

FAL
1997

The AEC Technology Survival Guide

**MANAGING TODAY'S
INFORMATION PRACTICE**

Kenneth K. Fallon, FAIA

GIFT OF
THE ASIA FOUNDATION
NOT FOR RE-SALE

ĐẠI HỌC QUỐC GIA HÀ NỘI
TRUNG TÂM THƯ VIỆN

A - DC / 4101



John Wiley & Sons, Inc.
New York • Chichester • Weinheim • Brisbane • Singapore • Toronto

CONTENTS

Preface	xii
Acknowledgments	xv
CHAPTER 1 The Information Revolution	1
Information Evolution	2
The Information Economy	4
Work Content	5
Where Work Is Performed	6
The Relationship of People to Work	7
Key Points	10
References	11
CHAPTER 2 Work Organization: Reengineering and Total Quality Management	13
Reengineering	14
Total Quality Management	16
Key Points	24
References	25
CHAPTER 3 Reaping Information Technology Benefits	27
Key Points	40

CHAPTER 4	Information Technology Strategies for Design Firms	41
	Cost Containment	41
	Management Effectiveness	41
	Adding Value	44
	Competitive Positioning	48
	Key Points	51
	References	59
		60
CHAPTER 5	Training That Works	63
	Professional Education	64
	Training: Why and When	66
	Orientation Training	67
	Just-in-Time Training	69
	Intensive Training	70
	No More Novices	71
	Transition Training	71
	Ongoing Training	73
	Project-Specific Training	74
	Tailor the Training to the Trainee	77
	Training Validation	77
	Training Effectiveness	78
	Key Points	79
	References	80
CHAPTER 6	Controlling Information Technology Costs	81
	Components of Support Costs	82
	Focus First on People	85
	User Support Mechanisms	89
	Purchasing Considerations	91
	<i>Select an Appropriate Hardware Vendor</i>	91
	<i>Discard Obsolete Technology</i>	92
	<i>Standardize Everything</i>	93
		95
	Data and System Management	95
	<i>Hardware and Software Inventory</i>	95
	Access Controls	96
	<i>Where Files Reside</i>	96
	Directory Structure	97
	Data Protection	97
	Archiving	100

<i>File Naming and Layering: Standardization Initiatives</i>	101
<i>Software Management</i>	103
<i>Network Computers (NCs) and NetPCs</i>	105
<i>Automated System Management Procedures</i>	106
Automated Processes Demand Automated Controls	106
Key Points	109
References	110
CHAPTER 7 The Outsourcing Option	111
Key Points	120
References	121
CHAPTER 8 Tools for Management	123
Content Analysis	124
Benchmarking	125
Key Points	133
Reference	133
CHAPTER 9 Where Have We Come From?	135
The First Computer	135
The Software Concept	136
Rapid Advances	138
Computer Graphics	141
Computers in Practice	150
The PC Revolution	157
Key Points	167
References	168
CHAPTER 10 Past Forward	171
Integrated Project Database	173
<i>Technological Barriers</i>	178
<i>Organizational Barriers</i>	184
<i>Lack of Understanding</i>	185
Conclusion	187
References	188
Bibliography	189
Index	199