Paper submitted for the IMP Conference, Manchester 2007

Managing A Merger Process – Market Practice And Construction Of Temporality

Per Andersson
dpa@hhs.se
Stockholm School of Economics
P.O. Box 6501
SE-113 83 Stockholm

Lars-Gunnar Mattsson
dlgm@hhs.se
Stockholm School of Economics
P.O. Box 6501
SE-113 83 Stockholm

Keywords:

Merger, Market Practice, Temporality, Managing

Managing A Merger Process – Market Practice And Construction Of Temporality

Introduction

Merger processes as market practices

We assume that the economic motive for merging two firms under one ownership is to benefit from a more effective coordination between their resources than could be achieved had they continued under separate ownership. The research literature on M & A and experience expressed by managers show that the process to achieve the, more or less clearly expressed, effectiveness objectives underlying the merger decision (”the deal”) is both lengthy and problematic. The historic odds against acquisition value creation are often put forward in management literature (e.g. Dobbs 2006). Changes (including investments and divestments) need to be performed and to be stabilized, both as regards the internal resources of the two merging firms but also in relation to external resources for which the merging units have limited or no control. These external resources are themselves undergoing change. (”a moving context). The outcome of the resource combinations achieved during the merger process are uncertain and may be differently interpreted by involved actors. Several concurrently ongoing change processes, both internally and in the context, during the over-all merger process may interact in unpredicted and difficult to control ways.

The merger process can be seen as one type of market practice (1) aimed at re-organizing resource interdependencies, thereby (re-)constructing the conditions for market practice (2) that refers to exchange with counterparts in the market context.

The above attributes of the merger process suggests that temporal dimensions of merger activities (Market Practice 1, M1) are important because changing and stabilizing resources are interdependent, not completely known by actors involved and influenced by the ”moving context”. Market practice 2 (M 2) is in itself undergoing change and stabilization, partly due to the merger process, partly due to strategic orentation and partly due to contextual influence.

Perceptions and interpretations of the market and market dynamics differ between the merging actors, due to their positions in the market, their experiences, cognitions, strategic intentions etc. Boundaries of what is perceived as the relevant market tend to change during the merger process.

Purpose

The purpose of the paper is to explicitly link temporal profile concepts to analyses of market practices during merger processes by a re-interpretation of an earlier reported deep case study (Andersson, 1996; 1996a). The construction of time can be seen as part of the process of

”creating orderliness” in business operations. For example, merging firms might need to use new forms of planning and scheduling as ways to construct temporal complementarity among temporally assymetric business contexts and operations. The research question posed is:

> *How does the temporality of the merger process (M 1) affect the transformation of the separate market practices (M 2) in the merging companies to new joint and stabilized practices?*

We base our paper on three conceptual frameworks: a ”network perspective”, an ANT related ”market practice” approach and literature on ”temporality and organizations”.

Conceptual Base

The network perspective

We refer to a common IMP perspective as concerns dynamics of exchange relationships, interdepence between relationships, interdependence between resources (internal and external to an economic actor), markets as dynamic structures. Perceptions and interpretations of the market and market dynamics differ between actors. Boundaries of what is perceived as the relevant market changes over time, e.g. due to internationalization, convergence between technologies, changes in institutional market rules etc. Market processes have both spatial and time dimensions.

An important base influencing strategic actions by a focal actor is its ”network theory”, defined as the actor’s set of systematic beliefs about market structure, processes and performance and the effects of its own and others’ strategic actions (Johanson & Mattsson, 1992). Included in the network theory is also the actor’s view of time and temporality (Andersson & Mattsson 2006). Temporality aspects are part of single actors’ (social) construction processes, and are also embedded in established network ”norms” and processes of norm creation (Helgesson et al 2005).

A market practice perspective

To analyze market practices we draw on the conceptual model proposed by Helgesson et. al. (2005) distinguishing three broad subcategories of market practice: exchange practice, representational practice, and normative practice (see Figure 1).

Exchange practice refers to the continuous activities that purport to temporarily stabilise certain conditions (the parties to the exchange, the exchange object, the price, the terms of exchange) so that an economic or intra-organizational exchange becomes possible. This includes both highly idiosyncratic activities and more general ones that go into creating a specific economic exchange with an external counterpart or intra-organizational exchange within a firm. We include in market practice what we above defined as strategic actions. Market practice 1 refers to efforts to somehow change, coordinate and stabilize Market practices 2 of the merging actors in order to reach merger objectives.

Representational practice refers to activities that contribute to depict markets, how they work, and how focal firms are positioned in the market context. E.g. description and analysis of the potential market for a new product or analysis of the profitability of different types of customers. One important part of representational practice is the conceptual and theoretical foundation for a specific description and analysis. The ”network theory” concept referred to

earlier is an important aspect of representational practice. Also for this practice we distinguish between Market practice 1 and 2.

Normative practice refers to activities that contribute to establish objectives for how a market should be (re)shaped and work according to such norms and also for how specific actor(s) in the market define norms they consider to affect their over-all objectives. Some examples on the macro level are ”market reforms”, general rules of competition and on the micro-level, individual firms´ over-all strategic objectives and economic control systems. An example of Market practice 1 is development and communication of the objectives of the merger and of Market practice 2 setting of objectives for a common logistics system.

The practices are linked to each other through chains of translations (Callon 1992). Thus, normative practice may produce rules and tools that become employed in exchange practice, as well as indicate measures and methods of measurement to be used in representational practice. Representational practice will produce both market descriptions that can be drawn upon in normative practice, and different types of results that feed back into on-going exchange practice. Exchange practice, finally, enters into representational practice through more or less systematic measurements and into normative practice through the interests it creates among actor(s).

We thus assume that construction of time is part of, and interacts with market practices.

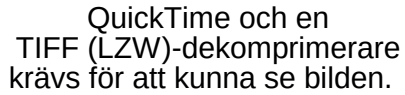

Figure 1

Temporality and temporal profiles perspectives

Part of the ”construction of time” concerns the complicated timing problem, where each individual actor more or less explicitly considers sequences of strategic actions, influenced by constructed views of e.g. time horizons (and network horizons.) This sequence is contingent upon changes in the context, and thus also other, connected actors’ ”temporal constructions”, whether common with other actors or not.

We use, refering to Sztompka (1993), the concept ”temporal profile” to capture the temporal characteristics of a market process. We select timing, sequencing, duration and speed as time dimensions of market episodes and coordinating as a further time function in the temporal profile, assuming that in connection with strategic market changes, these dimensions are underlying organizers of the actors and the actions. Actors´ temporal orientation (in terms of their temporal profiles) may differ and actors might act to reduce the temporal assymetry by temporal integration.

Reflected in the actors’ behaviour, they act with different time horizons and take different time perspectives. They act in interplay with the ”moving context”, for example they take

different temporal vantage points and different temporal viewing directions. (Pieters & Verplanken 1991). Dynamics of markets is affected by interplay between actors with different time horizons and time perspectives. Changes in the time perspective of actors, and subsequent adaptations of their market perception, is affected by changes in the market, including the type of change in focus in this paper, i.e. a merger process.
An actor´s strategic action is importantly influenced by its ”network theory”. The network theory includes both spatial and time dimensions. Part of the network theory is the actor's network horizon, (a spatial dimension), another part is the actor's view of temporality.
We assume actors to have different time perspectives, but these cannot be expected to remain stable during the whole course of a change process. The temporal profiles of the change processes themselves are subject to change. During the change processes tensions between different dominating profiles between actors in the merging firms and between them and actors in the market context will surface. We consider such changes, in the merging firms and in their contexts, to importantly influence the outcome of the merger process.

The Merger of Two Biotech Companies

The theoretical/conceptual base presented above will in section 3. be applied in analysis of an earlier published case, a merger process between two companies in the biotech industry (Andersson 1996). Pharmacia Biotech (BTG) acquired LKB Produkter in late 1986. The ”core” merger process by which a new joint organization and strategy for the company (BTG) is formally established, is finalized in 1989. This process, beset with problems and undeliberately extended in time, is Part II in our case description. However, to understand the core merger process and its consequences, we consider it necessary to put it in the context of processes before 1986 (Part I) and after 1989 (Part III). The core merger process sets the scene for efforts to change market practices in the merged firm from 1989 and onwards, especially in the distribution and logistics activities, in the organization of the international marketing organization, and in the after sales service activities. The case comprises some 350 pages and is only presented here as an illustration for our later conceptual analysis.

Part I Prologue: Two Companies with Different Backgrounds and in Different Stages of Development

In 1986, Swedish Phamacia Biotechnology (BTG) acquired its Swedish competitor in the same line of biotech business, LKB Produkter AB (LKB). The motives for the acquisition encompass ideas of various ”synergies” and ”complementarities” between the companies. The historical origin of the two companies were similar. Both were born from product innovations in separation technology. However, the two companies had developed in two different directions. BTG was the more ”academic” company with important relations in local (Uppsala) and international research networks, while LKB had developed into an international, progressive, ”industrial” company. In the 70s and early 80s. LKB and Pharmacia historically regard each other as competitors but at the time of the merger it is mainly in one minor functional area that they compete for the same customers.
LKB has a strong position in instruments and services, but is lagging behind some competitors in the development of chemicals/reagents and applications. The process of handling sales through wholly owned sales subsidiaries and sales support offices instead of directly or through agents is continuously accentuated.

As regards R&D, both companies are considered to be on the frontline. During the first half of the 80s, LKB has mainly launched a large number of modified versions of existing instruments while BTG has been handling research and development with a more open product system oriented focus.

LKB is, during the 80s moving through three stages of organizational adaptation: from an organization based on techniques to product orientation to a more market and customer driven organizational adaptation.

In 1986, a few months before the merger, LKB begins to implement a regionalization project. Other ongoing change processes in the marketing network are related to the specialization/divisionalization which started earlier in many sales subsidiaries. LKB's subsidiaries are used to act independently in relation to central headquarters, e.g. as regards pricing, product and customer strategies but under a very strict profit responsibility. The LKB philosophy in the 80s is to create decentralized subsidiaries with stable, local contacts. The decentralization of service support resources means that the distances to instrument users are short in most markets. Most technical support activities are performed within the customers' premises. In 1986, LKB had reached a more advanced level in handling after sales services than Pharmacia BTG.

The different philosophies in LKB and Pharmaia regarding instrument services are a natural consequence of the different historical backgrounds of the two companies. Pharmacia BTG, has been used to a constant, high level sales increase and stable, high profit margins. As a supplier of systems with a base in chemicals rather than instruments, the company is used to high profit margins on the chemicals, reagents and columns, and also on the advanced application support services. Pharmacia BTG's central instrument service function is still relatively small in 1986. and without significant strategic influence.

LKB, on the other hand has in the 80s as an industrial manufacturer experienced competition in standard laboratory supplies and shrinking profit margins on instrument sales. LKB became aware that profit margins can be increased by increasing the sales of spare parts and repairs. During the first half of the 80s the central, coordinative service support unit begins to grow and is coordinated with the other central management functions. The relatively frequent contacts and short "distances" (in all respects) between the central units in the LKB organization increase the opportunities for the central instrument service function to influence product development, production and marketing.

Pharmacia's centralized control system at the time of the merger is quite different from that applied by LKB. Pharmacia BTG´s central product units in Uppsala had product responsibility world-wide. Subsidiaries were seen centrally as the product units' own, local representatives in the various markets. Technical service policies were centralized. BTG´s market subsidiaries were cost centers rather than profit centers.

LKB and BTG handle customer relations differently. While LKB by tradition has built the activity and resource structures around its technical skills in instruments and technical after sales services, Pharmacia BTG has created an organization and resource structure emphasizing the actual application activities, including aspects of both the hardware and the application support services.

The major differences (or similarities) are summed up in the the tables below.

1. Routines and Business Operations

	BTG	**LKB**
Customer Relations	Long term, academic institutions	Long term, industrial customers

Distribution	Deliveries according to contract	Delivery from local stocks on customer order
Production	In-house	External suppliers
Research and Development	Chemicals, few long term projects	Equipment, many short term projects
Service Support	Application service, early in process	Maintenance, upgrading, long term

Economic Control	Centralized, cost centers	Decentralized, profit centers
Organizational Culture	Academic	Industrial
Product Portfolios	Chemicals, few instruments	Many instruments, few chemicals
Sales Principles	Application:chemicals some instruments ,systems	Instruments and some chemicals, some systems

2. Ongoing Process of Change at the Time of the Acquisition

	BTG	**LKB**
Mergers and Acquisitions	Little experience	Some experience
Rationalizations	Little experience	Recent experience
Regionalizations	Modest efforts	Major efforts
Internal Integration of Biotech Operations With Other Business Areas	Ongoing integration	Ongoing disintegration

Part II: The Core Merger Process Between BTG And LKB (1986-1990)

Background

The objective of the acquisiton of LKB was to creatie a new, dominating international biotech supplier. There are obvious similarities between LKB and BTG at the time of the acquisition - similar technologies, a concurrent, increased expansion, high global market shares. Pharmacia presents a number of reasons for acquiring LKB. The long-term strategy from the early 80s is to develop a strong position in the biotech supply business and create a biotechnology based drug and diagnostics product development program. Five motives for the merger are advanced (Joint press release, 1986-10-09. p. 3)

-*Growth*. Together LKB and Pharmacia will have almost a 50 per cent market share world wide in the two central separation techniques, making the new company the market leader in a situation where sales growth is beginning to level out and new Japanese and American competitors are appearing on the stage.

-*Complementary resources for systems selling and product development*. LKB's strong position in instruments and BTG's long tradition in chemicals are seen as complementary and help to speed up the development of a system-oriented biotech business already going on in each firm.

-*Scale economies*. Positive scale effects can be achieved in manufacturing.

-*Synergies due to globally overlapped marketing subsidiaries*. By keeping the established local positions and identities, i.e. maintaining dual sales channels in the short and medium range time perspective, it will be possible to defend the market shares and maintain

customer relations. In a later stage, cooperation in sales and distribution will lead to important synergies.

-*Other synergies*. In addition to the biotech operations, the merger also involves synergies in the diagnostics area.

In addition, not mentioned in this announcement

-*Complementarities related to marketing/service activities and customer groups.* While LKB has developed a strong position in the instrument business among academic research institutions, based e.g. on a well-developed technical service support organization, Pharmacia BTG has become well-known for its know-how in the separation media area and for its application service support.

Initial merger strategy

In December 1986, preliminary merger plans and a general strategy for the whole integration process are presented. A plan divided in three parts is presented: Orientation Phase (December-86 to March-87), Decision Phase (January-87 to June-87) and Accomplishment Phase (encompassing a period of around two years).

The principal idea is to integrate the two organizations in a specific order: Production, R&D, Administration, Finance and Economy, Personnel and Information, and lastly, Central Marketing and Local sales organizations. The strategy is based on the assumption that disturbances in the sales activities shall be minimized. Otherrwise, it is acknowledged, market shares and customers will be lost. Profit margins are still fairly high in 1986, and a loss in sales is asumed to be difficult to compensate by short-term cost reductions.

The acquisition shall be regarded as a common, offensive action with important long-term effects but also short and medium term synergies shall be realized. The joint BTG and LKB biotech business operation is to grow as fast as the total market for biotech at the time, around 10-15 per cent per year. LKB shall maintain its identity and its own sales companies in the initial phases. LKB's long experiences of international equipment sales shall be utilized in the new organization.

Seven work groups are formed for the integration process: R & D, Production, Central Marketing & Sales, Administration & Economy, Personnel & Information, Diagnostics, and Bioprocessing. As BTG has no separate, central subsidiary function, the responsibility for the subsidiaries is taken by the corporate management. The managing director of BTG becomes responsible for the integration process. Consultants, remaining six months, are brought in. Towards the end of 1986, after a number of analyses have been performed, the new, formal organization is presented. Pharmacia managers are appointed for most leading positions in the new functional organization.

Revisions Of Merger Plans

The original merger plans are revised several times. One important revision concerns the order in which the different units are merged, another the time schedule. The marketing subsidiaries in each local market start to integrate earlier and much faster than originally planned, and without centralized control, while the process of integrating production and R&D units takes much longer than originally planned.

Presenting A New Organizational Structure

In February-March 1987 the new general, joint organization plans for the home organization and for the marketing subsidiaries are presented. A functional organization for the home organization is chosen. The integration of the biotech divisions and the integration of the diagnostics divisions are to be handled more or less separately. The latter are to be merged imediately all the way from R&D to the sales units. The merger process for the biotech divisions are considered complicated. It is decided that integration should start with the central production and R&D units in order to avoid product and research overlaps. No new products are to be launched before a thorough economic analysis has been performed. BTG-LKB project groups with responsibility for merging the different central functions (EconomyAdministration, Personnel/Information, R&D, Central Marketing and Production) begin their work during Spring 1987.

The Subsidiaries Start To Merge

In retrospect, several explanations will be advanced as to why the original plans to wait with involving the marketing units in the integration process are revised. One explanation relates to the economic and administrative control system. Already during the first quarter of 1987 the Economy/Administration project group starts to incorporate the 16 LKB subsidiaries in Pharmacia's established economic and accounting system. As stated above, LKB's subsidiaries have been used to act independently but under a very strict profit responsibility.
At a meeting in Uppsala in February 1987, the Managing Directors of BTG and LKB's subsidiaries world-wide meet to discuss the integration of the marketing and sales organizations. It is stressed that the integration of the two marketing subsidiary nets is now to start, but in small steps, without affecting the daily sales and marketing routines.

Contrary to plan, the change process during the next months, is characterized by a steady acceleration of the merger activities, however without any direct centralized control or involvement. For central management it is difficult to hold back and control the process when local management in the subsidiaries speed up the process. It is reported that many of the LKB subsidiaries experience the integration process as a hostile take-over and during the six months that follow, the managing directors of all but three of LKB's sixteen subsidiaries leave the organization.

Irrespective of whether LKB's and Pharmacia's subsidiaries are located in the same or in different geographical regions in a market, LKB's subsidiary resources are in most cases transferred to the local Pharmacia organization. Instead of successively educating and training the two companies' sales and service personnel on the former competitor's products, as decided in the original plans, LKB's resources and activities in many countries are completely transferred to the Pharmacia organizational units. Many of LKB's sales and service people leave during 1987.

It proves difficult to convert remaining BTG and LKB personnel to market also the formerly main competitor's products. Some minor rationalization effects are reported as marketing support units in the two companies merge, but this cannot compensate for the loss of sales personnel due to the accelerating merger process. The damage proves difficult to repair in cases where LKB has built up stable customer relationships. If customers are customers to both Pharmacia and LKB it is easier to repair the damage. However, a number of LKB customers are lost during the first year of the merger. How many is not and will never really be known. The formal administration of customer accounts is taken over by the Pharmacia subsidiaries, but initiatives and efforts to analyze customer effects and to reapproach lost customers are left to the initiative of each single subsidiary.

To reduce uneasiness among customers, written explanations for the merger are sent out, both from the central marketing offices and from the local subsidiaries. The loss of sales and service personnel during the initial merger process is to some extent compensated for by employment of new sales and service representatives. Hence, in the subsidiaries, new product and customer portfolios are handled in 1987 by a mixture of LKB, Pharmacia and completely new sales and service personnel, but heavily dominated by former Pharmacia principles, routines and traditions. The reduction in sales was accentuated by the general downturn or levelling off in the sale of biotech instruments in 1987.

Officially, the integration of LKB's and Pharmacia's sales subsidiaries is terminated during 1987. The Managing Director of the new biotech company, renamed Pharmacia LKB Biotechnology, announces in 1988, that the merger of the sales organizations now is nearly completed. However, many of the practical problems to coordinate the activities and stabilizing new routines remain. There is a "general feeling" in the new company that the merger so far has affected customer contacts and loyalties negatively.

The integration of the central marketing support units in 1987 is founded on the results of the initial situation analysis concerning products, markets and customers.
Two years later, in 1990, as a result of a number of reorganizations, all central product divisions are located in BTG’s Uppsala operations.

Merging The Production Units

Another important reason for the reverse order in the integration process, with limited central control of the local marketing organizations, is that the central organizations in Sweden have to direct attention to the complex processes of integrating the biotech production, R&D and central administration units respectively. The integration problems for these activities result in and set the stage for forthcoming changes in physical distribution.

The group responsible for the production integration project becomes occupied with problems to coordinate two production philosophies and a number of geographically dispersed production units. The process also includes coordination with the changing marketing organization, and the links to the new emerging R&D organization, its projects and product portfolio. Contributing to the complexity of forming a new production organization is the rapidly levelling off of the almost unbroken sales increase since the 70s. The overcapacity that already exists in the new production operations, still marginal in the beginning of 1986, is increasing.

The new, joint Pharmacia LKB Biotechnology organization now encompasses five major production sites in Cambridge (LKB) Bromma (LKB) Uppsala (BTG), Umeå (BTG) and Milwaukee (Pharmacia). Although efficiency and rationalization aspects shall be in focus, it is stated in March 1987 that transfer of production resources shall be in both directions, between the different BTG and LKB sites. People employed in the LKB instrument production are worried that it will be difficult to integrate the partly overlapped production operations in Bromma and Umeå. LKB's representative in the production project group, the former manager of the whole LKB-Bromma Division, resigns in April 1987.

Discussions of the division of work between Bromma and Uppsala concerning production as well as R&D and central marketing continue and are intensified during the first half of 1988. Problems accumulate as former LKB personnel leave the company. However, it is announced in March 1988 that the new LKB-Pharmacia structure now is basically set and that the integration process can now be considered finished. During the autumn of 1988, plans are developed for extensive modernizations of the partly vacant premises in Bromma. In March 1989, there are signs of improved use of production capacities in Bromma, despite indications

of another bad year for the whole biotech instrument industry. A new operating manager is also appointed. An important task for the new product division is to continue rationalization in production, based on a continued rationalization and integration of the product programs.

In November 1989, to improve coordination between production units, including R&D, and to improve integration and coordination with the foreign marketing units are stressed as crucial priorities. In December, the new Managing Director states that one of the main priorities for Bromma is to re-establish the lost contacts and information exchanges with the local marketing subsidiaries!

In September 1990, as a result of decreasing sales, and after several months of internal analysis of the production organization and the present and future product and product application areas, a new organisation, the new so-called Biosystems Group, is introduced by Pharmacia. The new Managing Director for the Biotechnology organization signals the launching of a new production organization. In October, Biosystem's decision to reorganize the production activities is announced. The decision is to move all production from Bromma to Uppsala and Umeå.

Merging R&D Units, Product Portfolios, Stocks And Administrative Routines

Linked to the process of merging the marketing and production organizations are the processes to merge product portfolios and stocks, including storing and distribution procedures, and the large R&D units. All units have to adapt to a number of old and new administrative routines and information exchange systems.

One of the main reasons for the acquisition was that LKB and BTG manufacture complementary product ranges. Both companies have successively emerged as system suppliers, providing customers with instruments, chemicals and accessories, application services, and technical services. However, as stated above, the two companies have developed different capabilities and customer relations in these four areas.

Merging the two instrument portfolios proves to be a difficult task. In addition, the new integrated product portfolio, broadly consisting of LKB's 140 diversified instruments and Pharmacia's 15-20 instruments, needs to be adapted to the merger of the ongoing and planned product development projects in the two organizations. The merger starts during a period of rapid introduction of new instruments. At the same time as having to handle a merger of product portfolios and R&D projects - without losing pace and without losing customers in the marketing and sales activities - the new organization almost immediately has to take on the important tasks of rationalization and capital cost reduction, due to the sudden drop in 1986 in demand.

The rapid technological development within the growing biotechnology field requires a rapid development of new instruments and supplies to support the technological advances. For the joint project groups (including product managers,cenral marketing and R & D personnel) responsible for analyzing the R&D situation in 1986 it is not easy to analyze the overlaps regarding customers, products, techniques, and R&D projects and to what extent they complement each other. A large number of internal meetings take place from December 1986, throughout 1987 and even in 1988. One rough estimation of the overlap in the ongoing R&D projects and in R&D resources in the beginning of 1987 - from a LKB perspective - indicates that in one third of the projects there is a total overlap with the projects in BTG. BTG management considered it important to stay on the frontline and to provide the marketing subsidiaries with new products and systems. Concurrently, for the future, the new integrated R&D organization shall direct efforts to the development of integrated systems: instruments, media, accessories and methods.

In May 1987, BTG´s R&D manager presents a number of guidelines for the R&D organization and operations. The strategic guidelines for the future given to the five R&D units in Uppsala, Bromma, Cambridge, Piscataway and Milwaukee are: it is now necessary to increase the knowledge of customers' activities, to work in project form but increase the contacts between project groups and R&D centres, to keep up the technological competence e.g. through stable contacts with academic and basic research, to support an "entrepreneurial atmosphere", and to improve internal communication exchange.

It is generally acknowledged that during 1987 the five R&D centers shall remain and that relocation of projects will start at the earliest in the middle of 1988. One reason is that a common R&D organization has to be introduced first, based on project groups and a new central coordination unit. In addition, LKB's and BTG's project routines (from idea to finished project) have to be standardized and coordination routines with the central marketing and production project groups have to be worked out. The process of reducing the project overlaps starts, but the process of creating a new R&D organization takes longer than planned. The continuous information sent out during the first 18 months of the process, indicates the problems to integrate the 230 Bromma and Uppsala researchers in a new R&D organization.

On September 1st 1988, the new R&D organization is presented. One of the practical problems that has to be handled during the remainder of 1988 concerns the introduction of a common information system for planning and economic control of R&D projects. LKB's powerful system is to be introduced in the new R&D organization by the end of 1988. This process, in turn, is affected by the planning for and introduction of a completely new and integrated administrative information system for the whole BTG organization. The new integrated information system is to take the new Biotechnology Group a step towards becoming an industrial, distribution and product flow oriented organization.. During the 1990s - by linking the production and marketing units to the system - it is assumed that the company will be able to move further towards customer order based production with a high degree of direct distribution.

The administrative project group ("the AU Group") which has the responsibility for the difficult task of implementing the new system parallel to all the ongoing organizational changes affecting Pharmacia LKB Biotechnology, introduces a step-wise implementation program. Special information system work groups are formed centrally and locally. During 1989, the implementation of the new information exchange routines and systems overlaps with the start of an intensified capital rationalization program for distribution. The Capital Rationalization project, initiated by the new BTG manager, is given high priority and speeds up the process to create administrative and information routines to support a new efficient distribution system.

Overall, the new production organization, the R&D units, the projects and the new distribution oriented information system have to be adapted to a number of reductions in the new product portfolio. A comparison of the two companies' product portfolios indicates a strong product overlap. The process to adapt and transform the product portfolios begins in 1987, following a period of intense analyses of existing products, ongoing projects and long range product strategies. The immediate overlaps are handled in two ways. The products that overlap are either to be replaced by new products or one of them to be discontinued over a period of up to two years. An immediate effect of the integration is that the overlapped part of LKB's separation media program is stopped. LKB's limited large scale chromatography program overlaps completely with BTG's products and successively all LKB products are being discontinued. In electrophoresis and molecular biology, both companies' product lines remain unchanged. It is estimated that the new central distribution stores in Uppsala, after the transfer of Bromma stocks, contain over 24,000 articles. A large number of these are low frequency instrument parts.

In addition to the integration problems related to R&D, information systems and product portfolios, an important difference between BTG and LKB which causes a great deal of disturbance concerns the economic control systems. It is generally acknowledged that imposing Pharmacia's centralized economic, cost center-focused, control system, as early as in the first quarter 1987, on LKB's decentralized, profit center-focused marketing system is an important reason for the ”brain-drain” in LKB's subsidiaries and the escalating problems to integrate marketing operations.

Merging The Service Support Operations

In broad terms, LKB's and Pharmacia BTG's customer exchange relations have been centered around the suppliers' provision of instruments, chemicals and reagents, accessories, application support services, including training, methods and written support, and technical support services, encompassing installations, the supply of spare parts, repairs and up-gradings of installed systems. However, as stated above, there are important differences, especially in terms of the role of technical support and after sales services in interaction withcustomers.

The problems to merge the technical instrument service activities and resources are experienced on the central as well as on the subsidiary levels, not only due to the different views that the companies have on the operations, as such, but on the way they are and should be integrated with the other customer related exchange activities.

Problems that the local service organizations meet mirror general difficulties in merging the two nets of marketing subsidiary organizations. Due to differences in size, historical development, and power in relation to the home organization, both LKB's and Pharmacia's subsidiaries are already before the merger heterogeneous. The new central service support organization, formed in Uppsala already in early 1987 has to interact with a truly heterogeneous global marketing organization. The integration of the service support operations at subsidiary level due to the rapid pace of merging the subsidiaries, caused a noticeable loss of competence and knowledge to handle contacts with LKB customers.

As LKB's service technicians by tradition have been located closer to their customers and have been given the responsibility both for installations and continuous technical services, they generally have more intense and continuous customer contacts when the merger starts. As the responsibilities for instrument service activities in many cases have been performed also by sales people and by application service representatives (especially within the BTG organizational units), it is necessary to work out, in each market subsidiary, an intra-organizational structure and policy for how, when and by whom customer contacts shall be handled. These division-of-work adaptations are made locally, without much interference from the central units in Sweden, which, at the time, are busy handling the integration of the central support functions.

During 1987, efforts are made, by a number of subsidiary managers to move local service resources (mainly former LKB technicians and service resources) to centrally located work-shops, following established Pharmacia policies. However, it is argued that the risks are too high that LKB customers will be lost in the process since many of these customers have chosen LKB because after sales service has been available locally. Eventually, the centralization trend stops. Early in the integration process, it is decided by top management in Uppsala that all administration and economic performance control shall follow the old Pharmacia BTG routines. In practice, this means that the remaining LKB service personnel has to adapt to an "older" system, which in parts was similar to the system abandoned in LKB some years before.

Creating A New Central Service Division

As early as 1987, a new central Instrument Service function is established in Uppsala. The 2-3 years that follow are to a large extent devoted to position the new division within the organization and to establish coordinated and standardized routines for economic control and administration of the service support activities. These processes take place in a situation when the new central unit is constantly shrinking.

An important task in the early integration process is to ensure that, together with sales and marketing units, the loss of customer (especially LKB customers) contacts is minimized. In addition to the routines and procedures that have to be worked out with the local service units, it is necessary to coordinate activities and policies with local subsidiary management and local subsidiary sales and marketing units. Policies need to be developed concerning installations, demo. Instrument, repair, pre-installation checks, the extent of free services to be supplied, etc.

Internally, the positioning process includes the relations to a number of units and divisions. Contacts have to be worked out with the new BTG R&D, Production and Marketing Divisions. Contacts with the R&D departments are needed to plan for new product launches and new service demands due to changing products. In the meetings with the central marketing/product divisions, the conflicting demands on the service and the sales divisions have to be handled. The sales divisions are signalled that the pace in the sales efforts shall be kept during the merger process not to lose market shares. The service department is signalled to concentrate efforts on newly launched and installed systems. This stands in contrast to the efforts to handle and also keep old customers with older systems. While the sales departments are working with a 1-4 year perspective in instrument sales - and want the service departments to be supportive in their focus on the first years of customer contacts - service departments normally make their main profits after this warranty period. The contrasting philosophies need to be adapted by increasing the intensity of internal contacts and the frequency of joint meetings.

Parallel to this, the actual service support routines need attention. The mixture of former LKB, Pharmacia and new service policies and routines have to be adapted, stabilized and institutionalized in the new marketing organization, and be coordinated with the rest of the organization. The process to increase the control of global service activities and introduce more standardized exchange routines in the marketing system proves not to be easy and require a number of measures during the merger

1990: A New Integrated BTG Organization Takes Shape

In 1990, a new M.D. for the new Pharmacia LKB Biotechnology Group is appointed, and is given the responsibility for the major necessary reorganizations. Much effort has been devoted to analyze and decide on a new production organization, in the light of increasing overcapacity. The difficulties encountered in reorganization of production is considered to be a major reason for the resignation of the former MD. One of the new MD´s first decisions concerns the production organization.

The intended and unintended consequences of the multitude of actions and reactions in the merger of LKB and BTG set the stage for the important strategic meeting in 1990. The meeting is arranged as the start of a number of organizational change projects to handle the repercussions of the fusion and to meet the concurrent downturn of the whole biotech related

industry. These change projects arise from a situation that has been shaped by many major changes in Pharmacia's biotech operations in the period 1986-90. The focus on merging marketing, production, administrative units, etc. separately, has resulted in processes whereby "isolated" or loosely linked central and local organizational units have emerged. In 1989-90, it is generally acknowledged that the merger process during the preceeding years as an undesired effect has reduced internal coordination and contacts between, above all, the central and the local subsidiary units and also between the subsidiaries and the customers. This develoopment need to be arrested and reversed.

The subsidiary organizations during the preceding period have implanted a mosaic of internal routines and organizational arrangements. It is acknowledged in 1989-90 that something has to be done about this global net of subsidiaries. The lack of stable coordinative routines between HQ and the subsidiaries and the local heterogeneity is the cause of growing internal concern.

The stocks of chemical products, instruments, spare parts and accessories is growing towards the end of 1989. Both in the local subsidiaries and in the central warehouses in Uppsala and elsewhere, the stocks of slow moving products are growing rapidly. A mixture of distribution routines and policies penetrates the intra-corporate organization. As regards the services, the heterogeneity of local policies for application and technical services is increasing and the level of central coordination and standardization of the technical services especially is rapidly decreasing.

Part III After The Core Merger Process: New Connected Change Projects And Yet Another Merger

The difficult core merger process of the two companies lasted for approximately three years. Some of the unexpected consequences became the origins and triggers for a number of strategic marketing changes in the following years. One more merger and three major interconnected change projects can be identified affecting both the internal organizational network and the external relations to customers, suppliers and others.

In one of the biggest business deals ever in Sweden, the whole Pharmacia corporation was financially merged into a conglomerate, the state-owned Procordia Group. Processes began to reorganize Procordia's health care related organizations, including a merger of Procordia owned Kabi and the Pharmacia Corporation to which the BTG belonged. From the end of 1989, through the pre-merger planning process, and from the official establishment of Pharmacia Biosystems AB in June 1990 until the early 1992 Pharmacia's biotech supply operations go through major organizational changes. The practical integration and change process begins during the second half of 1990 and continues with varying intensity throughout 1991 until in February 1992 Pharmacia Biosystems AB is dissolved and BTG returns to its earlier organizational status.

One of the three major marketing change projects, begining in 1989 and merging with a capital rationalization project soon after concerned *physical distribution* and stocks of instruments and chemicals. It reached implementation stage in the Spring of 1990, moving towards customer order based production with high degree of direct distribution and a completely new way to distribute instruments, chemicals and accessories. The captital rationalization project efforts to tear up the old distribution and capital management routines, becomes an important motor in the processes to develop a more efficient, "industrial" way to use distribution resources in BTG.

Concurrently, a centrally coordinated project started to restructure *after sales service* operations. During the core merger process, much of LKB's after sales experience had been

lost, to a large extent depending on the above mentioned differences between LKB and Pharmacia as regards customer relations, service strategy, and service organisation. After Sales activities were not prioritized until early 90s. Then effforts to develop and implement service contract business began. This was met with major difficulties due to differences in subsidiary organization, policies and local market conditions. The regionalization project (see below) had started earlier and made it difficult in many cases for the after sales project group to find people to interact with in subsidiaries.

Thus, during the same period, the company´s old, nation based, net of marketing subsidiaries was rearranged and adapted to the new international situation. In this *regionalization* project regions and sub-regions were formed. Heavy emphasis was put on reorganizing market organizations in Europe. In particular, radical changes are implemented that aim to modify the old, country based system with few direct contacts between subsidiaries, and establish an integrated European marketing organization with a new central coordination and support unit in Brussels and more intense vertical contacts with the central marketing support and production units. The plans also include the restructuring of the units in the other major regions: North America, Far East and Japan. The organizational change implies a new logic for global presence, which to a large extent is driven by internal efficiency considerations, but also by the concurrent internationalization and global sourcing strategies of some important biopharmaceutical customers. Within the regionalization program, ideas to develop a key account system for handling customer relationships in a new way were concretized.

Analysis

The processes that lead the merging firms, as a new corporation, onto new roads of development, after the ”deal”, are complicated and interdependent. To implement the merger a number of processes are designed by corporate management, e.g. the initial functionally defined integration processes, each with a project group, Even so they do not emerge as easily defined and delineated change projects. A multitude of change actions taken by a great many organizational units, groups and individuals create what appears as a quite chaotic period in the history of the company. Even if management may influence the temporal profiles they are difficult to control completely. Also developments external to the merger may unexpectedly cause redirection of the the processes. We assume that the preparations for the “deal”, (objectives, analyses, communication) enter into the merger process (Market practice 1) as, more or less explicit and clear and more or less commonly agreed upon, a priori norms, representations (descriptions, network theories) and ideas about exchange (resource transfers, communication) between the two firms. During the M1 process, however, they may be considerably changed. Also such changes can be seen in a temporal profile perspective. E.g. a modified ”after sales” strategy may be formulated before, after or concurrently with extensive communication between organizational units and any specific change in sales reporting routines.

In this section we will use our conceptual framework regarding networks, market practice and temporal profiles to analyze the merger process. We repeat the research question:

How does the temporality of the merger process (M1) affect the transformation of the separate market practices (M2) in the merging companies to new joint and stablized practices?

Next, we will interpret some of processes described above and develop a set of propositions, with reference to the case and the conceptual framework, that might be used to guide further research on the subject matter.

Revisiting Some Processes

Sequencing merger projects

To implement the merger a number of processes are initially designed by management, e.g. the functionally defined integration processes, each with a project group, as regards Production, R & D, Adminstration, Finance and Economy, Personnel and Information, Central Marketing and Local Sales. Management wanted to schedule these processes in a specific sequential order (more or less as above) because of their supposed interdependencies and because of their assumed influence on on-going relationships to customers (M2). We saw in the case how the initial sequential ordering was changed. The merger of the sales subsidiaries began earlier than planned and was carried out with more speed and less duration than expected. Merger of sales subsidiaries were coordinated on the local level with little influence from central management and with little coordination with the other merger processes mentioned above. Thus M1 execution disregarded the representational practice stated initially that relationships with customers (M2) should not be disturbed during the early core merger process.

The lack of central attention to what happened in the subsidiaries made the subsidiary merger process more decentralized and much controlled by the acquiring party at the local level. Linked to this was a rapid implementation of Pharmacia´s economic control system which emphasized central cost control rather than decentralized profit measurement and thus ill suited as a governance mechanism for the LKB market practice (M2). The subsidiary merger process and the economic control system strongly influenced the exit of LKB personnel, which in turn had a negative effect on the established LKB-Customer relationships (M2) as well as on inputs from the local, former LKB sales/service organization to the merger process involving central units, especially Production and R & D. Thus, coordination attributes of M1 influenced the other dimensions in the temporal profile. M1 also included an early change of economic control systems in conflict with LKB norms. LKB personnel leaving BTG reduced resources available for M2. Representational practice residing in LKB subsidiaries was lost. Thus M1 contributed to an undesired change in M2 by seriously disturbing relationships between the former LKB organization and its customers and also to further M1 problems to handle ”vertical” relations between subsidiaries and central units, thus contributing to a prolongation of the merger process.

Proposition 1. Sequencing different M1 processes without explicit coordination between these processes will likely extend the period required to create and implement new joint M2s.

Proposition 2. The increased speed of single change processes in the M1 process without coordination between them will likely negatively affect the speed to establish new joint M2s

Proposition 3. Attention will be sequentially directed at different exchange relations in different parts of the network which will impact the establishment of joint M2

The merger influenced by downturn in customer demand
M1 was strongly affected by an external, unforeseen M2 process: the downturn in demand for biotech products and services. Overcapacity in production became evident. This made it urgent to prioritize cost saving and capital rationalization in production and logistics. A number of reductions in BTG´s product portfolio, both instruments and chemicals and mostly affecting LKB products, are made. A capital rationalization program mostly aimed to affect inventory and distribution activities is prioritized. At the same time, it was still considered important not to loose pace in the development and introduction of new instruments since the industry is characterized by rapid technological development.

Proposition 4. Unforeseen major changes in M2 during the M1 processes will likely lead to changes in the temporal profiles of M1 processes.

The complex merger of Production and of R & D
The merger of production and of R & D started early but became more complex and took longer time than expected. It was difficult to analyse the overlaps and complementarities between BTG and LKB as regards customers, products, techniques and R & D projects. This aspect of representational practice was extended in time. Also when the new R & D organization was presented, a common adminstrative information system for planning and economic control of R & D was not yet fully developed. It was assumed that this information system, in the 90s, when linking also the production and marketing units to R & D, should help BTG´s development to become an industrial, distribution and product flow organization including customer order based production and a high degree of direct distribution. The information system development is an M1 process that will influence future M2 processes in terms of norms, representations and exchange. Its temporal profile should preferrably be coordinated with not only R & D merger but also M1 for production and marketing.

Proposition 5. Focus on coordination of activities within single change processes without coordination between M1 processes will likely cause lower speed and longer duration in the process to establish new joint M2s.

Merging the service organizations
The initially launched merger processes did not specifically focus service support organizations, in spite of the fact that as regards strategies and routines the two companies had quite different market practices reflected also in the their more general handling of exchange with customers and that aspects of service also were implied by the merger objectives, especially systems selling ambitions (M2 before and after merger). The LKB routines emphasized local activities handling instrument repair and maintenance in the long run and in close interaction with customers. The Pharmacia routines for service of instruments were more centralized, less developed and more focused on applications, before and during installation. A new central service support organization formed soon after the merger had to interact with a number of central, internal units, emerging during the merger process but also the quite heterogeneus, globally dispersed market subsidiaries, each with more or less different service policies and routines, within as well as between subsidiaries.

Proposition 6. Depending on *when* controversies concerning norms appear in M1 the norms will have different impact on creation of new joint M2s .

Processes before and after the core merger processes

Before the core merger process starts in 1986, the two companies have initiated change processes that continue as the core merger starts. For example, in 1986, a few months before the merger, LKB begins to implement a regionalization project. Other ongoing change processes in the marketing network are related to the specialization/divisionalization which started earlier in many sales subsidiaries. In a more long-term perspective, the different philosophies in LKB and Pharmacia, that surface as the core merger starts, are a natural consequence of the different historical backgrounds of the two companies.

Even if the core merger process ends late 1989/early 1990 new market practices (M2) are far from developed and stabilized. We have referred to one new merger and three projects aimed at changing M2.Soon after Pharmacia was acquired by Procordia, a new business group Pharmacia Biosystems was launched but never fully implemented. However, during its existance it had important effects on the management of three concurrent change processes involving the marketing subsidiaries: regionalization, physical distribution and after sales service. One consequence was that some M1 processes took other directions, were temporarily stopped or delayed and as a result extended in time. For others however there was very little influence because these processes were coordinated at a lower organizational level, BTG rather than Pharmacia-Procordia.

The regionalization project was partly a continuation of an LKB project that was stopped by the Pharmacia/LKB ”deal”. The objective was to more effectively handle changes of M2 that were related to internationalizing customers, direct distribution, services etc. The distribution and capital rationalization project was also a continuation and integration of two earlier M1 processes aiming to reorganize logistics, eg. stocks, lead times, service levels. The after sales service project, initially was less prioritized, and encountered serious problems due to the heterogenity and on-going regionalization, the loss of LKB after sales experience and the difficulties to reconcile the different service policies in LKB and BTG. Efforts to formulate and get subsidiary acceptance for ”service contract” policies and routines were not very successful in the time period studied.

Proposition 7. Convergence between the parties´ M2 is dependent on how the temporal profile of M1 considers the on-going change processes in M 2 before the merger.

Proposition 8. The timing of the overall M1 process will affect the creation of new joint market practices, positively or negatively, depending on in what stages the two firms' ongoing market change processes (i.e the two ongoing M2s before the merger) are in.

Proposition 9. Static norms and representations of synergies, complementarities, as a basis for a merger requires to be complemented during the M1 processes by considerations relating to the temporal profiles and dynamics of the merging parties´ M2. If not there will be continuos and inefficient revisons of the planned sequences

References

Andersson, P.(1996) *The emergence and change of Pharmacia Biotech 1959-1995. The power of slow flow and the drama of great events*. Stockholm: Economic Research Institute

Andersson, P (1996a) *Concurrence, transition and evolution-Perspectives of industrial change processes*. Stockholm: Economic Research Institute

Andersson, P. and Mattsson, L.G. (2006) *Construction of temporal profiles and shaping of markets*. Paper presented at the Annual IMP conference, Milano.

Callon, M. (1992), ”The Dynamics of Techno-Economic Networks”, In: R.Combs, P.Saviotti & V. Walsh (eds.), *Technology change and company strategies: economic and sociological perspective*s (pp. 72-102). London: Academic Press

Dobbs, Richard. ”Creating value from mergers”, *McKinsey Quarterly*, 2006 Issue 4, p4-5,

Helgesson, C.F., Kjellberg, H. and Liljenberg, A. (red) (2004), *Den där marknaden. Om utbyten, normer och bilder*. Lund: Studentlitteratur

Johanson, J. and Mattsson, L-G., (1992), "Network positions and strategic action - an, analytical framework", In: Axelsson, B. and Easton, G.(eds.), *Industrial Networks - A New View of Reality*, London: Routledge pp. 205-217

Pieters, R. and Verplanken, B, (1991), "Changing our mind about behavior", In: Antonides, G., Arts, W. and van Raaij, W.F.(eds.), *The Consumption of Time and the Timing of Consumption - Toward a New Behavioral and Socio-Economics*, Amsterdam: North-Holland

Sztompka, P.,(1993), *The Sociology of Social Change*, Oxford: Blackwell