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The internationalisation process of Indian IT companies

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Executive Summary

Title: The internationalisation process of Indian IT service companies

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Keywords: Internationalisation, India, IT service industry, software, emerging markets, Infosys, Wipro.

Purpose: The general purpose of this thesis is to describe how companies in the Indian IT service industry managed the vast growth the industry has experienced during the 1990s and the early zeros. The thesis will describe how two IT service giants, Infosys and Wipro, evolved and internationalised, relative to the presented theoretical framework of internationalisation theories.

Theoretical framework: Literature on internationalisation in general, and internationalisation of companies from emerging markets in particular, have been used as theoretical framework.

Research question: Illustrate the internationalisation process of Indian IT companies and explain how they managed to internationalise and become global players in such short period of time.

Methodology: The thesis is performed in an exploratory way, with the theoretical framework as a foundation to analyse the empirical studies. The analysis is made with an open mind to the theories, with the possibility to comment whether they appear to explain the studied companies' internationalisation or if other underlying factors have affected the process.

Empirics: Two cases, Infosys and Wipro are presented. The cases illustrate how the company started and further describes the internationalisation process step by step, with focus on the reason behind decisions.

Conclusion: The thesis concludes that it is a mix of taking advantage of the globalisation and the economic features of India that has influenced the internationalisation process of both Infosys and Wipro. Taking advantage of the globalisation includes taking advantage of the interlinked global economy with web like characters of multiple networks is one of the key factors that has made it possible to succeed for Wipro and Infosys on the global market.

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Anton Brink John Rombin

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1. Introduction

The following chapter presents the background and purpose to the thesis. The limitations used are presented, and the research question. The chapter also shortly summarise the outline of all chapters, to give the reader an overview.

1.1 Background

In this ever so globalising world, some firms are benefitting more than others. The emerging markets of today, with Brazil, China, Russia and India in the forefront, have a growing influence on the global economy. India's growth has been 8.2 per cent in average between 2003 and 2009. One of the key industries behind this high growth rate is India's software and IT sector. (Datamonitor India, 2010)

The competitiveness within the Indian IT sector has been well maintained and the Indian software market has generated a total revenue of $11.2 billion in 2008. The compound annual growth rate (CAGR) was during 2004 to 2008 20.5 per cent. Over the same period, the Chinese and Japanese IT industry's CARG was 10.4 per cent and 5.8 per cent respectively, and reached a total value of $34.8 billion respectively $20.5 billion in 2008. The performance of the Indian software market is forecasted to decelerate, and the expected CAGR is predicted to be 12.1 per cent for the period 2008 to 2013. Still, the market value is anticipated to be $19.8 billion by the end of 2013. In comparison, over the same period, the Chinese and Japanese software market is predicted to grow with 13.4 per cent and 5.4 per cent, and reach values of $65.3 billion and $26.6 billion respectively in 2013. (Datamonitor, India, 2010) Which are the underlying factors behind this spectacular growth in the sector? How has it been possible to reach this high growth in this sector?

From the Indian software industry global IT giants such as Tata Consultancy Service, Wipro and Infosys have evolved, see Table 1 for a list of top Indian IT exporters. As deregulations of the Indian economy took place in the beginning of the 1990s, many of the Indian IT companies enjoyed a solid growth through increased international demand. The connections made in their home market made it far easier to reach international market, and as a result, international growth strategies took form within many Indian software companies and the internationalisation process began. The Indian IT service companies' largest international competitors are giants such as Accenture and IBM, looking at Table 2 below, it is clear that the international competitors still are much larger in terms of revenue and number of employees. But

the Indian companies are remarkably high valued in relation to their revenues, an indication of a strong belief in the future of these companies.

Table 1
Top 20 IT exporters from India (2005-2006)

Rank	Company	Rank	Company
1	TCS	11	Polaris
2	Infosys	12	Hexaware
3	Wipro	13	Mastek
4	Satyam	14	MphasiS
5	HCL	15	Siemens Information
6	Patni	16	Genpact
7	I-Flex	17	i-Gate
8	Tech Mahindra	18	Flextronics Software
9	Perot Systems (TSI Ltd)	19	NIIT
10	L & T Infotech	20	Covansys

Table 2
India's four largest IT companies vs. global IT companies

Company	Revenue ($ Billions)	Employees	Market Cap ($ Billions)	Market Cap/ Revenue Ratio
TCS	4.3	89,419	27.6	6.4
Infosys	4.2	91,187	25.9	6.1
Wipro	4.3	82,122	20.1	4.4
Satyam	1.9	51,000	9.2	4.8
Big 4 Total	15.0	313,728	82.8	5.5
Accenture	23.3	170,000	23.7	1.0
EDS	22.3	139,500	12.3	0.6
IBM	101.0	386,588	178.0	1.8

Source Table 1 and 2: Chary, 2009.

1.2 Problem discussion and purpose

Many companies from the emerging economies such as India are growing fast, and leaving a growing footprint on the global market. But do these companies follow the same steps as companies from developed economies, and how is it that these companies, in such short period of time, have been able to become such large international players? Considering their origin, with both economical advantages and disadvantages, it is likely to believe that companies from emerging markets face different problems compared to companies from developed markets. The internationalisation for companies in for example India, can be described as a backward internationalisation, where Western companies made the first move by outsourcing activities to India. First the activities were of simple nature, but they soon turned into more advanced activities, and today, Western companies place whole R&D division in India. This backward internationalisation has later shown to be very important for Indian companies when expanding abroad.

The thesis will investigate how the internationalisation process was executed for Indian IT service companies in particular, but also describe the process for emerging market companies in general. To visualise the internationalisation process in detail, two of the three largest IT

companies in India, Wipro and Infosys, have been chosen. By studying these two companies internationalisation processes, important success factors can be found, and conclusions can be drawn by these. The findings presented in this thesis will further illustrate the complexity of internationalisation, and that there is not one single theory that can be used to explain why and how different types of companies expand abroad. This will highlight that the internationalisation of emerging market companies is still an area open for research, and by further studies, a more accurate and complete model or explanation might be possible to develop.

In order to investigate the problem, the studied area has been narrowed down to the following two research questions:

1. How did the internationalisation process look like for Wipro and Infosys?

2. How was it possible for the companies to internationalise so rapidly?

1.3 Limitation

The limitation and focus on the Indian market is mainly due to its rapid growth, which has lead to recent internationalisations of many Indian companies. Since the IT sector is one of the key sectors in India's growth story, and due to the fact that the sector serves as back office to many of the most recognised global companies, the research will place most focus here. Regarding the IT industry, the main segments we refer to are different IT services and software development, which are the most preeminent segments, but when describing the companies, it will be clear that they strive to be comprehensive, by providing a wide range of both services and products.

The thesis is limited to a detailed investigation of Wipro and Infosys. The choice of two companies reflects the choice of method, namely a qualitative study. Arguments for why the choice suite this thesis well will be discussed in chapter 2.Wipro and Infosys are not only in the industry's top three measured in revenue, but also measured in years of experience in the industry. The choice of large and long-time established companies, over small and newly founded companies, will affect the research in several ways, partly practical when gathering data, but also when analysing the findings. Small companies have the opportunity to be more dynamic than large corporations, and might be able to act quicker, but the important factors behind the successful internationalisation will be applicable to both kinds of companies, disregarding size and years of experience.

1.4 Outline

Chapter 1 – Introduction

The first chapter gives a short presentation of the background for the research, with the IT industry and India in focus. The background leads up to the purpose of the thesis, with two formulated research questions. The limitations with arguments and explanations are also presented.

Chapter 2 – Research methodology

Here is the work process of the thesis presented, with discussions about different methodological approaches, together with arguments for the choice made in the process.

Chapter 3 – Theoretical framework

In this section we present a couple of the most cited work in the field of internationalisation, with the addition of more recent work for the internationalisation process of emerging market firms, and the rather new phenomenon of companies that are international right from their birth.

Chapter 4 – Empirical study

The empirical study begins with a description of the economical climate in India, with the technological development, followed by a review of the Indian IT industry. This is followed by two case studies of Indian IT service companies, consisting of historical events, and underlying reasons for the decisions that lead to the position today.

Chapter 5 – Analysis

The analysis focuses on the link between the theoretical framework of internationalisation theories, and the empirical study of the IT companies. This is complemented with discussions of alternative reasons and other findings in the empirical study.

Chapter 6 – Conclusion

In this chapter the authors establish what conclusion that can be drawn from the analysis, and connect it with the research question presented in the introduction.

2. Method

In this chapter, the methods used in the research process are presented, together with arguments for why different methods have been used.

2.1 Research design

The research in the field of internationalisation for multinational corporations (MNCs) with origin in emerging countries is a relatively new process to study, and is therefore still open to investigation. Our goal is to, visualise the link between the most cited researchers in the field of internationalisation, together with some more recent research in our specific field, with the reality of the internationalisation for two Indian IT service companies- Infosys Technologies Limited (Infosys) and Wipro Limited (Wipro). Due to the fact that the knowledge of how the rapid internationalisation has been possible for emerging market MNCs, we will perform our work in an explorative way, and by using qualitative methods. A quantitative method is not chosen because many quantitative approaches deal with, explanation, testing of hypothesis and statistical analysis. In relation to a quantitative method, a qualitative method is generally focused on interpretation, holistic understanding and focused structured, standardised and theoretical ways of analysing and collecting data (Eriksson & Kovalainen 2008). In order to answer the research question, we believe a holistic understanding of the issue is preferable and therefore a qualitative method is chosen.

2.2 Research approach

There are several methodical approaches to consider for the thesis process. The deductive approach uses the theories as the first source of knowledge, which allows the researcher to deduce hypotheses on the base of what is known theoretically about the phenomenon (Eriksson et al, 2008). This approach comes with some criticism, which points out that it is inevitable that the researcher looks for data relevant to the theories, and could by this disregard important information that would oppose the theories (Jacobsen, 2002). This problem has been regarded throughout the process of data collection, by having an open mind to new information, and a somewhat willingness to find data which oppose the theories. The opposite approach to deduction, induction, uses the empirical work to develop theories (Eriksson et al, 2008). Between induction and deduction is the abductive approach, where theories are the starting point, but are revisited after new findings are discovered in the empirical study (Eriksson et al, 2008).

This thesis will use previous work and models for the internationalisation processes as a foundation, and with these theories in mind, a case study will be conducted. Through the empirical work, we will be able to analyse the theories and decide whether the companies in the case studies follow these theories, or if there has been other explanations behind their position today. Since the theoretical work for the internationalisation process with emerging country companies still is evolving, the thesis will explore if there are some aspects found in the case studies that can be added, or that will contradict previous work. With this discussion, it can be established that the thesis will lean towards a deductive approach in the sense that the empirical work will help to answer whether the existing theories comport with the internationalisation of the studied companies. It will however also lean towards an abductive approach since the empirical work is used to find any other possible answers to the research questions. The mix of deductive and abductive methods, together with the previous discussion of an explorative, has proven to be the best way to conduct the thesis.

2.3 Holism or individualism

A relevant question is how much the individual affect decisions concerning the internationalisation process of a company. The scientific approach is either to look at the individual as the only possible analytical object to understand certain social phenomenon, or to analyse how individual act in general in different situations (Jacobsen, 2002). The explanation behind internationalisation of firms in developing countries is complex, especially when investigating Indian companies, which often are controlled by powerful families. A part of the study will therefore be to consider personal interest in internationalisation decisions, relative to the used internationalisation theories with more focus on rationality. In the empirical study, it will be clear that the owners in one company possess a great majority of the shares, but it is the opposite situation in the other studied company.

2.3 The case study

With the delimitations presented in previous chapter, we have narrowed down the study-area for the case to Indian IT service companies. A case study with this limitation will not give a representative image of all industries in all emerging markets. To be able to explain this process for a whole market and several industries, more time and resources would be needed.

Since our task is to describe a specific circumstance and to answer the research questions, a case study is according to Yin (2009) a possible research alternative. A case study is a preferred option if the research question “deals with operational links needing to be traced over

time" (Yin, 2009), which is the case for this thesis. Furthermore, a case study is preferable if complex organisational, managerial and other business issues are addressed, which also are considered problematic to study by using quantitative methods (Eriksson et al, 2008). Since this study aims to describe the internationalisation process of Indian IT companies, a use of holistic detailed knowledge is essential, such can be provided by using a case study (Eriksson et al, 2008). The end product should according to Eriksson & Kovalainen (2008) be based on different empirical sources while also encompass diversity and complexity. Bell (1999) suggests that a successful case study must give the reader a multi-approach view of the situation. The two case studies in this thesis will guide the reader through the history of the two companies so that the gradual internationalisation process will be as clear as possible.

The choice of doing no more and no less than two cases is based on the possibilities to get an in-depth understanding of these two companies. If choosing more than two cases important details regarding the internationalisation process would be disregarded. By choosing two cases instead of one, this thesis has the possibility to cross reference and compare different strategies and paths of the two companies with each other. From the in-depth analysis we will see if any cross-case conclusions can be made, and how well their respective process fit the theoretical framework. We are however aware of that it cannot be statistically ensured without a larger sample of companies. There are several IT service companies from India that has gone through a similar transformation and enjoyed the same development of the software sector in India, for example Tata Consultancy, Satyam Computer System and HCL Technologies, to only mention a few. The two chosen companies, Infosys and Wipro, were elected based on their size and international operations. It is important that the companies are still considered as Indian companies, and not have reached a level of internationalisation where it is only viewed as a "multinational company".

Looking for representative companies to explain and describe the fast internationalisation process, we choose the second and third largest IT service company from India, Tata Consultancy being the largest, seen in previous chapter. Tata Consultancy is part of the conglomerate Tata, which is a truly diversified conglomerate. We decided to look away from Tata, and choose companies whose core business was in IT services, and with no previous operations in other segments outside of India. If we would look at the internationalisation of the IT segment in a conglomerate, with already established operations in other industries outside of India, these international connections would be necessary to consider when analysing the reason for a rapid internationalisation for the IT segment. Choosing a company whose core business is

IT services, will provide a more accurate picture of the internationalisation process for IT companies in general. By presenting two case studies we hope to produce a generalisation of how Indian IT companies Internationalise.

2.3.1 Data collection

With the theoretical framework, we intended to give a description of internationalisation theories in general, and internationalisation theories for emerging market MNCs in particular. The first step is to choose the most relevant previous research and theories in order to provide a theoretical framework suitable for this thesis. When studying previous work of scientific articles, it soon gets clear to which authors most refer to, wherefore further studies of these authors were made.

There are many sources available for data collection, and according to Yin (2009) it is important to use multiple sources for evidence. In our case, we will be looking at the historical development of the different companies, and the best way of finding this information is from annual reports, historical articles and analysts' reports. It is important to consider where these sources get their information, if they are secondary or primary. An article can for example have the company's press release as source, which means that this article is not relevant for confirmatory evidence, if the main source is the company's website. According to Nyberg (2000) secondary data can be defined as information that has been published and interpreted.

To use documentation as the main source of information, which is our case, has its strengths and weaknesses. On the positive side, the information can be viewed repeatedly, it is not created for the case study, it is also exact and it provides a broad coverage (Yin, 2009). The negative aspects are that it can be difficult to find, it can be incomplete, it can be influenced by the author and some parts can be deliberately withheld (Yin, 2009). To overcome these weaknesses, the size and ownership of the companies is an important factor when choosing, where information will be easier to obtain for large and listed companies. This is partly because listed companies have accessible annual report with good time coverage, but also because it is more likely to find articles about these companies. Both Infosys and Wipro provide transparent annual reports. The fact that we need historical information that goes back several years, make documentation sources superior compared to for example interviews.

Academic article for the theoretical framework was found by searching within mainly two databases, Business source premier, and Academic search elite. All theories used in the theoretical framework are collected from the original article, written by the originator of the the-

ory in question. In excess of the academic articles, books written by prominent authors within our field have been used, and the studied companies web pages to receive annual reports and general information about the companies.

In order to build two detailed cases we used several sources, however, we used the database Datamonitor 360, as foundation in both cases, in which we found detailed and extensive reports regarding Infosys and Wipro. Datamonitor 360 provides objective and detailed information of companies, sectors as well as countries. When looking at historical events of a company, it is important to find objective information and that is why Datamonitor was the choice. The downside by using Datamonitor is that the source only present what has happened, but not the underlying strategies or why. By using Datamonitor as the main source, and complement with economic articles from the specific time for a certain historical event, this study will provide adequate and objective information. The more detailed information about historical events was found using the same databases as for the theoretical framework, but also as mentioned through annual reports and the companies web pages.

To complement the secondary data with primary sources, we have tried to reach several Indian companies for interviews, without any success. The information we were looking for was underlying factors and strategies for certain decisions we found in the case studies. We focused on contacting companies with offices in Sweden, and called to get hold of anyone who would possess this kind of information. But the answer we got in several cases was that the information we were looking for was not to be discussed with anyone outside the company. Another problem we discovered was that to get the right answers, we would have to interview senior management, which in this case always was someone in India, and proved to be even harder.

Unfortunately, we had to stop our attempts to attain primary sources for the cases and focus on secondary, which proved to be a successful option, probably due to the public interest paid to the chosen companies and the many sources that could be found. Due to the research interest by previous researcher for the emergence and the success in such a short period of time for the Indian IT and Indian software sector, it has been possible to obtain adequate information from previous studies.

Regarding the interviews included in the case, are all from academic papers or economic articles found in the databases mentioned. The contexts of the interviews are highly relevant to the internationalisation process of the firms. In the Wipro-case, CEO Azim Premji is inter-

viewed regarding how to build a large Indian company. In the Infosys case, formerly CEO Mr. Murthy is interviewed regarding key success factors for Infosys and how it was to be an entrepreneur in India during the 1980s. Other founders are interviewed in similar contexts with more specific focus on the successful growth and also on corporate governance.

2.4 Reliability and validity

Reliability is, according to Yin (2009) that if a later investigator should follow the same procedure as described by us while also using the same case studies, that investigator should arrive at the same conclusion and findings. An early definition of validity is according to Cohen, Manion and Morrison (2007), how well an instrument measures what it purports to measure. More recent suggestion by the same authors, in qualitative data, is that validity is addressed through the honesty, depth, richness and scope of the data achieved and the objectivity of the researcher.

Regarding the interviews with CEOs and founders, we are aware of that when they answer questions from researchers, they also communicate with company employees and that might prohibit the CEOs and founders to be fully honest. However, when interviewed the CEOs and founders have no incentive to lie and while also taking into consideration that the interviews where made under professional circumstances, by professional researchers, published in academic papers, and in the context of company growth and corporate governance, we believe that the interviews are to be considered as valid material.

Throughout the study we have collected data in a consistent and systematic way. Internationalisation theory in general is a subject well studied, which adds to the reliability of information. Research regarding the internationalisation process in firms specifically from emerging markets is still rather new, in comparison, but still widely studied. All information is collected from reliable sources. The same conclusion will be reached if another researcher would use the same method.

3. Theoretical framework

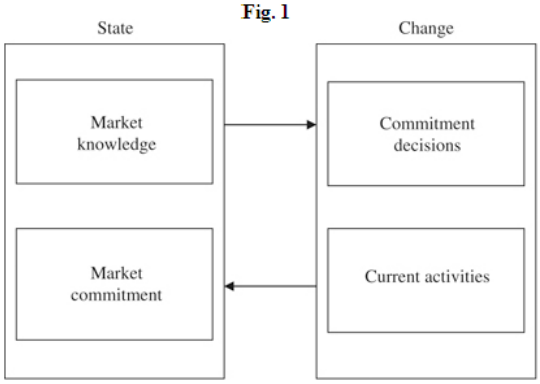
In this section we present a couple of the most cited work in the field of internationalisation, with the addition of more recent work for emerging market firms, and the rather new phenomenon of companies that are international right from their birth.

3.1 The Uppsala model

The Uppsala model (U-M) is a well used model to explain the internationalisation process of companies. It was developed by Jan Johanson and Jan-Erik Vahlne during the late 70s, and is a development of Johanson and Wiedersheim-Paul studies in the same area (1975). The model questions the ontological debate that man is rational and takes actions by valuing cost and benefit. It shows that the underlying factors behind internationalisation are in fact not rational, but a slow and cautious expansion, starting in markets with a resemblance to the home market. Factors which make a market similar are for example culture, language and business practices. An often noticed reason behind a global expansion among the analysed companies in the model, was often unplanned export to a specific market (Johanson & Vahlne, 2009). The internationalisation process is described as an incremental learning procedure for the company, initiated by a foreign demand, rather than an active choice to expand to a certain market (Johanson & Vahlne, 1977).

The model explains the process of internationalisation through a series of internal steps, all affecting each other, visualised in Fig. 1 below. "State" represents the current state of the company, which affect whatever changes a company might do, these changes are represented in "change", which when executed will affect the company and it will be in a new state condition. These internal steps leads gradually to an expansion in a foreign market, and are explained below.

Fig. 1



The basic mechanisms of internationalisation, the 1977 version

Source: Johanson & Vahlne, 1977

3.1.1 Market knowledge

A key in this model is market knowledge, which is the foundation for decision making. According to Penrose (1966) there are two main types of knowledge, first there is objective knowledge which can be taught through books or mouth-to-mouth, second is experiential knowledge that can only be obtained through experience. Johanson and Vahlne suggest that the right way of gaining market knowledge is by experience, by entering new markets step by step and slowly expand the operations. Experiential knowledge cannot be obtained quickly because of its nature, and it cannot be transmitted from one person to another (Penrose, 1966: 53). It is possible to acquire knowledge by attaining it from external sources, either by hiring personnel or taking advice from persons with experience. This however is not the preferred way, because to use market experience correct it must be adopted to the company's organisation. To do this you cannot only have market knowledge, you must also have experience from working within the organisation. This statement is true for marketing and management activities, but for product-oriented activities it is easier to separate the firm from the market, and it is then possible to obtain information from sources outside the firm (Johanson & Vahlne, 1977).

3.1.2 Market commitment

A company's market commitment is determined by the amount of resources invested in the market and to what extent these recourses are tied to the specific market. A company can for example have a large amount of financial resources in a market, without being very committed due to the fact that these resources can easily be moved. A greater commitment could be to have a large staff with experiential knowledge in the specific market, a knowledge that cannot be used somewhere else. (Johanson & Vahlne, 1977)

3.1.3 Commitment decision

Decisions for further commitments in a market are based on what risks and opportunities the market possess', which are determined by the company's market knowledge and current commitment. The commitment decisions can result in two scenarios; it can either be an economic effect with increased activities on the market, or have an uncertainty-reduction effect for the decision-makers. The activities and commitment to the market will increase until the company's risk-limit is reached, where further expansion is considered too risky. To decrease market uncertainty the company could integrate itself more with the market, by having closer connection with the customers or offering new services for its customers. (Johanson & Vahlne, 1977)

3.1.4 Current business activities

The commitment decisions lead to the current business activities on a market, which is where the experiential knowledge is obtained. But the results from different activities often take long time to be see, and it is not unusual that it must be repeated several times to have an effect on the market. In some industries where the products are either new or complex, the company must commit more to the market, which also means a greater risk if the company does not have enough knowledge about the markets potential. (Johanson & Vahlne, 1977)

But with increasing commitments, through both economic actions and uncertainty-reducing actions, the knowledge will gradually increase, which will improve the conditions for future decisions and closes the circle of the Uppsala model's decision process. With deep knowledge it is easier to estimate various risks the company will be exposed to in a certain market. This will also affect the sise of the investment, where companies will be able to make larger investments if they can make more accurate risk assessment. (Johanson & Vahlne, 1977)

In the case studies of the model it is concluded that in a vast majority of the studied internationalisations are initiated by export through an agent, followed by establishing a sales office and later followed by local production (Johanson & Vahlne, 1977).

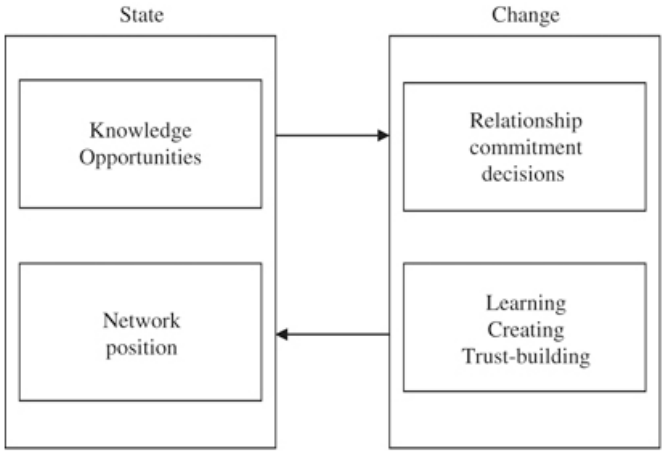
3.2 The Uppsala model: revisited

Johanson and Vahlne original theory (1977) is by some, including the authors themselves, partly outdated in today's business climate, where a lot of progress has been made in the theoretical field (Johanson & Vahlne, 2009), which has made it necessary to revise the model. In the original model (Johanson & Vahlne, 1977), suppliers and consumers are viewed as independent actors, but today's reality is different. Suppliers and consumers are linked together in a network based on interdependent relationships, and internationalisation is a way of strengthening a company's position in these networks. The discussion in the 1977 model with physical distance as a factor when choosing new markets and entry mode, has become less significant and existing business relationships has become important (Johanson & Vahlne, 2009). Knowledge and commitment to the market are of course still important aspects, but in this view these factors are developed through networks. Some information is not available to actors outside networks, wherefore a commitment to these relationships is important to discover new opportunities.

In the revised model there are some changes, see Figure 2. First "opportunities" has been included as a subset to the "knowledge" variable, which intends to illustrate that opportunities is

a driver in the internationalisation process. Other subsets of the knowledge aspect are needs, capabilities, relationships and strategies, which are all underlying factors of internationalisation. The previous second state variable was "market commitment", this variable is now embedded in "network position", since the internationalisation is considered to be improving network positions. The position in a network is built on knowledge, trust and commitment, these variables can all differ between companies which results in different successful internationalisations.

Fig. 2



The basic mechanisms of internationalisation, the 2009 version

Source: Johanson & Vahlne, 2009

"Relationship" has been added to the first of the two change variables, this is to clarify that the commitment decisions has to do with committing to relationships. These decisions must not only strengthen relationships, it can also be decisions to decrease a certain relationship within a network. According to the model, the results of the decisions are generally observed through a changed entry mode, in the size of an investment, organisational changes and in the level of dependence (Johanson & Vahlne, 2009).

The second variable in the change unit "Learning, creating and trust-building", has been changed and clarified in this revised model. In the old model, the outcome of "current activities" was knowledge, trust and commitment. The main difference in this model is that "knowledge" has been switch out for "learning", which is a step further than experiential knowledge. How well a company can learn, create knowledge and build trust is dependent on the existing body of these factors, but also to the extent that companies find opportunities appealing. (Johanson & Vahlne, 2009)

With this model, the authors describe the expansion to new market as an outcome of relationships with partners who intend to develop their business through internationalisation, and possess a strong position in a network on the specific market. These expansions have two possible motives, the possibility to finding business opportunities through networks, or to strengthen a relationship by showing commitment and following a partner abroad. The answer to which market the company or its partners will chose, is simply a market where they see opportunities or where someone in the network possesses a strong position in a network. (Johanson & Vahlne, 2009)

The physical distance is argued to be less significant in this model, but will however matter if the company does not have any significant partners. If this is the case, a company could either choose a market where it has promising opportunities to connect to a network, or chose a middleman, for example an agent, to gain access to networks and be able to expand. But a short physical distance is not a factor strong enough on itself. (Johanson & Vahlne, 2009)

The explanation for how the internationalisation process begin will be found in the state variable, such as knowledge, trust or existing commitment to relationships, regardless the reason behind the decision for the internationalisation (Johanson & Vahlne, 2009). It could for example be use of network knowledge about an opportunity in a foreign market, or as Larson (1992) argues, exploitation of trust between partners in their network.

The authors Johanson and Vahlne (2009) argues that the model is equally applicable to large and small firms. There are of course differences in the process for small and large firms, the large firms are for example often better informed before an acquisition in a foreign market, but in these cases it is rather because the experience of the company than the size. This experience, with knowledge and network already established before internationalisation, might also be an explanation for new and fast growing international companies. (Johanson & Vahlne, 2009)

3.3 The eclectic paradigm: OLI

The word eclectic implies that something is composed of elements from different sources (Encyclopædia Britannica, 2011), and composure of several existing internationalisation theories is what John H. Dunning presented in the 1980s.

The paradigm provides companies with a framework to determine which internationalisation method that would be most beneficial for the company, by suggesting to what degree a com-

pany should invest in a new market. This is decided by the advantages that different decision present, advantages such as ownership-specific advantages, location-specific advantages, and internalisation advantages. For a company to make a direct investment in a new market, three criteria must be met (see Table 3), first the company need to possess assets which its competitors in a market lacks (ownership-specific advantages), second, it should not be more profitable to sell or lease these assets to a foreign company (internationalisation advantages) and third, it should be more profitable to exploit these specific assets in combination with resources in a foreign market rather than in the home market (location advantages).The greater the ownership-specific advantages are, the higher are the motives to internationalise them, and also to keep them within the company. (Dunning, 1980)

The internationalisation process of the eclectic paradigm starts with a company supplying its home market, and for this company to grow, it can diversify internally with new products or activities, or externally through acquisitions. Foreign markets are possible for expansions in both cases (Dunning, 1980). If the company chooses a foreign market, it needs to possess ownership-specific advantages that compensate for the extra costs of establishing operations in a new market (Hirsch, 1976).

Table 3

Choices of FDI, Export and License			
	Ownership advantage	Internalization advantage	Location advantage
FDI	Yes	Yes	Yes
Export	Yes	Yes	No
License	Yes	No	No

Source: Dunning, 1980

The location- and owner-specific advantages are associated with the input companies use to create value, and according to Dunning (1980) there are two kinds of input. The first inputs are those available for all firms in a market, and which has to be used in that location, for example natural resources, most kind of labour, the legal and commercial environment, market structure and government policies. These factors alone do not give any advantages to expand to foreign markets, since all international firms have access to them. The second types of inputs are owner-specific, which companies purchases or creates themselves, and which are legally protected. These inputs are usually technology, organisational skills, a commercial monopoly, size of the firm, economies of scale production or intangible assets like brand

names, patents or trademarks. The advantages are not necessary exclusive to one multinational firm, but the fact that a company is multinational gives them additional advantages. It could be possibilities to move assets between countries for financial gains, or manage temporary market-crisis by moving production to another market (Dunning, 1977; 1980). What distinguishes the second type of inputs from the first one is that it is not strictly tied to a location, wherefore it is possible to use these as advantages when expanding abroad. Dunning (1980) also stresses that there is a time lag involved, that ownership advantages often reflect past location advantages.

The main thoughts that Dunning (1980) contributes to the internationalisation theories are that owner-specific and location specific advantages are not alone enough to explain all stages of foreign direct investments. Dunning present in the OLI paradigm an answer to the question of why a company chooses to internalise its owner-specific advantages itself, rather than selling or leasing them out to a company in a foreign market(internalisation advantages).

A first reason for this is that companies could avoid, or take advantages of, market- and price imperfections, which occurs for example when transportation cost are high, where market are not entirely free, or where the product is difficult to acquire due to a lack of information or high prices. The results of these imperfections will affect companies in different ways, depending on the nature of the operations. For purchase-based operations this means uncertainty over price, availability and deliveries of products. In retail operations these imperfections will be visible if the market has low property right protection, if price discrimination is prohibited, or if the seller wants to engage in after-sales services (Brown, 1976).A second reason for internalisation is the public intervention, such as governmental regulations for license production or import, patent systems, and different tax policies that could be avoided or taken advantage of. (Dunning, 1980)

The internalisation advantage in the eclectic paradigm compliments the location and owner-specific advantages, and explains where companies get their competitive advantage to make direct investments in foreign markets. Without the internalisation advantages, investments in these markets could be replaced by traditional trade or license production. (Dunning, 1980)

3.4 The eclectic paradigm – revisited

Like the authors behind the U-M, Dunning has revisited the OLI model several times since it was first presented. The reasons behind these updates are changes within the MNEs' organisation, and changes in their external environment (Dunning& Lundan, 2008). We have previ-

ously discussed the growing importance of networks which became central in the revisited U-M, in excess of this, Dunning and Lundan (2008) also emphasises other factors that affect the OLI model, like clustering of high value-added activities, increased importance of relationships with the society and governments, and an increased importance of institutions as support for the ownership- and internalisation advantages for the firm. The model has been updated, and the OLI parameters have been complemented with some additional theories to fit these changes.

The model also received criticism for being static and for not being able to manage interactions between international MNEs (Vernon, 1985). But Dunning (1988) argues that the advantages parameters presented in the model will be affected by actions made by international competitors, and in the same way will actions made by the company affect their competitors OLI parameters, which makes it a dynamic model.

3.4.1Ownership-specific advantages

For the ownership-specific advantages, it is added that they can be enhanced if a company engage in inter-firm collaborations, such as networks or alliances. Vertical alliances will give companies backward access to suppliers and their R&D, which provides them with input for how to improve products and the production process. It will also give them forward access to distribution channels and customers, which is important in new and unfamiliar markets. Horizontal alliances will provide companies with access to complementary technologies and a possibility to identify new uses of existing technology.

Network building with similar firms will result in reduced transaction and coordination costs, due to support and collaboration within the network. It will give the company access to knowledge about new markets and a possibility to share R&D by cooperative research focusing on different areas. MNEs can also build networks in business districts, i.e. clusters, which will provide access to a skilled labour market, universities and possible knowledge spill-over from competitors. (Dunning, 1995)

3.4.2 Internalisation advantages

When in a network, a MNE have the possibility to reach new markets through partner companies, instead of internalising its production on the market. This could be a time-limited substitute for FDI, but the network's overall competitiveness will strengthen in the long run if the company instead internalise production and move its operations to the specific market. Networks can however compliment the company, which can transfer its mobile ownership advan-

tages and cooperate with its partners immobile assets. According Dunning (1995), there is also important for the companies to go outside their comfort zone, to capture the international know-how trading and knowledge exchange. (Dunning, 1995)

3.4.3 Location-specific advantages

Networks can provide MNEs with a portfolio of immobile local complementary assets, which would be difficult to access from outside the network. They can also make better use of a local asset or local technologies, by creating a climate where the participants collaborate and through this enhance its efficiency. This use of the host countries comparative advantages might also be beneficial to the society, by creating attractive clusters, which gives local institutions incentives to further improve conditions for exploiting the specific advantages. (Dunning, 1995)

3.5 Born Global – criticise to the U-M and the OLI paradigm

There have been new empirical studies the last decades, suggesting that many companies do not follow the old theories with an incremental internationalisation, but instead initiate international operations right from their birth (Bell, 1995; McDougall, Shane, & Oviatt, 1994; McKinsey & Co., 1993).

One of the first studies to point out this phenomenon was a McKinsey and Co. report in 1993, at the request of the Australian Manufacturing Council. In their study, about 80 per cent of the recently internationalised exporters in Australia were SMEs, and research was conducted on 310 of these established SMEs. The majority, with over 75 per cent of the companies, followed traditional theories, and grew strong at their home market before starting their internationalisation process by exporting a small part of their sales. The remaining part of the investigated firms was found to be "born global", with a 75 per cent sales to foreign market within less than two years. The characteristic for these companies was that they produced unique products with advanced technology and/or design, such as scientific instruments or industrial equipment. They were also close to their customers, and responsive to changes in demand. (McKinsey and Co. 1993)

One year after the McKinsey and Co. report, McDougal et al. (1994) presented an article where the same conclusion can be drawn, that the stage models no longer are complete and therefore cannot be used. The authors of this article use the term International New Venture (INV), which is defined in an earlier article by Oviatt and McDougal, as "a business organisation that, from inception, seeks to derive significant competitive advantage from the use of

resources and the sale of outputs in multiple countries" (McDougal & Oviatt, 1994: 49). Through a case study of 24 INVs, McDougal et al. (1994) discover an internationalisation process that differs from previous theories. In the centre of the discovered pattern were the founders; entrepreneurs with unique competences, such as knowledge, networks and background, who because of this experience can spot opportunities in foreign markets. They internationalise early to gain internal international routines, which can be harder to gain once a company is well established in their home market. Another difference between early and mature internationalisations is the use of international hybrid governance structure during the first years with high start-up costs. It is stated that the early internationalised firms tend to just internalise some essential resources, and rely on other forms of international ownership forms. (McDougal et al. 1994)

A relevant study to this thesis is Jim Bell's (1995) article of small computer software firms, where the internationalisation process of 98 companies from Finland, Ireland and Norway was examined. According to Bell's survey, many of the participants did choose markets geographically or psychologically close to their home market, but 30 to 50 per cent had chosen markets without any type of proximity. After personal interviews with managers in 24 companies, other factors behind the internationalisation were discovered. A first factor was client followership, where companies begin exporting to a domestic client who expands operations abroad. A second factor was sector targeting, where companies in niche markets selected a specific market based on growth in their sector. A third and final factor was computer industry trends, where companies located industry clusters and located operations here. (Bell, 1995)

The study finds no evidence that supports gradually increased investments in existing markets, but it is found that companies instead continue with exporting to new markets for further growth. Consistent with the U-M is however that the investigated companies often commence their internationalisation with export. The conclusion was, like for the above mentioned studies, that the old theoretical models did not fully reflect the reality of internationalisation. More specifically was the "psychic distance" discussed in the U-M not true in all cases. (Bell, 1995)

3.6 Dragon Multinationals and the LLL-framework

In Mathews (2006a) Dragon Multinational: New players in the 21st century globalisation, the author looks into how some firms, starting small, with a lack of resources and are distant from major markets, are able to challenge established positions in the world economy and displace incumbents that are highly advanced and fiercely competitive. Mathews (2006a) has done

research in the business dynamics of the Asia-Pacific region between 1996 and 2006.What Mathews (2006a) mean by "Dragon Multinationals" are firms from the Asia-Pacific region, a region that used to be a peripheral region in the global economy, that have successfully internationalised and in some cases become industry leaders.

Mathews (2006a) finds another aspect to the process of globalisation, that there is countervailing pressure exercised by the Periphery on the centre- as a result of firms and institutions in the periphery moving fast to take advantages of new opportunities that are generated by the creation of global markets and global patterns of industrial development (Mathews, 2006a).

3.6.1 The first and second wave of MNEs from the Asia-Pacific region

At the beginning of the 21st century, many new sorts of internationally active firms have evolved, Mathews, (2006a:7) "so many new 'species' that one might legitimately talk of the new 'zoology' of the international economy". Latecomer firms from the Asia- Pacific region are part of this phenomenon. Mathews (2006a), refers to the first and the second wave of MNEs from developing countries, where the first wave includes companies that succeeded due to difficulties encountered at home, including market restrictions and export difficulties, and the incentives driving the internationalisation. These firms where "pre-globalisation" success cases and operated when international investment flows were still rudimentary. However, the arrival of the second wave of MNEs from the developing world is to be sought in pull factors that draw firms into global connection instead of push factors that drove firms as standalone players, as the case was in the first wave. (Mathews, 2006a)

3.6.2 The internationalisation process for latecomers and newcomers

According to Mathews (2006a), the internationalisation of the newcomers and latecomers, especially those from the Asia-Pacific regions, need to be conceived as a "pull" process as well as involving a push. Meaning, "it is the multiple connections of the global economy which draw firms into involvement across national borders, through licensing, contracting, or other transacting relationship", (Mathews, 2006a:16). Therefore Mathews (2006a) defines internationalisation as "the process of the firm's becoming integrated in international economic activities" (Mathews, 2006a:16). Mathews (2006a) emphasizes that the point of internationalisation is a process of engagement with the prior existing inter-firm linkages in the global economy (Mathews, 2006a).

The second wave of MNEs from emerging markets is searching more for markets and technological innovations in order to compete successfully on the world market instead of being

driven by cost factors per se (Yeung, 2000). The second wave MNEs arriving as latecomers on the global market utilize these pull factors and connections to speed up their internationalisation process (Mathews, 2006a). However, Mathews (2006b) argues that latecomer firms are able to exploit their late arrival and absorb advanced technologies and then skip the phase of going through and build a similar but necessary technological trajectory that the early MNEs had to establish. These companies are able to speed up their uptake and learning efforts by utilising different forms of collaborative processes (Mathews, 2006b).

More regarding the latecomers and newcomers is that they do not start the internationalisation process in a cautious way by feeling their way through foreign markets, rather they see our integrated world as their market from the beginning (Mathews, 2006a). Thus, Mathew develop the argument that it is the changes in the global economy that can be seen as responsible for driving the patterns and approaches to internationalisation. His argument states that using strategies of linkages and leverage are most likely to succeed in the current interlinked global economy for firms that lack prior resources, and therefore the strategies of linkages and leverage are most likely to be persuading by latecomers and newcomers, but also for all SMEs, rather than for well established incumbents (Mathews, 2006a). When Mathews (2006a) refers to the strategy of linkages, leverage and learning, it is not a cautious strategy by the particular firm, it is a more an umbrella term used to describe successful action by latecomers and newcomers firms. These firms in turn use "real" company strategies that can be interpreted as linkages, leverage and learning. However, when using the strategy of linkages and leverage repeatedly the firm also uses the strategy of learning. The strategy of linkages, leverage and learning is the base for Mathews' argument. Mathews (2006a) argues further that his dragons have everything to gain by tapping resources of others and that they internationalise clearly with that goal in mind.

On one hand there are the incumbents with the mindset that the world is full of competitors that wants to imitate their resources, while on the other hand, there are the late- and newcomers with the mindset that the world is full of resources ready to be tapped, provided the appropriate complementary strategies and organisational forms can be devised (Mathews, 2006a).

In comparison to Dunning's OLI paradigm, Mathews (2006a) argues that these latecomers and newcomers, instead of exploiting owner-,location-, and internalisation advantages abroad, these firms reaches out through linking up with resources in order to access the resources the firm lacks and thus internationalising (Mathews, 2006a).

3.6.2 Characteristics for latecomers and newcomers

In comparison to Dunning's OLI paradigm, Mathews (2006a) has identified three characteristics of these latecomers and newcomers. Firstly, that they internationalise very quickly. Secondly, that these firms are able to internationalise rapidly is due to organisational innovations rather than technological innovations, where the organisational innovations are well adapted to the circumstances of the emergent global economy. The third characteristic is that these firms have succeeded in implementing these approaches through strategic innovations that has enabled them to exploit their latecomer and peripheral status to advantage. (Mathews, 2006a)

The accelerated internationalisation of the newcomers and latecomers has been possible due to a use of prior international connections that made it possible to leverage their own expansion through making use of these, in ways such as following a global customer into new markets, or expanding abroad as contractors to an existing MNE (Andersen, Blenker and Christensen, 1997).

Regarding the organisational innovation, these companies used a variety of global organisational forms, from highly unconventional cellular clusters to web like integrated global operations. What is important is that these firms dispensed the traditional style of organisation with an "international division" to make room for these new organisational innovations, which demonstrates that these firms started their internationalisation process already equipped with a global outlook (Mathews, 2006a).

Regarding the strategic innovations, the latecomers and newcomers were able to find new ways to "complement" the incumbents' strategies, by among others, to offer contract services, through licensing new technologies and to forming joint ventures and strategic alliances' (Mathews, 2006). It is likely that it was due to the implementation of these "complementary strategies" that these companies were successful in winning a place in the global economy, not on the basis of their own existing strength, rather on the basis of their ability to leverage resources through the strength of others, by establishing international connections (Melin, 1992).

3.6.3 The LLL-framework

Mathews (2006a) uses an alternative and complementary framework, the LLL framework, to analyse the internationalisation process of newcomers and latecomers that goes beyond Dunning's OLI paradigm, which Mathews (2006a) argues fits the incumbents that have resources to exploit. The internationalisation process for newcomers and latecomer is not primarily to

exploit already existing resources, it is rather to attain new resources in the internationalisation process that is driven by resource linkage, leverage and learning (Mathews, 2006a).

Regarding linkage, these firms have a critical starting point when it focuses on advantages that can be attained externally before focusing on its own advantages. Therefore the global orientation in itself becomes an advantage (Mathews, 2006a). As soon as links have been established with incumbents or other partners, resources can be leveraged and the focus is directed towards the resources themselves and their leverage potential. The analysis is focused on how barriers to diffusion, such as delaying the entry of competitors can be overcome by newcomers and latecomers.

Learning is, as stated, reached through repeated application of linkages and leverage processes that are likely to result in organisational learning and thus the newcomer and latecomer execute operations more effectively. The point is that these companies have everything to gain from repeated application of linkages and leverage and that the learning is likely to be built up and increase the efficiency of such processes and it is the process of building that is helpful to explain the swiftly appearance and rapid internationalisation of the involved firms (Mathews, 2006a).

It is the LLL-framework that helps to explain why the Dragon Multinationals from the Asia-Pacific region have been able to make such clear footprint in the global economy. The LLL framework can further be described as an outward-oriented, research-seeking internationalisation process, via linkages and leverage, that is eminently suited to the needs of latecomers and newcomers that lack resources on foreign markets (Mathews, 2006a).

The firms taking advantages of the concepts of the LLL framework are early adaptors to the new conditions of the global network economy, by taking maximum advantage of new opportunities provided by the inter-linkages of the global economy (Mathews, 2006a). In contrast to "old" MNEs, the Dragon Multinationals are not slowed down with historical baggage in their organisational structure along with strategies and mentalities that derive from a previous era (Mathews, 2006a).

3.7 Internationalisation strategies of Emerging Market Firms

In their study Eisingeich and Tsai (2010) designs a typology that categorises companies from emerging markets in the context of their internationalisation strategies. The authors have investigated the pattern of internationalisation strategies executed by such firms. The companies

are categorised as: multinational challengers; global exporters and imported; original equipment manufacturing (OEM) and original design manufacturing (ODM) technology leaders and followers; and regional exporters and importers. Each of the four different kinds of companies uses a dissimilar internationalisation strategy. There is an optimal internationalisation strategy to follow for a company with certain characteristics regardless of country of origin age and size. The optimal entry mode of each of the four types of firms is also different. For example, the multinational challenger that should have a surplus of resources and are able to compete with multinational firms on the global market, such as Samsung and LG, should, in order to establish and sustain the strong brand name for the companies, establish marketing subsidiaries first followed by an overseas production facility later. These companies have a certain speed in their internationalisation process and focus more on the international market than on their home market. (Tsai &Eisingeich, 2010)

The global importer and exporter, companies that focus on import and export operations on the global market, are more likely to use an agency or a distributor as an internationalisation strategy. A regional exporter/importer, is a company with a certain geographically focus, such as Doonsan, Korea, that cater the needs of customers in a particularly region to attain a competitive advantage. The OEM/ODM- companies are categorised as born global, has a global mindset and internationalises on a very early stage in their evolution. These firms often use a subcontractor and follows clients into foreign markets and the most common mode of entry is to set up sales and production facilities. Both the multinational challenger and the born global companies are likely to set up R&D centres on overseas markets in order to obtain technological know-how and such establishments are followed by sales and production facilities. A regional exporter/importer usually sets sales subsidiaries followed by exporting. (Tsai & Eisingeich, 2010)

Companies from emerging markets and newly industrialised nations have other characteristics in comparison to their more advanced counterparts from developed countries. Therefore, firms from emerging markets should not follow the so-called best practices that are based on past experiences of internationalisation of companies from developed countries.

Tsai and Eisingeich (2010), argues that managers from companies categorised, as multinational challengers should develop their internationalisation strategies to penetrate international markets by differentiated products and distinguished brand names. Managers of firms in OEM/ODM or born global companies should provide a narrow product line on niche markets

while also differentiating their product strategies. When discussing pricing, the authors argue that OEM/ODM or born global companies and the multinational challengers should provide high quality and differentiated products. Companies categorised as regional challenger should offer lower price products and companies categorised, as global exporter/importer should offer good services to customers, such as complete supply chain management, for a moderate price. (Tsai &Eisingeich, 2010)

Ting and Eisingeich (2010) also argue that firms competing in the most advanced markets possess a strong technological know-how and financial resources. A strategy better suited for less competitive firms is to strive for less competitive markets at the beginning of the internationalisation. (Tsai &Eisingeich, 2010)

3.8 Internationalisation Drivers of Indian Firms

The gradually liberalisation of India's economy led to a surge in both inward and outward FDI. The deregulation on outward FDI enabled Indian companies to raise financial resources for foreign acquisitions, which in turn led to a shift in the pattern of outward FDI from India (Balasubramanyam & Forsan, 2010). The shift is reflected both in a higher number of FDI from India and in the entry mode of MNEs from India in foreign markets.

Regarding the entry mode, cross-border M&As has been increasingly common, although greenfield FDI still is an important entry strategy (UNCTAD, 2009). An interesting finding regarding India's outward FDI is, according to Balasubramanyam & Forsan, that since the late 1990s the focus of acquisitions has increased in the US and the UK, in where both markets are mature and highly competitive.

When breaking down the acquisitions in sectors, it becomes clear that skill intensive industries such as high tech in general and software in particular, but also chemical and healthcare, accounts for roughly 50 per cent of acquisitions made between June 2000 and June 2008 (Balasubramanyam & Forsan, 2010). In the late 1990s non-financial services became the leading outward investor sector instead of manufacturing. This suggests a change in the structure of India's economy towards services, which accounts for more than 50 per cent of India's GDP (Balasubramanyam & Forsan, 2010).

3.8.1 Ownership Advantages of Indian Firms

The ownership advantages of Indian companies can be traced back to India's post independent economic history in where the English language, the Nehruvian legacy of tertiary educa-

tion and the advancement in technology-intensive manufacturing are important elements, along with a migration of skilled labor to the US and the UK, which began in the late 1960s and 1970s. The knowledge in English is of significant importance and gives Indian entrepreneurs advantages particularly in import of technology, marketing of products and business negotiations. More than 70 million Indians speak English today (Balasubramanyam & Forsan, 2010).

Another source of ownership advantages is the contribution of know-how and technology from India's Diaspora. According to Balasubramanyam & Forsan (2010), part of the reason for the growing software industry in India is due to a emigration of many engineers and technicians to Silicon Valley and the second-generation engineers and technicians want to cultivate and maintain ties with the land of their parents. Balasubramanyam &Forsan (2010) state that there is a key link between technology and skilled banks in the US and the software industry in India provided by the emigration. The emigration provides marketing skills, the latest know-how and contacts for companies from India and as a result reduces transaction costs while also raising social capital levels relative to other companies from developing countries.

3.8.2 The Nature of Ownership Advantages of Indian MNEs: Software Firms and Manufacturing Firms

The sources of ownership advantages possessed by companies from India acting on the international market are many. To sum up the sources, the advantages are according to Balasubramanyam & Forsan (2010), the capital-intensive nature of the production function of Indian companies, technology licensing agreement, domestic R&D and early investments in science and engineering education and endowments of relatively low wage rates. Especially the combination of high productivity and relatively low wage rates enables companies from India to successfully compete globally. These two advantages enjoyed by Indian companies stem from India's relatively large pool of skilled labor with tertiary education. (Balasubramanyam& Forsan, 2010)

3.8.3 Location Advantages

According to Dunning's OLI paradigm, location advantages are involved in the decision process to internationalise. The majority of acquisitions made by Indian firms abroad have been in Europe and US and since 2005 the number has grown sharply, at the expense of south Asia, which attracted most f India's outward FDI in the pre-liberalization period. Obvious location advantages in Europe and US are stability of policies, infrastructure and communica-

tion facilities but also the large emigration in the US and the UK counts as a major location advantage (Balasubramanyam & Forsan, 2010). The emigration provides a stream of skilled labor and also cultural similarities in common with outward investors from India, both are likely to affect the choice of location of Indian firms going abroad. The relatively small size of India's home market is likely to be a source of motivation for technology and skill-intensive industries in India to go abroad.

Overall, Indian firms have an ability to adapt product and processes to suit market conditions. That becomes clear in the case of Tata Motors. The company produces a relatively low cost car, the Nano, for the Indian market, while also producing Jaguars for the high-end segment in the UK. Tata Motors has acquired the ownership advantages more than generated them internally in the case of Jaguar (Balasubramanyam & Forsan, 2010). However, the skills and ability of Tata Motors to organize and manage Jaguar from abroad ought to be counted as an ownership advantage.

The relatively poor location advantages in India might be a reason for Indian companies to go abroad, however, there is little evidence to back up this argument. The suggestion that Indian firms go abroad due to their ownership advantages and the willing to exploit these advantages on the global market, is much more compelling. (Balasubramanyam & Forsan, 2010) However, one location advantage in India is the large pool of cheap and skilled labor.

3.8.4 Internationalisation

Software companies are engaged in the business of producing and sale of a public good. The characteristics of such good are non-excludability and non-rivalry, which implies that the product is imitable and that when a person or company consumes the product, it does not reduce the quantity of it existence. Internalization for such company is then essential. Software companies, as producers of a public good, are almost forced to internalize their operations while protecting the ownership advantages they possess. Much of the advantages a successful company possesses are found in the human capital and thus provides a superior mechanism for the company as well as the whole industry to internalize and grow. (Balasubramanyam & Forsan, 2010)

The software industry is characterized by having a layer of products and each layer is parted from the other in terms of complexity and end-use of the product. Also within each layer there are different strands that all are different from each other, which are created based on the end-use to which the product is put. In other words, it is the end-user of the product that dictates

the differentiation, instead of the usual sort of differentiation based on quality. For example, one company might be specialized for software production for the airline industry, while another may specialize in software for the railway industry and another one for the banking industry. The companies in the example are in the nature of non-competing groups. Several non-competing groups can be identified in the software industry (Balasubramanyam & Forsan, 2010). To begin with, there are groups producing lower levels of the products that are not competing with firms that produce more complex or sophisticated products. There are firms providing the needs for a specific end-user within each layer. Although it exist competition within each layer, the competition is limited to companies that produces for related end-users (Balasubramanyam & Forsan, 2010).

The non-competing groups of companies within a software cluster allows each company to protect their specific ownership advantages and due to that, such company tends to produce products that suit a specific business and usage. These characteristics of the software industry are the key to that Indian companies manage to internalize their ownership advantages. (Balasubramanyam & Forsan, 2010)

3.8.5 The Mode of Internationalization MNEs

To answer the question, why Indian companies venture abroad, the previous analysis have many shortcomings and does not provide enough information to answer the question. Is it enough to have a low efficiency wage on the international market, where product differentiation and brand names along with the ability to react fast on sudden changes in market conditions is vital? It is also hard to determine which kind of internationalization strategy is most suitable, judging from the previous analysis. There are other alternatives, such as exporting that does not require outward FDI. Companies may use outward FDI to serve foreign markets if the firm is hindered to export due to various trade barriers in export markets but also if FDI enables the firm to internalize operations and seize advantages if being close to markets and other related effects (Buckley and Casson, 1976).

By exporting, information and other gains of producing on foreign markets might be provided. Dunning's OLI paradigm suggests that, to successfully export to foreign markets requires companies to be in possession of ownership advantages. These advantages are necessary and a key in any successful internationalization strategy because it allows the company to overcome the liability of foreignness.

Another explanation for why companies venture abroad might be for strategic asset seeking. That is to acquire existing firms in developed market in order to get hold of ownership advantages that predominantly are related to marketing and R&D. Most FDI from India are in terms of acquisitions (Pradhan, 2007).

When acquiring a firm it is up to the acquiring firm to restructure and manage the newly acquired firm. In contrast from other developing markets, firms from India are more likely to be in possession of the necessary tools and skills to execute a successful restructuring and integration (Balasubramanyam & Forsan, 2010). Acquiring a foreign firm is also likely to be an alternative for technology agreements in order to import technology. In contrast to licensing agreements, an acquisition enables a higher level of freedom of operation due to the absence of restrictions enforced by the technology provider. This might result in a relatively cheap way to gain technology know- how (Balasubramanyam & Forsan, 2010).

To sum up this part, according to Balasubramanyam and Forsan's article on India's FDI, it can be said that India's FDI is regarded to be more caused by pull factors related to the foreign market they seek rather than push factors- which is the desire to escape inefficiencies in the source country. Companies in the skill-intensive service-oriented industry sector in India have managed to build up competitive advantages on their home market that are exploitable abroad via internalized operations (Balasubramanyam & Forsan, 2010). The development of a huge pool of skilled scientists and engineers is the source of the firm specific advantages. This pool of skilled labour is internationally transferrable as managers or technologists. The basis for international expansion is due to high productivity that produces a high output per unit wage, also that wages are relatively low (Balasubramanyam& Forsan, 2010).

4. Empirical study

The empirical study begins with a section about India, with its economic structure and technological development, followed by a description of the Indian IT industry. The chapter then continues with two case studies of Indian IT service companies, consisting of historical events, with the strategies behind the companies' international expansion.

4.1 India –overview

In order to establish a discussion regarding the internationalization process for India's IT and software companies, the following text will provide an overview over the country's development since 1991 including a short history of the IT and software sector.

In spite of regional and cultural differences, India has for most part of its history since independence functioned as a democracy. Economic reforms were made in 1991 and have led to a strong economic development. India's GDP growth has averaged 8.2 per cent during 2003 to 2009 considerably higher than GDP growth during 1980s and 1990s where the number averaged 5.7 per cent. (Datamonitor India, 2010)

In the decade since 1997, India has reduced poverty with close to 10 percentage points. The early zeroes began with years of lower growth followed by a regained momentum in 2003. Belonging to the top performers are IT, telecoms, power, infrastructure, and retail.

FDI inflows during December 2009 reached $1,542 billion a 13 per cent increase over the same period previous year. For the financial year 2009-10 (September excluded) the FDI inflows displayed an increasing trend. In general, the economic development has been uneven and many sectors continue to lag behind. (Datamonitor India 2010)

India has a working population, which is among the largest in the world, which gives India an edge over other developed and developing countries. At present the massive workforce is seen as one of the country's greatest resources. On the Human Development Index (HDI), India's ranking is 119th of 169 countries in 2010, which reveals the country's poor performance on social indicators (UNDP, 2010) However, Indian companies continue to influence domestic and global financial markets and are now establishing a global footprint. (Datamonitor India, 2010)

Conglomerates are commonly occurring in India, more so than in Western countries, with Tata Group, Aditya Birla Group, Mahindra Group and former Mittal Steel, as some of the

most prominent groups. Thesetypes ofcorporations, with operations in multiple industries, often family owned, have been able to take form due to the economic climate which prevailed before the reformation in 1991. India had adopted a mix of command and market economy, where the government controlled the country's production by a tangle of licences, regulations and restrictions. It could take up to 80 confirmations from different agencies before a company could get a licence to produce, and even if a company got the licence, the government still decided what to produce, how much and how much the company would get paid. This bureaucratic system is referred to as the Licence Raj, and made it very difficult for new domestic competitors to emerge, but established companies could take advantage of the system and their present position, and expand into new industries. The licence raj has reduced dramatically since the reformation, but there are still difficulties to get licenses in different industries, restaurant licenses for example are governed under an act from 1957, which states that restaurants must be placed on the first floor. (Kohli, 2009; Thakur, 1993)

4.1.1 Technology – historical development

India's technology landscape has evolved through different phases since independence in 1947. The IT sector is now one of the fastest growing segments in the country with professionals working internationally in all major markets. Indian technology products and solutions are globally accepted. The IT sector went through a boost in the beginning of the 1990s and some of the major developments during this time includes the emergence of the IT service providers from India, outsourcing of IT projects to IT service providers in India, captive units being set up in the country by global players and the internet take-up in the last part of the 1990s. (Datamonitor India, 2010)

Bangalore is widely known as India's Silicon Valley and is the center of India's IT boom. All major technology companies, including Infosys and Wipro, have operations in Bangalore. The city's population has grown rapidly from 2.8 million when the IT boom began in 1990 to 5.6 million in 2009 (Chery, 2009) made it Asia's fastest growing city.

In 2000, India enacted the Information Technology Act that provides a legal framework in order to facilitate electronic commerce and electronic transactions and also to recognize electronic contracts. (Datamonitor India, 2010)

Fig. 3
Map of India

Within the Department of Information Technology, an international cooperation and bilateral trade division was set up in order to promote international cooperation in the emerging and frontier areas of IT. This was done with bilateral, multilateral or regional frameworks, all in order to provide an opportunity to share experience and knowledge with other countries, academia, international bodies and institutions by forming partnerships to reach mutual progress. For cooperation, the Department of Information Technology has entered memorandums with countries such as, Australia, Brazil, France, and Japan. The relevance of the cooperation ideated includes, IT software including telecom software, ITES, e-commerce services and information security and similar fields. Within the memorandums of understanding, joint working groups have been set up as an institutional arrangement. (Datamonitor India, 2010)

Many IT and ITES companies have emerged from India since the late 1990s and are present in the global arena, which makes India a well-known player on the international markets. Furthermore, India has emerged as a centre for talent with a talent pool with managerial and scientific skills available at far lower prices than in the U.S and Western Europe. (Datamonitor India, 2010)

Within the software industry, the most lucrative section in 2008 proved to be network and database management software that generated a total revenue of $2.7 billion, representing 24.5 per cent of the market's overall value. (Datamonitor India, 2010)

India has over three million scientific and technical workers and annually, 50 000 computer professionals and 360 000 engineers graduate. The progress within India's technology sector is reflected in the increase of technology institutions and the number of patents approved in the country. The large number of English-speaking people is an advantage for India in order to become a large exporter of software services. (Datamonitor India, 2010)

4.2 The Indian IT industry

India has emerged as a major exporter of software services in the last twenty years. This has been possible through the astonishing growth of the software industry in India. According to Arora & Gambardella (2005) sales in the software industry in India grew by a compound rate of over 50 per cent between 1995 and 2000.

The sector is becoming an important contributor to India's export earnings. The amount of software export compared to the amount of merchandise export grew from an insignificant number in 1990 to 18 per cent in 2002-2003. Connected to the software sector is the IT-enable services (ITES) sector, which grew with remarkable 70 per cent between 2001 and 2002 and employed 106 000 people (Arora & Gambardella, 2005).

In the new digital economy, software is a center intermediate good and is comparable to the role played by capital goods sector in an economy based on mechanized technologies. The software sector is characterized by a large number of specialized suppliers. Of all software development effort, over two third of the capacity is spent on maintaining and enhancing the existing software code instead of producing new. (Arora & Gambardella, 2005)

The initial growth of the software industry in India was due to the possibilities for companies to outsource significant parts of activities related to software. Software production suits the resource endowments of India's economy, which has an abundance of labor and a relative scarcity of capital and physical infrastructure. Software service is intensive in the use of skilled labor while it requires relatively little capital. The Indian software industry has primarily specialized in relatively low value activities. (Arora & Gambardella, 2005)

At large, India's software export is a product of domestic firms and the Indian software growth was led by Indian firms rather than foreign, as in the case of Ireland. The Industry in India retains a competitive structure wherein the top five companies accounting for almost a quarter of total industry revenue. According to Heeks, who provided one of the earliest explanations to India's successful software industry growth, argued that India's software workers

enjoyed a wage advantage and as a result there was a rise in exports(Heeks, 1996). According to Heeks argument, it suggests that India had an absolute advantage over the rest of the world in terms of software wage costs and that explains the large software export from India (Heeks, 1996). The wage differences, during the early stages in the industry development, were central to explain the profitability of software firms. Between 1995 and 2000 there was a boom in software exports and the growth were more than doubled compared with observations from other countries (Arora & Gambardella, 2005). At the same time Indian software salaries rose, although remaining low compared with US, UK and Ireland. If the only advantage had been wages, the boom would not have happened, the absolute advantage would be reduced when relatively scarcity increased and that would lead to less profitability for firms and reduce India's export of software to make way for other countries with lower wages. One can also consider the wage rates in other Indian industries such as manufacturing and agriculture, and look into why these sectors with almost the same wage rate not has enjoyed a similar export performance. The explanation would be that productivity in the software industry sector is relatively high compared to the manufacturing and agricultural sector in India, although productivity levels in the software industry remain low compared with other parts of the world. (Arora & Gambardella, 2005)

To understand the growth within the sector, it is important to understand how the sector responded to the change in the external environment. The external environment changed on two main parts during late 1980s and during 1990s. On one part, Indian economy changed from regulation to deregulations, liberalization and post liberalization. The second part was the change in world demand for software as computerization blossomed and business administrative processes became increasingly automated in the West (Arora & Gardbello, 2005). Between 1991 and 1996, a substantially policy reform took place in the form of a transformation to a broadly market determent exchange rate system, substantial reductions in India's high custom tariffs rates, gradual removal of quantitative restrictions on imports and a liberalization of foreign investments (Dyson, Cassen & Visaria, 2004).

The impressive growth would not have happened without a certain organizational capability in resource management and in software process management, as the outsource business model demanded just that to ensure reliability of the service product. Many software firms had problems with attrition that created different kinds of threats such as, losing knowledge to competitors and performing poor to clients. In order to thwart this, companies had to take various actions, including investing in education and training, implementing employee stock

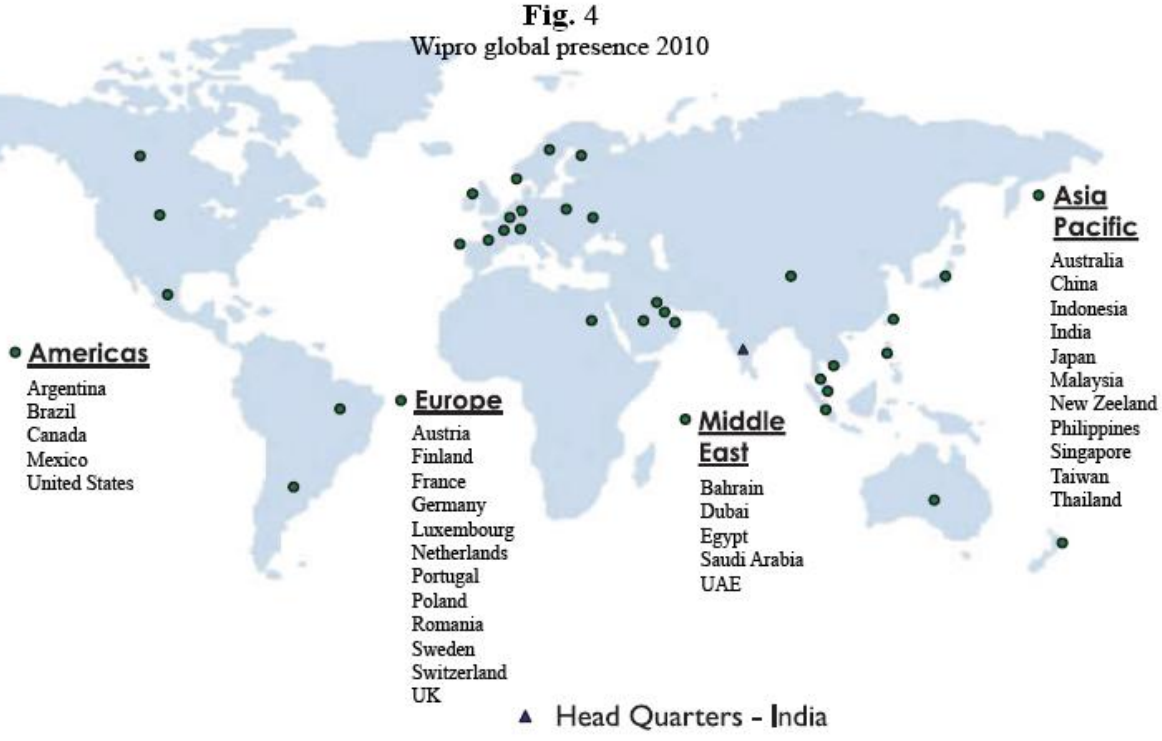
option, and other organizational practices and innovations in order retain employees' loyalty. (Arora & Gardbello, 2005)

4.3 Case 1 - Wipro Limited

4.3.1 Introduction

Wipro Limited (Wipro) is primary operating in the IT service industry, with headquarter in Bangalore, India. The company has over 130.000 employees, and have offices in over 30 countries (Figure 4), with Asia, Europe and the US as the most important markets (Figure 5). Wipro's revenues have increased heavily every year since the early 90s, the compound annual growth rate (CAGR) for 1991 to 1999 was 18.5 per cent, and for 2000 to 2010 an amazing 28.0 per cent, for more historical revenue development, see Figure 6. The numbers of employees and customers have also had a steady increase, which is illustrated in Figure 7 and 8. (Wipro, 2010a)

Fig. 4
Wipro global presence 2010



Source: Wipro, 2010a.

Fig. 5
Wipro geographic distribution

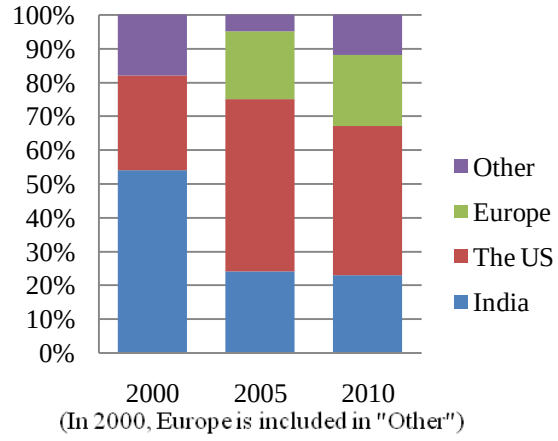
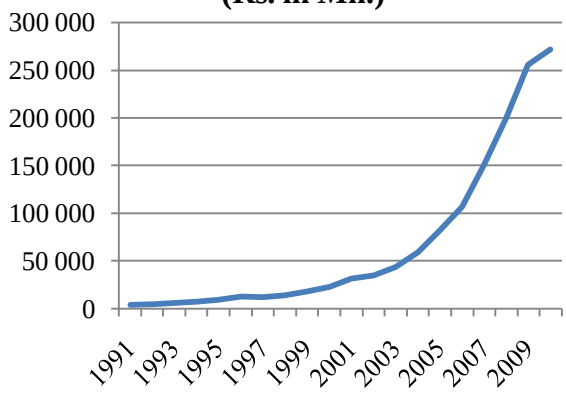


Fig. 6
Wipro revenue, 1991-2010
(Rs. in Mn.)



Sources: Wipro, 2001a; 2002; 2003; 2004; 2005; 2006; 2007; 2008; 2009; 2010.

Fig. 7
Number of employees Wipro, 2001-2010

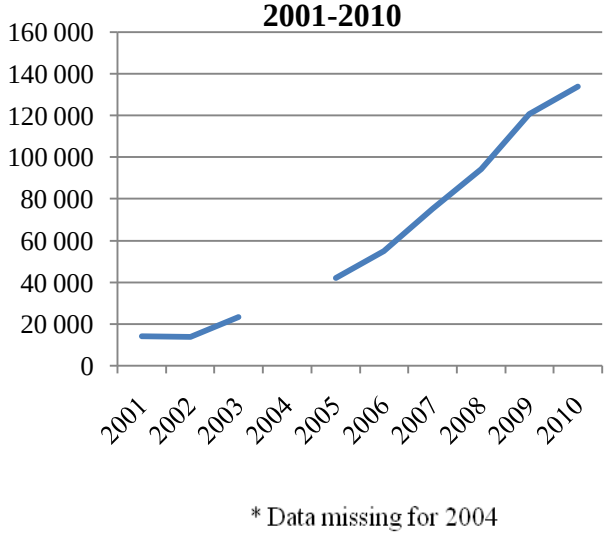
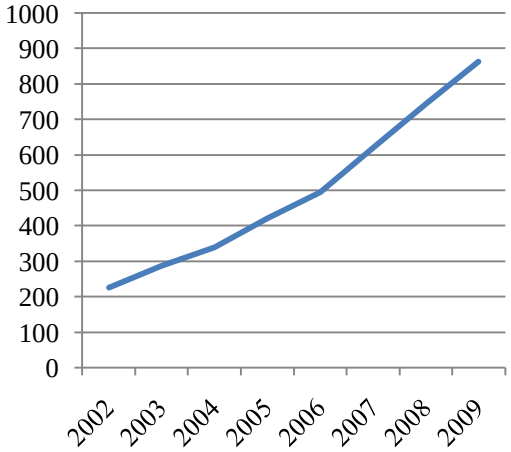


Fig. 8
Number of active clients Wipro, 2002-2009



Sources: Wipro, 2001a; 2002; 2003; 2004; 2005; 2006; 2007; 2008; 2009; 2010.

Wipro Limited is divided into four segments, including IT services, IT products, consumer care and lightening, and others (Figure 9). The IT service segment is the leading segment, and accounted for 76 per cent of the total revenue in 2010. It provides customers with a wide variety of IT solutions and services, including business technology, enterprise applications, infrastructure management, business process outsourcing (BPO), consulting, R&D in hardware and software design, output testing, data warehousing, telecommunication, and technology integration. The distribution among these services is illustrated in Figure 10. The BPO seg-

ment includes outsourcing processes, such as helpdesks, IT support, finance and accounting services, market research and data management, and employs about one fourth of the total staff in the IT service and product segments. (Wipro, 2010a)

Fig. 9
Wipro business units, revenue performance 2010

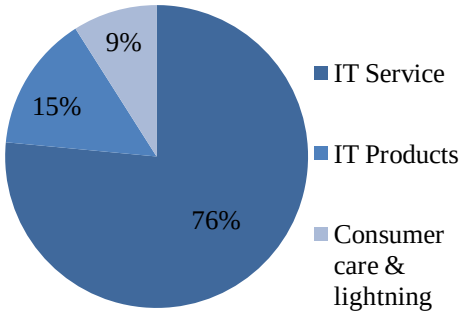
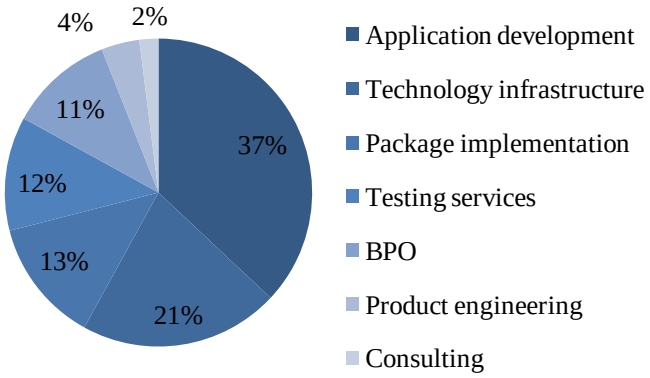


Fig. 10
Wipro IT Service revenue distribution 2010



Source: Wipro, 2010a

In the IT product segment, Wipro provides several products, including computing from notebooks to super computer, enterprise platforms with servers and databases, data storage solutions, networking and wireless communication solutions, security and software products (Datamonitor Wipro, 2010; Wipro, 2010a). The customers vary from Governments, to manufacturing, IT services and telecommunication providers (Wipro, 2010a).

The consumer care and lightening segment is focused on profitable niche markets, mainly in Asia and Africa, but competition is found primarily in India, consisting of MNEs and Indian firms. The product range includes soaps and toiletries, housing lighting, office solutions. The brands are built both organically and through M&As, and has reached top positions in the Indian soap category and the Malaysian Halal toiletries, to mention some. (Wipro, 2010a)

Wipro also produce hydraulic cylinders and is the world's largest third-party producer, they provide water treatment solutions, and consultancy in renewable energy and efficiency. These are all combined in the others segment, and contribute with only a small part to the overall revenue. (Wipro, 2010a)

4.3.2 Background history

The early years – hardware production

Wipro was founded in 1947 by M.H. Hasham Premji, father of today's CEO and Chairman Azim H Premji. Business started with vegetable oil production, and later branched out to soaps, wax and tin packaging, operations which still are a part of the company. In 1966, at the age of 21, Azim Premji left Stanford University before completing his studies, and took over the company after his father passed away. A decade later, in the late 70s, Azim and Wipro was looking to diversify into a high-tech service industry, and at the same time, the market leader in the Indian IT industry, IBM, was forced to leave due to conflicts with the Indian government in 1977. This created a vacuum in the industry which several corporations, including Wipro, took advantage of. The company entered the IT business in the early 1980s, and commenced operations by producing microprocessor-based minicomputers under its own brand and selling them through a dealer network. An important factor behind their rapid growth in the IT industry was according to Azim Premji that they invested in after-sale services, something competitors disregarded. (Datamonitor Wipro, 2010; Ramamurti, 2001)

The 1990s – a shift toward software services

The governmental reformations in the beginning of the 1990s lead to increased foreign investments in the country. Wipro engaged in assembly production for Western companies, and in the mid 1990's they had contracts with companies such as Apple, Canon, Cisco and Sun. The Western MNCs developed more capital productive product compared to Wipro and other Indian brands, which lead to a decrease in production of indigenous computers brands for most companies, as for Wipro. Ultimately it was not cost-efficient enough to produce their own computers, compared to assembly production and retailing for the Western MNCs (Prasad, 1998). In 1994, over 80 per cents of the sales in the IT segment came from export to the US market (Economist, 1994).

During this period, Wipro started to shift focus towards their "domain skills" as Azim Premji calls it, which were health care, data- and telecommunication, and enterprise resource planning (Chakravarty, 1998). These operations targeted mainly the US market, an important milestone for this market was taken a few years earlier, with a joint venture formed in 1992 with General Electric's, Wipro GE Medical Systems (Chakravarty, 1992). The company was producing medical appliances, such as sophisticated CAT scans for developed markets, but also low-end ultrasound equipment for poor countries (Chakravarty, 1998). The joint venture

with GE helped Wipro to expand further and get new customers, as Azim Premji puts it in a 2001 interview "potential customers would say that if you are good enough for GE you must be good enough for us" (Ramamurti, 2001: 13). He also states that the pioneering firm in the Indian IT industry, Tata Consultancy Service, laid the groundwork for other firms' internationalisation, which Wipro benefited from (Ramamurti, 2001).

In the interview, Azim Premji also states that the reason for acquisitions is not to get access to markets, projects, or technology, but to acquire brand names. They were at the time already well established in the US, Europe and Japan, and they possessed the technology they needed. But Wipro needed a strong brand if the market should accept their wish to decrease the price gap between them and their Western competitors, which at the time were 40 per cent and Premji wished to decrease it to 20 per cent. (Ramamurti, 2010)

Wipro took a further step in the IT industry in 1999, with a move into the residential internet service market, through a joint venture with Royal Dutch Telecom, aiming to conquer the Indian market (Business India intelligence, 1999; Datamonitor Wipro, 2010).

The beginning of the 21st century – growth through M&S

In the beginning of the new century, Wipro made the first physical step towards the American market by moving Wipro's software headquarter to Santa Clara, California. It was a natural step since the client base primarily consisted of American companies, and the growing demand for IT services was not going to be met by domestic supply, according to Vivek Paul, Director of the software unit. (Kripalani & Clifford, 2000)

Simultaneously as the move to Santa Clara, Wipro also listed their stocks on the New York Stock Exchange in October 2000. In an interview with Azim Premji (Ramamurti, 2001), he mentions four reasons for the listing in the US, first, Wipro will have a currency for western acquisitions, second, dollar-denominated stock options is a way of attracting talented personnel, third, it strengthen the brand by giving it credibility and creates a buzz among financial analysts, and fourth, it forces discipline on the organization with quarter-to-quarter performances.

In 2001 Wipro was the first company in the world to receive the highest rank with the globally recognized Software Engineering Institute's, CMM Level-5. To have this certification certainly helped Wipro to attract customers by strengthening the brand, but Azim Premji says

that the certification was not more important to them, than to American software companies, which one might have thought. (Ramamurti, 2001)

Wipro also gained customers through acquisitions, shortly after the CMM rating, they placed a $26 million bid on American Management Systems' global energy practice. Through this, Wipro also acquired credibility and 90 American consultancies, both important for growth in the US market (Hammonds, 2003). Among the client base that was acquired, investor owned utilities, public power utilities, regional transmission companies, and independent system operators (Chatterjee, Harley, Pradhan, Sauvant, 2010)

The same year Wipro entered the important PBO segment, by acquiring Spectramind, an already established company with American Express, Dell and GE among their clients The acquisition of Spectramind, which was completed in 2003, made it possible for Wipro to provide integrated and comprehensive BPO solutions for its customers. (Business India intelligence, 2002)

During 2003, Wipro was building up their IT consultancy services in the finance sector, to strengthen positions in the US market, the company acquired the American finance IT consultancy company NerveWire in 2003. NerveWire brought, except for their industry expertise, over 40 client relations and 20 active engagements to Wipro (Chatterjee et al., 2010). The same year they also gained market shares in the Indian banking sector, when the Oriental Bank of Commerce, a public Indian Bank, chose Wipro as its partner for their centralised banking services (Datamonitor Wipro, 2010).

The expansion of services provided by Wipro, with the acquisitions of Spectramind, NerveWire and American Management Systems as examples, was a part of a strategy to transform the company from an Indian-based offshore IT company to an international consultant, with local presence. Except from a broad portfolio of IT services and products, the strategy also focused on quality leadership and human capital investments. Wipro early adopted the Six Sigma Initiative[1] in their business process', and later added consultancy in the field for other companies, with the intention to become a leader in the six sigma field. This strive to become industry leader in segments such as quality control, has been a strategy to further strengthen the perception of the company as a well-reputed knowledge company. The company invested

[1] The six sigma initiative is management strategy, with intend to improve output quality. It was created in 1970, inspired by previous quality improvement processes such as Total Quality Management (TQM) and Zero Defects. Today is Six Sigma a commonly used strategy in many industries across the globe.

greatly in human capital, where consultancy training for their engineers had high priority. They could no longer only be programmers or researcher; they must be able to handle customers' expectations, performing effective consultancy work, gaining commitment and effectively deliver a finished result. (Business India intelligence, 2003)

In 2003, Wipro had over 3000 employees working abroad, in smaller development centres and offices across USA, Canada, Europe and Japan. They were the result of a need to be present close to their customers. (Business India intelligence, 2003)

The late zeros – from 2005 to 2011

The positioning in the finance sector continued in 2005, with the acquisition of American-based mPower and Indian-based MPACT Technology Service, a joint venture between mPower and Master Card. mPower operated in the payment segment of finance, and this vertical acquisition was in line with Wipro's strategy to establish leadership in niche industries, through superior domain knowledge and operational excellence. The acquisitions also gave Wipro the opportunity to provide IT services for Master Card and other companies in the payment segment. (Chatterjee et al., 2010)

The following years Wipro engages in a continued rapid growth with several mergers, alliances and acquisitions each year. Among the significant ones during 2005 and 2006, in an internationalisation point of view are the acquisitions of Austrian-based NewLogic in 2005, the Portuguese-based retail solution provider Enabler in 2006, the Finish-based telecom engineering company Saraware in 2006, the joint venture with Motorola to deliver network services in 2006, Swedish Hydrauto Group in 2006. (Datamonitor Wipro, 2010)

In 2007 Wipro made one of the largest acquisitions in the US made by an Indian company when it acquired Infocrossing, which provides IT infrastructure management, enterprise application and BPO services. The most important asset of Infocrossing was its five data centres in the US, with 900 employees, which could help Wipro to reach a customer segment that want to have their IT services local and not want to offshore. It was also a part of a plan to further expand presence in the US with local data centres, and create relationships with the American universities and colleges to develop the talent base. (Chatterjee et al., 2010)

Wipro has always focused on R&D within the IT industry, and strived to develop cutting-edge technology. They have through the years facilitated many Western companies R&D, placed in India, and in 2007 a further step was taken together with the large American defence contrac-

tor Lockheed Martin. They opened a Network Centric Operation Centre in India, where they would develop and experiment with future network –enabled capabilities and applications for both civil and military purposes. (Datamonitor Wipro, 2010)

In 2008, Wipro continued with the strategy to have local presence and strengthen global delivery capacity by opening a BPO centre in the Cebu, Philippines, offices in Cologne, Germany and Maia, Portugal, and an IT service agreement with the a multinational brewing company in Latin America. An important collaboration was initiated with SAP, to provide consultancy services for customers who adapt SAP's business systems, and a large acquisition of Citi Group Technology Service was made, which provides IT services and solution worldwide for the whole Citi Group. The acquisition cost around $127 million, but came with an IT service contract worth $500 million. (Datamonitor Wipro, 2010)

During 2009, Wipro secured several large outsourcing contracts worth over $1.4 billion, with customers such as CSG Systems International, Delhi International Airport, Foster's Group and British Petroleum. They also commence a partnership with Oracle to create industry leading HR platform solutions, and later the same year the partnership expanded to co-development agreement for multiple Oracle industry solutions. Wipro also physically entered China with the opening of a development centre in China's IT and electronics base Chengdu, once again to strengthen local presence and be able to provide IT and BPO services where their customers are. (Datamonitor Wipro, 2010)

The last year, Wipro has focused on developing expertise in service integration for mobile OS Android, by joining Open Handset Alliance and an alliance with Texas Instruments (TI) to develop commercialisation services on TI-products. Wipro also opened up a global delivery centre in Curitiba, Brazil and a development centre in Melbourne, Australia. (Datamonitor Wipro, 2010)

4.3.3 Owner structure

The majority shareholders in Wipro have always been the Premji family, first by founder Hasham Premji, and after his passing away, his son Azim Premji. In this sense, it is a second generation family corporation, but no one else from the family is involved with the company at any level, from suppliers to buyers (Ramamurti, 2001). This differs from other large Indian conglomerates, like Tata or Mittal, where several members of the owners' families have important positions within the company. Azim Premji controls directly and indirectly 79.52 per cent of the shares (Wipro, 2010a), which is a small decrease from 2001, when he controlled

83.96 per cent (Wipro, 2001b), see Table 4. Of the 79.52 per cent share of 2010, Premji owns 3.82 per cent in his own name, the rest of the shares are owned by Hasham Traders, Prazim Traders, Zash Traders and smaller shares in Napean Trading and Investment, Regal Investment and Trading and Vidya Investment and Trading, which are all companies in the Wipro Group, controlled by Azim Premji (Wipro, 2010a). The figure also includes a small share owned by his family members, his wife and two sons have share of between 0.01 per cent and 0.04 each, see Table 5 for a complete list of the shareholders with more than 1 per cent.

ADR[2] holdings have increased marginally in total shares, but in absolute numbers it has more than doubled since 2001. The Indian publics share in the company has decreased some since 2001, from 7.45 to 5.49. The most significant increase is the ownership from foreign institutional investors (FIIs), who in 2010 accounted for 7.23 per cent of the total share compared with 2.33 in 2001, whoever no single owner with more than 1 per cent.

In total, the shareholders pattern has not changed much during the first decade in the 21st century, only one single shareholder outside of Azim Premji's control has entered the list of shareholders with more than 1 per cent.

Table 4
Wipro shareholder pattern 2001 and 2010

Category	2001			2010		
	No. of shareholders	No. of shares	%	No. of shareholders	No. of shares	%
Founder (incl. family, bodies corporate, partnership firms)		195,141,610	83.96	11	1,167,572,260	79.52
Indian public		17,286,887	7.45	173806	80,619,153	5.49
Foreign institutional investors (FIIs)		5,417,634	2.33	332	106,109,353	7.23
Private corporations		4,163,249	1.80	1745	41,060,212	2.88
ADR		3,154,500	1.36	1	24,184,070	1.65
Foreign nationals, Non resident Indians		2,623,023	1,14	3228	13,190,708	0.90
Mutual funds, banks, Financial Institutions		1,304,308	0.57	133	25,032,803	1.71
Other		3,341,808	1.39	182	10,442,630	0.71
Total	*(data missing)*	**232,433,019**	**100**	**179,438**	**1,468,211,189**	**100**

Source: Wipro, 2001b; 2010b

[2] American depositary receipt (ADR) represent shares that are traded and owned in the US financial market, the shares are called American depository shares (ADS)

Table 5
List of Wipro's top shareholders with more than 1 per cent

	Name of shareholder	2001		2010	
		No. of shares	%	No. of shares	%
1	Mr. Azim H Premji partner representing Hasham Traders	54,376,500	23.39	326,259,000	22.22
2	Mr. Azim H Premji partner representing Prazim Traders	54,169,500	23.31	325,017,000	22.14
3	Mr. Azim H Premji partner representing Zash Traders	54,040,800	23.25	324,244,800	22.08
4	Regal Investment Trading Company Pvt. Ltd.	8,965,700	3.86	51,014,200	3.47
5	Vidya Investment Trading Company Pvt. Ltd	6,940,100	2.99	38,860,600	2.65
6	Napean Trading Investment Company Pvt. Ltd.	6,840,500	2.94	38,263,000	2.61
7	Azim H Premji	9,340,510	4.02	56,043,060	3.82
8	Oversea depository for ADR holders (Morgan Guaranty Trust Company of New York)	3,154,500	1.36	24,184,070	1.65
9	Life insurance corporation India	-	-	15,261,863	1.04
-	Yasmeen A Premji (wife) Rishad Azim Premji (son) Tariq Azim Premji (son)	468,000	0.20	637,600 568,000 159,000	0,04 0,04 0,01
	Total	**198,296,110**	**85.32**	**1,206,250,593**	**81.77**

Source: Wipro, 2001b; 2010b

4.3.4Summary

The M&As and alliances during the last two decades has lead to a broad client base across the world, with almost 900 active global clients, including just under 200 Global 500/Fortune 1000 companies, such as Microsoft, IBM, Cisco, Ericson, GE and Citi Group. Their local presence strategy has lead to 72 development centres in over 33 countries. The growth has been rapid the last decade, with acquisitions to both strengthen the brand and to grow inorganic. Wipro have also sealed several deals with large global corporation, and at the same time increased local presence, which both further strengthen their position in the IT service sector. Azim Premji controls direct or indirect the great majority of the Wipro shares, almost 80 per cent, and only one other owner has entered the list of shareholders with more than one per cent in 2010.

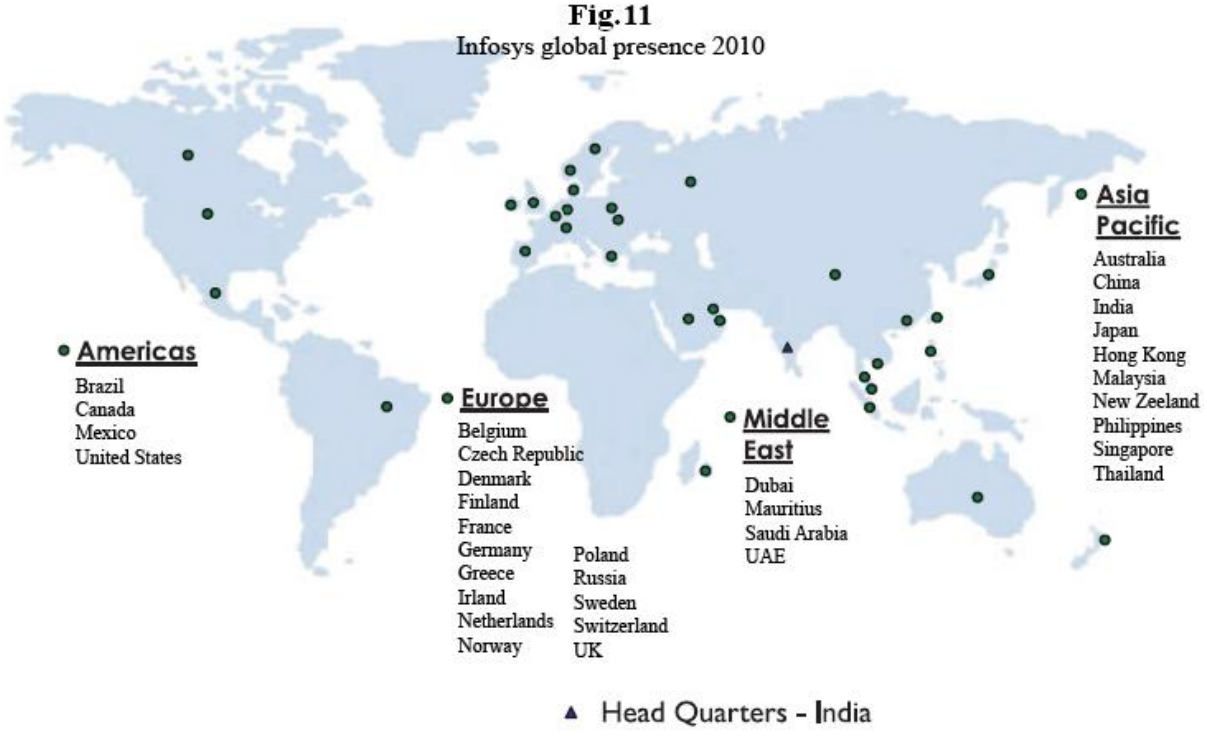
4.4 Case 2- Infosys Technologies

4.4.1 Introduction

Infosys Technologies (Infosys) was founded in 1981, Puna, India by N. R. Narayana Murthy and six software engineers, with an initial capital of $250. As of March 2011, Infosys have 64 offices and 63 development centres across the globe in over 30 countries, see Figure 11 for map and 12 for a geographical revenue distribution. Infosys' revenue has increased dramatically during the 21st century, as seen in Figure 13, and was at the end of their financial year March 31st in 2011 over Rs. 250 billion, which is equal to over $6 billion, see Figure 13 for a historical overview and Figure 14 for Infosys' employee growth. Already in 1981, Infosys signs its first client outside of India, Data Basics Corporation in New York. (Infosys, 2011a; Infosys, 2011b)

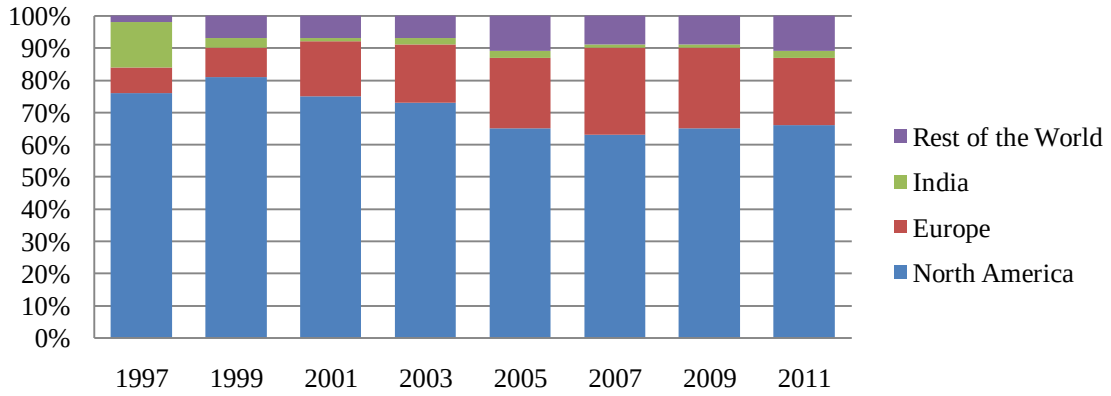
Infosys offers IT enabled business solutions for client worldwide. It provides end-to-end business solutions such as business and technology consulting, maintenance, system integration, package enabling consulting and implementation, product engineering, and infrastructure management services (Datamonitor Infosys, 2010).Infosys's services and business solutions are strengthened by alliances with leading technology providers including Microsoft, SAP and Oracle (Infosys, 2011c).

Fig.11
Infosys global presence 2010



Source: Infosys, 2010.

Fig. 12
Geographic revenue distribution



Source: Infosys, 1999; 2003; 2005; 2007, 2009; 2011.

Fig. 13
Infosys revenue 1993-2011
(Rs. in Mn)

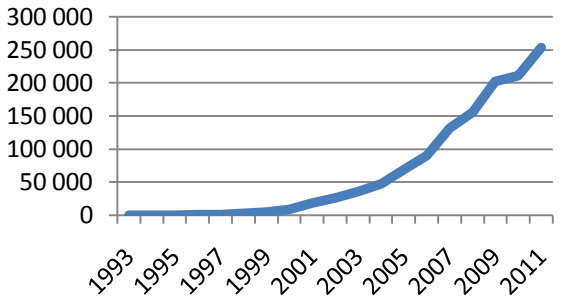
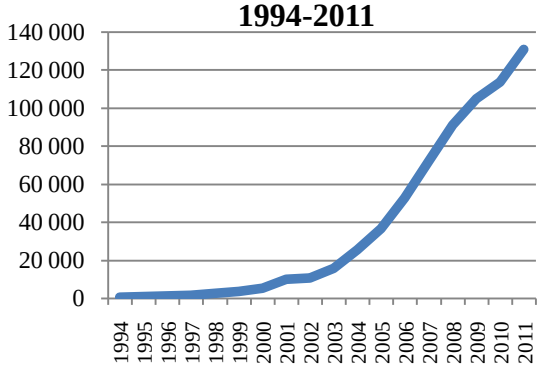


Fig. 14
Number of employees Infosys
1994-2011



Sources Fig. 13-14: Infosys, 1996; 1999; 2000; 2003; 2005; 2006; 2007; 2008; 2009; 2010; 2011d.

Fig. 15
Infosys revenue by
segment 2011

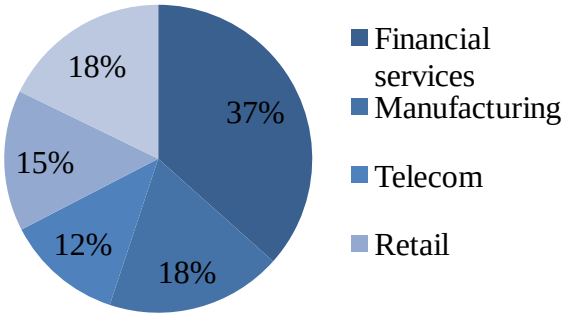
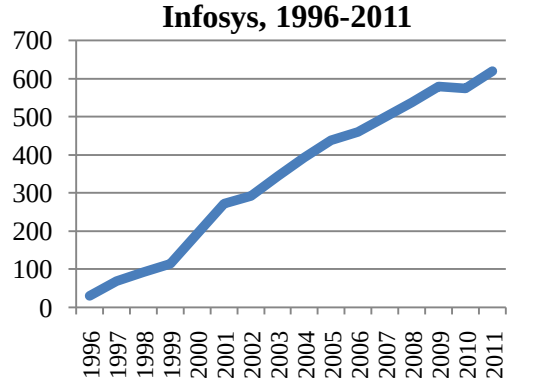


Fig. 16
Number of active clients
Infosys, 1996-2011



Sources Fig 15-16: Infosys, 1999; 2000; 2003; 2005; 2006; 2007; 2008; 2009; 2010; 2011d.

Through Infosys BPO (business process outsourcing), Infosys offers business process management services such as finance and accounting, offsite customer relationship management, and administration and sales order processing. Mainly Infosys serves clients in industries such as banking, insurance and capital markets, communication, media and entertainment, energy, healthcare, manufacturing and retail. The primary markets for Infosys are, North America, Europe and the Asia Pacific region. Operations are executed through five business segments, financial services, telecom, manufacturing, retail and others. (Datamonitor Infosys, 2010; Infosys, 2011a)

4.4.2 Background history

The early years – 1980 to 1999

The big break came when Germany's Bosch Group's subsidiary in Bangalore, in 1983, hired Infosys to run its data centre and Infosys relocated the corporate headquarters to Bangalore (Meredith, 2006). In 1987 the company opens its first international office in Boston, (Datamonitor Infosys, 2010) and during the 1980s some of the founders moved to the US to drum up business. When Nandan Nilekani, one of these expatriates and later CEO between 2002 and 2007, moved back to India in 1987, he helped Infosys to close a deal with General Electric, which proved to be an important step to further Western connections (Meredith, 2006).

During the 1990s customised software development and dedicated offshore development centres were one of the key revenue drivers for Infosys. The company initiated a public offering in 1993 on Bombay Stock Exchange and during the same year introduces employee stock option program and acquires ISO 9001/TickiT certification (Infosys, 2011b; Datamonitor Infosys, 2010). Infosys established development centres targeted at export markets across India in 1995, while also opened its first European office in the UK, establishing a development centre in Toronto and Mangalore (Bryson, 2007; Datamonitor Infosys, 2010). As of 31 March 1995, Infosys was the fifth largest export house in India with clients including, NCR, Xerox, Reebok, Nortel and Nordstrom (Narayanaswamy, 1996).

In 1999, the company reached over $100 million in revenue, was listed on NASDAQ, and opened new offices in Germany, Sweden, Belgium and Australia, along with two development centres in the US. The company also becomes the 21st company in the world to achieve a CMM Level 5 certification and the same year Infosys Business Consulting Services in launched (Infosys, 2011b; Datamonitor Infosys, 2010).

The beginning of the 21st century

What is particularly challenging for Infosys, and other similar companies with the same extensive growth, is the organisational design. On one hand they need to function in the day-to-day business, satisfying their customers and partners, and on the other hand they need to navigate themselves through fundamental shifts in their environments, as they grow. During the 1990s, Infosys focus predominantly on mainframes[3], but shifted focus in 2000 and included services internet/e-commerce. Subsequently the competition increased and Infosys began the climb up the IT service value chain into consulting and end-to-end IT solutions, while also continued to offer low-end software services. The transformation included a retraining of 1 500 employees, which equals a third of its software developers. (Garud, Kumaraswamy & Sambamurthy, 2006)

On a question how the transformation from mainframes to internet services was possible, founder and Director of HR and Quality K. Dinesh, said "The key to our company's success rests on four Pillars- people, technology, process, and purpose (i.e., corporate governance). From the beginning we have invested in all four of these pillars so that we can scale up over time. Each time we encounter a fundamental challenge, we view it as an opportunity to transform the company" (Garud et al, 2006: 179). As Infosys moved up the value chain, the governance faced new uncertainties and operating risks, typical for e-commerce and consulting companies. Recruiting external directors who had expertise in managing globalisation and growth into new markets, and dealing with the uncertainties. Top management also formalised a business model for the move up the value chain, which emphasised on predictability, sustainability, profitability and derisking (PSPD), in order to manage a revenue growth without jeopardises current operations (Garud et al, 2006). Former CEO Nandan Nilekani, says "when we talk about PSPD, we mean we must be able to predict that, in the next 4, 8 or 12 quarters, certain revenue is assured in order to ensure that we manage growth. Our revenue model has to certain sustainable revenue streams" (Garud et al, 2006: 283).

In 2000, the company touched $200 million in revenue and opens offices in France and Hong Kong along with three development centres in the U.S, one global development centre in Canada and one global development centre in UK. In 2001 Infosys reached over $400 million in revenue and opened offices in Argentina and United Arab Emirates, while they also opened a development centre in Japan. (Infosys, 2011b; Datamonitor Infosys, 2010; Bryson, 2007)

[3]Mainframes are large and powerful data processing computers.

N. R. Narayana Murthy, one of the founders, CEO from 1981 to 2002, and today's Chairman, answer a question in a 2001 interview about the key factors in the success of Infosys, particularly in the context of the environment for entrepreneurs in India, with the following words:

> "We (the seven founders) had what I would call a mutual exclusive, but collectively exhaustive, set of skills, expertise and experience. That is a very important statement because venture capitalists and their experience were not available in India. The second thing was the fact that we had an idea whose time had come...that the software industry was going to take off in a big way in the eastern countries. We realised that the only way to succeed was to have an external focus, outside India. The market in India was not developed, but at the time we had a team with the requisite strengths to succeed in countries that were embracing software development. That helped us see that we had to benchmark what we did against a global standard. The third thing that the company emphasised was that excellence has to permeate everything the organisation does. If we are trying to produce world-class software, we must have a world-class infrastructure. Our marketing and our finance must be as good as the software we produce. We also realised that the only sustainable fuel that would drive the success of the corporation is aspiration. It is the task of the senior people to make sure that the aspiration level of our people is high…" (Bernhut, 2001: 52).

Murthy continues about the founders' vision:

> "All four of us had a vision. We wanted to be a globally respected software corporation that would provide best in class business solutions and a corporation that employed best of breed professionals. By communicating that vision to everyone at Infosys, we knew that everyone in the company would aim for the highest level". (Bernhut, 2001: 52)

Regarding the business environment in India 1981, Mr. N.R. Narayana Murthy notes that:

> "In 1981, it took us a couple of years and about 25 visits to Delhi, which is about 1 500 miles from Bangalore, where we live, to obtain a license to import a computer. It took us one year to get a telephone connection and 15 days foreign currency to travel abroad...the economic reforms of 1991 changed everything. The business environment in India went from a controlled, state-regulated one to an open, free-market environment". (Bernhut, 2001: 53)

In 2002 Infosys opened offices in Netherlands, Singapore and Switzerland and revenues reached over $500 million (Infosys, 2011b; Datamonitor Infosys, 2010). During 2002 Infosys promoted Progeon, which was a business process management venture. The company had a majority stake in Progeon and secured a $20 million investment from Citigroup Investments (Datamonitor Infosys, 2010). Also in 2002, Infosys formed a partnership with Avaya to be able to provide integrated customer relationship management solutions. The company also formed a strategic alliance together with Sun Microsystems in order to market banking solutions to the international banking industry. At last in 2002, the company entered Thailand, by establishing partnerships with local companies, and strengthened its position in France. In 2003 the growth continued as Infosys expanded operations across India by opening new development centres. During the same year, Infosys acquired Expert Information Services, an IT service provider based in Australia, for $22.9 million. A subsidiary in China was also established.(Infosys, 2011b; Datamonitor Infosys, 2010)

In 2004 the company reached $1 billion in revenue and Infosys Consulting Inc. is launched as a wholly owned subsidiary, located in Texas, in order to add high-end consulting capabilities to its global delivery model. One element of significant importance for Infosys delivering of low-cost and high quality services was the Global Delivery Model (GDM). The GDM relies on geographical dispersed teams seamlessly working at the lowest work breakdown level, and in multiple time zones to deliver substantial customer value. The starting point for the GDM was develop as early as in 1996, when Infosys launched "Sparsh" an intranet which allowed employees to tap into private knowledge and expertise, and thus facilitating knowledge synthesis and organisational transformation over time (Garud et al, 2006). A user of Sparsh states "I could post a query or send an e-mail and I would get several responses within five or ten minutes from colleagues located around the world" (Garud et al, 2006: 180). The GDM together with Sparsh leverages key company strengths such as knowledge, global presence and fast-acting offshore development teams, to further strengthen Infosys' international competitive advantages. (Chatterjee& Watson, 2006)

The late zeros – from 2005 to 2011

Infosys partnered with British Telecom and together they developed licensed advanced automated resource management systems for organisations. The company also partnered with Microsoft Philippines and Intel Microelectronics (Infosys, 2011b; Datamonitor Infosys, 2010). In 2005, Infosys Technologies Shanghai signed letters of intent with Shanghai Zhanjiang Com-

pany and with the Administrative Commission of Hangzhou Hi-Tech Development Industry Zone-Hangzhou, for setting up software development centres in China. (Datamonitor Infosys, 2010)

In order to address the growing machine-to-machine wireless connectivity market, Infosys went into a partnership with Wavecom in 2006. At the same time Infosys established a BPO centre in Jaipur that could accommodate 900 people. Subsequently, Infosys and Schlumberger established a global alliance to offer information management solutions. (Datamonitor Infosys, 2010)

In 2007 the company has over 70 000 employees and reached over $3 billion in revenues (Infosys, 2011b)Infosys BPO also went into a strategic alliance with HVS International in New York to provide outsourcing solutions (Datamonitor Infosys, 2010). During the same year Infosys began the construction of a campus in Thiruvananthapuram while also acquiring three shared service centres in India, Poland and Thailand through an outsourcing contract with Royal Philips Electronics. In the same year, the company established its first subsidiary in Latin America, by opening a development centre and office in Mexico. During the same year it expanded its relationship with Microsoft Corporation (Datamonitor Infosys, 2010).

In 2008, the beginning of a second campus began in Hyderabad, which is expected to hold up to 25 000 people and will be completed within 10 years. During 2008, Infosys expanded its operations in Australia by investing $1.4 million in R&D in the new Smart Services Cooperation Research Centre. (Datamonitor Infosys, 2010) In 2008, the total revenue for Infosys was $4,18 billion (Infosys, 2008).

The year 2009 Infosys had over 100 000 employees (Infosys, 2011b), and continued its vast growth. It entered into a new go-to-market alliance with Microsoft, which focused on improving supply chain visibility and collaboration for suppliers. Together they launched a set of solutions, services and a centre of excellence to build the next generation of supply chains for manufacturers. The same year the company received a five-year applications outsourcing and support contract to manage and operate a big part of British Petroleum's business system. Infosys also expanded its Global Education Centre at its Mysore Campus with a training facility. It opened its first office in New Zeeland while also opening its firs development centre in Brazil. (Datamonitor Infosys, 2010)

In 2010, Infosys won a contract from Microsoft and will manage Microsoft and will manage internal IT services for Microsoft worldwide. This deal will also lower Infosys's enterprise costs through the usage of Microsoft's latest solutions, such as Windows 7. The same year, Infosys and Alstom, a world leader in energy and rail transport infrastructure, expanded their strategic partnership in areas of global R&D. Infosys showed its inventiveness by inventing a Digital Smart Home Gateway, which links multiple home devices and enables consumers to manage them from a Wi-Fi console, smart phone or through Internet. During 2011, Infosys expanded operations Thiruvananthapuram and opened its first Software Development Block at its techno park campus II. The same year, Infosys, together with Oracle completed a business transformation program at Seattle City Light, one of the U.S's largest municipal owned facilities. (Datamonitor Infosys, 2011)

Infosys has not made many acquisitions over the years, at least compared to Wipro. This is according to Kris Gopalakrishnan, CEO since 2007, due to a careful approach towards acquisitions. He further states that if Infosys finds the right opportunity the company will act. Gopalakrishnan further states: "we have the cash, a dedicated team and willingness...We don't want to be aggressive. History has shown that 70 per cent of acquisitions do not yield to the value they promise to deliver" (Economictimes, 2010).He also points out that Infosys has done reasonably well compared to Infosys's large competitors in terms of considering organic growth and meeting objectives. (Economictimes, 2010)

4.4.3 Owner structure

As stated in previously, it is more common with family owned businesses in India than in Western markets, however, Infosys is not family owned. As of March 31, 2011 the largest groups of owners was the founders, FIIs, the Indian public and ADS holders outside of India, see Table 6. The founders and families have 16.04 per cent voting strength, which is a huge decrease from 2001 when their possessed almost twice as much. FIIs have 36.12 per cent voting strength and ADS holders 17.6 per cent of voting strength. The majority of the founders are still active and included in the board of directors of Infosys. (Infosys, 2011d)

Compared with Wipro, there has been a lot more changes in the shareholding pattern since 2001for Infosys. FIIs have increased their share of ownership from 28.90 per cent of voting strength in 2001 to 36.12 per cent 2011. ADS holders have increased substantially from 3.16 per cent of voting on 2001 to 17.9 per cent in 2011. (Wipro, 2001)

The largest shareholders of today, disregard of the owners, are listed in Table 7. Of these holders, the largest is Life insurance corporation India, with a 4.28 per cent of the shares, almost twice as much as the second largest holder Oppenheimer developing market funds.

Table 6
Infosys shareholding pattern 2001 and 2011

Category	2001			2011		
	No. of shareholders	No. of shares	%	No. of shareholders	No. of shares	%
Founders (incl. family)	23	19,287,560	29.15	19	92,085,078	16.04
Foreign institutional investors (FIIs)	383	19,114,466	28.90	989	207,399,314	36.12
Indian public	84,881	15,896,476	24.03	405,131	75,670,639	13.18
Mutual funds, banks, FIs	202	7,875,178	11.90	392	51,634,033	9.40
American Depositary Receipt	1	2,088,117	3.16	1	101,050,021	17.60
Private corporations	3,478	994,196	1.50	3,357	38,466,629	6.70
OCBs, NRIs, Foreign nationals	675	497,918	0.75	6,696	4,937,208	0.86
Other	-	404,206	0.61	38	2,908,637	0.50
Total	**89,643**	**66,158,117**	**100**	**416,623**	**574,151,559**	**100**

Source: Infosys, 2001; 2011d.

Table 7
Shareholders (non-founders) holding more than 1 per cent of the shares

Name of shareholder		2011	
		No. of shares	%
1	Life insurance corporation India	24,597,487	4.28
2	Oppenheimer developing market funds	12,556,971	2.19
3	Abu Dhabi investment authority	11,065,285	1.93
4	Franklin Templeton investment funds	9,987,588	1.74
5	ICICI Prudential life insurance company Ltd.	8,409,519	1.46
6	Vanguard emerging market stock index fund	7,088,500	1.23
7	Government of Singapore	6,301,219	1.10
8	Aberdeen asset management Ltd.	6,268,000	1.09
9	Bajaj Allianz life insurance company Ltd.	6,141,329	1.07
10	HDFD Trustee company LTD	5,905,736	1.03

Source: Infosys, 2011d.

4.4.4 Summary

Infosys has a strong brand recognition that acts as a pitch for new contracts and attracts talent. The strong brand recognition is a result of quality services, which allowed it to maintain long-standing client relationship. The growth has mainly been organic and efforts have been put on employees. The company has a total client base of 574 including 338 million-dollar clients (Datamonitor Infosys, 2011). The company have 64 sales offices and 63 global development centres across the globe, in over 30 countries (Infosys, 2011b). The founders of Infosys do not control the company with a majority stake of the shares, they possess together 16.04 per cent. The largest owner disregard of the founders is Life insurance corporation of India, with 4.28 per cent (Infosys, 2011b).

5. Analysis

In this section we will analyse the cases from the perspective of our theoretical framework, the analysis is divided into subheadings for each theory. The analysis focus on the link between the theoretical framework and the empirical study, this is complemented with discussions of alternative reasons and other findings from the empirical study.

5.1 Advantages from India with regards to IT services

The software industry in India has four main advantages that have made the extraordinary growth of the sector possible and giants such as Infosys and Wipro has managed to evolve. Firstly, the advantages of speaking English in one way or the other, secondly, the advantage of being able to provide 24-hour workdays for the western companies, third, the ability to deliver high-value products at low prices, having a high output per unit wage, and fourth, India in general, and the IT sector in particular, has succeeded in generating talented software engineers. Production of software and other IT and consulting services do not require the same physical infrastructure as for example the manufacturing industry. This means that the Indian software industry is not in any large extent slowed down by the lack of infrastructure as other sectors in India might be.

5.2 Advantages in communication – IT as a driver of globalisation

One thing that has to be taken into consideration is the characteristic of an IT-service. After negotiating with customer, the order and information regarding the particular order can easily be transferred within the company around the world in order to get the opinions from specialist, but it also makes it possible to execute the service in the most preferable location. This is the essence of the global delivery model, pioneered by Infosys and now used by companies' world-wide (although not under the same name). Being a pioneer of that way of working, with the GDM in Infosys' case, makes it easier to communicate in the internationalisation process, which in turn makes it smoother a possibly faster.

The companies providing IT solutions can be regarded as specialists within the field of IT communication, especially the larger companies in India, such as Infosys and Wipro, which has moved up the value chain through investments in R&D and through acquisitions. Therefore it is easy to recognise that the internal competencies possessed by the companies regarding information transfers, such as the Sparsh intranet at Infosys, has been an advantage in the internationalisation process.

When considering that one of the main drivers of the globalisation is the ability to transfer information fast, through the Internet. In some extent, when providing IT services these companies have an advantage to be in the forefront of the development within IT and thus a step ahead of many other companies that do not provide services in IT. Meaning it is to some extent easier for IT companies, such as Infosys and Wipro to take advantage of the globalisation through their special knowledge in IT. Take for example the situation when an employee at Infosys has problem with an assignment and sends out e-mail with a question to his global colleagues and within minutes he has several answers. Today, that is nothing extraordinary, but when considering that this was in 1996 in India and a way for employees to work in their day-to-day business, it shows that Infosys is in the forefront of taking advantage of the IT development and in the long run possibly taking advantage of the globalisation at large.

5.3 Opportunities created by companies searching for cost-cutting - backward internationalisation

Along with India's financial deregulation in 1991 came opportunities for both Indian and western companies. Many western companies, such as GE and Citigroup, saw opportunities to reduce their costs by using Indian software and BPO companies, such as Wipro and Infosys. Indian companies within the IT sector enjoyed new clients without much effort due to the four reasons given first in this chapter. As a result companies within the sector, including Wipro and Infosys grew rapidly. However, competition within the sector was hard.

The expansion abroad, as a result of foreign companies searching to cut cost, became relatively easy to manage due to an already stabile client base of foreign customer in their home market. They have managed to build up competitive advantages on their home market that are exploitable abroad via internalised operations. The development of a huge pool of skilled scientists and engineers, high output per unit wage and structured management are some of the sources to the firm competitive advantages. This pool of skilled labour is internationally transferrable as managers or technologists.

5.4 The Uppsala Model

Wipro and Infosys began their internationalisation in line with the theories presented in the U-M. The model concludes that internationalisation begins with a foreign demand, and that the subsequent direct investments are focussed on the market from which the demand originated, the US market in our cases. But the following steps in the internationalisation process cannot be explained with the U-M, at least not with the first version. An important conclusion in the

first model is that companies gradually expand their operations to new markets, beginning with markets similar to the home market, and continue to expand globally as they gain experience. This has not been the case for Wipro or Infosys, and the reason can partly be found in the demand – it did not come from similar emerging markets, but from the developed Western markets. These skips of levels in the internationalisation process was possible much due to the relations with Western companies, which is the result of globalisation, and the possibilities the Western companies found in the Indian market. The relationships with these companies could also be an explanation of how Wipro and Infosys so quickly could go through the process of building the experiential knowledge, which Johanson and Vahlne discuss in the first version. It is likely to presume that the knowledge needed for the Western expansion was obtained more rapidly through networks, but there is however no empirical data that proves it.

Physical distance

The U-M discusses physical distance as a factor behind the choice of markets in their first model, and in the revised model that networks decrease the importance of physical distance. Both Infosys and Wipro started their internationalisation with offshoring services to Western companies, and because of this, the step to open offices and development centres in these markets was not very big. The physical distance had decreased because of the experience gained from doing business together in India, and through this, they also became a part of their customers' networks, which further eases the move overseas. The internationalisation process for Wipro and Infosys has by this argument been helped very much by the fact that Western companies took the first initiative by using their offshoring services to reduce their costs. It probably would have been much more difficult to set up operations if they had no previous relationships in the markets, which also would have made the physical distance more significant.

The importance of networks and alliances in the U-M

In Wipro's case, international networks have had more impacts. From an internal perspective, networks and alliances have improved internal processes, by providing the company with technology and experience from partners. From an external perspective, the network has strengthened the Wipro brand, by associating it with well established IT companies, making them a more reliable actor in the industry.

Since the 1990s, Wipro has strived to become a comprehensive IT service company, providing a complete portfolio of services for their customers, and also to be a leader when it comes to quality and technology. These goals are all possible to obtain internally, but to team up with already established companies within different segments of the industry will certainly fasten the process, and at the same time create a strong brand by association. Examples of this are the alliance with GE introduced them to the medical appliances industry, the collaboration with Royal Dutch Telecom introduced them to the internet and telecom industry and the R&D projects with Lockheed Martin made them a name in the defence technology industry, just to mention a few. Infosys on their side, have networks and alliances including Microsoft, Sun Microsystems and HVS International. Through these partners, Wipro and Infosys have been able to attract new customers, as Azim Premji put it when talking about reactions from potential customers"... if you are good enough for GE you must be good enough for us" (Ramamurti, 2001: 13).These kinds of relationships helped both companies to establish themselves in new markets where customers might have a distorted perception of the company, both by finding the companies new offshoring customers, and also by easing acquisition and greenfield investments in the foreign markets.

5.5 Can Infosys or Wipro be regarded as Born Globals?

The traditional theories state that companies grow strong in their home market before starting to internationalise, and the born global theories states that a company could be considered as being born global if a majority of their revenues is generated in foreign market after a few years from its creation.

In both Wipro and Infosys case, the traditional theories are more accurate in this aspect. Since the Indian market did not open fully until 1991, and both companies created their IT segment in the early 1980s, they had almost a decade to serve the home market and building up their internal expertise. Infosys did however open their first international office in the US in 1987, when one of the founders moved to Boston, but it was not until a couple of years later the sales in the US market really commenced. Once the Indian market opened, both companies tied strong international relations very quickly. The protection of the domestic industries, together with the important investments in the education system, are two of the reasons the Indian IT industry was so well prepared for international collaborations once the FDI limitations and other regulations were eased.

When looking at Tsai & Eisingeich (2010) theories of internationalisation process for emerging market firms, the multinational challengers as this thesis categorises Infosys and Wipro, should have a certain speed in their internationalisation process. That is the case for both Infosys and Wipro, as although they started late with process, they were quick once they started. There are some similarities between the theories of Tsai & Eisingeich (2010), and Infosys and Wipro. According to Tsai & Eisingeich (2010) both the OEM, ODM and the multinational challenger are firms that often follow clients into foreign markets and are likely to set up R&D centres on overseas markets.

5.6 Internationalisation through organic growth or acquisitions

Wipro and acquisitions

We have touched upon the importance of acquisitions to strengthen the brand during Wipro's internationalisation. In the 1990's and the 2000's Wipro acquired a long list of companies, from small niche companies with only a couple of employees, to large international companies with up to a thousand employees. As quoted in the Wipro case, Azim Premji states that the reason for these acquisitions were not to gain access to markets or technology, because at the time of the acquisitions, Wipro already were established and possessed the necessary technology according to Premji. The reason was said to be to strengthen the brand, and to broaden the company portfolio of services. It is a confident statement to declare that Wipro did not acquire companies to acquire new skills, and it could be debated whether this really were the case. However, to strengthen the brand could be regarded as an owner specific advantage. In several acquisitions, Wipro has acquired companies in segments of the IT service industry that they did not operate in, and even if they already had the necessary technology within the company, they most certainly would benefit from using the skills and knowledge of the acquired company.

The strategy of a rapid growth in the global market through acquisitions did help Wipro to create a strong brand, it also helped it to build a network by acquiring the companies customers. However, since Infosys grew in almost the opposite way, it was not the only way for an Indian IT service company to grow.

Infosys and organic growth

Regarding Infosys, the company has had a careful approach towards acquisitions and instead favoured organic growth. Infosys has focused on creating knowledge internally (as mentioned

also alliances in some extent). They have done so through established many R&D labs across the world, along with an own University with the capacity to hold 10 000 students, where both education of new "infosycians" and existing employees are held. This focused on employee's education and employee compensation, by issuing stock options for its employees in order to reduce attrition, has made it possible for Infosys to grow organically.

The Infosys caser suggest that it is not necessary to acquire companies in order to internationalise. In the case of Wipro, acquisitions were frequently used, but the reason according to Azim Premji was mainly to strengthen the brand. Infosys has however proven that it is possible to build a strong brand without acquiring existing companies in the Western markets.

5.7 The internationalisation process in regards to the OLI model

John Dunning's OLI paradigm suggest that a company should possess owner-specific, location-specific and internalisation-specific advantages in order to make direct investments abroad, if all advantages are not obtained, other solutions such as export might be preferred. In Wipro's case, much of these advantages were built up before the internationalisation, but some of the today's advantages were obtained during the internationalisation process. This means that the advantages not necessarily need to be obtained before an internationalisation, it could be enough for a company to be able to reach them through the internationalisation itself, as suggested in Mathews (2006).

Owner-specific advantages

The most important part of Wipro's and Infosys's owner-specific advantages, knowledge, was created during several years of serving the home market. But their well-known brand, and the advantages which follows, were created during their first years of providing offshore services. In the case of Wipro, it was further strengthened by the following acquisition of established companies in the Western markets, and in the case of Infosys, by organic growth.

Internalisation advantage

Wipro's and Infosys' internalisation advantages lies within their ability to provide comprehensive IT services, which also is an advantages that was obtained through the internationalisation. Wipro's broad portfolio of services was achieved through acquisition of Western companies, even though the knowledge presumably existed within the company, the acquisitions was the entrance into new segments of the industry. Infosys' focused just as much in R&D of these services, but the difference is that they did not engage in nearly as many acquisitions as

Wipro. By providing a full coverage of all the IT services their customers would need, both companies gain from economies of scale and will be able to decrease transaction costs, these advantages later eased the continued geographical expansion.

Location-specific advantages

The location specific advantages were at first reversed, with Western companies using Wipro' and Infosys' location advantage of low-cost labour. When they later expanded to the Western markets, they used the location-specific advantage of being close to their customers, and to reach customers who were not willing to offshore. At the same time Infosys could use its GDM to use the location advantages in India while being on a foreign market and use that location-specific advantage. The infrastructure of the industry has also been to great help, with the development of global fibre connections.

The importance of networks and alliances in the revisited OLI-model

The revisited version underlines the importance of networks, just as the revisited U-M, and how networks can be used to obtain the advantages in the OLI paradigm. The owner-specific advantages can be enhanced through alliances, and through being partner with a well-established brand, or sharing technology with specialised companies. This has been witnessed several times in both Wipro's and Infosys' history, in their collaborations with companies from different niche segments such as Royal Dutch Telecom, GE or Microsoft.

The ownership advantages can be acquired through alliances in different directions, Dunning & Lundan (2008) bring up vertical alliances as an example, which gives companies opportunity to affect suppliers R&D and gain market knowledge from customers. Wipro and Infosys have mostly been the suppliers, and could through input from their customers refine their R&D, and thus create services with a better fit. Vertical alliances also gave the companies market input from their customers, which increased their knowledge for future entrance into certain market. Another possibility with networks is the chance to use partners' immobile assets, like development facilities and offices, and transfer the Indian IT companies' mobile assets such as knowledge and expertise to reduce costs in the development of services. This is however something that we have not found any evidence of in any of the cases, but it could be confirmed with some more insight in the structure of different alliances.

5.8 The internationalisation with regards to the LLL/framework

Mathews (2006) view on networks is generally that latecomer companies, such as Infosys and Wipro are better equipped to take advantage of the new interlinked and weblike inter firm networks that has evolved as a result of globalisation. The reason for the relatively fast internationalisation process is due to the networks, which the companies built with the western companies in India. The networks not only gave the companies access to the markets, but also strengthened their brand, which further eased the process by attracting potential customers. Mathews (2006) is referring to the strategy of the three L, however, that is not something a company achieves consciously. Instead Mathews (2006) puts a name of a common pattern subconsciously made by successful companies entering late on the global market.

Linkages

Regarding the three L in Mathews (2006) linkages, leverage and learning, both Wipro and Infosys acquired the first L without any hard effort, when western companies in search for cost cutting outsourced various services to India. As a result linkages with global companies were established. Also a global orientation in itself is an advantage, therefore the mindset of the seven founders of Infosys along with the global orientation and overall open-mindedness towards the global market, should be regarded as an advantage.

Leverage

The second L was reached when Infosys and Wipro made use of the linkages already established, thus making use of their now established global presence. In the case of Wipro, the company made acquisitions in order to reach new niche segments i.e. to gain or leverage new resources that Wipro was missing.

Learning

When using the strategy of linkages and leverage repeatedly, Mathews third L is reached. Therefore as Wipro executed acquisitions and leveraged new resources the company learned and got better in executing acquisitions but also to absorb and gain new resources. Both Infosys and Wipro leveraged resources through experiences from being on the global market, particularly in marketing and strategies when entering new markets. In the case Infosys, the company formed a strategic alliance with Sun Microsystems in order to market banking solutions, that is a typical use of the strategy of linkage and learning. In this particular case, Infosys lacks the resources and instead of creating that particular resource internally, which oth-

erwise has been the case many times for Infosys, the company reaches out (linking) and form an alliance to obtain that particular resource (leverage). Later a similar alliance was created with Microsoft and thus *learning* is reached. Later more alliances are created that enables Infosys to obtain other resources, as more alliances are established, the better Infosys becomes in creating alliances, hence *learning*. Wipro has worked in similar ways, however, to a far greater extent acquired companies to obtain resources.

In our analysis we find that Infosys and Wipro has both used the strategy of linkages, leverage and learning and as a result the two companies are better equipped to take advantage of the new opportunities the globalisation has brought compared to the first wave of MNEs.

5.9 The effect of owner structure in the internationalisation process

In the case of Infosys there are no tendencies that the owner structure is connected to its internationalisation process, as the company is not family owned. However, in the middle of the internationalisation process, as of March 31, 2001, the largest owner group was founders and families with 29.15 per cent of voting strength. That shareholding group decreased the following years. The owner structure in Infosys is similar to any regular western company. When analysing Wipro's owner structure, it is also hard to find a connection between the internationalisation process and the owner structure, even though the company is to be regarded as family own, however, with only one son in the second generation in a leading position.

5.10 Is the "second" global shift shifting away from India?

John Bryson (2007) is addressing the offshoring of services from developed countries, to countries like India, as a "second" global shift, and Blinder (2006) argues that the offshoring in the service sector has only begun. What we have witnessed in our case studies however, is that Wipro and Infosys started as pure offshoring companies, but evolved very quickly from only supplying services in and from India, to opening development centres and offices overseas. Some of the important reasons for moving abroad are to reach customers who do not want to offshore, to follow existing customers into new markets, and because many consultancy services need to be performed firsthand, especially when reaching new steps in the value ladder. Both companies still have their main activities and headquarters in India, but what this indicates is that once an offshore IT companies have established a reputation, they physically move towards the Western markets for a continued growth. This phenomenon cannot however be statistically proven with only two case studies.

Along with increased demand for offshoring services in India, comes increasing salaries. The salaries in Indian are increasing more in percentages terms than Western salaries, but in absolute numbers it is the other way around, which gives India the cost advantage for some time to come. But the Indian offshoring companies are aware of this threat, and have started to outsource services to countries with even lower salaries, such as the Philippines, Vietnam and China. This phenomenon would be an interesting area for further research in the IT service industry, to investigate where the future offshoring centres will be placed.

6. Conclusion

To refer back to the research questions for this thesis; how did the Internationalisation process look like for Infosys and Wipro? And, how were they able to internationalize so rapidly? This thesis has illustrated the internationalisation process of two Indian IT-service companies, Infosys and Wipro, and explained how they manage to internationalise and make such a big footprint on the global scene in such short period of time and now competing with well-established western companies, such as IBM and Accenture.

The first step in order to demonstrate this, relevant internationalisation theory has been summarised, including the Uppsala Model, the OLI Model, Born global theories and Mathews' LLL-framework, but also two more recent theories with connection to India and emerging markets. The thesis concludes that it is a mix of taking advantage of the globalisation and the economic features of India, including the ability to speak English, that are the two largest influences in the internationalisation process of both Infosys and Wipro. Taking advantage of the globalisation includes taking advantage of the interlinked global economy with web like characters of multiple networks, which is one of the key factors that has made it possible to succeed for Wipro and Infosys on the global market.

The economic features include, in firsthand, the low wages and high output per unit wage that is possible due to a large skilled labour pool, that made it possible for Indian companies to offer quality services for low prices, which in turn made it possible for western companies in search for reducing costs to actually reduce their costs by outsourcing some activities, mostly IT processes, to India. It could be seen as if Infosys and Wipro utilized the location advantage in India and a form of backward internationalization began. Hence, Indian IT companies enjoyed a growth with global partners on their home market without actually internationalising but still having a global outlook. After growing strong on the home market while linking up, and establishing networks with global clients, the "physical" internationalisation process started for Infosys and Wipro. The networks not only include clients, it also includes alliances with large firms. Once the process started both companies entered many new markets by locating R&D facilities or offices on foreign markets in a short period of time. The main reason for the relatively rapid internationalisation process is due to the networks, which the companies built with the western companies in India. The networks not only gave the companies access to the markets, but also strengthened their brand, which further eased the process by attracting potential customers. Both the U-M revisited, OLI revisited and Mathews (2006) suggests that network is a key element in a successful internationalization process.

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