Implementing Organisational Innovations in Manufacturer-Retailer Networks

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Abstract
This paper discusses the diffusion and adoption of organisational innovations in interorganisational networks. We focus on one organisational innovation "Efficient Consumer Response" (ECR) conceived as a radical programme of change focused on achieving cost savings and speed up processes throughout whole supply chains, involving manufacturers, channel intermediaries such as wholesalers and retailers. The paper presents a longitudinal case study of ECR initiatives in a manufacturer and retailer network in Germany and focuses on the mechanisms, contexts and outcomes of the implementation of ECR.

Introduction
The objective of this paper is to examine the notion of the diffusion of organisational innovations. We define organisational innovations broadly as covering a wide spectrum of innovations ranging from the creation of new managerial functions (e.g. key account management) to complex programmes of change involving both the introduction of new technologies (e.g. electronic data interchanges systems) and the associated changes in working practices (e.g. activity costing systems).

The particular class of organisational innovation we are interested is what we have labelled 'programmatic initiative'. We conceive 'programmatic initiatives' as formalised programmes of action instituted to transform a range of practices with sweeping implications at all levels of an organisation. Programmatic initiatives usually take the form of a project-type activity in that they comprise a series of activities, their introduction is staged and they often have clear performance targets (e.g. achieve a target figure for cost savings). They also vary in the way they explicitly address capital investment decisions (e.g. electronic data interchange systems, EDI) and changes in the mix of physical and human resources of a firm (e.g. reskilling of middle managers).

In this paper, we want to focus on the diffusion and adoption of one programmatic initiative that is currently sweeping many manufacturer-retailer networks in Europe and

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in McLoughlin, Damien. and C. Horan (eds.), Proceedings of The 15th Annual IMP Conference, University College, Dublin 1999
North America and goes under the labels "Efficient Consumer Response" (ECR). The logic of ECR means a radical redesign of the business process from manufacturers' production lines to retailers' shelves and has important consequences at the level of electronic data interchange, creation of transparent and activity-based cost accounting and performance measurement systems, logistics and stock replenishment, new product development and introductions, promotions and organisational forms (e.g. shift from brand to category management systems).

The paper is structured as follows: in the first part we examine the nature of organisational innovations with particular emphasis on programmatic initiatives, and the factors that foster or hinder their diffusion and adoption. Our theoretical focus is on the organisational and managerial practices that underpin the adoption of the initiative and the resistances and accommodations that accompany the adoption process. In the second part of the paper we focus on the diffusion and adoption of ECR in one manufacturer-retailer network in Germany and present the conclusions of a longitudinal study here. Finally, we conclude with some brief observations on the practices that underlie the adoption and diffusion of organisational innovation.

**The adoption and diffusion of organisational innovations**

In a recent comparative review of frameworks for the study of the diffusion of technological and organisational innovations, Alänge et al (1998) make a number of key distinctions between these two types of innovations. Organisational innovations are said to represent investments in knowledge, procedures, behaviour and relations rather than technical artefacts. They are characterised by containing more tacit, person-embodied knowledge than technological innovations. They are also more difficult to identify, observe and draw boundaries around for they reside in intangible practices than tangible artefacts. In any case, in both technological and organisational innovations, there is no clear-cut boundary between diffusion and adoption – hence our preference to use the term 'implementation' to cover both diffusion and adoption.

The concept of supplier industry in organisational innovation has to be amended here for it has only meaning when we regard consultancy firms as providers of standardised concepts and procedures. Organisational innovations are difficult to price since they constitute transfers of knowledge and the marginal cost of these transfers is expected to be substantially lower than the fixed cost of creating that knowledge. Furthermore, Alänge et al (1998) contend that it is difficult to determine ex ante criteria for assessing the impact of organisational innovations since the ability to evaluate knowledge embedded in intangible practices is likely to be lower than knowledge embedded in material artefacts.

These characteristics of organisational innovations have a number of implications for the process of diffusion (Alänge et al. 1998). Internal factors, namely the ability to break away from old routines, may lead to important resistances that are likely to be higher the further the new ways depart from old ways. In order to successfully transfer an organisational innovation it may be important to standardise the contents and implementation procedures as far as possible. And since the market for organisational innovations is likely to be poorly developed for the reasons adduced earlier, Alänge et al (1998) speculate that networks and institutions may play a central function in the diffusion of organisational innovations.
In our view the notion of programmatic initiatives as defined above, represents an interesting case that both supports and refutes some of the propositions advanced by Alänge et al (1998). Programmatic initiatives are to a large extent standardised organisational innovations and are packaged and sold as such by those purporting to be experts, namely consultancy firms. But to a large extent, standardisation dissolves the neat boundaries between technological and organisational innovations that Alänge et al (1998) wish to sustain. Standardisation of organisational innovations allows for their embodiment in technological artefacts and the presence or absence of technological assets (e.g. scanner terminals) may enable or constrain their implementation.

Secondly, standardisation creates an interesting opportunity for the suppliers of organisational innovations, namely consultancy firms. Standardisation requires the creation of an abstract body of knowledge that purportedly transcends the specificities of local practices. But the implementation of standardised organisational innovations requires their re-embedding into the situated practices of each adopter. And this translation of abstract principles into concrete initiatives at the organisational level provides an opportunity for a host of intermediaries to contribute to their implementation. As Alänge et al (1998) suggest, networks of firms, institutions such as trade associations and consultants can all play the role of experts and purveyors of 'best practice' in the implementation of organisational innovations.

Finally, the embodiment of organisational innovations in intangible procedures and practices as well as 'hard technologies' enables their unbundling and reassembly to take into account the specific pattern of resistance and accommodations they may find in specific organisational settings. Thus programmatic initiatives, although sold as a standardised and integrated initiative, may not have to be adopted as a whole. Adoption can take place in stages and follow the line of 'least resistance' in a particular organisational setting. In short, existing structures of coordination of activities and mobilisation resources constitute the conduit for changes as well paths of resistance to that change (Lundgren, 1992; Elg and Johanson, 1997).

In the next section we will introduce the manufacturer-retailer network where we conducted our fieldwork and highlight the principles that underpinned the introduction of ECR in this network.

**The Context of Manufacturer-Retailer Networks**

The business network we studied is an integral part of German social, economic and cultural life. Population trends, income, legislation, technological changes and consumers’ buying behaviour define the externalities that affect organisational structures and interorganisational relationships. A number of developments at manufacturer-retailer network level are creating a new competitive framework in this network. Retailers and manufacturers are experiencing stagnation or decline of their sales turnover after several decades of continuous growth. Aggressive discount stores and hypermarkets are gaining market shares at the expense of smaller supermarkets. Mergers and acquisitions are consolidating the retail business while strong, global manufacturer and retailer brands are competing for shelf space.

The above trends should also not be seen in isolation. Socio-economic developments speed up or delimit network developments and vice versa. Consumers’ increasing leisure time and spending combined with shorter household and time budgets at a
macro, socio-economic level speed up the trend towards discount stores, hypermarkets and retailer brands at a network level. Consumers have to generate time and budget savings especially in the product categories of household, laundry and cleaning, and food and drinks to finance their travel and leisure spending. At the same time the same socio-economic phenomena speed up developments outside the manufacturer-retailer network that in turn affect our defined network. For example, increasing leisure spending and shorter time budgets set new demands for convenience products and services in convenience stores, home-services, petrol stations and other new channels that compete with the defined manufacturer-retailer networks.

As a result of these discontinuities in consumer demand, manufacturers and retailers have experienced a stagnation and decline of their turnover after several decades of continuous growth. Growth limitations revealed intrinsic and chronic weaknesses. During the years of continuous volume growth, the introduction of organisational innovations was not an issue. Manufacturers and retailers were busy in their own sphere. Manufacturers were preoccupied with the development and marketing of new products, internationalisation and penetration of emerging markets and finally, quarterly results to satisfy shareholder expectations. Retailers were equally busy with mergers and acquisitions as well as expansion into other European countries.

It was the sustained stagnation of consumer demand that triggered the search for ways to eliminate inefficiencies in the manufacturer-retailer network. The new competitive framework, combined with the growth limitation of the manufacturer-retailer network as a whole, required manufacturers and retailers to implement organisational innovations to increase efficiency in the whole chain of activities and take advantage of new opportunities.

Prompted by similar concerns, the grocery sector in the US embarked upon the concept of ECR initiatives as a means of increasing the efficiency of supply chains, eliminating waste and improving informational, monetary and physical flows from the production line of manufacturers to the shelves of retailers. In the words of Buzzell and Ortmeyer (1995, p. 86) these arrangements "...seek to achieve some of the efficiencies of vertically integrated systems without common ownership".

The start of the ECR movement in the US is usually associated with the Food Marketing Institute’s Midwinter Conference in January 1993 (Tosh, 1998) and its export into Europe happened around 1994 (Lewis, 1998). Although a late starter, the European ECR movement is now credited with greater momentum than its American counterpart and the ECR Europe Conference in Hamburg in April 1998 attracted more 2,000 delegates representing more than 135 retailers and manufacturers from 34 countries (Lewis, 1998).

The basic notion underlying ECR is that the whole supply chain is opened up for scrutiny and each linkage is carefully examined with a special emphasis on delivery and stock replenishment, price management and promotions, trade conditions and allowances, as well as communication and information systems for order processing, billing, etc (see Keh and Park, 1997). The implementation of ECR rests thus upon a different conception of the business system and the role of each actor in the supply chain. ECR requires a mode of thinking geared to the analysis of activities with little respect for formal, legalistic boundaries of firms and seeks to transform and expand performance and accounting measures to the sphere of interorganisational relationships.

The focus of ECR is generally agreed to be in increasing the efficiency of promotions, new product introductions, store assortments and stock replenishment. From our perspective, ECR is thus both an organisational and a technological innovation, since it incorporates both ‘soft technologies’ (e.g. move to category management structures, activity-based costing) and ‘hard technologies’ (e.g. continuous replenishment programmes supported by an appropriate information technology infrastructure).

ECR is framed under the notion of making the whole manufacturer-retailer network accountable to the consumer. Indeed, the rhetoric of most consultancy and trade magazines propounding the virtues of ECR emphasises consumer sovereignty and convenience as the key drivers for change. Consultancy organisations such as Coopers & Lybrand, A. T. Kearney and Roland Berger provide a vital link to understand how ECR has been problematised and ready-made solutions, couched in the language of expertise and consumer sovereignty, made available. They have cooperated with both trade and manufacturers in the implementation of ECR solutions by selling their know-how, software products and training. They have also teamed up with industry and trade associations to diffuse "best practice", collaborated with trade publications to highlight problems and pinpoint solutions, and made numerous presentations both to individual companies and trade conferences.

In Germany the role of Roland Berger, the leading management consultancy firm, exemplifies this process. Roland Berger is actively involved in associations like ECR Europe - a Pan-European association of manufacturers and retailers set up to share ECR experiences and expertise - cooperates with trade magazines (such as Lebensmittelzeitung) and is an active participant in the relevant trade conferences. Other consultancy companies are also active in niche areas such as EDI systems or logistics providing valuable assistance to smaller companies.

**Methodology**

The objective of this paper is to explain the implementation of ECR in manufacturer-retailer networks, following a critical realist epistemology. Critical realism emphasises that reality is independent of the knower but is not given transparently to us – i.e. our knowledge of the world is fallible and theory laden (Sayer, 1992). Realists argue that "generality is ascribed to the operation of causal tendencies or powers. The latter act in their normal way even when expected regularities do not occur" (Tsoukas 1989, p 551).

Causal tendencies or powers differ from the deterministic or stochastic association of events. Rather, they are necessary mechanisms of acting in a set of circumstances. Here lies a crucially important characteristic of realist epistemology. Causal powers depend upon certain conditions in order to operate (Easton, 1998). This implies that the same causal mechanisms can produce quite different results and, alternatively, different causal mechanisms may produce the same results. In other words, events emerge from the interaction between causal mechanisms and necessary preconditions. In the absence of any one of the necessary preconditions or causal mechanisms, the particular event does not occur. As the relationship between causal mechanisms and their outcomes is not fixed but contingent, realist epistemology would suggest the investigation of the "contextual conditioning of causal mechanisms which turns or fails to turn causal potential into a causal outcome" (Pawson and Tilley 1997, p 69).

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2 For information on ECR Europe see [http://www.ecr-europe.com](http://www.ecr-europe.com)

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In the next section we will present a network of seven retailers, five major manufacturers, three companies specialising in logistics and information technology (IT) all active in the market of fast moving consumer goods (fmcg). Interviews were conducted with middle managers in functional areas such as logistics, data processing, purchasing, key account management and marketing, and covered a number of issues concerned with the implementation of ECR namely trade allowance systems, EDI systems, continuous replenishment programmes (CRP) and category management. In addition to collecting primary data, we also accessed archival records from two market research companies and the first author was also a participant observer in the yearly negotiations between the trade and fmcg manufacturers.

A mechanism acting in context triggers its outcome

**Figure 1 Mechanisms, Context, Outcome. Source: Adapted from Pawson and Tilley (1997)**

Because of space constraints, in this paper we will only report a summary of the results of the embedded case study. Manufacturers Alpha, Beta and Unis are multinational producers of a wide range of fmcgs and particularly strong in the area of cosmetics, laundry and cleaning products while manufacturers Morgan and UT are multinational tobacco companies. Retailers Engel, Medos, Vere and KGD are grocery retailers with a leading position in Europe. GH and Foodland are wholesalers of food products and particularly strong in the convenience channels e.g. petrol stations. These companies are direct rivals and compete for consumers and shelf space in retail outlets. Traditionally, they are highly aware of each others’ moves and countermoves and their rivalry is mediated by their attempts to enrol other network actors as allies in the pursuit of their competitive strategies (see Araujo and Mouzas, 1997).

**Empirical Findings**

The following empirical findings describe the attempts of major manufacturers and key retailers to implement ECR as a means to transform traditional business processes in the supply chain. Our objective here in this case is to explore the pattern of diffusion and adoption of ECR and to identify similarities and differences across the network. As the

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patterns of diffusion and adoption are embedded in a context of pre-existing dynamics, our particular interest is in comparing how the necessary mechanisms of acting interacted with a set of contingencies over a period of time. Therefore, we use the realist formula described in methodology section that "Outcome = Mechanisms + Context" and compare manufacturers' and retailers' actions from a chronological point of view. The companies included in the case form part of a larger network that is analysed in four different periods of time. The first period refers to the years before 1990, the second period runs from 1990 to 1992, the third from 1993 to 1995 and the last from 1996 to 1997.

We have described above how the stagnation and decline of retail sales turnover sent an alarm signal and sparked off the quest to eliminate inefficiencies and uncover unrealised potential in the manufacturer-retailer network. We will now describe how ECR was implemented by manufacturers and retailers in their supply chain. We provide empirical evidence that a number of contingencies such as the decline in consumer demand, the transfer of experience from other countries and the availability of appropriate IT infrastructures provided an impetus for the implementation of ECR to increase the overall efficiency in the business network. On the other hand, other contingencies such as the concern with other priorities, lack of enabling technological assets such as scanner terminals or inappropriate organisational structures, created resistances to the implementation of ECR.

Figure 2 Manufacturer-Retailer Network

The period of stable growth (prior to 1990)

The continuous growth in this period reached its zenith in 1990, the year of German reunification. The prevailing subject in the yearly negotiations between major manufacturers and key account retailers was how to share the incremental profits arising...
from the on-going volume growth. With their engagement in mergers and acquisitions, both retailers and manufacturers were continuously adding to their production capacities and shelf space.

**The period of inertia (1990-1992)**

The stagnation in consumer demand set limits to volume and profit growth. Despite these challenges, the period from 1990 to 1992 was characterised by inertia and consolidation of existing organisational processes. A number of manufacturers and retailers ran their businesses under the assumption that the recession would be ephemeral. For example, retailer Medos and manufacturer United Tobaccos, regarded the stagnation of their volume as a temporary phenomenon. The inertia can be attributed to the preoccupation of manufacturers and retailers with other issues.

Major manufacturers and key account retailers were busy with mergers and acquisitions. A number of companies such as manufacturer Alpha recognised the dangers of a prolonged stagnation in consumer demand. However, they responded with minor initiatives that did not address basic organisational processes - e.g. relaunches and new product introductions.

**The period of trials (1993-1995)**

As the sustained recession emphasised the need for efficiency improvements, a number of major manufacturers and key account retailers searched for efficiency gains at the interorganisational level, calling for radical organisational changes. It is in this period that we observe new initiatives coming on stream such as the set-up of EDI links and the first ECR trials.

<table>
<thead>
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1) The adoption of the standardised ECR formula started in a very tentative fashion. ECR was unbundled and then implemented in key account relationships using small-scale pilot projects.

2) The key suppliers of ECR principles and philosophy were major multinational fmcg manufacturers that relied on the transfer of "best practices" from their business in other countries, namely the US. These manufacturers also had access to key account retailers with hypermarkets and department stores equipped with an advanced IT infrastructure. The implementation of ECR relied heavily on the use of these technologies and the intra-company transfer of "best practices" Without IT standards for product identification at the point of sale and access to an assemblage of "best practices", the attempt to change traditional business processes would have proved unfeasible.

3) The first major step towards new innovative business processes in the manufacturer-retailer network was to build up Electronic Data Interchange (EDI) links in manufacturer-key account relationships. These initiatives were aimed at producing a paperless interface for product ordering and invoicing between major manufacturers and key account retailers.

4) After the implementation of a functional EDI interface, major manufacturers and key account retailers were able to move on to other components of ECR, such as CRP. The new business process supported by EDI and CRP relied on consumer off-takes and point of sale technology to pull volume through the supply chain.

5) As we indicated earlier, these changes were framed by a new rhetoric that underlined the notion of making the whole network accountable to the consumer. The new rhetoric also emphasised the analysis of activities with little respect for formal, legalistic boundaries of firms and sought to expand performance measures and accounting standards to the sphere of interorganisational relationships.

The period of trials was also characterised by differences and idiosyncratic situations. The idiosyncratic behaviour of manufacturers and retailers can be explained by examining contextual conditionings such as the existing trade allowances systems, network positions or technological infrastructures. It was evident that manufacturers and retailers had seen the partial and tentative adoption of the ECR initiative as a means of changing or preserving their network positions. For example, manufacturer Alpha had seen a chance in promoting ECR initiatives of putting a halt to increasingly expensive

Table 1: Implementing Organisational Innovations Outcomes in the Period of Trials

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and opaque trade allowance schemes. On the other hand, Beta’s foray into ECR can be seen as a direct response to the initiative undertaken by manufacturer Alpha, its main rival. Retailers Engel and Medos regarded ECR as a way to improve the profitability of their business by capitalising on their under-utilised IT infrastructure.

The behaviour of retailer Vere was also idiosyncratic in that it initially resisted ECR overtures, because it felt excluded from the pilot projects of major manufacturers. Other retailers such as Deka and Spa followed the example of Vere and resisted ECR initiatives because their outlets were independent, small and equipped with only a limited number of scanner terminals. Manufacturer United Tobaccos initially resisted ECR initiatives because of the incompatibility of ECR prescriptions with traditional practices and structures in sales and logistics. The overriding concern with quarterly sales objectives and the employment of a logistics force were the main inhibiting factors. Competitive imitation, which worked as a catalyst in the focal net of Alpha and Beta did not exist in the focal nets of United Tobaccos and Morgan.

The period of replication (1995-1997)

The replication period is characterised by the endeavours of manufacturers and retailers to roll out ECR-pilot projects in their respective networks. After a period of trials and experimentation, manufacturers and retailers attempted to capitalise on existing know-how and extend the ECR initiative to other customers and suppliers.

As we have seen, in the focal nets of both manufacturer Alpha and manufacturer Beta, the implementation of ECR initiatives was crucially dependent on their ability to get others, in this case key account retailers, to abide by the plans they had developed. For this reason major manufacturer and key account retailers used a number of instruments as a lever to mobilise other actors. Manufacturers Alpha and later Beta used the reforms of trade allowance to promote the ECR concept among other key account retailers. Manufacturer Beta’s "expertise" was packaged in a sales folder to invite other key account retailers to co-operate. Retailer Vere capitalised on the ECR experience with manufacturer Alpha and attempted to roll out the project to other manufacturers asking them to pay 1% of their turnover as a trade allowance. The use of such instruments to mobilise other actors had two objectives. First, it was to put pressure on other actors to speed up the adoption process and secondly, it was the amortisation of initial development costs. The initial investments in EDI and CRP were considered unacceptably high when applied only to small-scale pilot projects.

In the period of replication, the rhetoric behind the endeavours to roll out organisational innovations gained further momentum. The rhetoric emphasised the transformation of the whole manufacturer-retailer network into a transparent, objective and efficient system ultimately accountable to the consumer. While consumer sovereignty was an irrefutable reference to the highest authority in the network, the rhetoric also made explicit that these innovations would eliminate waste and generate enormous cost savings to be shared amongst network members. In period of sustained recession, this rhetoric contributed to an increased willingness by manufacturers and retailers to participate in ECR projects.

Besides the similarities highlighted above, there were also differences in the replication attempts among manufacturers and retailers. While retailers Vere and Medos and manufacturers Alpha and Beta moved on quickly to roll out the organisational
innovations by enlisting the support of their customers, other retailers and manufacturers such as United Tobaccos and Morgan lagged behind testing EDI systems. Beyond the different contexts, such as network positions and competition, that partly explain differences in the speed of implementation of ECR initiatives, a critical factor was the engagement and involvement of top management. In the cases where ECR was not promoted by top management, it was restricted to small-scale pilot projects.

The reason for this limitation is related to the holistic and radical nature of ECR. Wholesale implementation of the initiative would create conflicts with many existing practices of both retailers and manufacturers. In the period of trials, the companies that initiated small-scale pilot projects were encouraged by the first positive results. However, they were surprised later on in the replication period when they attempted to roll out full-blown initiatives. Suddenly, they discovered through the incremental and partial adoption of ECR practices, that these were incompatible with archetypal structures and traditional organisational processes. ECR questioned the role of the manufacturers’ sales and logistics departments. Both departments were geared to building up distribution and volume at the retail level. Manufacturers were confronted with consumer-driven pull-mechanisms like CRP that made achievement of quarterly sales objectives problematic, and retailers were confronted with a redefinition of the role of purchasing that traditionally used to maximise trade allowances through purchasing volume. Suddenly, the roll out of ECR meant the total re-engineering of the whole company.

More importantly, perhaps, the roll out of ECR-practices meant radical changes in the existing structural arrangements and role allocation in the manufacturer-retailer dyad. For example, CRP required an important role reversal in the manufacturer-retailer dyad.

Order placement (i.e. definition of order size and timing of delivery), a traditional function of retailers, was automated and responsibility for its operation passed on to the manufacturer. The new organisational innovations required the willingness of retailers to provide relevant stock and consumer off-take data to manufacturers. However, retailers refused to simply give up the right to control the flow of goods from manufacturers to their shelves and demanded the inclusion of an interim stage where they could confirm or refuse the automated orders.

Table 2 IMPLEMENTING OF ORGANISATIONAL INNOVATIONS CONTINGENCIES IN THE PERIOD OF TRIALS

<table>
<thead>
<tr>
<th>CONTINGENCIES/FOCAL NETS</th>
<th>IMPETUS</th>
<th>RESISTANCE</th>
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<tbody>
<tr>
<td>Existing stagnation/decline of consumer demand</td>
<td>Existing experience in other countries</td>
<td>Existing information technology</td>
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<tr>
<td>Alpha co-operates with Engel/ITS facilitates</td>
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<td>X</td>
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<td>Beta co-operates with KGD</td>
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<td>Vere co-operates with Alpha</td>
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<tr>
<td>Urns co-operates with Medos and Karstown/Lion facilitates</td>
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<td>IT co-operates with Vere and GH</td>
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<tr>
<td>Morgan co-operates with Foodland/KAN facilitates</td>
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X = Contingency is present/affects the development of business processes

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### Table 3 IMPLEMENTING ORGANISATIONAL INNOVATIONS OUTCOMES IN THE PERIOD OF REPLICATION

<table>
<thead>
<tr>
<th>OUTCOMES / CASES</th>
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<tr>
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<td>X</td>
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</tbody>
</table>

X = Outcome is present

As the incremental and partial adoption of radical ECR practices conflicted with many existing business processes and structural arrangements in manufacturer-retailer networks, it contributed inevitably to a watering down of its radical objectives and ambitious performance targets. According to our empirical findings, it appears that only when upper organisational echelons champion the initiative are its more radical implications pushed to their logical conclusion. Otherwise, political resistance and the pressure to keep sales or purchasing volumes up continued to sap middle managers’ energies and deflect their attentions elsewhere.

**Conclusions**

In most models of network evolution, innovations whether technological or organisational occur as a result of actors’ attempting to change their micro-positions or to persuade other actors to change their network theories (Johanson and Mattson, 1992; Lundgren, 1992). In our study, organisational innovations are outcomes that can also be effected when powerful actors attempt to reconfigure network processes, relationships and structures to promote their interests.
Programmatic initiatives such as ECR underline the fact that the study of interorganisational networks of organisations cannot not decoupled from their institutional contexts. Instead, interorganisational networks are a target for regulation and intervention for all those who seek to influence the government of economic life. As programmatic initiatives such as ECR do not recognise ownership boundaries between firms, their effect is not limited to transforming organisational practices but have repercussions on a whole network. It is this focus and range of impacts that makes the study of programmatic initiatives such as ECR interesting for network researchers.

Our research highlights the role of third parties, such as trade associations, specialised consultancy firms and trade conferences, as key actors in diffusing ECR. It also indicates a rather tentative and partial adoption of the initiative by most manufacturers and retailers in the network we studied. If this is largely attributed to the incompatibility of standardised business formulae with existing practices, then it is entirely plausible that actors would find it easier to adopt first the ‘harder elements’ of ECR (e.g. EDI systems) which provide durable platforms to implement changes and then the ‘softer elements’ (e.g. category management systems) which represent more radical departures from existing routines. These conclusions suggest that programmatic initiatives are not embraced as wholesale programmes of change but are disassembled into constituent part and implemented within the historically situated practice of each adopting company. And adoption appears to follow the line of ‘least resistance’ within the situated context of each adopter.

Our empirical findings also suggest that organisational innovations are adopted partially and through stages, carefully preserving the balance between change and stability In any case, the adoption process should not be treated as a teleological process following a predetermined path, or as representing the additive outcome of isolated events. The implementation of organisational innovations is contingent upon a dialectic of disorganisation and reorganisation, of change and stability, as has been underlined by past network researchers (Håkansson, 1992; Elg and Johanson, 1997). In our study, network actors had difficulties in implementing new practices and discarding old routines. They frequently experienced a stage of inertia in which they resisted changes, then moved on to a stage of trials in which they tested innovative ideas in existing relationships, and then rolled out their change initiatives by mobilising other network actors who diffused the organisational innovations in the network.

Network actors thus strive to balance the exploitation of new opportunities with the maintenance of existing exchange relationships. The exploitation of new opportunities was as far as possible, insulated and protected from existing routines so as both to make it easier to evaluate outcomes and to minimise disruption. In practice, some of the trials were more successful than others and actors often found creative ways of bypassing resistances and accommodating new practices within existing routines. In summary, the same mechanisms of change interacted with a variety of historically situated contexts to generate the rich range of outcomes we have described in this study.
Table 4 IMPLEMENTING ORGANISATIONAL INNOVATIONS CONTINGENCIES IN THE PERIOD OF REPLICATION

<table>
<thead>
<tr>
<th>CONTINGENCIES / FOCAL NETS</th>
<th>IMPETUS</th>
<th>RESISTANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Existing stagnation/decline of consumer demand</td>
<td>Existing experience in other countries</td>
</tr>
<tr>
<td>Alpha co-operates with Engel/ITS facilitates</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Beta co-operates with KGD</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Verc co-operates with Alpha</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Ultras co-operates with Medos and Karstown / Iton facilitates</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Ul co-operates with Verc and GH</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Morgan co-operates with Fossland / K&amp;N facilitates</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

X = Contingency is present/affects the development of business processes

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References


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