

	4	5	6	7	8	9	10	11	12	13
	Integration	Scope	Schedule	Cost	Quality	Resources	Communication	Risk	Procurement	Stakeholder
Data Gathering Tools and Techniques										
Benchmarking		5.2			8.1					13.2
Brainstorming	4.1,4.2	5.2			8.1			11.2		13.1
Check-sheets					8.3					
Checklists	4.2				8.2,8.3			11.2		
Focus-groups	4.1,4.2	5.2								
Interviews	4.1,4.2	5.2			8.1			11.2,11.3,11.4, 11.5		
Market-research									12.1	
Questionnaires-and-surveys		5.2								13.1
Statistical-sampling					8.3					
Data Analysis Tools and Techniques										
Alternatives-analysis	4.5, 4.6	5.1, 5.4	6.1, 6.4	7.1, 7.2	8.2	9.2, 9.6		11.5		13.4
Assessment of other risk parameters								11.3		
Assumption and constraint analysis				7.2	8.1			11.2		
Cost of quality										
Cost-benet analysis	4.5, 4.6				8.1	9.6		11.5		
Decision tree analysis								11.4		
Document analysis	4.7	5.2			8.2			11.2		13.1
Earned value analysis	4.5		6.6	7.4					12.3	
Inuence diagrams								11.4		
Iteration burndown chart			6.6							
Make-or-buy analysis									12.1	
Performance reviews			6.6		8.3	9.6			12.3	
Process analysis		8.2								
Proposal evaluation	12.2									
Regression analysis	4.7									
Reserve analysis			6.4	7.2,7.3,7.4				11.6		
Risk data quality assessment								11.3		
Risk probability and impact assessment								11.3		
Root cause analysis	4.5				8.2,8.3			11.2		13.2,13.4



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	Integration	Scope	Schedule	Cost	Quality	Resources	Communication	Risk	Procurement	Stakeholder
Sensitivity analysis								11.4		
Simulation			6.5					11.4		
Stakeholder analysis								11.1		13.1,13.4
SWOT analysis								11.2		13.2
Technical performance analysis								11.7		
Trend analysis	4.5,4.7	5.6	6.6	7.4		9.6			12.3	
Variance analysis	4.5,4.7	5.6	6.6	7.4						
What-if scenario analysis			6.5, 6.6							
Data Representation Tools and Techni	iques									
Afnity diagrams		5.2			8.2					
Cause-and-effect diagrams					8.2, 8.3					
Control charts					8.3					
Flowcharts					8.1,8.2					
Hierarchical charts						9.1				
Histograms					8.2,8.3					
Logical data model					8.1					
Matrix diagrams					8.1,8.2					
Matrix-based charts						9.1				
Mind mapping		5.2			8.1					13.2
Probability and impact matrix								11.3		
Scatter diagrams					8.2,8.3					
Stakeholder engagement assessment matrix							10.1,10.3			13.2,13.4
Stakeholder mapping/ representation							, , ,			13.1
Text-oriented formats						9.1				
Decision-Making Tools and Technique	S									
Multicriteria decision analysis	4.6	5.2, 5.3			8.1, 8.2	9.3		11.5		13.4
Voting	4.5,4.6		5.2,5.5	6.4	7.2					13.4
Communication Skills Tools and Techn	niques		·							
Feedback							10.2			13.4
Presentations							10.2			13.4



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International and Trans Chille Trade	Integration	Scope	Schedule	Cost	Quality	Resources	Communication	Risk	Procurement	Stakeholder
Interpersonal and Team Skills Tools a	1						10.3			12.4
Active listening	4.4						10.2			13.4
Communication styles assessment							10.1			
Conict management	4.1, 4.2					9.4, 9.5	10.2			13.3
Cultural awareness	10.1,						10.2			13.3,13.4
Decision making						9.5				
Emotional intelligence						9.5				
Facilitation	4.1,4.2,4.4	5.2, 5.3							11.2,11.3,11.4	
Inuencing						9.4,9.5,9.6		11.6		
Leadership	4.4					9.5				13.4
Meeting management	4.1, 4.2						10.2			
Motivation						9.4				
Negotiation						9.3,9.4,9.6			12.2	13.3
Networking	4.4						10.2			13.4
Nominal group technique		5.2								
Observation/ conversation		5.2					10.3			13.3
Political awareness	4.4						10.1,10.2			13.3,13.4
Team building						9.4				
Ungrouped Tools and Techniques										
Advertising									12.2	
Agile release planning			6.5							
Analogous estimating			6.4	7.2		9.2				
Audits					8.2			11.7	12.3	
Bidder conferences									12.2	
Bottom-up estimating			6.4	7.2		9.2				
Change control tools	4.6									
Claims administration									12.3	
Colocation		9.4								
Communication methods							10.1,10.2			
Communication models							10.1			



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	Integration	Scope	Schedule	Cost	Quality	Resources	Communication	Risk	Procurement	Stakeholder
Communication requirements analysis							10.1			
Communication technology						9.4	10.1,10.2			
Context diagram		5.2								
Contingent response strategies								11.5		
Cost aggregation				7.3						
Critical path method			6.5,6.6							
Decomposition		5.4	6.3							
Dependency determination and integration			6.3							
Design for X					8.2					
	4.1,4.2,4.4,4.5,							11.1,11.2,11.3,		
Expert judgment	4.6,4.7	5.1,5.2,5.3,5.4	6.1,6.2,6.4	7.1,7.2,7.3,7.4	8.1	9.1,9.2	10.1,10.3	11.4,11.5,11.6	12.1,12.2,12.3	13.1,13.2,13.3
Financing				7.3						
Funding limit reconciliation				7.3						
Ground rules										13.3
Historical information review				7.3						
Individual and team assessments						9.4				
Information management	4.4									
Inspections		5.5			8.3				12.3	13.3
Knowledge management	4.4		6.3,6.5,6.6							
Leads and lags										
Meetings	4.1,4.2,4.3,4.5, 4.6,4.7	5.1	6.1,6.2,6.4	7.1	8.1,8.3	9.1,9.2,9.4	10.1,10,2,10.3	11.1,11.2,11.3, 11.6	12.1	13.1,13.2,13.3, 13.4
Organizational theory	,		0.1,0.1,0.1	,,_	0.2,0.0	9.1	10:1,10,2,10:0			2011
Parametric estimating			6.4	7.2		9.2				
Pre-assignment						9.3				
Precedence						2.0				
Precedence diagramming method			6.3							
Problem solving					8.2	9.6				
Product analysis		5.3			-					
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	4	5	6	7	8	9	10	11	12	13	
	Integration	Scope	Schedule	Cost	Quality	Resources	Communication	Risk	Procurement	Stakeholder	
Project management information system	4.3		6.3,6.5,6.6	7.2,7.4		9.2,9.5,9.6	10.2,10.3	11.6			
Project reporting					8.2						
Prompt lists								11.2			
Prototypes		5.2									
Quality improvement methods					8.2	9.4					
Recognition and rewards											
Representations of uncertainty								11.4			
Resource optimization			6.5, 6.6								
Risk categorization								11.3			
Rolling wave planning			6.2								
Schedule compression			6.5, 6.6								
Schedule network analysis			6.5								
Source selection analysis									12.1		
Strategies for opportunities								11.5			
Strategies for overall project risk								11.5			
Strategies for threats								11.5			
Test and inspection planning					8.1						
Testing/product evaluations					8.3						
Three-point estimating			6.4	7.2							
To-complete performance index				7.4							
Training						9.4					
Virtual teams						9.3,9.4					