Kaipia, Riikka; Turkulainen, Virpi

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Published in:
Industrial Marketing Management

DOI:
10.1016/j.indmarman.2016.04.001

Published: 01/02/2017

Document Version
Peer-reviewed accepted author manuscript, also known as Final accepted manuscript or Post-print

MANAGING INTEGRATION IN OUTSOURCING RELATIONSHIPS – THE INFLUENCE OF COST AND QUALITY PRIORITIES

Riikka Kaipia
Aalto University School of Science
Department of Industrial Engineering and Management

Virpi Turkulainen
UCD School of Business

ABSTRACT

Outsourcing has become increasingly popular in the contemporary business context. This study aims to develop the understanding of outsourcing by addressing the management of integration in the outsourcing relationship between buyers and contract manufacturers. Specifically, we address the effect of strategic priorities of cost and quality on how different modes of integration are used both before and in the early phase of production. The paper elaborates the strategic contingency argument by analyzing qualitative data from eight cases in the food and electronics industries. The results indicate that managing the outsourcing relationship requires considerable resources after the decision to outsource has been made. The results show that integration in the outsourcing relationship evolves over time and the use of integration modes is contingent on the strategic priority. The study provides an understanding of the contextual nature of integration in the outsourcing relationship, as well as a contextualized understanding of buyer-supplier relationships. It also provides an illustration of theory elaboration research.

Keywords: outsourcing, integration, buyer-supplier relationship, contract manufacturing, strategic priority, case study, theory elaboration

1 INTRODUCTION

Outsourcing is one of the key business trends and has become a common practice in manufacturing industries; for example, in the pharmaceuticals industry 60-70% of manufacturing activities were outsourced in 2005 (Brewer et al., 2013). Explanations of the increase in outsourcing include specialization and a focus on core competencies while releasing capital to survive in an increasingly competitive market place (e.g., Gray et al., 2009b). Despite its prominence, outsourcing continues to pose significant challenges (Gadde & Snehota, 2000; Harmanciouglu, 2009; Kroes & Ghosh, 2010) and many businesses fail to realize the anticipated benefits of their outsourcing initiatives (Gray et al., 2013; Handley & Benton, 2009; McIvor, 2000). For example, Lego outsourced most of its manufacturing activities to Flextronics in 2006 but brought them back in-house in 2008. As with the case of Lego, one major reason for the challenges posed by outsourcing is issues related to managing the outsourcing relationship (Ishizaka & Blakiston, 2012). Failing to manage the relationship with the contract manufacturer can have serious consequences for the buying firms' long-term performance and reputation and lead to the failure of the whole outsourcing initiative (Fan, 2000; Ishizaka & Blakiston, 2012; Lonsdale, 1999). The purpose of this study is to develop a further understanding of the management of the outsourcing relationship. In particular, the focus of the paper is on assessing how integration is managed in the outsourcing relationship.

While integration is one of the fundamental issues in buyer-supplier relationships and has been addressed extensively in prior research (e.g., Fang et al., 2008; Terpend et al., 2008; Sheth and

Sharma, 1997), outsourcing relationships represent a special context. Outsourcing relationships are a distinctive type of buyer-supplier relationship, comprising the following key elements (Araujo et al., 1998; Baraldi et al., 2014; Handley & Benton, 2009, 2012, 2013; Harmanciouglu, 2009; Narasimhan et al., 2010; Ndubisi 2011; Sousa & Voss, 2007). First, outsourcing is a conscious decision *not* to carry out an activity in-house, which implies that there is always the option of in-house production. Second, when production is outsourced, the outsourced objects are specific to the client, which means that the buyer holds the brand rights. The buyer also uses the contract manufacturer as an extension of its own production structure and contrary to standardized interfaces, the contract manufacturer requires specifications and production schedules from the customer ex ante. Taken together, the degree of interdependence between the parties is reciprocal and the relationship is highly mutually dependent, making integration particularly critical in outsourcing relationships (Baraldi et al., 2014; Boulaksil & Fransoo, 2010; Handley & Benton, 2009; Thompson, 1967; Van de Ven et al., 1976). Moreover, outsourcing relationships are highly complex as a result of high buyer power and task- and location-specific features, requiring a greater managerial emphasis on integration (Handley & Benton, 2012, 2013; de Vries et al., 2014). The importance of understanding how to manage integration is increased by the significant costs associated with it (Galbraith, 1973).

This paper takes a theory elaboration research approach to develop a contextualized understanding of how to manage integration in outsourcing relationships. First, we build on the strategic contingency argument (Dean & Snell, 1996; Ketokivi & Schroeder, 2004) and the underlying assumption that integration in an outsourcing relationship is contingent on the strategic priority, referring to the main operational priority the buyer expects from the contract manufacturer when carrying out the specific activity (Gray et al., 2009a). We study the impact of cost and quality priorities as they have been identified as the main operational strategic priorities in the context of outsourcing (Gray et al., 2009a). Second, we take the temporal dimension into account and build on the assumption that integration in the outsourcing relationship is contingent on the phase of the outsourcing relationship because buyer-supplier relationships in general (e.g., Ambrose et al., 2008; Claycomb & Frankwick, 2010; Vanpoucke et al., 2014), and outsourcing relationships in particular (Benito et al., 2013; Handley & Benton, 2009; Narasimhan et al., 2010; Perunovic et al., 2012; Willcocks et al., 2011), evolve over time and also because the management of integration varies over time (Adler, 1995; Turkulainen et al., 2013). Our focus is on the early phases of the relationship after the decision to outsource has been made because integration is particularly important in those phases (Boulaksil & Fransoo, 2010). To illustrate and elaborate the general proposition of a strategic contingency argument in the outsourcing context, we collected data with a multiple embedded unit case study design (Yin, 2009) and analyzed eight outsourcing relationship cases.

The study contributes to the research on outsourcing by developing an understanding of the management of the outsourcing relationship in the operations context by illustrating how it depends on the operational strategic priority related to the specific object of outsourcing (Boulaksil & Fransoo, 2010; Handley & Benton, 2009, 2012, 2013; Ishizaka & Blakiston, 2012; Narasimhan et al., 2010; Ndubisi, 2011; de Vries et al., 2014). Moreover, the study contributes to research on more generic buyer-supplier relationships by developing a contextualized understanding of the management of buyer-supplier relationships (e.g. Ambrose et al., 2008; Gadde & Snehota, 2000; Terpend et al., 2008); in an outsourcing relationship, integration practices need to be adjusted dynamically and depending on the strategic priority. While research on buyer-supplier relationships places significant emphasis on integration, it tends to assess buyer-supplier relationship management at a general level without distinguishing between potentially different relationships that a buyer might have with different suppliers (e.g., Das et al., 2006; Dyer et al., 1998; Krause & Ellram, 1997; Krause et al., 2007; Terpend et al., 2008).

However, in each buyer-supplier relationship, integration is an investment in the relationship and not every relationship warrants similar types of integration practices (Gadde & Snehota, 2000). Finally, the study contributes to the marketing research by illustrating a theory elaboration research approach. Such an approach has not been common among marketing researchers, and yet it is well established among social scientists (Merton, 1968; Vaughan, 1992).[1] The results also have practical relevance and provide guidelines for managers on how they could direct their efforts in managing outsourcing relationships.

2 THEORETICAL BACKGROUND

Research on outsourcing

While research on outsourcing is both broad and plentiful, it has mainly focused on the outcomes and implications of outsourcing. For the purposes of this study, we divide the existing outsourcing research into two streams: strategic focus and relationship focus. Research on outsourcing with a *strategic focus* has especially addressed the strategic decision of why and what to outsource, both at the firm level and at the level of the decision-making process (e.g., Bhalla & Terjesen, 2013; Jiang et al., 2007; Kakouris et al., 2006; McIvor, 2000; Prahalad & Hamel, 1990; Quélin & Duhamel, 2003; Vining & Globerman, 1999). This view concludes, for example, that organizations should focus on their core competences and consider potential opportunism related to outsourcing and the availability of suppliers when making decisions about outsourcing (McIvor, 2000, 2009; Prahalad & Hamel, 1990).

In this study, we adopt a *relationship focus* on outsourcing, which can be considered as a complementary approach to the strategic view, addressing how to manage the outsourcing relationship after the decision to outsource has been made. Prior research on the management of the outsourcing relationship has studied, for example, practices for managing the relationship in different contexts (e.g., Baraldi et al., 2014; Levina & Vast, 2008; de Vries et al., 2014; see Appendix 1). Overall, this stream of research concludes that the management of the outsourcing relationship, including integration, is critical for successful outsourcing (e.g., Boulaksil & Fransoo, 2010; Harmanciouglu, 2009; Narasimhan et al., 2010).

Integration in outsourcing relationships

We approach integration from the information-processing point of view; integration is defined as the sharing and processing of information between organizations (Galbraith, 1973). In order to achieve integration, managers have a variety of integration practices (Lawrence & Lorsch, 1967; Turkulainen et al., 2013). Companies have differentiated portfolios of relationships with suppliers and adopt different management practices to fit those relationships (Gadde & Snehota, 2000; Lambert & Cooper, 2000). The information processing view makes a distinction between three modes of integration: impersonal integration mode, personal integration mode, and group mode (Galbraith, 1973; Turkulainen et al., 2013; Van de Ven et al., 1976). These are defined and examples are given in Table 1 below. Importantly, the information processing view argues that integration practices offer different capacities to process information and simultaneously also create different costs for the organizations (Galbraith, 1973). Impersonal practices facilitate the processing of information to a lesser extent and are less costly, while personal and group practices facilitate information processing better. Group mode is the most resource-consuming but also the most efficient in information processing. Because of the inherent costs of implementing integration practices, the information processing view suggests that impersonal

[1] The authors thank one of the anonymous reviewers for pointing this out.

mechanisms are implemented first, whereas personal and group modes are used to complement those only when the information processing needs are high (Galbraith, 1973).

TABLE 1. Integration modes

Integration mode	Description	Examples of mechanisms	References
Impersonal mode	Defining formal procedures, rules, and programmes in terms of what, where, when, and how organizational members are to accomplish a given set of tasks; programmed practices for coordinating, controlling, and monitoring suppliers' activities	Rules, written policies, job descriptions, standard procedures with charts, blueprints and manuals, schedules, formal plans, information systems	Child (1972), Galbraith (1973), Lawrence & Lorsch (1967), March & Simon (1958), Thompson (1967), Van de Ven et al. (1976)
Personal mode	Information sharing through direct interaction and communication; organizational members serve as the mechanism for mutual adjustments through either vertical or horizontal channels of communication	Temporary and permanent liaison roles, integrator roles, boundary-spanning roles	Galbraith (1973), Lawrence & Lorsch (1967), Tushman (1977)
Group mode	The mechanism for developing plans and making mutual adjustments is vested in a group of organizational members through scheduled or unscheduled group or staff meetings, creating lateral integration	Cross-unit teams, task forces, ad hoc teams, committees, integrative departments	Adler (1995), Thompson (1967), Van de Ven et al. (1976)

In outsourcing relationships, integration aims at treating the contract manufacturer as an extension of the buyer's operations, creating a continuum between the buyer's own production and the contract manufacturer's production as the boundaries become blurred as a result of mutual dependency (Baraldi et al., 2014; Sousa & Voss, 2007). While prior research concludes that the management of the outsourcing relationship is critical (e.g., Baraldi et al., 2014; Handley & Benton, 2009; McIvor 2000), little attention has been paid to *integration* in the outsourcing relationship (Wilcocks et al., 2013; see Appendix 1). This is surprising as research suggests that integration in the outsourcing relationship improves performance (Gadde & Hulthen, 2009; Narasimhan et al., 2010). Moreover, outsourcing relationships are concluded to be highly complex – they involve high buyer power, information asymmetries, and task- and location-specific features – which requires a highly rich information exchange, communication, and integration between the parties (e.g., Boulaksil & Fransoo, 2010; Handley & Benton, 2013; Harmanciouglu, 2009; Ndubisi, 2011). We complement these studies by assessing the contextual nature of integration in an outsourcing relationship.

The influence of cost and quality priorities on integration in the outsourcing relationship

In this study, we elaborate the strategic contingency argument to develop further the understanding of the contextual nature of integration in an outsourcing relationship (Dean & Snell, 1996; Ketokivi & Schroeder, 2004). The core idea of the *strategic* variant of contingency theory (in contrast to the structural contingency theory (Donaldson, 2001)) is that managerial activities vary depending on the strategic priority (Dean & Snell, 1996; Ketokivi & Schroeder, 2004). Operational strategic priorities are defined as the objectives and goals of an organization; in other words, the importance the organization attributes to these different dimensions (Ketokivi & Schroeder, 2004). These are different from the general motives for outsourcing (see e.g. the strategic choice argument; Ndubisi, 2011). By determining the strategic priorities, the company selects to invest more time and resources for the management of these priorities. Although a firm can emphasize multiple priorities, a strategic priority is defined as the most important one (Gray et al., 2009a). The research on outsourcing puts forward two critical strategic priorities: *cost* and *quality* (Gray et al., 2009a). The trade-offs of cost and quality are pervasive in the domain of manufacturing strategy. While the research on outsourcing has emphasized the role of cost savings in great detail, quality, referring to the degree to which a product meets specifications (Garvin, 1987), can be considered as the main building block of successful operations (Ferdows & DeMeyer, 1990). In the context of this research, we define an operational strategic priority as the most important dimension of the output the buyer needs to gain from the contract manufacturer.

Applying the strategic contingency argument to the context of this research, the integration modes are expected to be used differently, depending on whether cost or quality is the dominant strategic priority in the specific outsourcing relationship. The research on outsourcing concludes that the outsourcing decision is influenced by the strategic priorities and outsourcing can be used as a way to improve cost efficiencies and productivity and that congruence between the strategic priorities and the outsourcing decision is associated with higher levels of supply chain performance (Broedner et al., 2009; Gray et al., 2009a; Jiang et al., 2006; Kroes & Ghosh, 2010). However, how the strategic priorities of cost and quality affect the management of the outsourcing relationship and integration in particular is not yet understood. Moreover, we expect that integration modes are used differently depending on the phase of the outsourcing relationship because buyer-supplier relationships in general (e.g., Ambrose et al., 2008; Claycomb & Frankwick, 2010; Edvardsson et al., 2008; Gadde & Snehota, 2000; Vanpoucke et al., 2014), and outsourcing relationships in particular evolve over time (Benito et al., 2013; Handley & Benton, 2009; Narasimhan et al., 2010; Perunovic et al., 2012; Willcocks et al., 2011) and also because the management of integration varies over time (Adler, 1995; Turkulainen et al., 2013). In particular, we elaborate the use of integration modes in two phases of the outsourcing relationship: before actual production and in the early phases of production. This is because integration is assumed to be most challenging in the early phases of the relationship. In the phase before the production begins, the outsourcing partners need to agree on the appropriate level of inputs and specifications (Brewer et al., 2013). In the early phase of production, on the other hand, it becomes essential to ensure that agreed practices are obeyed and outcomes are achieved. We chose to study the phases at the very beginning of the relationship, following the suggestion from previous research about the importance of the management of outsourcing relationships (e.g., Baraldi et al., 2014; Benito et al., 2013; Harmancioglu, 2009; Handley & Benton, 2009; Kotabe et al., 2008; Ndubisi, 2011).

The focus of this study is to elaborate how the operational strategic priorities of cost and quality are related to the integration modes in the outsourcing relationship both before the actual production starts and in the early phases of production. We use the information processing view

(Galbraith, 1973) as a means of interpreting and providing theoretical explanations for the empirical findings.

3 DATA AND METHODS

Research approach

Our research approach can be described as *theory elaboration* (Ketokivi & Choi, 2014), which is different from theory testing or theory development. The theory elaboration research approach builds on Merton's (1968) ideas about mid-range theory and is well established in sociological research (Vaughan, 1992), and yet is still less used in studies published in IMM (as an exception, see Turkulainen et al., 2013). The key factor in theory elaboration is that a general conceptual idea or framework exists that can be used to approach the empirical context but an explicit hypothesis cannot be derived (Ketokivi & Choi, 2014). Our research builds on the strategic contingency theory framework (Dean & Snell, 1996; Ketokivi & Schroeder, 2004). Although it has been suggested that outsourcing is affected by strategic priorities (Gray et al., 2009a; Narasimhan et al., 2010), the extant studies provide little theoretical explanation for *how* integration is managed in the outsourcing relationship, thus not allowing us to formulate hypotheses for theory-testing purposes. Theory elaboration is based on abductive reasoning, which emphasizes the interplay between empirical data and theory (Dubois & Gibbert, 2010). Data is used to *illustrate* and *elaborate* the strategic contingency argument in the context of the outsourcing relationship (Ketokivi & Choi, 2014), meaning that strategic contingency theory provides the overall theoretical idea used as the basis of our empirical study and then evolves into a more detailed framework with the empirical analysis (Dubois & Gibbert, 2010). In line with the theory elaboration research approach, the paper does not conclude with a tested theory but an elaboration of an existing one (Ketokivi & Choi, 2014).

We collected qualitative data from eight cases with a multiple embedded unit case study method (Yin, 2009). A case study approach was considered suitable for the following reasons. First, case studies support the aim of providing rich analysis and understanding complex BSRs (Beverland & Lindgreen, 2010; Dubois & Gibbert, 2010; Piekkari et al., 2010). Second, the case study method is especially suitable for theory elaboration research (Ketokivi & Choi, 2014; Vaughan, 1992). Third, the case study method supports our aim of investigating a contemporary phenomenon in depth and within its real-life context (Dubois & Gibbert, 2010; Yin, 2009). And finally, the aim in this paper is to understand *how* integration in the outsourcing relationship is managed from a contingency view, as well as to develop explanations for the observations, which is suitable to be studied with the case study method (Yin, 2009). The unit of analysis is an outsourcing relationship between a buyer and a contract manufacturer concerning a product or component that is outsourced. We selected eight cases. A small sample is not an issue because theory elaboration studies are not concerned with sampling for generalizability purposes (Ketokivi & Choi, 2014). Additionally, the decision to focus on eight cases is somewhat arbitrary but allows us to obtain variation in the sample.

We selected the cases from two buying firms to gain some variety but at the same time to control for the effect of the context (Dubois & Gibbert, 2010). The two buying firms were chosen from two different industries, the electronics and food industries, to allow interesting comparisons. While outsourcing is very common in the electronics industry because of increased competition and specialization (Marshall et al., 2007; Sousa & Voss, 2007), it is less pervasive in the food industry because of, for example, the critical requirement for quality at every step of the food value chain; as the end product is consumed for nutrition, it must not only meet the nutritional requirements but be safe to consume as well. Outsourcing in the food industry has been studied

relatively little or only from the viewpoint of non-core activities (as an example, see Hsiao et al., 2010), making it an interesting context from that perspective too.

Both the selected buying firms, ElectronicsCo and FoodCo (pseudonyms), have outsourced manufacturing and other related activities concerning several components and products. ElectronicsCo is a large, globally operating electronics manufacturer with its headquarters in Northern Europe and manufacturing plants in Europe, Asia, and the Americas. Its annual revenue is about 13 billion euros. The product/service offerings consist of complex manufactured electronics products, as well as large system projects delivering full infrastructure solutions to customers. ElectronicsCo has some 1400 customers, with direct contact in 150 countries. Organizationally, the company is structured as a global matrix around two dimensions: key business processes (e.g., product creation process, delivery process) as one dimension and main business areas as the other dimension. As a result of the development of the industry and high competition, it has outsourced significant parts of its manufacturing and other activities. By outsourcing the company seeks cost efficiency, as well as flexible production capacity. In this sense the company is not an exception in the industry. Contract manufacturers are managed by the global procurement function. FoodCo is headquartered in Northern Europe and has a strong market position in the Nordic and Baltic countries. The company has three factories, a number of product lines, and strong brands in various categories, especially in the luxury category. Annual sales are over 1 billion euros, and the number of products is around five hundred. Producing the actual product was considered to be highly important at FoodCo. The Managing Director stated: "Production is our core competence." Quality issues related to product safety and brand image are of critical concern and were considered easier to control if the production was kept in-house. For example, in whipping, which is an important production phase for FoodCo, the tools and processes that are used influence how much air will be included in the product mass. In the firm's own production, several factors contributing to differences in the taste of the product, such as air humidity, the taste of the water, or machinery, can be eliminated. Outsourcing has started to play a more important role in the firm. There are numerous reasons for this. First, outsourcing is used to accommodate the varying demands of the market; consumers and retailers require frequent introductions of new products and modified packaging for existing ones. Second, outsourcing is used for additional capacity; the nature of the demand is very volatile and during some peak periods additional capacity is needed. And third, outsourcing is also used for more strategic reasons; the company aims at increasing variety and diversification of the product range through contract manufacturing. Details about the cases are presented in Table 2 below.

In line with the theory elaboration approach to developing an understanding of how to manage integration in outsourcing relationships, we chose cases that are considered successful to provide results that are potentially useful for benchmarking purposes (Choi & Hong, 2002; Fisher, 2007). Most importantly, the individual cases differ in terms of their operational strategic priorities. In order to select the cases, we organized a half-day meeting with category managers at ElectronicsCo and another with key representatives of various functions at FoodCo (see Appendix 2 for a description). The cost priority cases were selected to represent relationships where most managerial attention was directed towards the total cost of the items that were delivered, including price, transportation, inspection and testing, returns, and other associated costs. The quality priority cases comprise relationships where the main investments and emphasis were directed towards ensuring the supplier's ability to provide reliable inputs. In the quality cases, the essential feature of an outsourcing relationship is conformance with specifications, meaning the ability of the contract manufacturer to conform to the given specifications. Identifying the strategic priority – cost or quality – for each case was relatively

clear for the participants. These workshops were also essential in forming an understanding of the general nature of the relationships and served to ensure commitment to the study.

TABLE 2. Case descriptions

Nr	Case	Companies involved	Motivation to outsource	Main management target	Description
1	**Product line extension for an existing product**	FoodCo and a previously known contract manufacturer	A new taste variant widens the product family of a known brand product. The production of the new variant was outsourced to achieve production capacity.	To ensure the contract manufacturer's ability to produce high quality and consistency with regard to other products under the same brand, and to maintain responsiveness to demand changes in the market.	A long-term well-performing relationship with the contract manufacturer, but requires slack capacity to be maintained at the contract manufacturer.
2	**An entirely new product**	FoodCo and a previously unknown contract manufacturer	The company suffered from a market share drop during one peak season. A new type of product in terms of shape, components, and packaging was introduced to diversify the seasonal product offering. To get access to the necessary specific machinery, manufacturing and packaging was outsourced.	To reduce supply uncertainty for a new product totally developed by the case company by carefully selecting a contract manufacturer capable of delivering sufficient quality and capacity. To build knowledge of a new type of product, machinery, and component.	A new relationship. Thorough and resource-consuming contract manufacturer selection process to ensure the capability to produce sufficient quality. Long process of defining quality requirements and processes before production. The great effort needed for NPD and contract manufacturer selection delayed market entry remarkably.
3	**New product development (NPD) with deep contract manufacturer involvement**	ElectronicsCo and a large globally-operating contract manufacturer	The contract manufacturer serves as an NPD resource on a continuous basis with several new products being developed simultaneously. Provides access to collaborative NPD capability and test capacity.	To ensure simultaneous implementation of multiple parallel NPD projects with intensive time pressure. To ensure efficient technology choices with long-term impact.	For each NPD project, a contract manufacturer is selected separately. If chosen, the contract manufacturer is tightly connected to the NPD process and provides knowhow and test production capacity.

4	**Large-scale component manufacturing for long-life-cycle products**	ElectronicsCo and a large globally-operating contract manufacturer	Access to manufacturing capacity and capability.	To ensure smooth operations for a large scale of components.	Long-term close relationship with a high level of dependency. Wide and deep collaboration with significant resource usage needed to ensure good performance.
5	**High-volume component manufacturing.**	ElectronicsCo and a large globally-operating component manufacturer	Provides global on-time material availability with lowest landed cost of multiple components of varying sizes, complexities, and prices, where the buying company's own capacity is inadequate. The contract manufacturer offers flexible manufacturing capacity and capability.	To ensure the contract manufacturer's capability to produce the agreed volume and sufficient quality for a large number of components according to varying demand. The long lead time of the components sets requirements for this task.	Long-term relationship with great effort to maintain responsiveness to demand. Provides exceptional flexibility, but costly.
6	**Complex component manufacturing**	ElectronicsCo and a specialized contract manufacturer	Concerns a complex component with hundreds of different configurations. Dependency is low on both sides, except that customers require this component from this specific contract manufacturer.	To manage the schedule and uncertainties caused by configuration variations. To reduce high operating costs in a price-competitive component.	Needs much effort and exception management because incomplete orders put the profitability of the whole business at risk. Low level of dependency on both sides. Long-term relationship.
7	**Continuous packaging**	FoodCo and a company specializing in providing packaging services	Packaging activities of a product with stable but low demand. Because of the specific machinery required, packaging was contracted out to a company specializing in food products.	To ensure smooth operations in a continuous relationship. To maintain the realized low cost level.	Well-performing long-term relationship. Concerns packaging, and thus is not sensitive to product quality.
8	**Seasonal packaging**	FoodCo and a special packager with personnel capacity	Concerns an established product manufactured by FoodCo. The packaging of an important seasonal package type requires manual work. The contract manufacturer offers	To ensure the contract manufacturer's ability to produce the agreed volume at an agreed cost level.	A repetitive and well-performing relationship. Concerns packaging and thus is not sensitive to product quality.

	premises and capacity for a work-intensive packaging phase.	

Data collection and analysis

We used structured interviews as the main data collection method. Altogether, 69 interviews were conducted in 2009 (Appendix 2). The interviewees were selected on the basis of their organizational positions, as well as their experience and in-depth knowledge related to the cases. To gain multiple perspectives, interviews were carried out with functional managers and team leaders from quality assurance, product development, supply chain management, production, sourcing, and logistics, as well as from buying, supply chain planning, supplier development, quality and supplier integration, planning process development, and the top management of the procurement function. We used a combination of semi-structured and more closed-ended questions (Patton, 1990). The topics of the interviews included motives for outsourcing, organizational capabilities, the challenges faced in managing the outsourcing relationships, and integration between the focal firm and the contract manufacturer. In addition, supplementary written material such as formal process descriptions, process material, and meeting agendas was collected during the interviews. We also interviewed one to three contract manufacturer representatives for each case, and thus there were ten contract manufacturer interviews altogether. These gave us additional knowledge of the outsourcing relationships.

We implemented several procedures to ensure that the data had high validity and the data collection high reliability (Beverland & Lindgreen, 2010; Eisenhardt, 1989; Piekkari et al., 2010; Yin, 2009). First, we developed a research protocol in order to ensure systematic data collection. The protocol included a structured outline and questions for the interview, as well as an overview of the study and a description of how the data was collected and results reported. Second, each interview was carried out separately (i.e. with one interviewee present) by multiple researchers. Moreover, each interview was tailored to the area of expertise of the focal interviewee as a way to increase the validity of the data. Third, the interviews took place face-to-face whenever possible (seven interviews were conducted via phone). Fourth, as the interviews were not allowed to be recorded for reasons of confidentiality, particular care was directed towards note-taking. One researcher was responsible for writing down the discussion in detail, while others asked questions and took notes. The notes were combined into a detailed memo, and each of these was sent to the relevant interviewee afterwards for a validity check to enhance the data quality. Fifth, a comprehensive case description was written for each case after the data collection. Sixth, the interviewees were very motivated; everyone was willing, even eager, to participate and considered the topic of critical importance, thus improving the accuracy of the information provided. Moreover, we analyzed the primary and archival data in order to facilitate triangulation. Finally, we ensured anonymity to the informants and their firms to encourage open discussion.

The case study method develops insights from clearly defined and bounded case units by combining within-case analyses and cross-case comparisons (Eisenhardt, 1989; Piekkari et al., 2010). Subsequently, the data analysis was carried out in two phases. First, in our within-case analysis we focused on each case separately and developed individual profiles of the cases. As a second step, we conducted a cross-case analysis via tabulation, looking for common patterns and differences in the use of integration practices. Finally, the relationships between the constructs were analyzed and compared to literature in order to develop propositions.

We treated the interview notes as text and coded it using specific software (Atlas.ti). The data analysis focused on identifying the nature of the outsourcing relationship and analyzing how integration was managed in each outsourcing relationship. The data analysis followed an iterative process, moving back and forth between data and theory (Dubois & Gibbert, 2010). First, we

searched for how integration was managed in the outsourcing relationships. Although we had a pre-existing idea of potential integration practices, we first let them emerge from the data. This was considered important as it eliminate the possibility of missing some dimensions. On the basis of this open coding, we identified integration practices in two phases in the outsourcing relationship: integration before the production started and integration in the early phase of production. This way of analysis at "two different moments" follows the suggestion of Dubois and Gibbert (2010) as to how to capture time in empirical phenomena related to interorganizational interfaces. We then classified the integration practices in both phases into categories of impersonal, personal, and group modes (Turkulainen et al., 2013; Van de Ven et al., 1976), and organized the case-level data for both phases into a spreadsheet. Finally, we triangulated between the data from the interviews and conclusions based on management meetings to validate the strategic priority for each case. In each case, the different data sources were in alignment in terms of the strategic priority.

The key empirical data with respect to the focal theoretical constructs is presented in Table 3; it illustrates how integration was managed in the two phases of the relationship, as well as the strategic priority of each case, serving as the within-case analysis.

TABLE 3. Empirical observations regarding strategic priorities and integration practices

	Strategic priority	Integration modes before production starts	Integration modes in the early phases of production
1 Product line extension for an existing product To ensure the contract manufacturer's ability to produce high quality and consistency with regard to other products under the same brand, and to maintain responsiveness to demand changes in the market.	Quality priority	**Impersonal:** Detailed and formalized audits to ensure product quality. Creating and implementing standardized procedures and practices for manufacturing and other operations with the contract manufacturer as well as for resource usage with a close monitoring system. **Personal: -** **Group:** Cross-organizational team with representatives from production, quality, marketing, supply chain management, and sourcing to continuously assess quality issues, ensure an appropriate quality level, and develop and implement improvements.	**Impersonal:** Detailed standardized operative process model to be followed during production. Emphasis also on a formalized demand forecasting system, feeding information to both parties. Regular process for quality control. **Personal:** - **Group:** Control meetings at the contract manufacturer's site to ensure an appropriate quality level.
2 An entirely new product To reduce supply uncertainty for a new product totally developed by the case company by carefully selecting a contract manufacturer capable of delivering sufficient quality and capacity. To build knowledge of a new type of product, machinery, and component.	Quality priority	**Impersonal:** A formalized process for NPD implemented by a project team with members from all relevant functions (quality, packaging, purchases, marketing, production, planning, contracting). Thorough and detailed standardized process to select contract manufacturers. A formalized process, for example, for supplier audits and test production with set targets for quality level. Detailed specifications, for example about tooling given for the contract manufacturer to be achieved. **Personal:** - **Group:** A project team with representatives from both organizations and across functions to ensure an appropriate quality level and develop and implement improvements. Product quality function responsible for ensuring all aspects of product quality, for example, concerning machinery.	**Impersonal practices:** Frequent formalized audits, focusing on the time period before the seasonal peak production. **Personal:** - **Group:** Frequent meetings with the contact manufacturer on a regular basis, with representatives from quality, production, marketing, and logistics). A regular and pre-defined meeting schedule between the buyer and the contract manufacturer to update and share information on operational issues.
3 New product development with deep contract manufacturer involvement To ensure simultaneous implementation of multiple parallel NPD projects with intensive time pressure. To ensure efficient technology choices with a long-term impact.	Quality priority	**Impersonal:** A formal co-development practice: a formal, standardized project management methodology with strict management follow-ups. Clear formal component requirements already in the planning phase. Very strict and formal processes to be followed during the whole process, including test production and development of testing machinery. **Personal:** - **Group:** Dedicated purchasing and delivery capability persons nominated in each part of the R&D projects. These persons act as integrators between the organizations and across projects. Together they form a team that oversees the projects as a whole and is, for example, responsible for resourcing between projects.	**Impersonal**: A formal co-development practice, including a formal, standardized project management methodology with strict management follow-up. **Personal**: - **Group: -**
5 High-volume component manufacturing To ensure the contract manufacturer's capability to produce the agreed volume	Cost priority	**Impersonal:** Changes in the product portfolio are managed as part of the weekly planning process. An agreed procedure for how and when new products become part of the process. **Personal: -**	**Impersonal:** Formal weekly and monthly planning process to ensure responsiveness to demand. Agreed standards on capacity flexibility (up/down) at the contract manufacturer.

and in sufficient quality for a large number of components according to varying demand. The long lead time of the components sets requirements for this task.		**Group: -**	**Personal**: Dedicated integrator roles both at the buyer and at the contract manufacturer to manage demand, response, and communication. Intensive daily or weekly communication between the buyer and the contract manufacturer on demand or other changes. **Group:** Dedicated teams with members from supply chain planning, forecasting, and delivery planning to manage demand and communication. Weekly and monthly team meetings with a pre-defined agenda and participants from all relevant functions (planners, category specialists, category managers, buyers, supply chain) from both organizations. A specific exception management practice and organization: global materials organization for managing component allocations, including both own manufacturing and contract manufacturing.
6 Complex component manufacturing To manage the schedule and uncertainties caused by configuration variations. To reduce high operating costs in a price-competitive component.	Cost priority	**Impersonal: -** **Personal**: - **Group:** Top management meetings participated in by managers from both companies responsible for the business twice a year to discuss business development and to direct the development of operations.	**Impersonal**: Long-term relationship with formalized planning to ensure steady material flow. Highly formalized procedures for exception management: planning items to implement planning for changing configurations. **Personal**: To avoid re-configuration of orders, an order planner is assigned as a liaison officer between the buyer and the contract manufacturer to check and complement unclear incoming orders. A category specialist is also assigned a role as an integrator to manage the relationship between the buyer and the contract manufacturer. **Group:** Regular, frequent, and standardized checks by the planning team (supply chain planners, demand forecaster, product manager) to maintain correct planning items with the contract manufacturer.
7 Continuous packaging To ensure smooth operations in a continuous relationship, to maintain the realized low cost level.	Cost priority	**Impersonal**: Formal and standardized process for initial supplier selection, but not a repetitive practice. **Personal**: **Group:** Manager-level meetings twice a year to review past performance and to discuss emergent issues.	**Impersonal:** Formal auditing practice to ensure capacity availability. **Personal:** Key persons related to the relationship identified and assigned integrator roles. Significant effort on facilitating informal communication, e.g. by specifying an extensive list of people on both the buyer's and the contract manufacturer's sides. The list of these persons is updated regularly to help in informally contacting the right persons immediately if needed. **Group:** Regular formal meetings with a predefined schedule and agenda with the contract manufacturer.
8 Packaging a seasonal product To ensure the contract manufacturer's ability to produce the agreed volume at the agreed cost level.	Cost priority	**Impersonal:** Formal and standardized process for initial supplier selection, but not a repetitive practice for each season. **Personal:** - **Group:** No heavy project team, but before each season, a meeting is organized to ensure smooth operations and agree on daily practices.	**Impersonal:** No dedicated people but daily operations organized as part of other operations with responsible persons in both companies to manage and control logistics, quality, and availability. **Personal:** Frequent informal ad hoc communication and collaboration. Significant emphasis on facilitating informal relationships and communication. **Group: -**

4 DISCUSSION

In this section we first illustrate the use of integration practices to manage the outsourcing relationship after the outsourcing decision has been made. Table 3 serves as the basis for developing a link between operational strategic priorities and integration practices. We summarize the key empirical observations and provide theoretical explanations for them. These illustrations and explanations are developed into theoretical propositions that relate operational strategic priorities to integration practices in the outsourcing relationship. Below, the cases are divided into two groups on the basis of the strategic priority. The discussion covers the two major phases: before the production starts and in the early phases of production.

Group 1: Quality as the main strategic priority

For three cases (1, 2, and 3), the main strategic priority is quality. The empirical observations in Table 3 illustrate that in these cases a variety of impersonal, personal, and group integration modes were emphasized, especially *before* production started. For example, in all three cases highly standardized processes for managing the relationship with the contract manufacturer were implemented before the production started, including formal co-development procedures that aimed to ensure the appropriate level of quality of the outsourced products. In Case 3, the Category Manager explained: "For long life-cycle components, it is essential to ensure the quality by involving the contract manufacturer in product development, as both companies are tied to the product for the next 20-25 years." Very detailed and formalized audits were carried out at the contract manufacturer's site before the actual production started in order to ensure all aspects of quality. Additionally, standard operations processes were implemented, and group mechanisms, such as cross-organizational teams, were used to continuously assess and discuss quality issues, ensure appropriate quality levels, and develop and implement improvements.

Integration practices were also used in the early phases of production. However, the focus of integration during production was merely on impersonal modes such as a formal and standardized operating process and standardized project methodology in order to ensure that set standards are followed, procedures are obeyed, and the required quality level is achieved and maintained. In addition, standard audits were used, for example, to collect information about process parameters and to ensure quality-level achievements. An interviewee stated: "After we have defined the production and product specifications, it is too late and difficult to change the agreed way of operating; the emphasis is only on controlling that set ways of operating are obeyed" [Quality Manager, Cases 1 and 2], emphasizing the need to accurately eliminate any potential for quality failures.

As the findings above illustrate, the cases where quality was the priority showed an emphasis on integration that focused on the period *before* the actual production started. This can be explained as follows. With regard to quality, the inputs of the process are especially critical (Brewer et al., 2013); if the inputs of a process are not at an appropriate quality level, neither can the output of the process be. Similarly, Gray et al. (2009a) suggest that in order to ensure quality, monitoring of the inputs of the outsourced production is required. This is in line with the lean manufacturing approach. Hence, integration is emphasized before the actual production starts to manage the inputs of the process. We therefore propose:

> ***P1a.*** *In an outsourcing relationship, a prioritization of high conformance quality is linked to an emphasis on integration before the actual production starts.*

Let us look at the use of integration modes in more detail (Table 3). In cases where quality is the strategic priority, integration in the outsourcing relationship can be characterized by the extensive use of both impersonal and group modes before the actual production starts. In all the quality cases, strict and standardized supplier audits and formal inspections were conducted on

a regular basis before the production started. These were pre-specified visits with a pre-defined schedule and set agenda to collect, for example, detailed information about the supplier's activities and achievements. "When production takes place somewhere other than in our own facility, quality control is of the utmost importance; for example, the first test production batches need to be controlled on the spot" [Quality Manager, FoodCo]. The companies designed the relationship carefully, and aimed at creating standard procedures and ensuring correct production inputs during production. Also as an example in Case 2, a formalized process for the development of new product and test machinery was implemented, and a thorough and formalized process for supplier audits and test production with set targets relating to quality levels was followed. The purpose of these mechanisms was to allow as little deviation as possible from the pre-defined quality measures. In Case 3, a standardized formal process for developing new products was also implemented. In addition, because many projects included new choices of technology with a long-term influence, formal and standardized test production was conducted.

Also group integration modes were emphasized before production started. For example, in Case 2, a project team with representatives from both organizations and across functions was set up. Their task was to ensure the appropriate quality level and to develop and implement improvements even before production started. Likewise, in Case 1, a cross-organizational team was put in place to continuously assess quality issues and to solve potential problems. In all the quality cases, such cross-organizational teams were used to ensure that information and knowledge on issues related to quality were shared among the organizations and that potential problems were solved before production was scheduled to commence.

The findings with regard to the use of both impersonal and group integration practices before the start of production can be explained as follows. In order to ensure quality, monitoring the quality of inputs to the process and ensuring the high quality of the process are both critical (Brewer et al., 2013; Gray et al., 2009a), requiring extensive integration between the buyer and the contract manufacturer *before* production begins. This is also supported by the information processing view (Galbraith, 1973); uncertainty in cases where quality is the priority is especially high before production starts because it is impossible for the buyer to specify all the required information relating to quality issues (Sousa & Voss, 2007). Hence, integration must be managed through the extensive use of both impersonal and group integration modes before production starts. Therefore, we propose:

> ***P1b.*** *In an outsourcing relationship, a prioritization of high conformance quality is linked to an emphasis on integration with impersonal integration modes, such as standard procedures and formalized audits, as well as group modes, such as cross-organizational teams, before the actual production starts.*

On the other hand, in the early phases of production, integration was managed with group practices, such as pre-scheduled meetings with a set agenda. These were mainly audits conducted at the contract manufacturer's site. "The role of auditing is to increase trust in the capability to produce a certain level of quality, but it does not remove the need to control outsourced production" [Marketing Manager, Case 1]. He further continued that trust is needed to ensure that the contract manufacturer is willing to share all relevant information, for example that related to potential problems relating to quality. In a similar way, the Quality Control Manager from Cases 1 and 2 explained: "Anyone included in the process who observes a deviation in quality needs to react and not wait for consumer claims."

There is always some uncertainty related to the quality of the output because the buyer will not be able to manage every aspect of uncertainty before the production starts and simply cannot implement an auditing and inspection regime that can ensure perfect conformance quality during

production (Sousa & Voss, 2007). However, as most of the uncertainty related to the quality cases was already managed by means of a significant emphasis on both impersonal and personal integration modes before the actual production, the integration challenge is lower during the production, explaining the use of only impersonal practices in this phase (Galbraith, 1973). Therefore, we propose:

> ***P1c.*** *In an outsourcing relationship, a prioritization of high conformance quality is linked to an emphasis on integration with impersonal integration modes, such as standardized processes and procedures, as well as group forms, such as formalized and recurring cross-organizational meetings, to ensure the desired level of quality in the early phases of production.*

Group 2: Cost as the main strategic priority

For five cases, the primary strategic priority is cost (Cases 4, 5, 6, 7, and 8). In these cases the buyer company focuses on maintaining the desired cost level to avoid pressure to increase prices. The observations illustrate that in cases where cost is the priority, very little emphasis was put on integration before production began. In contrast, during production significant emphasis was put on both impersonal and personal integration modes. These included, for example, standard planning processes, scheduled meetings, dedicated procedures, and dedicated persons for exception management. Hence, all the cost cases illustrate that considerable effort was put into integration *during* the early stages of production.

This observation can be explained as follows. Outsourcing in cases where cost is the priority can be considered as somewhat less risky and simpler to manage compared to when quality is the priority; the main measure, price per unit, as well as fixed costs, can be better expressed explicitly in a contract between the buyer and the contract manufacturer (Gray et al., 2009a, b). This implies lower risks for the buyer because it pays the set price, while the potential overruns of expected costs are directed to the contract manufacturer. Thus, the consequences arising from the contract manufacturer not reaching the target do not have such severe direct consequences for the buyer as when quality is the primary factor. Hence, there is less uncertainty from the perspective of the realized cost level before the production starts, explaining the low emphasis on integration in this phase (Galbraith, 1973). This is also supported by the finding of Gray et al. (2009a) that a propensity to outsource is higher when cost is the priority. On the other hand, after production starts, attention in managing the relationship between the buyer and the contract manufacturer is focused on ensuring that the products that are produced fulfil the specifications. This requires more information processing between the buyer and the contract manufacturer, explaining the emphasis on integration in that phase (Galbraith, 1973; Van de Ven et al., 1976). We propose:

> ***P2a.*** *In an outsourcing relationship, a prioritization of low costs is linked to an emphasis on integration in the early phases of production.*

Let us take a look at the integration modes in more detail. As Table 3 illustrates, in cases where cost was the priority integration was managed with impersonal mechanisms, such as a formalized planning process, standard and recurring meetings, and standardized procedures for exception management, complemented with personal and group modes, such as cross-organizational teams for multiple collaborative activities in the relationships and integrator and liaison roles. For example, in Case 4, there were six different weekly collaborative meetings altogether, each of which included a predefined agenda and tasks. Topics such as component availability, open purchasing orders, deliveries, prices, and components purchased from second-tier suppliers, as well as finances, were pre-defined in each activity. The category manager maintained a liaison role with responsibility for the global on-time material availability of tailored sub-assemblies. In Cases 7 and 8, the management of the outsourcing relationship took the forms of regular

collaboration meetings, personal communication practices, and clear responsibilities and contact persons.

There are several plausible explanations why impersonal and personal integration modes are both used during production in cases where cost is the priority. First, the major characteristics related to the cost cases are demand uncertainty and inability to predict demand in advance (Gray et al., 2009a). This poses uncertainty in managing the relationship with the contract manufacturer. Because of this uncertainty, intensive information processing between the buyer and the contract manufacturer is needed on a daily basis during production. Moreover, in the cost cases, outsourcing is essentially about extending production beyond a firm's boundaries to achieve efficiency through economies of scale and pooling resources and the supplier requires constant information exchange between the buyer and contract manufacturer about production specifications and schedules in the early phases of production (Araujo et al., 1998). These explain the use of both impersonal and personal integration modes (Galbraith, 1973; Van de Ven et al., 1976). In addition, another explanation for the use of personal mechanisms, such as dedicated personnel, during production is that in some cases the outsourced products, parts, or components are not testable (Gray et al., 2009a). This is evident in Cases 4 and 5. In these cases, in addition to implementing impersonal integration, personal integration modes such as order planner or category specialist roles were used, especially to target exception management in order to ensure the agreed cost level. These roles include intensive information processing between the parties. Finally, a low emphasis on integration before production starts also helps to provide an explanation for the observations. A greater emphasis on integration is likely to be needed in this phase because information processing has not been managed earlier in the relationship (Galbraith, 1973), explaining the use of both impersonal and personal integration mechanisms in the early phase of production in cases where cost is the priority. Therefore, we propose:

> ***P2b.*** *In an outsourcing relationship, the prioritization of low costs is linked to an emphasis on integration with impersonal modes, such as formal planning and standardized procedures, and personal modes such as specific roles enhancing communication and exception management, as well as group modes, such as cross-organizational teams providing support for daily operations to ensure the desired cost level is reached, in the early phases of production.*

Figure 1 draws together the propositions, elaborating the strategic contingency framework in the context of integration in the outsourcing relationship. As the framework illustrates, the strategic priorities of cost and quality affect both *how* integration is managed and *when* integration is emphasized in the outsourcing relationship.

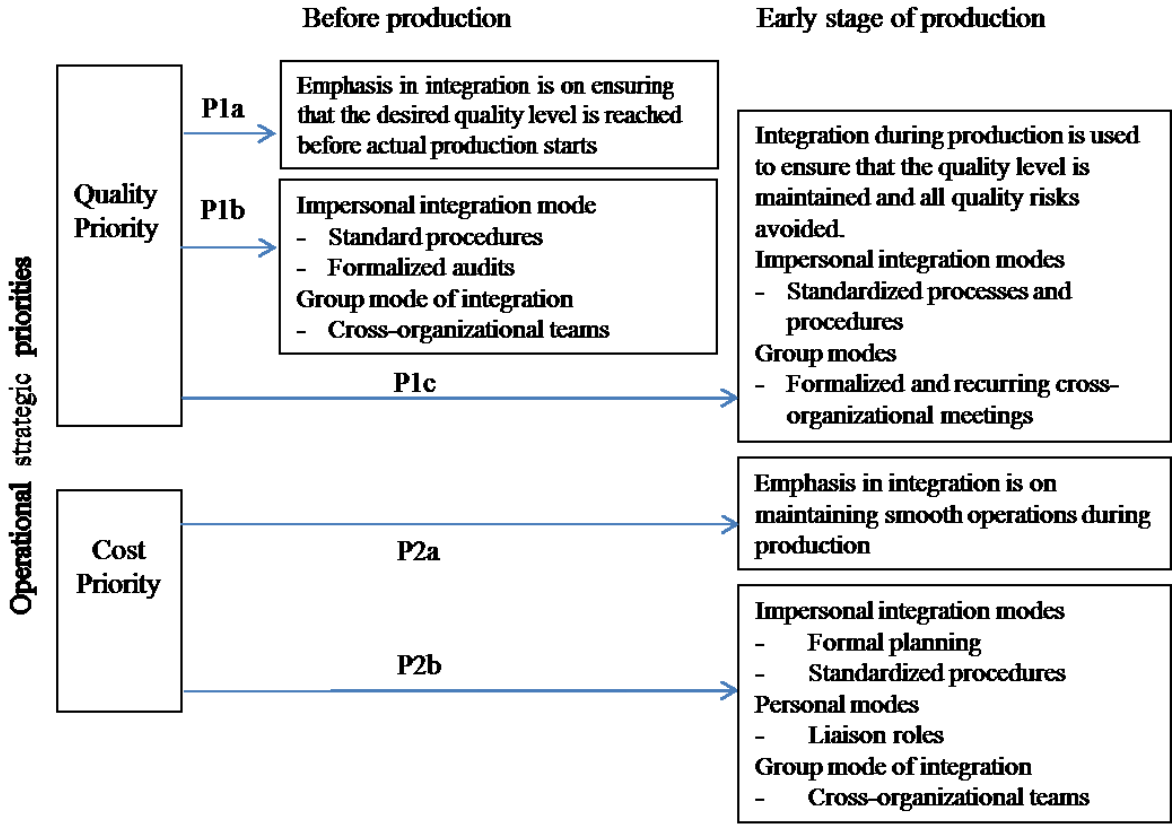

Figure 1. Elaborated framework for integration in the outsourcing relationship

5 CONTRIBUTION AND IMPLICATIONS

Outsourcing is one of the key trends in the contemporary business context (Gadde & Snehota, 2000; Harmanciouglu, 2009; Ishizaka & Blakiston, 2012). The management of the outsourcing relationship between a buyer and a contract manufacturer is a critical factor affecting the success of outsourcing, and yet it is still relatively unexplored (Baraldi et al., 2014; Gray et al., 2009b; Harmanciouglu, 2009; Ndubisi, 2011; see also Appendix 1). We studied how integration in the outsourcing relationship is managed both when preparing for production and in the early phase of production. By responding to the call for more interplay between theory and data (Dubois & Gibbert, 2010), we have elaborated the strategic contingency argument (Dean & Snell, 1996; Ketokivi & Schroeder, 2004) in the context of outsourcing relationships.

The study complements prior research on the management of outsourcing relationships by developing a detailed and contextualized understanding of how integration is managed in outsourcing relationships. This is important as integration is a critical success factor for the management of BSR, such as outsourcing relationships (Gadde & Hulthen, 2009; Handley & Benton, 2013; Vanpoucke et al., 2014). First, we link integration in outsourcing relationships to the operations strategic priorities. This complements prior research on the factors affecting the outsourcing decision and the outcomes and benefits of outsourcing (e.g., Broedner et al., 2009; Ishizaka & Blakiston, 2012; Kakouris et al., 2006; Quélin & Duhamel, 2003), as well as research looking at the management of outsourcing relationships with a focus on control mechanisms (Harmanciouglu, 2009), handling conflict (Ndubisi, 2011), and contract characteristics (de Vries et al., 2014). Second, we include the time dimension into the study and conclude that integration practices in an outsourcing relationship evolve over time. This supports the arguments of prior studies on the dynamic nature of outsourcing relationships (Benito et al., 2013; Handley & Benton, 2009) or integration in general (Adler, 1995; Turkulainen et al., 2013). Taken together,

we show that when quality is being emphasized preparing for production is essential, requiring significant resources for a variety of integration practices in order to facilitate smooth operations. On the other hand, when cost is emphasized, a variety of integration practices is used in the early phase of production to optimize it from the cost perspective.

Moreover, by elaborating the strategic contingency perspective (Dean & Snell, 1996; Ketokivi & Schroeder, 2004), we provide a *complementary* theoretical view on outsourcing as prior research has typically built on the resource-based view, agency theory, and transaction cost economics (for a review, see Ndubisi, 2011 and Appendix 1). These different theoretical views build on different assumptions about the need for integration and hence, our study provides a complementary understanding about integration as an information processing phenomenon rather than, for example, as a way to overcome challenges related to opportunistic behaviour (see e.g., McIvor, 2009). As the study indicates, building on the strategic contingency argument provides new insights into the management of outsourcing relationships, and hence can be argued as serving as a relevant complementary theoretical view. By taking a theory elaboration research approach, the study also contributes to the research on marketing. Theory elaboration is a well-established research approach in social science and organization studies (Merton, 1968; Vaughan, 1992) but less established in marketing. The role of elaborative approaches has also been recognized in marketing studies and they have been described as important, inspirational, and crucial in complementing more conventional studies and even questioning conventional approaches to qualitative research (Dubois & Gibbert, 2010; Piekkari et al., 2010).

At a broader level, this study provides a nuanced, contextualized understanding of the management of buyer-supplier relationships (Ambrose et al., 2008; Dyer et al., 1998; Gadde & Snehota, 2000). By studying a specific type of buyer-supplier relationship – the outsourcing relationship – we develop a contextualized understanding of the nature of buyer-supplier relationships, complementing prior studies on generic buyer-supplier relationships (e.g., Ambrose et al., 2008; Das et al., 2006; Krause & Ellram, 1997; Krause et al., 2007). Our findings indicate differences in managing integration in outsourcing relationships and generic buyer-supplier relationships, giving further support to our argument that outsourcing relationships are a special case of buyer-supplier relationships. For example, Ambrose et al. (2008) observed that in generic buyer-supplier relationships, rich media (i.e. personal integration) is used for communication in the early stages but its use declines over time. This is different from our observations, which suggest that it is only in cases where quality is the priority that an emphasis on personal integration practices and rich media communication in the relationship declines over time. In contrast, in cases where cost is the priority, the emphasis on integration, including personal mechanisms, is greater in the later stages when the actual production has already started. This can be explained by the inherent reciprocity and higher mutual dependence in the outsourcing relationship (Thompson, 1967; Van de Ven et al., 1976). Furthermore, by illustrating how integration is managed differently depending on the strategic priority, the study gives further support to the relevance of the strategic contingency argument in the context of generic buyer-supplier relationships. By illustrating the effect of the temporal dimension, the study has direct implications for research on integration in buyer-supplier relationships, which tends to take a static perspective (Gadde & Snehota, 2000).

The food industry cases provide some additional interesting insights. Quality and brand image are essential in the food industry (Traill & Grunert, 1997) and monitoring the inputs of production, as well as day-to-day effort regarding quality, can be considered to be a core competence which should be maintained in-house (Gray et al., 2009a; Prahalad & Hamel, 1990). Hence, outsourcing is not a typical phenomenon and involves significant risks, which was also evident in our cases in FoodCo. In these cases, outsourcing was a way of widening the product offering, for example by gaining access to innovative types of packaging. Small series, seasonal

and campaign packages, and hand packaging make packaging an attractive target for outsourcing in these cases. The evidence illustrates that outsourcing can especially be used as an important means to diversify a product offering in the food industry, i.e. as a way to implement a product diversification strategy. This is an interesting observation as product diversification is increasingly relevant for firms and such a strategy has been generally recognized as having a positive influence on performance as a result of, for example, economies of scope and scale, market power effects, risk reduction effects, and learning effects (Narasimhan & Kim, 2002).

This study also has implications for managers. First, the study illustrates that integration in the outsourcing relationship requires considerable resources after the decision to outsource has been made; the key to successful outsourcing is not just about the decisions of what to make-or-buy and when. As prior empirical evidence suggests, the examples of failed outsourcing cases are abundant (e.g., Fan, 2000; McIvor, 2008; Quélin & Duhamel, 2003) and the management of the outsourcing relationship continues to pose significant challenges even for firms that have extensive and long-term experience of outsourcing (Ishizaka & Blakiston, 2012). The key message for companies is that they need to be prepared for a significant investment into the outsourcing relationship in the early phases of the relationship. This means that various integration practices are needed in the outsourcing relationship, such as the role of audits and their purpose, liaison roles, and the importance of regular meetings and attendance at them, as well as working in cross-functional and cross-organizational teams. Moreover, the personnel on both sides of the outsourcing relationship need to be trained to understand the importance of the practices and their use to facilitate information sharing across the firms. Such training programs also facilitate the creation of a common language across firms and that facilitates integration and information processing. Second, the results illustrate that firms need to manage the phases of the outsourcing relationship separately; different integration practices are used before vs. after production has started. Our results indicate that especially when quality is emphasized as the priority, investing in the outsourcing relationship before full-scale production starts is critical. It is essential for companies to ensure that the prerequisites for production are at the desired level and that rules and standard procedures for the relationship are defined, as it is too late or expensive to define those when production is already running. This study also shows that in cases where cost is the priority, it is important to control full-scale production accurately because the reached cost level is easily lost if not actively monitored and maintained.

The study also has its limitations. Our empirical context is limited to the eight cases. Although the use of case studies as a research method fits well with the theory elaboration research approach taken in the study (Ketokivi & Choi, 2014) and research on integration in general (e.g., Turkulainen et al., 2013), future research could complement this research by addressing integration in outsourcing relationships through large-scale data. Developing the propositions into testable hypotheses and testing them in different empirical contexts would provide stronger evidence about the contextual nature of integration in outsourcing relationships. Second, the data analyzed in this paper was collected in 2009. Although this may be considered as a limitation, we do not see that it would affect the results as in line with the research question and the theory elaboration research approach, we observed integration modes mainly identified by Galbraith (1973) and provided theoretical explanations and drew conclusions about the use of integration in the light of the strategic contingency theory. Having more recent data would be required if we were to examine the most contemporary integration modes or the relative importance of the different integration modes in general.

In this study we build on the strategic contingency argument. Future research could extend the analysis of integration in outsourcing relationships and build on the structural variant of contingency theory and assess, for example, how various other contextual factors affect integration (Donaldson, 2001). Future research could also complement this study by building on

different fundamental assumptions about behavior in organizations; for example, TCE provides avenues to study governance structures as a way to reduce opportunistic behavior and enhance collaboration or RBV facilitates the assessment of how organizations develop integration capabilities in outsourcing relationships over time (McIvor, 2009). And finally, related to the management of BSRs, it would be interesting to investigate the following questions: How does the role of contract manufacturing in the firm affect the use of resources for integration in the outsourcing relationship? What role does employee commitment play in successful outsourcing relationships and the integration of the outsourcing relationship?

6 CONCLUSIONS

The empirical evidence illustrated that there are significant differences in managing integration in the outsourcing relationship, both in terms of *how* integration is managed and *when* the firm places the emphasis on integration and these differences can be explained by the focal strategic priority. Integration is managed differently depending on whether cost or quality is emphasized as the strategic priority and whether production has started or not. Making quality the priority was associated with adopting multiple complementary impersonal and personal integration practices for the purpose of ensuring product quality *before* starting actual production. Our results indicated that investing in integration before starting production is critical to ensure the desired quality level, and this reduces the integration needs during production. In contrast, cost as the main strategic priority was associated with integration practices that aim to streamline day-to-day operations *during* the early phase of production.

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Appendix 1: Recent research on organizational view to outsourcing

Study	Purpose of the study	Research setting	Background literature and theory	Conclusions or key findings
Understanding outsourcing relationship characteristics				
Baraldi et al. (2014), IMM	Study the value in the relationships between suppliers of outsourced activities and their customers, taking the supplier's viewpoint from a relational perspective.	Qualitative case study of complex outsourcing activities between a packaging company and large consumer goods manufacturers	Industrial Marketing and Purchasing literature, Transaction cost economics, Resource-based view	Three key dimensions of outsourcing relationships: value co-creation via inter-firm coordination, mutual dependence between supplier and customer as a result of the supplier's taking over activities, and the blurring of organizational boundaries resulting from mutual dependence.
Gospel & Sako (2010), ICC	Investigate the demand side of outsourcing business services.	Two case studies of leading consumer products companies	Administrative structure of the firm, Transaction cost theory, Resources and capabilities theory	A relatively high degree of centralization at the other company led it to create an internal shared services center before outsourcing, whilst the other company utilized outsourcing as an opportunity to globally standardize its systems and processes.
Handley & Benton (2009), JOM	Study management practices (strategic evaluation, contractual completeness, and relationship management practices) during the outsourcing process that are considered the key drivers of outsourcing performance.	Online survey from procurement and sourcing professionals from different types of outsourcing activity, industries, and firm sizes	Transaction cost theory	1. Outsourcing performance is significantly influenced by extensive strategic evaluation and proactive relationship management practices. 2. The impact strategic evaluation has on outsourcing performance is not direct, but rather partially mediated by the relationship between the parties. 3. Contractual completeness does not distinguish between successful and unsuccessful outsourcing efforts, and can be considered qualifying activity.
Handley & Benton (2012), JOM	Address how the buying firm's dependence on the service provider, the asserted importance of the outsourced activity, and difficulties with other inter-organizational control mechanisms are related to the reliance on mediated power.	Dyadic survey data investigating large US-based companies engaged in offshore or domestic business process outsourcing relationships	Inter-organizational power, Strategic sourcing literature, Agency theory	1. The use of mediated power is diminished when the buyer is currently more dependent on the service provider because of switching difficulties and the buyer has a higher expectation of future supply market consolidation. 2. The use of mediated power is more pronounced when the buyer experiences contract management difficulties, but the same is not true when the buyer has difficulty in monitoring the provider.

Handley and Benton (2013), JOM	Address how the dimensions of task- and location-specific complexity influence the costs of control and coordination costs incurred by the customer organization.	Dyadic survey data from 102 outsourcing relationships	Transaction cost theory, Information processing view	1. The scale of the service and the geographic distance between the customer's and provider's locations increase both control and coordination costs. 2. Task breadth and geographic dispersion increase control costs, but not coordination costs. 3. Control costs decrease with the degree of service customization.
Leonardi & Bailey (2008), MISQ	Study how individuals contend with problems that arise from the use of transformational technologies across time and space.	A single case study of an automobile manufacturer outsourcing engineering tasks to an offshore site in India	Not specifically defined	Five new work practices to transfer occupational knowledge to the offshore site: defining requirements, monitoring progress, fixing returns, routing tasks strategically, and filtering quality.
Levina & Vast (2008), MISQ	Study how differences in country and organizational contexts give rise to boundaries and associated status differences in offshore application development projects and how these boundaries and status differences can be renegotiated in practice to establish effective collaboration.	Qualitative case study of a large multi-national financial services firm, which outsourced "high-end" IT work to its wholly owned subsidiaries and to third-party vendors in multiple global locations	Practice theory	1. The differences in country contexts gave rise to a number of boundaries that inhibited the effectiveness of the collaboration, while differences in organizational contexts were largely mediated through organizational practices that treated vendor centers and captive units similarly. 2. Some key onshore managers were able to alleviate status differences and facilitate effective collaboration across diverse country contexts by drawing on their position and resources.
Malik et al. (2012), IMM	Develop understanding of market-based organizational learning capabilities in business outsourcing firms.	Case study of four business process outsourcing firms in India's IT sector	Resource- and knowledge-based views	Effective knowledge transfer, diffusion, and the development of market-based organizational learning capabilities are contingent upon the strength of a firm's quality management capabilities.
Ndubisi (2011), IMM	Address conflict handling typologies (integrating, accommodating, and compromising), which affect trust and commitment in B2B outsourcing relationship.	Survey data from Chinese and Indian human resource outsourcing service providers	Resource dependency theory, Agency theory, Relational view	1. Conflict handling styles are significantly associated with trust and commitment. 2. Trust mediates in the association of conflict handling styles with commitment. 3. The impact of compromising in handling conflict on trust and commitment is moderated by culture. 4. Culture has a direct impact on commitment but not on trust.
Oshri et al. (2007), MSQE	Focus on how expertise dispersed across sites can be managed.	Single case study of a large IT services provider with its headquarters in India	Not specifically defined	Over the next five years, offshore providers will need to develop a system for managing knowledge and expertise to complete and deliver on client expectations.

de Vries et al. (2014), IMM	Study how do contractual and non-contractual (i.e. relationship) characteristics influence the knowledge sharing behavior of service partners.	Survey data from relationship managers from a large multinational firm that operates on a global scale in several industries	Knowledge transfer theory, organizational learning	1. Contractual incentives had a negative effect on exploratory knowledge sharing, but not on exploitative knowledge sharing. 2. The level of contract specification and the quality of the relationship related positively to both types of knowledge sharing 3. Relationship managers' experience related positively to exploratory knowledge sharing, but not to exploitative knowledge sharing.
Understanding integration and coordination in outsourcing relationships				
Boulaksil & Fransoo (2010), IJOPM	Study the implications of outsourcing on integration at the operational planning level.	Two case studies at three pharmaceutical companies	Transaction cost theory, Resource-based view	In an outsourcing relationship, the order process consists of different, hierarchically connected, decisions in time, hence requiring a richer and more developed communication and ordering pattern than is commonly assumed.
Gadde & Hulthen (2009), IMM	Address reasons for problems in logistics outsourcing.	Extensive literature survey	Industrial network model	Increasing interaction between buyer and provider would be beneficial to the outcome of outsourcing.
Harmancioglu (2009), IMM	Study antecedents of control mechanisms through which firms manage the risks and costs associated with outsourcing relationships.	Literature analysis of global technology-intensive markets	Agency theory, Resource dependency theory, Transaction cost theory	The supplier in a new product development relationship may behave opportunistically when knowledge is asymmetrical and/or the goals of the buyer and supplier are incompatible.
Narasimhan et al. (2010), IJPR	Assess the role of integrative supply management practices in enabling higher performance in an outsourcing relationship.	Multiple case study of buyer-supplier outsourcing relationships from manufacturing and service sectors	Not specifically defined	The intensity of the implementation of failure prevention practices and performance-enhancing practices is contingent on the motivations of the firms to outsource.
Willcocks et al. (2011), IEEE	Examine three aspects involved in outsourcing and offshoring, namely sourcing models, coordination, and value extracted from outsourcing projects.	Literature review on the changes of outsourcing on the firms and their effects on engineering management	Practice-based approach	Additional research is needed on recent trends in outsourcing and the impact of such a change process on the practice of engineering management.
Building a supply network				
Bhalla & Terjesen (2013), IMM	Study how new firms operating in dynamic environments organize their outsourcing operations.	Case study of the relationship between biotechnology start-ups and their suppliers	Transaction cost theory, Resource-based view	New firms outsourcing to highly-embedded suppliers are likely to secure access to a wider supplier network, attain best-in-class operational knowledge, and avoid supplier opportunism while facing low levels of relationship-specific investments.

Holmström Olsson et al. (2008), MISQ	Investigate and develop an initial theoretical model of the implementation of a two-stage offshoring bridge model.	Multiple case study of two large global companies from the United States with significant software development operations	Relational exchange theory	1. While both companies act as bridges in two-stage offshoring arrangements, their approaches differ in relation to team integration, organizational level implementation, and site hierarchy. 2. Temporal location seems to favor a bridge location. 3. Offshoring tends to progress through a staged sequence of progressively lower-cost destinations.
Mason & Leek (2008), JOMS	Explore dynamic business models as an example of inter-firm knowledge transfer.	Case study of an offshore supply network in the aerospace industry	Not specifically defined	Dynamic business models help organizations identify and link key actors with each other, and aid the identification and specification of appropriate knowledge types and knowledge transfer mechanisms for different actors, in different contexts.

Appendix 2. Data collection.

Interviews

Interview number	Job title	Company	Time	Duration	Cases
1	Global procurement development, Expert	ElectronicsCo	8.1.2009	120 min**	3, 4, 5, 6
2	Demand-supply planning process, Owner	ElectronicsCo	12.1.2009	60 min	4, 5, 6
3	Supplier Manager	ElectronicsCo	12.1.2009	80 min	3
4	Supplier Manager	ElectronicsCo	12.1.2009	55 min	4
5	Buyer	ElectronicsCo	14.1.2009	60 min	4
6	Buyer	ElectronicsCo	14.1.2009	60 min	3, 4
7	Supplier integration, Manager	ElectronicsCo	14.1.2009	60 min	3, 4
8	Supplier development, Expert	ElectronicsCo	14.1.2009	60 min	3, 4
9	Supply chain, Supplier Coordinator	ElectronicsCo	14.1.2009	35 min	
10	Buyer	ElectronicsCo	14.1.2009	60 min	5
11	Supplier development, Expert	ElectronicsCo	14.1.2009	60 min	5
12	New product delivery capability, Process owner	ElectronicsCo	15.1.2009	60 min	5
13	Global materials, Coordinator	ElectronicsCo	15.1.2009	60 min	6
14	New product material availability, Coordinator	ElectronicsCo	15.1.2009	60 min	5
15	Supplier development, Expert	ElectronicsCo	16.1.2009	60 min	5
16	Supplier development, Expert	ElectronicsCo	16.1.2009	60 min	6
17	Buyer	ElectronicsCo	22.1.2009	60 min	3
18	Supply chain, Supplier coordinator	ElectronicsCo	22.1.2009	65 min	6
19	Supply chain, Supplier coordinator	ElectronicsCo	22.1.2009	70 min	3, 4
20	Supply chain, Supplier coordinator	ElectronicsCo	12.1.2009	60 min	5
21	Supply chain, Supplier coordinator	ElectronicsCo	22.1.2009	45 min	4
22	Materials Manager	ElectronicsCo	2.2.2009	60 min	3
23	Category Specialist	ElectronicsCo	2.2.2009	65 min	4
24	Materials Manager	ElectronicsCo	25.2.2009	65 min*	5, 6
25	Demand supply planning, Delivery process, Owner	ElectronicsCo	27.2.2009	80 min	4, 5, 6
26	Global procurement, Process development, Expert	ElectronicsCo	27.3.2009	90 min	3, 4, 5, 6
27	Supplier Manager	ElectronicsCo	27.3.2009	75 min*	5

28	Global procurement, Process development, Expert	ElectronicsCo	24.3.2009	60 min	3, 4, 5, 6
29	Category Manager	ElectronicsCo	24.3.2009	60 min*	5
30	Global materials, Coordinator	ElectronicsCo		40 min*	5
31	Global procurement development, Expert	ElectronicsCo	17.4.2009	60 min	3, 4, 5, 6
32	Demand-supply Planner	ElectronicsCo	17.4.2009	50 min	3, 4, 5, 6
33	Vice President	CM	26.3.2009	60 min	6
35	Account Manager	CM	26.3.2009	50 min	6
36	Vice President	CM	27.3.2009	35 min*	4
37	Order and delivery process, Owner	CM	1.4.2009	60 min	6
38	Key Account Manager	CM	18.3.2009	40 min	5
39	Vice President	CM	27.3.2009	50 min*	3
40	Sourcing Manager	FoodCo	1.2.2009	90 min**	1, 2, 7, 8
41	Supply Chain Planning Manager	FoodCo	1.2.2009	35 min	1, 2, 7, 8
42	Vice President, Supply Chain	FoodCo	3.2.2009	90 min	1, 2, 7, 8
43	Sourcing Manager	FoodCo	17.4.2009	60 min	1, 2, 7, 8
44	Vice President, Supply Chain	FoodCo	27.4.2009	75 min	1, 2, 7, 8
45	Product Development Manager	FoodCo	6.5.2009	120 min	1, 2, 7, 8
46	Category Director	FoodCo	12.5.2009	105 min	1, 2
47	Development Manager	FoodCo	20.5.2009	90 min	1, 2, 7, 8
48	Production Controller	FoodCo	25.5.2009	80 min	
49	Material Functions, Manager	FoodCo	27.5.2009	60 min	7, 8
50	Category Director	FoodCo	2.6.2009	90 min	7
51	Quality and Environment, Manager	FoodCo	8.6.2009	120 min	1, 2, 7, 8
52	Sourcing Manager	FoodCo	8.6.2009	60 min	1, 2
53	Sourcing Manager	FoodCo	9.6.2009	60 min	7, 8
54	Supply Chain Planner	FoodCo	9.6.2009	30 min	1, 2, 7, 8
55	Marketing Manager	FoodCo	12.6.2009	45 min	1, 2, 7, 8
56	Vice President, Supply Chain	FoodCo	15.6.2009	35 min	1, 2, 7, 8
57	Purchasing, Quality Manager	FoodCo	22.6.2009	60 min	1
58	Product Development, Manager	FoodCo	25.6.2009	60 min	2
59	Managing Director	FoodCo	2.7.2009	90 min	1, 2
60	Material Functions (Warehouse), Team Leader	FoodCo	3.7. 2009	60 min	7, 8
61	Product Development Manager	FoodCo	7.7.2009	60 min	1, 2
62	Supply Chain Coordinator	FoodCo	15.7.2009	60 min	2, 8

63	Operative Manager	CM	22.7.2009	60 min	7
64	Quality Expert	FoodCo	10.8.2009	90 min	1
65	Packaging, Development Manager	FoodCo	10.8.2009	120 min	7, 8
66	Communications Manager	FoodCo	10.8.2009	45 min	
67	Sales Director	CM	10.8.2009	120 min	7
68	Material Functions (Warehouse), Team Leader	FoodCo	14.8.2009	45 min	7, 8
69	Service Manager	CM	14.8.2009	90 min	1

CM = Contract manufacturer; * Interview by phone; ** Initial planning meeting

Workshops

Type of data collection	**Job titles of the workshop participants**	**Purpose**	**Time and duration**	**Cases**
Opening workshop, ElectronicsCo	Head of Global Procurement, Global Procurement expert, Supply Base Manager	To understand the basic structure of the company and global management of categories, selecting cases	9.12.2008, 120 min	3, 4, 5, 6
Opening workshop, FoodCo	Procurement Director, Package Materials Manager, Buyers (3), Outsourcing Coordinator, Product Development Manager, Product Development Director, Procurement Manager, Quality and Environment Manager, Production Quality Controller	To become acquainted with the company and organization and gain an understanding of the challenges in managing outsourcing relationships.	21.1.2009, 180 min	1, 2, 7, 8
Supplier-specific workshop	Supplier Managers and Category Managers from each supplier, Global Materials Execution Expert and Global Procurement Expert	Systematically going through the business, markets, supply market situation, competitive situation and status of supplier relationships	9.1.2009, 240 min	3, 4, 5, 6
Result workshop, ElectronicsCo	Head of Global Procurement, Global Procurement Expert, Supply Base Manager, Category Manager (2)	Reporting and discussing initial results	27.4.2009 120 min	3, 4, 5, 6
Result workshop, FoodCo	Procurement Director, Package Materials Manager, Product Development Manager, Quality and Environment Manager, Production Quality Controller	Reporting and discussing results	27.8. 2009, 120 min	1, 2, 7, 8