

Research on technology transfer to small enterprises in China

Wu Tianzu and Zou Gang

This article explains how technology transfer to small enterprises has taken place in China during the last 22 years. It explains the evolution of the transfer process and the main characteristics of the evolution. It also presents real-life case studies to illustrate the process. The article is based on a time-based research project and stresses the importance of improving technical capability in small enterprises.

Introduction

Small enterprises are a very important part of the economy of China. They account for a substantial chunk of production and massive employment in many sectors, especially in light industry, such as food, clothing and hardware. In 1996, small firms had a share of 65.59 per cent¹ of gross production value of China and provided over 75 per cent² of new employment in cities and towns.

But most small firms face many obstacles to fast development. First, there is the perennial problem of insufficient funds for acquiring advanced technologies to enhance production quality and lower costs. Funds owned by small enterprises in 1995 aver-

aged ¥ 170,000, only 0.1 per cent of that owned by large enterprises.¹

Second, small firms cannot compete with larger ones in attracting sufficient numbers of highly qualified workers and experts. In 1995, only 2.98 per cent of all employees in small enterprises had been trained at or beyond college level.¹

While such factors may seem to hold out little hope for fast growth of small enterprises, statistics show that their numbers have actually increased from 344,000 in 1978 to 7,907,700 in 1999³, or 22 times in 21 years! Also, small firms now have a presence in many high-tech industries, such as software, gene technology and so on. What enables them to grow even when they are so short of funds and talent?

Prof. Wu Tianzu

President

*SMB Development Institute
Zhejiang University
of Technology, Section 6, Zhaohui
Xincun, Hangzhou, Zhejiang
Province, China.*

Tel: 86 571 5133641

Fax: 86 571 8320618

E-mail: k.zjsmbi@zjut.edu.cn

Mr. Zou Gang

Research Assistant

Tel: 86 571 8819083

Fax: 86 571 8320618

E-mail: zzgg0200@263.net