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Global IT Outsourcing

Software Development across Borders

This book offers key insights into how to manage software development across international boundaries. It is based on a series of case studies looking at the relationships between firms from North America, the UK, Japan and Korea and Indian software houses. In these case studies, which have typically been compiled over a 3–4-year timespan, the authors analyse the multi-faceted challenges encountered in managing these Global Software Alliances (GSAs). These challenges range from the conflicts that managers face when dealing with distance to the tensions of transferring knowledge across time and space, to issues in trying to establish universal standards in a context of constant change and the problems of identity that developers and clients experience in having to deal with different organizations and countries. Throughout the book, the authors draw on their extensive research and experience to offer constructive advice on how to manage GSAs more effectively.

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Foreword

Software is a key element in the increasing use of information and communication technologies in contemporary society, and thus its production and use are of major importance. Outsourcing of software production has been common for many years, but since the late 1980s this has increasingly occurred across national and cultural borders, a phenomenon which is known as 'global software outsourcing'. Cost is a major driver of this, with production normally located in countries with relatively low wage levels, but outsourcing organizations recognize that effective relationships with their software suppliers must be developed and maintained if full benefits are to be realized. This has resulted in various forms of collaborative arrangements, which can be labelled as 'Global Software Alliances' (GSAs).

This book provides rich empirical data on Global Software Work (GSW) and associated organizational alliances. The material is derived from the extensive fieldwork carried out by the authors over a number of years, with special emphasis on outsourcers in Canada, the UK and Japan, and companies in India as the software producers. India is a major success story in this area, with quite exceptional growth rates of its software export sector since the 1990s. However, as the book so vividly illustrates, this has not been achieved without lengthy and sometimes painful learning processes on the part of those involved on both sides of the outsourcing alliances. The longitudinal nature of the fieldwork carried out by the authors enabled them to trace and analyse such processes over several years.

The book can be read at one level, therefore, as a set of 'war stories' of the shifting objectives, personnel, relationships and outcomes of the various case studies. However, at another level, the book aims to connect these stories with the broader debate on globalization. The book argues that GSAs can be conceptualized as both a model *of* globalization and a model *for* globalization. In other words, that GSW, in its arrangement and conduct, both reflects globalization phenomena, such as the increasing interconnection of the world across time and space, and is itself one of the contributors to how globalization evolves, since all parties to it are affected by the ongoing process.

The authors also theorize their empirical work through an interesting set of six micro-level themes derived from a combination of their own experiences and aspects of the literature on software outsourcing. One theme, for example, examines tensions between the unbounded global space within which it is feasible in principle to conduct

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GSW, and the boundedness of the individual software developer's need to belong in a particular place, with all that this entails in terms of family and broader social relationships. Other themes, all of which are related, examine shifting identity, the complexities of knowledge sharing, the limitations and benefits of standardization, issues of power and control and the challenges of cross-cultural communication.

The book will be essential reading for academics and other researchers working in the area of software production and outsourcing, but it will also be of interest to the wider community of scholars concerned with the role of information and communication technologies in the contemporary world, and in particular those trying to understand the phenomena known as 'globalization'. Thoughtful practitioners will also find much of value here. The book does not contain a set of prescriptions on 'how to do it' in all contexts, since the authors would argue that action needs to be context-specific. Nevertheless, they do offer sets of questions which the practitioner will wish to try to answer in their own specific context, based around the areas of the management of knowledge, people, communication and relationships within the overarching concept of managing ethically. The book aims to contribute to both theory and practice in the area of global software work, outsourcing and alliances, and I believe that it will achieve success in this endeavour.

Geoff Walsham

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Abbreviations

ACCR	American Chamber of Commerce in Russia
ACM	Association of Computing Manufacturers
ASP	application service provider
BCS	British Computer Society
BPO	business process outsourcing
CCTA	Central Computer and Telecommunications Agency (from 1 April 2001 an integral part of the UK Office of Government Commerce)
CEO	chief executive officer
CMM	Capability Maturity Model
COO	Chief Operating Officer
DSP	digital switching product
DVD	digital versatile disc
EDA	electronic design automation
ERP	enterprise resource planning systems
EU	European Union
FTP	file transfer protocol
GIS	general information sessions
GRDG	Global R&D Group
GSA	global software alliance
GSODC	GlobTel Software Overseas Development Software Centre
GSW	global software work
HR	human resources
HRM	human resources management
ICT	information and communication technologies
IEEE	Institution of Electrical and Electronic Engineers
IIT	Indian Institute of Technology
IP	intellectual property
IPP	intellectual property protection
IPR	intellectual property rights
IS	information systems
ISO	International Standards Organization
IT	information technology

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JV	joint venture
KPI	key performance indicator
MD	managing director
MNC	multinational corporation
NASDAQ	National Association of Securities Dealers Automated Quotation System (US)
NASSCOM	National Association of Software and Service Companies (New Delhi)
NGO	non-governmental organization
OECD	Organization for Economic Cooperation and Development
PCMM	People Capability Maturity Model
PDD	Performance Dimensions Dictionary
PR	public relations
R&D	research and development
SSADM	structured systems analysis and design methodology
UK	United Kingdom
UN	United Nations
USA	United States of America
WTO	World Trade Organization

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