

CHAPTER 6

TURNING EXPERIENCE INTO ALLIANCE CAPABILITY

Alliance Evaluation in Rolls-Royce

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Over the past years researchers have paid attention to alliance capability building as a success factor in alliance management. Research identified alliance tools that increase alliance success rates (Draulans, De Man, & Volberda, 2003; Dyer, Kale, & Singh, 2001; Heimeriks & Duysters, 2007) and showed the role of experience in alliance learning (Anand & Khanna, 2000). However, the question as to how experience can be turned into explicit learning is largely unanswered. This chapter connects the “experience” literature with the “tools” literature by researching how alliance tools can help to turn experience into explicit learning and thus contribute to the building up of an alliance capability. Specifically, we highlight the role of alliance evaluation techniques that are common in practice. A detailed case study into the way Rolls-Royce learned from an evaluation tool will show also that alliance evaluation clearly helps companies to accumulate lessons learned and to capture them. It has some impact on integrating those lessons in alliance policies, but a limited impact on the diffusion of alliance learning. An additional finding from the case is that there may be a number of barriers to alliance capability building, which have not yet been studied in extant literature.

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ALLIANCE CAPABILITY, EXPERIENCE, AND LEARNING ABOUT ALLIANCES

Alliance capability is defined as the mechanisms or routines that are purposefully designed to accumulate, store, integrate, and diffuse relevant organizational knowledge acquired through individual and organizational experience with alliances (Kale, Dyer, & Singh, 2002). There are several important elements in this definition that require attention. One element is the role of experience with alliances. It is well known that companies with more experience with alliances tend to be more successful than companies with limited alliance experience (Anand & Khanna, 2000; Powell, Koput, & Smith-Doerr, 1996). Learning-by-doing is a first step for building an alliance capability, but it is not sufficient. Companies also need to focus on mechanisms or routines that formalize lessons learned and transfer alliance best practices inside companies (Spekman & Isabella, 2000). The effect of such dedicated alliance management has been proven in some large-scale empirical studies. Alliance training, alliance evaluation, and having an alliance specialist in a company was shown to raise alliance success rates, especially after learning-by-doing had reached its limits (Draulans, De Man, & Volberda, 2003; Heimeriks & Duysters, 2007). Similarly, the presence of an alliance department in a company, which acts as a repository for learning and stimulates the exchange of alliance best practice, significantly increases alliance success (Kale et al., 2002). However, in the empirical literature alliance experience and alliance management mechanisms are treated as separate phenomena. Even though Kale et al.'s (2002) definition links mechanisms to experience, empirical studies into this link are absent. We present a case study of one such mechanism (alliance evaluation) and explore to what extent this mechanism helps companies to translate experience into alliance capability.

Alliance management mechanisms need to perform four functions in order to contribute to alliance capability building. They must help to accumulate, store, integrate, and diffuse knowledge gained from experience (Kale et al., 2002). "Accumulate" refers to searching and finding alliance management practices that seem to have worked well and searching and finding alliance management practices that are inadequate and require improvement. "Store" refers to registering these practices in company reports, on websites or presentations. "Integrate" refers to incorporating the practices in the alliance tools, processes, and alliance training programs a company has. "Diffuse" refers to spreading these tools, processes, training programs to other alliances or departments in the company or to alliance partners.

In the literature alliance evaluation has been identified as one of the most important tools contributing to alliance success and to company success in alliances. The Association of Strategic Alliance Professionals' Second State of Alliance Management Study (De Man & Duysters, 2007) showed that the use of alliance evaluation techniques was the most important differentiator between companies with high alliance success rates and those with low alliance success rates. Companies with alliance success rates of 60% or higher paid significantly more attention to measuring and evaluating their alliances than companies with success rates of 40% or lower. So far, however, it remains unclear how alliance evaluation translates into higher success rates on a company level rather than on an alliance level. Do companies only improve the alliances they evaluate once or does alliance evaluation help to build a capability that can be applied to numerous alliances?

It is clear why evaluation is important for improving the success of individual alliances. Alliances are often used in a dynamic context (Duysters & De Man, 2003). They may be affected by external conditions, like new competitors, technologies or regulatory change. Alliances are also subject to numerous internal tensions (Das & Teng, 2000). Tensions may come from trying to find the right balance between cooperation and competition or differences in the time horizon of the partners. Consequently, alliances will often have to be adapted to changing situations (Reuer, Zollo, & Singh, 2002). To monitor whether an alliance is still on track, individual (one partner evaluates for himself) and joint (partners evaluate an alliance together) evaluation are important. It shows where modifications in an alliance are necessary to meet changing conditions. Evaluation thus facilitates single loop learning (Argyris & Schon, 1978): it helps companies to determine where and how to modify their alliance.

Single loop learning, however, is not sufficient to build an alliance capability. That also requires double loop learning (Argyris & Schon, 1978): taking the lessons learned in individual alliances and embed them in the organization. In an ideal situation alliance evaluation should affect alliance capability building in a number of ways. It may help to accumulate lessons learned by methodically reviewing alliance success factors and identifying which have not been met and which have been met. Next, the lessons are stored in company presentations and reports. Companies may use the lessons learned described in those presentations and reports to incorporate them in new alliance tools, processes, and training programs. Finally, the new alliance tools, processes, and training programs may be made available inside the company via websites, presentations, training sessions, etc. and thus reach a wider audience.

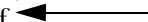
Finding out whether the process described above occurs in practice requires a detailed case analysis. It is necessary to trace what happens with individual bits of alliance knowledge that emanate from an alliance evaluation. We will provide such a case analysis below. First, however, the next section will show the relevance of this question for practice. It will show that alliance evaluation is a widely spread practice. Therefore it is empirically relevant to study whether the investments made in alliance evaluation deliver value in terms of double loop learning.

OVERVIEW OF ALLIANCE EVALUATION TECHNIQUES

In practice three types of alliance evaluation have been identified (De Man, Duysters, & Neyens, 2009). The first type is individual evaluation. Individual evaluation means that each alliance partner evaluates for himself whether a specific alliance is running well for that company, whether it meets the company's strategic goals, and whether its organization and governance run well. This type of evaluation is usually based on metrics (Hoffman, 2001) that companies have defined previously, often combined in an alliance scorecard. This type of evaluation has two functions. First, it aims at ensuring that a particular alliance still fits with the company strategy. Second, it reviews whether the company is able to appropriate sufficient value from the alliance.

Joint evaluation refers to a diagnosis of an alliance in which all partners of an alliance are involved. An example is Eli Lilly's voice of the alliance tool (Futrell, Slugay, & Stephens, 2001) and Alliance Best Practice's alliance diagnostic (for more information, see www.alliancebestpractice.com). These tools contain a number of standardized questions about a broad set of alliance success factors like alliance strategy, alliance governance, cultural differences, planning, decision making, and trust. For each of these success factors questions are asked that respondents can rate on a scale. The questionnaire is sent out to a number of people participating in the alliance such as the alliance manager, a board member or a member of an alliance team. By gathering the responses and depicting them graphically in, for example, a spider web diagram, the alliance partners can essentially identify two types of areas for improvement. The first area is where both partners score low. Low scores indicate that a success factor is not met. Second, areas where the partner scores diverge may also cause a problem for the alliance. This indicates that the partners do not see the alliance in the same way. Divergent opinions may lead to issues arising in an alliance. Based on this analysis, the alliance partners can develop an action plan to improve their collaboration. This type of alliance evaluation

Au: Decision making is two words in Webster's. But decision-making process.



aims at maintaining the fit between partners (Douma, Bilderbeek, Idenburg, & Looise, 2000) and at maintaining the fit between the alliance and the environment it operates in.

The third form of evaluation is cross-alliance evaluation. In this form of evaluation one company compares a number of its own alliances on specific aspects. For example, a company may compare its alliances on their governance structures to identify new lessons learned or best practices that can be used in other alliances. This type of evaluation stimulates learning between alliance managers of the company. It also helps to identify company specific problems or mistakes. For example, a finding may be that a company does not pay sufficient attention to the soft side of partnering or is not consistent in defining alliance exit strategies.

Data from the First State of Alliance Management Study (De Man & Duysters, 2002) and the Third State of Alliance Management Study (De Man et al., 2009) show that alliance evaluation is a widely spread practice. In addition, it has become increasingly popular over the past years. Table 6.1 shows that individual evaluation is the most widely used tool, with the vast majority of companies using it. Cross-alliance evaluation is used by fewer than half of the companies in 2009, but still the number of companies performing such evaluations has more than doubled since 2002. Individual and joint evaluations have become standard best practices; cross-alliance evaluation is rapidly becoming standard as well.

Further details from the State of Alliance Management Studies show that there are no major differences in the use of alliance evaluation techniques across sectors. The IT sector is slightly ahead of other sectors and financial service firms have a lower implementation rate, but the differences are minimal. Likewise, alliance evaluation is not only relevant for large companies, but for small and medium-sized firms as well. Table 6.2 shows that in 2009 companies of all sizes were using alliance evaluation techniques. Concluding, alliance evaluation has become a widely used alliance management technique. Hence it is relevant to research whether they help to build alliance capability, and if so, how.

Table 6.1. Percentage of Companies Using Alliance Evaluation Techniques in 2002 and 2009

	2002	2009
Individual evaluation	65%	84%
Joint evaluation	42%	76%
Cross-alliance evaluation	20%	49%

Table 6.2. Percentage of Small, Medium-Sized, and Large Companies Using Alliance Evaluation in 2009

	<i>Small FIRMS (1–500 Employees)</i>	<i>Medium-Sized firms (501–1000 Employees)</i>	<i>Large Firms (Over 1000 Employees)</i>
Individual evaluation	81%	61%	89%
Joint evaluation	73%	82%	76%
Cross-alliance evaluation	45%	42%	52%

METHOD

To discover whether evaluation leads to capability building, we executed an embedded, single case study. We study one multipartner alliance in-depth: the Global Physical Logistics alliance (from here onwards referred to as the GPL alliance) initiated by Rolls-Royce involving three other partners. The focus lies on the use of a joint evaluation tool in this alliance. The joint evaluation tool used is the Alliance Diagnostic developed by Alliance Best Practice. As this tool contains 52 questions on alliances, it should present many opportunities for learning. By studying a multi-partner alliance we can trace whether all partners learn from alliance evaluation to the same extent. The GPL case has one additional benefit. The partners in the alliance have no previous alliances. This makes it much easier to follow the learning process in the partners: we can trace learning processes from this alliance, without having to research whether any lessons learned might have come from previous alliances.

For the case study we triangulated our data gathering. The method followed was a combination of action research, interviews, and the study of company documents. One of the authors was involved in diagnosing the alliance under review in 2004. Five years later, in 2009, the research team returned to the alliance to study the alliance again. In 2009 seven interviews were held with representatives from the partners and company documents were studied to see whether the partners had learned from the evaluation process. In 2009 structured interviews were held with people involved in the alliance evaluation process in 2004 and with alliance managers that joined the alliance later to establish whether lessons learned were transferred to them. Table 6.3 lists the positions, affiliations, and dates of the interviews. After gathering the material, it was analyzed to find instances of accumulating, storing, integrating, and diffusing lessons learned. The case study and the analysis were next sent to the alliance companies for validation.

Table 6.3. Overview of Professionals, Involved in the Alliance, Interviewed

<i>Function</i>	<i>Company</i>	<i>Date of the Interview</i>
GPL director	Rolls-Royce	3 August 2009
Purchasing executive-Services	Rolls-Royce	29 July 2009
Head of GPL development	Rolls-Royce	24 July 2009
Global purchasing executive-Facilities & Logistics	Rolls-Royce	21 August 2009
Director airfreight	KN	18 August 2009
Head of business development	CEVA	31 July 2009
Business development director	CEVA	31 July 2009

ALLIANCE EVALUATION IN ROLLS-ROYCE

Company Background

Rolls-Royce, a world-leading provider of power systems and services for use on land, at sea and in the air, has established a strong position in global markets—civil aerospace, defense aerospace, marine, and energy. The company has a broad customer base comprising more than 600 airlines, 4,000 corporate and utility aircraft and helicopter operators, 160 armed forces, more than 2,000 marine customers, including 70 navies, and energy customers in nearly 120 countries, with an installed base of 54,000 gas turbines. Rolls-Royce employs over 38,000 skilled people in offices, manufacturing and service facilities in 50 countries.

Our case focuses on the Global Physical Logistics department within Rolls-Royce. This department handles the logistics for direct materials (i.e., materials that end up in original equipment manufacturers' (OEM) products), spare parts, and finished OEM products. To maintain its leading position in the engine making business, Rolls-Royce is committed to establish and maintain world-class supply chains for all its products and services. In order to achieve this, the company cooperates closely with its preferred suppliers through the GPL alliance. The GPL alliance came into existence in 2004 and initially included, besides Rolls-Royce, TNT Logistics (currently named CEVA Logistics), KLM Cargo Aerospace Logistics in a joint bid with Kuehne + Nagel Ltd (KN), and Daher Sawley Ltd. In 2009 the GPL alliance consists of Rolls-Royce, CEVA, KN, and Daher. KLM and KN switched positions in 2006 with KN becoming the contractual supplier and KLM the second tier.

Alliance Background

The reason for setting up the GPL alliance was Rolls-Royce's aim to achieve operational excellence. The business model that Rolls-Royce had been predominantly working with so far was focused mainly on buying materials "delivery included" and selling them "ex-works." In order to gain supply chain control, Rolls-Royce decided to move away from this existing business model towards a new supply chain model where the company collects the most critical goods from its main suppliers. This business model is also used extensively in the automotive industry. Also, in its Total Care (TM) contracts, Rolls-Royce plc is accountable for the quality, cost and performance of the logistics operation that delivers the maintenance materials to the point of use, and this increases the importance of optimized and dependable logistics operations to the overall customer service experience. The need for a logistics function within Rolls-Royce thus became increasingly pressing.

Early 2000, however, there was no formal logistics group in Rolls-Royce. Instead, the supply chain was managed by a stand-alone purchasing group, which mainly focused on costs. A new logistics group was thus set up that started to consider several options for further implementing the logistics function within Rolls-Royce. The company could have decided to manage the execution of this logistics function by itself through a large network of local service providers. Alternatively, it could have followed its competitors by employing a single lead logistics partner (fourth party logistics or 4PL) to manage that network on its behalf. However, Rolls-Royce found itself unable to resource the management of a large (diverse) subcontractor network. Furthermore, the company was unable to find a single logistics company that possessed all the capabilities it needed on a global scale. In addition, Rolls-Royce was not particularly keen of the added costs and commercial hazards of working with a single 4PL. Therefore, the new logistics group started to create a new collaboration based model and began negotiations with several logistics partners to be part of a new alliance.

The goal of this alliance was to serve an increasingly global market with customer expectations increasing in terms of delivery assurance, speed, responsiveness, and cost. As no one company had all the required capabilities, Rolls-Royce selected partners that were able to deliver capabilities in three areas: road transport, international freight forwarding, and packaging (the decision to also outsource warehousing was taken by Rolls-Royce at a later stage in time). After a careful partner selection process where several other partners were also considered, Rolls-Royce selected three core partners for the alliance: CEVA, KLM with KN as its second tier, and

Daher (see Table 6.4 for background descriptions of each of these partners). Rolls-Royce looked for partners with overlapping, yet complementary capabilities. The overlap was deemed necessary in case that, for whatever reason, one of the partners would have to leave the alliance. In that case, the other partners should be able to fill the gap left behind by that partner temporarily, but for a sufficiently long time to find a new partner to plug the gap.

For the partners the new way of working was quite different than before. Normally the partners would coordinate bilaterally with Rolls-Royce for delivering their services. As Rolls-Royce believed that better

Table 6.4. Description of the Partners Involved in the GPL Alliance

CEVA

CEVA Logistics is a leading global supply chain management company. Providing end-to-end design, implementation and operational solutions in contract logistics and freight management to large and medium-sized national and multinational companies. CEVA employs circa 50,000 people and runs an extensive global network with facilities in over 100 countries. For the year ending 31 December 2008, the Group reported revenues of €6.3bn. CEVA Logistics has been the most important transport provider to Rolls-Royce since 2000. During the course of the GPL alliance CEVA has increasingly taken on outsourced warehousing activities.

KLM Cargo Aerospace Logistics

From its home base at Schiphol Airport, The Netherlands, KLM Cargo serves more than 300 destinations worldwide. With a fleet that includes 17 Boeing 747-400 combi aircraft and 3 Boeing 747-400 Extended Range Freighters, KLM Cargo's freight traffic was 4,400 million ton kilometers in 2008. KLM Cargo has 2,700 employees worldwide. KLM Cargo joined the GPL alliance in 2004 through a joint bid with Kuehne + Nagel Ltd. Rolls-Royce awarded the partnership a contract to manage inbound and outbound international freight forwarding for sites in the United Kingdom, United States, Germany, and Canada.

Kuehne + Nagel

Kuehne + Nagel is a global logistics provider. It was founded in 1890 and has over 55,000 employees at 900 locations in more than 100 countries. KN particularly holds strong market positions in seafreight, airfreight, and contract logistics, with a clear focus on providing IT-based Supply Chain Management services. Although KN initially acted as a second tier supplier to KLM in the GPL alliance, in 2006 the company took over from KLM and gained contractual supplier status with Rolls-Royce.

Daher Sawley Ltd

Sawley Packaging Ltd, owned by Rolls-Royce, focused on the supply of packaging services and manufacture of packaging containers primarily to Rolls-Royce, though in later years also to a diverse set of other customers. In September 2003 the company was acquired by the French Daher Group to become the focus of the group's UK operations. The company's name was changed to Daher Aerospace Ltd. It is located in Derby and employs over 120 people, generating revenues in excess of €15 million. Daher provides supply chain management and integrated logistics services; containers and shelters; ground support equipment; parts for civil and military fixed and rotary wing aircraft.

coordination between partners would deliver major benefits in terms of cost saving and speed, the partners were now asked to coordinate among each other as well. As downtime of planes was very expensive, pre-planning and scheduling of maintenance activities could deliver substantial cost savings. The more integrated the collaboration with the various partners would be, the faster engines could be repaired or maintained and the lower the costs.

This of course increased the partners' costs. Their incentive to participate was that they would be better positioned to potentially get more business from Rolls-Royce. Based on studies of other industries where similar endeavors had been undertaken Rolls-Royce had identified a strong business case of supply chain savings of nearly 20% per year. In addition to cost savings Rolls-Royce also wanted better quality and higher speed. Supply chain response time was to be reduced significantly. Since the inception of the alliance, Rolls-Royce and its partners have consistently realized significant cost savings and service improvements. For example, CEVA's inbound collection service for gas turbine materials in the United Kingdom is on time in over 99.87% of the cases every year. Furthermore, KN has achieved significant cost reductions while the rest of the market has gone up in price.

Partners do not have a preferred status: they need to be competitive with non-partners. However, they have two benefits from the alliance. The first is that they have more intimate knowledge of Rolls-Royce's requirements and therefore they are better able to pitch for Rolls-Royce business. Second, the alliance has put in place a joint risk-reward scheme that improves the partner's margins.

The Initial Alliance Evaluation: 2004

After having selected the partners and agreeing on the contracts, the alliance started. There were, however, many questions with respect to: how to set up the alliance; whether the groundwork for the alliance was complete; whether all success factors had been incorporated in the alliance design. Rolls-Royce then decided to evaluate their alliance. They selected a method of joint alliance evaluation, called the Alliance Best Practice Diagnostic.

The Alliance Best Practice Diagnostic consists of 52 questions about alliance success factors, derived from alliance literature. Respondents can rate answers to these questions on a 1–100 scale. Table 6.5 gives an overview of these success factors. Alliance Best Practice interviewed managers in Rolls-Royce and in the partners about the alliance. For each partner,

three respondents were interviewed, each having a different function in the alliance. The data gathered were first reported back on a bilateral level; that is, they diagnosed the relationship between Rolls-Royce and an individual partner. Next, the data were used to analyze the entire GPL alliance. The conclusions of the exercise were reported in a group meeting of the partners, held in August 2004.

The results of the evaluation were presented in PowerPoint format. At the core of the presentation are three slides: one slide listing things that went well, one slide listing areas for improvement, and one slide listing lessons learned. Below we quote from this presentation literally (Alliance Best Practice, 2004).

Table 6.5. Success Factors Incorporated in the Alliance Best Practice Alliance

<i>Diagnostic</i>				
<i>Commercial Success Factors</i>	<i>Technical Success Factors</i>	<i>Strategic Success Factors</i>	<i>Cultural Success Factors</i>	<i>Operational Success Factors</i>
<ul style="list-style-type: none"> • Breakthrough Value Proposition (BVP) • Due Diligence • Optimum Legal / Business Structure • Alliance Audit • Key metrics • Alliance reward system • Commercial cost • Commercial benefit • Process for negotiation • Expected Cost value ratio 	<ul style="list-style-type: none"> • Valuation of technical assets • Partner company position • Host company market position • Market fit of proposed solution • Product fit with partners offerings • Identified mutual needs in the relationship • Process for team problem solving • Shared Control • Partner accountability 	<ul style="list-style-type: none"> • Shared objectives • Relationship Scope • Tactical and strategic risk • Risk sharing • Exit strategies • Senior Exec support • B2B Strategic alignment • Fit with strategic business path • Other relationships with same partner • Common strategic ground rules • Common vision 	<ul style="list-style-type: none"> • Trust • Collaborative corporate mindset • Collaboration skills • Dedicated alliance manager • Alliance centre of excellence • Decision-making process • Other cultural issues • B2B Cultural alignment 	<ul style="list-style-type: none"> • Alliance process • Speed of progress so far • Distance from revenue • Formal business plan • Communication • Quality review • Memorandum of Understanding and Principles • Change management • Operational metrics • B2B Operational alignment • Exponential breakthroughs • Internal alignment • Project plan • Issue escalation

The report listed that among others the following things went well:

Senior executive support—Without exception all the interviewees recognized the high level of support granted to the project and the critical importance of that support. This factor alone was seen as the single most important factor in the progress made to date and in the chances of continued progress in the future.

Existence of dedicated alliance manager support—It was clear that all sides recognized the critical need of such a role and almost without exception this was seen to be working well. Responsibility was clear on all sides and identified individuals had a clearly understood role to play.

Next, the report listed among others the following areas for improvement:

The need for a more formal process—All interviewees conceded that the absence of processes and formal procedures had delayed the project. Many people interviewed felt that the project could not withstand such delays in the future and maintain its credibility.

Internal communication and validation of the model within Rolls-Royce—There is evidence that the model is not universally understood within Rolls-Royce. This in turn has led to resistance on the part of key functions and has damaged and delayed partner relationships.

The third element that was highlighted is the lessons learned so far. These included:

Personal energy and vision is not enough—Personal drive and determination (from a number of the key players in the model) has carried the project thus far. However, if the project is to have organizational credibility both within and without Rolls-Royce, the time has now come to use a more formal structure to drive the alliance relationship.

Passing the contractual negotiations to a formal purchasing function—All the potential partner suppliers (both successful and unsuccessful) had reservations about transferring the sole responsibility at the negotiation stage to purchasing. This is not to say that purchasing should not commercially lead the negotiation process; they should. However, as it was considered by the partner suppliers that the purchasing function was not entirely congruent with what the GPL model was seeking to achieve, purchasing were perceived to have applied a more traditional vendor/supplier model to the negotiations. (Note: The presentation quoted describes partners' sentiments at a relatively early stage of the alliance (2004). By no means are these value judgments related to the current state of knowledge regarding the GPL model within the purchasing function at Rolls-Royce.)

In short, the evaluation process indicated areas for improvement for the alliance. In a workshop it was established that the need for a formal alliance process was most pressing. This led to the development of a governance model as a direct result of the evaluation process.

In the new governance model the alliance was structured around three levels: the executive level, the alliance management level, and the project management level. Each partner was to appoint one person at each of these levels to be the alliance representative. On the executive level an alliance board was formed, chaired by Rolls-Royce. The board meets every six months and approves and commits activities and resources. The alliance management group meets monthly to monitor the progress of the activities and to identify further possibilities for the alliance to propose to the board. The operational project management group meets at least monthly, but sooner when required. The project teams are responsible for implementation of alliance projects.

Postevaluation Capability Building: 2004 and Beyond

Since its inception in 2004 the GPL alliance has changed somewhat in terms of the group of companies participating in the alliance. While KN was a second tier supplier to KLM at the start of the alliance, the company took over from KLM as a preferred supplier in the alliance in 2006. The role of CEVA in the cooperation has changed significantly during the course of the alliance. The company has taken on board an increasing number of outsourced warehousing activities. Despite the recession, Rolls-Royce's order book continues to be strong and the alliance has generated substantial revenues over the years. The alliance is acting for all major trading and customer facing units (i.e., Civil, Defense, Energy, and Marine) active in Rolls-Royce's business. The GPL partners, although having to compete with outside suppliers, generate considerable business from their cooperation with Rolls-Royce as they know better what the company needs than their competitors.

Below we describe how Rolls-Royce engaged in double loop learning since the initial alliance evaluation in 2004, focusing on the four elements of learning: accumulation, storage, integration, and diffusion. The initial alliance evaluation was carried out at the level of each bilateral relationship within the cooperation as well as at the level of the alliance as a whole. As a result lessons (what went well and what went not so well) were drawn for improving the whole of the GPL alliance and for each of the relations Rolls-Royce engaged in with individual partners. The results pointed at the need for the GPL alliance to be based on a formal governance model, the need for GPL representatives to better communicate

the value of the alliance and gain commitment for it within Rolls-Royce, and the need for Rolls-Royce to start building an alliance capability. As such, important lessons with respect to formalization and communication were *accumulated* from the joint evaluation. The PowerPoint generated by Alliance Best Practice shows these lessons. As the GPL director at Rolls-Royce points out:

The evaluation gave us structure and a common language to address our problems. They also gave us confidence to continue. We could see that others had done something similar before (e.g., Bank of America, British Telecom, and most importantly Boeing). This meant that the tension went down and we were able to concentrate on the issues.

Partners in the GPL alliance picked up these lessons and made an effort to *store* important information regarding the alliance and lessons learned from it in reports and company presentations. Each of the partners received a report storing the results of both the evaluation on the alliance level and the bilateral evaluation to use as a communication device within their parent company. These presentations were used by GPL representatives to communicate information about the cooperation within Rolls-Royce and its partners. The person heading up business development at CEVA states: “We have extensive documentation that [the GPL director at Rolls-Royce; authors] has developed based on the frameworks supplied by Alliance Best Practice.... As time went on and his team produced more presentations, ... executives became happier to accept the framework.”

Not only were important results from the evaluation stored in reports and company presentations, the findings were also *integrated* in alliance governance and training. Firstly, the lessons learned with respect to formalization led to the instigation of a new governance model ensuring strong alliance management, interpartner communication, and performance reviews at three distinct levels: strategic, managerial, and operational. Furthermore, the new governance model ensures stakeholder management at the top managerial levels within each of the partners. According to CEVA’s head of business development “it [governance model, authors] drove people’s behavior to work in a collaborative way.” Secondly, the results were used to set up training programs within Rolls-Royce. First and foremost the training materials are used to create a shared mindset within the group of professionals working for the alliance. All incoming professionals receive the same briefing so that they share a common background in the alliance goals, vision, and history. In the words of the GPL director at Rolls-Royce:

We changed our personnel ... which meant that we had to educate some people on what we are trying to achieve and what some key concepts meant. To do this we had to start writing stuff down so that we could explain it in the same way in a consistent manner to multiple people.

Materials are also used to facilitate recurring road shows to Rolls-Royce sites, information sessions for incoming graduates, and annual leadership meetings hosted for Rolls-Royce employees and partners. All sessions are targeted at educating people and convincing them of the general value of engaging in the GPL alliance. The head of business development at CEVA in his interview talks about the value in sharing this type of knowledge: "We in CEVA have used [the GPL director at Rolls-Royce, authors] often to present to our own executive teams and also on occasions to present to other potential customers the value of deeper relationship management." Thirdly, the new model also entailed setting up a small "alliance management office" within Rolls-Royce to facilitate the day-to-day functioning and the longer-term development of the cooperation. The person heading up Airfreight at KN explains the practical workings of this alliance office: "We provide an alliance manager to Rolls-Royce. He works for [the person heading up development, authors]. The KN alliance manager is a senior supply chain technician. The team is three Full Time Equivalents (FTE's) provided from all three core partners."

A final result of the joint evaluation is the spread or *diffusion* of knowledge regarding the alliance within Rolls-Royce, the partners to the GPL alliance, and beyond. Within Rolls-Royce all trading units are currently benefiting from the GPL alliance. Furthermore, the lessons learned from the multi-partner cooperation are not only used by Rolls-Royce's larger set of suppliers but have also started to spread to other organizations and prospective partners. Rolls-Royce's GPL partners CEVA and KN use the alliance governance model as a reference case to inform their clients and to set up new alliances. In this respect, the Purchasing executive-Services at Rolls-Royce mentions that "the [governance; authors] model has won a number of logistics awards and is now used as a reference site in Rolls-Royce.... I have used it in [other areas; authors] and I think generally the principles have gone down well." The head of business development at CEVA states that "Rolls-Royce was heralded as a case study in relationship management and we have used the concepts with other clients." Hence, new alliances benefit from the governance model developed as a result of the joint evaluation process in the GPL alliance.

Despite the obvious benefits that were reaped from the joint evaluation in terms of learning, there are a number of specific factors that may have resulted in Rolls-Royce not realizing the full learning potential present in the evaluation results. First of all, as none of the partners involved in the

alliance had previous experience with alliances, it is difficult to build up an alliance capability. There is no knowledge base on which to build and hence it is more difficult to realize the full potential for learning from an alliance evaluation process (Lane & Lubatkin, 1998). The GPL director at Rolls-Royce describes this lack of experience in the following manner: "The variation in knowledge in individual companies was very large at the beginning and in particular there was a huge divergence of ability to understand [partnering; authors] even within individual companies." As a result, even though all involved believed the evaluation was very valuable, the evaluation was never repeated. A recurring evaluation could have shown progress made and the results could have guided the further diffusion of alliance knowledge within Rolls-Royce and partners. Building an alliance capability from scratch appears to be a difficult, slow, and somewhat haphazard process.

Second, existing views on collaboration with suppliers do not fit with a partnering approach. It is difficult to change the prevailing mindset and that makes it difficult to implement all lessons learned. Or in the words of CEVA's head of business development: "Originally both Rolls-Royce and we ourselves had naïve supplier views." In this respect, a purchasing executive at Rolls-Royce describes the results of an evaluation conducted at the time: "the suppliers did not value the way that Rolls-Royce worked with them." Although knowledge of collaboration is surely spreading through Rolls-Royce and the attitude towards cooperation is significantly changing with new people entering senior management positions, it is a process that takes time. The strong background in cost-based purchasing and the accompanying focus on control hampers the swift spread of alliance knowledge and the development of alliance capabilities within Rolls-Royce as a whole. As a result the GPL alliance still has many characteristics of a supplier network rather than a collaborative network of equal partners. Particularly, the tooling used to manage the alliance is very much grounded in supply chain management rather than alliance management. For example the QCR (quality, cost, and response) index is used as a key performance indicator. This index is a standard tool in the supply chain management world. The GPL director at Rolls-Royce confirms that "we are using standard Rolls-Royce purchasing and logistics processes adapted to our needs.... We have no GPL specific processes identified." Therefore rather than using individual alliance mechanisms, combinations of mechanisms may be required to build up an alliance capability.

Third, the change management issues in Rolls-Royce are also present in the logistics sector at large. The sector is mainly purchasing driven instead of partner driven. In general, companies operating in this industry are very suspicious of their competitors/partners and find it hard to share informa-

tion with them even though this may benefit their cooperative relation as a whole. The Global purchasing executive-Facilities & Logistics of Rolls-Royce hints at this general industry attitude as he thinks back to the very start of the GPL alliance:

It took a long time before partners would dedicate resources to the alliance in the absence of any guarantees of extra work. There was an initial suspicion from the partners that they did not know what Rolls-Royce was up to so consequently they were not prepared to commit more than token resources to the project.”

However, the problem did not only persist at the level of the partners but was also present in Rolls-Royce. The GPL director at Rolls-Royce proclaims that “one of our biggest barriers is openness with partners. There are people in Rolls-Royce who are less comfortable with sharing information with partners. This stops the partners from doing as good a job as they could do.” This again underlines the difficulty of changing existing practices and engaging in double loop learning.

ANALYSIS AND DISCUSSION

Table 6.6 presents an overview of instances of alliance capability building in the partners of the GPL alliance. It lists the examples of accumulating, storing, integrating, and diffusing lessons learned from the alliance evaluation.

This leads us to the next conclusions. First, all elements of learning are present and hence alliance evaluation contributes to alliance capability building. Lessons drawn from the alliance evaluation were accumulated, stored, integrated, and diffused. The joint evaluation of the alliance has led to single loop learning: the alliance has improved. A new governance model was developed and other changes in the alliance have been made based on the outcome of the evaluation process. In addition, double loop learning took place. Examples of double loop learning include the fact that Rolls-Royce applies lessons from the GPL alliance to indirect suppliers and that CEVA uses the governance structure as a benchmark for other relationships. Finally, another indication that alliance capability building is taking place is that lessons are not only confined to the heads of individuals and subsequently lost when these people leave. Instead, new people are trained in alliance thinking.

A second observation is a qualification of the first one. Alliance evaluation may not cover each element of the process of accumulating, storing, integrating, and diffusing lessons to the same extent. It appears to be particularly strong in accumulating and storing lessons. As the alliance evalu-

Table 6.6. Alliance Capability Building Based on Alliance Evaluation in the GPL Alliance

<i>Element</i>	<i>Example in Rolls-Royce</i>
Accumulate	<ul style="list-style-type: none"> • Evaluation highlighted what went well, areas for improvement, lessons learned • Specific attention required for formalization of the alliance and alliance capability building in Rolls-Royce • Lessons taken from bilateral relationships (Rolls-Royce and each individual partner) and on the alliance level
Store	<ul style="list-style-type: none"> • Accumulated lessons learned were stored in a PowerPoint presentation describing merit and commercial value of the alliance • The results were presented to the alliance partners; each partner received a report
Integrate	<ul style="list-style-type: none"> • Results from the diagnostic were integrated in a new governance model • Internal company presentations (roadshows, training of incoming graduates, and annual leadership meetings) are held to convince and educate people involved inside Rolls-Royce; people replacing others involved in the alliance receive the same training so that they have a similar background • Initial group in Rolls-Royce developed towards a miniature version of an alliance department (all partners assign an alliance manager to be part of this group)
Diffuse	<ul style="list-style-type: none"> • First internally: all trading units of Rolls-Royce are involved • Second, to other relationships: Rolls-Royce indirect suppliers now also use lessons from the alliance • Third, CEVA uses governance model as a reference model for their new alliances • Fourth, KN uses governance model to inform their clients • Fifth, external presentation to other organizations and prospective Rolls-Royce partners

ation process in this case ended with the development of an improvement program, it also made a start with integration of the lessons learned. However, the development of the new governance structure that integrated the lessons learned was not technically a part of the evaluation process. Instead, it was a follow up project. Evaluation had the least impact on the diffusion phase. Even though the lessons learned through the evaluation were to some extent diffused to other individuals and organizations, this was not part of the alliance evaluation itself. Instead, this depended on the management and the alliance group that came into being. Hence, alliance evaluation may ensure the capture and storage of lessons learned, but it may be less helpful in integrating and diffusing those lessons. To achieve the latter two elements, further mechanisms (like an alliance committee or alliance office) may be required.

Third, learning is limited in two ways. The first is that not all elements that were discussed in the evaluation process were picked up. Most of the learning is incorporated in the governance model, but other elements received little or no attention. The second limitation is that not all partners learned to the same extent. CEVA and Rolls-Royce appear to have been most active with conscious learning. This study suggests three reasons why learning may be limited: the absence of a knowledge base to build on, internal barriers in the partners, and barriers related to the culture present within the logistics sector. The first point is the traditional chicken and egg problem of capability building. When no capability exists and prior knowledge and experience is absent, the only way to start building a capability is to just start. The partner's capacity to absorb alliance knowledge was limited in the beginning and needed to be built up step by step. The other two elements raise an intriguing point. The literature on alliance capability so far has only focused on elements that stimulate the build-up of an alliance capability. There is no literature on barriers to building alliance capability. The elements mentioned in the GPL case are barriers that have been highlighted in the change management literature as well (Boonstra, 2004). It may be interesting to research whether the change management literature can provide insights into alliance capability building processes.

Fourth, double-loop learning may be direct and indirect. An instance of direct double-loop learning occurs when lessons from the evaluation are incorporated in company training. Indirect learning occurs when lessons from the evaluation are incorporated in the governance structure. People who use this structure may not always be aware that this practice derives from an alliance evaluation process. It is invisible, but still an important value generated by alliance evaluation.

THEORETICAL IMPLICATIONS AND FURTHER RESEARCH

As research into the role and effectiveness of the widespread alliance practice of evaluation is still in its infancy, there are many issues that need to be addressed. Based on this study we identify the following areas as being promising for further research. First, the strong relationship between experience and success may exist because alliance management mechanisms transfer experience into capability. Kale and Singh (2007) suggested this could take place because an alliance department facilitated learning. This case shows that other management tools and processes may have this effect as well. Further research may therefore be directed at studying other tools and processes. In particular it may be valuable to research how combinations of tools increase effective learning. Alliance

evaluation is strong in the “accumulate” and “store” phases of the alliance capability building process. Perhaps the combination with an alliance department may be necessary to benefit more from alliance evaluation, because such a department may support the “integrate” and “diffuse” phases.

Second some instances of factors that inhibit alliance learning are found. The literature so far has mainly looked at elements stimulating learning and capability building. Further theorizing may be directed at factors that hold back learning and capability building. Is the fact that not all possibilities for learning from the evaluation process were exploited an indication that managers find some elements of learning more valuable than others? If so, what determines whether they believe something is valuable? The case also showed some barriers to change. Internal processes in Rolls-Royce and sector culture have been seen by some respondents as slowing down the learning process. The literature on change management may help to understand why this happens and what types of interventions are necessary to overcome those barriers. This may work in two directions: change management literature may help to shed more light on the difficulties of alliance capability building and how to overcome them. On the other hand, the field of change management may be advanced to include inter-organizational change. Most research into change management is of an intracompany nature. Can the research results be applied on an interorganizational level as well? Do alliances have different sources of resistance to change than organizations internally? Are there any interventions that work across organizational boundaries? Or should new techniques for organizational change be developed that apply specifically to alliances and incorporate more than one organization? On an industry level it may be interesting to see whether certain business systems are more amenable to alliances than others. What characteristics should business systems have to be receptive to alliance learning? How can companies deal with obstacles to capability building that are of a systemic nature?

Third, the case shows that joint evaluation of alliance is important. Individual evaluation and cross-alliance evaluation have not been studied yet, but are heavily used in practice. What do they add over and above joint evaluation? Is cross-alliance evaluation more suitable to diffuse lessons across alliances? Is there a correct order in which to apply evaluation techniques to maximize learning, for example first individual, then joint and finally cross-alliance evaluation? Or should the methods be used simultaneously or independently from each other?

Finally, empirically most work on alliance capability building has been large scale and focused on one point in time. This case study shows that it is possible to trace learning over a longer time period. More fine grained

studies may shed more light on the process of learning. The current case studied learning at two points in time, 5-years apart. Perhaps better insights might have been generated when the case was tracked continuously over that time period. There is a need for longitudinal case studies to answer many of the questions surrounding the build-up of alliance capability.

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