider the nature of what knowledge and know-how need to be learned, the organizational and cultural differences and possible strategic divergence in their ambitions, interests and in the framing and meaning they assign to the collaborative relationship. Third, given the contingencies and moderating variables above, we will turn our attention to processes of inter-partner learning,

and the evolution of learning over time, sources of balance or asymmetry, risks of learning races, and irreversibility of commitments. And finally, fourth, we briefly review the likely consequences of inter-partner learning for value creation, value capture and success of the collaboration. Given the breadth of this agenda, and the well-trodden nature of the territory, space limitations prevent us from giving detailed attention to all the many contributions to this field, and this chapter is necessarily written in the spirit of a conceptual overview, not that of an exhaustive literature review.

Motives for Interpartner Learning

Motives may vary greatly from alliance to alliance, and also between partners in the same alliance. As a preamble to discussing them, we consider why an alliance may, in many cases, serve a learning objective better than alternative means, from purchasing products and technologies, to acquiring their sources. Let's review some obvious alternatives to learning alliances and highlight their limits.

The Purchasing and Licencing Alternatives*:* The need to learn involves new knowledge and innovation, at least for the partner who needs to learn. Innovation becomes, more than ever, the least imitable source of competitive differentiation and advantage, and licencing, may come too late and too slowly in accessing relevant innovations early, and may confine a firm to a role of distant follower, relying on mature technologies. Licensing also typically requires a high level of formalization of the knowledge to be accessed, and may not provide such support in learning new skills. Like so many "technology transfers", licensing may well fail, or at least be arduous and slow, for lack of required support to the licensee. New technologies may be too complex (systemic, not modular or simply architectural) and require more co-working and co-learning, experientially, than licensing contracts normally provide. They involve complex knowledge.

Experience of the knowledge in use is required, and this may be difficult to provide in mere licensing or in product sales, even with the promise of extensive technical support. Buying the end products themselves, to incorporate them as components and subsystems with one's own, and dispensing oneself from the need to learn, raises similar issues of slowness and poor effectiveness and presents risks to continuity of supply and stability of terms and conditions, the seller deciding to withdraw, or renegotiate supply agreements.

Innovation itself can be outsourced. Subcontracting innovation and design for new technologies and products is an increasingly important phenomenon, from ICT platform and product architectures (e.g. as Advanced Risc Machines [ARM] provides standard platform and circuit architectures for makers of electronic communication devices and processors) to advanced technologies and subsystems in the automobile industry (e.g., Bosch in Germany, Valeo in France and McLaren in the UK). The boundary between what can be labelled as "supplier's contracts and agreements" and what we call "strategic alliances" can be ill-defined, permeable and hard to discern. Indeed, the closer the collaboration, the more exclusive and constraining the terms and conditions and the greater the risk sharing, and the share of total value created coming from the collaboration, the more a supplier's contract turns into an alliance.

The Acquisition Illusion: Another driver of managerial interest toward inter-partner learning is the growing awareness of the limits faced by the acquisition of technology companies. In short, with a few exceptions (of which Cisco became the emblematic example), large companies acquiring small companies find they often do not obtain the expected benefits from such acquisitions. First, acquirers tend to develop a "we own them" attitude, mistakenly exonerating these acquirers from sustained efforts at learning from the acquired company. No inter-organizational learning is systematically undertaken. Second, even when they have a learning

agenda, most acquirers have become aware of the fragility of the innovative capabilities of small entrepreneurial firms. So, rather than attempt to integrate them, they keep them at arm's length, in a "preservation" mode (Haspeslagh and Jemison, 1991). Scientists and managers in the acquired company may also resist integration attempts and leave. This makes the acquisition approach self-defeating, in terms of learning benefits. Third, the scope of an acquisition may have to be highly imperfect from the acquirer's standpoint. Acquiring a whole company may not be feasible (for financial, ownership and regulatory reasons) or may need to result into significant divestments. Even when feasible, it may take the acquirer into unwanted fields or relationships that may conflict with its own business and create a conflict of interest between being a supplier and a competitor (e.g. when the acquired companies provides common process technologies to multiple adjacent fields) or be a source of distraction and resource diversion. Conversely, acquiring just a focused sub-unit may deprive that unit from the learning and capability development advantage offered by its embedded-ness in its previous parent's activities and knowledge networks. Dynamic economies of scope no longer accrue. Fourth, acquirers may also find it difficult to learn from innovative firms they acquire because the nature of their technology, knowledge base, organizational processes and culture may just be too different to allow learning, and the burden of bridging these differences is put on the acquired firm. The challenge is heightened further by the fact that large acquirers are often willing to let themselves overpay for acquisitions, based on learning potential that is actually never achieved. Lastly, acquisitions often entail a significant up-front financial commitment in a situation of information asymmetry, making the acquisition overly risky. In contrast, alliances may allow one to schedule commitments over time as a function of the removal of such asymmetry brought by collaboration itself. So, paradoxically, the fact of having to learn from a partner company, over a limited time

horizon, rather than yield to the illusion of learning acquisitions may encourage an active learning approach and be a motivator for success in learning alliances.

Internal development: This would provide the most obvious and safest alternative, but it suffers from major limitations too. In short the process may be too slow (Dierickx and Cool, 1989). It suffers from many challenges not least developing the required talents. Hiring a handful of researchers or engineers from a competitor may nor provide the ability to catch up or reverse-engineer the efforts of the competitor. Complex collective knowledge may be too important to be duplicated from very partial samples brought by a few individuals! And learning and sharing complex knowledge is difficult under the best of circumstances (Tsoukas, 1996; Doz, Santos and Williamson, 2001). Adverse selection issues may also lead to hiring the wrong types, not innovation leaders but lemons.

So, given the risks of these alternatives, learning from alliances becomes a priority for executives.

The value of inter-partner learning:

Indeed, most strategic alliances between corporations have a learning dimension; many have a learning objective. Indeed, most alliances aim at combining capabilities, knowledge and skills from their partners to create value through co-specialization in the use of these resources.[*] So, at the very least, partners need to learn to work together to achieve the successful combination of their respective contributions. Mutual knowledge needs to be created to understand enough about each other's contributions to integrate them effectively (Crampton, 2001). Inter-partner learning may also be directed toward a better comprehension of the joint undertaking's external context: markets, technology, competition, regulatory constraints, etc. in particular for innovative

[*] Of course, some alliances are aimed purely at pooling volumes, for instance in the production of a component to achieve critical scale, and some purely at increasing market power; these require very little interpartner learning, and we do not consider these alliances in this chapter.

developments. Indeed, one way alliances can create value is to allow a deeper and more accurate assessment of collaboration potential than partners could achieve alone, and to refine such understanding over time. Such potential can also be expanded by the collaboration itself as more information, more diverse perspectives and competencies and simply more brainpower are brought together through the alliance they may discover new sources of added value creation. Such improved assessment allows not only better decisions, and therefore risk reduction (not just risk sharing), but may also trigger the discovery of new collaboration and side benefits. In other words, shared learning may create new opportunities and help sustain and renew an alliance.

In practice, though, the objective for inter-partner learning may go well beyond what is needed to work together effectively across partners, or even what partners hope will reduce risks and extend opportunities in their collaboration. Research attention on inter-partner learning initially stemmed most clearly from a concern about containing the risks of alliances and expanding their benefits: the issue of inter-partner learning and the early research done on its dynamics specifically resulted from a growing concern in Europe and in the US with Japanese competition and the use of alliances by Japanese entrants to access and appropriate technologies held by their Western partners (e.g. Hamel, Doz & Prahalad, 1989; Badaracco, 1991; Hamel, 1991). In sum, these researchers observed key new Japanese competitors, such as Honda, Fujitsu, Toyota and many others learning from their Western partners.

In short, companies may want to learn knowledge and skills from partners because they believe they can leverage them widely, geographically and through related businesses – more so than the company they learn them from – but may see no reason to associate the partner to this wider leveraging efforts and have the partner share in the benefits. In Gulati et al's (Gulati, Tarun & Nitin,1994) parlance, in contrast to common benefits accrued within the alliance proper, private

benefits accrue to one partner or another, from the learning in the alliance, but outside its scope – i.e. separately and differently between partners. Partners with a wider application scope have a stronger reason to learn.

Inter-partner learning can also serve to rebalance the alliance value capture itself to one partner's benefit to the relative detriment of the other.[†] Indeed, this darker side of inter-partner learning was the first to draw the attention of researchers. This was true, for instance, of alliances by major up and coming Japanese groups in the 1980s with weaker American and European players (e.g. Toshiba and Motorola, Fujitsu with ICL, Honda with Rover, Matsushita with Thomson: four examples researched by Hamel and his co-authors). This was also true of alliances with leading (rather than lagging) Western companies, where joint ventures originally defined as market entry collaborations in Japan turned into global alliances over time, where the Japanese partner, or the joint venture in Japan itself, gained the ascendency and refocused the alliance to its advantage. Fuji-Xerox became an emblematic and widely referred to example, but there were many others, such as Caterpillar and Mitsubishi in hydraulic excavators.

Determinants of inter-partner learning:

Learning Intent: The role of strategic intent in inter-partner learning appears obvious but may be more complex than often thought. The simple argument is that learning requires an intent to learn, to serve strategic purposes, and that asymmetric learning is a key issue. Therefore, partners engage into "learning races" within the alliance, to bolster their relative power, or/and to be able to dispense with further collaboration and exit the alliance.

[†] Of course, we know this should not be a relevant consideration, so long as the alliance remains preferable, for each partner to its specific set of alternatives. But we also know counter-factual assessments are difficult and uncertain, alternatives are foreclosed anyway, and jealousy plays a role

Early empirical research in interpartner learning (i.e., Hamel et al, 1989) observed such asymmetric learning in a number of alliances between Japanese and Western firms. However, the strategic intent to learn questions maybe more complex –learning may emerge as an intent as an alliance proceeds, and partners get worried about its balanced success –for reasons other than interpartner learning- and decide to learn from one from the other to obviate the break up risk. In that sense, as Zeng and Hennart (2001) put it, learning races denote "an alliance gone bad". Others have noted that interpartner learning may actually be welcome by partners, for instance around situations when one partner teaching the other may be essential to the success of the collaboration. And when learning is joint, or mutual in a balanced way, deepening trust rather than suspicion can interact positively with learning, and deepen mutual learning (Muthusamy &White, 2005).

The extent of required mutual knowledge may also vary. In complex endeavors it may be useful for partners to know roughly as much of the same areas to faced risks and uncertainties as well equipped as can be.

In some cases, the learning intent of the partners is intrinsically asymmetric. This is not only in the cases highlighted by Hamel (1991) but in situations where one partner uses the alliance as a discreet, stepwise exit process from a business in which it no longer enjoys competitive advantage. An alliance when one decreases commitment over time may be a way to "harvest" a business one is no longer committed to. It may also be that the learning agenda of one partner is much taller than that of the other. One partner engages in a long learning journey, as the other just intents to run a short term learning experiment. One of the best researcher and better known learning alliances, NUMMI, fits that pattern (Adler, S,1993; Inkpen, 1998). In NUMMI Toyota merely wanted to run an experiment of applying Japanese new manufacturing methods to a US

unionized plant (and despite being rather successful at it, concluded it would rather start greenfield plants and hire non -unionized workers new to automobile manufacturing). GM, on the other hand, saw their joint venture plants, and what it was learning from it as the first step in its journey to revive its manufacturing system -42 plants, worldwide.

A precise learning agenda: A learning intent cannot be operationalized except via transforming it into a learning agenda, i.e., specifying what exactly needs to be learned, through what steps (or modules) and in what sequence. The definition of the learning agenda needs to be operational, i.e., to articulate practical steps. At the most aggregate level this can be seen as the "rungs" in a long learning ladder, over decades (for an example, see Doz & Hamel, 1998, p. 248). At the specific level it is a breakdown of operations, practices, with performance milestones and clean measures completion for each step (for an example, see Fujitsu AMD).

A precise learning agenda thus may not be established at the outset, the learning partner being too ignorant of the actual set of tasks needing to be performed by the other partners(s) to generate a result. Causal ambiguity between practices and results adds to the difficulty. So a first observational step in the collaboration may have to be to identify the actual set of tasks and, tentatively, how they seem to fit together, and then a learning agenda gets specified over time iteratively.

What needs to be learned: Knowledge transferability. The more complex the knowledge to learn is, the more difficult the learning. Explicit knowledge travels more easily (Doz, Santos & Williamson, 2001, Ch. 5) Complexity should refer not only to density of interdependencies (as captured for instance by Simonin, 1999) but also to the tacitness, context dependency, and collective nature of knowledge in use (i.e., knowledge being shown only in interaction and collaboration among many individuals in a given context, usually not well defined nor clearly

bound). Such knowledge can only be understood through co-practice with its creators over time (Nonaka & Takeuchi, 1995). Conversely, simple, explicit knowledge of a context-independent nature, held by single individuals is much easier to identify, bound, transfer and appropriate. The difference stems partly from patterns of interactions between individuals, using tacit knowledge in an unspecified context being hard to make sense of, even when observed at close range. Co-practice over time, in an apprenticeship-like process, is needed.

This opportunity to apprehend complex knowledge is more rarely offered between partners in an alliance than simpler knowledge, because it is deliberately hidden, or more often, simply because patterns in collective knowledge in use are revealed only infrequently, in the face of a specific need, or when an "anomaly" results in the breakdown of more codified and routinized processes that offer less of a window into collective complex knowledge.

Organizational receptivity: Hamel (1991) and any others have emphasized the key role of receptivity, sometimes building on the notion of absorptive capacity (Cohen and Levinthal, 1990). In short, not all companies can learn from the outside equally effectively. Cultural differences play a role, both corporate and national.

Learning processes:

Concrete learning mechanisms: Not all tasks are similar; some are more procedural and performed in more explicitly structured ways than others. These may be documented but others are not. Depending on where a task fits in a knowledge complexity scale (Doz, Santos & Williamson, 2001) the approach required to learn that task differs (Doz & Santos, forthcoming). Co-practice may be important for tasks drawing on complex knowledge, whereas simpler knowledge can be shared electronically.

Close interactions: Interpartner learning of complex knowledge calls for close interactions and often joint activities between partners, such as shared facilities, jointly performed tests and experiments, customer visits, etc. depending on the learning agendas. This leads toward secondments, exchanges of personnel, or "foraying" visits to each other's labs (Wilson & Doz, 2011). To an extent common IT platforms, such as design environments in product development or common simulation tools and databases, can substitute for co-located joint work. But these do not leave room for informal emergent "spontaneous" interactions that seem essential to learning complex knowledge in use (Pak & Snell, 2003; Janowicz-Panjaitan & Noorderhaven, 2008).

Learning Outcomes:

Interpartner learning outcomes are essentially of three varieties. The first is improved collaboration and greater alliance success. This is intrinsically positive for all partners. This positive outcome is driven by better understanding of the strategic context of the alliance than partners would achieve separately, for instance on markets, competition, regulation, technology evolution, etc. Better decisions result. It is also driven by better understanding of each other among partners and leads to more effective and efficient collaboration. In such situation learning and trust interact positively to stimulate each other.

A second type of learning outcome is a shift in relative bargaining power between partners over time, leading to a shift in the balance of benefits to the faster learner. It is not just that the faster learner learns from the other partner but also that it learns from a more stimulating environment. Japanese companies that were gaining advantage over Western partners in the 1980s were learning both from the partner, for instance on advanced technology, and from their domestic environment, for instance on quality and other process knowledge equally key to the alliance

success as technology (for an example of the learning dynamics at work, see Doz & Hunter, 2003).

A third type is leveraging learning from the collaboration broadly into one's own non-partnered other activities. What has been learned from the partner in the alliance is applied outside the scope of the alliance to similar activity, that was the essence of GM's collaboration with Toyota (Inkpen, 1998). The more complex the knowledge in the alliance the more difficult the transfer becomes to one's own operations as GM discovered, the technical features of NUMMI could be emulated easily the social and cultural ones were much harder to transplant. At an extreme, some very traditional firms that engaged in collaboration with entrepreneurial firms with the objective to learn how to be entrepreneurial found the culture change this required impossible to implement (Doz, 1988, 1996).

Pulling it together?

From our short overview emerges a very composite picture, interpartner learning has a number of key determinants, in the purpose and value creation logic of the alliance for each, and also in the approach they follow and the mechanisms they put in place to learn. Outcomes are multiple, and bring different types of benefits to one partner or another or to both. And, obviously, this multifarious and overdetermined nature of interpartner learning is not new (for a remarkable synthesis, see Salk and Simonin (2003), in particular Figure 13.1, p.265). Process perspectives, and empirical process research, are still relatively lacking today, as they were much earlier (Doz, 1996) an more such research is still needed to fully understand the interpartner learning process and its contingencies.

References:

Adler, P. S. (1993). The 'Learning Bureaucracy': New United Motor Manufacturing, Inc. In L. L. Cummings & B. M. Staw (Eds.), *Research in Organizational Behavior, 15*, 111–194.

Badaracco, J. L., Jr. (1991). *The Knowledge Link: How Firms Compete Through Strategic Alliances*. Boston, MA: Harvard Business School Press.

Cohen, W. M. & Levinthal, D. A. (1990). Absorptive Capacity: A New Perspective on Learning and Innovation, *Administrative Science Quarterly, 35*, 128-152.

Crampton, C. (2001). The Mutual Knowledge Problem and Its Consequences for Dispersed Collaboration, *Organization Science*, *12*(3), 346-371.

Dierickx, I. & Cool, K. (1989). Asset Stock Accumulation and the Sustainability of Competitive Advantage. *Management Science, 35*(12), 1504-1511.

Doz, Y. (1988). "Technology Partnerships Between Larger and Smaller Firms: Some Critical Issues" in F.J. Contractor and P. Lorange (Eds) *Cooperative Strategies in International Business*, Lexington, Mass.: Lexington Books.

Doz, Y. (1996). "The Evolution of Cooperation in Strategic Alliances: Initial Conditions or Learning Processes?" S*trategic Management Journal, 17*, 55-83.

Doz, Y. & Santos, J. (Forthcoming) Knowledge integration in global innovation.

Doz, Y., Brannen M.Y., Hill M., Hunter M., Osland A. & Whaley, G. (2009). Renewing the Fujitsu-AMD Joint Venture (A). *INSEAD* Case study.

Doz, Y. & Hunter, M. (2003). Fuji Xerox and the Xerox Corp.: Turning Tables?, *INSEAD* Case study.

Doz, Y., Santos, J. & Williamson, P. (2001). *From Global to Metanational: How Companies Win in The Knowledge Economy*, Boston, Massachusetts: Harvard Business School Press.

Doz, Y. & Hamel, G. (1998). *Alliance Advantage: The Art of Creating Value through Partnering*, Harvard Business School Press.

Gulati, R., Tarun K., & Nitin N. (1994). Unilateral Commitments and the Importance of Process in Alliances. *MIT Sloan Management Review 35* (3), 61–69.

Hamel, G. (1991). Competition for Competence and Interpartner Learning within International Strategic Alliances. *Strategic Management Journal 12*, 83–103.

Hamel, G., Doz, Y. & Prahalad, C.K. (1989). Collaborate with your Competitors - and Win, *Harvard Business Review*, *67* (1), 133-139. Reprinted in *Harvard Business Review on Strategic Alliances*, pp. 1-22, Harvard Business School Press, 2002.

Haspeslagh, P.C.& Jemison, D.B. (1991). *Managing Acquisitions. Creating Value through Corporate Renewal*, New York, NY: The Free Press.

Inkpen A.C. (1998). Learning and Knowledge Acquisition through International Strategic alliances. *Academy of Management Executive 12*(4), 69-80.

Janowicz-Panjaitan, M. & Noorderhaven, N. G. (2008). Formal and Informal Interorganizational Learning within Strategic Alliances, in *Research Policy (37)* 8, 1337-1355.

Muthusamy S.K. & White, M.A. (2005). Learning and Knowledge Transfer in Strategic Alliances: A Social Exchange View. *Organization Studies*, *26* (3), 415–441.

Nonaka I. & Takeuchi H. (1995). *The Knowledge-Creating Company*. New York, NY: Oxford University Press.

Pak, C.K. & Snell, R.S. (2003). Programmed, Autonomous-Formal and Spontaneous Organizational Learning. *British Journal of Management, 14,* 275–288.

Salk, J.E. & Simonin, B.L. (2003). Beyond Alliances: Towards A Meta-Theory of Collaborative Learning. *The Blackwell Handbook of Organizational Learning and Knowledge Management*, M. Easterby-Smith, M.A. Lyles (Eds.), Oxford: Blackwell Publishers, 253–277.

Simonin, B. L. (1999). Ambiguity and The Process of Knowledge Transfer In Strategic Alliances. *Strategic Management Journal 20,* 595-623.

Tsoukas, H. (1996). The Firm as A Distributed Knowledge System: A Constructionist Approach, *Strategic Management Journal 17*, Special Issue, 11-25.

Wilson, K & Doz, Y. (2011). Agile Innovation: A Footprint Balancing Distance and Immersion, *California Management Review*, *53* (2) 6-26.

Zeng, M. & Hennart, J.F. (2001) Learning Races And Cooperative Specialization: Reconciling Two Views of Alliances. Paper presented at IMD's conference on "Cooperative Strategies and Alliances: What We Know 15 Tears Later".