

Index

■ A

Action plan, continual improvement, 105
Appraisals, 5. *See also* CMMI appraisal

■ B

Business objectives, 3
Business process improvement, 5

■ C

Capability Maturity Model (CMM), 4
Capability Maturity Model
 Integration (CMMI), 2, 9
 appraisals, 5
 growth of, 6
 business objectives, 3
 for business process improvement, 5
 capability levels, 9
 continuous representation, 10
 definition, 11
 incomplete, 10
 managed, 11
 performed, 10
 components, 17
 definition, 2
 evolution, 3
 institute, 7
 maturity levels, 11
 vs. capability levels, 15
 definition, 13
 initial, 12
 managed, 13
 optimizing, 14
 quantitatively managed, 13
 staged representations, 12
 in organizations
 commercial and government, 5
 peoples involved, 6
 origin, 4
 overview, 2

 process areas, 17, 25
 categories, 27
 in continuous representation, 27
 engineering, 29
 maturity level, 28
 process management, 29
 project management, 28
 staged representation, 27
 support, 29
 process improvement, 15
 continuous representation, 16
 generic goals, 18, 20
 generic practice, 18, 20
 specific goals (SG), 17
 specific practice, 18
 staged representation, 16
 product and service development. CMMI-DEV
 purpose of, 5
 structure, 17
Causal Analysis and Resolution process area, 60
CMMI appraisal
 commitments, 100
 constraints, 96
 objectives, 96
 opening meeting, 101
 plan and prepare, 101
 planning activities, 97
 cost and schedule, 99
 document and manage risks, 100
 logistical plan, 99
 resources required, 98
 tailoring method, 98
 requirements, 95
 scope, 97
 team preparation and training, , 100
CMMI-DEV, 3
CMMI implementation
 business needs, 71
 constellation, 73
 gap analysis
 components, 78
 definition, 78

■ INDEX

CMMI implementation (*cont.*)

- examination, 78
- plan and close, 79
- report format, 79

identify and form teams, 74
initiation, 71

- lead appraiser services, 73
- metrics analyst group, 76
- planning phase, 77
- PQA/SQA, 76
- program/project manager, 75
- roles and responsibilities, 75
- search screen, 72
- SEPG, 76
- training group, 77

CMMI Institute, 7

CMMI Institute Partner Network, 7

CMMI program/project manager, 75

Configuration Management (CM)
process area, 62

Continual improvement

- action plan, 105
- analysis, 103
- prioritize, 105
- process improvement form, 104
- review and monitor, 106

■ D

Decision Analysis and Resolution (DAR)
process area, 64

■ E, F, G, H

Engineering process area, 38

- customer requirements, 38
- interface requirements, 40
- make, buy or reuse analysis, 42
- operational concepts and scenarios, 40
- product component requirements, 40
- product integration, 43
- product requirements, 39
- product support documentation, 43
- requirement analysis, 40
- requirements development, 38
- stakeholder needs, 39
- Technical Solution process area, 41
- validation requirements
and techniques, 40, 41

Engineering Process Group (EPG), 76

■ I, J

Integrated Project Management (IPM)
process area, 30

■ K

Knowledge repository, 94

■ L

Lead appraiser services, 74

■ M, N

Maturity levels, CMMI, 12

vs. capability levels, 15

definition, 13

initial, 12

managed, 13

optimizing, 14

quantitatively managed, 13

staged representations, 12

Measurement and Analysis (MA) process area, 66

Metrics analyst group, 76

■ O

Organizational Performance

Management (OPM) process area, 48

Organizational process areas, 48

OPD, 51

OPF, 53

OPM, 48

OPP, 56

OT, 57

process-performance models, 57

training plans, 58

Organizational Process Definition (OPD)

process area, 51

Organizational Process Focus

process area (OPF), 53

Organizational Process Performance (OPP)

process area, 56

Organizational Training (OT) process area, 57

■ P

Process and Product Quality

Assurance (PPQA) process area, 68

Process areas, 17, 25

categories, 27

in continuous representation, 27

engineering, 29

(*see also* Engineering process area)

maturity level, 28

process management, 29

(*see also* Organizational process areas)

project management, 28

(*see also* Project Management)

- staged representation, 27
- support, 29 (*see also* Support process areas)
- Process improvement, 104
- Process-performance models, 57
- Process quality assurance (PQA), 76
- Product integration (PI) process area, 43
- Project Management
 - IPM process area, 30
 - PMC process area, 30
 - PP process area, 29
 - QPM process area, 35
 - REQM process area, 32
 - RSKM process area, 32
 - SAM process area, 34
 - product transition, 35
 - work status and performance, 35
- Project Monitoring and Control (PMC)
 - process area, 30
- Project Planning (PP) process area, 29

■ **Q**

- QMS formation, 74
- QMS implementation
 - conduct audits, 93
 - knowledge repository, 94
 - process training, 91
 - project artifacts, 91
 - project documentation, 94
- Quality Management System (QMS)
 - for employess and organization, 81
 - examination, 81
 - goal question metric, 82
 - organization quantitative objectives, 82
 - SEPG quality objectives, 83
 - SQA quality objectives, 84
 - training quality objectives, 84
 - goals and objectives, 81

- policies and process creation, 84
- templates, checklists and
 - guidelines creation, 86
 - updaton and release, 90
- Quantitative Project Management (QPM)
 - process area, 35

■ **R**

- Requirements Development (RD) process area, 38
- Requirements Management (REQM)
 - process area, 32
- Risk Management (RSKM) process area, 32

■ **S**

- Software Engineering Process Group (SEPG), 76
- Software quality assurance (SQA) group, 76
- Supplier agreement management (SAM)
 - process area, 34
- Support process areas, 59
 - casual analysis and resolution, 60
 - CM process, 62
 - configuration management system, 62
 - DAR process, 64
 - evaluation criteria, 65
 - MA process, 66
 - PPQA process, 68

■ **T, U**

- Target profile, 27
- Technical Solution (TS) process area, 41

■ **V, W, X, Y, Z**

- Validation (VAL) process area, 46
- Verification. *See* (VER) process area, 47