

PATH DEPENDENCE IN ORGANISATIONAL GROWTH THROUGH ACQUISITIONS  
How to break the path in a changing business environment?

**Abstract**

This exploratory study makes an extension to prior research by evaluating cross-border acquisitions in their spatial, historical and industry setting, and also taking into account the interconnectedness of actions. These extensions change the picture of an acquisition to include a range of activities from a bold action into reluctant moves. It attempts to challenge the prevailing thoughts and fulfil the gap in the existing research by analysing the development of one case company, Finnish Tieto Oyj. The aim of this study is to analyse how a company can be locked-in a growth through acquisitions, and what can break this path. The exploratory case points out that although path dependency may explain why companies become locked-in cross-border acquisitions, the interplay of internal and external factors may break the path, although it requires active participation of the top management.

**Keywords:** path dependence, organisational growth, mergers and acquisitions, case study

1. INTRODUCTION

Companies' international growth may take several forms, but increasingly companies expand their operations internationally through foreign direct investments (FDI), and particularly cross-border<sup>1</sup> M&As<sup>2</sup>. (World Investment Report 2010). Therefore it is not surprising that they have also been in the focus of extensive research during the past decades (e.g. Haleblan et al 2009, Cartwright & Schoenberg 2006, King et al. 2004, Shimizu et al 2004), but still many questions remain unanswered. For example, it is still a common assumption that the acquisition process is initiated by a prime actor – the acquiring firm's management – who after a careful analysis of company needs, scanning and evaluation of potential partners makes the decision to acquire in order to increase the economic value for its shareholders (Angwin 2007, Bagchi & Rao 1992). And yet, recent studies on cross-border acquisitions provide evidence that this assumption may be challenged for several reasons.

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<sup>1</sup> In line with Shimizu et al (2004), a cross-border acquisition is understood here as an acquisition in which the headquarters of the acquirer and the target are located in different countries. Due to their international nature, cross-border acquisitions involve unique challenges, due to the various economic, institutional or regulatory and cultural structures (Hoecklin 1995, Child et al. 2001, Very & Schweiger 2001). They are interesting objects for study because sometimes companies underestimate the complexity of cross-border acquisitions (Nadolska & Barkema 2007).

<sup>2</sup> Although mergers and acquisitions (M&A) are commonly used interchangeably in the literature, mergers remain a minority of the deals. Additionally, the basis for integration is completely different. Whereas mergers are often characterized by equality and the result is a jointly negotiated consensus-based, 'third culture', in acquisitions the roles are defined by power and hierarchy (acquirer and target). As a result, the degree and nature of integration is determined by the dominant partner. (cf. Olie 1994).

Increasing number of firms are using cross-border acquisitions as strategic tools for their growth, and as a result, acquisitions range from single, isolated critical events to series of routine events in an acquisition program (cf. Laamanen & Keil 2008). Additionally, institutional environment and the history in which the case is embedded may be a powerful explanation for both how the acquisition process evolves and its outcomes (e.g. Fang et al 2004). Furthermore, acquisitions may be unintended outcomes of a pattern which is deeply rooted in the industry structure as well as organizational and individual contexts instead of rational decision-making process (Nummela & Taalas 2006). In sum, a vast amount of different internal and external impulses can contribute to the unfolding of the acquisition, which could better be described as a political and negotiated process rather than planned and strategic event (cf. Jemison & Sitkin 1986, Angwin 2007).

This exploratory study makes an extension to prior research by evaluating cross-border acquisitions in their spatial, historical and industry setting, and also taking into account the interconnectedness of actions. These extensions change the picture of an acquisition to include a range of activities from a bold action into reluctant moves. It attempts to challenge the prevailing thoughts and fulfil the gap in the existing research by analysing the development of one case company, Finnish Tieto Oyj. To be specific, *the aim of this study is to analyse how a company can be locked-in a growth through acquisitions, and what can break this path.*

The paper is divided into seven sections. The first one introduces the topic, the second describes the phenomenon and third links it with path dependence. The fourth section summarises the methodology used in the empirical study and fifth one portrays the case company. The sixth section presents the key findings and discusses the results within the context of existing literature. The paper ends with conclusions and suggestions for future research.

## 2. EXPLORING DECISION-MAKING IN CROSS-BORDER ACQUISITIONS

In the literature acquisition is generally considered as a conscious act, a strategic decision (Richman 1984) that is driven by choice. Decision-makers in this process are often considered neutral towards the alternatives and the role of emotions is mainly ignored in the process (Kusstatcher & Cooper 2005, Sinkovics et al 2010, being one of the rare exceptions). Previous literature often considers M&As as a process consisting of a series of sequential, rational decisions, and in the case of cross-border acquisitions the process starts with the decision to enter particular markets with an acquisition (cf. Shimizu et al 2004). In this process decision-makers are usually understood as utilitarians who aim at maximizing the financial valuation of the firm (Richman 1984) or entrepreneurial empire builders (Penrose 1959, see also Trautwein (1990) on merger motives). However, in spite of the complexity of the process, the number of studies investigating M&As from this point of view is yet limited (Shimizu et al, 2004).

The great majority of M&A literature tends to be very normative when it comes to the process how acquisition proceeds. Researchers do admit that multiple processes are involved in M&As (Shimizu et al, 2004), and that many acquisition-related questions in the process are intertwined (Haspeslagh & Jemison 1991) but the complexity of these processes and particularly the role of the decisions are not revealed. Most often it is argued that M&As acquisition follow a pattern, in which sequential stages can be identified – for example, pre-

acquisition, acquisition, post-acquisition (Haspeslagh & Jemison 1991). It is also commonly assumed that this process is initiated by thorough analysis of company needs, scanning potential partners and evaluating them carefully (e.g., Chaudhuri & Tabrizi 1999, Bagchi & Rao 1992).

It would – of course – be very convenient to imagine that as in decision-making processes in general, also in M&As the identification of potential alternatives would lead to analytical examination of them and their outcomes and finally to a decision and implementation of that decision (cf. Cohen et al, 1972/1988). However, in practice we may question this, particularly in context with cross-border M&As where the processes are usually considered as more cumbersome than in cases where both parties are embedded in same national context (Angwin & Vaara 2005). The alternatives may be ambiguous and decision-makers might need to act with limited information. In other words, we agree with Brunsson (1990) that in practice decision-making is less rational than the theory suggests.

It seems that the pattern which cross-border acquisitions follow is far from clear-cut, and the acquisition process may take diverse routes from opportunity recognition to the business integration of the acquired unit. The process is determined by the interaction of internal and external factors limit the alternatives available and thus may lead the process to a partly predetermined organisational path. Researchers have put a lot of effort in explaining these organisational paths from several theoretical perspectives. For example, economists argue that they can be explained by *sunk costs* related to earlier investments, which restrict the number of alternative strategies available. Or network researchers might suggest that this kind of development is due to *network embeddedness*; i.e., economic actions are affected by actors' network of relationships (Granovetter 1992). On the other hand, organizational scholars would point out that if the decision-making in a cross-border acquisition is an incremental series of decisions, it is possible that *earlier decisions* limit the number of potential alternatives available (cf. Lindblom 1959, Chia 1994). Furthermore, strategic management literature indicates that the top management tries to avoid *strategic dissonance* (cf. Burgelman & Grove 1996), so strategic actions – such as acquisitions – need to be aligned with the corporate strategy.

All of these explanations are partly overlapping and each of them offers one viewpoint to the diverse paths companies follow in their organisational growth through cross-border acquisitions, but none of them takes into account the processual nature of the phenomenon investigated. In our opinion, in order to understand the organisational growth process properly, a more holistic approach which a longitudinal point of view needs to be taken. Therefore, next we apply the concept of path dependence to cross-border acquisitions.

### 3. PATH DEPENDENCE IN CROSS-BORDER ACQUISITIONS

The self-enforcing organizational behaviour which has been labelled as path dependence in the literature originates to the works of Arthur (1989, 1994) and David (1985). Path dependence as a concept assumes that decisions are initially open to revision but over time past decisions become increasingly irreversible and restrict future decisions (Gruber 2010). The consequences of prior decisions – although unintended – may lead first to gradual emergence of organizational path and even to inefficiency due to lock-in in which the dominant pattern becomes deterministic and alternative courses of action are no longer feasible (Sydow et al 2009). The QWERTY keyboard is a well-cited example of a lock-in

situation (David 1985), but from the viewpoint of technology diffusion also the lock-out situations are interesting; when a company may ignore subsequent technological developments due to limited absorptive capacity (Cohen & Levinthal 1990).

Prior research does not describe M&As from the viewpoint of path dependence, so it is unclear which parts of the acquisition process would be most sensitive or which would be the triggers to path dependency. However, it may be assumed that we should analyse path dependence in cross-border acquisitions in two phases: the time prior to the deal and post-acquisition integration time separately. This separation is needed because the time of when the deal is made can be interpreted as a critical juncture (cf. Sydow et al 2009) in the process and it introduces a number of new triggers for path dependency to the process. Also in terms of investigation studying the two phases would require a different research design: analysis of path-dependent behaviour in the pre-acquisition phase should be made on the company level, whereas the post-acquisition analysis would require acquisition-specific data.

Although we recognise that the post-acquisition phase would also offer an interesting topic from the viewpoint of path dependence (for example, the nature of takeover, the type of acquisition and distribution of power between partners may be critical triggers for the path to take in the integration process), *the focus of this study is in the pre-acquisition phase* and the various critical events that may lead the company to path dependent organisational growth through cross-border acquisitions. The reasons for this focus are threefold: First, There has been a call for the examination of the “front-end” of the acquisition process, particularly the identification of targets and the process of negotiating the deal (e.g., Shimizu et al. 2004). Additionally, from the viewpoint of value creation and performance in cross-border acquisitions, this phase is of importance as successful beginning of the process may lead to a more favourable end result, and, e.g., the friendliness of the acquisition negotiations may have a positive impact on the target company’s top management turnover (Walsh 1989). And finally, interest in this pre-acquisition phase is additionally highlighted in cross-border acquisitions because national cultural differences affect the parties’ perceptions of each other and of the deal in general (Angwin 2001).

This study analyses path dependency in organisational growth through cross-border acquisitions with the help one explorative case from the knowledge-intensive industry. The development of path dependency in the case company is described with the model of organisational path dependency by Sydow et al (2009). In the description of the organisational growth path we point out the interplay of internal and external factors but also identify the path breakers which lead the company out of the lock-in situation where it was heading to.

#### 4. RESEARCH DESIGN

This research is a longitudinal single case study. The case study approach allows for the obtaining of a deeper understanding of the phenomenon under scrutiny (see Yin 2003; Eisenhardt 1989). Conducting research on organizational change and processes in a holistic and comprehensive way is often best approached by using a longitudinal research design (e.g. Pettigrew 1990; Van de Ven 1992; Pettigrew, Woodman & Cameron 2001). Given the interest to organizational growth process and the path dependence development as well as the limited prior research on the topic, the single case study approach was regarded as the most appropriate one.

*The case* in this research is Tieto Oyj<sup>3</sup>, which is a Finnish IT service company providing IT, R&D and consulting services. The case was selected for two reasons. Firstly, Tieto Oyj is a company that has been conducting a great number of M&As and its growth is largely based on M&As. Secondly, the IT field has been facing many challenges and changes during the 21<sup>st</sup> century forcing companies like Tieto Oyj to reform in order to survive the increasing competition. Companies locked-in certain paths need to break those paths and think differently to survive the competition following the economic crisis. Finally, access was also an important factor when choosing a suitable case company. In this research the *unit of analysis* is the same as the case, i.e. the organisation. The data was collected in a retrospective manner during 2009-2010.

This research is largely based on secondary data, but also on two face-to-face interviews with top management. The main source of data was Tieto Oyj's website and annual reports; as a listed company it has a great amount of information both qualitative and financial on their website. In addition news articles on Tieto Oyj and the IT sector in Finland has been used to gain information on the IT market. Information on Tieto's M&As has been collected both from the company's website and a weekly magazine *Talouselämä*, which reports all M&As taking place in Finland.

Additionally, primary data was collected with two face-to-face interviews with top managers: one involved in the strategic planning and business development at Tieto Oyj and the other being a member of the M&A team. In addition to the two interviews, data was also collected through observations and group works at a one-day company workshop and at a seminar on M&As, where one of the interviewees had a presentation related to new strategy of Tieto Oyj and M&As. The workshop was organised in May 2010 with key persons selected by the VP in Strategic Offering. The main motive of the workshop was to define Tieto's strategy to 2015 by using the backcasting method, and the authors of this paper were involved in organising it.

As the study is exploratory in nature, the data has been used mainly to describe the phenomenon. It was collected from several sources, summarised and confirmed, thus, data triangulation was used to increase the validity of the findings (cf. Yin 2003). The various data sources enabled not only improved validity and reliability, but also helped in forming a richer and deeper understanding of the phenomenon. Here the trustworthiness of the study has been evaluated with on four criteria; credibility, transferability, dependability and confirmability (cf. Lincoln & Cuba 1985, 290–301). Credibility has been ascertained by using multiple sources of data, while transferability has been enhanced by a rich description. These should in turn increase the dependability of the research. Confirmability refers to a qualitative definition of objectivity and is related to the characteristics of the data. To increase confirmability the researchers have been as detailed as possible in data description and data sources. The major limitation of this study is the lack of deeper information on individual acquisitions, but unfortunately that kind of data is considered strategic and very sensitive by companies and therefore access to such information is limited.

## 5. THE STORY OF TIETO OYJ

### 5.1 Tieto in a nutshell

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<sup>3</sup> <http://tieto.com/about-us>

Tieto is an IT service company providing IT, R&D and consulting services in the Northern Europe. Tieto employs around 16 500 people. Tieto Oyj's net sales were 1 704 million euros, while the operating profit was 75.3 million euros in 2009. The main markets of Tieto Oyj are the Nordic countries, Russia and Poland. The company offers to its customers IT services, R&D services, outsourcing, consulting, cloud services and industry specific solutions. It operates in twelve industries; automotive, energy utilities, financial services, forest, healthcare and welfare, logistics, manufacturing, media, oil and gas, public, telecom and trade. It is a publicly owned company and its shares are listed on the OMX Nordic Helsinki and Stockholm Stock Exchanges. It is ranked as the second biggest IT company in Finland, and it is ranked 34<sup>th</sup> on the list of the 500 largest companies in Finland. It was also listed among the Global 100 Most Sustainable Corporations in the World.

Tieto was originally founded in 1968 and started its business operations in Espoo, Finland, under the name Tietotehdas Oy. In its early years Tietotehdas developed and maintained systems mainly for the Union Bank of Finland and its customers, and for a few forest-industry companies. The business expanded gradually as personal computers became established in the 1980s. However, during the 1990s the company experienced rapid growth through a number of acquisitions, mergers and strategic alliances (see table 1). It strengthened its forest expertise by acquiring Carelcomp Oy from Enso-Gutzeit in 1993, and its market position in financial and personnel management systems by merging with Unic Oy. In addition, in 1995 Tietotehdas and the state-owned VTKK Group merged to create a strong concentration of expertise specialising in IT processing, professional and software services. This same year Tietotehdas became TT Tieto, and three years later in 1998 it changed its name again to become just Tieto. The acquisition of Avancer Oy enabled Tieto to strengthen its position in the telecommunications sector.

Tieto Oyj was formed through the merger of the Finnish Tieto Corporation and the Swedish Enator AB in July 1999. The Swedish Enator ABB was a much younger company. It was formed in 1995 when Celsius AB, a Swedish listed company, merged its IT-related operations, which until then had been operating in separate subgroups, Telub, Enator and Dialog. However, in a way Enator also goes back to 1968 when a company called Kommundata, which later became Dialog, became part of the IT Services Company known as Enator. In 1995 Enator acquired Adedata and consequently in March 1996 the name of the parent company CIS was changed to Enator. Enator was then listed on the Stockholm Stock Exchange. However, the merger of the three groups resulted in major restructuring, which was completed in 1997. During 1998 and 1999 Enator made several acquisitions to strengthen its public-sector base. (see table 1)

**Table 1** Major mergers and acquisitions of Tieto and Enator until 1999

M&As at Tieto		M&As at Enator	
1976	Finnsystems Oy	<b>Telub</b>	
1983	Avonius Oy	1991	Celsius acquires FFV, which includes Telub. FFV Ground Support is acquired.
1984	Tietojyvä Oy	1992	Majority interest in Dotcom and 100 % of Miltest are acquired.
1987	Nokia computer center		Telub Inforum's business in England is divested.
1987	Datema AB, Sweden	1993	Försvarsmedia and Systecon are acquired.
1988	ASW Systems Oy	1994	Vexa is acquired.
1990	Tietoässä Oy	<b>Enator</b>	
1990	Finnish Data Power Oy	1991/92	Rowika, Enator Kunskapssystem and Enator Ltd are divested.
1993	Carelcomp Oy	1992/93	Knight is divested.
1993	Datacity Information Systems Oy	1994	Celsius acquires majority holding in Enator.
1994	Financial Software Technology Oy	<b>Dialog</b>	
1994	Suunnittelu ja laskenta Oy	1993	Kommundata changes name to Dialog.
1995	Dativo Oy		Trigon, L-Data, ADB Malmö and the CRS companies are acquired.
1995	Procons Data Oy	1994	Dialog is acquired by Celsius.
1995	VTKK-yhtymä Oy	1994	The three subgroups Telub, Enator and Dialog are operationally co-ordinated within Celsius Information System (CIS).
1995	Unic Oy	1995	CIS becomes an operationally independent sub-group within the Celsius group.
1996	Avancer Oy	1996	Adedata is acquired. CIS changes name to Enator and its shares are listed publicly.
1996	AXO Systems AS, Norway	1998	Acquisition of 51 per cent of Programmera.
1997	Huld & Lillevik AS, Norway		Acquisition of Kvatro Telecom (Norway) and SoftProjekt (Germany).
1998	Oy Tietokonepalvelu Ab		Divestment of Enator Telemekanik.
1998	Konts SIA, Latvia	1999	Acquisition of NetDesign (Denmark).
1999	Entra Data AB, Sweden		
1999	Enator AB, Sweden		

The merger of Tieto and Enator in 1999 was communicated as a merger of equals, as the companies were about the same size. The Swedish Enator was ahead in revenues, but Tieto was more profitable. The combined company had a market capitalisation of some 2.9 billion euros, roughly 70% of which came from Tieto. The former CEO and President of the Tieto Corporation Matti Lehti was appointed CEO of the combined company, and the former CEO and President of Enator Åke Plyhm was appointed deputy CEO. The Group Management of Tieto comprised six managers from Enator and seven managers from Tieto. Mergers and acquisitions continued to facilitate growth and strengthen the expertise of Tieto in its various business fields. In 2008 the company celebrated its 40<sup>th</sup> anniversary. Tieto and Enator shared a common vision: that industry-specific knowledge in IT would differentiate Tieto from the competition. In 2009 TietoEnator changed its name back to Tieto Oyj.

## 5.2 Growth through cross-border acquisitions

Tieto Oyj is a leading IT service company in Northern Europe. Tieto's growth before and after the merger with Enator has been strongly characterised by acquisitions. During 2000 and 2010 Tieto Oyj did 86 acquisitions (see Appendix 1, table 2). The majority of these acquisitions are small IT companies employing less than 100 employees. Only in 23 acquisitions the target company employed more than 100 employees and only 7 acquisitions were bigger, target companies employed more than 300 employees.

When analysing Tieto's M&A history retrospectively, it can be concluded that the M&As are horizontal and mainly about product/service and market extension. The acquisitions complemented the existing offering in various industry sectors. In general Tieto Oyj purchases 100 per cent of the shares, but in some cases Tieto Oyj has first acquired a smaller percentage of the shares to later increase the amount to total ownership. The majority of the acquisitions have been conducted in the Nordic countries, Finland, Sweden, Norway and Denmark, but also in other countries such as the Baltic countries, Poland, Germany, Austria, Italy, UK, USA and India (see Appendix 1, table 2).

One of the challenges related to mass acquisitions is integration. Small companies become easily absorbed in a company the size of Tieto Oyj but value creation and synergy realization in the long run becomes challenging. Traditionally the business division managers were largely in charge over their business division, and had relatively larger decision-making power over M&As than nowadays. There has also been a risk that some business portfolio areas grow too much in relation to others. Since 2009 Tieto Oyj centralized its M&A functions at the corporate level to an M&A team of three experts. The aim was to coordinate better the M&A process with experience and in a more systematic way. Strategic fit became increasingly important.

Today Tieto Oyj has defined its growth strategy by increasing its market share in Sweden and by exploring Russia's opportunities. Tieto Oyj's strategy is to grow organically faster than the relevant market, and to support growth by acquisitions. Looking back at Tieto's M&A history, this has been their strategy throughout their history. We argue that acquisitions became over the years a locked-in way of growing at Tieto Oyj. Acquisitions have been, compared to the size of Tieto Oyj, very small and thus, wouldn't mean radical changes in Tieto's way or strategy. Nevertheless, the changing environment has increasingly added pressure to Tieto's way of growing.

### 5.3 Critical events – pushing to break the path?

The IT field in Finland is very dependent on Nokia. In fact, Nokia makes almost as much profit as the 99 IT firms following it in the IT-100 ranking list. It provides a living not only for numerous suppliers, but also for their subcontractors. Without Nokia the growth rate of the IT field was around 6-7% in 2005 and 2006. Tieto and Nokia are the largest companies in terms of the numbers of people employed. The IT companies are satisfied with their location in Finland: the country's Silicon Valleys are Espoo, Tampere and Oulu.

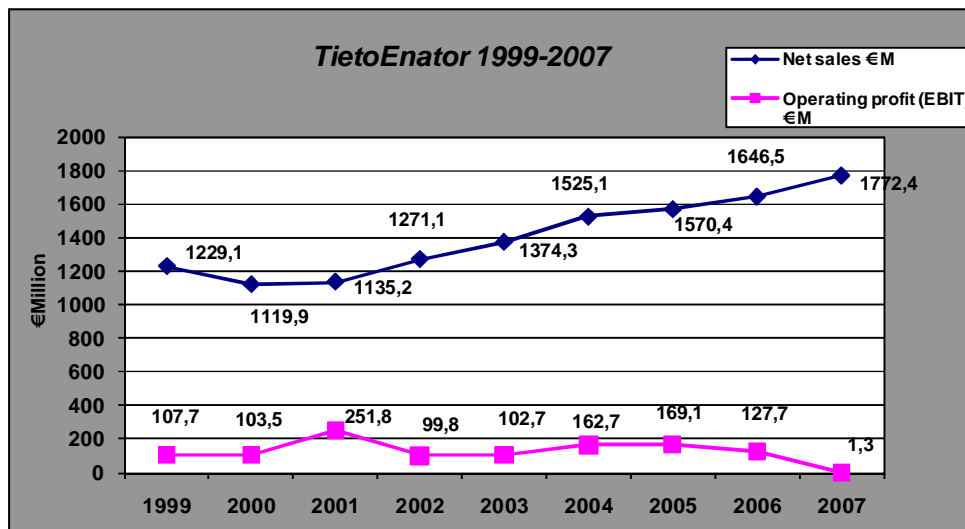
Competition is very fierce and often the small and medium-sized companies are over-dependent on their key accounts. In addition, Asian companies have been present in the Nordic countries for some time already. In Finland, Nokia's success not only depends on the IT SMEs but also affects their success in return. The increasing number of mergers and acquisitions in the field show that there are growth opportunities, and companies need to integrate in order to be competitive and to find new ways of expanding their businesses. Moreover, the low-cost outsourcing services provided by Indian and Chinese companies are rendering the competition fiercer than ever. Nevertheless, no company can deny the importance of these emerging economies and the potential these mass markets provide.

Since the bursting of the so-called technological bubble at the beginning of the 21<sup>st</sup> century the IT industry has developed slowly in Finland, and sales have been poor. However, in 2005 there were some minor signs of revival. The net trade started to bloom, wireless internet and intelligent phones or smart-phones became more common, broadband speeded up developments and customers finally started to use the services companies were providing five years previously. Nevertheless, many companies, including TeliaSonera, WM-data, the TJ Group and Tecnomen, laid off personnel in 2005. Elisa laid off the most, at close to 20%. (e.g. Siltala 2005; Felt & Vuokola 2007.)

Contrary to other IT companies, TietoEnator was doing well despite the burst of IT bubble and the general economic slowdown due to the 9/11 (see Appendix 2 and Figure 1 below).



However, since 2005 the operating profit had begun to decrease and it went very low in 2007, to 1.3 million euros (see Appendix 2 and figure 1 below).



**Figure 1 TietoEnator's net sales and operating profit 1999-2007**

Although the net sales were increasing each year, there was a dramatic drop in the operating profit in 2007 and Tieto was not able to reach its financial goals. Expansion into product-based businesses in Banking & Insurance and Healthcare & Welfare was resulting in lower profitability. Thus, Tieto's full year operating profit would not reach the 2006 level of 124 million euros. The share prices reflected the company's financial problems. In October 2007 the CEO, Pentti Heikkinen, resigned and the vice CEO and former CEO of Enator, Åke Plyhm, was appointed interim CEO until a replacement was found. Pentti Heikkinen was appointed the Group's president and CEO only a year ago, in January 2006 when the long-term CEO Matti Lehti was elected the Board's Chairman. Matti Lehti had been the CEO of TietoEnator for 20 years.

As a consequence, Tieto's Board of Directors reviewed the company's long-term financial targets at the end of 2007. The new strategy, called the *Performance Improvement Programme*, was to deliver over 100 million euros of cost savings by the end of 2009. The aim was to restore the company's profitability and to secure a sustainable basis for future growth. The profit-improvement plan consisted of three elements;

1. *to restructure, discontinue or divest* underperforming or unsustainable operations and projects,
2. *to accelerate profit improvement* across the company by improving the utilisation of staff and facilities, reduce administrative costs and speed up offshoring, and
3. *to focus* increasingly on service quality.

The main goals were to grow organically at a higher rate than the relevant market, and the growth strategy was also supported by acquisitions. The operating margin was set to go over 10% (EBIT%). It was thought that the dividend payout ratio should be around 50% of the net income, including one-time items, but it would depend on the financial position and the major investment needs of the company. Consequently, as part of the Performance Improvement Programme, Tieto started negotiations concerning personnel adjustments in January 2008.

The need for such adjustments affected approximately 800 positions, mainly in Finland and Sweden. These negotiations ended at the end of February, resulting in the layoff of 190 employees and yearly savings worth 24 million euros.

A new CEO Hannu Syrjälä was appointed on the 17<sup>th</sup> of December 2007. He had previously worked as the Vice President and General Manager of Life Support Solutions at General Electric. He had the chance to review the improvement plans and was committed to making Tieto profitable again. In spring 2008 Cidron Services made a hostile acquisition bid on TietoEnator, but pulled their offer by the end of May. In May 2008 the long-term CEO and Chair of the Board of directors Matti Lehti resigned. Since, Tieto Oyj has been pursuing a full turnaround of the company. The revised strategy, the Performance Improvement Programme and the actions taken so far were expected to have a positive impact on the company's profitability in the future. Since 2009 Tieto Oyj has a new structure and model, which is based on three dimensions: *country operations, industries, and service lines*. The company's competitive advantage is based on customer-centric operations, which are supported by the sharing of knowledge and resources across industries and service lines.

Despite these major internal changes at Tieto Oyj, also external issues have added to the pressure to adjust the strategy and organisational structure to a changing environment. The economic crisis was global and affected all industries in 2008 and 2009. It has been estimated that the Nordic IT services market relevant to Tieto Oyj shrunk approximately 5 per cent in 2009. In Finland in general the IT sector has remained in 2009 much to the level of 2008<sup>4</sup>. The growth in the IT market has been modest in 2010, as concerns over the world economy have risen again and companies are holding their investments. However, it is expected that during 2011 and onward the transition from traditional IT projects to models where customers are buying IT as a service will be accelerating. It has been argued that the IT sector is facing now a new era where cloud computing is the new trend (Rainisto 2010). It is expected that cloud services or service-based IT will account 20 per cent of the IT market in 2015. (Market development in 2010). Cloud computing will affect the value chain of the IT services delivery and thus impact the way of doing business. These new trends impact also which companies will be regarded as attractive targets for M&As in the future.

#### 5.4 Discussion

The case description of Tieto illustrates well how a company can develop in its organizational growth in such a manner that it may even be locked-in a situation where it does seem to have only one growth strategy available – through acquisitions. Mergers and acquisitions have played an important role in forming Tieto Oyj to what it is today. Since TietoEnator was formed the company continued to aggressively acquire horizontally small IT companies to complement its portfolio and increase its market share in the Nordic countries. This merger of Tieto and Enator can be interpreted as a critical juncture (cf. Sydow et al 2009) in the organisational path of Tieto, after which the range of available options both in terms of strategy alternatives as well as potential targets to be acquired started to narrow down.

Based on our analysis, the organisational path seemed to reach a lock-in phase by 2006. The M&As were largely in the hands of divisions' managers, and the post-acquisition integration process was institutionalised as each target was consolidated to TietoEnator making it harder to evaluate how well were they really succeeding in business integration. The company (as

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<sup>4</sup>Source: statistics Finland at [http://www.stat.fi/til/iptp/2009/iptp\\_2009\\_2010-09-22\\_tie\\_001\\_fi.html](http://www.stat.fi/til/iptp/2009/iptp_2009_2010-09-22_tie_001_fi.html)

well as individual acquisitions) was locked-in a tradition of growth through acquisitions and its way of making acquisitions had become a routine. Although individual acquisition processes were not identical at the corporate level, the ways of operating particularly at the divisional level were not challenged. Both at the organisational and division level acquisitions were considered as the only way to grow. Particularly management on operational level had created a 'comfort zone' in which it was easy and familiar to act, whether the actions really created the maximum value for the company or its shareholders. In other words, the story of Tieto fits well the dynamic framework of organizational path dependence presented by Sydow et al. However, at the same time it points out a gap in the framework mentioned.

Although history does matter and it may shape the destiny of a company, the company should not be considered a passive actor in the process. Its fate and future does not depend only on its past but also path breakers exist. Usually the path breakers can be found within the organisation itself – the personnel – managers and employees – are the key resource in this. Top managers are responsible for the strategic decisions they make to the shareholders, and they have to adjust to a changing business environment and make the strategic moves required. One factor reinforcing the chosen path of organisational growth was that it had strong support from the very top of the organisation. The CEO, Matti Lehti was a charismatic person with an experience of leading the company successfully for 20 years. Although the changing business brought new challenges all the time – including increasing competition from Asia, economic crisis, technology development, such as cloud computing – it was not easy to confront him, and yet all this was calling for a new strategy and way of operating. It was as late as in 2006 when the financial problems forced the board to make a strategic move and start the process of changing CEO. The current CEO, Hannu Syrjälä, was nominated in 2008, and he was committed to start a full turnaround at Tieto Oyj. We could argue that this broke the path – or at least introduced another critical juncture in the process.

## 7. CONCLUSIONS

This paper argues that path dependence may explain why companies become locked-in cross-border acquisitions and how this narrowing path limits their opportunities and makes them increasingly more predictable. However, it also demonstrates that it is possible to break the path with deliberate strategic moves. In order to understand path dependence and breakers it is necessary to understand the social mechanism driving the path process. Only then it would be possible to develop path-breaking interventions (cf. Sydow et al. 2009). The exploratory study also shows that path breaking is usually a result of the interplay of external and internal factors, which together can trigger the break. Although the case does not include such an option, it may be assumed that the path may be broken by the actions of other actors (competitors, stakeholders etc.).

This research contributes both to the path dependency literature and M&A literature. First, there is a gap analysing how multiple M&As effect the value creation in an organisation (cf. Laamanen & Keil 2008). Much of the M&A research focuses on the process and performance of single acquisitions. However, there is a need to understand the drivers and patterns in M&A processes to identify how well firms are actually able to adapt to the different nature of each M&A. As the Tieto Oyj case showed there is a potential risk of becoming locked-in the way M&As are executed. Second, this research contributes to path dependency literature by illustrating how the path dependency framework of Sydow et al. (2009) work but also by

providing an example how path dependency is not self-evident and internal and external factors may trigger path breakers.

Nevertheless, the study also opens doors for future research. Our exploratory study does not provide any evidence of the post-acquisition process, neither were we able to investigate the phenomenon on the level of individual acquisitions. A deep study with mixed method approach would probably provide answers to several questions which still remain unanswered. For example, does path dependence explain also some outcomes of individual acquisitions? Could it be linked with the foreign expansion process of the company?

Path dependence as a concept has not been applied in international business research extensively and this study indicates that besides acquisitions it might have interesting applications when studying international growth of companies in general. Foreign direct investments have been commonly explained by theories based in economics (such as Dunning's eclectic theory) and yet path dependence suggests that maybe the reality is more complex than the theories imply. Additionally, international entrepreneurship research might benefit from the concept, especially in the context of learning and unlearning in international new ventures. It has been argued that the fact that because they do not carry the institutional heritage as their larger and older counterparts, they may overcome the liability of newness which is their greatest disadvantage in the market (cf. Autio et al 2000). In our opinion, the concept of path dependence will increase our understanding of international business operations in the future as well.

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## APPENDIX 1

### Table 2 Tieto Oyj's M&As 2000 – 2010

	Company, country	% of shares	Business	Employees	Business Area	M&A Type
<b>ACQUISITIONS / SHARE PURCHASES</b>						
<b>2010</b>	T&T Telecom	100%	IT and consultancy company specializing in services for telecom operators	~70	Tieto International	horizontal
	Tieto Broadcasting IT Oy	From 80% to 100%	IT system consulting and development services, services related to the applications and infrastructure management	97	T&M	horizontal
	Intensium Oy, Finland (Kuopio)	100 %	IT services for healthcare industry	17	H&W	horizontal
<b>2009</b>	TKP Tieto, Finland (Helsinki)	100 %	employment pension and insurance information systems	211	Financial Services	horizontal
	Odeco Oy, Finland (Jyväskylä)	100 %	HR development services	4	Tietoakseli Oy	horizontal
	Fonecta Oy, Finland (Helsinki)	100 %	IT services business	21	TietoEnator Finland Oy	horizontal
<b>2008</b>	FD Finanssidata	From 30% to 60%	ICT operations management services for the OP Pohjola Group and Ilmarinen. The services are produced by the joint enterprise FD Finanssidata.	98 in FD Finanssidata	P&N	horizontal
	Primasoft, Finland (Helsinki)	100% of Primasoft, a JV previously owned by TietoEnator (60%) and others (40%).	IT services	180 out of 290 employees will be integrated into TietoEnator.	B&I and P&N	horizontal
	<i>*In connection with the agreement, parts of Primasoft's application management business were sold to If P&amp;C Insurance Company and Sampo Life. These transactions will have a negative impact on the net sales of both Banking &amp; Insurance and Processing &amp; Network in full year 2008.</i>					
<b>2007</b>	Abaris AB, Sweden	100 %	IT services for capital markets	86	B&I	horizontal, international
	Provisio AB, Sweden	100 %	IT services for healthcare industry	7	H&W	horizontal, international
	Fortuna Technologies Pvt. Ltd., India	100 %	Telecom R&D Services	300	T&M	horizontal, international

Table 2 continues...

<b>2006</b>	Waldbrenner AG, Germany	100 %	IT services for healthcare industry	30	H&W	horizontal, international
	Manpower's HR services, Sweden	100 %	Payroll and human resources outsourcing services	178	Personec (discontinued oper.)	horizontal, international
	RTS Networks Ltd., Poland	51 %	Telecom R&D services	110	T&M	horizontal, international
	Laps Care AB, Sweden	100 %	IT services for healthcare industry	8	H&W	horizontal, international
	Cymed AG, Germany	100 %	IT services for healthcare industry	34	H&W	horizontal, international
	Abaris AB, Sweden	100 %	IT services for capital markets	86	B&I	horizontal, international
	Provisio AB, Sweden	100 %	IT services for healthcare industry	7	H&W	horizontal, international
	Service 4 Mobile Oy, Finland (Helsinki)	100 %	projektct management and consulting services	14	Tieto-X Oyj	horizontal
	UAB Tieto-Enator Consulting, Lithuania	100 %	IT applications and asministration services	76	TietoEnator Oyj	horizontal, international
	Siemens Communications, Germany	-	mobile netw ork R&D	270	TietoEnator Oyj	horizontal, international
	Sofnetix, Finland	-	Sofrware development for wireless and mobile systems	34	T&M	horizontal
	Telenor Business Consulting, Norway	-	Business development, project and bid management in telecom sector	40	T&M	horizontal, international
	Topas Consulting, Gernany	-	SAP experts for utilities business	74	F&E	horizontal, international
	Quickcllc Finland, Finland	100 %	Interactive and wireless communication services for the social welfare and healthcare industries	5	H&W	horizontal
<b>2005</b>	ITB AG, Germany	100 %	IT services for healthcare industry	173	H&W	horizontal, international
	S.E.S.A.Software und Systeme AG, Germany	100 %	Telecom R&D services	600	T&M	horizontal, international
	Pentec Ltd, Great Britain	100 %	IT solutions for the paper and corrugated board industry	46	P&L (Forest)	horizontal, international
	AttentiV Systems Group, Great Britain	100 %	Softw are solutions to the financial service sector	350	B&I	horizontal, international
	SIA IT Alise, Latvia	51 %	IT professional services company	200	T&M	horizontal, international
	Zait IT Tjänster AB, Sweden	100 %	Custom-based system development, products and operation & maintenance services for the healthcare & welfare area	43	H&W	horizontal, international
	Comnet S.P.A., Italy	65 %	IT services for telecom industry	160, 80 subcontractors	T&M	horizontal, international
	Vega Techonologies Oy, Finland (Oulu)	100 %	Symbian IT development services	80	Tieto-X Oyj	horizontal
	Oy Sevennet Ltd, Finland (Rovaniemi)	100 %	netw ork and softw are solutions	17	Tietotalo Oy	horizontal
	UpperCase, Sweden	-	Business system Axapta	7	Personec Group (Economia)	horizontal
	CSC Austria, Austria	-	ERP business for pulp and paper industry	80	P & L (Forest)	horizontal, international
	SAP HR consultation business, Finland	-	HR consultation	13	Personec (seller TietoEnator,	horizontal
	Manpower's HR services, Sweden	-	Payroll and Human Resource outsourcing	178	Personec Group	horizontal, international



Table 2 continues..

<b>2004</b>	Ki Consulting & Solutions AB, Sweden	100 %	IT and telecom consulting	<b>770</b>	T & M	horizontal, international
	Respons AS, Norway	100 %	Healthcare and welfare software solutions	24	P & H	horizontal, international
	Doctorex, Finland	100 %	Healthcare solutions	15	P & H	horizontal
	C&S Healthcare Software AB and C&S Management AB, Sweden	98,3% of C&S Healthcare Software AB and 51% of C&S Management AB	IT services for healthcare industry	31	P & H	horizontal, international
	InformationsLogik Sweden AB *) and InformationsLogik Netherlands B.V, Sweden and Netherlands	100 %	Laboratory systems	34	P & H	horizontal, international
	ITB AG, Germany	100 %	IT services for healthcare industry	<b>173</b>	P & H	horizontal, international
	S.E.S.A. AG, Germany	100 %	Telecom R&D services	<b>600</b>	T & M	horizontal, international
	IT Optimo, Finland (Helsinki)	-		9	TietoEnator Oyj	horizontal
	Mogul Finland Oy, Finland (Helsinki)	100 %	Internet consulting and communication	20	Tietotalo Oy	horizontal
	Octel Oy, Finland (Helsinki)	100 %	logistics services	<b>130</b>	TietoEnator Oyj	horizontal
	Helsekomponenter AS, Norway	22 %	software components' production	3	TietoEnator Oyj	horizontal, international
	Jons-Medical, Finland	100 %	Medical imaging and archive business	2	P & H	horizontal
	Tekla's customer information systems, Finland	100 %	Energy sector services	<b>115</b>	P & L	horizontal
	IFS' payroll solution, Sweden	100 %	Payroll software	45	Personec	horizontal, international
<b>2003</b>	MOPS Systems, Sweden, Germany and Canada	-	IT systems for pulp and paper industry	40	TietoEnator Oyj	horizontal, international
	Sykora, Germany	100 %	mobile IT systems	80	TietoEnator Oyj	horizontal, international
	Tietokate Oy, Finland (Joensuu)	100 %	financial outsourcing services	23	Tietokate Oy	horizontal
	KPMG Consulting AS, Norway	-	IT consulting, integration and maintenance	35	TietoEnator Oyj	horizontal, international
	TietoEnator ISS a.s., Czech	100 %	IT services	<b>110</b>	TietoEnator Oyj	horizontal, international
<b>2002</b>	Enterprise Systems Copenhagen A/S	-	IT services for healthcare industry	18	TietoEnator Oyj	horizontal, international
	WTS Wireless Technology Systems Oy, Finland (Jyväskylä)	100 %		32		horizontal
	Ericsson, Sweden	-	IT software network and teleoperation R&D	<b>860</b>	Tieto-X Oyj	horizontal, international
	Araneum A/S, Denmark	100 %	IT services	55	TietoEnator Oyj	horizontal, international
	Teledynamics B.V., Netherlands	80 %	Contact center- programs	35	TietoEnator Oyj	horizontal, international
	Sykora, Germany	51 %	mobile IT solutions	<b>125</b>	TietoEnator Oyj	horizontal, international
	Majiq Inc., USA	-	pulp and paper industry IT systems	<b>117</b>	TietoEnator Oyj	horizontal, international
	Baltijos Informaciniu Duomenu Valdymo Centras UAB, Lithuania	-	computer services and consulting	-	TietoEnator Oyj	horizontal, international
	Compaq, Finland (Espoo)	-	IT services in healthcare industry	6	TietoEnator Oyj	horizontal
	Elisa Com Oy, Finland (Helsinki)	-	phone numbers' up dating services	1	TietoEnator Oyj	horizontal
	Softshark AS, Estonia	100 %	bank and insurance programs	13	TietoEnator Oyj	horizontal, international
	ABB Energy Information Systems AB and 50% of Prototum AB, Sweden	-	ABB Energy Information systems AB measurement business	61	TietoEnator Oyj	horizontal, international
	Softema Oy, Finland Raisio	100 %	IT services in the insurance industry	72	TietoEnator Oyj	horizontal

Table 2 continues...

2001	Modultek Oy, Finland (Pori)	-	it services in workshop industry	21	TietoEnator Oyj	horizontal
	Sampo Oyj, Finland (Helsinki)	-	it services in insurance business	330	Tietoleonia Oy (Sampo 60% & TietoEnator 40%)	horizontal
	Arrowhead Technology Solutions AB, Sweden	-	consulting business in e-services	30	TietoEnator Sweden AB	horizontal, international
	Eumetrix AB, Sweden	100 %	investment programs	50	TietoEnator Sweden AB	horizontal, international
	IT+A/S, Denmark	75 %	financial e-services	19	TietoEnator A/S Denmark	horizontal, international
	Kantate BSP AS, Norway	100 %	oil and gas industry consulting	30	TietoEnator Consulting AS, Norway	horizontal, international
	Oy Softema Ab, Finland (Raisio)	60 %	life and pension insurance systems	70	TietoEnator Oyj	horizontal
	Tietokesko Oy, Finland (Helsinki)	80 %	it services	178	TietoEnator Oyj	horizontal
2000	Botnia Comp Engineering Oy, Finland (Kemi)	100 %	IT services	19	Tieto-X Oyj	horizontal
	Sedad Oy, Finland (Helsinki)	-	financial IT services	11	Tietonowyhtiöt Oyj	horizontal
	Anite Business System Ltd, UK	-	energy industry consulting	6	TietoEnator Oyj	horizontal, international
	MAS (Mathematische Analysen- und Systeme) GmbH, Germany	51 %	it solutions in paper industry	90	TietoEnator Oyj	horizontal, international
	Sypro System Professionals Oy, Finland (Jyväskylä)	100 %	wireless software desing services	25	TietoEnator Oyj	horizontal
	Oy Visual Systems Ltd, Finland (Joroinen)	100 %	new media consulting	82	TietoEnator Oyj	horizontal
	Tietovara Oy, Finland (Helsinki)	100 %	it consulting	31	Tieto-X Oyj	horizontal
	European Medical Solutions Group, Norway	-	-	-	-	horizontal, international
<b>OTHER CHANGES</b>						
Merger of Oy Visual Systems Limited into TietoEnator Corporation on December 2004.						
TietoEnator Corporation has a permanent establishment in Czech Republic.						

B&I = Banking & Insurance, T&M = Telecom & Media, GMR = Government, Manufacturing and Retail

H&W = Healthcare & Welfare, F&E = Forest & Energy, P&N = Processing & Network, DI = Digital Innovations

(Sources: <http://tieto.com/investors/business-transactions> and *Talouselämä*)

<http://www.talouselama.fi/yrityskaupat/?action=search&buyer=Tieto&seller=&companyBought=&startTurnover=1&endTurnover=&lineOfBusiness=&startYear=2000&endYear=2010&buyerCountry=&country=&startEmployeeCount=1&endEmployeeCount=>

## APPENDIX 2 Tieto Oyj's key financial figures 2004-2010

### Tieto Keyfigures

	2009	2008	2007	2006	2005	2004
<b>Net sales</b>	<b>1706.3</b>	<b>1865.7</b>	<b>1772.4</b>	<b>1646.5</b>	<b>1649.6</b>	<b>1525.1</b>
Other operating income	17.5	10.8	13.3	25.1	25.9	24.5
Employee benefit expenses	986.7	1056	1021.3	938.5	918.1	819.9
Depreciation and amortization	70.7	66.1	77	59.4	61	63.8
Impairment of goodwill	0	0	40	0	0	18.7
Other operating expenses	591.1	642.8	646.3	546.4	517.9	487.5
<b>Operating profit (EBIT)</b>	<b>75.3</b>	<b>111.6</b>	<b>1.3</b>	<b>127.7</b>	<b>178.9</b>	<b>162.8</b>
<b>Financial net</b>	<b>-5</b>	<b>-29.2</b>	<b>-9.9</b>	<b>-3.2</b>	<b>-7.3</b>	<b>-4.6</b>
Profit before taxes	70.3	82.4	-8.6	124.5	171.6	158.2
Income taxes	15.2	-21.9	-22.6	-37.2	-36.7	65.2
<b>Net profit for the period</b>	<b>55.1</b>	<b>60.5</b>	<b>-31.2</b>	<b>87.3</b>	<b>134.9</b>	<b>223.4</b>