

## Introduction

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In the spring of 2004 we were asked by the Association of Computing Machinery (ACM) to chair a task force to study the phenomenon of information-technology offshoring. Offshoring was a hot topic in early 2004. Since the dot-com and telecommunication crashes of the early 2000s, offshoring appears to be the proverbial "third shoe" to hit the IT sector in the United States. While articles on offshoring and outsourcing appeared in the media weekly, sorting out facts from fiction was exceedingly difficult. While it was clear that offshoring was a boon to providers in developing countries, debates raged on its impact on developed countries. Getting a clear, factual picture of IT offshoring was undeniably important and timely.

ACM offered us a free reign in conducting this study, subject to two constraints. First, the study had to look at offshoring from a global perspective, reflecting ACM's position as an international organization. Previous studies of offshoring have typically taken a national, usually American, perspective. Second, the study had to be completed roughly within one year, which implied that it had to be a secondary study, based on published material, rather than a primary study, doing its own collection of data. Early on we decided to focus on the software side of IT. Offshoring of IT manufacturing has been going on for a number of years; the phenomenon that took off during the early 2000s was the offshoring of software.

Our hope is this report sheds much-needed light on software offshoring. It points out that offshoring is a symptom of globalization, which has been an inexorable economic force since 1990, while examining the specific forces that drive software offshoring, both at the country level and at the firm level. It surveys the debate on the economic impact of offshoring, and examines the available data, pointing out the paucity of reliable relevant data. The report also shows how IT research has been leading the offshoring trend. It highlights risks and exposures to individuals, corporations, and countries created or magnified by offshoring. Finally, it portrays the opportunities and challenges that offshoring poses to IT education in both developing and developed countries.

The Task Force was assembled during the second half of 2004. Bill Aspray, who has experience with work force studies, agreed to serve as executive consultant and primary editor for this study; indeed, it could not have been carried out without him. To ensure a broad perspective, we recruited around 30 Task-Force members, computer scientists, economists and sociologists from the US, Europe, Israel, India and Japan (see listing below and biographies). We are grateful to all of them for volunteering their time and efforts.

The Task Force held four meetings: in Chicago, IL, Oct. 8-9, 2004; Washington, DC, Dec. 3-4, 2004; Palo Alto, CA, March 4-5, 2005; and New York, NY, May 13, 2005. During its first meeting, the Task Force scoped the study, decided what the main topics should be, and divided into several committees, with some members serving on more than one. Roughly, each committee was focused on one topic, which is covered by one chapter in the final report. The next two meetings were dedicated to hearing perspectives by many experts and scholars (listed below), while committees continued their work during and between the meetings. At the final meeting, the committees presented drafts of their reports and received feedback from the rest of the Task Force.

The committees prepared the final drafts of their reports during the summer of 2005. These drafts went then to Aspray for editing. The edited versions were then sent to reviewers; each chapter was vetted by several reviewers. The process of review and revision continued through the fall of 2005.

During its work, the Task Force has reviewed hundreds of articles on the subject of offshoring, and IT offshoring in particular. To aid the Task Force in its work, Aspray prepared an extensive annotated bibliography. While this bibliography is too extensive to be included in the printed report, ACM is making it available online (<http://www.acm.org/globalizationreport>) as a service to its members.

We appreciate the efforts of the many individuals who helped the Task Force carry out its work.

Frank Mayadas and Moshe Y. Vardi  
Task Force Co-Chairs, December 2005.

## **Contributors**

The following people gave generously of their time to serve on the ACM Job Migration Task Force, which produced this report. Biographies of the Task Force members are given in the appendix.

### **Task Force Executive Committee:**

Frank Mayadas (Sloan Foundation), co-chair  
Moshe Y. Vardi (Rice University), co-chair  
William Aspray (Indiana University), executive consultant  
John White (ACM), *ex officio*

### **Task Force Members:**

Alok Aggarwal (Evalueserve)  
Frances E. Allen (IBM)  
Stephen J. Andriole (Villanova University)  
Ashish Arora (Carnegie Mellon University)  
G. Balatchandirane (University of Delhi)  
Burt S. Barnow (Johns Hopkins University)  
Orna Berry (Gemini Israel Funds, Adamind, and Prime Sense)  
Michael Blasgen (consultant)  
Arndt Bode (Technische Universität München)  
Jean Camp (Indiana University)  
Seymour E. Goodman (Georgia Institute of Technology)  
Vijay Gurbaxani (University of California, Irvine)  
Juris Hartmanis (Cornell University)  
Charles House (Intel)  
William Jack (SAIC)  
Martin Kenney (University of California, Davis)  
Stefanie Ann Lenway (University of Illinois at Chicago)  
Vivek Mansingh (Dell India Development Center)  
Göran Marklund (Swedish Offices of Science and Technology, Washington, DC)  
Peter Mertens (University of Erlangen-Nuremberg)  
Rob Ramer (TerraFirma Security)  
Bobby Schnabel (University of Colorado, Boulder)  
Bankim Shah (BRS Associates)  
Marie Stella (US Federal Aviation Administration)  
Valerie E. Taylor (Texas A&M University)  
Takashi Umezawa (Kokushikan University)  
Roli Varma (University of New Mexico)  
Richard C. Waters (Mitsubishi Electric Research Laboratories)  
Stuart Zweben (Ohio State University)

*We thank the graduate students who provided research assistance to the task force:*

Alla Genkina (Indiana University and University of California, Los Angeles)  
Matthew Hottell (Indiana University)

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Mark Mandelbaum  
David Padgham  
Cameron Wilson

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Josh Bivens (Economic Policy Institute)  
Rafiq Dossani (Stanford University)  
Ralph Gomory (Sloan Foundation)  
Dan Griswold (Cato Institute)  
Ron Hira (Rochester Institute of Technology)  
Lori Kletzer (University of California, Santa Cruz)  
Leonard Liu (Augmentum)  
Catherine Mann (Institute for International Economics)  
Anita Manwani (Agilent Technologies)  
Carol Ann Meares (US Commerce Department)  
Peter Neumann (SRI)  
Sahas Patil (Cirrus Logic)  
John Sargent (US Commerce Department)  
Loren Yager (US General Accountability Office)

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Rakesh Basant (Indian Institute of Management Ahmedabad)  
Allan Borodin (University of Toronto)  
Erran Carmel (American University)  
Lorrie Cranor (Carnegie Mellon University)  
Anthony D'Costa (University of Washington)  
Dorothy Denning (Naval Postgraduate School)  
Peter Denning (Naval Postgraduate School)  
Rafiq Dossani (Stanford University)  
Ben Fried (Morgan Stanley)  
Peter Hart (Ricoh Innovations)  
Ron Hira (Rochester Institute of Technology)  
John King (University of Michigan)  
Randy Kirihaara (Target)  
Maria Klawe (Princeton University)  
Lori Kletzer (University of California Santa Cruz)  
Rich LeBlanc (Southern Catholic College)  
Peter Lee (Carnegie Mellon University)  
Thomas Lookabaugh (University of Colorado Boulder)  
Catherine Mann (The Institute for International Economics)  
Andrew McGettrick (University of Strathclyde)  
J Strother Moore (University of Texas)  
Sharon O'Bryan (O'Bryan Advisory Services Inc.)  
David Patterson (University of California Berkeley)  
Eric Roberts (Stanford University)  
Mari Sako (The Said Business School Oxford University)

Kevin Schofield (Microsoft)  
Alan Selman (University at Buffalo, The State University of New York)  
Manuel Serapio (University of Colorado, Denver)  
Russ Shackelford (Stanford University)  
Eugene Spafford (Purdue University)  
Elizabeth Sparrow (British Computer Society)  
Manuel Trajtenberg (Tel-Aviv University)  
N.V. "Tiger" Tyagarajan (GECIS)  
Robert A. Walker (Kent State University)  
David Waltz (Columbia University)  
Tim Wedding (Government Accountability Office)  
Loren Yager (US Government Accountability Office)  
Yoram Yahav (Technion Institute of Management)  
Andrew Yao (Tsinghua University)