

Work-in-progress paper
for the 24th IMP Conference, 2008
Uppsala University, Sweden

Routines for coordinating inter-organisational incremental product development activities – a case study from the Danish food industry

Kristin B. Munksgaard
PhD-student
kbm@sam.sdu.dk
Department of Entrepreneurship and Relationship Management
University of Southern Denmark
Engstien 1, DK-6000 Kolding
Denmark

Abstract

An inherent part of collaborating with and involving customers in product development activities is to provide a basis for adapting and customise new product offerings. The notion of adaptation is therefore a vital part of understanding company interaction for product development as well as in business interaction in general. Due to the associated costs and resources as well as potential conflicting issues related to adaptation, companies may, however, have an incentive to limit the degree and scale of adaptations related to involving customers in product development activities. This paper presents a case where a company is making an effort for building and maintaining internal product development routines while collaborating with customers. Building on a set of internal routines, the company is offering value creating activities to customers intended to contribute to customers' product development activities. In other words, the company is trying to standardise activities in an effort to create routines for product development with the main issue of coordinating the product development effort with various involved customers and configuring the collaboration for product development. The case is framed by the special setting of the Danish food industry, where product development in most instances is characterised by rudimentary change of functional products in a low-technology situation.

Keywords: coordination, routines, product development activities, food industry

Introduction

The case reported in this paper concerns the routinisation of organising and coordinating product development activities when collaborating with industrial customers. The setting of the Danish food industry provides a special framing for investigating company effort and coordination of inter-organisational product development activities. This is due to an industry characterised by demands of fast time-to-market and continuous product renewal, although changes are mostly rudimentary. Moreover, the flow of new products to end-consumers is dominated by influential retailers, and where technologies utilised for product development in many instances are categorised as low-tech (Hansen, 2005, Trail and Grunert, 1997). To capitalise on product development, Danish food producing companies are challenged to make product development activities more efficient while at the same time customise their new product offerings. The special research interest of this paper is on how a company is striving to build routines for product development activities and at the same time coordinate and customise their product development effort to individual industrial customers.

The paper is organised as follows: The first section will shortly introduce the characteristics of product development in the Danish food industry to provide an initial understanding of the specific framing of coordinating inter-organisational product development activities treated in this paper. The second section will bring a theoretical discussion of routines and adaptation in coordinating product development activities with customers. Thirdly, methodological considerations will be presented. The next section will present the case of Spice Inc., a medium-sized supplier of ingredients and spice blends for meat products, who is making an effort for building product development routines and coordinate development activities with industrial customers. The paper finalise with a discussion emphasising how routinisation of organising and coordinating product development activities are balanced by offering selected customers additional adapted services.

Characteristics of product development in the Danish food industry

In the Danish food industry, product development is playing a vital role for food producing and processing companies and suppliers to maintain or develop their engagement in the industry (Harmsen, 1996, Ministry of Food, 2003, Søndergaard, 2003). Many actors in the industry thus initiate product development activities in more or less regular intervals. However, measured in traditional innovation terms of R&D spending and degree of newness, the innovative effort in the food industry is primarily related to functional products, where the basic elements are only rudimentarily changed. The Danish food industry (as well as in the food industry in wider Europe) has a lower R&D spending compared to other manufacturing industries (Trail and Grunert, 1997, Dansk Center for Forskningsanalyse, 2005) and may therefore - in a technological development perspective - be characterised as not particularly innovative. More elaborated measures of industry innovativeness (including measures on e.g. personnel involved in development, received public innovation funding, patents and trademarks, turnover from new products, etc.) also result in low rankings of the food and beverage industry (e.g. electrical, ICT, chemicals and manufacturing are in general scoring higher - TrendChart, 2005:23). Researchers discussing this argue that the low R&D spending in food must be understood in light of the product complexity which in most cases is rather low in food articles (van der Valk and Wynstra, 2005). Others argue that the food industry in general is a carrier of innovations from other industries, making use of e.g. developments in biotechnology, electronics, machinery, etc., thus reaping the advantages of others' developments (Trail and Grunert, 1997). The conclusion however remains the same; even though fundamental product or process innovations are rare, the food industry is characterised by a significant flow of incremental developments.

Most product introductions in the food industry are based on incremental variants of the company's existing products or copies of other actors' products (Harris, 2002). When product development in the industry on one hand is being challenged by changing consumer trends, and when product introductions on the other hand are continuous and incremental, it points in the direction of a routinised development behaviour among food companies focusing on composing their product line and varying their product portfolio. The routinised element in development behaviour is also ascertained in the relatively high amount of seasonal product introductions (Harris, 2002), where

former product variants form the basis for the development of new products for the coming seasons. Additionally, a study of product development projects in the Danish food industry concludes that companies regard the product development process as rather straight forward, and incremental projects are completed relatively fast (Harmsen, 1996:205). Harmsen further concludes that the main focus area of development is the actual product, making Danish food companies giving less prioritisation to e.g. process and market developments (this is also emphasised in a report from CUTA, 2005). Finally, it is in many instances rather inexpensive to develop prototypes of food products – especially incremental variants that do not demand the use of new/unknown technology or ingredients. This makes it possible for food companies to relatively fast and at a low cost to develop a wide range of prototypes, evaluate and decide which one to go for. This also underpins a routinised element in the incremental product development process.

Additionally, most newly developed food products are not sold directly to private end-consumers, product development activities accordingly have to be coordinated in relation to or in collaboration with other industrial actors and retailers in the food industry for new food products to actually reach consumers. Thus, the product development effort of food producing and processing companies in many instances has to accommodate with additional requirements raised by these actors.

Summing up, companies in the Danish food industry are facing the contemporary challenges of adapting their new product offerings to consumer demands and additional requirements from industrial customers and retailer as well as building routines for creating efficiency and economics of scope in the continuous and incremental product development effort.

Literature review

Routines in product development activities are here considered related to standardised activities in sequential order performed to deliver value to customers while building economics of scope (Mathews, 2001). Furthermore routines and standardised activities are regarded the opposite of adaptation. In other words, the creation and use of routines for organising product development activities in the Danish food industry may be an aim for confining the degree of adaptations – both in the single relationship and in relation to other activities in the network.

Adaptation in inter-organisational product development activities

Adaptation in relationships is to be distinguished from adaptation in a traditional marketing perspective, where actors adapt to changing external conditions (e.g. adapt offering to a group of customers). Already in the early studies of the industrial network approach (Hakansson, 1982) as well as in additional latter studies (e.g. Brennan and Turnbull, 1998, Hallén et al., 1991, Walter and Ritter, 2003), adaptation has been identified as a key aspect of business exchange in relationships. The concept of adaptation in business relationships relates to changes that one of the other parts may make in either the elements or the process of exchange related to technical, commercial, financial and/or social issues (Hakansson, 1982). Simply put, adaptation is about matching company offering (in a broad interpretation) to a certain counterpart. Such adaptation will be relationship-specific and considered a sunk-cost if terminated (Walter and Ritter, 2003). Making relationship-specific adaptations may also be seen as a way to show commitment and bind the actors closer together. Even though the focus on adaptation has been more pronounced in the industrial network approach than studies of routinisation (especially in the case of product development) – these concepts will for the present purpose be considered as two sides of the same coin.

The incitement of companies to seek limitations in the scale of adaptation is related to the potential downsides of making adaptations. What must be remembered is that partner involvement in product development activities and the following coordination of these activities are not costless. On the contrary. Collaboration is resource demanding, not only in terms of e.g. technological resources utilised and combined for developing the product, but also in relation to development and maintenance of a close relationship which can be costly and may exceed the potential benefits. For example, relationship specific investments made will bind the resources of the parties

which may obstruct adaptations with other partners. Adaptations made may also conflict with adaptation opportunities in other relationships (Hakansson and Snehota, 1998). Thus, companies must consider whether involvement in product development activities will create either short termed benefits in terms of new products or longer termed benefits related to the development and future potential of that relationship in relation to the associated cost. Or, companies may hold a strategic intention for creating routines for organising product development activities that may be utilised across relationships to different customers in an aim to achieve economics of scope.

Ongoing exchanges in relationships will often involve considerable investments by one or all implicated partners – such investments are often non-transferable and can thus be considered severe adaptations. When developing new products involving customers in the process, adaptations can be of critical importance for obtaining the desired result and matching the new product offering to customers' requirements. As suggested by Hallén et al. (1991) and confirmed by Brennan et al. (2003), inter-firm adaptations are elements in a social exchange process and thus closely related to the distribution of power between partners. Company strategic intentions of achieving economics of scope through minimising adaptations may thus be interfered by the strategic intentions of a counterpart.

Building routines for coordinating inter-organisational product development activities

The notion of routines is one element of organisational behaviour and coordination and a way of accomplishing organisational work (Nelson and Winter, 1982). In the literature, it is possible to find several variations on thinking of and discussing routines (Feldman and Rafaeli, 2002). A common ground for the various approaches is a view of routines as a way for organisations to get things done by drawing on sequences and repeated patterns of behaviour, involving multiple individuals. Traditionally, routines have been described as mechanical elements of organisational behaviour (Nelson and Winter, 1982). Lately, an emerging focus has been put on organisational routines as a viable part of organisations' quest for seeking a balance between adaptability in increasingly changing and globalised business settings and stability through coordination of activities important to business actors (Feldman, 2000, Feldman and Rafaeli, 2002). In a product development setting, this entails building routines that through a repetitive pattern (in one relationship or across relationships) creates a basis for effectiveness and efficiency (Adler et al., 1996, Mathews, 2001). Simultaneously, the building of routines implies actors adjusting their actions as they reflect on outcomes and develop new understandings (Feldman, 2000, Harrison and Huemer, 2005). Routines are thus not only mechanical – they mutate and develop through social practice. Therefore, routines can be considered built by actors to perform their activities through which their resources and relationships are utilised (Mathews, 2001).

Research on routines have mostly been focusing on intra-organisational issues, but recently increasing interest has been given to the notion of routines in relationships and networks (Andersen, 2003, Harrison and Huemer, 2005). Conveying routines in relationships and networks induces modifications to the concept. Used in a business network context, routines can be seen as a device for coordinating activities across organisations in the sense that business exchanges are considered similar to the conceptualisation of organisational routines (Andersen, 2003). If we furthermore acknowledge that individuals and routines should not be seen as separated from each other (Feldman, 2000), we must also take into consideration how interpersonal routines do not respect organisational boundaries (Andersen, 2003) when discussing routines in an inter-organisational context. This implies that we can regard patterns of interpersonal coordination across organisations as connected and embedded in social structures partly governed by the exchange system of the network (Andersen, 2003). From the single organisation's point of view, inter-organisational routines thus describe a sequenced pattern of activities performed to achieve a specific aim within a relationship.

In a relational or network context, it is possible to identify internal routines that need to be coordinated across actors (e.g. buyer routines vs. supplier routines) as well as routines that cross organisational boundaries (Harrison and Huemer, 2005). In addition, it is essential to distinguish

between the outcomes of a routine as opposed to the process of routines (Feldman, 2000). Both the outcome and the process of routines may be elements considered important by actors performing routines as these may have significant influence on how involved actors perceive a joint effort. Considering the repeated and incremental characteristics of product development in the Danish food industry, a food producing company and its involved industrial customer may be concerned whether the outcome of product development routines lead to a new food product that is not only attractive to potential end-consumers, but is also applicable and adjusted to a industrial customer's or retailer's further processing and value-adding refinement of the product. Furthermore, the food producer may be interested in aligning the elements of the product development process in a way that spares the use of development resources towards additional other customers.

Examining the elements of routines can provide insights of whether the process of routines is altered for instance by decomposing routine elements or by bringing in elements from another context. These efforts may be initiated with a wish to change or enhance the routine output (Feldman, 2000). Inherently in the abstract notion of routines is thus a dual view of stable patterns of repeated behaviour, but building on a continuously changing pattern of exchange where actors reflect on actions and outcome, bringing in an adaptive and dynamic character, as actors adjust their behaviour when developing new understandings (Feldman, 2000, Harrison and Huemer, 2005). Hereby, when discussing the routine concept, it is rewarding to take into consideration also the actions, behaviour, thinking and feelings of actors performing routines. Put differently, both behavioural and cognitive aspects of routines are relevant (Feldman, 2000).

To reach an insight and understanding of routines in an inter-organisational setting, it is thus relevant to examine the degree of convergence or overlapping in actors' interpretations and shared understandings of the product development situation. An examination of the actors' shared understanding of the wider context including their interpretation and understanding of the task and perspective of counterparts (labelled network picture by e.g. Gadde and Hakansson, 2001, Henneberg et al., 2006, Öberg et al., 2007). This will provide an insight into why product development activities are coordinated as they are and the intended purpose of the coordination of product development activities.

Methodological considerations

The empirical basis of the paper is data from an ongoing research project in the Danish food industry of organising product development activities involving the customer. A case study approach has been adopted as a method for handling rich sources of data and multiple forms of data collection (Easton, 1998) to reflect the complexity of building routines and coordinating product development activities in the interaction between a supplier and an industrial customer. The case study has been a point of departure for describing and discussing sequences of product development activities coordinated in relationships between a supplier of spice blends and marinades and two of its industrial customers. Data has been collected through personal semi-structured interviews and participant observation. For this paper, a total of 14 interviews and observations of 4 joint development meetings provide the empirical foundation. Semi-structured interviews have focused on how product development activities are performed within the single organisation as well as coordinated in relation to involved customers. Product development meetings between the involved actors were identified as a central joint event for the parties to coordinate their development effort. Development meetings are consequently considered a window for giving insights on which activities are actually carried through, in which order and by whom. Observing meetings also provided information on how the partners decide which activities are carried out and by whom. Therefore participant observations of these development meetings have for the present purpose provided insights of the unfolding of joint activities and the coordination endeavour.

Case study

The case study evolves around the focal company Spice Inc., who is a medium-sized supplier of spice blends and marinades for a different range of meat products. The company's products extend from simple blends of different spices as well as marinades that provide a certain taste when added to a meat product (e.g. a combination of onion and mustard or garlic and pepper) to functional blends that not only give taste to the meat, but also contain consumables, food preservatives or food additives and therefore also provide a function of e.g. starching and/or improving keeping qualities (e.g. blends for pates or Danish pork sausage). A smaller selection of Spice Inc.'s marinades and spice blends are sold directly to consumers through retailers. Most of the company's products are however sold to industrial producers of consumer meat products and retail chains having their own in-store butcher shop and delicatessen preparing various private label and convenience meat products. Product development at Spice Inc. serves as a way to introduce and offer new spice blends and marinades to customers.

It has been important to us, that our economic growth is reached in the right areas. That our economic growth is not only obtained through onward sales, but is based on the spice blends and marinades that we ourselves develop and produce.

Spice Inc. Development Manager

The developmental effort is focused on refining the company product portfolio, where new products replace existing less performing products. At Spice Inc., development of new products is on one hand cyclic and closely related to the grill season. The cyclic product development is initiated months before the grill season to secure time for idea generation, prototyping, development and presentation for customers as well as potential adjustments. On the other hand product development at Spice Inc. is based on customers' requests and specifications, which in many instances are also related to the summer grill season.

Since the former family-owned business was acquired by two partners in 2003, the aim and strategic intent has been to enhance the company's position as a development-oriented supplier and partner of blends and marinades in the Danish food industry. Therefore Spice Inc. has made an effort for linking their development activities closer to those of their customers.

We wanted to grow organically with customers through joint product development. So, even though the growth has been slower, we have had more interesting revenues on these products (developed together with customers...) We have used more product development resources in those customer relationships where we detected the greatest potential. And naturally, we have experienced the greatest growth when we have experienced a positive reaction from customers.

Spice Inc. Development Manager

To coordinate the joint development effort, individually selected and important customers are invited to joint development meetings. Two of these selected customers are the retail company Euretail and the industrial customer Chicken Delight.

Euretail – which is one of the three biggest food retail companies in Denmark – is considered an important customer at Spice Inc. This is not as much due to sales and earnings, but mainly because Euretail is considered a far-sighted and innovative actor in the Danish food industry and thus a prominent development partner. Spice Inc. and Euretail have for the last couple of years tightened their relationship partly by increasing their commercial exchange and partly by becoming more development-oriented in their mutual cooperation by carrying out joint development activities. Their joint development effort primarily focuses on developing new spiced or marinated private label meat products for consumers sold through Euretail's in-store butcher shops and delicatessens.

Spice Inc. regards Chicken Delight as an important industrial customer because they are the biggest producer of poultry consumer products in Denmark and thus considered a vital mean for

getting Spice Inc.'s products to final consumers. Based on their slaughter houses, Chicken Delight develops and produces various poultry products sold as branded products to consumers through retailers. Likewise they sell various cuttings and products to retailers partly under retailers' own private labels. The relationship between Chicken Delight and Spice Inc. is rather young, but has from the start been based on joint development activities. The joint collaborative effort has mainly been focusing on developing new spice blends and marinades including functional blends for the Chicken Delight grill assortment.

Routines for product development

Preparing for the coming grill season, Spice Inc. so to speak restarts a sequence of activities aimed at developing a range of prototypes for new spice blends and marinades to be offered to customers. Based on experiences and inputs during earlier seasons, development and marketing staff is summing up trends and ideas for new blends and marinades. At an internal held meeting this brain storming ends up with a list of potential new products and concepts. New ideas are screened by development staff and some are chosen for further prototyping. Ideas for new blends, marinades and concepts may also be based on customers' specifications. Since prototyping does not demand large technological investments, and the associated costs mainly are related to the price of spices, which are affordable, Spice Inc. can in essence 'cook-and-look' when they prototype. The prototyping activities constitute an essential element in the development process, resulting in a range of prototypes chosen to be presented to a few selected important customers – among those Chicken Delight and Euretail.

Prototypes are presented to the single customer at a joint development meeting held by Spice Inc. at their development kitchen (resembling a large household kitchen). Spice Inc.'s strategic intention and purpose of joint development meetings with customers is to build closer customer relationships and build interdependencies.

Our total product development process includes the idea generation, customers' evaluations, the actual development of new products and the presentation to customers who then chooses which new products to buy. In this sense we tie the hands of the customer's purchaser. When we have developed a new product in collaboration with the customer's product developers and the customer's customer have approved the product - then there is not much else to do for the purchaser than to accept our offer.

Spice Inc. Development Manager

Spice Inc. also views development meetings with customers as an input for their own evaluation and selection of which prototypes are to become part of their seasonal product portfolio offered to all customers. The essential activity of joint product development meetings with customers is to prepare, taste, evaluate and select among a range of new prototyped spiced and marinated meat cuttings. As the participants taste and evaluate every prototype the customer may suggest adjustments (e.g. 10% more paprika). Based on the joint development meeting and the tastings, the customer decides which of Spice Inc.'s products they would like to incorporate in their portfolio. Responding to individual customers' choices, Spice Inc. re-prototype requested adjustment and prepares the selected new products for mass production. Additionally, compiling various customers' reactions from development meetings, the development staff at Spice Inc. builds up impressions of customers' preferences. Partly drawing on customers' preferences and partly on experiences from implementing prototypes to mass production, Spice Inc. puts together their own portfolio of various existing and new spice blends and marinades offered to all customers for the coming grill season. Figure 1 summaries the product development activities at Spice Inc.

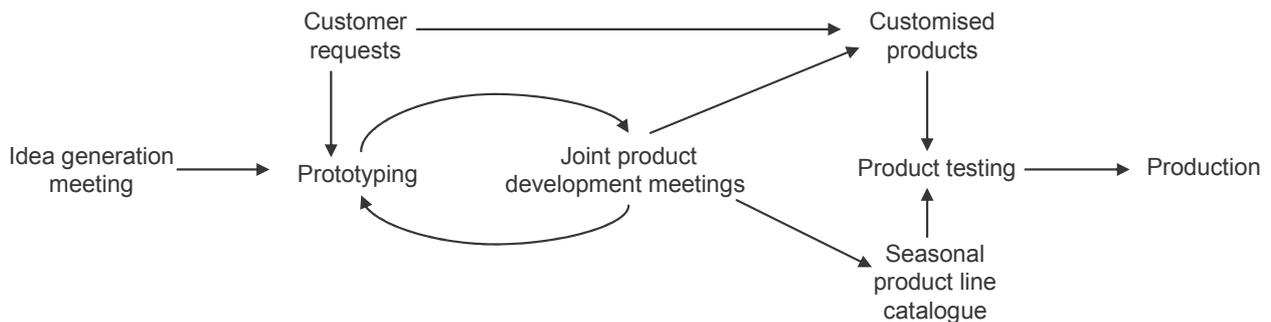


Figure 1: Seasonal and customer requested product development activities at Spice Inc.

During other exchange activities with customers and during development meetings, new ideas for new products may come up that customers wish to include in their assortment. These are accordingly prototyped by Spice Inc. and incorporated in the ensuing development activities. The overall general flow of product development activities at Spice Inc. thus consists of repeated routines for idea generation, prototyping and adjustments and implementation for mass production of newly developed spice blends and marinades. This sequence of standardised activities may be considered routines at Spice Inc. as they are repeated season after season as well as across different customer relationships. Likewise, these standardised activities are iterated whenever customers are approaching Spice Inc. with new ideas for new products.

In these routines for product development, development meetings may offhand be considered a forum for customers to decide which new products to incorporate in their product portfolio and for adjusting new products to individual customers' preferences. But development meetings are also forum for aligning internal activities at Spice Inc. with that of their customers. In other words, development meetings are a way for Spice Inc. to link and coordinate their internal product development activities and routines to that of their customers.

Coordinating product development activities with customers

The Spice Inc. – Euretail relationship

At the retail company Euretail purchasing, product development and marketing are centralised functions related to different product categories. This is also the case for the fresh meat purchasing function, that also holds the responsibility for developing new products to the in-store butcher shops and delicatessens as well as other fresh meat products sold through every of the company's different retail chains. This department, however, differs in two respects to most others within the central Euretail purchasing function. Firstly, the meat purchasing department is responsible for the quality of existing and new products, including optimising the work flow in local in-store butcher shops and delicatessens. Secondly, products being produced in in-store butcher shops and delicatessens essentially compete with branded fresh meat products provided by meat processing companies, thus making selected meat processing companies suppliers as well as competitors. The Purchasing Manager has the joint responsibility of developing a full portfolio of private label products and branded or non-branded products bought from meat producing companies.

When coordinating product development activities with Spice Inc. at joint development meetings, the Euretail Purchasing Manager takes immediately decisions on which new products to introduce as private label meat products at the retail chains' local in-store butcher shops and delicatessens and which to introduce as new non-branded products at the retail chains' refrigerated display counters. The joint product development meetings are valued by Euretail.

To me joint product development meetings (with Spice Inc.) play a significant role. I consider these meetings as being part of our internal product development scenario.

Euretail Purchasing Manager

Euretail considers development meetings as a forum for coordinating the Spice Inc. product development activities with the Euretail marketing activities as well as activities related to the general working procedures at in-store butcher shops and delicatessens. During meetings the Purchasing Manager from Euretail and the development staff from Spice Inc. e.g. agree on when new products are to be launched and marketed in the retailers national household distributed advertisements. Likewise, adjustments of new product are not only related to taste and expectations of consumer preferences, but also to a great extent adjusted to fit with the working procedures at the retailer's in-store butcher shops and delicatessens. The Purchasing Manager from Euretail also regards development meetings as a forum for influencing Spice Inc. to customise their services to fit the retailer's internal working procedures. Accordingly, additional services are customised to support the joint development effort. E.g. Spice Inc. has formulated recipes and descriptions of how butchers at Euretail's in-store butcher shops and delicatessens may incorporate new products in their daily working procedures.

Even though most new spiced and marinated meat products are sold during the summer grill season, Euretail introduces new products throughout the year at their in-store butcher shops and delicatessens. Their development activities are spread out accordingly and continuously coordinated with Spice Inc. Still, the formula described for joint product development meetings remains the same.

The Spice Inc. – Chicken Delight relationship

The Chicken Delight development department is together with the marketing department and the sales department responsible for the development of new poultry products directed partly at consumers in terms of branded premium products and partly as new products offered to retail customers. New products are introduced prior to the summer grill season. Branded Chicken Delight products are introduced (by the sales personnel) to retailers as part of the company's offering to consumers including a range of supporting marketing activities. Other new products are introduced as supplements to retailers' general portfolio of meat products as well as possible private labels. Chicken Delight thus regards development meetings with Spice Inc. as a means for obtaining new ideas for new products as well as a means for accessing the supplier's competences and advice on mass production issues. In this sense joint product development meetings with Spice Inc. are considered valuable input to Chicken Delight's own product development effort.

...(at these meeting) we can concentrate on these issue (developing new products) and discuss with competent people and highlight the finer distinctions (...) Spice Ins. Are really good at developing good taste and they are also strong in developing functional blends. We are very satisfied with their blends and there are perfectly adjusted to our production facilities.

Chicken Delight Product Developer

The development staff at Chicken Delight coordinates the joint product development effort with Spice Inc. New ideas obtained at development meetings are then presented to Chicken Delight marketing and sales personnel, who jointly decide which new products to incorporate in the season's summer grill assortment. Some new products are incorporated in Chicken Delight's portfolio of branded premium poultry products, others are offered to retail customers to supplement their general assortment of meat and grill products. During development meetings, Spice Inc. and Chicken Delight discuss the potential problems related to mass production of every new product idea. Potential adjustments of new products are thus not only related to taste and expectations of consumer preferences, but also adapted to fit the mass production at Chicken Delight where new spice blends and marinades are added to and intermingled to various poultry cuts. Accordingly, the relationship with Spice Inc. is central to both the product development effort and the production activities at Chicken Delight as well.

Case analysis

The case presents a supplier making an endeavour to build routines for product development. At Spice Inc. these routines are related to sequences of product development activities that are repeated from season to season as well as across relationships to different industrial and retail customers. These routines are closely related to Spice Inc.'s internal organisation of development with a focus on new products and development activities. The routines pertain to the generation and searching for new ideas building on employees' experiences as well as customers' input. The routines related to generating new ideas may thus be either closely related to the development of new products for the coming grill season or building on customers' specifications. The routines of prototyping are considered an essential value creating input to customers' product development, as prototypes of new spice blends and marinades, constitutes a tangible resource for evaluation. Customers' evaluations may both be related to the actual new product (taste, consumer preferences etc.) and related to other essential activities of the customer e.g. production activities, working procedures or marketing activities. When prototypes have been evaluated and selected for further development, Spice Inc. has routines for turning prototypes into products suitable for mass production. Through these routines Spice Inc. builds a framing for their role in the organising of product development activities when collaborating with customers.

Drawing on the work of Feldman (2000) the outcome of Spice Inc. routines may be considered related to new spice blends and marinades, but also supporting services adjusted to different customers. Furthermore, the routines process may be considered standardised product development activities iterated from season to season and across relationships. The process of routines is however also embedded in the wider activities of the business exchange with customers. A central outcome of Spice Inc.'s routines for organising product development activities is thus the value creating input this offers to customers. One valuable input from Spice Inc.'s product development routines to the development activities at Chicken Delight is new ideas for new products. Another input is Spice Inc.'s ability to convert prototypes into products that are suitable for mass production at Chicken Delight's facilities. In relation to Euretail, an essential contribution is the combination of routine elements that transform new ideas into new products that are adapted to the working procedures at Euretail's in-store butcher shops and delicatessens and adjusted to their marketing activities. In essence Spice Inc.'s routines, in this relational interpretation, become the basis of configuring the product development collaboration with customers.

The routines build at Spice Inc. are thus on one hand related to the company's mass production of newly developed blend or marinade. On the other hand, this routine is related to making the new product fit into single customer's production. As was the case with Euretail, this may require supporting customised services and adaptations. This sequence of product development activities is also replicated when customers specify new products to be developed off season. Depending on customers' dependence on seasons and their general specifications for new products, these different routine elements for organising the product development effort at Spice Inc. can be combined differently from customer to customer. At the same time, Spice Inc. is making an effort to retain the different routine elements and utilise them across different customers.

As the product development effort is closely interdependent and related to the relationship to individual customers, joint development meetings constitute a means for coordinating the parties' product development activities. On one hand, development meetings are routines crossing traditional organisational boundaries with the purpose of evaluating ideas and prototypes for new products. On the other hand, development meetings are a forum for coordinating supplier routines and customer routines (Harrison and Huemer, 2005) when the parties develop additional and customised services supporting the developmental effort. In building up the process of routines, the single elements can be divided and separated to be combined in a way that adapts to the single customer. Development meetings are by the involved actors considered an essential forum for linking and tying together activities and resources across companies in a dual relationship. The building of these cross-organisational routines emphasises how the organising of product development is *per se* not only related to activities but connected to companies' ability to also

handle relationship routines (Laage-Hellman, 1997). In this paper focus is thus not on building continuous changes into organisational routines (Feldman, 2000) but on how companies balance adaptation and routinisation when organising product development activities with involved customers and thus as a way for creating a cohesion between internal activities and external activities.

Preliminary discussions

This paper has attempted to portray routines for product development as an on-going accomplishment of organising and coordinating product development activities with involved customers. Interactions between a supplier and a customer constitute a viable part of the multiple elements composing product development routines in each of the organisations as well as for routines crossing organisational boundaries. In their interaction, an important element is the information exchanged on the counterpart's other activities and their perceptions of the routine. During the season, continuous interactions and business exchanges as well as joint development meetings are influenced by actors' interpretations or former events thus influencing the coordination among them. Still, the overall repeated pattern of product development activities is similar in many ways, giving regularity. In other words, what actors do as part of their routines are influenced by the interaction and the interpretations of the involved parties, even though the outcome is still the same – new products for the upcoming grill season.

Reversely, specific events and the actors' ongoing interactions are explaining the adaptive coordination element in the joint product development effort. Additional outcomes from the interaction may thus constitute adapted elements (e.g. in terms of services supporting the introduction and implementation of a new product at the customers). Through a shared understanding (but not necessarily agreement) negotiated in a relationship, actors may be able to create routines with an inherent element of adaptation. Our understanding of routines for product development activities and their organisation and coordination between a supplier and a customer thus relates to the history and context of the actors' interaction and relationship. This relates to the adaptive aspect of routines as highlighted by Feldman (2000, , 2003).

The case presented here shows how a supplier is seeking to handle and coordinate a product development effort in a setting that is characterised by the contingencies related to the structure of the food industry. The technologies utilised are in many instances low-tech and the flow of new products to end-consumers is dominated by retailers and a few large food producing companies. These characteristics are framing the coordination of product development activities leading to the building of routines for product development whereas the adaptive aspect is closer related to issues of commercialisation, distribution and marketing.

References

- ADLER, S., NGUYEN, A. M. & SCHWERER, E. (1996) Getting the Most out of Your Product Development Process. *Harvard Business Review*, 74, 134-152.
- ANDERSEN, P. H. (2003) The Embeddedness of Selfish Routines: How Routines are Replicated in Business Networks. *Industry & Innovation*, 10, 159.
- BRENNAN, R. & TURNBULL, P. (1998) Adaptations in buyer-seller relationships. IN NAUDE, P. & TURNBULL, P. (Eds.) *Network dynamics in international marketing*. Oxford, UK, Elsevier Science.
- BRENNAN, R., TURNBULL, P. & WILSON, D. T. (2003) Dyadic adaptation in business-to-business markets. *European Journal of Marketing*, 37, 1636-1665.
- CUTA (2005) Føde- og drikkevareindustrien i Vejle Amt - fokus og udfordringer.
- DANSK CENTER FOR FORSKNINGSSANALYSE (2005) Erhvervslivets forskning og udviklingsarbejde (Research and development in business). University of Aarhus.
- EASTON, G. (1998) Case research as a methodology for industrial networks: A realist apologia. IN NAUDE, P. & TURNBULL, P. (Eds.) *Network dynamics in international marketing*. Oxford, UK, Elsevier Science.

- FELDMAN, M. S. (2000) Organizational Routines as a Source of Continuous Change. *Organization Science*, 11, 611-629.
- FELDMAN, M. S. (2003) A performative perspective on stability and change in organizational routines.
- FELDMAN, M. S. & RAFAELI, A. (2002) ORGANIZATIONAL ROUTINES AS SOURCES OF CONNECTIONS AND UNDERSTANDINGS. *Journal of Management Studies*, 39, 309-331.
- GADDE, L.-E. & HAKANSSON, H. (2001) *Supply network strategies*, Chichester, John Wiley.
- HAKANSSON, H. (Ed.) (1982) *International marketing and purchasing of industrial goods*, Chichester, Wiley.
- HAKANSSON, H. & SNEHOTA, I. (1998) The burden of relationships or who's next? IN FORD, D. (Ed.) *Understanding business marketing and purchasing*. 2002, 3rd ed., Thomson Learning.
- HALLÉN, L., JOHANSON, J. & SEYED-MOHAMED, N. (1991) Interfirm adaptation in business relationships. *Journal of Marketing*, 55, 29.
- HANSEN, H. O. (2005) *Vækst i fødevarerindustrien*, København, Handelshøjskolens Forlag.
- HARMSSEN, H. (1996) Succesfaktorer i produktudvikling og deres implementering i mellemstore fødevarer virksomheder (Key Success Factors in Product Development and Implementation in Medium-sized Companies in the Food Industry). *Department of Marketing/The MAPP Centre*. Aarhus, Denmark, Aarhus School of Business.
- HARRIS, J. M. (2002) Food Product Introductions Continue To Decline in 2000. *Food Review*, 25, 24.
- HARRISON, D. & HUEMER, L. (2005) Boundaries, inter-organisational routines and change. *21st IMP Conference*. Rotterdam, Netherlands.
- HENNEBERG, S. C., MOUZAS, S. & NAUDÉ, P. (2006) Network pictures: concepts and representations. *European Journal of Marketing*, 40, 408-429.
- LAAGE-HELLMAN, J. (1997) *Business networks in Japan. Supplier-customer interaction in product development*, London, Routledge.
- MATHEWS, J. A. (2001) COMPETITIVE INTERFIRM DYNAMICS WITHIN AN INDUSTRIAL MARKET SYSTEM. *Industry & Innovation*, 8, 79-107.
- MINISTRY OF FOOD, A. A. F. (2003) Vækstmuligheder gennem innovation for fødevarer sektoren i Danmark (Growth through innovation in the Danish food sector). IN BUSINESS, T. D. F. F. F. A. A. (Ed.).
- NELSON, R. R. & WINTER, S. G. (1982) *An evolutionary theory of economic change*, Cambridge, Massachusetts, Harvard University Press.
- SØNDERGAARD, H. A. (2003) Markedsorienteret produktudvikling med en means-end chain tilgang (Market-oriented Product Development using the Means-End Chain Approach). *Department of Marketing/The MAPP Centre*. Aarhus, Denmark, Aarhus School of Business.
- TRAIL, B. & GRUNERT, K. G. (1997) *Product and process innovation in the food industry*, London, Blackie Academic and Professional.
- TRENDCHART (2005) European innovation scoreboard 2005. Comparative analysis of innovation performance. Innovation Policy in Europe.
- VAN DER VALK, W. & WYNSTRA, F. (2005) Supplier involvement in new product development in the food industry. *Industrial Marketing Management*, 34, 681-694.
- WALTER, A. & RITTER, T. (2003) The influence of adaptations, trust, and commitment on value-creating functions of customer relationships. *Journal of Business & Industrial Marketing*, 18, 353.
- ÖBERG, C., HENNEBERG, S. C. & MOUZAS, S. (2007) Changing network pictures: Evidence from mergers and acquisitions. *Industrial Marketing Management*, 36, 926-940.