Chapter 8 Boundaries: Their Influence on Managing Safety in Outsourcing



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Abstract Boundaries are an essential feature of an organization and integral to the on-going process of organizing. Outsourcing not only disrupts the configuration of organizational boundaries but also compounds the safety management challenges faced by an organization. This chapter connects these two observations through an examination of the composite nature of the organizational boundary. Misalignment between organizations in one or more of the three clusters of processes (physical, mental or social) that comprise the boundary create differences which may contribute to the safety management challenges commonly experienced in outsourcing. Boundary spanning skills that manage these processes are vital for successful working relationships between organizations but are rarely taught in safety training.

Keywords Outsourcing · Organisational boundaries · Safety management · Interventions

8.1 Introduction

Contractors create safety challenges. This chapter examines this widely held view of outsourcing from the perspective of the organisational boundary. Several authors have reported that organisational boundaries are a composite of three elements and that organisations do not always differ on every element. Here I suggest that differences across the organisational boundary in one or more of these elements can account for the particular safety challenges that commonly occur. Differentiating the boundary in this way and considering the safety implications of this may have significant practical application. Effective management of the three elements of the boundary is necessary for successful safety management in outsourcing relationships.

8.2 Outsourcing

As connectivity increases in a global world, the opportunities for outsourcing increase, making it one of the most enduring strategic initiatives adopted by organisations (Espino-Rodriguez and Padron-Robaina 2006). It occurs in many different industrial sectors across the globe, involving firms that range in size from sole traders to multinational corporations and in many different types of activity. This diversity ensures that the term 'outsourcing' risks becoming an 'umbrella term' requiring clearer specification.

Both Harland et al. (2005) and Espino-Rodriguez and Padron-Robaina (2006) identified a wide variety of definitions of outsourcing that highlight not only different activities that occur across levels of analysis but also a wide variety of working relationships between firms which have different consequences. Espino-Rodriguez and Padron-Robaina (2006) observe that while most authors agreed "that outsourcing means going outside of the firm to acquire determined activities that are not processed internally, pp. 51–52", there are differences between their definitions. These differences are related to the nature of the relationship between parties, the types of activity or service that is outsourced and the business processes that are involved. Subsequently, Davis-Blake and Broschak (2009) defined outsourcing as "the act of obtaining goods or services from individuals or organisations outside of a firm's boundaries when these goods or services could be created internally by a firm's own employees and managers, pp. 322". This definition has two important characteristics. The first is that it emphasises the strategic decision to access goods or services from beyond the firm boundary, when the firm has the capability to produce these goods or services internally, which distinguishes it from a simple purchase decision. The second is the requirement for an inter-firm relationship between a lead or client firm, purchasing the goods or service, and a contractor, supplying the goods or service. This suggests that the supplier has skills and capabilities that are superior to those of the client firm for producing that particular good or service.

Davis-Blake and Broschak (2009) suggested that outsourcing arrangements can be structured in one of three ways. First, the whole process or function can be located beyond the boundary of the client firm (i.e. inside the supplier firm). Second, only part of the process is located outside of the client firm. These may be mundane tasks or those requiring specialist skills. Third, necessary skills can be procured through an employment agency or search firm. The latter, however, is only one of four forms of contingent work (Connelly and Gallagher 2004). There are three others: 'free-lance' or independent contractors; 'direct hires' with an implicit expectation of an enduring employment relationship; and seasonal workers. Outsourcing may therefore occur either between a firm and another firm, where processes are outsourced, or between a firm and an individual, where staff resources are outsourced. There is an extensive literature on both of these levels of outsourcing; but because they operate at different levels of analysis, they rarely overlap.

Not only are there different forms of outsourcing, but there are different theoretical explanations for its occurrence, which may also contribute to the diversity

of definitions. Conventionally, the decision to outsource is explained by transaction cost economics (TCE), which focuses on the efficiency of the economic transactions conducted between the firms and considers each interaction between firms as discrete and independent of previous (or future) interactions. However, there are alternative perspectives for analysing and explaining outsourcing. The resource-based view (RBV) of the firm focuses on the internal capabilities and resources of the firm relative to others and suggests that firms should outsource those activities in which their capabilities give them no competitive advantage, because others can perform them better.

A third perspective emphasises the longitudinal and enduring relationship aspects of outsourcing. This relational perspective contrasts with the TCE approach by considering the *ex post* relationship development, not just the *ex ante* outsourcing decision (Baraldi et al. 2014). Kaipia and Turkulainen (2017) observe that the relationship perspective addresses "how to manage the outsourcing relationship after the decision to outsource has been made, p. 115". Effective management of the relationship is critical to the future success of the outsourcing activity, but this would be overlooked through the adoption of a TCE perspective. The relationship perspective anticipates the potentially high levels of mutual dependence due to the interlinked activities and the need for close coordination that can occur in outsourcing relationships. These different theoretical perspectives inevitably affect the characterisation of the required boundary between the firms that allows separation or integration or something in between.

8.3 Safety Challenges of Outsourcing

Variations on modes of outsourcing to service a wide range of needs in many different sectors inevitably result in many different challenges to the management of safety in organisations. A series of informal focus groups with senior managers from different industries conducted as part of an IOSH-funded research project (Pilbeam 2020) identified many different challenges (Table 8.1). Here the collective synthesis of these data is aligned to the five major steps for contractor safety management developed by the Campbell Institute (National Safety Council 2015).

The selection by the client of suitable contractors to perform the task is often constrained by price considerations, and by legal or administrative rules, especially in public sector organisations. The nature of the outsourced tasks can create challenges, especially if it is complex, lengthy and likely to change as it progresses. This uncertainty creates challenges in terms of understanding what is, or will be, required and for assuring the appropriate skills are available. Cultural differences between the client and contractor organisations, especially in terms of language and values, may create further challenges for safety management, not only before the task begins, but also at subsequent changes. While contractors who have worked on different sites and with different clients are able to share safety insights because of their breadth of expertise, this is rarely done. A more common experience for the contractor is the

Table 8.1 Challenges for managing safety in outsourcing relationships identified in a series of cross-sector focus groups with senior managers aligned to best practices in contractor management (National Safety Council 2015)

Five major steps in contractor safety management (NSC 2015)	Identified safety challenges
1. Prequalification	Price and quality constraints for task set by client Constrained choice of contractors
2. Pre-job task and risk assessment	 Scope and complexity of the work, including likely evolution of the project Understanding of the required task Competence to undertake and complete the task Cultural differences (languages, values)
3. Contractor training and orientation	Different procedures and ways of working for different clients create confusion for the contractor Inconsistent implementation of rules between sites of the same client or over time on the same site Turnover of personnel on site
4 Monitoring of job	 Monitoring Sharing of information Communication Awareness/coordination of who is on site
5. Post-job evaluation	-

confusion created by the need to follow different rules and ways of working for each client. This requires appropriate training and orientation. A further challenge rarely reported is the turnover of personnel on site. The contractor may not always supply the same workforce to the client site on every occasion, resulting in variation in understanding of the task, competence to perform the task and knowledge of acceptable ways of working. All of this requires close monitoring of the contractors and a keen awareness of who is present on site and which tasks they are performing. Mechanisms to capture and share this information in order to safely coordinate and control activities are essential. Echoing the wider findings from the IOSH-funded study and the research underpinning the Campbell Institute guidelines is the absence of any comment on post-job evaluation. Rarely done, this may be a significant contributor to the ongoing and persistent safety challenges arising from outsourcing.

Over two decades, Quinlan and colleagues have developed and applied a 'Pressures, Disorganisation and Regulatory Failures' (PDR) framework (Quinlan et al. 2001) that groups risk factors explaining the poorer health and safety performance of individual contract workers into three categories. Economic and reward pressures identify risks that favour production over safety considerations and encourage unsafe working practices. Tight financial margins on contracts or payments contingent upon performance relegate considerations of safety in favour of cutting corners and risk taking. Compressed contracts, work intensification and fast-paced work may encourage long or irregular working hours, so increasing the risk of fatigue, as will multiple job holding to secure a living wage. Disorganisation manifests itself in the

recruitment of inexperienced or under-qualified staff, who receive limited induction and little supervision. If safety policies and procedures are available, they may lack clarity and may be implemented ineffectively. Communication between firms and individuals may be ambiguous and unclear, leaving contractors isolated, particularly when there are cultural differences. Regulatory failures are especially evident for contractors with limited knowledge of their legal entitlements, for example workers from other countries deployed by a contractor on a client site.

Milch and Laumann (2016) in their review of studies investigating accident risk in inter-organisational settings identify the first two categories of Quinlan's PDR framework: economic pressure and disorganisation. Pilbeam et al. (2020) similarly identified these two categories in their literature review of safety risk factors in outsourcing for both firm-to-individual and firm-to-firm relationships. Both papers draw attention to the possible inadequacy and over-bureaucratisation of safety management systems, making safety difficult to manage in outsourcing relationships. Milch and Laumann also note two other categories that contribute to increased risk and challenges of managing safety. The first is the dilution of competence arising from an unfamiliarity with the specific working methods required on site or the particular rules that apply when operating in an unfamiliar sector. The second is organisational differences in the importance and achievement of safety. As the number of organisations involved in a particular activity increases, the chance of differences also increases. In lengthy contracting and sub-contracting chains, differences are inevitable. This encourages the fragmentation of decision-making such that local compromises are made that may not be optimal for the safety of the whole system. Greater organisational difference also ensures that trust between organisations is initially low and conflicts are likely.

8.4 Organisational Boundaries

Boundaries are an essential feature of an organisation and integral to the ongoing process of organising (Santos and Eisenhardt 2005). However, they are routinely overlooked (Heracleous 2004) and rarely considered even in the context of outsourcing where changes to organisational boundaries are inevitable.

Boundaries connect points of similarity (Abbott 1995) that separate and differentiate entities. What lies on one side of a boundary is in some way different from, and no longer the same as, that which lies on the other side. As Barth (1969) noted, this assumes an abrupt discontinuity across a boundary, where reality may involve a more gradual transition. Nevertheless, the characterisation of these boundaries depends in part on the conception of the entities that are being separated. Araujo et al. (2003) observe that organisations can be defined variously, for example as economic or legal or administrative entities. These differences in definition give rise to different conceptions of what the boundary demarcates. Santos and Eisenhardt (2005) note that organisational boundaries demarcate four mechanisms operating inside an organisation, namely economic efficiency, power, competence and identity. They demarcate

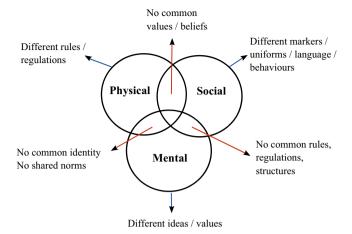


Fig. 8.1 Model of boundary types with application to outsourcing. Based on categories proposed by Hernes (2004)

the economic transactions undertaken by the organisation. They bound the extent of organisational influence. They circumscribe the resources possessed by the organisation, and they define the identity of organisational members. Clearly, these four conceptions create different boundaries that delimit different activities. Moreover, by possessing many, if not all, of these different types of boundary, it is evident that there are multiple coexisting boundaries to any single organisation (Hernes 2004). Either in combination or singly, these may influence outsourcing relationships (Fig. 8.1).

This characterisation of organisational boundaries as composite provides an important analytical framework for differentiating between entities on either side of the boundary. Hernes (2004) suggested that boundaries demarcate three clusters of processes. Physical processes include the rules, regulations and structures operating within an organisation, which specify how an organisation does things. Mental processes include ideas, values and beliefs that guide action and specify what organisations do, while social processes relate to the identity and norms that establish the loyalty and trust that define who is a member of the organisation. Together these three collectively define and delimit the organisation, differentiating it from others. In this way, the organisational boundary acts as a buffer separating one organisation from another. However, the composite nature of the boundary offers the possibility that there may be not only differences, but also similarities, between the entities on either side of the boundary. These similarities allow organisational boundaries to act also as bridges (Araujo et al. 2003) connecting one organisation to another permitting the flow of information and people between them. Despite this flow, and the apparently porous nature of the boundary between organisations that could lead to homogenisation, organisations commonly remain distinct. This suggests that there are important organisational processes operating to maintain the boundary.

The organisational capabilities that permit separation differ from those that support interaction. They are complementary, and both sets of capabilities are essential for the maintenance of a boundary. Araujo et al. (2003) suggest (p. 1256) "boundaries are determined by capabilities necessary to undertake productive activities, and by capabilities required to interact with others". While consideration is often given to the productive (or core) capabilities of the firm in the decision to outsource, much less consideration is given to those ancillary or interactive capabilities, which likely contribute to the success, or otherwise, of the outsourcing relationship. These include the ability to create, maintain, develop and eventually exit relationships and the ability to coordinate internal and external processes.

8.5 Organisational Boundaries and Managing Safety

Outsourcing creates a range of managerial and leadership challenges at the levels of both the organisation and the individual, for example specifying coordinating activities or challenging unsafe working behaviours. As we have seen, Quinlan's PDR framework and other literature reviews are able to categorise these challenges and provide a plausible account of their occurrence. An alternative perspective on the commonly observed safety challenges may come from the recognition that boundaries are composite. Hernes (2004) depiction of organisational boundaries comprised of three elements (physical, social and mental) suggests that attention needs to be given to all three elements for successful safe interaction across the organisational boundary. Where these elements are all aligned, the experience of working with another organisation may be like working with yourself. Absent alignment on one or more of these dimensions, difficulties arise.

Inattention to any one of the three primary boundary elements in an outsourcing context may provide the basis for a range of the safety challenges commonly experienced in these settings. Failing to align rules and procedures between organisations, which is one aspect of the physical dimension of a boundary, creates challenges for those working in a shared workspace. Similarly, differences between organisations in their prioritisation of safety and production can create confusion about how to proceed in a given situation, especially when this is time pressured. Environments that differentiate between groups, and that accentuate obvious differences, for example in language, or differences in resourcing, including the provision of PPE, create social differences, which lead to safety challenges.

Organisational boundaries necessarily, but inadvertently, create barriers to safe working. Waring et al. (2015) recognised this in the healthcare sector where interdependencies between professions and organisations are many and often complex, leading to unintended consequences that create safety issues. These boundaries in health care then become latent threats to the safety of the system. Outsourcing perhaps creates similar latent threats, in addition to active failures. The framework used by Waring et al. (2015) bears strong resemblance to that developed by Hernes (2004) (see Fig. 8.1) and identifies three important analytical dimensions of boundaries that

threaten the safety of a system. These three are organisation, culture and knowledge. Organisation embraces the formal aspects of work configuration shaping how individuals and organisations work together. It includes task allocations and resource profiles, governance arrangements and leadership. Culture typically relates to the shared values and norms which influence the meanings given to work activities, for example the value placed on collaborative working. Knowledge describes how actors make sense of or understand their work, relating for example to the sources of information that guide actual practices. These characterisations align, respectively, to the physical, social and mental dimensions of Hernes framework.

By adopting this organisation, culture, knowledge analytical framework, we can categorise the typical safety challenges encountered by managers (described above) according to which of the three dimensions are misaligned. In many of the observed challenges, there is a misalignment of either knowledge or organisation. Constraints to selection refer to the rules and governance arrangements that determine which organisations can work together. A similar organisational challenge results from different procedures and ways of working and the inconsistent implementation of rules between organisations. How safety data is captured and shared can also differ between organisations, and this may influence how tasks are configured and executed. In contrast, differences in knowledge between the two organisations can explain how there are different conceptions of the scope of the work, the required ways of working and whether individuals and organisations are judged to be competent to perform the task. Similarly, the turnover of staff on site may influence the levels of understanding of both the task and the site. These are challenges to safety arising from differences in knowledge. Communication too depends on a shared understanding of the work, which is also a knowledge challenge. However, effective safety communication may also be influenced by cultural differences. Inability to speak the same language is evidently a barrier. This provides an important illustration. The three analytical elements are not completely independent and discrete in their creation of safety challenges. More than one may generate and contribute to the same challenge. Moreover, the overlap between any two of these dimensions may have also a specific influence on safety in an outsourcing relationship. Communication about safety illustrates this overlap. Another example might be the writing of methods statements, which assumes an understanding of the detail of the required work practices, and of their importance in the context of safely executing the task.

Other categorisations of the safety challenges arising from outsourcing, for example Quinlan's PDR framework, can also be analysed and reinterpreted using this organisation, culture and knowledge framework. Economic and reward pressures reflecting the prioritisation of production over considerations of safety and the structuring or organisation of work align, respectively, to cultural and organisational differences operating across the organisational boundary. Disorganisation incorporates issues related to competence, communication and ineffective occupational health and safety management systems. These are covered by a combination of all three dimensions, respectively, knowledge, culture and organisation. As noted above, communication may be accounted for in the overlap between knowledge and culture. Inadequate safety management systems and the related concern of

over-bureaucratisation of safety fall in the overlap between knowledge and organisation. Regulatory failure incorporates poor knowledge of legal rights and obligations, limited access to occupational safety and health, fractured or disputed legal obligations and non-compliance and regulatory oversight. Some of these reflect differences in understanding of the task, but they also reflect differences in governance (i.e. knowledge and organisation).

8.6 Other Boundaries, Outsourcing and Safety

So far, we have explored one particular analytical framework for investigating boundaries, observing how it may help in practice to explain the safety challenges frequently arising from outsourcing. It provides a heuristic device for practitioners to ensure that different facets of the safety challenge are not overlooked in an outsourcing relationship. Nevertheless, there are other ways of investigating boundaries, and there are also other boundaries that influence the management of safety that may not align with organisational boundaries. We now turn to consider both of these briefly.

Returning to Santos and Eisenhardt's (2005) consideration of organisations, there are four different conceptions of an organisational boundary: efficiency, power, competence and identity. Respectively, they delimit the transactions occurring within the organisation, the extent of its influence, the resources it can draw upon and the dominant 'mind-set' or culture. Exploring outsourcing relationships using these different conceptions as lenses might reveal why particular safety management challenges occur. Organisations attempting to collaborate but having different conceptions of what an organisation is and what a boundary represents may encounter particular difficulties. Understanding how these different conceptions interact and how their salience varies with context may help to mitigate some of the tensions encountered in outsourcing and make safety management more effective.

Four different types of interface between suppliers and buyers have been identified by Araujo et al. (1999), namely standardised, specified, translation and interactive. These may also be used to describe the nature of the interface between client firms and contractors in an outsourcing relationship. Standardised interactions indicate no specific adaptations to accommodate the uniqueness of the relationship; every relationship is managed in an identical way. Where directions are provided by the client or customer, they may (translation) or may not (specified) take account of the contractor and the wider circumstances. An interactive interface is one where both organisations jointly develop the desired solution. These four types of interface may also impact the way safety is managed between firms in an outsourced relationship, ranging from unbending application of safety rules demanding strict compliance, which may lead to adversarial relationships, to more collaboratively developed safety management systems based on contextually aware risk assessment.

Professional affiliations are known to be strong, and the boundaries between professions are defended fiercely, especially when established hierarchical relationships between professions are disputed. These professional boundaries traverse

organisational boundaries, resulting in the professionals in one organisation identifying more closely with their peers in another organisation than with their fellow workers in their own organisation. Inevitably, this will disrupt the consistency of interpretation between firms of the social dimension of the boundary between them. In a similar manner, companies operating across national borders may experience internal inconsistencies in their interpretation of the three dimensions of the boundary. Legal and regulatory frameworks differ between nations, creating physical boundaries. In construction, the UK's CDM regulations (HSE 2015) identify more strictly the roles and responsibilities of the different parties. Differences in language contribute to social boundaries. Mental boundaries result from differences in the values and beliefs that underpin national cultures, which senior managers in the oil and gas industry anecdotally suggest contributes to differences in risk taking or incident reporting (Mearns and Yule 2009; Casey et al. 2015). It is perhaps unsurprising therefore that outsourcing internationally adds further complexity to the existing challenges of managing safety between organisations within a country.

8.7 Managing the Boundary: The Role of the Boundary Spanner

The principle thesis of this chapter is that understanding and managing boundaries is vital for successfully managing safety in outsourcing relationships. Boundaries within an organisation require maintenance in order to differentiate one organisation from another. Nevertheless, they are also permeable, allowing the flow of information. Boundary spanners who perform four main roles undertake tasks across the organisational boundary. These are relational, coordination, mediation and entrepreneurship (Williams 2013, 2019). Each of these roles requires a different set of competencies that may, or may not, be found in a single individual. The relational role requires competencies in managing the politics of inter-organisational relationships and the complexity of the information flow supporting different professional and organisational interests. Coordination and planning are vital to effective collaboration in an outsourcing relationship, but this is time consuming. The mediation role requires an ability to understand and value differences between the participating actors, and the ability to interpret one to the other, ensuring effective communication. Finally, the entrepreneurial component focuses on the abilities to develop innovative solutions to the particular challenges of working together while adhering to established policies and procedures and managing the inter-organisational politics. These boundaryspanning skills are rarely taught in safety training, and yet, they are vital for successful working relationship between organisations, including effective safety management.

Safe working in an outsourcing relationship is made more challenging by the presence of an organisational boundary. By deconstructing the organisational boundary into three separate elements, it is possible to explain the occurrence of different safety challenges and to identify appropriate managerial interventions to mitigate

the problems. This analytical framework has proven to be a useful tool for managers in one multinational company. They have used it to diagnose their relationships with contractors, and through open discussion of the differences and similarities in these three dimensions, to develop better, safer and more effective working relationships. A better understanding of organisational boundaries and how they are managed would improve the safety of outsourced work.

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