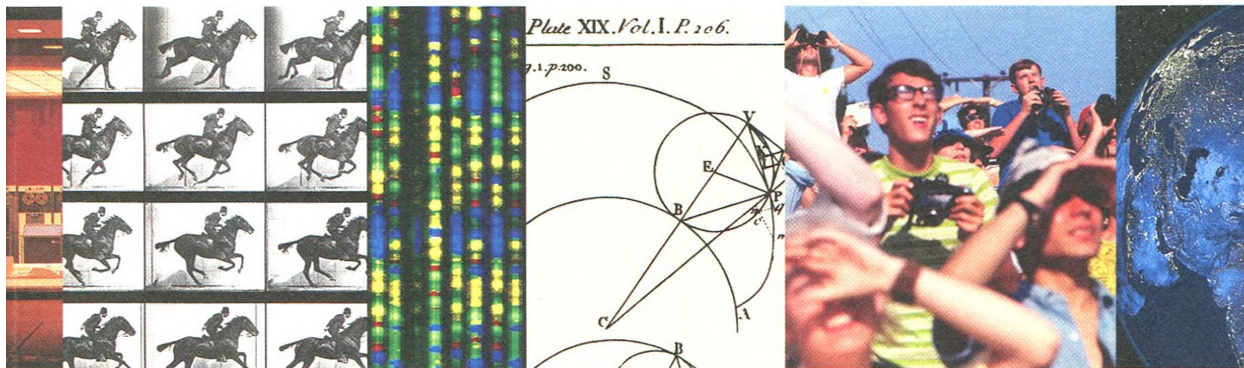


62-50
M24

MAKING THE WORLD WORK BETTER



THE IDEAS THAT SHAPED A CENTURY AND A COMPANY

✓ Kevin Maney • Steve Hamm • Jeffrey M. O'Brien

Foreword by Samuel J. Palmisano

MAKING THE WORLD WORK BETTER

THE IDEAS THAT
SHAPED A CENTURY AND
A COMPANY

IBM Press – Pearson pic

Upper Saddle River, NJ / Boston / Indianapolis / San Francisco
New York / Toronto / Montreal / London / Munich / Paris / Madrid
Cape Town / Sydney / Tokyo / Singapore / Mexico City

ibmpressbooks.com

The authors and publisher have taken care in the preparation of this book, but make no expressed or implied warranty of any kind and assume no responsibility for errors or omissions. No liability is assumed for incidental or consequential damages in connection with or arising out of the use of the information or programs contained herein.

© Copyright 2011
by International Business Machines Corporation.

Cover and interior design:
VSA Partners, Inc.

Editor:
Mike Wing

Copy editor:
Pennie Rossini

Fact checker:
Janet Byrne

Indexer:
Robert Swanson

The following terms are trademarks of international Business Machines Corporation in many jurisdictions worldwide: IBM, IBM Press, THINK, Blue Gene. CICS, Deep Blue, Lotus. PROFS, InnovationJam, Cognos, ILOG, Maximo. Smarter Planet, Global Business Services, World Community Grid. On Demand Community, Many Eyes, DB2 and Blue Gene/L. A current list of IBM trademarks is available on the web at "Copyright and trademark information" at www.ibm.com/legal/copytrade.shtml.

Intel and Pentium are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries.

UNIX is a registered trademark of The Open Group in the United States and other countries.

Linux is a registered trademark of Linus Torvalds in the United States, other countries, or both.

Other company, product or service names may be trademarks or service marks of others.

Library of Congress Cataloging-in-Publication Data is on file.

All rights reserved. This publication is protected by copyright, and permission must be obtained from the publisher prior to any prohibited reproduction, storage in a retrieval system or transmission in any form or by any means, electronic, mechanical, photocopying, recording or likewise.

ISBN-10: 0-13-275510-6
ISBN-13: 978-0-13-275510-8

Text printed in the United States on recycled paper at R.R. Donnelley in Crawfordsville, Indiana.

First printing June 2011

CONTENTS

Foreword: Of Change and Progress 6

**Pioneering the Science
of Information 14**

Sensing 20
Memory 36
Processing 52
Logic 68
Connecting 88
Architecture 102

**Reinventing the
Modem Corporation 134**

The Intentional Creation of Culture 142
Creating Economic Value from Knowledge 168
Becoming Global 198
How Organizations Engage with Society 222

**Making the World
Work Better 244**

Seeing 258
Mapping 268
Understanding 278
Believing 296
Acting 310

Acknowledgments 328
Notes 329
Photography Credits 339
Index 340
About the Authors 351

Of Change and Progress

CHAIRMAN, PRESIDENT AND CHIEF EXECUTIVE OFFICER
IBM CORPORATION