

1. Introduction

This book has two principal objectives. One is to report a remarkable corporate success – the rapid development of China’s largest and most advanced container terminal from its foundation in 1993.¹ The other objective is to increase our understanding of corporate co-evolution – how firms and their environments evolve together over time – by closely examining the development of the company running this terminal within its changing environment. This includes ways in which the company was able to influence the evolution of that environment.

The book has contributions for both academics and practitioners. For academics, it offers new theoretical and empirical insights on the processes lying at the heart of co-evolution. Theoretically, it adopts and takes forward a political perspective that focuses on the role of power and influence, a perspective that has largely been absent from previous work on co-evolution.² Detailed examination of the company’s history will illustrate the relevance of this perspective and offer some detail about the actors, the issues and the sources of power that came into play in its dealings with the environment. For practitioners, we identify ways in which the company was able to chart its own evolution through successfully managing key external relationships. In reporting a major turnaround from a vicious to a virtuous cycle of port development, we describe how a coherent strategy can emerge from positive engagement with the environment. We distil implications for corporate practice into seven approaches that can be taken to generate change that has positive consequences not only for a company but also for its environment. These are presented in the final chapter.

The terminal is located at Yantian in the Shenzhen Special Economic Zone [SEZ] just three kilometres across the Mainland Chinese border from Hong Kong. The company that owns and runs it is Yantian International Container Terminals [YICT]. This is a joint venture, which was established in 1993 between Hutchison Port Holdings [HPH] based in Hong Kong as the majority owner and the Yantian Port Group owned by the Shenzhen government as the principal minority shareholder.³ Its story is a fascinating one of how a company achieved its strategic objectives within China’s complex environment, and actually went on to

set new standards of practice within its sector both in China and internationally. It enlightens our understanding of the strategic possibilities that companies can create even within highly challenging and controlled environments.

Although the booming economy of southern China provided a propitious environment for the new port, YICT experienced a difficult first few years. It had a major problem persuading shipping companies to switch their business to its new facilities from the well-established and efficient berths of nearby Hong Kong despite offering competitive rates. The shippers' fear was that Yantian, being located in Mainland China, would suffer from all the restrictions of Chinese bureaucracy to the detriment of being able to offer them a reliable and efficient service. So through the years 1993 to 1997, the young joint venture was investing heavily in its new facilities while at the same time losing money fast. The agreement under which the YICT was established specified a number of reforms in the procedures of government agencies located in the port that could directly affect its operations, such as the Customs Administration. In practice, it took several years of careful and persistent relationship management at different levels in the Chinese system, as well as investment in advanced equipment for the agencies to use, before these reforms started to be put into practice. By 1996, the Chinese central authorities formally endorsed the principles of port reform and they officially recognized Yantian as the 'pilot site' for national reforms in port administration. From that point on, the company was able to institute a series of initiatives that gave it a leading place first within China's port industry and then worldwide. Yantian won a series of Chinese industry awards and in 2005 it was chosen by the Global Institute of Logistics to be the 'Global Terminal of the Year'. While YICT had to continue with innovations in order to maintain this leading position, against growing competition from other local ports, it also had to contend with another issue which was actually stimulated by its success. This was the desire of its Mainland partner to secure a larger stake in what had become a highly profitable business.

THE CO-EVOLUTIONARY PERSPECTIVE

Good theory and research can inform practice. In order to do full justice to our subject, we shall adopt and add to what has come to be called a 'co-evolutionary perspective'. This perspective, which is described in Chapter 2, draws attention to ways in which firms and environments evolve together and how, through their relationships, each can impact on

the other. The practical significance of this is that, while firms have to adapt to changes in their environments, they may also be able to influence external organizations so as to create better conditions for meeting their strategic objectives. This is not achieved easily and requires a strategy for building and using channels through which corporate leadership can relate with key people outside of the firm. This 'relational framework' offers opportunities to influence the perceptions and thinking of these external people (Meyer and Scott, 1983).

The environment of a firm consists of institutional and non-institutional segments (Lewin et al., 1999). The latter primarily comprises other firms – as customers, suppliers and competitors. The institutional environment comprises government agencies and public institutions, such as the legal system. This segment is becoming increasingly important to business because of the growing economic significance of emerging markets, which have a tradition of heavy regulation and in view of the more interventionist policies of governments in most countries following the global financial crisis of 2008.⁴

We need to have a better understanding of how firms can be proactive toward their environments with the intention of both securing some strategic leeway for themselves while at the same time recognizing that their legitimacy depends on their responding responsibly to social and political concerns. There has been a longstanding debate around the question of how much strategic leeway firms can realistically hope to secure. On one side are those who adopt a Darwinian perspective, which maintains that ultimately firms and other organizations have to adapt to externally-imposed pressures if they are to survive. This is the theory that only the fittest survive through a process of 'natural selection' by the environment. The only role it accords to corporate strategy is the reactive role of monitoring external changes and ensuring that the firm adjusts to them. The influence of the environment is therefore seen to be ultimately decisive. On the other side are those who stress that firms actually have a considerable degree of choice as to the strategies they adopt because their dependence on the environment is only conditional. For example, if they deem it to be necessary, they may be able to move from one environment (industry or country) to another. They are not necessarily dependent on one set of external conditions. While this option is not available to a physically fixed unit like a port, it may also be possible to exercise some influence over environmental conditions through other means such as market leadership, innovation and effective lobbying. The extent of this influence may be a function of the power firms can wield through their size or their ability to act collectively, as well as their negotiating skills. Only a close empirical examination of the respective initiatives and

pressures arising from both firms and relevant external bodies can shed light on this issue and highlight the practical ways in which both parties are able to exercise influence effectively. The co-evolutionary perspective has a special attraction and relevance precisely because it encourages this particular empirical focus.

WIDER RELEVANCE OF THE STUDY

The institutional environment has been of key importance for YICT. This is because it is a major infrastructural facility of strategic importance to the Chinese authorities and, in addition, it is located in a country where government is closely involved with business and intervenes actively in it (Redding and Witt, 2007). At first glance, these two characteristics might seem to make it a rather non-typical case, with only limited general relevance. Certainly, infrastructural companies have not been studied as much as other categories by management researchers. But this does not mean they should be considered as out of the mainstream. Actually, infrastructural industries such as transportation, energy, power and water are both large and of central importance to economies, so they can hardly be dismissed as 'of less consequence'. Ports play a vital role in economic development, and ideally should enable the increasing volume of exports and imports associated with a growing economy to be handled without delay or undue cost. In reality, the combination of historical and bureaucratic impediments can create a serious barrier to the effective performance of this function, as is the case today in a major emerging economy such as Brazil. Despite being a greenfield facility, YICT also had to overcome some of these problems.

In all countries, ports tend to be highly regulated. However, in some countries such as China their regulation is more subject to political forces than in others. While the general level of political intervention in business by government and institutions is particularly high in China, government and its bureaucracies also impose significant constraints on business activities in other emerging economies. The World Bank's 10 indicators of 'doing business' in 183 countries point clearly to the added difficulties of conducting business in most emerging economies due to bureaucratic requirements and restrictions, with the situation often exacerbated by political instability (World Bank, 2012). Active government involvement can create considerable uncertainty for firms regarding the strategies they should pursue, especially when political considerations predominate. The other side of the coin, however, is that this involvement also provides channels to government ministries and agencies through

which firms themselves have the potential to exercise influence. Using such channels, proactive companies possessing valued specialized competencies have an opportunity to inform the evolution of government policies and practices (Child and Tsai, 2005).

So although YICT does have some special features, there are many other situations to which the insights it furnishes into co-evolutionary processes are likely to apply. YICT's senior management engaged proactively with Chinese government ministries and their local agencies whose support was essential for the company to achieve its objectives and to secure the port's profitable growth. Lessons of wider significance can be drawn from the company's success in doing this.

Companies like YICT, operating within the heavily institutionalized context of a major emerging economy, have received less attention in studies of how firms evolve than companies in western contexts that do not generally impose the same level of constraint. With the exception of anti-competition and consumer protection legislation, political and regulatory forces may well touch many companies relatively lightly in developed western countries. As a result, studies of corporate evolution have tended to focus on the growth strategies companies have taken in their marketplaces rather than on how they relate with governments and institutions. Burgelman's investigation of how strategy and environment co-evolved in the case of Intel is one such example (Burgelman, 2002a; 2002b). Such investigations naturally tend to adopt an economic perspective rather than a political orientation that is attuned to dealings with governments. There are some studies that have examined the political processes through which companies have evolved over time within heavily institutional environments (for example, Rodrigues and Child, 2008; Dieleman and Sachs, 2008), but they are exceptional.

THE SPECIAL CONTRIBUTION OF THIS BOOK

It is a major undertaking to explore how a company has evolved over time in keeping with changes in its environment. It requires the collection of information that satisfies a number of criteria. It should, first, relate to a historical time-period that is sufficiently extensive to enable changes and trends to emerge clearly. Second, the information secured must also be comprehensive enough to permit the various strands in the development of both the firm and its context to be understood in order to provide a balanced and holistic picture. Third, as we note shortly, shedding light on how a firm and its environment evolve in relation to each other requires that insights be obtained into the interactive processes involved.

The opportunity to secure this quality of information and insight occurs only rarely in business and organizational research. Indeed, one can virtually count on the fingers of one hand the number of studies that have come close to meeting even the first two criteria: Jacques (1951), Chandler (1962), Pettigrew (1985), Johnson (1987), Burgelman (2002a), Rodrigues and Child (2008), and not many more. There are, of course, many business histories and biographies of entrepreneurs. Valuable though these are, they tend to concentrate on their story rather than analyzing it in ways that contribute to theory-based generalizations and practical implications of wider relevance.

The concept of co-evolution suggests that firms have the capacity to *interact* with their environments, rather than being obliged simply to *react* to external events and trends. It draws attention to the dynamic interaction of forces in an organization's environment with the capacity of its leadership to respond to these forces, and indeed intentionally to shape aspects of the environment. A co-evolutionary perspective therefore has the potential to inform research on organizations that spans levels of analysis and involves adaptation over time (Lewin and Volberda, 1999). It offers a lens through which the development of organizations and their populations can be better understood. There is, however, still uncertainty among scholars as to what 'co-evolution' means (Murmman, 2010). Does it simply mean that the organizations and environments develop along parallel paths, or does it mean something more, namely that there is interdependence in their development which arises because environments 'influence' organizations and vice versa? In this book we adopt the latter interpretation in which co-evolution refers to interdependence in the respective development of organizations and their environments.

If both organizations and environments are influencing each other's development, the key question then becomes 'how does this take place?' The way in which this interdependence plays out necessarily lies at the heart of any theorizing on the subject (Volberda and Lewin, 2003), yet our understanding of it remains underdeveloped. A number of studies have traced events in detail to provide evidence of whether changes in the environment were followed by apparently related changes in organizations, and vice versa (for example, Jones, 2001; Flier et al., 2003). However, there is still the question of how co-evolution is driven forward.

For example, in discussing the co-evolution of multinational enterprises [MNEs] and institutions, Cantwell et al. (2010: 572) refer to both MNE experimentation and institutional entrepreneurship as potential drivers, but they do not go further into the processes by which co-evolution might come about. While they identify MNEs as 'change agents' in co-evolution, they pass over the issue of how MNEs can

mobilize and apply sufficient influence to have an external impact. There is a longstanding debate concerning the influence of the firm vis-à-vis that of the environment on co-evolution (White et al., 1997; Volberda and Lewin, 2003). However, only recently have co-evolutionary studies come to refer to the political processes that may be involved (for example, Rodrigues and Child, 2008; Dieleman and Sachs, 2008; Dieleman and Boddewyn, 2012). We still lack a systematic analysis of how the power and influence held by organizations and relevant external parties might impact on their respective evolution. A major aim of this book is therefore to advance the understanding of how co-evolution takes place by examining the ways in which key actors both in a focal firm and its environment were able to influence aspects of each other's evolution. This will help us move towards a more adequate theoretical perspective on the subject.

At a more applied level, this book also adds to our understanding of how a company can successfully achieve sustained strategic development over a long period of time. It contributes guidelines on this issue, which are of interest to executives as well as to specialists in port operations. The book provides a detailed account of how a strategy for a new large container terminal emerged through a process of learning about the unfamiliar market and other conditions that it faced. The ways in which the company developed its external relations, especially with government, in order to implement its strategy are of wide relevance. Insights are also provided into how YICT's management came to develop a clear intentionality, which accelerated the company's growth and took it to a position of being a global benchmark for its industry.

It is generally very difficult to obtain valid information into the processes through which a company's strategy emerges and how strategic opportunities are conditioned by interactions with other organizations in its environment. It can be even more difficult to secure valid insights into the intentions of external actors, especially when they are government personnel who are subject to political restrictions. So research on the subject is often handicapped by the very real problem of gaining access to the appropriate informants. Concerning as it does strategic issues and sensitive negotiations, the information required is normally confidential and carefully guarded from the prying eyes of investigators. This is not an easy obstacle to overcome and it is undoubtedly a major reason why so few studies are available of this central issue. Gaining adequate insights into what goes on may depend largely on serendipitous good fortune, such as finding participants in the process who are interested in collaborating with scholars. This book would not have been possible without such collaboration between two scholars and the former chief

executive of YICT, Kenneth Tse. Our collaboration has provided a unique opportunity to examine the process of the company's evolution comprehensively, in detail and over its total lifespan. It is another factor lending special interest to this study of YICT, to complement the remarkable achievements of the company itself.

PLAN OF THE BOOK

This book is divided into three parts. The task of Part I is to introduce the book, its perspective and its methodology. The purpose of Part II is to present the story of how YICT evolved and the context within which this happened. Part III draws various strands of the story together and builds on them in order to offer new theoretical insights as well as practical lessons for managers.

This initial chapter is introductory, indicating what the book is about, what it claims to do, and what it will cover. Chapter 2 provides a more detailed account of the co-evolutionary perspective we adopt. Knowledge of the perspective and its rationale will assist an appreciation of how it is applied to the case study later on in the book and the analytical value it provides. The chapter traces the development of evolutionary and co-evolutionary thinking and its application to firms and other organizations. It compares co-evolution with other perspectives, such as environmental determinism, institutional theory, resource dependence, path dependency and strategic choice. It argues the case for bringing a political dimension into co-evolution, which is one of the distinctive contributions of this book.

Chapter 3 focuses on relevant methodological issues. It considers the strengths and limitations of case studies such as the one that this book is based on. It reviews the additional contributions one should expect from longitudinal case studies, such as an insight into processes, into cause and effect, and into complex systems of relationships. The chapter also describes the specific methods used to construct the YICT case study.

The opening chapter in Part II, Chapter 4, puts YICT and the Yantian port 'on the map' and describes the changing context in which it evolved. The general 'macro' context was that of China's Reform and Development Program, launched at the end of 1978, which accelerated rapidly from 1992 just before YICT was founded. This context was one of high growth, expanding international trade, and a political agenda to introduce institutional reforms. This agenda, however, did not necessarily carry forward easily into implementation. The chapter also describes YICT's 'meso' context – the Shenzhen SEZ and the port industry in Hong Kong

and Mainland China. In these ways Chapter 4 provides an understanding of YICT's competitive and institutional environments.

Chapters 5, 6 and 7 focus on the 'intentionality' of YICT's management in the process of the company's co-evolution with its environments. Chapter 5 analyses the stages through which YICT evolved during the first 15 years of its operation, giving particular attention to the ways in which its management developed a strategy vis-à-vis its environment. This emergent strategy resulted from a process of learning about how to adapt to the serious difficulties that the company faced during its early years. The chapter also charts the growth of the port and changes to its joint venture ownership. The latter were the subject of difficult and protracted negotiations.

Chapter 6 examines four areas of innovative management practice that YICT introduced in order to provide an internal capability to realize its strategic intent. These concern development of a service mentality supported by productivity improvements, a strategic orientation toward port construction and development, innovations in port marketing, and establishing a favourable ecological system. The advanced practices introduced by the company's management also played a significant role in adding substance and lending credibility to the firm's proposals for reform in the Chinese port industry and in its external relations.

How the company developed its external relational framework is the subject of Chapter 7. This chapter concentrates on three areas – relations with the Chinese joint venture partner, relations with Chinese government ministries over the port's expansion and relations with government regulatory authorities operating in the port. While the need for companies to manage their external relations in China is often mentioned, the rationale and skills required for it to be effective are less well understood. Chapter 7 contributes valuable insights into this process.

The purpose of Part III is to analyze the main themes from the Yantian story and then to apply them to advance our understanding of the practice and theory of co-evolution. Chapter 8 identifies two forms of co-evolution. The first consists of actions taken by the company or external parties that are primarily adaptive. The second consists of actions that influenced the way in which complementary domains evolved. These include managerial actions that influenced the way in which the environment evolved over time and external actions or event that influenced the way the firm evolved. The chapter illustrates both forms of co-evolution through an examination of the interactions of YICT and HPH with the Chinese government and its agencies.

Chapter 9 then develops a systematic analysis of the political dynamics of co-evolution, illustrating these primarily by reference to interactions

between the company and government agencies on the issue of port practices. This issue was of vital importance both to the firm because it directly impacted on the port's productivity and the level of service it could offer, and to government authorities because it concerned their ability to regulate the country's frontier. The chapter demonstrates the relevance of applying a political perspective. It develops a theoretical analysis of power and associated processes of influence in corporate co-evolution. This recognizes that while the power bases available to firms and external organizations provide a potential for exercising influence, translating that influence into actual evolutionary change requires specific initiatives.

The closing chapter, Chapter 10, applies insights drawn from the YICT case to formulate guidelines for managers operating in complex environments such as those of China and some other major emerging countries. These guidelines are drawn from what YICT achieved and how this was accomplished. YICT's experience suggests seven key approaches which, together with the gains they produce, can generate a positive cycle of co-evolution over time.

NOTES

1. A terminal is a single operating unit in one port location. It is the maritime equivalent of a manufacturing plant. Ports like Rotterdam and Shanghai comprise several terminals. The port at Yantian in Shenzhen China, featured in this book, has one terminal which has grown through several phases of new investment, so we shall use both 'port' and 'terminal' synonymously.
2. We define 'power' as the potential to ensure the compliance of others, and 'influence' as the exercise of power over others.
3. We shall refer to the joint venture company as YICT and to the terminal itself as Yantian. There were also some other smaller equity-holders, notably the international shipping company Maersk with 10 percent. The Chinese partner was initially called the Dong Peng Industry Company Limited, which later in January 1995 changed its name to the Yantian Port Group.
4. Each year the World Bank compiles a ranking of countries according to the ease of 'doing business' in them in the light of government regulations and practices. The generally lower ranking of emerging economies reflects a high level of government intervention in, and restriction of, business activities. See <http://publications.worldbank.org>.

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