



ALLIANCE PERFORMANCE MANAGEMENT IN SERVICE LOGISTICS

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Abstract: This study explores the management of stakeholder values for alliance success. A multiple-case study method is used to analyze – within six organizations attempting to form alliances – how the management of inter-organizational dimensions of stakeholder value adds to the success of an alliance business strategy. Our study focuses on the establishment of vertical service alliances within the Dutch maritime sector, including private-private as well as public-private initiatives. The findings point toward the usefulness of developing an inter-organizational success map. Because of its comprehensive multi-stakeholder orientation, a success map can be used by alliance managers to understand management’s considerations, including the trade-offs among an alliance’s various performance drivers. This new conceptual thinking can enhance research and best practices on inter-organizational design.

Keywords: Alliance performance, performance management, stakeholder management, inter-organizational values, success map design

In a globally connected world, organizations increasingly work with partners to reinforce their strategic positioning (Parmigiani & Rivera-Santos, 2011). Many managers recognize the need for inter-organizational cooperation to create new business opportunities (Taplin, 2006). An alliance can serve to access complementary resources and skills that reside within other companies (Caldwell & Howard, 2010; Dyer, Kale, & Singh, 2001) and to contribute to an organization’s own strategy (Pintelon, Pinjala, & Vereecke, 2006). As such, alliance management constitutes a strategic activity (Schiffrin, 2001), and it increasingly extends beyond a firm’s boundaries (Bititci et al., 2005; Bobbink & Hartmann, 2014).

Working in alliances poses new management challenges. Challenges may result from alliance managers finding it difficult to manage multiple alliance stakeholders; partners having incompatible views of the alliance; business process coordination becoming too complex and costly; and potential synergistic advantages failing to materialize (Gulati, Khanna, & Nohria, 1994; Gulati, Wohlgezogen, & Zhelyazkov, 2012; Schilke & Goerzen, 2010). In addition, CEOs may be hesitant to invest in strategic partnerships without a clear prospect of value being added. (We use ‘value’ and the plural ‘values’ in relation to organizational performance, not abstract principles an organization adheres to.)

While existing research offers rich insights into the management of a wide variety of business models (Bacharach, Bamberger, & Sonnenstuhl, 1996; Neely, Adams, & Crowe, 2001; Solaimani & Bouwman, 2012), managing the combination of the partner’s processes and capabilities suggests two important research questions: Can alliances be managed according to existing business models and success factors? What kinds of opportunities for value creation do alliances enable (Bititci et al., 2005; Weiller & Neely, 2013)?

The objective of our study is to explore in the context of alliance performance management the role partners’ values play in ensuring their own and collective success. Alliances affect the participating organizations both internally and externally. For example, an alliance can have a positive impact internally by providing access to new or complementary expertise

(Gnyawali & Park, 2011). Externally, combining products and services can underpin new value propositions (Harrison, Hitt, & Hoskisson, 2001; Ye, Priem, & Alshwer, 2012). Conceptually, we draw on the research literatures on alliances, value creation, and performance management. We also conducted empirical qualitative research in the Dutch maritime sector, examining managers' strategic motivations for forming alliances and their conceptualization of alliance success in relation to their organizations' values. In the sections below, we first discuss value creation and performance management in alliances. Then we describe the method used to investigate six public and private organizations in the Dutch maritime sector as they sought to form alliances. Lastly, we discuss our findings and derive their implications for theory and practice.

ALLIANCE PERFORMANCE MANAGEMENT: CONCEPTUAL FRAMING

The term 'alliance' covers a broad range of relationships, from short-term projects to long-lasting partnerships (Long & Zhai, 2010). In general, alliances as a cooperative initiative aim at synergy, expecting benefits obtained to exceed individual organizations' efforts (Ireland, Hitt, & Vaidyanath, 2002). An alliance can be distinguished from other inter-organizational relationships. It can be positioned between transactional exchanges (simple, discrete, one-time events) and 'relational' organizational forms such as networks or joint ventures. Alliances can be shaped by informal handshake agreements as well as formal contracts (Geyskens, Steenkamp, & Kumar, 2006; Kale & Puranam, 2013). Alliances are ultimately based on each participant's self-interest (Chang, Chen, & Lai, 2008) but can become a breeding ground for potential 'win-win' business opportunities (Taplin, 2006).

Value of Alliances

To date, the literature has mostly explored *why* organizations focus on business cooperation as a means of value creation. Theoretical perspectives such as inter-organizational cooperation theory (Jones & Lichtenstein, 2008; Oliver, 1991), alliance theory (Dyer et al., 2001) or the extended resource-based view (Caldwell & Howard, 2010) offer conceptual underpinnings for cooperation as a business model. Less attention has been paid to the value generation and appropriation process in alliances. In order to ensure the alliance's legitimacy, alliance managers need to secure the support of all relevant stakeholders such as shareholders and investors, employees, customers, suppliers (including the alliance partners), competitors, and public organizations (Chang et al., 2008; Hillman & Keim, 2001). The success of the alliance depends on the ability to take into account the underlying economic and social interests of stakeholders. This requires partners to have insight into each other's stakeholders and to manage values in such a manner that the alliance's entire system is supported (Draulans, De Man, & Volberda, 2003; Tjemkes, Vos, & Burgers, 2012).

An important issue is how alliance managers can manage the trade-off between maximizing alliance value and at the same time serving their own stakeholders' interests. Research has shown that alliance failures are mostly related to the motives for cooperation and the alliance's scope. Scope is one of the most challenging and critical activities in alliance performance management (Joncas, Kelly, & Schaan, 2002). The process of 'scoping' includes coming to know stakeholders' values and preferences for outcomes. Uncovering, shaping, and reinforcing the contribution of stakeholders' value is crucial to the accomplishment of strategic efforts (Schein, 1990). Since values can influence performance outcomes, they can be considered factors enabling or disabling the alliance strategy. Managing these factors is important to the organization's success (MacIntosh & Spence, 2012). At the same time, we would argue, coming to know the partners' values increases trust (by understanding why the partner acts as it does), and managing values is important to alliance performance. Stakeholder value refers to the desired wealth of the focal party, such as employees' job satisfaction. There are different methods for identifying stakeholder value (see the Appendix).

Following Rokeach's (1973) framework regarding individual values, a distinction can be made between an alliance's *instrumental* values ('facilitating capabilities' in organizational terms) and *terminal* values ('strategic objectives' in alliance terms). Moreover, Rokeach

(1973) was one of the first to emphasize that values interact. Congruence in values occurs when there is a high level of agreement about the connections between instrumental and terminal values (Adkins, Ravlin, & Meglino, 1996), and value congruence facilitates the achievement of long-term objectives. Further, understanding the incongruence of values helps managers to determine actions that could decrease operational differences (Adkins, Ravlin, & Meglino, 1996).

Operationalizing Value: Towards Alliance Performance Management

Since an alliance consists of inter-organizational exchanges, partners must understand the different values of all participating organizations. Assessment of alliance performance, however, often lacks metrics to assess the congruence of underlying strategic values (Tjemkes et al., 2012). In operationalizing value, we seek to bridge both strategic topics (e.g., stakeholders, business models) and operational measurement. Performance management frameworks such as the PRISM framework (Neely et al., 2001) offer a good starting point. This framework is built on five views and questions (Neely, Adams, & Kennerley, 2002):

1. Stakeholder satisfaction: Who are our stakeholders, and what do they want and need?
2. Stakeholder contribution: What do we want and need from our stakeholders?
3. Strategies: What strategies do we need to put in place to satisfy these sets of wants and needs?
4. Processes: What processes do we need to put in place to satisfy these sets of wants and needs?
5. Capabilities: What capabilities – bundles of people, practices, technology and infrastructure – do we need to put in place to allow us to operate our processes more effectively and efficiently?

The PRISM framework helps organizations develop their own success maps – a logical, abstracted structure for understanding the drivers of performance. “The success map encapsulates those things that the business has to deliver if it is to achieve its overall financial goals” (Neely et al., 2001). Based on a success map, organizations can develop approaches to performance data collection and analysis. Alliance managers identify factors that presumably drive revenues and costs, and they articulate their reasoning on how these factors are related. Organizations, both public and private, can thereby improve their strategic focus and internal coherence (Bacharach et al., 1996; Baden-Fuller & Morgan, 2010). An example of a success map is shown in Figure 1.

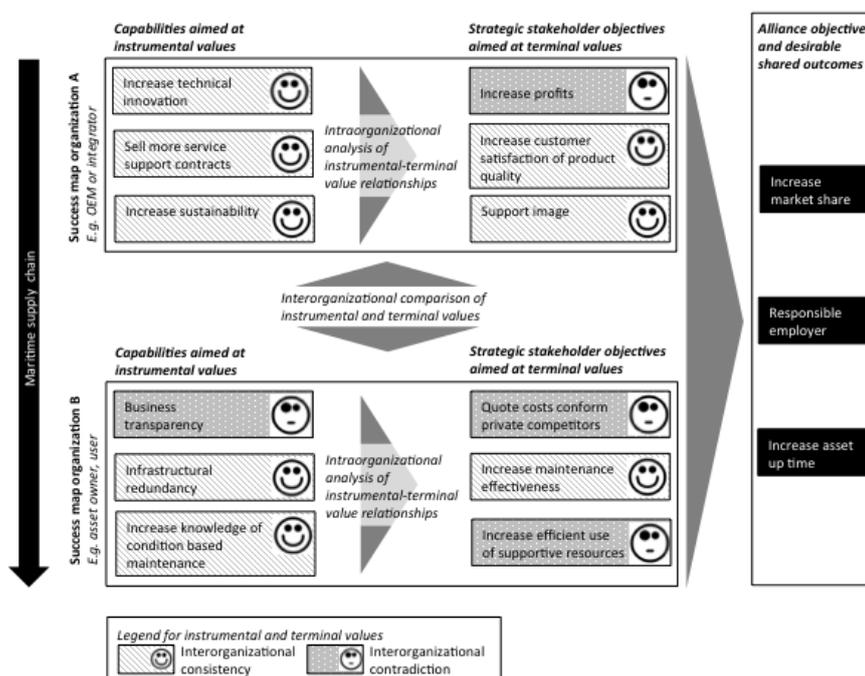


Fig. 1. Alliance success map

We envision organizations moving back and forth between their own success map and inter-organizational dimensions of value during the formation stages of an alliance. (See Table 1.) They can consider the structural features of their success map and insert these into the alliance process (inside out). Conversely, the alliance is likely to impact their success map (outside in) because it affects existing values and may create new or unexpected values. Our empirical work examines these dynamics in the Dutch maritime service logistics sector.

Table 1. Alliance life cycle phases and performance management

LIFE CYCLE PHASE	SCOPE		
	Organizational success map	Alliance impact on organizational success map	Inter-organizational cooperation for materializing alliance value
Pre-Alliance	Partners develop their own organizational success maps		
Business Case	Partners consider the alliance's potential for impacting their organizational success maps		
Partner Assessment and Selection	Partners initiate cooperation		
Alliance Negotiation and Governance	Partners consider impact on their organizational success maps		Partners elaborate on alliance's cooperation framework
Alliance Management	Partners may adapt their organizational success maps based on alliance experiences		
Assessment and Termination	Partners may decide to terminate the alliance due to a lack of positive effects on their organizational success maps		

METHOD

To investigate how organizations' values relate to potential alliance partners' values and how an alliance can contribute to each partner's success, we used a multiple-case study research method (Eisenhardt, 1989; Eisenhardt & Graebner, 2007). The cases were drawn from a large study focused on alliance formation within the Dutch maritime sector. In exploring the success factors for service logistics alliances, we traced the most significant intra-organizational strategic values and underlying capabilities. We focused specifically on vertical service alliances between different types of organizations. Given involvement in the assets' (i.e., ships) total life cycle, organizations have the opportunity not only to strengthen their individual performance but also to influence organizations upstream or downstream in the alliance. 'Vertical' here means sequentially linked contributors to value creation. In the maritime sector, *original equipment manufacturers* of naval systems (e.g., radar, engines), *system integrators* (e.g., shipyards, service suppliers), and *asset owners* who use the systems for business purposes (e.g., tug towing, offshore investigation services) constitute the vertical alliance. The maritime sector has boosted efforts to form service alliances as a strategy to improve maintenance processes. The sector's ambition is driven by the observation that maintenance constitutes a significant part of a ship's exploitation costs and that system downtime may lead to a substantial loss of revenues for asset owners (Peeters et al., 2012). In the past, top management tended to ignore maintenance costs by considering them to be part of manufacturing overhead (Pintelon et al., 2006). In today's environment, maintenance and overhaul costs are viewed from a broader angle, as part of innovative strategies for designing, modifying, and maintaining assets.

Data Collection

We collected data at the organizational level from multiple sources: interviews, inter-organizational project meetings, and secondary sources (e.g., corporate documents and academic theses). Face-to-face interviews were conducted with 20 managers from six public and private organizations. We interviewed experts representing different functions and responsibilities, such as purchase managers, service managers, lawyers, and senior executives. Interviews were conducted using a semi-structured protocol in order to give room for the interviewees' thoughts and perspectives. Interview protocols were written in the respondent's native language (Dutch) to prevent misunderstandings. As mentioned earlier, we focused on the initial stages of alliance formation, exploring the values of stakeholders and their motivation in the sense of preferences for alliance outcomes and the relationship between organizational capabilities and alliance strategy. We also attended a number of inter-organizational meetings from which we drafted field notes. Trying to ensure that accurate information was provided, we promised that neither the interviewees' nor the organizations' names would be disclosed.

Data Analysis

To analyze relationships among alliance objectives, strategic values, and organizational capabilities, we content analyzed our data, which is "... a systematic, replicable technique for compressing many words of text into fewer content categories based on explicit rules of coding" (Stemler, 2001). From this, we constructed a structured data table to present the findings on organizational processes and capabilities, stakeholder requirements, and alliance contributions across the six organizations.

To examine how intra-organizational performance relates to alliance success and vice versa, we drafted alliance success maps to explore intra- and inter-organizational relationships between different values and strategic objectives. Our initial approach of success maps evolved during the analysis phase into a model for examining the congruence of instrumental and terminal values within organizations, and to relate these values across organizations. We analyzed alliance objectives and instrumental-terminal values for the three categories of stakeholders (original equipment manufacturers, system integrators, and asset owners). In some cases, terminal values changed over time, and we analyzed how this influenced the alliance formation process.

Validity and Reliability

In order to increase the validity and reliability of the interview data, all respondents were asked to read and, if necessary, revise the transcripts. The same procedure was adopted for the drafted field notes. To supplement the primary data gathered by interviews and informal conversations, secondary data were collected by examining a broad range of corporate documents and maritime newspapers, and by studying masters and bachelors theses tied to the research project. All of the secondary data were triangulated with the primary data to increase validity and reliability (Yin, 2009).

FINDINGS

Our data deal with the early stages of alliance formation. The first set of findings presented below focuses on the organizational values and alliance objectives of the main types of alliance partners: original equipment manufacturers, system integrators, and asset owners. The second set of findings focuses on the processes and capabilities, stakeholder requirements, and alliance contributions of the six organizations studied.

Organizational Values and Alliance Objectives

Organizations considering an alliance explore inter-organizational relationships that move beyond traditional quid-pro-quo exchanges (Jones & Lichtenstein, 2008; Sobrero & Schrader, 1998; Tjemkes et al., 2012). In the case of Dutch maritime services logistics, expertise and information from customers allowed original equipment manufacturers (OEM) and system

integrators (SI) to improve their organizational learning and product/service development processes. Asset owners (AO), on the other hand, were most interested in learning about products and services that would extend their own knowledge about maintenance processes. Organizational success maps express what an organization wants to achieve and which drivers may contribute to or hinder success (Neely et al., 2001). In order to understand how an alliance could contribute to the success of an organization, we first explored the intra-organizational interrelations between organizations' values and objectives. We found that success maps – limited here to values – are characterized by organizations' positioning in maritime supply chains. Most OEMs adopt an alliance strategy as a supportive (secondary) strategy to improve the quality of their differentiation or cost strategy. In addition, we found that OEMs struggle to resolve internal strategic ambivalence (e.g., partially moving from product towards service business models, shifting from a go-it-alone approach towards alliances). As success drivers change with shifting business strategies, the design of organizational processes shifts as well (Gerritse, Bergsma, & Groen, 2014). Consequently, fitting processes and capabilities to new business strategies presents a formidable challenge (Bacharach et al., 1996). Product-oriented OEMs face operational tensions when partially shifting towards a service-based business model. Most OEMs focus on cooperation with a customer rather than with system integrators and service providers, as these relationships tend to become competitive.

With respect to how an organization's values relate to a potential alliance partner's values, our findings showed a common interest in seeking new knowledge by means of cooperating with (horizontal) partners having complementary knowledge. Partners' strategies for forming an alliance are caused by an emphasis on service and by a shift towards a 'customer function' orientation (e.g., how does an asset support operational customer functions such as 'power' for transporting). These notions have surfaced in the literature on procurement and industrial marketing (Bacharach et al., 1996; Grönroos, 2011; Neely, 2008). Value for customers takes center stage rather than the offering itself (Chandler & Vargo, 2011). Alliance outcomes are primarily focused on service innovation and expansion of services packages. Since the input from organizations within the alliance involves core capabilities, to expand their quality requires an equal commitment from their partner(s). Furthermore, in comparison to both OEMs and SIs, most asset owners and users seem to have a different approach towards motivating alliance participation. Depending upon their capabilities, asset owners seek other suppliers to improve organizational performance.

Private asset owners are being confronted with OEMs' and SIs' desire to experiment with new business models (Caldwell & Howard, 2010). This might also explain their approach when exploring partners' inputs to the alliance. To counter possible relationship asymmetry, private asset owners tend to focus on balancing the alliance outcome by inserting risk and reward penalties as a means to balance power. This formalizes the relationship and limits the development of new values. In contrast, public asset owners face different market dynamics. For example, the Dutch Navy has been facing budget cuts that jeopardize its own maintenance base. Fewer ships mean less maintenance work; this threatens long-term sustainability of maintenance capabilities. Moreover, the Navy needs to consider elaborate public regulation on procurement aimed at transparency rather than relationship building with particular upstream providers. At the same time, SIs and OEMs may seek to benefit from the Navy's expertise and resources (e.g., for testing). Agreeing on value exchange thus represents a formidable challenge.

The findings on organizational values and alliance objectives are summarized in Table 2.

Table 2. Alliance Objectives and Instrumental/Terminal Values

Category of Organizations	Instrumental Values	Terminal Values	Alliance Objectives
Original Equipment Manufacturer (OEM)	Aimed at extending customer-centric, full service offering	Best product offering → New terminal values: servitization, globalization	Using core capabilities to provide products and services to AOs
System Integrator (SI)	Aimed at locating equipment for asset owners	Services with a transaction focus → New terminal values: collaborative services (relationship focus) with horizontal partners	Acquiring extended knowledge for and by providing services to AOs
Asset Owner (AO)	Aimed at business transactions with OEMs instead of cooperation	Public organizations: asset availability, independence → New terminal values: capability sustainment, avoidance of lock-in and strong dependence on suppliers, cost effectiveness Private organizations: asset availability → New terminal values: reliability, minimal disruption of operations, collaboration with upstream partners, cost effectiveness, avoidance of lock-in and strong dependence on suppliers	Provided with cost-effective products and services from OEMs and/or SIs

Dynamics Among Alliance Partners

Alliance formation confronts two sets of values and success maps: those of an organization considering an alliance and those of its potential partner(s). Dependencies begin to appear between the organizations, which could lead to collaborative success maps. Our findings in maritime services logistics support the opinion that different values and success maps can nurture alliance formation. The alliance success map articulates areas of cooperation while leaving room for each organization to assess ‘integration’ or the ‘interlocking of value horizons’ (Henneberg & Mouzas, 2008). Recent work on control towers in logistics makes this notion palpable: operations from different organizations are at least virtually integrated (Pieri, 2012). In the alliance projects we studied, such multi-organizational concepts are being introduced. This echoes earlier work on network orchestration (Busquets, 2010; Dhanaraj & Parkhe, 2006) and virtual organizations – organizations that coordinate their business processes and services without losing their own identity and legal structure (Danesh et al., 2013; Katzy & Crowston, 2007).

Reverting to the organizational level success maps, values may be similar and aligned or perhaps contradictory (Tatham, 2013), and they can change during the alliance formation process. We examined how organizations’ values relate to potential alliance partners’ values. (See Table 3.) We compared the intra-organizational success maps between alliance partners to examine the similarities and differences between their values. We found that organizations face several challenges by analyzing both inter-organizational and intra-organizational instrumental and terminal values.

Table 3. Comparison of Features Across the Six Potential Alliance Partners

Organizations	Processes and capabilities: What capabilities influence our achievements (instrumental values)?	Stakeholder requirements: What are our main strategic objectives (terminal values)?	Alliance contributions: What do we want and need from the alliance?
Original Equipment Manufacturer			
PC	<ul style="list-style-type: none"> • Knowledge of intermediate and depot level maintenance • Cooperative activities with integrators • Customer-centric downstream focus and lock-in by sub-supplier contracts • Innovative and qualitative product development • Provides services without penalty risks/rewards due to goodwill (experience-based trust) • New complementary service strategy requires process renewal and new capabilities (personnel, machinery, infrastructure) • Lack of activity-based costing • “Turnover” culture; service awareness but • 9-5 mentality in providing it • Limited service performance measurements • Good relationship with DM (system integrator) 	<ul style="list-style-type: none"> • Offer service level agreements to customers with maintenance knowledge but insufficient capacity • Interested in working with system integrator in the development of innovative maintenance methods to improve service quality 	<ul style="list-style-type: none"> • Service provision that is complementary to the differentiation strategy (new innovative products or increased quality of renowned products) • Maximal system up-time by performing effective preventive maintenance. In addition, when total care is provided (control of operational planning), maintenance costs might be decreased.
TH	<ul style="list-style-type: none"> • Design and production of innovative electronics • Strive for quicker service response times via problem analysis • New service strategy requires process renewal and resources to be sourced (additional service personnel, machinery, infrastructure, spare stocks) • Minor investments in service development since its significance is uncertain • Lead service contracts with sub-suppliers occur occasionally • Sub-supplier selection and product design are insufficiently based on service requirements and costs • Good relationship with RN (asset owner) 	<ul style="list-style-type: none"> • Maintain primary knowledge focus in the field of production • Ambition to provide life service support and to deliver to customers requiring maximal system up-time (primarily not for cost reduction) • Close cooperation with customers to explore and understand operational interests and requirements • Despite alliance, jobs and job positions need to be preserved 	<ul style="list-style-type: none"> • Desire intermediate maintenance support to increase product service quality • Offer to share depot level maintenance knowledge

System Integrator			
AL	<ul style="list-style-type: none"> • Tailor-made product integration and interface development • Customer-centric downstream focus • Long-term, efficient intermediate or depot level maintenance; training offering on behalf of suppliers or on customer request • Good relationship with PC (original equipment manufacturer) • Limited global support capabilities (distribution network) • Installation of sensors at systems to attain operational performance data for condition-based maintenance. • Maintenance and spare part planning 	<ul style="list-style-type: none"> • Expand global (scaled) service offerings. 	<ul style="list-style-type: none"> • Interested in working with horizontal partner with complementary knowledge to increase service package offering (market expansion) • Interested in working with asset owner on new systems to obtain data and develop and test efficient maintenance plan (instead of purchasing performance knowledge from OEM)
DM	<ul style="list-style-type: none"> • Technological and product development and integration • Customer-centric downstream focus • Provision of performance-based maintenance advice and contracts • Enough experienced personnel, material, and infrastructure 	<ul style="list-style-type: none"> • Increase effectiveness of preventive and condition-based maintenance • Increase efficiency of logistics maintenance support • Exploit previous customer experience in new product or service offerings to improve company image 	<ul style="list-style-type: none"> • Desire to extend product quality through life-time to increase customer satisfaction and thereby increase market share
Asset Owner			
RN	<ul style="list-style-type: none"> • 24/7 service mentality • Business transparency • Flexible operations and strategic volatility due to political dynamics • Infrastructure redundancy • Shortage of technical and purchasing specialists • Limited process registration • Large amount of business interactions on the basis of break-fix maintenance • Desire to increase knowledge of condition-based maintenance 	<ul style="list-style-type: none"> • Increase intermediate level maintenance knowledge (system analysis, project management) • Quick results to motivate stakeholders • Increase stock response times and decrease costs • Maintain redundancy of personnel for JIT intermediate level maintenance • Share infrastructure, machinery, and performance data to reduce costs • Maintain control over operational performance • Not interested in total care service contracts • Scheduling to solve expensive market mechanisms • Interested in working with OEM to share infrastructure and maintenance knowledge 	<ul style="list-style-type: none"> • Desire to increase maintenance effectiveness for maximal system up-time (profits) • Increase efficient condition-based maintenance • Decrease and share system failure risks • Achieve long-term results • Offer to provide infrastructure
SL	<ul style="list-style-type: none"> • Local maintenance personnel (cultural differences) • Personnel incapable of conducting efficient intermediate level maintenance • Large amount of business interactions on the basis of break-fix maintenance • Limited amount of spare parts locally stored • Central storage of spare parts and global distribution network 	<ul style="list-style-type: none"> • Increase intermediate level maintenance knowledge (system analysis, project management) • Increase efficient planned maintenance • Increase JIT spare parts • Maintain control over operational performance • Not interested in total-care service contracts • Estimate maintenance quality or cost improvement to motivate CEO • Interested in working with OEM to obtain knowledge 	<ul style="list-style-type: none"> • Desire efficient planned maintenance to maximize up-time for increased profits and decreased costs • Offer system performance data

Note: The names of the six organizations have been disguised for confidentiality.

Considering the inter-organizational comparison of the value drivers behind the shared alliance objectives, two instrumental and two terminal values seemed to be opposite to each other. With respect to the terminal values, we found a case where the public asset owner

considered offering services to third parties, that is, customers of the OEM. This would be organized under the umbrella of a service alliance between the OEM and the public asset owner. In terms of value, however, the OEM desired maximum profits. This was in conflict with the public asset owner who is required by regulation to offer third-party services that conform to market prices. Here the instrumental values leading to the terminal values were in conflict: the OEM strives for technological innovation and secrecy, whereas the public asset owner tries to share information so that it is easier for others to see what activities are being performed.

Again, the qualification of value differences is important to understand whether there is a tendency for cohesion enhancement or disruption in achieving alliance success. Since these differences represent existing rather than new values, the initiative might tend to overlook the underlying drivers. Nevertheless, proper attention must be given to sort them out; otherwise they will become bottlenecks in a successful partnership. Furthermore, the mixture of similar and conflicting values implies that external management of processes and capabilities will become difficult when the alliance commences. A fine line separates external activities that serve similar values and those incurring the risk of asymmetrically benefitting one of the partners. As such, partners need to demarcate their area of cooperation, assign responsibilities, draw contracts or at least settle on gentlemen agreements, and operationalize risk management and the allocation of benefits and costs (Doz, 1996; Yadav, Miller, & Schmidt, 2003).

Concerning the intra-organizational comparison of values, organizations need to understand the relationship between instrumental and terminal values. Rather than thinking of alliance formation as a one-time effort, our findings suggest that it should be a continuing process to monitor partners' alignment of intra-organizational values. Terminal values keep evolving as organizations push their strategic and innovation agendas. We found organizations struggling with the organizational implications of new strategic concepts (e.g., 'servitization' (Neely, 2008)) and new strategic realities (e.g., budget reductions in the Navy). Conflicting intra-organizational values are an early sign of business discontinuity and upcoming change, having an effect on the alliance coherence. Obtaining insight into conflicting intra-organizational values is valuable in understanding where to focus managerial attention when negotiating and monitoring alliance performance.

DISCUSSION AND IMPLICATIONS FOR RESEARCH AND PRACTICE

As organizations consider or embark on the path of alliance relationships, opportunity and risk go hand in hand. With organizational level performance in mind, our study explores how six public and private organizations in the maritime supply chain go about forming alliances. Their interest stems from market conditions (e.g., shrinking defense budgets), new concepts (e.g., servitization), and sourcing innovations (e.g., performance-based contracting). Our findings help to explain the role values play in alliances.

Alliances and Value: Towards Inter-organizational Performance Management

Current research increasingly acknowledges the external dimension of organizational performance. This includes both external societal impacts of organizational activities (Gopalakrishnan et al., 2012; Wolf, 2011), performance across supply chains (Craighead, Hult, & Ketchen, 2009; Trkman et al., 2010), and performance of the 'extended enterprise' (Bititci et al., 2005; Bobbink & Hartmann, 2014). Our findings indicate that alliance managers need to take multiple stakeholder interests into account and encompass an integrated view, rather than emphasizing outcome measures such as costs and productivity (Bititci et al., 2012). Moreover, with customer orientation taking center stage for all organizations, performance management intersects with inter-organizational value relationships (Chandler & Vargo, 2011; Peronard, 2014). Our findings on alliance formation underscore this trend, yet they reveal the complex environment in which managers try to serve their organizations' objectives while opening up the organization to external cooperation.

Our findings cut across three levels: intra-organizational, inter-organizational, and alliance. Organizations strategize on alliance formation and articulate their joint intentions. Our findings suggest that future research should combine intra-organizational analysis of performance management and success drivers with inter-organizational analysis of value drivers. Compared with non-cooperative transactions where performance boils down to achievement against service levels, alliances call for more external transparency. Also, alliance success is likely to depend on weighing contradictory values against those that are consistent across organizations. Dealing with only partial consistency of values across organizations is an increasingly acknowledged feature of organizational coordination (Bacharach et al., 1996; Donnellon, Gray, & Bougon, 1986) and inter-organizational cooperation (Uiterwijk, Soeters, & van Fenema, 2013).

Governance and Strategic Relationship Management

Traditional research on governance has presented clear-cut options for control and coordination: markets (buy), hierarchies (make), and clans (ally) (Ouchi, 1980; Williamson & Ouchi, 1981). An alliance could fit the clan option, yet theory's emphasis on relationships and trust obscures the complexities from a value perspective. Moreover, categorization of ideal forms has given way to theories that show these complexities and the blurring of inter-organizational boundaries (Bradach & Eccles, 1989; Caldwell & Howard, 2010; Ghoshal & Moran, 1996). Reflecting on our findings, an alliance has market aspects in that organizations look for a good deal that serves their terminal values. They are also aware of power differences and drivers of each organization's business model. An alliance has hierarchical properties as organizations are expected to share ideas and operational information and to co-innovate. These complexities imply that organizations move slowly during alliance formation. Middle managers test the ground for potential tensions, search for areas of commonality, and solidify internal approval from top management and employees. Organizations seem to clash, at least somewhat, on the type of relationship they seek. Most upstream organizations, such as original equipment manufacturers and system integrators, tend to look for input from downstream organizations to improve their products and services. In addition, some strive for long-term partnerships in a cooperative fashion. Downstream organizations, such as asset owners, act according to a customer-centric logic. They expect upstream organizations to increase transparency and develop a cooperative attitude. Downstream organizations, focused on their core business, may neglect the development of their own marketing and operational strategies to exchange resources with upstream partners.

Our findings suggest that the alliance formation process can be facilitated by universities and consultancy firms. Future research might investigate how relationships evolve in an industrial sector (Berends, van Burg, & van Raaij, 2011), how stakeholders are engaged (Ho, 2007), and to what extent organizations 'open up' to counterparts. Moreover, our vertical supply chain study can be extended towards horizontal alliances (van Fenema, Keers, & Zijm, 2014). An example of a horizontal alliance would be 'co-opetitive' relationships aimed at joint procurement or co-development of products and services (Gnyawali & Park, 2011; van Fenema & Loebbecke, 2014).

Operationalizing Value in Alliances

Our findings show that new alliances must address two main issues in operationalizing value. First, the participating organizations may shift from traditional procurement towards performance-based service contracts (Kleemann & Essig, 2013). While the procurement mode offers well-known routines for specifying work and tendering, performance-based contracts present new alliance partners with challenges. For suppliers, performance-based contracting could present a major risk or it could offer opportunities for controlling customer operations and making a good profit. For customers, the comfort of being taken care of may be threatened by a concern for paying too much and by hesitation in trusting the supplier. Alliances wanting to use performance-based contracts could draw on the IT and manufacturing literatures where outsourcing is commonplace (Dedrick & Kraemer, 2010; Oshri et al., 2007). Service-based performance management would build on the detailed

measurement of operations and on linking data to business, technical, and service metrics (Keller & Ludwig, 2003).

Second, organizations transitioning towards a cooperative mode have to develop criteria for joint operations and measures for organizational and alliance level performance. Alliance partners must specify their ‘common playground’, avoiding areas with conflicting instrumental and terminal values. Demarcating the common playground from no-go areas will ease concerns of an alliance moving in a direction that does not serve partners’ interests. Alliance activities can be limited to particular products and services; measurement then depends on internal data being cleansed for external use. Organizations move step by step to ensure that their interests are being met as long-term investments pay off. Future research might explore how measurement relates to the direction an alliance takes, which information processing challenges are to be taken care of, and who should be involved in operationalization.

Methods for Alliance Performance Research: Process and the Role of Concepts

Our role as researchers transformed during the course of the study. We started off with a round of analysis-oriented interviews befitting a traditional case study. Gradually, our role is shifting towards a co-facilitator of the alliance formation process. This role shift has implications on the conceptual side as well. Analysis-oriented research aims at developing a model to describe and explain reality and to extend theory (Romme & Endenburg, 2006). The co-facilitator role suggests an action research approach aimed at designing and influencing organizations’ reality (Bititci et al., 2005). As such, we will test the relevance of our success map concept for alliance formation by conducting workshops with alliance partners. The concept then becomes a vehicle for presenting new concepts to organizations to influence their thinking, in the tradition of management concepts such as the Balanced Scorecard (Kaplan & Norton, 1996). Obviously, both approaches can work in a mutually reinforcing manner, with analysis feeding design, design impacting organizations, and analysis studying the impact (Romme & Endenburg, 2006). Future research may explore how researchers can take on different roles in studying and influencing values measurement.

Implications for Practice

Our findings encourage practitioners to reflect on their organization’s success map, eliciting the inter-organizational influences on intra-organizational instrumental and terminal values. When relating to alliance partners, the collective understanding of consistent and contradictory values could demarcate why and how cooperation could benefit all organizations. Once the alliance kicks off, ongoing monitoring of value performance and impact is crucial for sustaining the alliance. Alliance managers face, in addition to their external work, a complex internal role of rallying business units, top management, and employees to support the alliance. Their communication and cognitive skills have to be outstanding in order to support boundary-crossing processes (O’Mahony & Bechky, 2008). Moreover, an entrepreneurial attitude is paramount when chartering new ground.

CONCLUSION

Our study found that values represent a complex architecture for organizations in alliances. Different levels of organizations are involved in the process of constructing this architecture. Moreover, new stakeholders may have to be taken into account such as international headquarters and the national government. Alliance success thus requires careful navigation and major efforts to sufficiently – not perfectly – align and protect stakeholder interests.

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APPENDIX

Stakeholder analysis begins with stakeholder identification. Primary and secondary stakeholders are distinguished. Primary stakeholders have a formal or contractual relationship with the organization and are vital for its survival, whereas secondary stakeholders merely affect, or are affected by, the organization. Primary stakeholders include owners, employees, customers, government, local community, and business partners. Usually, relationships between alliance stakeholders are interactive – for example, the government regulates the market, but organizations also influence political decision-making. According to Ho (2007), it is helpful to identify stakeholders and their relation to performance by categorizing them according to their interest and impact (power). Stakeholders can have positive or negative interests in the organization's strategy, while the depth of the relationship influences stakeholder impact. Through understanding interest and impact, managers can develop competitive or cooperative strategies for managing stakeholders.

Jensen (2001) proposes long-term value maximization of the organization as the key objective and a criterion for selecting pivotal strategic values. He calls this approach 'enlightened value maximization', as it is a combination of value maximization and stakeholder theory. He suggests defining a true single-dimensional score for measuring performance for the organization or division which is consistent with the overall strategy, and then to measure the most important stakeholders' values (as performance drivers) to understand how to maximize the score. In contrast, Earl and Clift (1999) propose to weigh value trade-offs for reflecting different stakeholders' priorities. Their basic premise is that important attributes to maximize an alliance's objectives are given high weights, while less important attributes are given low weights.