
Preface

If business process reengineering (BPR) is as powerful a tool as it appears to be, organizations must develop the capability to analyze and redesign their business processes. Since many elements of the redesigned processes will be implemented as computer application systems, new modeling and communications techniques will be required to facilitate communication between the business person and information technologists. This publication is intended to help consultants, customer information systems management, and IBM account teams understand the new methodologies and tools which must be employed to document and understand the current processes and aid in the design of new ones. The objectives of this document are to:

- Document the major forces driving organizations to reexamine their business processes.
- Describe a framework for understanding business processes.
- Position business process reengineering and its outputs within the framework for information systems architecture described by John Zachman.
- Describe a methodology for BPR, IBM's Enhanced Line of Visibility Engineering Methodology (LOVEM-E).
- Examine technologies that support the reengineering process and the capture of business rules and facts for use in developing application systems. A common business process, an application for mortgage financing, is introduced to illustrate the use of these technologies in the BPR process.
- Investigate workflow technology as a logical extension of a process-oriented view of business processes and the BPR process. The mortgage financing sample application is implemented in IBM's workflow management tool, FlowMark, to illustrate this linkage.
- Discuss how the outputs of a BPR process can complement the development of application systems.

Some knowledge of business process reengineering concepts and traditional application development techniques would increase the value of this publication.

How This Document is Organized

The document is organized in four major parts:

Part 1, “Context Setting” on page 1

This part describes the volatile business environment that is causing companies to examine the way they do business. This part is comprised of the following chapters:

- Chapter 1, “Business Processes Overview”
- Chapter 2, “The Changing Environment”
- Chapter 3, “A Model for Business Processes”
- Chapter 4, “Information Systems Architecture”
- Chapter 5, “A Case Study”

Part 2, “Roadmap” on page 47

This part describes two methods for defining your business: IBM’s Enhanced Line of Visibility Methodology and workflow management. This part consists of the following chapters:

- Chapter 6, “Business Process Reengineering Using IBM’s Enhanced Line of Visibility Engineering Methodology”
- Chapter 7, “Workflow Management”

Part 3, “Tools for Productivity” on page 99

This part describes the various IBM tools that are available to aid in the process of documenting, capturing requirements, and implementing possible reengineered alternatives. Three tools are discussed: Business Modeling Tool, VisualAge Requirements Tool, and FlowMark. This part consists of the following chapters:

- Chapter 8, “Business Modeling Tool”
- Chapter 9, “VisualAge Requirements Tool”
- Chapter 10, “FlowMark”

Part 4, “Conclusions” on page 173

This part consists of our conclusions and closing thoughts. We recommend reading this part if you are interested in a summary or overview of the ideas in the book.

Related Publications

The publications listed in this section are considered particularly suitable for a more detailed discussion of the topics covered in this document.

- John A. Zachman, 1987. “A Framework for Information Systems Architecture.” *IBM Systems Journal*, Vol. 26, no. 3.
- John F. Sowa and John A. Zachman, 1987. “Extending and Formalizing the Framework for Information Systems Architecture.” *IBM Systems Journal*, Vol. 31, no. 3. G321-0108-00.
- William H. Davidson, 1993. “Beyond Reengineering: The Three Phases of Business Transformation.” *IBM Systems Journal*, Vol. 32, no. 1. G321-0110-00.
- Allan L. Scherr, 1993. “A New Approach to Business Processes.” *IBM Systems Journal*, Vol. 32, no. 1. G321-0110-00.

- Sumantra Ghoshal and Christopher A. Bartlett, "Changing the Role of Top Management: Beyond Structure to Process." *Harvard Business Review*, January-February, 1995.
- Michael Hammer and James Champy, *Reengineering the Corporation: A Manifesto for Business Revolution*. (New York: HarperCollins, 1993), SR28-4952-00.
- Charles Handy, *The Age of Unreason*. (Boston: Harvard Business School Press, 1989).
- *FlowMark for OS/2: Managing Your Workflow*. SH19-8176-01.
- *FlowMark V2.1 Managing Your Workflow*. SH19-8243-00.
- *US English Modeling Workflow*. SH19-8175-01.
- *FlowMark V2.1 Modeling Workflow*. SH19-8241-00.
- *IBM LOVEM/CABE Consultant's Guide Version 2.0*.
- *Business Modeling Tool User's Guide*.

A complete list of International Technical Support Organization publications, known as redbooks, with a brief description of each, may be in:

International Technical Support Organization Bibliography of Redbooks, GG24-3070.

To get a catalog of ITSO redbooks, VNET users may type:

TOOLS SENDTO WTSCPOK TOOLS REDBOOKS GET REDBOOKS CATALOG

A listing of all redbooks, sorted by category, may also be found on MKTTOOLS as ITSOCAT TXT. This package is updated monthly.

How to Order ITSO Redbooks

IBM employees in the USA may order ITSO books and CD-ROMs using PUBORD Customers in the USA may order by calling 1-800-879-2755 or by faxing 1-800-445-9269. Most major credit cards are accepted. Outside the USA, customers should contact their local IBM office. For guidance on ordering, send a note to BOOKSHOP at DKIBMVM1 or E-mail to bookshop@dk.ibm.com.

Customers may order hardcopy ITSO books individually or in customized sets, called BOFs, which relate to specific functions of interest. IBM employees and customers may also order ITSO books in online format on CD-ROM collections, which contain redbooks on a variety of products.

ITSO Redbooks on the World Wide Web (WWW)

Internet users may find information about redbooks on the ITSO World Wide Web home page. To access the ITSO Web pages, point your Web browser to the following URL:

<http://www.redbooks.ibm.com/redbooks>

IBM employees may access LIST3820s of redbooks as well. The internal Redbooks home page may be found at the following URL:

<http://w3.itsc.pok.ibm.com/redbooks/redbooks.html>

Acknowledgments

This project was designed and managed by:

Paulette J.A. Soper

International Technical Support Organization, San Jose Center

The authors of this document are:

Allan Helton

IBM Canada Ltd.

Eric Zulaybar

IBM Philippines

Paulette J.A. Soper

International Technical Support Organization, San Jose Center

This publication is the result of a residency conducted at the International Technical Support Organization, San Jose Center.

Thanks to the following people for the invaluable advice and guidance provided in the production of this document:

Dr. J. Carlos Goti

IBM Corporation, Santa Teresa Lab

Terry Allard

IBM Corporation, Santa Teresa Lab

Alan Brown

IBM Canada Ltd., BPR Consulting Practice

Wolfgang Trautmann

IBM Canada Ltd., BPR Consulting Practice

Enrico Zapanta

IBM Canada Ltd., Systems Integration

Michael Breidhardt

German Software Division Lab

Gerhard Mueller

German Software Division Lab

Dr. Bernd Hoffmann

German Software Division Lab

Bernd Wiedmann

German Software Division Lab

Dr. Peter Deichmann

German Software Division Lab

Karl Van Leuven

German Software Division Lab

Thomas Bilfinger

International Technical Support Organization, San Jose Center

Leif Trulsson

International Technical Support Organization, San Jose Center

Laura Nystrom

Editor