

CHAPTER 1

INTRODUCTION

1.1 Indian software firms scenario

The scenario of India software firms have transformed under aegis of liberalization of economic policy. India has built its reputation continuing till today as being one of the world's most active software hub. The country has captured about three-fourths of the worldwide global 'information technology (IT)' services exports with mere one million IT and 'IT enabled service' employees. There are over 140,000 engineers working for multi-national companies around the globe. With the creation of employment, software export has contributed to 5.4 per cent of the gross domestic product (ASSOCHAM, 2008) in 2006-07. And the Indian software industry has grown exponentially from a mere US \$ 150 million in 1991-92 to a staggering US \$ 5.7 billion (including over US \$ 4 billion worth of software exports) in 1999-2000. Every year the revenue generated through software exports has been increasing. In 2009, the Indian software export has generated revenue equivalent to US \$ 2.5 billion. The 'compound annual growth rate' (CAGR) of the market in the period 2005-2009 is 35.4 per cent (see Table 1.1).

Table 1.1: Indian software market value: US \$ million, 2005-2009

Financial year	US \$ million	INR million	Growth per cent
2005	731.7	32,060.0	-
2006	1,134.8	49,720.0	55.10
2007	1,506.1	65,990.0	32.70
2008	2,015.1	88,290.0	33.80
2009	2,461.0	107,826.6	22.10
CAGR, 2005-2009			35.40

Source: Datamonitor, 2009.

About 90 per cent of Indian software's are exported to the USA and Europe. The remaining 10 per cent are exported to other countries of the globe. Hence, the biggest client is the USA (NASSCOM, 2008). Software and services exports grew by 29 per cent in US dollar to register revenues of US \$ 40.4 billion in 2007-2008, up from US \$ 31.4 billion in 2006-2007 and aspiring to achieve the target of US \$ 60 billion in exports in 2010 (Figure 1.1). The domestic segment grew by 26 per cent in Indian rupees to register revenues of US \$ 11.6 billion in 2007-2008.

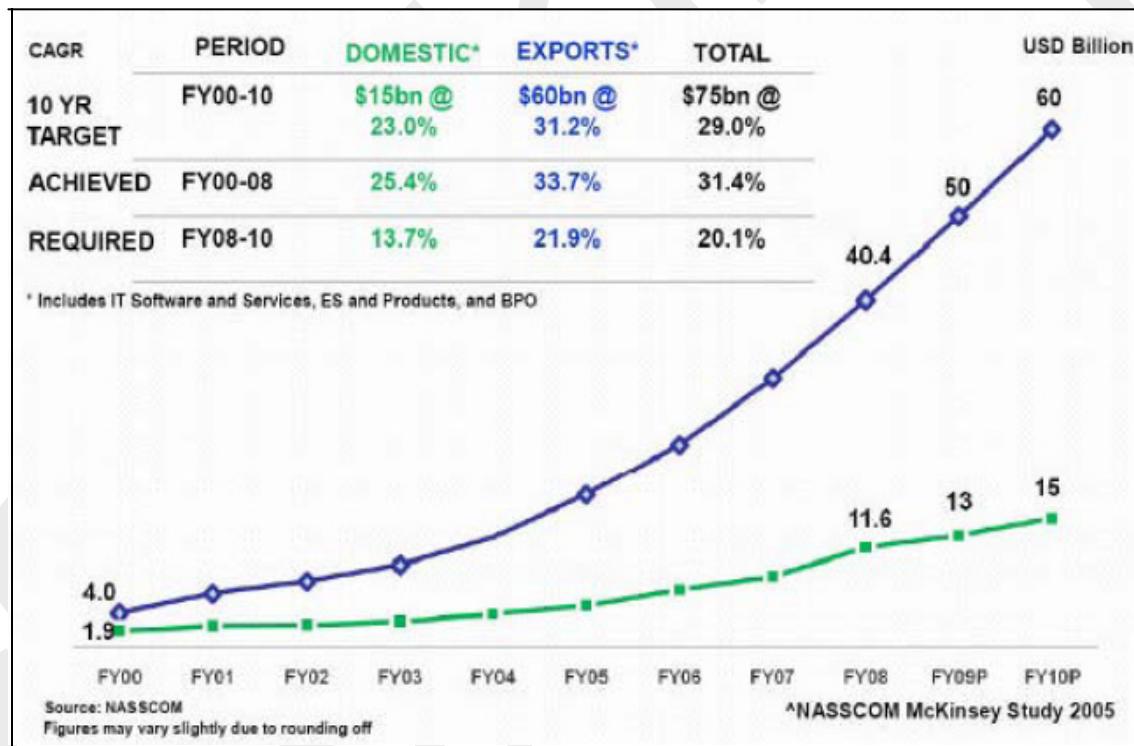


Figure 1.1: Industry performance

Source: NASSCOM, 2008.

1.2 Problem statement

Indian software firms have performed very well because the country's abundant English-speaking computer educated employees. Apart from the employment

generation, the India software export growth can be attributed to the productivity of software firms vis-à-vis software professionals (SPs). SPs are engineers who write code, design configuration architecture and testing, manage system network, analyse web, develop portals, and perform software maintenance jobs. They possess domain expertise, work in lieu of financial rewards, and are guided by a code of ethics (ACM, 2007; Baase, 2008; Buchholtz, 1989; Kakabadse & Kakabadse, 2000; Mosley & Hurley, 1999). SPs have worked hard to accomplish the productivity of software firms. However, productivity of SPs is difficult to measure directly. Therefore, this study measures productivity indirectly by: (a) assessing the performance of SPs. It also (b) determines the antecedents of performance, and (c) finds out the catalysts that boost up relationships between antecedents and performance.

1.2 Scope of the thesis

The scope of the study is limited to software engineers and senior software engineers who are referred to as SPs. The data were collected from IT hubs at Bangalore, Hyderabad, and Kolkata (India). The findings of the study are confined to the above objectives and applicable to SPs in the studied locations.

1.3 Organization of the thesis

The thesis has overall 6 chapters. The second chapter critically examines the literature, states an objective, derives the hypotheses, and asks a research question. Chapter 3 incorporates methodology. It deals with sample of the study, measurement of the constructs, the reliability and validity of the constructs, and the procedure for data collection. Chapter 4 provides evidence to realize the objective, support or refute the

hypotheses, and answer the research question. Chapter 5 discusses the interpretation of results providing literature support and narrating the ground realities. Chapter 6 summarizes the findings, develops a conceptual framework, states the implications of findings, lists the limitations of the study, and mentions the agenda for future research.