

THE ECONOMICS OF INTELLECTUAL PROPERTY: A STUDY OF
PROPRIETARY RIGHTS, COMPETITION AND TECHNOLOGY TRANSFER IN
THE SOFTWARE INDUSTRY

A THESIS

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Abstract

We are in an age where knowledge and information is of economic value. We are willing to pay money in exchange for knowledge and information. In this way, software is valuable because software is an encapsulation of information that sends instructions to a hardware computing system to perform various functions. In order to encourage the development of new software technologies, intellectual property rights are recognized in software programs. However, intellectual property rights in software sit uneasily with the public good nature of knowledge, more so when the knowledge is encapsulated in a digital storage medium. This paper argues that any knowledge-based product can be easily acquired without the knowledge and control of the owner. If this is the case, then stronger intellectual property rights in software programs cannot protect programs from being copied. The solution to illegitimate acquisition of software programs therefore must be a market-based or industrial-focused one. If software businesses develop new business models, piracy may no longer be a concern. With software businesses less concerned with the proprietary right in the program, there may be a better development of the industry with more open competition and freer access to knowledge and information for technology transfer.

Preface and acknowledgements

The central idea behind this thesis is simple. The software industry is an important industry to many countries, developing and developed countries alike. The intention behind writing this thesis is to examine the factors that will contribute towards a thriving software industry. Three factors are examined in three chapters in this thesis - in Chapter One, the proprietary right in software, in Chapter Two, competition in the industry and in Chapter Three, technology transfer in the industry. The thoughts in this thesis had developed through the course of my studies in the Stanford Program in International Legal Studies at Stanford Law School and my experiences with the Malaysian Government's efforts to deal with the mass reproduction and distribution of software programs in Malaysia. Many people had helped me develop my ideas in this thesis and I owe them many thanks. My primary research advisor, Professor Rogelio Perez-Perdomo, had provided me extremely valuable support and encouragement as I wrote this thesis and had been a source of guidance and motivation at times when putting my thoughts on paper seemed too laborious. I must also thank my secondary research advisor, Professor John Barton, who had offered me insightful comments and directions in which to take this thesis and who had helped me think through the more specific and difficult issues in this thesis.

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