. Record Nr.	UNINA9910141610603321
Autore	Weiss Stanley I
Titolo	A value approach to product and systems development [[electronic resource] /] / Stanley I. Weiss
Pubbl/distr/stampa	Hoboken, N.J., : Wiley, 2013
ISBN	1-118-59297-2 1-118-59294-8
Descrizione fisica	1 online resource (277 p.)
Disciplina	658.5/038
Soggetti	New products - Planning
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Product and Systems Development: A Value Approach; Contents; Preface; Acknowledgments; 1 Preview of Best Practices; Resource and Note; Review Checklist; 2 Stakeholder Values; 2.1. Value and Stakeholder Identities; 2.2. The Stakeholder Connection; Resources and Notes; Review Checklist; 3 Role of Systems Engineering; 3.1. Definition of a System; 3.2. Industry Views; 3.3. Stakeholders and Systems; 3.4. System Value Stream; Resources and Notes; Review Checklist; 4 Stakeholder Value Drivers; 4.1. Value Analysis in a Strategic Framework; 4.2. The QFD Stakeholder Values Matrix Process 4.3. QFD Process SummaryResources and Notes; Review Checklist; 5 Value-Driven Requirements Development; 5.1. Establishing the Parameters; 5.2. Translating Values to Requirements; 5.3. Changing Requirements; 5.4. Quantifying Requirements; 5.5. Requirements Process Summary; Resources and Notes; Review Checklist; 6 Functional Analysis; 6.1. Functional Flows; 6.2. Functional Block Diagrams; Resources and Notes; Review Checklist; 7 Interface Definition and Management; 7.1. Interface Complexity; 7.2. The N-Squared Matrix; 7.3. Interface Control; Resources and Notes; Review Checklist 8 Concept Selection and Trades8.1. Concept Options; 8.2. Concept Creativity; 8.3. Decision Processes; 8.4. Multidiscipline Analysis and Optimization; Resources and Notes; Review Checklist; 9 Architectures and "Architecting"; 9.1. Selecting an Architecture; 9.2. Architectural Design; 9.3. Architectural Imperatives and Precautions; Resources and

1.

	Notes; Review Checklist; 10 Failure Modes and Fault Tolerance; 10.1. Causes of Failure; 10.2. Failure Modes and Effects; 10.3. Fault Tolerance; 10.4. Redundancy Concepts; 10.5. Human Factors and Hazards; 10.6. Programmatic Failures and Fault Tolerance 10.7. SummaryResources and Notes; Review Checklist; 11 Risk Analysis; 11.1. Risk Philosophies; 11.2. Risk Management; 11.3. Risk Mitigation Practices; Resources and Notes; Review Checklist; 12 Integration, Verification, and Validation; 12.1. Definitions; 12.2. Planning Issues; 12.3. Design Verification and Validation; 12.4. Quality Assurance; 12.5. Test Considerations; Resources and Notes; Review Checklist; 13 Integrated Product and Process Development; 13.1. Definitions; 13.2. Integrated Project Teams; 13.3. IPPD Benefits; Resources and Notes; Review Checklist; 14 Design for X Resources and Notes; Review Checklist; 15 Development Management; 15.1. Key Integrations; 15.2. Strategic Approaches; 15.3. Measuring Progress; Resources and Notes; Review Checklist; 16 Cost Estimating; 16.1. Stakeholder Involvement; 16.2. Costing Factors; 16.3. Estimating Methods; 16.4. Learning Curves; 16.5. Cost-Estimating Problems; Resources and Notes; Review Checklist; 17 Lean Principles and Practices; 17.1. Thinking Lean Precepts; 17.2. Dealing with Waste; 17.3. Lean Models; Resources and Notes; Review Checklist; 18 Value Stream Mapping; 18.1. Streamlining the Process 18.2. Adapting to New Developments
Sommario/riassunto	A thorough treatment of product and systems development in terms of value to all stakeholders Product and Systems Development compiles more than twenty years of research and practice from a value perspective, from vision and marketing to design, manufacturing, delivery, operations, and maintenance. It defines stakeholder value and identifies specific stakeholders in the product and system development process; covers best practices in development; and examines systems engineering, current industry views, and the life cycle of a value stream. Featuring appendices written