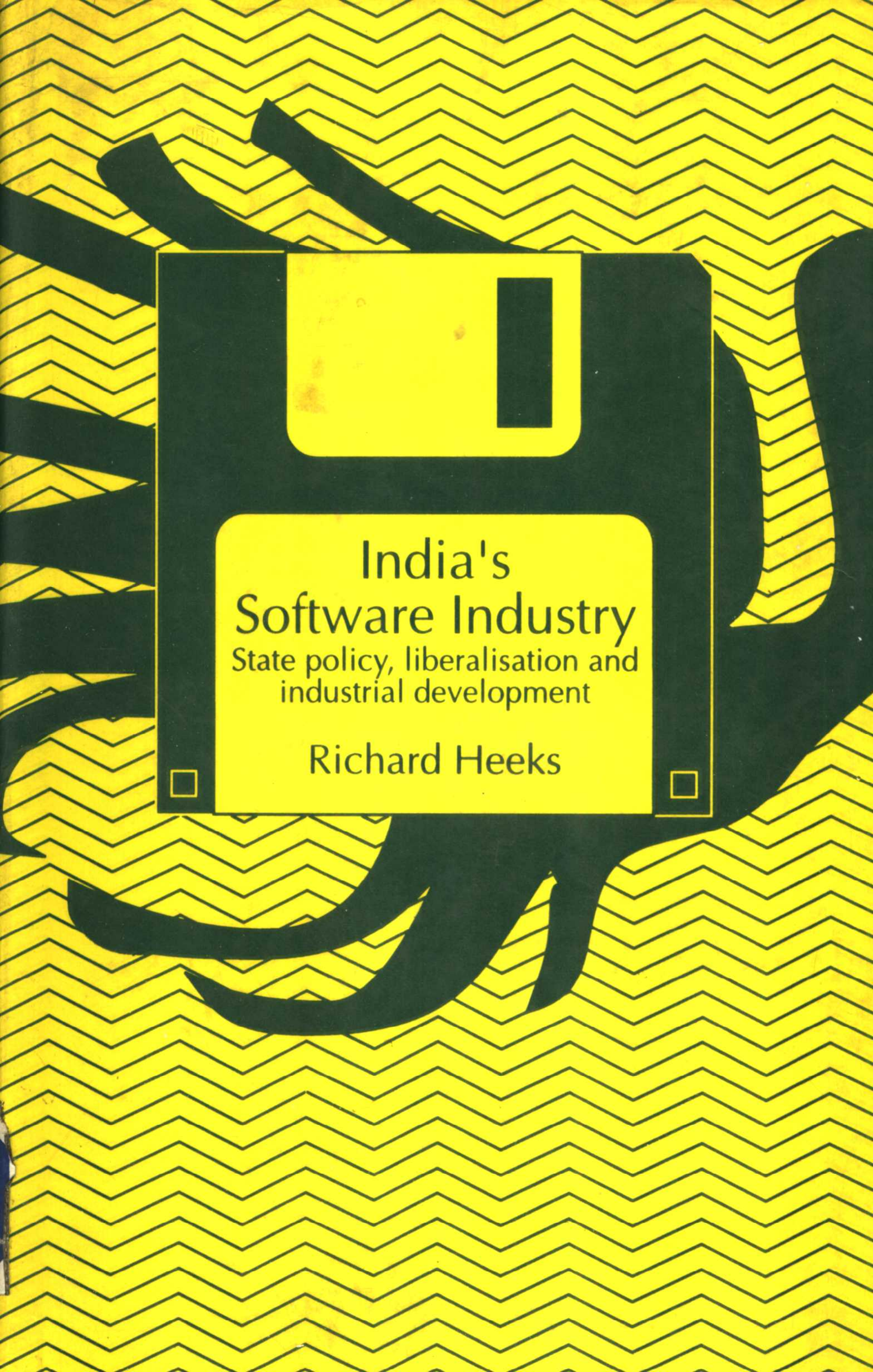
India's
Software Industry
State policy, liberalisation and
industrial development
Richard Heeks

India was the first and is still the largest exporter of software among developing countries and annually exports nearly half a billion US dollars worth of software. Yet, aside from journalistic accounts, this industry has not so far been studied in depth. Richard Heeks provides the first critical analysis of the development of India's software industry and the impact on it of the recent policy of liberalisation in the areas of trade, state intervention and foreign investment. The study is located at the intersection of three major trends witnessed in the nineties — the increasing importance of computer software in all aspects of business; the mounting global search for outsourcing services and manufacture on the part of multinational companies; and the growing dominance of neo-liberal policy models inspired by the World Bank and the IMF.

The author starts with a detailed history of the government's role in India's industrial development. Dr Heeks then examines important issues concerning the software industry such as the division of labour within exports, the relation between export and domestic markets, the role of multinationals, and the impact of imports. Finally, he also studies the development of India's computer industry because of the intimate connection between software and hardware.

Basing his arguments on a wealth of facts and figures and probing many misconceptions, Dr Heeks concludes that liberalisation has brought in only limited benefits, and argues that a successful software industry requires essential state interventions of a promotional nature. To this end, he makes recommendations for the future growth of this industry both in India and in other developing countries.

Besides being of considerable interest to academics and professionals in the areas of business finance, management, information systems, economics, industrial development and computers, this book will be essential reading for all computer manufacturers, softwdre companies, bureaucrats and those engaged in framing economic and industrial policies.

Rs 450

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*Jacket design by Bharati Mirchandani*

# INDIA'S SOFTWARE INDUSTRY

## State Policy, Liberalisation and Industrial Development



RICHARD HEEKS

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# INTRODUCTION

## Industrial Policy Models

The world of policy and policy-making for developing countries generally consists of a number of possible models which policy-makers are exhorted to follow. Overlaid on this has been a dynamic such that, at any given time, one of these models will be held up as a paradigm, as *the* model to follow in order to attain developmental goals. As described later, clear changes have taken place in the paradigmatic model.[1]

Under colonial rule, most of these countries followed a non-industrial model:

> Until the early 1930s there was little disagreement among economists or policy-makers that the system of international division of labour then prevailing—industrial countries producing manufactures and developing countries supplying primary commodities—was more or less equally beneficial for both groups. (Stecher 1981: 29)

In the post-war period, after a decade or two of deterioration in the terms of primary commodity trade, a structuralist and pro-industrial model developed which emphasised the benefits of industrialisation:

> Industrialization seemed the appropriate course because it not only promised self-sufficiency for nations that had just regained political sovereignty, but it also offered external economies accruing from technical progress. (Stecher 1981: 30)

Structuralist ideas varied, but it was generally seen that industrialisation would be achieved through government intervention, by protection from imports, and by a process of import substitution. Such views were partly reinforced by the work of the dependency school of writers, such as Frank (1967) and Amin (1976) (who constituted one element of structuralist thinking). This school emphasised the structural constraints within links between developing and developed countries and, hence, the limitations of industrialisation involving foreign capital.

Although a somewhat diverse body of theories, structuralism remained 'the dominant intellectual paradigm in the economics of developing countries over the years 1950–1980' (Colclough 1991). Then, starting gradually during the 1960s and 1970s and gathering pace during the 1980s, a neo-liberal model came into ascendancy, emphasising the importance of price and market mechanisms and the deficiencies of government intervention and import substitution.

The origins of liberalism can be traced to the writings of John Locke in the seventeenth century, 'defending the rights of the individual against the commands of monarchs and other rulers' (Moss 1982). The ideas of classical economic liberalism were developed particularly by Adam Smith in the eighteenth century, with his concept of the 'invisible hand' of the market which would ensure the greatest welfare for all. It is 'the philosophy which advocates the largest possible use of the forces of competition as a means of coordinating human efforts and achieving economic ends, and thus rejects most types of coercion and interference in economic life by interest groups or governments' (Seldon and Pennance 1976).

Neo-liberalism is a more recent resurgence of the same ideas which became recognisable in the work of economists such as Hayek (1949) and Friedman (1970). Key writers in relation to developing countries include Balassa (1971), Bhagwati (1978), Krueger (1978) and Little, Scitovsky and Scott (1970). 'In one sense, this was and is a return to the original project of asserting society against the state, the market against planning and regulation, the right of the individual against overpowering authorities and collectivities' (Dahrendorf 1987). Later writers tend to take a more relative position than that of their earlier counterparts[2]—they admit that there are neither ideal markets nor ideal states but argue that 'imperfect markets are better than imperfect states' (Colclough 1991).

## The Change from Structuralism to Neo-Liberalism

As a crude generalisation, the 1970s can be characterised as a decade of evaluation of the outcomes observed in countries which were being