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Title	Industrial Sales People as Market Actors
Authors(s)	Geiger, Susi, Finch, John
Publication date	2009-09
Publication information	Geiger, Susi, and John Finch. "Industrial Sales People as Market Actors" 38, no. 6 (September, 2009).
Publisher	Elsevier
Item record/more information	http://hdl.handle.net/10197/5189
Publisher's statement	This is the author's version of a work that was accepted for publication in Industrial Marketing Management. Changes resulting from the publishing process, such as peer review, editing, corrections, structural formatting, and other quality control mechanisms may not be reflected in this document. Changes may have been made to this work since it was submitted for publication. A definitive version was subsequently published in Industrial Marketing Management (Volume 38, Issue 6, August–September 2009, Pages 608–617) DOI:10.1016/j.indmarman.2009.04.003 Elsevier Inc.
Publisher's version (DOI)	10.1016/j.indmarman.2009.04.003

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Industrial Sales People as Market Actors

*Susi Geiger and John Finch**

Published at Industrial Marketing Management

Susi Geiger
Marketing Group,
UCD Smurfit Business School
Carysfort Avenue, Blackrock
Co Dublin, Ireland
T: +353-1-7164813,
susi.geiger@ucd.ie

John Finch (corresponding author)
Department of Marketing,
University of Strathclyde,
Stenhouse Building, 173 Cathedral Street,
Glasgow G4 0RQ, Scotland,
T: +44 141 548 5899,
john.finch@strath.ac.uk

Susi Geiger (Ph.D., Dublin City University) is a Senior Lecturer at University College Dublin. Her academic work considers marketing interfaces in both business-to-business and consumer contexts, with specific interest in the area of industrial buyer-seller interactions. Her work has appeared in a wide range of international journals such as *European Journal of Marketing*, *Journal of Marketing Management*, *Industrial Marketing Management*, and *Consumption, Markets and Culture*.

John Finch (PhD, Lancaster University) is a Professor of Marketing at the University of Strathclyde Business School in Glasgow. Combining marketing and economic sociology, his research analyses processes of incremental innovations in products and services as these emerge from the interactions of buyers, sellers and other actors. He has published in *Research Policy*, *Cambridge Journal of Economics*, *Journal of Evolutionary Economics* and *Marketing Theory*.

Industrial Sales People as Market Actors

Abstract: We develop the concept of boundaries in the context of sales personnel and their counterparts encountering and negotiating these while they undertake work to shape markets and build relationships. Drawing on a case study from production chemistry, we show that market shaping implies a mutual development of relationships, goods and services exchanged, and boundaries. In particular, we show that while relationships can submerge and obscure parts or dimensions of boundaries to other market actors, normal business activities such as testing new products and adapting products to changes in environmental legislation make visible some material dimensions of the exchange object, which can attract attention from other sellers. Visibility finds an expression as those market objects are exchanged, such that objects can be devices by which other actors join in and position themselves and their objects within markets.

Key words: Boundary spanning, market shaping, business relationships, industrial markets, production chemistry.

1. Introduction

Researchers have for a long time regarded sales personnel as being the prototypical boundary spanners, mediating directly and personally between the buying and selling organizations (e.g. Lysonski & Johnson, 1983; Matsuo, 2006). Relationship selling, as a paradigm, has propagated a belief that with the right training and tools, sales people can suspend or even suppress a market by creating and maintaining strong and enduring relationships with their customers (Tzokas, Saren & Kyziridis, 2001; Ahearne, Bhattacharya & Gruen, 2005). Guenzi, Pardo and Georges (2007), for instance, note that sales personnel such as key account managers have the significant role of being boundary spanners between selling and buying companies, thereby establishing and working within relationships as a normal working practice. Through the work of those boundary spanning sales people, customers may even start identifying with the selling firm (Ahearne, Bhattacharya & Gruen, 2005), in which case the boundaries between the buying and selling companies all but disappear from sight.

But, as Callon (1998a) claims, exchanges and markets are mutually constitutive, which indicates that even when engaging explicitly in relational activities, sales personnel are involved intimately and simultaneously in making exchanges and thereby shaping markets. To date, the sales and industrial marketing literatures have shed little light onto the sales person's *market*, rather than *relationship*, shaping activities, contributing to a narrow view of the salesperson as boundary spanner who aims to suppress rather than perform markets.

In this paper, we question the boundary spanning concept and focus on the multiple, simultaneous and often incoherent market shaping practices of industrial sales people. Investigating ways in which relationships, markets and exchanges of goods and services are mutually constitutive and interdependent, we present a company case study from the production chemistry industry, where multiple market and relationship forms are maintained by selling personnel at the same time and often with the same company. We draw on the performativity approach to markets, in which markets are studied “as sites of multiple and often conflicting sets of practices” and attention is directed “towards the forms markets take as a result of efforts to shape them” (Araujo, Kjellberg & Spencer, 2008, p. 6).

The performativity approach conceptualizes markets as dynamic social organizations, which tie together the practices of a broad set of (material and human) actors, and which have a propensity to be open to joining in by other actors. As part of their normal and mundane activities actors shape and re-shape markets. ‘Shaping’ implies performing, and adjusting exchange practices ‘on the spot’, rather than designing and overseeing some rules of a game as if from the outside. Likewise, as collective social organizations, markets can become actors in their own right and interfere in sales people’s relational or client-facing activities in diverse and often unforeseen ways.

In combining the performativity perspective and concepts from sales research with our empirical data, our aims are to show that: 1. in their client-facing activities, industrial sales people actively, if sometimes unintentionally, shape the markets in which their relationships are located; 2. vice versa, markets seen as social organizations influence and

interfere with the buyer-seller relationships and resist being ‘spanned’ and suppressed by sales people’s relational efforts; and 3. the nature of the boundaries being ‘spanned’ is more complex and dynamic than had been assumed in the boundary spanning literature in that sales people actively negotiate and shape rather than “penetrate” these (Lyonski and Johnson, 1983, p. 8), to a point where the very notion of ‘boundary spanning’ may become redundant.

2. Theoretical Background

In this section, we show that many contributions to research into boundaries in business marketing, sales and organization studies take boundaries to be given or static and rarely explore the characteristics of boundaries. A rare exception is Bechky (2003), who observes that, “We need to further investigate workplace interaction in order to fully specify and explain the process by which occupational boundaries move and are shaped” (p. 721). Otherwise, we are left with the impression that stable boundaries distinguish organizations from one another, for example as company and company or company and market, or that the boundary is displaced to the edges of an emerging community or relationship. We show this tendency first in the sales and marketing literatures, with specific reference to the conceptualization of boundaries in the IMP network approach. In Section 2.2, we then trace recent developments of the boundary spanning concept in the organizational literature, but argue that these are still not able to fully account for the dynamic boundary work industrial sales people undertake. Section 2.3 introduces recent advances in market studies from a range of disciplines, which problematize the notion of

boundaries in and around markets and market exchanges and open up the boundary concept for a more multifaceted perspective.

2.1 Boundary Spanners in the Sales and Marketing Literature

Research in the concept of boundary spanning began in the 1970s in management studies. In much of this early literature, organizations' boundaries are seen as a necessary protection mechanism against environmental stresses (Leifer & Delbecq, 1978). Those individuals who operate across their organization's boundaries and who relate their organization to its environment are called boundary spanners (Tushman & Scanlan, 1981). In an influential paper from management studies, Aldrich and Herker (1977) distinguish between two main functions of boundary spanners, namely information processing and external representation. Sales and marketing personnel, in their classification, are external representers of internal policies as well as "resource disposers" (p. 220), but they also play an important role in presenting environmental information to the organization. They therefore contribute to sense-making processes both in the organization and its environment.

From the beginning, 'role conflict' has been important in the boundary spanning literature. 'Role conflict' indicates that actors are competent in two settings during an episode of interaction, having spanned a boundary successfully. Upon the concept's adoption in sales research in the 1980s role conflict became the dominant issue for sales researchers, with the two settings typically being the buying and selling companies

(Lyonski & Johnson, 1983). Research focused on the key questions of which specific skills and attributes sales personnel should acquire to perform the role of being in two organizations simultaneously and effectively, and of which organizational provisions could alleviate individuals' role stresses and role conflicts in marketing and sales (e.g. Goolsby, 1992; Singh, 1993; Brown & Peterson, 1993; Bettencourt & Brown, 2003).

Interestingly, this literature is silent on the nature of the boundaries spanned and the specific environments that boundary spanners inhabit. Implicitly, the boundary spanning activities of sales and marketing personnel seem to equate with customer-facing activities (Singh, Verbeke & Rhoads, 1996). More explicitly, the boundary spanning of sales people has recently been related to the concept of relational selling, implying that sales personnel can develop relationships with counterparts in client organizations to secure sales repeatedly over time and so exclude other producers and other sales personnel from their client's business. A point may be reached where "the boundaries between the two systems of production and consumption are dissolved" (Tzokas, Saren & Kyziridis, 2001, p. 198), presumably indicating an ideal case of a boundary that has been spanned and so dissolved successfully or at least simplified greatly for its actors. Thus, the sales and marketing literature on boundary spanning has by and large taken "the existence of boundaries as given while treating boundary spanning activities as problematic" (Aldrich & Herker, 1977, p. 218).

We see the proposal of dissolving 'prior' market boundaries into specific episodes of intensive interaction and co-creation, and the displacement to new relationship, community or network boundaries, in the IMP literature too. Håkansson and Snehota

(1989) and Håkansson and Ford (2002) argue that companies interact intensively with some counterparts and develop inter-dependence. Consequently, theories of strategy that work with a focal company's corporate boundaries lack coherence because they depict stable bounds between a company/system and its environment rather than rich interactions between a focal company and some counterparts. Håkansson and Waluszewski (2002) and Baraldi and Waluszewski (2005) have focused on interactions occurring between different kinds of resource rather than between companies per se, to include business units and relationships as well as products and facilities. Where examining specific processes, interaction researchers have implied boundaries rather than made them problematic. Gadde, Huemer and Håkansson (2003) and Holmen and Pedersen (2003) have under the headings of 'strategizing', 'mediation' and 'network horizons' examined the question of how businesses recognize and manage the means and extents of their influence.

Put simply, both the IMP literature and the boundary spanning literature in sales and marketing have cast boundaries between buyers and sellers or buying and selling companies as either present (and to be spanned) or absent (that is, successfully spanned by either individuals or firm-level relationships and networks). By contrast, as we will discuss in more detail below, Kjellberg and Helgesson (2006; 2007) and Araujo (2007) have suggested in the context of research into market studies that boundaries are constitutive of markets and of the exchange activities of actors therein. Therefore, boundaries are never fully resolved.

2.2. Relational and Material Dimensions of Exchanges

Research into boundary spanning in management studies has recently begun to problematize the notion of boundary spanning by adopting a practice perspective. Levina and Vaast (2005, p. 339) refer to Bourdieu's theory of practice and depict boundary spanners as "relating practices in one field to practices in another field by negotiating the meaning and terms of the relationship. They engage in building a new joint field 'in-between' the two fields". They also distinguish between objectified "market-like" boundary spanning practices and relational "community-like" practices (Levina & Vaast, 2006, p. 19). In their definition, actors' interpersonal relationships suppress the material aspects of exchanges 'within a joint field'. Where actors engage in a joint production of objects and their meanings, the field becomes 'community-like' and the jointly produced object merely demarcates its boundary to the outside. The object and its material dimensions are otherwise unproblematic and a boundary spanner's task is primarily a relational one. Working across boundaries, on the other hand, requires boundary spanners to 'exchange' and thus objectify a good or service that is no longer a shared object situated in communal relationships.

While we applaud Levina and Vaast's practice perspective on boundary spanners and their emphasis on the 'in-between', we argue that with respect to sales personnel's practices, their definition places insufficient emphasis on the multiplicity of forms and of overlaps the 'fields' can have. Their distinction between 'within field' and 'across fields' and the related distinction between community-like and objectified exchanges assumes a relatively stable boundary in both instances. Levina and Vaast also assume that the

emphasis ‘within field’ is on relational dimensions of the exchange, whereas ‘across fields’ it is on the material dimension, which in effect would cast relational against material exchange practices; presented as a continuum, their categories further imply that while boundary spanners may move from one practice production to the other, they are by and large mutually exclusive.

Applied to sales, Levina and Vaast’s (2006) perspective would represent the buyer-seller relationship as a ‘community-like’ field with its own boundaries, which other buyers will find difficult to penetrate or join-in with. Following this logic, if the (immaterial) relationship between the sales person and their customers is put to the foreground, as it is done in much of the relationship selling literature (e.g. Tzokas, Saren & Kyziridis, 2001), the material elements of the exchange (for instance price or contractual terms and conditions) can easily slip out of sight. With this, the market could seem to be kept outside of the relationship because if the material side of the exchange is not visible, other market actors cannot so easily join in with and contest (or complement) this exchange (by for example offering a better price). From the perspective of the boundary spanning literature reviewed above, this would present a boundary successfully spanned.

By contrast, we argue that actors are situated in market-like and ‘community-like’ (or relational) fields at once and often with the same actors; that they engage in relational and in material or objectifying practices simultaneously, and that the boundaries they span are therefore less stable and certain than implied in the literatures reviewed above. This argument follows a body of literature that has emerged under the broad umbrella ‘market studies’ in recent years and that will be discussed next.

2.3 Sales People as Market Shapers

We argue that sales people are market shapers because we understand their activities as being situated in significant part within markets, in which they are continually seeking to join in with the activities of customers and clients, and with an acute awareness that other sales people are seeking to do the same. We began this theoretical review with mention of Bechky's (2003) comments about actors shaping boundaries as colleagues with different professional affiliations encounter one another regularly within a company. The performative approach to market studies provides further leads in our mission to understand how sales people encounter boundaries in both their exchange and relational practices. Callon (1998b), Callon, Méadel, and Rabeharisoa (2002) and Callon and Muniesa (2005) implicate boundaries in their explanations of how markets allow exchanges to happen. By situating themselves in a social and economic organization called the 'market', actors seek to calculate differences between an array of broadly comparable market objects, which are candidates to be exchanged. The activity of exchange requires that buyers and sellers broadly agree on those dimensions of the objects 'that count', which are being taken into account by actors when calculating the differences between goods. Other dimensions of the goods are momentarily discarded as a basis for calculating differences in this market. Hence, a very fragile boundary prevents goods in the array from 'spilling over' and complicating actors' calculations. Sales people typically seek to get their exchange object, usually some product/service hybrid, to be considered by other market participants as part of the array of objects that count as

goods, and that others take into account (Araujo & Spring, 2006). Rinallo and Golfetto (2006) show how extended and convoluted an activity this can be in their study of concertation at a trade show for textiles. Sometimes, sales people or other market actors may find some advantage in unsettling how others go about assembling an array of objects that count (Cochoy, 2008; 2009). For example, actors can draw attention to those dimensions of the goods that previously have not been taken into account, such as a poorly understood or overlooked product or design feature.

By exploring in fine detail the activities of ‘making count’ and ‘spilling over’, researchers who have contributed to the performative market studies approach have identified a complex cast of boundaries, which are of a more detailed order than considered in much research into boundary spanning. In addition to boundaries in between organizations, such as companies and markets, Azimont and Araujo (2007) show how producers negotiate retailers’ category reviews through making some boundaries between product categories fluid. Kjellberg and Helgesson (2007) and Kjellberg (2007) depict producers, sales personnel and retailers promoting self service retailing in the 1950s by highlighting a new dimension of shopping. MacKenzie and Millo (2003), MacKenzie (2004) and Beunza and Stark (2004) show traders in financial markets promoting and adopting trading and hedging strategies based on algorithms and therefore changing ways in which goods are being calculated. Finch and Acha (2008) discuss how geologists and engineers calculate different valuations of a mature oilfield that they are considering trading.

Boundaries are rarely the focus of market studies, despite the researchers being aware that they are implied in the explanation of spilling-over proposed by Callon and

colleagues. The critical feature is the array; the set of objects as comparators that market actors can cluster around with their related objects that help them format, organize and perform their exchanges. We cannot expect the boundaries ‘around’ these arrays to be completely specified. Rather, participants in markets continually face uncertainty and doubt as they seek to answer questions such as, ‘does this market object count’ or ‘does this no longer count’. Underlying the question, ‘does this count’, may be a further trail of questions, such as ‘have I got the calculation right’, ‘have I got the science right’ and ‘have I understood correctly what my customers want or how they intend to use the object that I’m offering them’.

At the same time, exchanges and the objects that surround and enable them are in part visible, regardless of what further boundaries the exchange implies. Sellers may seek to nurture close relationships, communities or networks among their customers with the intention of using this closeness to keep others out. The objects in and around an exchange can provide both a focus and shape for the relationship and become artifacts of the community. Simultaneously, objects of seemingly closed exchanges within relationships, communities or networks are potentially ‘joining-in’ devices that can be available to others who are not presently part of the relationship or community (Lave & Wenger, 1991; Orlikowski, 2002). Overall, we draw on performative market studies to envisage ways in which sales people encounter boundaries by encountering the questions regularly of, ‘what counts’, ‘how can I make this count’, and ‘how can I keep others from seeing what counts to this buyer’, both within and without their current buyer-seller relationships.

To summarize, we argue that in and through their interactions with clients and customers, sales personnel contribute to the ongoing nature of markets by contributing to the question of ‘what counts’ in these exchanges. By doing so, we are augmenting a sales person’s identity as being with their company and being vis-à-vis a customer with another identity formed primarily in relation to their market shaping activities. We represent the sales person not so much as boundary *spanner*, but rather as market *shaper*, where they participate in the redefining of often plastic and malleable boundaries and thus contribute to market dynamics and evolution.

In the remainder of the paper we will examine instances of market shaping, taking account of multiplicity and simultaneity, through the case study presented below. In particular, we will draw attention to how the materiality of market objects becomes visible and so allows others to join in with exchange practices at (often dynamic) boundaries, so adding yet further dimensions to that boundary.

3. Research Design

Our research design draws on the case study method (Yin, 1994). We adopted a single case design in order to provide ‘richness’ in empirical illustrations and findings, together with a sound understanding of the case’s business context (Weick, 2007; Narayandas & Rangan, 2004). Following Siggelkow (2007), conducting a single case study of a business setting is valuable in projects where researchers have objectives of motivating, inspiring, or illustrating theoretical development. Ours is an ‘inspirational’ use of the

single case, consistent with an aspiration of developing, inductively and abductively, an understanding of the activities of sales personnel as being market shaping rather than boundary spanning, and co-extensive with developing business relationships and markets (Eisenhardt, 1989; Eisenhardt & Graebner, 2007; Easton, 1995).

The case in our paper is of sales personnel employed by an industrial chemicals company, Subchem, which offers a range of products and services to oil companies concerned with ensuring the continuity of production in oil and gas fields. We were motivated by a theoretical interest in sales people's boundary activities and by informal conversations with members of this industry, which hinted at the multiplicity of market and relational forms in place often simultaneously in this industry. We developed our research design to assess the practices of work and interaction within Subchem's three departments (sales, operations and technical) and as embedded in markets and relationships with customers and competitors. Within Subchem, their activities of providing chemicals for their customers, and undertaking the related services in diagnosis, testing, field trials and monitoring, were organized primarily as projects and recorded on its internal database. Subchem's technical manager arranged for us to review the projects on its database, which we took to be a sampling frame.

Following the principles of theoretical sampling (Glaser & Strauss, 1967; Eisenhardt, 1989) we selected seven projects from the database, each of which had a distinctive feature that potentially could have an impact on sales people's practices, to include: different kinds of chemicals treatment, incremental and more radical innovation, involving different customers, featuring repeat business or gaining new business, a

project in which something ‘went wrong’ and one designed for a trade show demonstration rather than for a particular client (see Table 1 for an overview).

-----INSERT TABLE 1 ABOUT HERE-----

We traced each project’s documents that were posted on Subchem’s database, to include requests from sales personnel to their colleagues in the labs to commence projects, lab reports, field trial reports and customer feedback, and arranged interviews with those personnel that had key roles in each project.

As Table 2 shows, during 2006 and 2007 we undertook documentary reviews, 23 face-to-face interviews with senior managers, sales, technical and operations personnel, and non-participant observation where we attended account review meetings between Subchem and its two most significant customers. We followed up the account review meetings by interviewing the senior chemists and procurement managers of those two customer organizations.

-----INSERT TABLE 2 ABOUT HERE-----

Data were transcribed verbatim and analyzed using the qualitative software package QSR NVivo8 as a data management tool. Initially, the researchers analyzed their data separately, proposing categories through coding all of the data individually with an emerging coding scheme. We then reviewed these schemata collaboratively, resolved divergences in the individual coding schemata and developed common categorizations in an iterative process. The auto-coding or auto-analysis features of the QSR software were not used at any stage of this analysis process. Once the categorization schema became

stable, we discussed our findings with two key informants at Subchem, leading us to form a more nuanced understanding of their business routines and to a refinement of the categories. It should be noted that the data presented in this paper pertains to sales people's market and customer activities as opposed to internal relational practices, but it remains in the context of the overall data picture of three company departments and respective networks interacting in a diverse set of practices and reporting on these activities to the authors of this paper.

We claim internal validity in our case study as our research design's theoretical sampling of projects included cases within cases across Subchem's product areas and clients, as we gained four or five perspectives on each case, and as we gave an account of our interim findings to two key informants. Rather than presenting our findings on a case-by-case basis, the data analysis below captures the commonalities across the cases as they pertain to our research questions. Table 1 presents an overview of the individual cases, indicating how each case contributed to the development of our analytical categories. We claim external validity of our findings by proposing boundary and market shaping as a critical development of boundary spanning, to include an explanation of the activities of sales personnel and of the mutual development of an industrial market and of business relationships therein. Our discussion and conclusions will consider the extent to which findings from our specific setting may be applicable to other industrial settings or, indeed, to other boundary spanning activities such as managing projects or research and development.

4. Data Analysis

4.1 Case Background

Subchem is a group within a larger, trans-national chemicals company, which is active in different industrial sectors, with its oil field services groups also operating internationally. We focus specifically on its operations in the UK and Norwegian sectors of the oil industry. A significant trend in the oil industry in the UK and Norway is with oil companies coping with maturity, manifested for instance in extending the life of oil and gas fields and so protecting production and pipeline infrastructure from corrosion. Two further trends are important, of adapting products to stricter environmental legislation and of, in the Norwegian sector, coping with new oil fields coming on-stream in the more challenging physical settings on the fringes of the Arctic.

For the sales personnel the conditions of selling and of contributing to the existence and nature of markets in this area are shaped by the materiality of their customers' oil and gas fields. The chemical regimes of oil and gas fields change as production tends towards maturity. For example, the geological formations in which oil companies discover hydrocarbons also contain accumulations of water. As production continues from oil fields, their reservoirs become depleted of hydrocarbons and so the proportion of water being produced increases. The produced water forms alongside the hydrocarbons, trapped in a reservoir, and usually contains traces of chemicals such as barium, which can later form as barium sulphate in and around an oil company's production infrastructure. In short, for an oil or gas field, the reservoir together with its production infrastructure is a dynamic system, which production chemists monitor in order to adapt its treatments.

All of Subchem's sales personnel have a background in chemistry and most have worked in Subchem's labs or those of another production chemistry company. Partly because of the complexity and dynamics of the oil field systems, multiple layers of market relationships are often developed between buyers and sellers, indeed between a particular buyer and a particular seller, at the same time. As the following three sections will show, while sales people aim at an idealized situation where a customer relationship suppresses the market entirely, being 'inside' or 'outside' the market and/or the customer-firm dyad is never clear-cut in this industry. Indeed, the very boundaries between supplier and customer, competitor and market, are slippery in nature and open to renegotiation at all times and particularly where aspects of the objects being exchanged become visible.

4.2 Relationship Shaping Leads to Market Shaping

Referring to their customer facing activities, Subchem's sales personnel are primarily guided by the contractual regime by which Subchem develops its relationships with each oil company. Since the mid 1990s, the larger oil companies have operated a regime of Chemicals Management Services (CMS) contracts, which are typically of five years' duration and mark a transformation of loose and continuing commercial exchanges to an in-depth and richly interactive relationship between an oil producer and its chemical supplier. Through CMSs, oil companies typically retain a senior chemist to oversee and direct the activities of a production chemistry supplier, such as Subchem, subject to quarterly reviews. Senior sales personnel are involved in developing tendering documents when the CMSs come up for offer. Where Subchem holds a CMS, a number of its

personnel work closely with the customer, often being co-located at the customer's premises, such that the relationship becomes a key account for Subchem.

As will be explained in the following paragraphs, this shift in intensity in the relationship does not imply exclusivity of relationship, nor does it signal the beginning of one relationship and the end of other supplier relationships. Instead, from a boundary perspective, a CMS could be described as an insulating mechanism that offers the CMS holder some protection from other suppliers. This protection, and the boundary 'around' the relationship, are however porous in nature. CMSs are not straightforwardly exclusive contracts. The emphasis is on services management, which is exclusive and focuses on sourcing, delivering and monitoring the effectiveness of chemistry products. Upon the award of a CMS, Subchem will find itself having to continue supplying the products of its predecessor, or maybe its predecessor's predecessor. Once with a CMS, Subchem's personnel seek to substitute any competitors' products used by the customer with their own and are often encouraged to do so by the oil company, who can realize significant savings and ward off compatibility problems if the majority of the chemicals in use are supplied by the CMS holder. For Subchem, mark-ups on supplying competitor products typically lie in the range of three to five percent, representing a fee for sourcing and handling. If successfully changed out, Subchem can charge a margin of 30 to 40 percent on its products:

Account Manager: I mean that's...it's what my colleagues say "we're in business to sell chemicals and to replace our competitors' chemicals", so the way we think of it is, we take over an asset that's been looked after by a

competitor we straight away want to ... try to substitute it with all of our chemicals which would hopefully, well, should, improve performance of the production.

Changing out competitors' products with Subchem's is not always a straightforward substitution of products. Subchem will often have to develop a variant of a product to suit the novel circumstances of its customer's particular production facility, each of which will have a unique 'chemistry regime'. The key account manager's task is to persuade the chemical buyer and the oil field manager of the customer company to allow Subchem to test a product new to them, which is often a new product for Subchem in the form of an incremental innovation. Oil field managers in particular are often risk averse. They work within their company's system of monitoring and rewarding performance, do not usually have a background in chemistry and tend to see new products as sources of risk unless there are clear problems manifesting themselves, which often puts Subchem in the position of responding to urgent problems. Opportunities to pitch new products can emerge anyway, as production systems change over time as the level of depletion in the underlying hydrocarbons reservoir increases and as the infrastructure itself ages.

If a client authorizes a test of a new product, Subchem has to demonstrate that its product has a significant price or quality advantage over the incumbent product, given that it will provide the services in diagnostics, testing, logistics and monitoring use as established in the CMS. The typically five-year duration of the CMS contract gives the sales people a unique possibility to become intimately acquainted with a client's collection of oil production systems and to work with those systems to achieve the best possible oil-

chemical interaction. The co-location of sales personnel provides a significant advantage to the company holding the CMS as it can pitch new goods against the goods that are a legacy of past suppliers. This is an important feature of market shaping for production chemicals: Because field testing procedures for new products involve many people and various processes, they are visible to actors outside the CMS relationship. Thus, while aiming to intensify and insulate the customer relationship from the market, the production chemistry supplier presents new and future ‘opportunities to join in’ to other sellers.

At a first glance, then, a CMS contract transforms Subchem’s relationships with oil companies, suggesting that a sales person’s main task throughout the duration of the contract is to move from tendering to an exclusive relationship, where a customer’s connections with other chemicals companies and their goods are all but suppressed. A closer examination shows that being awarded a CMS as a result of a tendering process puts Subchem in a cooperative, as well as competitive, position to the other chemical suppliers, as this interview excerpt with a CMS customer demonstrates:

Buyer A: “And you touched on a little bit ... when you mentioned “why don’t you use six companies?”, in the good old days, if that’s the right word, if there was a chemical issue, yes...what we don’t have now because Subchem’s supplying chemicals right through, is they can’t say, “ah, it’s that chemical that’s interfering, it’s that one, it’s that company there”, [but we can] say “sorry Mr Subchem you’re supplying the whole range and you have to own this challenge”, yes? It’s not X’s [competitor company] got this demulsifier and Subchem’s got that de-oiler and Y got this scale inhibitor and which one’s the bad guy and

they're all going like that [gestures a shrug] and saying "no". So, now we have that lead chemical vendor they've got to say "hey it's our problem as well as obviously A's [customer] problem".

In this situation, Subchem's key account manager effectively becomes the relationship manager for all of its customer's continuing relationships with competing chemical companies. While continuing to be in a competitive position with chemicals companies X and Y, and with the ultimate aim of replacing their products when possible, Subchem is at the same time responsible for the successful deployment and interaction of these companies' products in the field. The 'within' and 'in between' of non-market and market 'fields' overlap in these instances in a number of ways. The CMS contract functions as a way of organizing and regulating a business relationship but simultaneously also provides scope and direction for dynamism in the market. The buyer-seller relationship becomes a market actor of itself, and sales people, rather than insulating the relationship from the market, represent their customer in its market activities *qua* the relationship. They also, at least temporarily, represent their competitors to their customer *qua* the relationship, thus shaping (more so than spanning) several thin boundaries at once. Finally, in their continuous development work in the relationship, they often shape the market by presenting and making visible new or previously unaccounted dimensions to material objects.

4.3 Market Shaping Interferes in Relationship Shaping

There are further instances in the data of the other market entities ‘creeping’ back into the buyer-seller relationship of a CMS contract and of boundaries becoming fluid as a result. For instance, the market is also called upon if and when a customer feels that other chemicals companies may have superior products for a particular problem:

So customer A selected Subchem ahead of all others including its other CMS suppliers. An interesting facet of this was that Brian (senior sales manager) very early on in the interview and with some emphasis spoke of customer A going to the market. But when I sought to pick up on this, he was a bit surprised, seeing this as a normal part of the business. Sure, most large oil companies have CMS arrangements, and also reserve the right to over-ride this for particular chemicals. (Field notes)

Such situations often arise due to the dynamic nature of the oil wells. With new problems continually emerging, be they of technical or legislative nature, the sales person is challenged to improve upon the company’s own products to thwart the threat of the customer ‘going to market’ in guise of consulting other producers and surveying their goods. Sales people are encouraged to reflect or create clusters of market entities of their own making through self-cannibalization even in the seemingly most settled of relational interactions. If they are not seen to offer their customer the best solution to an emerging problem, the customer, despite the existence of the CMS contract, can call on other producers or accept a competing supplier’s offer of a ‘chemical challenge’.

A chemicals supplier has to become active across a wide number of market dimensions in order to retain some connection with those oil companies that it currently has no CMS

with. Outside CMSs, Subchem's sales personnel continually sought to persuade oil companies to install its products as a third party supplier, or to retain its products in the face of change-out activities by the competitor who had been awarded the CMS. In this case, the sales person's ambition is to re-introduce its goods into the CMS relationship between a competing seller and the buyer by marshalling other market entities. While insider knowledge is not necessarily available to Subchem in this situation, Subchem, along with its competitor companies, seek to retain relationships with the oil companies even outside of tendering times and CMS contracts, keeping them informed of new products and services and campaigning for openings for what the industry calls 'chemical challenges'. Note that the discussions between Subchem's sales personnel, in the role of business development, and oil companies' buyers, are about particular new products and services. 'Interfering' in CMS relationships happens therefore for the most part through shaping the market 'outside' that relationship and presenting these market changes to the buyer *qua* the exchange object that presents some new 'dimension that counts' to the buyer. Chemical challenges can focus on price, availability, greener products or other commercial drivers.

Because of the potential advantages of invoking the market in the CMS relationship, oil companies seem willing to accept chemical challenges within the limits of their risk tolerance. These perceptions of risk can be militated against by Subchem's sales personnel engaging in 'network spanning' activities such as interacting informally with the oil company's senior production chemists at scientific conferences or industry conventions organized by the regulator. Professional and disciplinary bonds regarding the basic science in chemistry can overlay the strong commercial imperatives, and also be

assisted through a strong track record during previous chemical challenges. Further, chemical challenges are usually refereed by one or two widely-regarded independent chemistry labs, which provide independent adjudications as to each product's characteristics and therefore act as important market mediators.

As a consequence, sales people within a CMS have to make sure the change-out processes discussed above happen quickly and smoothly, lest competitors perceive a chance of challenging the process with their own chemicals. For CMS outsiders, a chemical challenge is a way of showing a minor difference in chemistry and show-casing the company's capabilities in logistics, adaptability, testing and adaptation, which may in future lead to increased business with that oil company:

Sales manager: This particular company who won the downhole contract, their lab work did stand scrutiny but actually in terms of performance in the field it basically did not come up to scratch, to the Subchem product that was in there previously to that. So over a period of time, on a well-by-well basis, customer A actually reinstated the Subchem products one-by-one, and as they reinstated and showed superior performance, it gave them more confidence to implement them almost across the field. So I think from initially having none of the business, and then 50 percent, I think it is now something in the region of 75 percent, possibly.

In this case, 'performance' rather than 'lab work' was the dimension that counted to the buyer and that allowed market actors interfere with the buyer's relationship with their competitor. 'The market' takes on an important function as a social

organization in connection with those relationships that are organized by CMS contracts. It is a threat that the oil customer can hang over the CMS holder to encourage them to improve performance or lower prices and it is a social organization with conventions or, in Orlikowski's (2002) argument, recurrent actions that the members of this community recognize and observe (such as the procedure of the 'chemical challenge' that non-CMS holders can call upon). The main task of sales managers outside the CMS contract is to remind CMS participants of the existence of 'the market' and to continually de-stabilize the boundaries formally set by the CMS contract.

4.4 Market Making through Boundary Shaping

A third way in which sales personnel in Subchem actively shape markets is mainly due to the dynamic regimes in which oil production typically takes place. While most of the product development happens as part of a change in the oil production conditions and is thus reactive, sales personnel can also be proactive and engage in innovative or incrementally innovative activities. One instance of such innovativeness has been witnessed in the case of Subchem, where the company has invested substantial resources to create a new means of administering chemicals in sub-sea settings. Another area of innovation has been fuelled by environmental legislation, under the European Union's REACH (Registration, Evaluation, Authorisation and Restriction of Chemical substances) initiative and the overlapping OSPAR (Convention for the Protection of the Marine Environment of the North-East Atlantic) initiative. These directives require many

established oil production chemicals to be substituted with chemicals with superior environmental credentials. In these instances, sales people often undertake important (internal) boundary work with Subchem's technical group as well as negotiating new boundaries with existing and potential clients, their own suppliers, industry and legislative bodies. As the following verbatim indicates, this is an area where markets are dynamically shaped by all participants involved:

The green corrosion inhibitor came out of a project to swap to environmentally friendly chemical solutions for customer B two years ago. It was the focal project driving a general concept of green corrosion inhibiting chemicals. The project has developed with customer B through Jeff [senior chemist] at B. Subchem people and Jeff at B meet frequently, say every three months, sharing data on testing and development, he comments and the project keeps moving. B will trial the product. Subchem has ten green products that have gone to customers although B is still evaluating. Others are though buying. This focal project has had spillovers into every other green project/products, some of which have already been sold to other customers.

(Field notes)

Close cooperation with one customer, in this instance, has led to substantial market opportunities with other customers, and indeed to market creation, through the introduction of a range of new products that are sufficiently different from what had constituted the market up to that point to be considered a new market. Interestingly, the customer at the source of this particular development has not formally entered this new

market of ‘green corrosion inhibitors’ as a buyer yet but has acted as an important market catalyst. Environmental regulation has introduced and made highly visible new dimensions for chemistry products, which have been absorbed into the particular relationships between oil companies and production chemistry companies, and have become ‘markers’ for competition in the industrial market. In this case, both the regulator and the buyer-seller relationship acted as market actors and catalysts for market making; the boundaries have shifted from company/company to relationship/market and from company/regulator to relationship/regulator, but again with various spill-overs and discontinuities involved, for instance into other markets and buyer relationships.

5. Discussion

5.1 Analytical Summary

Our analysis in the previous section indicates that sales personnel, buyers and users of combinations of services and products of production chemistry develop their relationships, or in other words engage in boundary spanning activities, and by doing so make and shape markets. Our cross-case analysis above identified three variations of overlaps of ‘within’ and ‘across’ boundaries: relationship shaping leading to market shaping, markets interfering with relationships, and market making where relationships act as market catalysts. These variations all feature continuing relationships across many companies and thus manifold boundary spanning work, but also – and importantly – numerous instabilities often associated with material effects, with a cast of sales

personnel who were all trying to join into the exchanges either opportunistically or under more stable rules of the game.

The common feature across our cases is that boundaries become fluid and/or contested especially where objects become visible beyond the immediately relating parties. In a CMS contract, Subchem has little option but to become familiar with another's chemistry, just as other companies are supplying Subchem's solutions in other CMS contracts at other production sites. The CMS encourages an incoming contract holder to instigate incremental innovation, which is part of the market practices in this industry. Changing out attracts visibility. Reasons are proposed and given and explanations are sought by all parties during an attempted change-out.

A chemistry challenge also provides an instance of a particular market practice that makes visible a product's performance across a limited number of dimensions. Chemicals challenges are audited by an independent lab, making the different chemistry solutions, along with the rules of the competition, visible. Chemistry challenges attract additional visibility as the reputations of sales personnel and of their company are at stake. Production chemists research their challenges thoroughly and devote lab time to these ventures as calculated prospects and as defenses against others' challenges.

We describe as 'market making' production chemistry companies' activities in relation to changing environmental legislation. One dimension of production chemistry companies' solutions becoming products is in being certified as complying with environmental legislation. Environmental regulation also makes chemistry solutions visible. Oil companies highlight existing substitution orders when offering CMSs, and production

chemistry companies need to keep a watching brief on substitution orders as part of their CMSs.

In the above, we show many boundaries, all of which have the effect of making some dimension of the chemicals solution more visible to a number of actors, including actual and potential customers as well as other production chemistry companies, regulators and independent labs. By emphasizing the material dimensions of exchanges, we recognize that sales and purchasing personnel relate to one another across their seemingly mutual boundaries in part through a sales or market object and across multiple boundaries. Our argument is that boundary spanning provides too narrow a template from which to understand the actions of sales personnel because it implies that the sales/purchasing boundary intermediates directly between buying and selling organization and emphasizes the relational dimension of sales ahead of the material.

As a consequence, we suggest that ‘boundary spanning’ is an unhelpful simplification of the roles and settings of sales personnel, which perpetuates an understanding that sales personnel can suppress markets by forming relationships with buyers. Our case examples have demonstrated that sales people’s activities are more fruitfully described as market shaping, where market and relational exchanges are mutually constitutive across often fluid boundaries. Boundaries are fluid because qualities of the material and relational dimensions of an exchange change. Material dimensions in particular can ‘stick out’: Production chemists set new standards in changing out products, in responding to the changing needs of oil companies as their production infrastructure ages and in addressing changing environmental regulation.

5.2 Theoretical Contributions

As mentioned in the introduction, this paper aims to show that: 1. in their client-facing activities, industrial sales people shape the markets in which their relationships are embedded; 2. markets in turn influence and interfere with the buyer-seller relationships; and 3. the nature of the boundaries being ‘spanned’ is more complex and dynamic than had been assumed in the boundary spanning literature to date. The three constitutive elements of these aims are relationships, markets and boundaries. Starting from a review of existing boundary spanning literature and specifically from a critique of Levina and Vaast’s dichotomy of ‘market-like-’ versus ‘community-like’ boundary spanning activities, we presented evidence that demonstrates how, in our specific setting of production chemistry, both types of activities and fields overlap in many ways. While our case may be seen as an extreme case where the overlaps may be more apparent than in other settings, implications can be drawn for other boundary spanning settings and other types of boundary spanners.

First, our research has shown that ‘market versus relationship’ dichotomies cannot be upheld in markets where relationships are ongoing but may fluctuate in their level of intensity (Borghini, Golfetto & Rinallo, 2006) and where the relationships themselves can become market actors (Holmen, Pedersen & Torvatn, 2005). In these settings, ‘within’ and ‘across’ and their respective boundaries are too interdependent to be meaningfully distinguished analytically. Conventional readings of supplier-customer relationships such as Porter’s Five Forces Model suggest that alternative suppliers exert

competitive pressures on the focal relationship. Sales people ‘within’ that relationship endeavor to insulate the boundaries, whereas sales people ‘without’ try to penetrate the boundary. In contrast, our accounts have shown that both types of sales people (and indeed the buyer) act ‘within’ and ‘without’ at once, and that the relationship itself actively shapes markets ‘without’ and thus becomes an actor in its own right. Our accounts also differ from network descriptions of markets. We show the numerous ruptures that the boundary work of sales people implies, and emphasize the visibility and materiality of the exchange objects.

Second, while our explanation focuses on sales people as boundary shapers particularly in their client-facing tasks, the multiplicity of their boundary work resonates with literature on other boundary shapers such as for instance project managers. Sapsed and Salter’s (2004) account of the failure of formal boundary objects to successfully ‘span’ boundaries in global project work may indicate that these objects fail precisely because they reify the boundaries they are supposed to span and thus add to rather than alleviate the ‘balkanization’ of departments that was the reason for their use.

This last point leads to the core of our findings; the very inability reliably to trace the ‘boundaries’ that are supposedly spanned by our market actors. Indeed, in business settings such as ours where objectified and ‘communal’ exchanges coincide, ‘boundary spanning’ may be meaningless analytically. A performative account such as ours can trace what actors do in those network spaces ‘in between’, which have often been neglected in previous literature, without having to refer precisely to ‘in between’ what this space lies, and where exactly the boundaries are situated.

5.3 Implications for Practice

Management and sales personnel alike need to be cognizant of the proliferation and changing dimensions of boundaries in industrial settings such as the one presented in this paper. We mentioned at the outset that the relationship selling paradigm has propagated a belief that with the right training and tools, sales people could make the buyer-seller boundary dissolve. But this belief could generate a false sense of security and stability in what essentially remains a dynamic market setting. Boundary shaping work at the buyer-seller interface is continuous, even in the context of longer-term contracts, and has clear and tangible advantages. It gives a seller an important advantage in promoting inquiry and learning about the dimensions ‘that count’ for buyers, helping them to influence these dimensions. For buyers, relationships provide an order in which sellers can join in with their activities, in the senses of who gets to go first, and under which conditions others can join in. Both buyers and sellers need to realize, however, that that their mutual activities make visible certain dimensions of a boundary at any moment while obscuring others. Thus, managers should emphasize that boundaries proliferate during exchanges and that rather than purely customer-facing, they should encourage sales people to be actively network-facing, shaping those boundaries proactively rather than encountering them passively.

Buyers and sellers should also realize that above all, their identities are established in markets. As Orlikowski (2002, p. 270) points out, “to the extent that knowing ‘what the organization is’ is enacted in practice, we might usefully begin to think about identity as

an ongoing accomplishment, enacted and reinforced through situated practices.” Rephrasing this statement in relation to knowing ‘what markets are’ as enacted in practices, management should aid sales people in coming to understand their ‘market identity’ and cope with the many discontinuities contained in this identity. Instead of adding to buyers’ and sellers’ ‘role ambiguity’, managers can help in defining a more integral sense of sales people’s roles as being situated market actors. Markets become places where the hitherto separate roles of exchanging and relating are unified. This understanding can help buyers and sellers alike cope with their identities of ‘within’ and ‘without’ the organization better than may be the case at present.

6. Conclusions

Our case – as with all case studies – is an unusual setting within which to study the activities of sales personnel. It brings together materiality of production chemistry as well as market and relational practices that have emerged among production chemistry companies and oil companies. Our analysis shows that multiple market practices and boundaries are maintained simultaneously between buyers, sellers, service companies and competitors. Sales personnel develop and act on and within a complex pattern of relationships with other companies as well as with their colleagues in their own organization, making exchanges and forming identities within and across these companies as well as within and across markets. Through their interactions, sales people contribute to shaping markets dynamically. In this paper, we aimed to highlight the proliferation of sales people’s boundary practices in their client facing and market

shaping activities. Future research will also need to take into account sales people's other 'network' facing boundary work to provide a complete picture of their boundary shaping practices, for instance with regard to their interactions with other work groups in their own company or with regulators. Future research may also endeavor to extend our findings to a broader set of contexts where boundaries may not be as fluid and/or as multiple as in our case. Finally, and fundamentally, researchers need to revisit the term 'boundary spanner' in the light of the potentially pervasive fluidity of boundaries that sales people encounter.

Acknowledgements

The authors would like to thank the Special Issue editors and particularly Prof. Enrico Baraldi as well as the two anonymous reviewers for their encouragement and constructive comments on this paper. These comments have improved this article immensely. We would further like to thank the attendants of the Market Studies track at IMP 2008 for their comments and suggestions.

References

- Ahearne, M., Bhattacharya, C. B. & Gruen, T. (2005). Antecedents and Consequences of Customer-Company Identification: Expanding the Role of Relationship Marketing. *Journal of Applied Psychology*, 90(3), 574-585.
- Aldrich, H. & Herker, D. (1977). Boundary Spanning Roles and Organization Structure. *Academy of Management Review*, 2(2), 217-230.
- Araujo, L. (2007). Markets, Market-making and Marketing. *Marketing Theory*, 7, 211-226.
- Araujo, L. & Spring, M. (2006). Services, Products, and the institutional structure of production. *Industrial Marketing Management*, 35(7), 797-805.
- Araujo, L., Kjellberg, H. & Spencer, R. (2008). Market practices and forms: introduction to the special issue. *Marketing Theory*, 8(1), 5-14.
- Azimont, F. & Araujo, L. (2007). Category reviews as market shaping events. *Industrial Marketing Management*, 36(7), 849-860.
- Baraldi, S. & Waluszewski, A. (2005). Information Technology at IKEA: An “Open Sesame” Solution or Just Another Type of Facility? *Journal of Business Research*, 58, 1251-1260.
- Bechky, B. (2003). Object Lessons: Workplace Artifacts as Representations of Occupational Jurisdiction. *American Journal of Sociology*, 109(3), 720-752.

- Bettencourt, L. A. & Brown, S. W. (2003). Role Stressors and Customer-Oriented Boundary-Spanning Behaviors in Service Organizations. *Journal of the Academy of Marketing Science*, 31(4), 394-408.
- Beunza, D. & Stark, D. (2004). Tools of the Trade: The Socio-technology of Arbitrage in a Wall Street Trading Room. *Industrial and Corporate Change*, 13(2), 369-400.
- Borghini, S., Golfetto, F. & Rinallo, D. (2006). Ongoing Search Among Industrial Buyers. *Journal of Business Research*, 59, 1151-1159.
- Brown, S. P. & Peterson, R. A. (1993). Antecedents and Consequences of Salesperson Job Satisfaction: Meta-Analysis and Assessment of Causal Effects. *Journal of Marketing Research*, 30(1), 63-77.
- Callon, M. (1998a). Introduction: The Embeddedness of Economic Markets in Economics. In M. Callon (ed.). *The Laws of the Markets*. Oxford: Sociological Review and Blackwell Publishers, 1-57.
- Callon, M. (1998b). An Essay on Framing and Overflowing: Economic Externalities Revisited by Sociology In M. Callon (ed.). *The Laws of the Markets*. Oxford: Sociological Review and Blackwell Publishers, 244-269.
- Callon, M. Méadel, C. & Rabeharisoa, V. (2002). The Economy of Qualities. *Economy and Society*, 31(2), 194-217.
- Callon, M. & Muniesa, F. (2005). Economic Markets as Calculative Collective Devices. *Organization Studies*, 26(8), 1229-1250.

Cochoy, F. (2008). Calculation, Qualculation, Calqulation: Shopping Cart Arithmetic, Equipped Cognition and the Clustered Consumer. *Marketing Theory*, 8(1), 15-44.

Cochoy, F. (2009). Driving a Shopping Cart from STS to Business, and the Other Way Round: On the Introduction of Shopping Carts in American Grocery Stores (1936-1959). *Organization*, 16(1), 31-55.

Easton, G. (1995). Methodology in Industrial Networks. In K. Möller & D. Wilson (eds), *Business Marketing: An Interaction and Network Perspective*, 411-492.

Eisenhardt, K. M. (1989). Building Theories from Case Study Research. *Academy of Management Review*, 16, 620-627.

Eisenhardt, K. M. & Graebner, M.E. (2007). Theory Building from Cases: Opportunities and Challenges. *Academy of Management Journal*, 50(1), 25-32.

Finch, J. F. & Acha, V. L. (2008). Making and Exchanging a Second-hand Oil Field, Considered in an Industrial Marketing Setting. *Marketing Theory*, 8(1), 45-66.

Gadde, L-E., Huemer, L. & Håkansson, H. (2003), Strategizing in Industrial Markets, *Industrial Marketing Management*, 32, 357-364.

Glaser, B. G. & Strauss, A. L. (1967). *The Discovery of Grounded Theory: Strategies for Qualitative Research*, De Gruyter, New York.

Goolsby, J. R. (1992). A Theory of Role Stress in Boundary Spanning Positions of Marketing Organizations. *Journal of the Academy of Marketing Science*, 20(2), 155-164.

Guenzi, P., Pardo, C. & Georges, L. (2007). Relational Selling Strategy and Key Account Managers' Relational Behaviours: An Exploratory Study. *Industrial Marketing Management*, 36, 121-133.

Håkansson, H. & Ford, D. (2002). How Should Companies Interact in Business networks? *Journal of Business Research*, 55, 133-139.

Håkansson, H. & Snehota, I. (1989). No Business is an Island. *Scandinavian Journal of Management*, 5, 187-200.

Håkansson, H. & Waluszewski, A. (2002). *Managing Technological Development. IKEA, the Environment and Technology*, London: Routledge.

Holmen, E, & Pedersen, A.-C. (2003). Strategizing through Analyzing and Influencing the Network Horizon. *Industrial Marketing Management*, 32, 409-418

Holmen, E, Pedersen, A.-C. & Torvatn, T. (2005). Building Relationships for Technological Innovation. *Journal of Business Research*, 58, 1240-1250.

Kjellberg, H. (2007). The Death of a Salesman? Reconfiguring Economic Exchange in Swedish Post-war Food Distribution. *Sociological Review*, 55(2), 65-91.

Kjellberg, H. & Helgesson, C-F. (2006). Multiple Versions of Markets: Multiplicity and Performativity in Market Practice. *Industrial Marketing Management*, 35(7), 839-855.

Kjellberg, H. & Helgesson, C-F. (2007). On the Nature of Markets and their Practices. *Marketing Theory*, 7, 137-162.

Lave, J. & Wenger, E. (1991). *Situated Learning: Legitimate Peripheral Participation*. Cambridge: Cambridge University Press.

Leifer, R. & Delbecq, A. (1978). Organizational/Environmental Interchange: A Model of Boundary Spanning Activity. *Academy of Management Review*, 3(1), 40-50.

Levina, N. & Vaast, E. (2005). The Emergence of Boundary Spanning Competence in Practice: Implications for Implementation and use of Information Systems. *MIS Quarterly*, 29(2), 335-363.

Levina, N. & Vaast, E. (2006). Turning a Community into a Market: A Practice Perspective on Information Technology Use in Boundary Spanning. *Journal of Management Information Systems*, 22(4), 13-37.

Lyonski, S. J. & Johnson, E. M. (1983). The Sales Manager as a Boundary Spanner: A Role Theory Analysis. *Journal of Personal Selling & Sales Management*, 3(2), 8-21.

MacKenzie, D. (2004). The Big, Bad Wolf and the Rational Market: Portfolio Insurance, the 1987 Crash, and the Performativity of Economics, *Economy and Society*, 33(3), 303–334.

MacKenzie, D. & Millo, Y. (2003). Constructing a Market, Performing a Theory: The Historical Sociology of a Financial Derivatives Exchange. *American Journal of Sociology*, 109(1), 107–45

Matsuo, M. (2006). Customer Orientation, Conflict, and Innovativeness in Japanese Sales Departments. *Journal of Business Research*, 59, 242-250.

Narayandas, D. & Rangan, V. K. (2004). Building and Sustaining Buyer-Seller Relationships in Mature Industrial Markets. *Journal of Marketing*, 68(2), 63-77.

Orlikowski, W. J. (2002). Knowing in Practice: Enacting a Collective Capability in Distributed Organizing. *Organization Science*, 13(3), 249-273.

Rinallo, D. & Golfetto, F. (2006). Representing Markets: The Shaping of Fashion Trends by French and Italian Fabric Companies. *Industrial Marketing Management*, 35(7), 856-869.

Sapsed, J. & Salter, A. (2004). Postcards from the Edge: Local Communities, Global Programs, and Boundary Objects. *Organization Studies*, 25(9), 1515-1534.

Siggelkow, N. (2007). Persuasion with Case Studies. *Academy of Management Journal*, 50(1), 20-24.

Singh, J. (1993). Boundary Role Ambiguity: Facets, Determinants, and Impacts. *Journal of Marketing*, 57(2), 11-31.

Singh, J., Verbeke, W. & Rhoads, G. K. (1996). Do Organizational Practices Matter in Role Stress Processes? A Study of Direct and Moderating Effects for Marketing-Oriented Boundary Spanners. *Journal of Marketing*, 60(3), 69-86.

Tushman, M. L. & Scanlan, T. J. (1981). Characteristics and External Orientations of Boundary Spanning Individuals. *Academy of Management Journal*, 24(1), 83-98.

Tzokas, N., Saren, M. & Kyziridis, P. (2001). Aligning Sales Management and Relationship Marketing in the Services Sector. *Service Industries Journal*, 21(1), 195-210.

Weick, K. E. (2007). The Generative Properties of Richness. *Academy of Management Journal*, 50(1), 14-19.

Yin, R. K. (1994). *Case Study Research: Design and Methods* (2nd Edition). Sage, Newbury Park.

Table 1: Seven Cases Within the Case

	<i>Chemistry Characteristics</i>	<i>Selling Characteristics</i>	<i>Case Characteristics</i>
Case 1	Simple diluting of scaling treatment on a new installation	Selling to non-CMS customer & 'I challenge your chemistry'	Market shaping and relationship interfering
Case 2	Bio-infection on an established installation	Getting customer to act, green chemistry	Market making
Case 3	Corrosion & oil carrying water within a pipeline	Technical collaboration with customer	Relationship shaping
Case 4	Un-programmed problem solving, demulsification at a mature oil field	Close network, selling to new entrant	Market shaping
Case 5	Testing & validating established products for new use	Technology personnel undertaking marketing at trade show	Market shaping
Case 6	Radical innovation in delivering and releasing chemicals	Field trials with a customer, selling through a third party	Market shaping
Case 7	Selling a non-product – one that turned out not to	Sales solved a customer's problem	Relationship-making

be a licensed for that jurisdiction	transactionally, referring to mis-specified database	
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Table 2: Subchem Fieldwork Log

Date of interview	Job Title of Informant	Location	Length	Researchers Present	Purpose
09/11/2005	Business Development	Cafe	45 minutes	SG & JF	Initial meeting
01/02/2006	UK Sales Manager	Subchem	45 minutes	JF	Scoping project
18/07/2006	UK sales Manager	Subchem	30 minutes	JF	Refining project
25/07/2006	UK sales Manager	Subchem	60 minutes	SG & JF	First interview
26/07/2006	UK Sales Manager	Subchem	60 minutes	SG & JF	Overview interview
26/07/2006	Technical Manager	Subchem	120 minutes	SG & JF	Overview interview
27/07/2006	Technical Manager	Subchem	90 minutes	SG & JF	Overview interview
04/08/2006	Sampling SAP system	Subchem	180 minutes	JF	Supervised work on database
04/08/2006	Technical Manager	Subchem	30 minutes	JF	Feedback on sampling
15/09/2006	Business Development	Subchem	60 minutes	JF	Discussing Project 1
20/09/2006	Senior Technical	Subchem	45 minutes	JF	Discussing Project 1
08/10/2006	Technical	Subchem	30 minutes	JF	Discussing Project 1
10/10/2006	Technical Group Leader	Subchem	60 minutes	JF	Discussing Project 2

& colleague					
15/10/2006	Operations Manager	Subchem	60 minutes	SG & JF	Discussing various projects
09/11/2006	Technician	Subchem	60 minutes	JF	Discussing Project 3
20/11/2006	Account Manager	Customer premises	45 minutes	JF	Discussing Project 3
29/11/2006	Senior Technical	Subchem	60 minutes	JF	Discussing Project 4
01/12/2006	Quarterly review meeting customer 1	Subchem & customer premises	day	SG	Sat in on meeting
20/12/2006	Technical Group Leader	Subchem	120 minutes	JF	Discussing Project 5
10/01/2007	Account Manager	Subchem	50 minutes	JF	Discussing Project 6
13/02/2007	UK Sales Manager, technical and commercial managers from customer 1	Customer premises	70 minutes	JF	Reviewing business relationship
14/02/2007	Quarterly review meeting with customer 2	Customer premises	120 minutes	JF	Sat in on meeting
22/02/2007	UK Sales Manager, technical and commercial	Customer premises	60 minutes	JF	Reviewing business relationship

	managers from customer 2				
23/03/2007	UK Sales Manager	Subchem	45 minutes	SG & JF	Discussing findings to date
10/05/2007	Business Development	Subchem	80 minutes	JF	Discussing project 7
23/05/2007	Operations Manager	Subchem	30 minutes	JF	Discussing project 7