

Table of Contents

TABLE OF CONTENTS	I
PREFACE	1
INTRODUCTION	1
THE CHALLENGE OF INTERNATIONAL SYSTEMS	1
RESOURCES FOR THE INTERNATIONAL SYSTEMS MANAGER	2
INTENDED READERSHIP	3
TECHNICAL CONTENT	4
HOW TO USE THIS BOOK	4
REFERENCES	5
CHAPTER 1 BUSINESS ARCHITECTURE	7
INTERNATIONAL BUSINESS	7
BUSINESS DRIVERS FOR INTERNATIONAL SYSTEMS	7
BUSINESS AND SYSTEMS DEPENDENCIES	11
WHY INTERNATIONAL SYSTEMS ARE DIFFERENT	12
BREAKING DOWN THE PROBLEM	14
CRITICAL ROLE OF THE BUSINESS ARCHITECTURE	15
EXAMPLE BUSINESS MODELS	17
WHAT DOESN'T WORK	21
CONNECTION WITH INFORMATION SYSTEMS	22

CHAPTER 2 SYSTEMS STRATEGY	25
WHAT MAKES A SYSTEMS STRATEGY	25
THE PLAYERS	26
AN OVERVIEW OF A SYSTEMS STRATEGY	27
HINTS FOR DEVELOPING THE SYSTEMS STRATEGY	28
WHAT DOESN'T WORK	30
USEFUL DISTINCTIONS	34
RULES FOR AN INTERNATIONAL SYSTEMS STRATEGY	37
INTERNATIONAL STANDARDS	38
UNHELPFUL DECISIONS	39
CHAPTER 3 DEVELOPING A CORE APPLICATIONS PORTFOLIO	40
ALIGNING WITH THE BUSINESS MODEL	40
DISCOVERING THE APPLICATIONS PORTFOLIO	42
EXAMPLE APPLICATIONS REFERENCE MODEL	46
APPLICATIONS ROADMAP	48
APPLICATIONS MADE UP OF COMPONENTS	49
FINDING CORE APPLICATIONS COMPONENTS	50
MODELS FOR CONNECTING COMPONENTS	52
CHOOSING A COMPONENT STANDARD	54
LEVERAGING OTHERS' EFFORTS	57
INTEGRATION VS. BUILDING FROM SCRATCH	57
USING WEB SERVICES	58
CHAPTER 4 MANAGING APPLICATIONS DEVELOPMENT	59

THE CHALLENGE OF BUILDING APPLICATIONS	59
POOR SOLUTIONS TO A DIFFICULT PROBLEM	60
OUTLINE OF A METHOD THAT WORKS	62
MANAGING CHANGE	66
LEVERAGING SOFTWARE PATTERNS	67
APPLICATION TIERS	68
STRUCTURING PRESENTATION SERVICES	68
LEVERAGING BUSINESS COMPONENTS	69
EXAMPLES OF LARGE-GRAINED BUSINESS COMPONENTS	70
DATABASES	73
OFF-SHORE VS. IN-HOUSE DEVELOPMENT	77
DOCUMENTATION DELIVERABLES	78
DUE DILIGENCE WITH PURCHASED FIRMS	79
RESOURCES AND REFERENCES	80
CHAPTER 5 TECHNICAL ARCHITECTURE	82
THE RATIONALE FOR TECHNICAL ARCHITECTURE	82
APPLICATIONS DETERMINE THE TECHNICAL ARCHITECTURE	83
BREAK UP THE PROBLEM AREAS	84
TECHNICAL ARCHITECTURE BY PURCHASE ORDER	84
STANDARDS-BASED ARCHITECTURE	85
SUGGESTED TECHNICAL STANDARDS	87
ELEMENTS OF A TECHNICAL ARCHITECTURE	88
AN EXAMPLE OF TECHNICAL ARCHITECTURE	98
ROLE OF XML	99

GUIDELINES FOR TECHNICAL ARCHITECTURE	101
CHAPTER 6 ORGANIZATION	102
GOVERNANCE MODELS	102
THE TEAM REQUIRED FOR INTERNATIONAL SYSTEM	105
SYSTEMS VS. BUSINESS OPERATIONS	108
OUTSOURCING	109
THE MANAGEMENT TEAM	110
TRAINING	112
CHAPTER 7 MANAGING TECHNOLOGY	114
IT MANAGEMENT IN FOUR STEPS	114
DETERMINING SERVICE-LEVEL AGREEMENTS	115
BUYING WISELY	116
HIRING THE RIGHT STAFF	119
AVOIDING SUPPLIER LOCK-IN	121
“NOBODY EVERY GOT FIRED FOR BUYING...”	122
SUPPORT AND OTHER AWFUL CALLS IN THE NIGHT	122
LIFECYCLE OF A SYSTEM	123
REFERENCE METRICS	124
RESOURCES AND REFERENCES	125
CHAPTER 8 DEVELOPMENT TECHNOLOGY	126
DISTRIBUTED DEVELOPMENT APPROACH	126
USE OPEN DEVELOPMENT TOOLS	127
SOFTWARE CONFIGURATION MANAGEMENT	127

DEVELOPMENT ENVIRONMENT	128
MANAGING DEVELOPMENT SECURITY	129
CHAPTER 9 SYSTEMS OPERATIONS	132
WHY INTERNATIONAL OPERATIONS IS DIFFERENT	132
SYSTEM CAPACITY MANAGEMENT	132
END-USER TOOLS	137
INTRODUCING UPGRADES	138
PROBLEM DETERMINATION	138
IDENTIFY PROBLEMS BEFORE THE CUSTOMER DOES	139
THE ROLE OF OPERATIONS IN TESTING	139
REFERENCES AND RESOURCES	140
CHAPTER 10 INTEGRATING SYSTEMS	141
TECHNICAL INTEGRATION	141
INFORMATION INTEGRATION	144
TRICKS FOR EASING SYSTEM INTEGRATION	144
CHANGE MANAGEMENT	145
APPENDIX A: FRAMEWORK FOR EVALUATING SYSTEMS OF PURCHASED FIRMS	147
APPENDIX B: AN EXAMPLE OF JAVA CODING STANDARDS	148
APPENDIX C: EXAMPLE USE CASE	150
APPENDIX D: EXAMPLE GLOBAL WEB INTERFACE RULES	151

INTRODUCTION	151
INTERFACE STANDARDS	152
DATA ENTRY	160
TOOL TIPS	164
MESSAGES	164
ONLINE HELP	166
COLOR SCHEME	167
APPENDIX D: EXAMPLE SERVICE LEVEL AGREEMENT	169
APPENDIX E: GLOSSARY OF TERMS	170
FIGURE 1 TYPICAL GROWTH CURVE.....	12
FIGURE 2 PARTNER AND COMPETITOR RELATIONSHIPS.....	19
FIGURE 3 ORGANIZATION OF PARTS OF SYSTEMS STRATEGY	22
FIGURE 4 CATEGORIZING COMPONENTS	52
FIGURE 5 STANDARDS PRESERVE IT INVESTMENT	83
FIGURE 6 EXAMPLE HIGH LEVEL TECHNICAL ARCHITECTURE.....	89
FIGURE 7 A LOW COST DISTRIBUTED DEVELOPMENT ENVIRONMENT.....	129
FIGURE 8 FINDING SYSTEM CAPACITY.....	135
FIGURE 9 SYSTEM CAPACITY VS HARDWARE INVESTMENT.....	136
FIGURE 10 TRANSACTIONAL UPDATES	142
FIGURE 11 MESAGING UPDATES	143