The Concept of Inertia in Business Relationships: Empirical Analysis of a Design Furniture Manufacturer

Anu Norrgrann¹ and Karita Luokkanen
University of Vaasa

Abstract

In this paper we discuss how inertia can manifest itself in business relationships. We focus on the role of history and cumulative inertia in the form of path dependencies and the ways in which the existing paths are challenged by internal or external changes, thus revealing latent inertia. In our analysis, we explore inertia of different types (negative/positive, structural/mental) and its expressions on different levels and functions in the light of a longitudinal case study from the furniture industry.

INTRODUCTION

Business relationships exist and develop in an environment of constant dynamics, change and adaptive processes, either small and incremental in nature or more radical. However, the processes of change and adaptation are rarely easy or smooth. A concept that describes the constraints and difficulties related to change is inertia. It has been used by different theoretical schools of thought, which have addressed various dimensions of it. This enables us to gain a broad and general picture of the concept, and provides an opportunity to use the term in many ways in different contexts.

However, the fragmented use of the concept of inertia implies some problems as well as gaps in the literature. First, the concept of inertia is often used on a fairly abstract level, on multiple levels of analysis, and without analysing and exploring specific effects of inertia on change and adaptation. This results in inconsistency of the content of the concept, as well as difficulties to compare the way inertia is dealt with in different studies. Additionally, inertia has been operationalised quite subjectively and abstractly (Miller and Chen 1994).

Secondly, the explicit and detailed discussion of antecedents of inertia is not commonly included in the studies. Also the effects of inertia are not often tested or analysed. At present theories have not specified which factors have the greatest effect on constraining change, or whether there are significant effects arising from the interaction of two or more factors (Gresov et al. 1993).

Thirdly, and closely linked to the previous point, is the notion “history matters”, which is commonly used in this type of study. However, what is the role of history in the

¹ Corresponding author. University of Vaasa, PO Box 700, FIN-65101 Vaasa, FINLAND. Tel +358-6-3248508. Fax. +358-6-3248171. E-mail: anu.norrgrann@uv.wasa.fi
context of inertia? Does history build strength or restrict change and future development?
The role of history related to inertia originates mainly from the concept of path dependency, which in turn is seen in both positive and negative light within different theoretical approaches (Fear 2001).

The purpose of our paper is to explore the question “How is inertia manifested in a business relationship?” We focus our discussion on:

- the role of history and cumulative inertia in current relationships and the ways in which current business relationships give inertia to other relationships
- the structures and functions, where inertia seems to occur
- which kind of (positive and negative) characteristics inertia has

CONCEPTUAL FRAMEWORK

Path dependence as an antecedent to inertia

It has commonly been argued that history has a strong role in the trajectories of firms and the choices they make. A notion which has been used to theoretically grasp this phenomenon is path dependence. In the next section we shall briefly overview this concept and discuss its linkages with change and inertia.

The discussion of path dependence has within economics concentrated on how inefficient technologies are adopted and persist as a result of increasing returns, self-reinforcing mechanisms and externalities (Heffernan 2003). Particularly, the work of David and Arthur are frequently cited and regarded as the foundation of the concept of path dependence. Their basic assertion is that sub-optimal or inefficient technologies can become locked in and become industry standards when there are significant network effects and that such inefficiencies can persist over time. Their cases of the QWERTY-keyboard and the VHS-format in VCRs provide illustrations of developments where the success of the technology was dependent on a certain historical path, rather than product optimality or superiority (Stack and Gartland 2003; Barnes, Gartland and Stack 2004).

Path dependence thus illustrates how solutions can be locked in by historical events. This again can inhibit the emergence of new paths that break with the existing structure, also explaining why many new products fail (Håkansson and Waluszewski 2002).

According to David’s (1985) definition (quoted in Håkansson and Waluszewski 2002 and Araujo and Harrison 2002), a path dependent sequence of economic changes is one of which important influences upon the eventual outcome can be exerted by temporally remote events. Factors that lie behind this lock-in include: (a) technical interrelatedness /need for compatibility; (b) economies of scale; (c) quasi-irreversibility of investments (David 1985, quoted in Håkansson and Waluszewski 2002).
Araujo and Harrison (2002) continue saying that path dependence is a characteristic of sequences of events, in which a particular economic process is unable to shake free from the influence of its past states or motions.

Firms' decisions and actions open up or close down future choices regarding products, markets and technologies. By making specific investment decisions or by developing specific product or market knowledge, or by establishing a repertoire of specific routines, firms and other actors limit and structure the possibilities of future actions open to them (Teece et al. 1997, quoted in Booth 2003).

Path dependence stories have been criticised for attributing inefficiencies in development processes mainly to historical accidents and thus minimising the role of firm agency. More recently, scholars have begun to focus on lock-in not only as a random event or historical accident, but on examining the environment in which the lock-in occurred. The role of entrepreneurs and firms in shaping and interacting with the environment is increasingly emphasised (Stack and Gartland 2003).

Araujo and Harrison (2002) emphasise the view that events can be dependent on history, but this does not imply that events can be predetermined or are inevitable. A more open-ended view of path dependence incorporates both contingency and agency. While path dependence may limit options, strategically reflexive actors can make sense of their positions, interests and identities and change the direction of their paths or even create new ones (Araujo and Harrison 2002).

Araujo and Harrison (2002) discuss two types of path dependence: self-reinforcing and reactive sequences. The former is related to more structural mechanisms that reproduce and amplify the impact of earlier events, thus keeping development moving along the specific path. Economists refer to such effects as increasing returns and positive feedback mechanisms, which can originate from large set-up or fixed costs, learning effects, coordination effects or adaptive expectations.

Reactive sequences, again, are seen as path-shaping actions, where disturbances do not reinforce the existing path through positive feedback, but trigger responses that change the path in a new direction (Araujo and Harrison 2002). Path creation focuses, in contrast to path dependency, on the active role of entrepreneurs and firms in helping shape the evolution of markets and the rules by which they operate (Stack and Gartland 2003).

However, actors may in fact not only alter paths, but also reinforce the existing ones. Barnes et al. (2004) use the term behavioural lock-in to describe path-dependencies arising from situations where actors are stuck in some kind of inefficiency or sub-optimality resulting from habit, learning or culture. This is linked to the notion of "irreversibility due to learning and habituation" in David's (1985) definition of path-dependence (Barnes et al. 2004).

Behavioural lock-in and habit can concern different types of actors, producers, professional groups or consumers. Once a particular behaviour is embedded in an organisation, a strong status quo (inertia) may discourage other behaviour. Inefficient
processes can thus be locked-in on the producer side, while on the consumer side, “inefficiencies” can prevail in the form of consumer tastes and attachments locking-in (or locking-out) certain products (Barnes et al. 2004).

On the level of the individual firm, path dependence can be caused by the set of rules the firm has adopted. Rules develop to facilitate and provide guidance in decision making situations, i.e. help individuals deal with the difficulty of perceiving all possible contingencies. Rules utilise existing knowledge and provide procedures for responding to new situations. There is thus a trade-off between lower decision-making costs and innovative responses. If rules are followed rigidly, it can result in path dependence (Heffernan 2003).

Strategically, path dependence can give rise to competency traps where successful organisations are less likely to seek change. If core capabilities are “too finely tuned” they may ossify over time and become liabilities rather than sources of competitive success (Booth 2003).

Heffernan (2003) claims that the degree of organisational path dependence is limited by profit considerations. That is, in the case of a crisis, actors tend to begin looking for new ways of doing things and seizing upon new ideas more actively. This is referred to as entrepreneurial alertness.

Håkansson and Walouszewski (2002) point out that paths do not exist in a vacuum, but that different paths may intersect and form crossroads. In such crossings, actors, activities and resources, as well as habits and routines are confronted and these confrontations can potentially lead to positive outcomes. Håkansson and Walouszewski’s study illustrates how crossings between paths enhanced technological development and enabled innovation. They conclude that the better a single process can be related to collective patterns that path dependencies are a sign of, the more successful the process will be.

In sum, path dependencies can be characterised in both negative and positive terms. They can create lock-in of inefficiencies or market imperfections and technical, behavioural and cognitive constraints. Simultaneously, it can provide possibilities to utilise established competencies and routines as well and facilitate or enable, and not only hinder, development.

The concept of inertia

At the same time as an organization creates its paths, it also accumulates inertia, in both positive as well as negative terms. Cumulative inertia takes often latent and implicit forms, until it gets concrete and explicit in the moment of external or internal forces, which challenge the previous or past ways of acting.

The concept of inertia has been used in theories such as organizational ecology, organizational evolution and metamorphosis, and adaptation (Gresov et al. 1993; Miller and Chen 1994). As a rough categorization, the use of inertia in the early phases started to develop in two areas of academic inquiry: on one hand, studies on organizational
adoption and strategy saw inertia as a negative issue, stressing inertia as inadequate adaptation to a changing environment, or as a resistance to fundamental reorientations in policy. On the other hand, in evolutionary economics and population ecology, inertia is related more to firm development as it emphasizes also the positive sides of inertia, i.e. inertia as a provider of reliability, development, continuity and stability (Miller and Chen 1994). In the following section, the concept of inertia will be discussed in more detail.

**Definitions**

In organizational studies, the discussion of inertia is commonly linked to the concept of *structural inertia* (Hannan and Freeman 1977) within the context of population ecology. The structural inertia theory asserts that “existing organizations frequently have difficulty changing strategy and structure quickly enough to keep pace with the demands of uncertain changing environments... it depicts organizations as relatively inert entities for which adaptive response is not only difficult and infrequent, but hazardous as well” (Baum 1996: 77-78, 99 quoted in Jaffee 2001). Hannan and Freeman (1984) define inertia related to environmental change as follows “Structures of organizations have high inertia when the speed of reorganization [core feature change] is much lower than the rate at which environmental conditions change” (p 151).

In the context of strategic change, Huff, Huff and Thomas (1992) describe inertia as an “overarching concept that encompasses personal commitments, financial investments and institutional mechanisms supporting the current ways of doing things... inertia describes the tendency to remain with the *status quo* and the resistance to strategic renewal outside the frame of current strategy” (p 55). This definition leads us to the concept of *mental inertia*, which originates in cognitive and learning approaches, thus linking the firm’s difficulties to change to cognitive structures, perception and interpretation.

Gresov et al. (1993) define inertia as “a tendency not to move or act”, or as a concept, which denotes the property of a system “by which it remains at rest or continues to move in a straight line, unless acted upon by some external force (Scribner-Bantam English Dictionary 1980, p. 436). According to Gresov et al. (1993), the latter definition is more common in inertia studies, and it reflects the inertia not only in relation to external forces, but also against a firm’s own development. In this sense, a firm can be seen as inertial even it is making changes, if the changes are along the line of the firm history (Kelly and Amburgey 1991).

Finally, Miller and Chen (1994) speak about competitive inertia, and define it as “level of activity that a firm exhibits when altering its competitive stance in areas such as pricing, advertising, new product introductions and market scope.” In their view, inertia is discussed on strategic and tactical levels, bringing the concept to a more concrete level compared to previous studies. Competitive inertia reflects the number of market-oriented changes a company makes in trying to attract customers and out-maneuver competitors.
Within the IMP tradition, the issue of inertia has also been used to some extent, by Ford et al. (1998) to describe the difficulty for a firm to change supplier or customer. Inertia thus exists both on the customer side and the supplier side. A business buyer may not have the resources to re-evaluate each purchase or want to avoid unknown problems or costs that might be related to a new supplier, which can imply a “bias towards the incumbent”. Also on the supplier side, sales personnel may prefer to approach existing customers, whom they already know, rather than attempt to gain new clients. Even this is related to the avoidance of uncertainty and risks with new relationships.

Håkansson and Waluszewski (2002) discuss inertia in the light of resource interaction and technological change. They, however, prefer to use another metaphor borrowed from physics, namely “friction” to better describe movement related to interacting resources.

The sources of inertia

As stated implicitly in previous definitions, several sources of inertia can be identified. According to Gresov et al. (1993), resistance to change is inherent in organizational design, where existing organizational arrangements create and maintain stability, and control or inhibit change. Conversely, forces that promote change are primarily external.

In general, the sources of inertia are found both internally and externally. According to Hannan and Freeman (1977), the internal, inertial pressures arise from an organization’s investments, the constraints on the information received by the organizational decision makers, internal political constraints, and constraints generated by their own history. Inertia increases through established routines, institutionalization and increasing commitment to the current ways of doing things. Additionally, organisations are assumed to get more inertial when the firm grows and ages and when the complexity of the organization increases (Huff et al. 1992).

From a cognitive or mental point of view, Huff and Huff (2000) argue that resistance to change at the level of individual cognitive processes is the primary source of inertia in organizations. They continue that inertia “results not from any external force but rather from properties inherent to the use of knowledge structures. The very properties that make schema useful sense making structures (i.e. efficiency, expectancy) also stand in the way of change” (p. 46). Within the IMP Group, the notion of “framing” has been applied (Torvatn 2004) to describe how actors view resources and how their perceptions of them affect the extent to which they (are able to) make use of them.

Mental models, historical experience and organizational capabilities are all related to internal sources of inertia (Wong-MingJi and Millette 2001, Senge 1994) According to Miller and Chen (1994), actor’s incentives to act and awareness of alternatives are the sources of competitive inertia. Incentives to act are linked to previous performance, where the past success is in general linked to resistance to change and reinforcement of previous ways of acting, whereas failure is more commonly seen as a trigger for a change. In this sense, a successful past can cause a competence trap and an illusion of continuous success.
Awareness of alternatives perceived by the actors is also partly dependent on the previous and current ways of acting. Organizations competing with many different rivals or for a great variety of customers can learn much about the demands and possibilities of their environments and are more open to perceive new opportunities. Organizations that compete in a narrow market against similar competitors or that have only one type of customer confront a more sterile and homogeneous environment; one that may foster inertia. Also managers’ past experiences in taking actions determine managerial knowledge bases, thereby influencing how and in how much detail managers perceive their environments (Miller and Chen 1994).

The external pressure towards inertia, in turn, originates from the institutional and competitive environments (i.e. legal and fiscal barriers to entry and exit from markets, the acquisition of information, legitimacy constraints emanate from the environment). (Wong-MingJi and Millette 2001, Hannan and Freeman 1977). Constraints arise also from social pressures for accountability and reliable performance (Hannan and Freeman 1984, Kelly and Amburgey 1991). Goodwill assets with suppliers, buyers and other stakeholders accumulate inertia. These commitments are channelled and reinforced by expectations outside the organization, largely embodied in the institutions that operate at a level above individual decision making. On the other hand, the past can include a lot of experiences and knowledge, which are needed for operating in an effective way for learning.

Positive and negative aspects of inertia

In the context of inertia, there is also a discussion of the positive and negative characteristics of the concept. Especially in the strategic field, inertia is often seen in a negative light because it makes firms less adaptive and in this sense, it may hurt performance or even survival. Additionally, the structural inertia model assumes that past is inert until exogenous forces impel change, overcoming a sluggish past. In this sense, the past is seen as a constraint that organizations need to overcome (Fear 2001).

However, inertia and path dependency (or past dependency), are not just restrictive characteristics of a firm. It can be also the stock of accumulated knowledge and resources (Fear 2001). It may give managers time to think about their competitive actions and to choose these actions more judiciously. It can also stabilize product offerings so that customers will not be alienated by unpleasant surprises. Moreover, parsimony in the number of competitive actions allows organizations to learn efficiently to concentrate on and exploit what they do best. It also reduces the chances of error that come with making changes, especially major changes (Wong-MingJi and Millette 2001, Huff et al. 1992, Miller and Chen 1994). In other words, it is not necessarily only a negative phenomenon. Häkansson and Waluszewski (2002) also describe path dependencies as signs of the existence of collective patterns, which can be used either to hinder or to enhance development.

Manifestation of inertia

Efforts have been made to recognize the elements or factors in organizations that cause inertia. In some studies, different adaptive elements have been identified, where the
difficulty, risk and cost levels of change are different. Structural inertia is discussed on two organizational levels: core and peripheral, and they are classified according to their bearing on resource mobilization (Hannan and Freeman 1984). The core structure includes stated goals, forms of authority, core technology and marketing strategy. Peripheral structures include horizontal and market-extension mergers, joint ventures, and interlocking directorates. They protect an organization’s core from uncertainty by buffering it and by broadening the organization’s connections to its environment. The changes are assumed to be easier to manage in peripheral features, thus the inertia in core features is stronger than in the peripheral features (Amburghey and Kelly 1991: Hannan and Freeman 1984).

Strategy and adaptation studies often analyze adaptation and inertia in a hierarchical way (i.e. core features, strategic, competitive and operative levels), where the core features are more inertial, and changes are more common in operative or competitive levels and actions (Vesalainen 1995). Miles and Snow (1978), see adaptation happening in firm’s administrative, technological and product-market areas, which includes, to some extent, the same elements as the categorisation of Hannan and Freeman. In the cognitive field, it has been concluded that changes in firm’s identity, mental models and belief systems are not common and inertia is relatively high (Huff and Huff 2000).

In the empirical part, we combine the insights from these different perspectives in order to gain a broader and more detailed picture of the concept of inertia in the context of a business relationship. Our discussion will focus on the following aspects:

**Cumulative inertia – embeddedness and path dependence**

It is often argued that history has a strong effect on a firm’s actions and at the same time, inertia accumulates in different structures of organisations. The first empirical phase concerns the path dependence as antecedents for inertia. In the IMP perspective, this is related to the notions of embeddedness, adaptation and mutual orientation.

**Perception**

We want to address the importance of perception when evaluating inertia. That is, the way individual actors perceive (e.g. resources either in an inert vs. innovative way), how they recognise and utilise “crossings” in path-dependent structures and opportunities in new combinations of resources. Additionally, we address the issue of time in assessing inertia; how a structure or resource may seem inert and “cemented” at one point in time, when exposed to new forces or interfaces, it can be easier to change.

**The nature of inertia**

As stated earlier, inertia is a broad concept which manifests itself on different levels, structures and functions of a firm. It also seems to have positive and negative consequences for the firm’s later actions. Empirically, we pay attention to the mental and structural aspects of inertia, in which way inertia manifests itself, and the positive and negative aspects of it.

In this study, the concept of inertia is always reflected and analyzed with reference to the firm’s “core path”, which results from its historical development. In this way, we are not trying to “decide” if the firm is inertial or not, instead we are discussing, in which
sense and levels inertia exists, and which kind of positive and negative aspects it has in different functions.

METHODOLOGY

The empirical data that forms the basis for our analysis consists of a longitudinal case study of a Finnish furniture manufacturing firm. The case selection was based on a pre-existing longitudinal data set of 60 furniture manufacturer firms, collected during the last 20 years within the framework of the Furniture Project at the Department of Marketing at the University of Vaasa. This data consists of structured telephone interviews with each firm, gathered with the same format in the years 1986, 1990, 1993, 1995 and 2000. The case firm was strategically selected to illuminate the phenomenon under study as it filled two important characteristics. First, a clear development path in a firm’s history could be recognized, which enabled its use as an analytical base for the concept of inertia. Second, we could identify other businesses activities in this case, which could reflect the firm’s intention to either follow or attempt to break with the historical path.

The focal firm in our case is characterised by a strong dependence on a certain business relationship, which has strongly affected its development. The firm has also simultaneously attempted to engage in other types of complementary business activity. In selecting this case, we hoped to gain insight into how such a dominant relationship may cause inertia that could possibly hinder, or facilitate, engagements in other relationships and ventures.

In part, we have relied on structured telephone interview data from the aforementioned Furniture Project. This data provided us with insights into how the firm has developed through time in terms of size, investments, products and relationships. In addition to the longitudinal data, a semi-structured personal interview with the managing director of the company (the same person who had also been the informant in the studies during earlier years) was carried out in May 2005. In part, this provided us with an update of the firm’s activities, but also allowed us to explore the relationship and product development issues in more depth. In conjunction with the interview, we also received the opportunity to visit the production facilities and observe the production processes, which helped enhance our understanding of the activities within the focal firm. Furthermore, secondary data in the form of product brochures, company web pages and annual reports were also used as sources of evidence.

EMPIRICAL CASE: HKT KORHONEN

Background description

The focal firm, HKT Korhonen Oy, is a Finnish furniture manufacturer. It could be classified as a medium-sized firm, currently having 75 employees and a turnover of 4.4 million euro.
According to the company history (available on www.hkt-korhonen.fi) this family-owned firm was founded in 1910 by the carpenter Otto Korhonen, who in the late 1920’s began to collaborate with the internationally renowned architect Alvar Aalto in developing new, functional furniture for Aalto’s architectural projects, among others the Paimio sanatorium. Aalto and HKT Korhonen collaborated during several decades in the development of new products and new, innovative techniques related to their technical implementation.

Starting from the collections developed in the 1920’s onwards, the manufacturing of Aalto furniture has continuously formed the backbone of economic activity for HKT Korhonen. During the last decade, the share of the Aalto collection in the firm’s turnover has ranged between 75 and 95%, being today somewhere around 85%.

HKT Korhonen is however only the manufacturer of Aalto furniture. The marketing of these products since the 1930’s has been the responsibility of another actor, Artek Oy. According to Artek’s history (available on www.artek.fi) it was set up to market Aalto’s furniture, lamps and textiles particularly in international markets, where Artek focused its operations from the very beginning. Artek was initially founded by among others Alvar Aalto himself, but today it is owned by the international investment group Proventus AB. Artek’s headquarters are based in Finland, where it has showrooms in the biggest cities, as well as a national and international network of distributors who represent their products. Thus, to the final consumer, Aalto furniture appears as Artek product.

Alongside the production of Aalto furniture, sold through Artek, Korhonen has also engaged in supplementary business activities to a varying extent. These activities have ranged from subcontracting to office furniture firms and caravan manufacturers to more recent investments in own new product development ventures. Even these products could, like the Aalto collection, be characterised as highly design-intensive. Today, the share of own products is about 10% of turnover and subcontracting and projects account for some 5%.

Path dependencies arising from the Artek relationship

The history and development of Korhonen has thus been closely intertwined with that of its main customer, Artek and it is clear that 70 years of cooperation between these business units sets its traces on the parties involved and creates paths, which can be difficult to break. In the analysis that we present in this section, we attempt to identify ways in which the relationship with Artek has affected Korhonen and how this relationship history, which has caused certain path-dependencies, manifests itself in the firm’s ability to engage in other types of business activities than those that are directly related to Artek. In the discussion, we have chosen to call the Artek related path-dependencies the focal company’s “core path”.

Analogically with the so called 4R’s model (Håkansson and Waluszewski 2002), we distinguish between four levels on which history can affect a company and become either a facilitating or hindering factor. That is, we highlight certain effects on facilities
(mainly production-related), products, business relationships and on the business unit itself. In line with our earlier discussion on the two sides of inertia: structural and mental, we also stress that history sets its traces on a company’s resources not only in a physical sense, but also mentally in the actor’s perceptions of these physical or social resources.

**Production/facility level**
The fact that the focal firm from its founding started out as the manufacturer of Alvar Aalto’s designs and that the share of this production has through the decades persistently and clearly dominated the activities of the firm, naturally implies that the facilities have developed “hand-in-hand” with developments within Artek. Artek’s products have defined what kind of production facilities are used and production has been organised with these products as a point of reference.

Apart from the type of facilities, developments related to the amount of the facilities has been linked to the Artek relationship. Investments in machines, technologies and premises have followed Artek’s expansion in terms of sales and the number of products offered. The Aalto collection has namely been extended through renewing and re-issuing Aalto designs through the years. At the same time, Artek’s expansion can thus be seen as dependent on Korhonen’s production capacity.

**Product level**
The Artek relationship has also created a kind of inheritance related to products. The Aalto collection’s products are primarily made out of the same raw material, massive birch, and to some extent birch veneer and plywood, which has resulted in a broader orientation to be involved with such materials also in the case of other products that the firm makes for other customers.

On the immaterial product feature side, the attempt to create products with long product life cycles can also be traced back to the influence of Aalto products, which share the same type of philosophy. It could perhaps be said that it is hoped that the new products would also become long-lived design classics like the Aalto products. A certain “design legacy” of Aalto could thus be perceived, which relates to products being of high quality and “demanding” to make. It has led the firm to “not take the easiest way out”, to quote the managing director.

Although the managing director of the firm emphasised attributes such as longevity and continuity, when it comes to product decisions, an openness for new, innovative and radical designs was simultaneously expressed. This is also related to the “legacy” of the 1920’s, when the functionalistic products of Aalto and Otto Korhonen represented quite radical solutions for their time. The managing director concluded that “We attempt to make products in the spirit of Aalto...That is what is the most characteristic of us”.

Further, Aalto products have to a significant extent been used not only in the furnishing of private homes, but also in furnishing projects in public spaces, such as universities, libraries, hospitals etc. Korhonen’s “core product” has thus been both a business-to-consumer and a business-to-business product. Interestingly, some of the firm’s new products are directed at public spaces.
Business unit/strategic level
As we stated above, the manufacturing of Aalto furniture has provided the firm with a specific set of production facilities that are required for manufacturing the furniture according to Aalto’s designs. On the business unit level, this has also been coupled with development of certain skills and competencies, related for instance to the specific technical solutions in the products such as the bending, finishing and surface treatment of massive birch. According to the managing director, copies of Aalto furniture are manufactured using different, usually easier and cheaper, materials and techniques than those used by Korhonen.

As referred to above, Korhonen’s strategy is to produce products “in a proper way.” This simultaneously also defines the business that the firm is in and how it positions itself, i.e. not dealing with large quantities and lower quality and thus focusing rather on top competence related to timeless/design-intensive high-quality furniture.

The Aalto/Artek relationship has significantly influenced Korhonen’s organisational structure. Due do the linkage with Aalto as the designer and Artek as the marketer of its products, Korhonen has remained fairly clearly as a production-oriented business unit, focusing on its “core competence”. Thereby Korhonen’s own resources related to marketing, product development or design have remained minor.

It could however be simultaneously suggested that the fact that design and marketing resources have been located outside the business unit, has also built in a certain openness or preparedness and experience to deal with such external actors. It could be argued that Korhonen could be quite well equipped to for instance “speak the same language as a designer”, something which is often considered a challenge in cross-functional product development projects.

As referred to above, the Alvar Aalto name and the awareness and imagery that it is related to, marks Korhonen quite clearly and provides the firm with a certain “label” as a producer of design furniture. The implications of this linkage can be seen both on the level of corporate image and reputation as well as trickling down to the image of its other products. An illuminating example is the fact that Korhonen’s company logo used to have a stylised image of Aalto’s Paimio chair on it.

Business relationship level
On the business relationship level, the Artek relationship has created a strong mutual dependence between the two counterparts. As the managing director expressed it, they “operate hand in hand”, much alike the production department and the marketing department of a single firm.

Also when it comes to activities outside those related to the Aalto collection, Korhonen has been able to utilise its relationship to Artek as a provider of agent and distributor contacts abroad as well as its domestic distribution network. The Artek relationship has also as such worked as an important reference in the establishment of new business relationships.

Manifestations of inertia
According to our interpretation, the relationship with Artek and the effects that this has had structurally as well as mentally, has defined a certain path, that forms the core of Korhonen's business activities. This path has been gradually reinforced by status quo or small, incremental changes, implying that latent inertia has accumulated.

This inertia is activated and exposed at "crossings" between different paths and when internal or external change challenges the core path. Next, we shall examine some selected intersection points in the case, revealing either negative or positive inertness in the core path. The different crossings/changes are summarised in Figure 1.

**Figure 1: Korhonen's core path and its crossings**

**Crossing 1**
The external change force underlying both the first and the second crossing analysed here, is the severe economic recession that hit Finland in the early 1990's. This situation implied that the earlier very stable demand for Artek furniture plummeted, forcing Korhonen to more actively consider other possible business opportunities. This external change thus activated entrepreneurial alertness (Heffernan 2003).

According to our interpretation, this contributed to the choice to establish a business relationship with office furniture manufacturer Martela, for whom Korhonen supplied certain product components or items, such as tabletops. In addition to Martela, Korhonen had also been supplying board to the caravan manufacturer Lohja/Solifer. The latter relationship had existed before the recession.

The subcontracting of board/tabletops is an activity which could be characterised as a way of making use of excess production capacity in a situation when the revenues...
generated by the core path decreased. In the manufacturing of these subcontracted products, Korhonen appear to have been able to utilise the existing (Artek-related) facility structure to some extent. The fact that the other customers were business market actors, is somewhat in line with the existing path. That is, these activities did not require investments in developing competence to market the products to consumers, as this was again, like the Artek relationship, the task of the customer.

This crossing thus resulted in new products and a new customer, but it still largely reinforced the core path through relying on similarities in the activity structure and utilised the core path’s free capacity, thus not leading to development of clearly different resources.

Crossing 2
In addition to the “subcontracting path” depicted above, the recession and the decreased demand for Artek furniture also triggered Korhonen to begin considering own products as a complementary product. The initialisation of Korhonen’s first own product development project was a coincidence between several factors. Firstly, Korhonen had discussed with Artek that the otherwise broad Aalto collection was lacking a shelf system. Secondly, due to the recession, a suitable designer was also out of work and was thus available for this venture. The recession pushed Korhonen to seize upon this opportunity and the combination of these factors resulted eventually in the development of the shelf and cabinet system named Raami (Frame), designed by Rauno Sorsa. The shelves are sold both through Artek as well as other furniture retailers, such as Vepsäläinen and the Merkkiliike-chain.

This product could be said to be fairly well in line with the Aalto collection, both in terms of raw material (massive birch) as well as its aesthetic properties. It is also, like the Aalto products, an expression of the aim at product longevity. Having been on the market for more than a decade already and having undergone minor modifications during the years, Raami is considered as having potential to become a long-lived product.

It could be argued that this product is an illustration of positive inertia, where strengths in the core path are utilised and something new is generated as a result. As Raami is also sold by Artek as a complement to the Aalto collection, this crossing can also be seen as a reinforcement of the Korhonen-Artek relationship.

In the case of Raami, not only existing resources were put into new use, but new ones also developed. Apart from the actual physical resource, the new product also involved development of new competencies within the firm, related to marketing. Furthermore, the firm began cooperating with external designers again, just like it had done a number of decades ago with Alvar Aalto.

Crossing 3
The third crossing with the core path that we have chosen to pinpoint is timed in the mid-1990’s. It is related to the two earlier ones, i.e. subcontracting and own product development, but reflects more the mental side of the issue, the firm’s expression of increased willingness to increase the relative importance of these activities for the firm.
and in a sense also reduce its dependence and sensitivity to fluctuations in the Artek relationship. It can in other words be seen as a mental change which reinforces the earlier two crossings.

At this point cooperation with other designers as well as other furniture manufacturers increased, but new products were also made for Artek.

**Crossing 4**
The fourth intersecting point is clearly one where the core path was reinforced. The event that caused this was the fact that 1998 was Alvar Aalto’s 100 year anniversary, which implied a peak in the sales of Aalto furniture.

**Crossing 5**
Another avenue to seek supplementary opportunities to the core path was what might be called design-intensive subcontracting. That is, supplying product series to business customers such as the Finnish furniture companies Avarte, Vivero and Mobel, which Korhonen’s managing director described as “a design family.” An underlying factor behind these relationships was namely personal relationships between the involved actors, which facilitated the process of starting up with these business activities. The relationships to these types of customers also date back to the times after the recession when possibilities were sought to make use of free capacity, but these more design-intensive subcontracting activities appear to have increased in significance around the turn of the millennium and today, their relative importance appears to be decreasing somewhat.

The engagement in this type of activity illustrates in our view positive inertia and similarity with the core path in terms of being experienced in dealing with business customers, which similarly to Artek, sell highly design intensive products. Such an activity is thus in a way more in line with the core path than the subcontract manufacturing of board, as it reinforces the identity of the firm as a “design actor”, differentiating it from other producers it may be competing with.

**Crossing 6**
The stabilised demand of Aalto products and its “limits to growth” has in the recent years continued to spur Korhonen to seek supplementary opportunities provided by other paths. The previous experiences from own product development ventures, such as the Raami shelf/cabinet system in the 1990’s, encouraged Korhonen to keep following this new path. In order to do so, it has established relationships to new actors, whose competencies it has been able to access. This has required cooperation with marketing actors, such as the export promoting organisation Showroom Finland as well as design actors. Designer Teemu Järvi functions as an external design manager for Korhonen, ensuring that the design elements are consistent. This own product development path has in the recent years resulted in successful new products such as the chairs “Vera”, designed by Teemu Järvi and “Object 1”, designed by Vesa Damski.

Although these products have been developed largely utilising external resources when it comes to design, they have implied a certain shift in the orientation within Korhonen, from a pure production focus, towards product development. As the managing director
put it “we have been practising that now for 10 years now and we are beginning to learn what it is and what it brings with it.”

An interesting feature of the new product development ventures is that in some of these development processes, particularly the early ones, the development initiatives were taken by freelance designers. That is, the designers were seeking a manufacturer for their designs and contacted Korhonen. We would like to presume that the linkage Korhonen has to Artek and Aalto contributed to the perception that these designers had of the firm and its capabilities and thus played a part in the development process. Such a utilisation of the embedded design orientation for the establishment of new relationships to other actors and for the creation of new products, is in our view an example of positive inertia.

Apart from teaching Korhonen product development and cooperation with external designers, the new product ventures have also led to developments regarding in-house competence in marketing. However, in the distribution of the own new products, the previous paths have come into use. The new products are firstly offered to existing customers such as Artek and Vepsäläinen (and its Merkkiliike-chain) through which the brand and design oriented consumers can be reached. This appears to be a good example of supplier inertia in the form of preference of convivial contacts (Ford et al. 1998).

**Crossing 7**

Recently, Korhonen has begun to seek new opportunities in business-to-business projects to furnish public spaces, which reflects another type of crossing with the core path. Characteristic of these activities is the cooperation with architects and new types of customers. Interaction with this type of actor would again appear to be a way of tapping into the design-focused core path as well as a utilisation of the accumulated, Artek related experience.

**DISCUSSION**

The case study above has shown how a specific business relationship has created a certain path for the focal firm, which when being challenged by changes, has revealed different types of inertness, which can either hinder or enhance development of business activities that are different from this “core path”

The case has highlighted the mental/perceptional dimension of inertia. For instance, during times when the production capacity was in full use by the Artek production, the firm did not pay as much attention to possible crossings or other paths. This could be interpreted as a competence trap, i.e. a belief that the firm can successfully keep on doing what it is doing. On the other hand, when pressure from external forces (recession) activated entrepreneurial alertness, new opportunities were realised in the form of subcontracting paths, which made use of the core path’s facilities and capacity (Martela) and design orientation (design intensive subcontracting). Another new avenue was the decision to start own product development. Even in this path, it could be seen that the good experiences gained from the first of such development projects, the Raum
shelf system, inspired Korhonen to continue along this path. That is, the experience of a successful venture affected the degree to which the firm was willing to follow this new path later on in the form of other new product developments.

When it comes to core level inertia, it could be said that the firm appears to have a well-defined idea of its mission and identity, indicating positive inertia in the form of stated goals and development directions, as well as a clear perception of what they do not want to be. This core mission then influences the firm’s willingness to develop own products and create relationships to external actors, or more precisely, what kind of products and with and for whom. We would like to see this foremost as positive inertia, although it may be in a sense a restricting factor through creating a certain lock-in. In our case, however, the core path and mental inertia did not hinder Korhonen from working with Martela and Lohja. These activities could however be characterised as tactical/strategic actions for coping with the effects of the recession (capacity utilisation), and did not require significant changes.

Another issue related to inertia on the core level, is the fact that Korhonen has remained faithful (or inert) to its production oriented path, even though it has increasingly also developed its own products and started selling its products to consumer markets. That is, the product design and marketing functions remain organisationally outside the focal firm. This might be explained by mental inertia (corporate identity as a producer) or path dependency in terms that these resources and competencies have not developed within the firm itself.

The sources of inertia can also be external, as in this case, the “design label” which marks the firm’s image and reputation and thus affects how other actors perceive it and what they expect of it. Korhonen’s design label is not only related to Aalto/Artek, but it is also reinforced by strongly emphasising the role of contemporary designers it has affiliated itself with for instance in its corporate communication.

On the technological/operative level, we can see that inertia has accumulated over time into a clear path, both in terms of technical investments as well as through cumulative learning. It has given the firm certain restrictions, which on the other hand, can be seen as possibilities when utilised in another way. The core path has still enabled Korhonen to supply products to customers of a very different nature than Artek, such as Martela and Lohja and made it possible to also pursue own product development utilising the same resource structure. The core path seems to incorporate an “openness” for the use of external designers.

On the restriction side, the existing structure does not allow the firm to take on orders from large volume customers. Furthermore, as the core technologies are primarily focused on the processing of (solid) birch, activities related to other raw materials would be likely to be more inert. As we have argued before, the degree of inertia related to production is in our opinion also linked to the perception side, i.e. what the firm can or cannot imagine doing, given its resource structure.

On the strategic level, we have identified positive inertia in the form of utilising existing relationships (Artek and Vepsäläinen) in market creation for the firm’s own new products. These distributors have also had a certain role in the actual product
development processes. On the other hand, the own product development ventures have implied totally new issues for the firm, such as building new competences.

When it comes to the notion of competitive inertia, we can conclude that in this case it can be considered fairly high. The firm follows the established path rather than altering its competitive stance frequently in terms of changing prices, advertising, new products etc. Instead, it is largely bound by its core path to the production of more expensive, high-quality design furniture and seeks different possibilities mainly “within these boundaries”. Furthermore, long-term relationships and the preference to deal with “convivial contacts” e.g. as distributors are more characteristic of this firm than being involved in doing business in more competitive markets or niches. Subcontracting to Martela is an example of such a highly competitive setting, where Korhonen’s strengths related to its core path remained little utilised (due to the nature of the product supplied) and where price pressures were simultaneously high. In this sense, it could be argued that in this case, the more design-intensive ventures may provide better potential to utilise the existing path dependencies (in structure, image, reputation etc) in new ways, than activities which only rely on capacity utilisation.

**SUMMARY AND CONCLUSIONS**

In this paper, we have discussed how inertia is manifested in a business relationship. More specifically, we were interested in examining the role of history and cumulative inertia in the context of current and other business relationships, the location of inertia in different structures and functions of a firm, and finally the characteristics of inertia.

Studies from the fields of economics, strategy, population ecology and IMP were used to build our theoretical framework. First, we discussed path dependence as an antecedent of inertia. In general, path dependence illustrates how solutions can be locked-in by historical events, which can inhibit the emergence of new paths that break with the existing structure. Moreover, behavioural lock-in and cognitive constraints can reinforce the existing path. Despite the technological and predetermined roots of the concept, recent studies have stressed the important effect of agents and environmental contingencies on path dependence. This opens the arena for strategic decision making, where success and competency traps are perceived as supporting factors of an existing path, whereas profitability considerations and crises can work as a trigger for path breaking actions. Similarly, as types of path dependency, self-reinforcement is strengthening the existing path, whereas reactive sequences are seen as path shaping actions. Finally, different paths may intersect and form crossings, which in turn, may provide possibilities to utilize established competencies and facilitate development and innovation.

Inertia, in turn, accumulates at the same time as an organization creates its paths, and it is usually used to describe the constraints and difficulties of change and adaptation. In the definitions of inertia, it is usually used to describe a firm’s change or reorganization efforts related to environmental changes, related to its own development, or as a commitment to continue current ways of acting. Inertia is assumed to be stronger in core
features and cognitive structures, whereas peripheral and tactical features are considered easier to change.

Inertia originates from internal and external sources. Structural inertia arises from investments, policy constraints, established routines and institutionalization, whereas knowledge structures, schema and frames are used to describe the sources and locations of cognitive inertia. Cognitive inertia is influencing the individual’s perception, and thus affecting ways to see and evaluate existing resources and new alternatives. Additionally, past experience seems to affect inertia. Positive past experiences seem to accumulate inertia and support status quo, whereas negative experiences challenge current ways of acting. On a competitive level, narrow competition and customer space may limit perception and thus increase inertia. As an external source of inertia, institutional and competitive environments are creating pressures in the forms of legal and fiscal barriers to entry and exit from the markets, pressures for accountability and reliability and reputations related to important stakeholders.

Finally, inertia can be characterized in positive and negative terms. On the positive side, it is associated with learning, accountability and reliability, while the inability to adapt and stiffness are examples of the negative features.

Based on our analysis, we can conclude that inertia was manifested in the firm in several ways which affect its business relationships. Firstly, in mental and perceptual terms, a successful past reinforced current ways of acting, and it was not questioned until external events shook the performance level. In this sense, inertia could be characterised in a positive light as a purposeful business development, which however simultaneously was negatively affecting entrepreneurial alertness and openness to other business opportunities. Secondly, on core feature level, inertia appeared in the form of clarity in mission and identity, which positively affects not just current behaviour, but also new development projects. On the structural level, however, we could identify negative effects of inertia, mainly because the clear idea of (manufacturing) identity hindered the development of other important functions. This, however, created an openness for establishing relationships with external design and marketing actors. On the peripheral level and partly on the strategic level, positive inertia affected the formation of new business relationships. Thirdly, on the technological and operative levels, inertia could be characterised as a positive phenomenon in terms of accumulated learning. On the other hand, the firm seemed to be “locked-in” to the capabilities of processing only certain kinds of raw material. Also, its size and structure can be limiting factors in its possibilities to gain big customers. Finally, on the competitive level, inertia was manifested strongly though stability of customer relationships as well as the utilisation of “convivial contacts” to distributors and other actors.

We acknowledge, however, that this study has certain limitations. A major one is the fact that the empirical material only presents the view of a single actor and also within this focal firm, the views of a single informant, i.e. the managing director. Having had a broader analytical base would have increased the trustworthiness of the findings through triangulation. Interviews with other actors, with whom the focal firm has relationships, would have provided a more detailed picture of the concrete ways in which inertia can be seen in relationships. Likewise, interviewing other informants within the firm, such
as people engaged in production and product development, could have shed more light on the ways in which path-dependencies and routines arise and how inertia shows in concrete actions and interactions within relationships.

We think it would be a fruitful avenue for further research to extend the analysis of this case by including also the perspectives of other actors and informants in order to gain a fuller picture of the phenomenon in this empirical context.

Even if our choice to use a longitudinal case has implied that the analysis has remained on a fairly broad level without a detailed understanding of how inertia appears in single events (decisions, change processes, learning and interactions), it has nevertheless been able to provide us with a broad and multifaceted picture of the notion of inertia. Furthermore, having chosen the longitudinal perspective, we believe that an attempt to analyse detail in historical events may not necessarily have been reliable. That is, the informant’s ability to recall events dating back over a period of twenty years is likely to have been limited.

The fact that we have chosen a single case approach also implies certain limitations. The results can be used to improve the theoretical understanding of inertia, while generalisations cannot be made. A suggestion for further research could however be to select another case, or multiple units of analysis within the same case (such as different products or customer relationships), and perform a cross-case analysis in order to enrich the understanding of inertia in different functions and on different levels.

Another interesting topic for further research would be an investigation of change and inertia. By examining inertia at different points in time (before and after change) it could be possible to discuss the degree or intensity of inertia. Linked to this, is also the question of the nature of change (radical vs. incremental) and its effect on inertia.

References


