An institutional analysis of the new product development process of small and medium enterprises (SMEs) in China, Hong Kong and Taiwan

Wai-sum Siu,⁎, Tingling Lin,1 Wenchang Fang,2 Zhi-Chao Liu,3

⁎ Corresponding author. Tel.: +852 3411 7532; fax: +852 3411 5586.
E-mail addresses: wssiu@hkbu.edu.hk (W. Siu), tingling@mail.ntpu.edu.tw (T. Lin), fang@mail.ntpu.edu.tw (W. Fang), bmzcliu@scut.edu.cn (Z.-C. Liu).
1 Tel.: +886 2 25009842; fax: +886 2 25099854.
2 Tel.: +886 2 25009848; fax: +886 2 25029353.
3 Tel./fax: +86 20 87114693.

Received 2 September 2004; received in revised form 13 April 2005; accepted 18 April 2005
Available online 17 February 2006

Abstract

Since China and Taiwan became members of the WTO, conducting business in Greater China (China, Hong Kong and Taiwan) has come to the fore. However, researchers point to the importance of understanding the similarities and differences of new product development (NPD) practices of Chinese small- and medium enterprises (SMEs) in China, Hong Kong and Taiwan. The available literature does not elaborate clearly how and to what extent SMEs in Greater China manage their NPD practices, nor does it consider the contextual factors. This paper uses an institutional perspective to examine the interplay of government intervention, manufacturing systems and business approaches and its impact upon the NPD practices of SMEs in the three regions. In-depth personal interviews with 43 Chinese, 26 Hong Kong and 28 Taiwanese SMEs were undertaken to examine the respective similarities and differences in NPD practices and to compare and contrast the Chinese practices with those of their Western counterparts. The grounded theory approach was used to analyze the interview scripts. Based on the research results, a schema is proposed depicting the interplay and its impact on the NPD practices of Chinese SMEs.
© 2006 Elsevier Inc. All rights reserved.

Keywords: Institutional analysis; Small firms; New product development; China; Hong Kong; Taiwan

1. Introduction

Innovation and new product development (NPD) are considered to be important to economic development (Schumpeter, 1934) and corporate growth and survival (Drucker, 1985). Innovation and NPD have been traditionally associated with large enterprises (LEs) only (Vossen, 1998) mainly due to their comparative advantages in capital-intensive industries with scale economies. Caputo, Cucchiella, Fratocchi, Pelagagge, and Scacchia (2002) explain that high costs, fear, moderate knowledge base, limited time and modest financial resources affect owner-managers’ opportunities for developing new products. However, small firm researchers (for example, Acs & Audretsch, 1990; Rothwell, 1991) reveal that the strengths of innovation and NPD of small- and medium enterprises (SMEs) lie in their behavioural characteristics, for example skilled labour, flexibility and motivated management. Hadjimanolis (2000) suggests that innovation and NPD, specifically technological innovation in a small firm context, are not first-to-the-world innovations, but tend to be the adoption of new production methods or the development of improved products only. Also, March-Chorda, Gunasekaran, and Lloria-Aramburu (2002) find that the NPD process in Spanish SMEs is simple and short, rather than follows a formalized plan similar to that of LEs as suggested by the literature, and they query the appropriateness of transferring the critical success factors in the product development process of LEs to SMEs. Most studies of innovation and NPD, no matter whether they study LEs or SMEs, have been undertaken in the context of industrialized countries, such as the USA, the UK or Germany. Given the importance of the ‘contextual embeddedness’ of SMEs in developing countries, researchers (for example Hadjimanolis, 2000; Kim, Song, & Lee, 1993; Siu, 2001; Tidd, Bessant, & Pavitt, 1997) advocate...
The paper begins with an institutional analysis of the NPD processes of SMEs in developing and newly developed economies (NIEs), including China, Hong Kong and Taiwan.

Due to Hong Kong’s history as a British colony until 1997, it has evolved into a Chinese city with British characteristics. It is now a special administrative region of The People’s Republic of China, a communist country which adopted an open door policy in 1979 and which is moving from a planned state to a socialist market economy. Taiwan was, variously, a Portuguese, a Dutch, a Spanish and a Japanese colony. The island was retroceded to the Republic of China following Japan’s defeat and surrender in 1945. A review of relevant literature suggests that in China a trend has emerged of people doing business and becoming owner-managers (Siu, 1995). Hong Kong is also an entrepreneurial society (Siu & Martin, 1992) whereas Taiwan is a ‘boss’ island (Shieh, 1992). As shown in Table 1, SMEs in China, Hong Kong and Taiwan not only dominated the economies of their respective regions, but also contributed in large measure to increased levels of business activity and employment there. Recently, institutional analysis (Aoki, 2001) has been widely adopted to describe economic development and contextual factors; researchers (Lau, 1997; So, Lin, & Poston, 2001) specifically point to the importance of understanding the socio-cultural environment and the role of government when applying comparative institutional analysis to the three areas. Thus, this paper redresses the balance by adopting institutional analysis to examine the NPD processes of SMEs in the Chinese socio-cultural context and comparing the results with the respective practices in the West.

The paper begins with an institutional analysis of the NPD practices of each individual economy. A conceptual framework related to the specific NPD process in a Chinese context is identified. This provides a solid foundation on which to develop research questions. The research design, sampling procedures, and analytical framework and methods are described in the following section. The research findings and implications are discussed, and a schema is proposed to depict the NPD practices of SMEs in China, Hong Kong and Taiwan. The paper ends with some concluding remarks.

2. Institutional analysis

Brown (1995) argues that it is equally important to take account of the general business approaches in explaining Chinese business behaviour. Hsiao and Hsiao (1999), Redding (1990), and Whitley (1992) acknowledge the impacts of different manufacturing systems on the performance of Chinese enterprises. Siu (2005) proposes a comprehensive institutional analytical framework, which is the interplay of government intervention, manufacturing systems and business approaches, specifically for analyzing the marketing practices of SMEs in Greater China. Government intervention is a continuum of strong government influences that hinder business practices at the one end (China), have no effect in the middle (Hong Kong) and provide a well-established infrastructure to facilitate at the other end (Taiwan). Business approaches are relational and transaction approaches in doing business. Manufacturing systems refer to the adoption of OEM (original equipment manufacturing), ODM (original design manufacturing) and OBM (original brand manufacturing) systems. Thus, this paper adopts Siu’s proposed framework by undertaking an extensive review of relevant literature and the effects of the interplay upon the NPD practices of SMEs in China, Hong Kong and Taiwan.

2.1. Institutional factors in China

Government intervention is still a major force among Chinese enterprises (de Boer, Gan, & Sahn, 1998; Li, 1998), including SMEs, as their roles have been expanding in the changing socio-political context of China (Anderson, Li, Harrison, & Robson, 2003). Hu (2001) finds that an increase in government R&D expenditure can induce the firm to expand its own R&D activities. Small privately owned enterprises, specifically due to their small firm size and speedy response to environmental changes, are more innovative and efficient in transforming new products into production than the large state-owned enterprises (Tan, 2001). In emerging from the shadow of the planned economy, Chinese SMEs have to develop a strong ability to respond to market signals, to create new products and to develop brands that differentiate them from their competitors (Siu, 2001). Wang and Yao (2002) report that some Chinese SMEs have successfully seized the opportunity and developed into LEs that produce national brand products. Chinese SMEs act like OBM and NPD is one of their major marketing thrusts.

As practitioners of capitalism in a socialist country, private businesses, mostly SMEs, were not socially accepted in China in the past (Siu, 1995). Operating in an uncertain political

Table 1
Manufacturing SMEs in China, Hong Kong and Taiwan

<table>
<thead>
<tr>
<th>Year</th>
<th>China</th>
<th>Hong Kong</th>
<th>Taiwan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of SMEs</td>
<td>2002</td>
<td>2002</td>
<td>2002</td>
</tr>
<tr>
<td>Total establishments</td>
<td>2002</td>
<td>2002</td>
<td>2002</td>
</tr>
<tr>
<td>% of SMEs to total establishments</td>
<td>95.2%</td>
<td>99.82%</td>
<td>96.92%</td>
</tr>
<tr>
<td>Number of employees</td>
<td>N.A</td>
<td>0.154 million</td>
<td>2.748 million</td>
</tr>
<tr>
<td>% of total employment</td>
<td>N.A</td>
<td>82.82%</td>
<td>82.46%</td>
</tr>
<tr>
<td>Sales value</td>
<td>RMBY 5.6313 trillion (approx. US$0.7 trillion)</td>
<td>HKD175.89 billion (approx. US$22 billion)</td>
<td>NT$3.0013 trillion (approx. US$0.1 trillion)</td>
</tr>
<tr>
<td>% of total sales value</td>
<td>51.40%</td>
<td>79.26%</td>
<td>29.20%</td>
</tr>
</tbody>
</table>

N.A.: not available.
دریافت فوری متن کامل مقاله

امکان دانلود نسخه تمام متن مقالات انگلیسی
امکان دانلود نسخه ترجمه شده مقالات
پذیرش سفارش ترجمه تخصصی
امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
امکان دانلود رایگان ۲ صفحه اول هر مقاله
امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
دانلود فوری مقاله پس از پرداخت آنلاین
پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات